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RAILWAY FINANCE, MEETINGS &c.

Buffalo and Lake Huron Ry.—The reports and accounts for the half-year to Dec. 31, 1900, have been issued. The balance, as shown by the revenue account, including the amount brought forward from the previous half-year, after providing for the interest on the first and second mortgage bonds, is £14,481, which will allow of the payment of a dividend of 5s. 3d. per share, and leave a balance of £677 to be carried forward, as against £623 last half-year. The dividend is at the same rate as that distributed for many previous half-years.

Calgary and Edmonton.—Net earnings for six months to Dec. 31, 1900, \$75,618, against \$48,271 for corresponding period. Net earnings for Jan., 1901, \$12,041.71, against \$11,881.50 for Jan., 1900.

Canada Eastern Ry.—In the House of Commons recently, the Minister of Railways, in answer to N. C. Wallace, M.P., said:—"I am not aware that any member of the Government other than myself has made any statement or had any communication on the subject of acquiring the Canada Eastern Ry. as part of the I.C.R., nor do I believe that any such communication has taken place. During the past four years the Boards of Trade in different sections of New Brunswick, municipal bodies and city and town councils of Fredericton and Chatham have declared themselves strongly in favor of the Government taking over the C.E.R., and both political parties in the Provincial Legislature have joined in a unanimous memorial to the Government in favor of the acquisition of this road by the Government. The C.E.R. intercepts the I.C.R. at Chatham Jct. with one terminus, and crosses at the other terminus the St. John River at Fredericton, over the new steel bridge to which the Dominion Government has contributed \$300,000, which sum with interest remains as a lien upon the structure. From time to time, both publicly and privately when this question has been brought up by these various boards and by business men, I have not hesitated to acknowledge that, in my opinion, speaking for myself alone, it would be in the interests of the I.C.R. that the C.E.R. should become part of the Government system of railways, and I have stated that I would personally advocate action by the Government in this direction; but I have never made nor professed to make any offer to the C.E.R. or any person in its behalf, for the purchase of the road, nor has the Co. or any person in its behalf made to me any offer for the sale thereof."

Canada Southern.—The New York Stock Exchange has listed \$80,000 additional first

mortgage 5% bonds of 1908, and \$900,000 additional second mortgage 5% bonds of 1913, making the total amount of first mortgage bonds listed to date \$14,000,000 and of second mortgage bonds \$6,000,000. Of the bonds just listed, \$75,000 of the \$80,000 first mortgage have been recently sold to pay for a second track and a second track bridge over the Grand river at Cayuga. The proceeds of the \$900,000 second mortgage bonds have been or are to be expended for the construction of second track and for other additions to the property of the company.

the present C.S. shares. For several years C.S. stockholders have been receiving 2% dividends, but the earnings are now sufficient to justify a larger payment. Under the existing agreement between the two companies C.S. shareholders are entitled to 40% of the net earnings over fixed charges out of the first \$1,000,000. This agreement, which was entered into in 1883, runs until 1904, and it is believed that the proposed purchase of the entire capital stock of the C.S. is recommended so as to place the relations between the two companies on a more lasting basis.

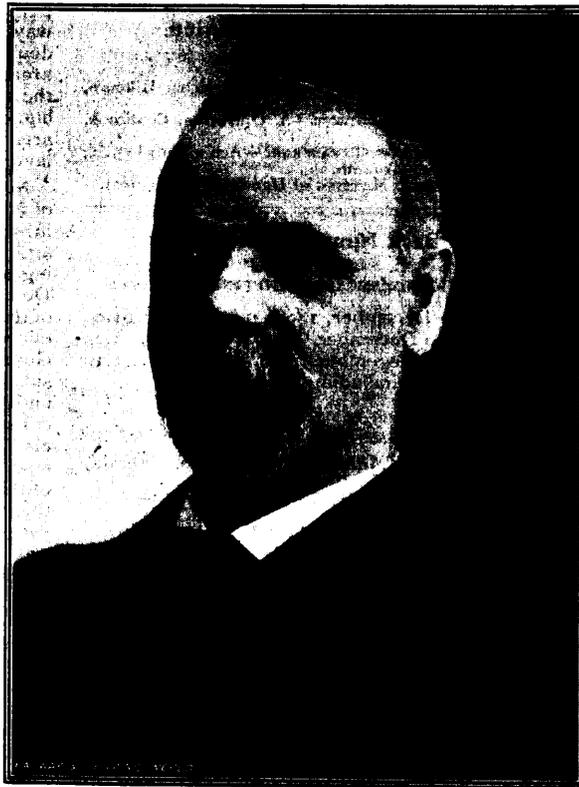
The M.C. is said to be a large stockholder of the C.S., and would accordingly benefit in more ways than one by the merger. It is not yet certain on what basis the proposed exchange of bonds for stock will be made. Calling the bonds worth par, it is not believed C.S. shareholders would be allowed as good a bargain as even exchange, but they would receive a substantial bargain."

Chignecto Marine Railway.—A. D. Provand, who has been in Ottawa for several weeks past, has issued a pamphlet in which he reviews the history of this line, and the efforts made by him to secure a renewal of the subsidy from Parliament and a revival of the charter. The pamphlet contains a letter, written by Mr. Provand to Sir Wilfrid Laurier, in which he states that Mr. Fielding proposed a private bill should be introduced to revive the company's charter, and the Government would allow the measure to go before the Railway Committee in the usual way. Mr. Provand does not see the use of a private bill, which would be of no value, as the Government has stated it is opposed to the renewal of the subsidy. What he wants is the appointment of a special committee to take evidence and report to the House upon the bill. In this way, Mr. Provand thinks, an opportunity would be afforded of satisfying Parliament and the Government that the company is entitled to its subsidy or to compensation, and, if the former, renewal of the charter could follow. (May, 1900, pg. 155.)

Dominion Atlantic.—Earnings for Jan., 1901, \$45,531, against \$45,738 for Jan., 1900.

G.T.R. Stock.—For the first time G.T.R. stock passed C.P.R. stock in London, Eng., March 19, the former selling at 94½, against 93¾ for the latter.

Grand Trunk Western.—Further steps in the reorganization of the G.T. system have been taken, quit-claim deeds having been recorded conveying from the G.T. Junction Co. the four miles of track running south from Elsdon, Chicago, together with all rights of way, rolling stock and other property to the G.T. W. Ry. Co. Revenue stamps showed the property to be valued at \$500,000.



WILLIAM APPS,

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New York despatch of Mar. 27 said:—"Plans are nearly completed, it is said, for the merger of the Canada Southern into the Michigan Central by the exchange of new 3% M.C. collateral trust bonds for C.S. shares, after the fashion of the acquisition of the Michigan Central and Lake Shore roads by the New York Central. The purpose of the scheme is to weld the C.S. to the M.C. so as to prevent their separation at any time. And in addition to this, the plan is to give a gilt-edged investment security, which would command a higher value in the market than

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NEXT MEETING, probably in March, 1902.

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NEXT ANNUAL MEETING at Hamilton, Oct. 16, 1901.

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R. Hering, W. P. Anderson, P. S. Archibald, H. J.
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VICE-PRESIDENT, W. Jackson, Clinton, Ont.; and VICE-

PRESIDENT, M. McNamara, Walkerton, Ont.; 3rd
VICE-PRESIDENT, W. H. C. MacKay, St. John, N.B.;
SEC.-TREAS., E. de la Hooke, London, Ont.; AUDITOR,
S. H. Palmer, St. Thomas, Ont.

EXECUTIVE COMMITTEE, W. H. Harper, Chatham,
Ont.; C. E. Morgan, Hamilton, Ont.; T. Long, Port
Hope, Ont.; W. F. Egg, Montreal; J. P. Hanley,
Kingston, Ont.

NEXT ANNUAL MEETING at Montreal in 1901.
OFFICIAL ORGAN.—THE RAILWAY & SHIPPING WORLD,
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Great Lakes and St. Lawrence River Rate Committee.

CHAIRMAN, A. A. Schantz, Detroit, Mich.
SECRETARY, G. C. Wells, Passenger Department, C.
P.R., Montreal.

NEXT MEETING, at Sault Ste. Marie, Ont., probably
in Feb., 1902.

National Association Marine Engineers of Canada.

HONORARY PRESIDENT, O. P. St. John, Toronto;
PRES., A. J. Woodward, Toronto; 1st VICE-PRES., R.
Craig, Toronto; 2nd VICE-PRES., E. Abbey, Toronto.

COUNCIL, W. Jannison, Windsor, Ont.; J. Payne, Col-
lingwood, Ont.; O. Flummerfelt, St. Catharines, Ont.;
J. Currie & S. T. Wilson, Toronto.

TREASURER, H. Brownley, Toronto; SECRETARY, S.
A. Mills, Toronto.

Niagara Frontier Summer Rate Com- mittee.

CHAIRMAN, T. Henry, Montreal.
SECRETARY, G. C. Wells, Passenger Department, C.
P.R., Montreal.

NEXT MEETING, at New York, probably in Jan., 1902.

Track Supply Association.

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Great Northern of Canada.—The contrac-
tors are reported to have sold the Quebec
city and Joliette bonds, voted by these two
towns to the G.N.R. The Quebec bonds
amounted to \$200,000, and sold at 93¼, while
the \$35,000 from Joliette brought 96.

London and Port Stanley.—As stated in
our issue of Nov. last the Lake Erie and De-
troit River Ry. Co. offered the City of Lon-
don to pay \$17,500 a year for the balance of
the present lease of the L. and P.S.R. for 13
years from Jan. 1, 1901, in lieu of the present
rental of \$10,000 a year, with interest on the
bridges over the ravines near St. Thomas,
and 10% on the gross earnings over \$80,000 a
year. After the 13 years the Co. to pay \$20,-
000 a year for 20 years. This offer was con-
sidered by the L. and P.S.R. Board of the
London City Council early in March. A
motion was proposed to accept the offer and
an amendment was moved to make the rental
\$20,000 a year from Jan. 1, 1901. A vote re-
sulted in a tie. Subsequently a conference
was held between the Railway Board and the
Board of Trade when a resolution was passed
to leave the matter in the hands of the Rail-
way Board. This was followed by a public
meeting in London, at which a resolution was
passed advising that the lease be not extend-
ed at present, but that the question be left to
the people to decide. (Nov., 1900, pg. 341.)

Midland of Nova Scotia.—The annual
meeting held in Montreal, March 5, was ad-
journed for three months to Halifax, N.S.

Montreal Incline Railway.—The Mount
Royal Park Incline Ry. has offered the city of
Montreal, in consideration of receiving from
the city a renewal of lease for 25 years, free
of taxes, to run the railway under the pre-
sent conditions, with the exception that the re-
turn fare will be reduced from 8c., as at pres-
ent, to 7c. The Co.'s contract with the city
has expired, but the city has no cash to build
a new road, and so is in a very peculiar posi-
tion with the company.

New Brunswick Taxation.—Supt. Tim-
merman, of the Atlantic Division of the C.P.-
R., recently interviewed the N.B. Government
in opposition to the proposed tax of 3% upon
the gross earnings of railways in the Pro-
vince.

Newfoundland.—R. G. Reid, proprietor of
the Newfoundland Ry., has lodged with the
Land Office claims for 1,000,000 acres, being
the balance of lands unselected by him under
the terms of the railway contract, 1898, by
the terms of which, and the previous arrange-
ments with the colony, he acquired a right to
slightly over 4,000,000 acres, and of that he
has selected three-fourths, the remainder
being pre-empted. The terms of his '98 con-
tract called upon him to complete his selec-
tions within three years of its signing. Until
then the Government could not grant to other
parties any lands within 10 miles of the rail-
way. Now that prohibition is removed, and
doubtless many other persons will be seeking
areas for different purposes. It is said that
the aggregate of Mr. Reid's grants makes
him owner of just one-seventh of the usable
area of the island—farm, timber and mining
lands.

Nova Scotia Railway Claims.—The sum
of \$671,000 has been awarded to Nova Scotia
in settlement of the claims of the Province
against the Dominion in respect of the hand-
ing over of the Eastern Extension Ry. to the
Dominion Government in 1883. At the time
of the transfer, the Dominion Government de-
clined to pay the amount which the Provincial
Government had paid the Ry. Co. by way of
subsidy, but nothing was done to recover it
until 1891 when the Eastern Extension be-
came a part of the I.C.R. Then the Provin-
cial Legislature made a demand on the Do-
minion Government for \$671,000, the amount
of the subsidy. Payment was refused and
the matter remained in abeyance for some
years until, after another demand, the matter
was referred to arbitration. The result is an
award for the amount claimed, but interest
was not allowed, as this was regarded as an
unsettled claim.

Ontario and Rainy River.—The Ontario
and Rainy River Ry. Co. has ceased to exist,
and the line from Port Arthur westward to the
International boundary at Rainy River is now
called the Ontario Section of the Canadian
Northern Railway.

**The Port Arthur, Duluth and Western
Ry.,** which runs from Port Arthur, Ont., to
Gunflint Narrows, 86 miles, is now part of the
Canadian Northern system. The first 19
miles from Port Arthur to Stanley have been
incorporated in the Ontario Division of the
C.N.R., which will extend westward to the
Rainy River. The remainder of the old P.A.,
D. and W.R., from Stanley to Gunflint Nar-
rows is now known as the Duluth extension
of the C.N.R.

Quebec and Lake St. John.—Receipts for
Nov., 1900, \$6,072 less than for Nov., 1899,
making for 11 months to Nov. 30, 1900, \$45,-
581 more than for corresponding period.

Quebec Central.—Net earnings for 1900,
\$169,770, against \$168,999 for 1899. Net
earnings for Jan., 1901, \$8,243, against \$4,235
for Jan., 1899.

Qu'Appelle, Long Lake and Saskatchewan.—Net earnings for Dec., 1900, \$5,500, against \$2,200 for Dec., 1899.

Shuswap and Okanagan.—Gross earnings for 6 months to Dec. 31, 1900, \$22,300; working expenses \$13,380; net earnings \$8,320.

Seattle and International.—T. Earle, M. P. for Victoria, B.C., has begun a second suit in Seattle against the Northern Pacific Ry. Co., the Seattle and International Ry. Co., and the old Seattle, Lake Shore and Eastern Ry. Co., which was reorganized as the Seattle and International, to prevent the first defendant from absorbing the other two, according to plans said to have been recently formed by the N.P. Earle claims to act in behalf of the stockholders of the old S.L.S. and E.R., and his action is the second commenced along similar lines within the past two months. The first suit was for the purpose of forcing the S. and I. into the hands of a receiver, and the present suit is brought to protect rights which Earle hopes to determine in the first action. The action is based on a law of the State of Washington which makes it unlawful for a railway to purchase or control another line paralleling or competing with it. It is alleged by the complainant that the S. and I., formerly the L.S. and E.R., does parallel the N.P. from Spokane to Seattle, and that, therefore, its absorption will be unconstitutional. Further, it is alleged that the S. and I. now forms a connecting link between Seattle and Sumas for the C.P.R., and that it practically forms a competing line, or allows competition, not only across the State but across the continent. The action is based on the theory that should the former case be decided favorably to Earle he cannot recover if in the meantime the contemplated absorption has occurred, for it will then be impossible to tell what property belonged to the S. and I. and what property belonged to the N.P. He, therefore, desires to keep the S. and I. property separate until the former case can be decided.

White Pass and Yukon.—An extraordinary general meeting was held in London, Eng., Mar. 11, Hon. S. Carr Glyn presiding. He explained that a circular which the shareholders had received clearly showed the necessity for a new issue of shares. At present there were no liquid assets of the Co., and they did not expect to receive any cash from earnings to any extent from America until Aug. Close Brothers & Co. had agreed to finance all liabilities falling due by the Co. until June 30 on the terms that they should have the call of the £255,550 shares at par up to Dec. 31, 1903. These shares, of course, would derive no benefit from the Co.'s operation until after they were issued. With regard to the £100,000 they instructed the brokers to make inquiries as to whether they could place these shares at a better price, and they stated that not only could they not get a premium on these shares, but that they could not undertake to place so large an amount as £100,000, and the directors had again had to ask the assistance of Close Brothers & Co. to underwrite this issue, and they had agreed to do this for the very moderate commission of 1% payable out of profits. He moved resolutions empowering the directors to increase the capital by the creation and issue of 70,000 new ordinary shares, and for the alteration of the articles of association so as to bring them in accordance with the Companies' Act, 1900, and to enable a bonus distribution of shares to be made. Sir Allen Sarle seconded, and the resolutions were carried.

F. H. Clergue, President of the Algoma Central Ry., has given \$1,000 to the Canadian Association for the Prevention of Tuberculosis.

C.P.R. Earnings, Expenses, &c.

Gross earnings, working expenses, net profits & increases or decreases over 1900, from Jan. 1, 1901:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
Jan.	\$2,054,015.68	\$1,405,819.23	\$648,196.45	\$43,373.16—
Feb.	1,977,189.47	1,356,509.63	620,679.84	2,052.41—
	\$4,031,205.15	\$2,762,328.86	\$1,268,876.29	\$45,425.57—

Approximate earnings for Mar., \$2,484,000; increase over Mar., 1900, \$204,000.

DULUTH, SOUTH SHORE & ATLANTIC.—Net earnings for 1900 \$929,134, against \$938,541 in 1899; net earnings for Jan., 1901, \$35,710, against \$63,230 in Jan., 1900.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.—Net earnings for 1900, \$2,105,521; against \$2,261,529 in 1899.

Grand Trunk Earnings, Expenses, &c.

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

	1901.	1900.	Increase.	Decrease.
Jan.	\$2,225,878	\$2,222,200	\$3,678	.....
Feb.	1,993,493	1,917,348	76,145	.....
	\$4,219,371	\$4,139,548	\$79,823	.....

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

TRAFFIC RECEIPTS OF THE SYSTEM.

Traffic receipts, Jan. 1 to Feb. 28, 1901:

	1901.	1900.	Increase.	Decrease.
Grand Trunk.....	£ 705,690	£672,297	£ 33,393	.....
G. T. Western....	129,695	154,863	.....	25,168
D., G. H. & M....	31,549	27,957	3,592	.....
Total.....	£ 866,934	£855,117	£11,817	.....

Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.

Following is a summary of the report for the year ended Nov. 30, 1900.

Gross earnings, after deducting earnings from Government service, \$113,056.45, against \$96,911.93, for previous year, increase \$16,144.52, or 16.65%. Expenses \$116,236.91, against \$97,878.30 for previous year, increase \$18,358.61, or 18.75%. Percentage of expenses to earnings 102.81%, against 100.99% for previous year. Net loss \$3,180.46, against net loss for previous year of \$966.37. Earnings from passenger traffic, including Government service, \$28,258.80, against \$25,724.50 for previous year, increase \$2,534.30 or 9.85%. Freight, express, mail and miscellaneous earnings, including Government service, \$88,328.87, against \$73,701.91 for previous year, increase \$14,626.96, or 19.84%.

The increase in gross earnings is fairly satisfactory, the increase in passenger and freight earnings being about in the right proportion. In the previous year while passenger earnings increased very considerably, there was not a proportionate increase in freight earnings, owing to the partial failure of crops along the line. The increase in expenses is rather heavy. Of this \$12,414.57 was expended for maintenance of way and structures, the balance being incident to the heavier traffic of the road. During the year 95,526 ties were put into the track, against 87,341 the previous year, the increased cost being \$3,680.06. The heavy expenditure on maintenance of way and structures is to a very large extent accounted for by the fact that for the past two years there have been exceptionally wet seasons in the district through which the railway runs, and the directors regret to state that the estimates show that as large a number of ties will be required this year as last, and that a very considerable amount

will have to be expended in otherwise improving the road bed. The settlement in some of the districts tributary to the railway continues fairly satisfactory.

ASSETS.

Cost of road	\$4,010,140 00
Sundry debtors	10,114 17
Interest deferred.....	679,931 47
Profit and loss account.....	5,062 16
	\$4,705,247 80

LIABILITIES.

Capital stock paid up.....	\$ 201,000 00
First mortgage bonds, £782,700.....	3,809,140 00
Coupons due and not presented.....	1,872 56
Interest unpaid.....	679,931 47
Sundry creditors.....	43,303 77
	\$4,705,247 80

EARNINGS.

Passenger.....	\$ 28,258 80
Freight.....	84,724 72
Express.....	1,086 24
Mail.....	2,043 36
Miscellaneous.....	474 55
	\$ 116,587 67

Less amount of Government service included in above..... 3,531 22

By balance carried down..... \$ 113,056 45
4,649 49

\$ 117,705 94

Government subsidy for year, £16,438 7s. ad. \$ 80,000 00
Balance carried..... 5,062 16

\$ 85,062 16

OPERATING EXPENSES.

Balance brought forward.....	\$ 1,469 03
General expenses.....	1,113 62
Conducting of transportation.....	13,271 43
Management expenses.....	1,949 88
Motive power.....	26,505 30
Maintenance of way and structures.....	69,959 96
Maintenance of cars.....	3,436 72
	\$ 117,705 94

INTEREST ACCOUNT.

Balance carried down.....	\$ 4,649 49
£1 1s. paid on account Feb. 1, 1900, coupon.....	£8218 7s.
£1 1s. paid on account Aug. 1, 1900, coupon.....	£8218 7s.
	£16,436 14s. 79,991 93

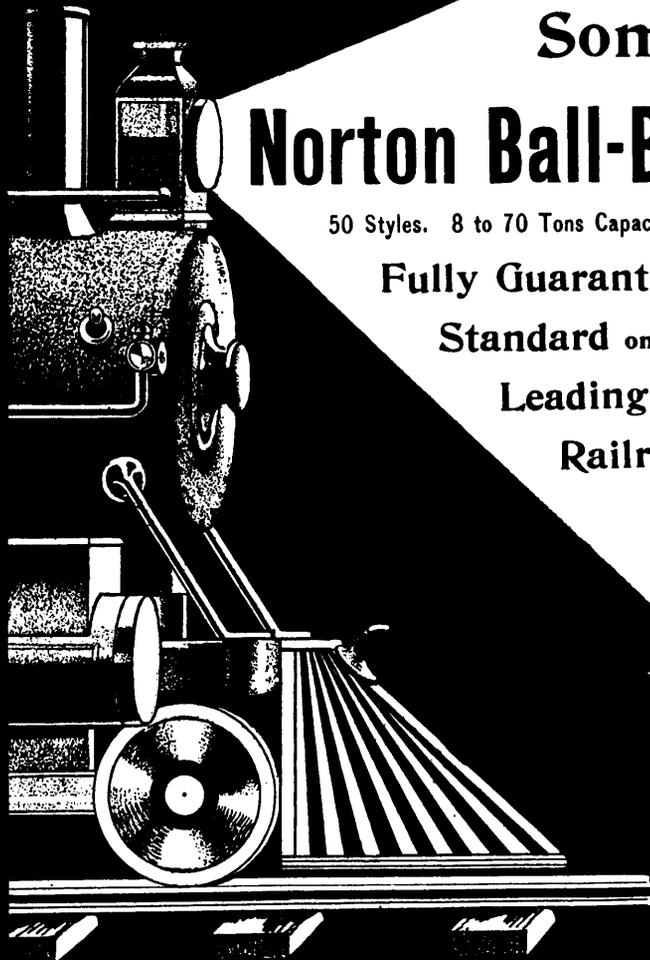
Expenses re service of coupon, (London).... 420 74
\$ 85,062 16

As security for the annual subsidy the Government retained and now hold 499,144 acres of the Co.'s land grant.

The annual meeting called for Toronto on Feb. 6 was adjourned until Mar. 16, when only routine business was transacted. The old Board of Directors was re-elected as follows:—President H. C. Hammond, Toronto; Vice-President, Hon. W. Pugsley, St. John, N.B.; Secretary, R. A. Smith, Toronto; other directors, A. Bruce, Hamilton; A. R. Creelman, G. T. Chisholm, C. S. MacInnes, E. B. Osler, S. B. Sykes, Toronto.

An Important Tie Suit.

The judgment of the Supreme Court of Canada in the case of Magann, appellant, and Auger, respondent, was briefly mentioned in our last issue. The facts are as follows:—The manager for G. P. Magann, of Toronto, being in Quebec saw Auger & Sons about a quantity of ties which he wanted to purchase. He returned to Toronto, and a letter was then sent from Auger & Sons to Magann, offering the ties and offering to keep the offer open for a certain time. Magann immediately telegraphed as follows:—"Accept your offer; am writing," or words to that effect, and he then wrote accepting the offer, but adding an additional term to the contract, which apparently was intended by the parties, but which had been left out. The fact of adding the extra term makes little difference in the result. The action was tried in Quebec, Magann having been served by publication in a local news-

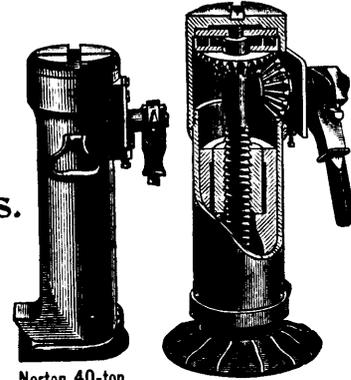


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Journal Jack.

A. O. NORTON, MANUFACTURER,
COATICOOK, QUEBEC, CANADA.

paper in a French village, and before he appreciated the fact that he was being sued, a judgment had been given against him for default of defence. After Auger & Son had obtained judgment by way of default on Magann's part in not defending in response to the advertisement, they caused the Sheriff to seize the ties, and they were then sold over again and bought for very little, under an agreement, as Magann alleges, between Auger & Sons and the purchaser, by which Auger & Sons got the actual price at which the ties were subsequently sold by the Sheriff's sale purchaser. Magann's solicitors, Macdonell, Boland & Thompson, of Toronto, applied to be let in to defend, alleging that the whole cause of action did not arise in the City of Quebec, and that the Quebec courts had no jurisdiction, and further, that Magann had a defence on the merits as the ties had not been accepted, not being up to specifications. In addition to that there was a further defence on the question of freight rates, Magann contending that it was represented that Auger & Sons had a freight rate which Magann could use to move the ties, which representation turned out to be incorrect, and in addition to the ties not being up to the specifications, there was a prohibitive rate of freight. On the application to be let in to defend, the Quebec court held that it had jurisdiction, but allowed Magann to defend the whole action, and to enter any defence he thought fit. The case was subsequently tried, but the Court refused to admit Magann's evidence in connection with the freight, and in connection with the ties not being up to specifications, and after reserving judgment he was condemned to pay the whole amount of the purchase money and the costs. Magann appealed and was again unsuccessful, but the Court moderated the damages which he was adjudged to pay. He again appealed to the Supreme Court, and the matter came up early in March, when judgment was reserved and was given a few days later, maintaining Magann's objection to the jurisdiction of the Quebec court. He claimed in the action that the contract having been closed in Toronto the whole cause of action had not arisen in Quebec, and in consequence Quebec courts had no jurisdiction. With this the Supreme Court agreed, the plaintiffs being also condemned to pay the costs.

Growth of Canadian Railways.

The following table shows the growth of railways from year to year since the opening of the first line in 1836:

MILEAGE.		MILEAGE.	
1835	0	1868	2,278
1836	16	1869	2,524
1837	16	1870	2,617
1838	16	1871	2,695
1839	16	1872	2,899
1840	16	1873	3,613
1841	16	1874	3,832
1842	16	1875	4,331
1843	16	1876	4,804
1844	16	1877	5,218
1845	16	1878	5,782
1846	16	1879	6,126
1847	54	1880	6,858
1848	54	1881	7,194
1849	54	1882	7,331
1850	66	1883	8,697
1851	159	1884	9,577
1852	205	1885	10,273
1853	506	1886	10,773
1854	764	1887	11,793
1855	877	1888	12,184
1856	1,414	1889	12,585
1857	1,444	1890	13,151
1858	1,863	1891	13,838
1859	1,994	1892	14,564
1860	2,065	1893	15,005
1861	2,146	1894	15,627
1862	2,189	1895	15,977
1863	2,189	1896	16,270
1864	2,189	1897	16,550
1865	2,240	1898	16,718
1866	2,278	1899	17,250
1867	2,278	1900	17,657

Railway Statistics for Years Ended June 30, 1899 and 1900.

Following is a comparative statement of the railway statistics of the Dominion for the above mentioned years:

	June 30, 1899	June 30, 1900
Miles of railway completed (track laid)	17,358	17,824
Miles of sidings	2,402	2,558
" iron rails in main line.	178	130
" steel " " "	17,180	17,694
double track	562	591
Capital paid (including 4 following items)	\$964,699,884	\$998,268,404
Dominion and Provincial bonuses paid	\$165,534,900	\$169,706,725
Dominion and Provincial loans paid	\$20,468,245	\$20,869,214
Provincial Govts. (subscription to shares paid)	\$300,000	\$300,000
Municipal aid paid	\$15,749,668	\$15,884,542
Miles in operation	17,250	17,657
Gross earnings	\$62,243,784	\$70,740,270
Working expenses	\$40,706,217	\$47,699,798
Net earnings	\$21,537,567	\$23,040,472
Passengers carried	19,133,365	21,500,175
Freight carried (tons)	31,211,753	35,946,183
Train mileage	52,215,207	55,177,871
Passengers killed	20	7
Elevators	163	239
Guarded level crossings—public roads	197	169
Unguarded crossings—public roads	11,813	12,879
Overhead bridges	430	431
Level crossings of other railways	276	244
Junctions with other railways—branch lines	347	346
Engines owned	2,142	2,179
hired	75	103
Sleepers and parlor cars owned	231	535
hired	37	3
First-class cars owned	1,170	1,213
hired	69	74
Second-class and immigrant cars owned	621	640
Second-class and immigrant cars hired	19	1
Baggage, mail and express cars owned	639	632
Baggage, mail and express cars hired	29	30
Refrigerator cars owned	665	736
hired	122	207
Cattle and box freight cars owned	38,839	39,112
Cattle and box freight cars hired	3,112	3,426
Platform cars owned	15,434	14,947
hired	377	679
Coal and dump cars owned	5,540	5,739
hired	1,008	1,055
Conductors' vans owned	42	133
hired	5	1
Tool cars owned	910	872
hired	8	.....
Snow ploughs owned	302	300
hired	2	.....
Flangers owned	186	311
hired	1	.....

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

Railway Accidents in 1899-1900.

Following is a statement of the fatal accidents in Canada during the year ended June 30th, 1900:

	Passengers killed.	Employees killed.	Others killed.	Total killed.
Falling from cars or engines	3	25	7	35
Getting on or off trains in motion	3	6	11	20
At work making up trains	.....	11	.....	11
Putting heads or arms out of windows	.....	1	.....	1
Coupling cars	.....	16	.....	16
Collisions and derailments	.....	15	3	18
Striking bridges	.....	3	1	4
Walking or being on track	.....	18	103	121
Explosions	.....	1	.....	1
Other causes	.....	28	70	99
Total	7	123	195	325

Mackenzie, Mann & Co. have given \$1,000 to promote immigration into the Thunder Bay and Rainy River districts of Ontario.

The Great Lakes and St. Lawrence River Rate Committee.

The official minutes have been issued of a meeting of representatives of railway and steamship lines interested, which was held in Toronto Feb. 5.

The following lines were represented:—Algoma Central S.S. Co., Anchor Line, Buffalo Ry., Buffalo and Niagara Falls Electric Ry., Buffalo and Lockport Ry., Canada Atlantic Ry., Canadian Pacific Ry., Cleveland and Buffalo Transit Co., Delaware, Lackawanna and Western Rd., Detroit and Cleveland Navigation Co., Duluth, South Shore and Atlantic Ry., Grand Trunk Ry., Goodrich Transportation Co., Huntsville and Lake of Bays Route, Lackawanna-Green Bay Line, Lake Erie and Detroit River Ry., Lake Erie Navigation Co., Lake Michigan and Lake Superior Transportation Co., Lake Ontario and Bay of Quinte Steamboat Co., Lake Ontario Navigation Co., Lehigh Valley Rd., Manitou Steamship Co., Maple Lake and Port Cockburn Tally-Ho Stage Line, Minnesota, St. Paul and Sault Ste. Marie Ry., Montreal and Rochester Navigation Co., Muskoka Navigation Co., Niagara Falls Park and River Ry., Niagara Gorge Rd., Niagara Navigation Co., Northern Michigan Transportation Co., Northern Navigation Co. of Ontario, Northern Steamship Co., Northwest Transportation Co., Parry Sound Yacht Fleet, Richelieu and Ontario Navigation Co., Rideau Lakes Navigation Co., Toronto, Hamilton and Buffalo Ry., Windsor, Detroit and Soo Line.

A. A. Schantz, of the Detroit and Cleveland Navigation Co., was elected chairman, and G. C. Wells, of the C.P.R., secretary.

Decided that the organization be henceforth known as the Great Lakes and St. Lawrence River Rate Committee.

The representatives of the various steamboat lines were invited to announce their rate for the season of 1901, and the Secretary was instructed to embody same in the proceedings. The U.S. lines being unable to announce their rates definitely at this meeting, it was agreed that they should hold an adjourned meeting at Chicago, on Feb. 20, and notify the Secretary of the result as early as possible, he to advise the Canadian lines if any changes affecting them are agreed to.

Mr. Ussher called attention to the fact that although the sheet reads "between shore ports and certain other points," it did not seem last year to be fully understood that the rates apply in both directions. The Chairman, after asking for an expression of opinion from the interested lines, said that it was to be understood that all rates quoted in this sheet apply both ways, unless otherwise stated.

Mr. Ussher, representing Mr. Hibbard, of the D.S.S. and A. Ry., gave notice that that line would meet the rates and commissions of the lake lines from Duluth to and via Sault Ste. Marie.

The Canadian railway companies gave notice that for the season of navigation, 1901, their basing rates to shore ports (other than Windsor and Detroit and Parry Sound (Rose Point)) on Upper Lake business, would be as follows:

From Toronto—One way, 1st class, \$2.85; 2nd class, \$2.85; return, \$4.75.

From west of Toronto—Local fares to nearest shore port, it being understood that variations in same may be necessary for proper adjustment of rates by different routes.

From east of Toronto—Local fares added to Toronto basing rates on one-way business, and regular return rates on first-class round trip business.

This notice does not carry with it the acceptance of above basing rates as railway proportions of through rates, and such proportions will be subject to re-arrangement between the lines interested.

ENAMELED IRON TELEGRAPH SIGNS.

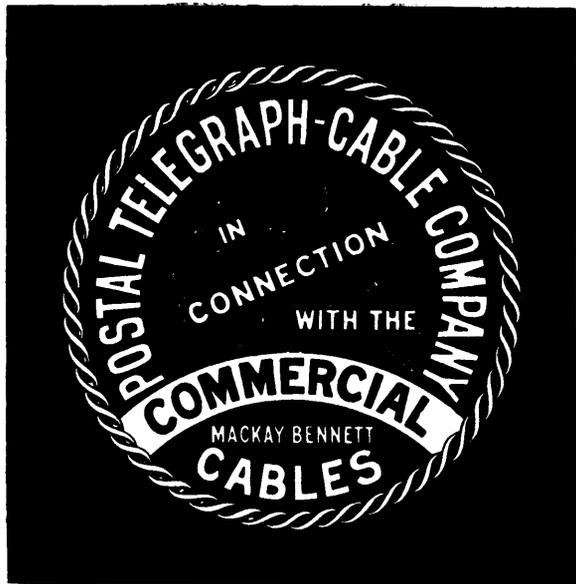
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Importers of Enamelled Iron Signs of the best English manufacture.

Agreed that the same through rates should be made via Parry Sound to Byng Inlet, French River, Killarney and points beyond as are made via Owen Sound, Midland or Collingwood.

Agreed that in making up tourist rates through and via lake ports, going and returning via different routes, one-half the regular return rate (not basing) be used as a basis for one-way passage during the tourist season—exceptions being made as follows:—(a) By the Anchor Line, that this does not apply on St. Paul or Minneapolis. (b) By the Northern Navigation Co., that during the Mackinac excursion season the one-way proportion on circular tours will be \$9 between shore ports and Mackinac Island or Sault Ste Marie. The representatives of the Anchor Line, D. and C.N. Co., and Northern SS. Co. announced that the one-way amounts so arrived at between Detroit and eastern points reached via the steamers of those lines, would not include transfer in Detroit.

The Canadian railways named a \$35.90 excursion rate from Toronto to Port Arthur or Fort William and return, to be used at their stations in Ontario, Toronto and west—the route to be one way by lake, and on such business the rail proportion between Port Arthur or Fort William and Toronto via North Bay to be \$20.

The Canadian railways named a \$22.15 excursion rate from their stations in Ontario, Toronto and west, to Sault Ste. Marie and return—the route to be one way lake—(it being understood that an increased rate may be named from points west of London), and on such business the rail proportion between Sault Ste. Marie and Toronto via North Bay to be \$12.75.

Agreed that east-bound or west-bound rates current at any time between Cleveland and Toronto and points east of Toronto, via rail lines to Buffalo, be made applicable as limited rates via Detroit & Cleveland Navigation Co.'s or Northern SS. Co.'s route through Detroit, and that, while the Niagara Navigation Co.'s boats are running, May 15 to Sept. 30, the rates current via that route across Lake Ontario be adopted as the limited rates via D. & C.N. Co. or N. SS. Co. and Detroit, provided that the rates to and from Detroit be not cut; the D. & C.N. Co.'s or N. SS. Co.'s proportion of all rates not based on full tariff via Detroit to be \$1.50 Detroit to Cleveland, not including transfer at Detroit.

Agreed that the same rates as provided for above be applied via London or St. Thomas or Port Stanley, the Lake Erie Navigation Co. accepting \$2.25 from London or \$2 from St. Thomas.

Agreed that the current second-class rates via Chicago or Sault Ste. Marie to points on or north of the line of the M., St. P. & S.S.M. Ry. may be applied by the rail and lake routes unless sum of locals is less.

The Anchor Line, Cleveland & Buffalo Transit Co., Detroit & Cleveland Navigation Co., and Northern SS. Co. gave notice that transfer arbitraries of 35c. at Buffalo, 35c. at Cleveland, 25c. at Detroit, 25c. at Port Huron, 25c. at Sault Ste. Marie, 40c. first-class, 25c. 2nd class at Duluth, must be added in the construction of all one-way rates, and double these amounts on all round trip rates, such transfer arbitraries to be included in reports to their respective companies, except that for N. SS. Co. transfer arbitraries should be reported as follows:—At Buffalo, Sault Ste. Marie and Duluth, to receiving line; at Cleveland and Detroit, to delivering line (except that at Detroit with C.P.R. report is made to receiving line); divide round trip equally. The Northern Navigation Co. gave notice that same arbitraries at Sault Ste. Marie and Duluth should be added in connection with their line. The Algoma Central SS. line concurs in this arrangement as to Detroit, Port Huron and Sault Ste. Marie.

On all business passing through the port of Parry Sound requiring a transfer between the steamboat line and C.A. Ry. in either direction, a coupon or coupons will be required on account of the Parry Sound Yachting Fleet—one way 25c., round trip 35c.—to be added to tourist or local rates at present in effect. These arbitraries to be reported to the P.S.Y.F., Parry Sound.

The Cleveland & Buffalo Transit Co., Detroit & Cleveland Navigation Co., Manitou SS. Co. and Northern SS. Co., request that all lines issuing tickets over their respective routes print same to read "meals and berths extra."

Agreed that the different lines shall furnish the Secretary particulars of their stop-over privileges, length of season during which tickets may be issued, limit of tickets, etc., to be incorporated in the proceedings. Information was furnished as follows:—

Algoma Central SS. Line.—On application to purser, stop-over allowed at any regular port on all unlimited first-class and tourist tickets.

Anchor Line.—Upon application to purser, stop-over privileges will be granted at any regular port on all unlimited first-class and tourist tickets and checks good within the limit of the ticket will be issued at each port, and passengers may resume their tour at pleasure within that limit on any passenger steamer of the line. Passenger season May 1 to Oct. 30. Stop at Mackinac Island from June 1 to Sept. 30 only.

Canadian Pacific SS. Line.—One of the express steamships Alberta, Athabasca, and Manitoba will leave Owen Sound for Sault Ste. Marie, Port Arthur and Fort William every Tuesday, Thursday and Saturday during the season of navigation. Stop-over allowed on application to purser, on first-class unlimited and tourist tickets within their limit.

Cleveland and Buffalo Transit Co.—Steamers run from April 1 to Dec. 1. No intermediate stops.

Detroit and Cleveland Nav. Co.—Navigation closes Dec. 1. Stop-over privileges allowed at Detroit, St. Clair and Alpena on the up trip only.

Lackawanna-Green Bay Line.—Buffalo to Cleveland, Detroit, Port Huron, Mackinac Island, Pt. St. Ignace, Escanaba, Menominee, Marinette and Green Bay. Stop-over privileges granted on application.

Lake Erie Nav. Co.—Steamers will cease running about Sept. 15.

Lake Michigan and Lake Superior Transit Co.—Regular steamers run from May 1 to September 30. Stop-over checks on first-class unlimited and tourist tickets will be issued between all ports, except Milwaukee.

Lake Ontario and Bay of Quinte Steamboat Co.—Steamers run from May 1 to Oct. 15. No stop-overs.

Lake Ontario Nav. Co.—Cleveland, Toledo, Detroit and Soo Line. Leave Cleveland 2 p.m., Saturday, June 22 to Sept. 7 inclusive, arrive Sault Ste. Marie 6 a.m. Tuesdays; leave Sault Ste. Marie 6 p.m. Tuesdays, June 25 to Sept. 10 inclusive, arrive Cleveland 6 a.m. Fridays. Stop-overs allowed on notice to purser.

Manitou SS. Co.—SS. Manitou's first sailing from Chicago, June 20, and last sailing from Mackinac Island, Sept. 13. Stop-over checks issued at intermediate ports on application to purser.

Montreal and Rochester Transit Co.'s str. Alexandria will leave Charlotte 8.00 p.m. every Sunday during the season of navigation, touching at all Bay of Quinte and River St. Lawrence ports, and arriving Montreal at 5 on Tuesdays. Returning will leave Montreal 12 noon, Thursday, and arrive Charlotte 8.30 p.m. Saturday. Stop-over allowed on notice to purser. This steamer will run several excursions direct to Quebec during

July and Aug., leaving Charlotte Sunday evenings schedule time, giving passengers nearly a day in Montreal, and a day in Quebec. Fare, one-way \$13, return \$25, including berth and meals.

Muskoka Nav. Co.—Stop-over allowed.

Niagara Nav. Co.—Steamers cease running about Oct. 10. Stop-over allowed.

North Michigan Trans. Co.—Steamers run from April 15 to Dec. 1. Stop-over allowed at all points.

Northern SS. Co.—Stop-over checks good until close of season will be issued on application by the purser to all passengers holding unlimited or tourist tickets. Season extends from middle of June to middle of Sept.

Northern Nav. Co. of Ontario.—One stop-over in each direction allowed on application to purser on first class unlimited and tourist tickets within their limits. Passengers for Killarney and points beyond via Collingwood must proceed by Soo steamers; they will not be carried via Parry Sound to Killarney, there changing to direct steamer, except on payment of an extra charge as provided for in tariffs.

North-West Trans. Co.—Stop-over allowed on application to purser on unlimited first-class and tourist tickets within their limit.

Ottawa River Nav. Co.—Stop-over allowed at Carillon, Grenville, and L'Orignal for Caledonia Springs; at other points on notice to purser. Steamers run daily (except Sundays) from about May 20 to about Oct. 1.

Richelieu and Ontario Nav. Co.—Stop-over allowed on notice to purser at Alexandria Bay, Clayton, Thousand Island Park, Montreal, Quebec, the Saguenay and all other points. Passengers embarking at Clayton are not allowed to stop at Alexandria Bay; those who desire to stop at Alexandria Bay should take Thousand Island S. B. Co.'s steamer. Service between June 1 and Sept. 30, on Western division, and during season of navigation east of Montreal. Meals and berth are included on west-bound tickets between Montreal and Toronto, where single-fare is \$3 or over, or where round trip fare is \$5.50 or over. Steamers of Hamilton, Bay of Quinte and Montreal route will leave Hamilton and Montreal tri-weekly during season of navigation, touching at all Bay of Quinte and River St. Lawrence points in both directions.

Rideau Lakes Nav. Co.—Kingston and Ottawa. Steamers James Swift and Rideau Queen leave Kingston every Monday and Thursday at 7 a.m., every Tuesday and Friday at 1 p.m.; leave Ottawa every Monday and Thursday at 5 a.m., every Tuesday and Friday at 3 p.m. Fare between Kingston and Ottawa \$3 one way, \$5 round trip. The James Swift runs from May 1 to Nov. 15, and the Rideau Queen from June 1 to Sept. 15. Stop-over allowed on application to purser.

St. Lawrence River S.B. Co., and Thousand Island S.B. Co.—No stop-over allowed.

Windsor, Detroit and Soo Line.—One stop-over allowed on application to purser, on first-class unlimited and tourist tickets, good for 15 days on return voyage only. Steamers run from about June 24 to Sept. 1 inclusive.

The Secretary was instructed to insert in the proceedings a note to the effect that on all lines represented at the meeting, unless specially stated to the contrary, children five years of age and under 12 will be charged half-rate—exceptions made by any of the lines, charges for meals, etc., to be shown in the sheet. The Algoma Central SS. Line, Anchor Line, C.P.R. SS. Line, Lake Michigan and Lake Superior Trans. Co., Northern Nav. Co., North-West Trans. Co., Rideau Lakes Nav. Co., and Windsor, Detroit and Soo Line, gave notice that children under five occupying seats at the table will be charged for meals at regular rates.

Commercial Travellers.—Agreed that the following rules be adopted for commercial

travellers:—On Northern Nav. Co.'s lines they will be given 25% discount off transportation rates (exclusive of meals and berths), with 300 lbs. of baggage free, excess to be charged for at regular rates. On North-West Trans. Co.'s lines.—Members of Canadian Commercial Travellers' Association, on presentation of their certificates for current year, will be charged half regular return rate from shore to Fort William or Port Arthur (for example, from Sarnia \$13.50), or Duluth (for example, from Sarnia \$15.00), no concession being made to Sault Ste. Marie—through tickets from inland points not to be issued on basis of these rates. The C.P.R. and Algoma Central S.S. Line gave notice that they reserved the right to meet these concessions if found necessary.

The question of rates for clergymen having been brought up, it was referred to lines interested to settle amongst themselves.

All steamer lines agreed to withdraw their issue of tickets from outside agents in Toronto and other inland points, providing the initial lines gave them satisfactory representation.

It was decided to hold the 1902 meeting at Halifax, but opposition to this subsequently developed, and a mail vote was secured by the Chairman; the result being that the meeting will be held at Sault Ste Marie, Ont.

The Automobile in the Klondike.

J. W. Fox, of East Cleveland, Ohio, relates some notable particulars about the introduction of the automobile into Dawson, the venture being in the hands of E. H. Clear & G. W. Dunham, of Cleveland. The machines are built like a three-seated surrey, each seat

to accommodate four people. They are propelled by 15 h.p. motors & use about a gallon of gasoline an hour. They run on the trails & climb the hills without the slightest difficulty. They carry 10 or 12 passengers each, & also have room for small packages for the different mining camps on the daily runs. The winter has evidently been a severe one in the Klondike, & this more than ever demonstrates the value of an automobile for an Arctic climate. During the last 187 miles of the journey of Mr. Dunham, the temperature ranged from 55 to 71 degrees below zero, & the government thermometer registered 70 degrees below zero for three days in Dawson. Mr. Dunham says: "I started up the river Dec. 30, & did not get back until Jan. 21, being delayed by a run of cold equaled by nothing experienced by the old inhabitants. For over a week the temperature never rose above 55 below zero, & one time was as low as 77. We traveled every day, however, going slow, making from 5 to 12 miles, according to the conditions of the trail. To make matters worse, the horses' nostrils would clog up with frost, & had to be cleared from time to time when they began to stagger for want of air. Our loads consisted of two four-horse teams, pulling about 5,000 lbs. each, & the wagons were 9½ ft. wide, so you see we had to chop ice wherever it was rough. Some nights we did not go into the roadhouses until nearly 12. We have one machine erected, & we take it out every day, & are getting it in pretty good shape. Dawson is highly excited, & every one is urging us to hurry so they can ride." Another letter says: "The stage lines, or rather their owners, are beginning already to tremble, but after they see the 'gas buggies,' as one fellow called them, they will want to go out of business altogether, for the stages are only bob-sleds with seats, horribly cold & uncomfortable."

Fireproof Railway Buildings.

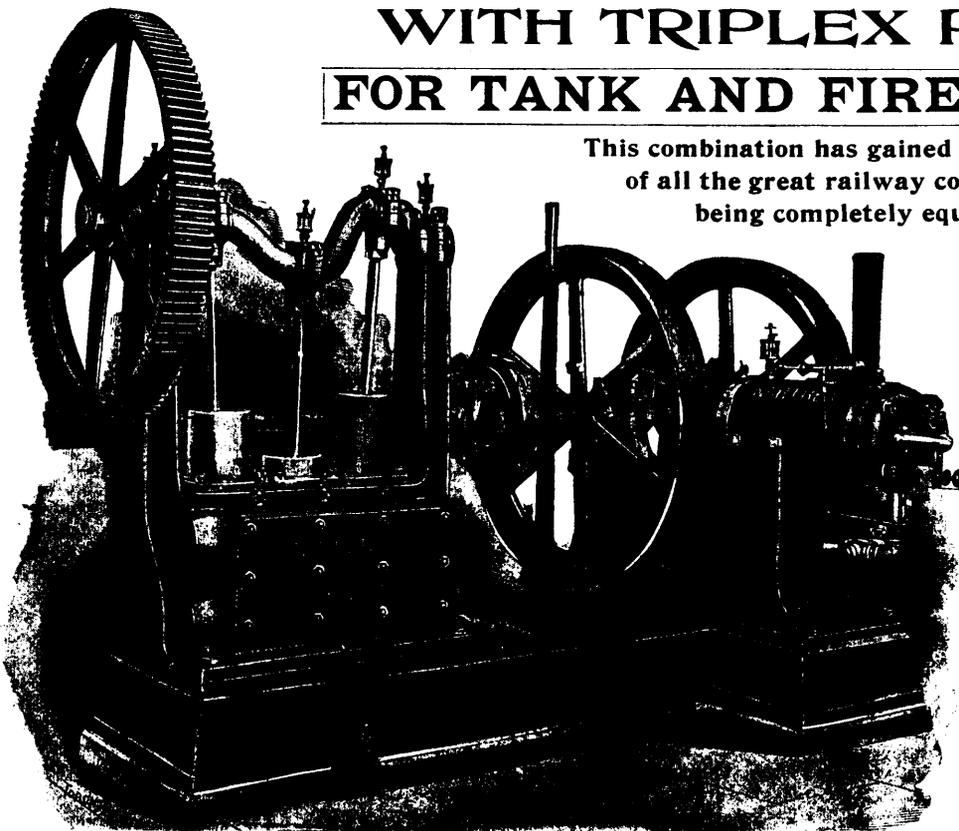
Most people are possessed of the idea that fireproof buildings are necessarily very expensive. But modern methods and an ingenious use of convenient materials have rendered the cost of fireproof work but little more than ordinary construction. The expanded metal system of construction of floors and roofs by reinforcing cinder concrete with expanded metal is rapidly becoming general. The work can be done quickly and cheaply, and therefore is being adopted for all sorts of buildings. For the walls of round-houses, freight sheds and machine shops the use of expanded metal lath with Portland cement mortar, furnishes a cheap fireproof structure, cheaper than brick or stone. Light steel channels are set up as studding, and to these the lath is wired securely. The plaster is laid on both sides of this metal skeleton, making a solid wall 2 or 2½ inches thick. These walls are non-conductors of heat, are very strong and rigid, and are perfectly fireproof.

The Canadian Northern Railway have recently constructed a round-house, the walls of which are built with expanded metal lath and cement. The Montreal Street Railway Co. has had the floor of its new power house constructed with expanded metal in concrete. The Canadian Pacific Ry. Co.'s Telegraph has had expanded metal and concrete floors put throughout its new seven-story office building in Montreal. The Expanded Metal Fireproofing Co. has its factory and offices in Toronto.

Cliff Automatic Hose Reel.—F. E. Came, General Sales Agent for Canada, Montreal, reports that the Victoria Hospital, of Hamilton, has given an order for the equipping of the building with this reel. It has also been adopted for the Hotel Royal, Hamilton; the Sydney Hotel, Sydney, N.S., and the C.P.R.

The NORTHEY GASOLINE ENGINE WITH TRIPLEX PUMP FOR TANK AND FIRE DUTIES.

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This cut illustrates a very satisfactory combination of the Triples Power Pump, actuated by The Northey Gas and Gasoline Engine, for duties wherever an independent pumping plant, ready for instant service, is required. The advantages of this plant are: economy in space occupied, low running expenses, extreme ease in handling (any person can operate it), readiness on the minute for service at all hours, making it invaluable in case of fires, and the absolute safety and precision with which it performs its work.

The Triples Pump used, with pistons placed 120 degrees apart, gives a practically constant flow of water, minimising strain on pump, connections, piping, etc. Both machines are heavily and solidly built, and carry the most ample guarantees.

We will be pleased to send you catalogues and specifications.

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Manufacturers of Pumping Machinery of every description.

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TORONTO, CANADA

RAILWAY APPOINTMENTS, ETC.

Algoma Central.—J. R. Patterson has been appointed Superintendent of the Michipicoton division, including the Josephine branch, with headquarters at Michipicoton, Ont.

G. D. Ellis, heretofore Travelling Passenger Agent of the Northern Navigation Co., has been given charge of the passenger and express business of the Algoma Central Ry. and Steamship Line, with headquarters at Sault Ste. Marie, Ont.

Brockville, Westport and Sault Ste. Marie.—Supt. Jas. Mooney, having asked to be relieved on account of ill health, E. A. Geiger, heretofore Secretary, General Passenger Agent and Auditor, has been appointed Superintendent and will also act as General Freight Agent and Treasurer. Mr. Mooney will remain in the service as General Passenger Agent. W. A. Gogo, agent at Brockville, has been appointed Auditor.

Canadian Northern.—Conductor Risteen has been promoted as train-master.

Canadian Pacific.—J. E. A. Robillard has been appointed Superintendent of the Quebec division, with headquarters at Quebec, vice W. C. Hall, resigned.

W. J. Singleton has been appointed Superintendent of the Ottawa division in addition to his duties as Superintendent of Terminals, vice J. E. A. Robillard, transferred.

H. D. Anable, Travelling Freight Agent at Montreal, has been appointed Travelling Traffic Agent for Great Britain and Ireland, succeeding T. H. Underwood, who has received an appointment at Cape Town, as Traffic and Dock Manager of the Cape Colony Government. A. R. Evans succeeds Mr. Anable as Travelling Freight Agent at Montreal.

Grant Hall has been appointed General Locomotive Foreman of the Winnipeg shops, succeeding S. G. Pentland, who has been given charge of the Calgary shops.

Sydney Haywood has been appointed passenger representative at the Pan-American Exposition. He was formerly in the Co.'s service at Calcutta.

Central Ontario Ry.—J. D. Rowe has been appointed Treasurer from April 1, succeeding R. H. Spencer, who has resigned to enter the service of the Eastern Audit Co., of Boston, Mass.

Central Vermont.—E. D. Thomson, for many years in the G.T.R. service, has been appointed secretary to R. S. Logan, Vice-President and General Manager of the C.V.R.

Grand Trunk.—W. G. Brownlee, assistant superintendent, 5th 6th and 7th districts, with headquarters at Belleville, Ont., has been transferred to the 1st, 2nd and 3rd districts, with headquarters at Island Pond, Vt., and will have charge of all employes and matters pertaining to train and station service.

C. H. Bevington, train-master of the 1st district at Island Pond, Vt., has been transferred to 2nd, 3rd and 4th districts, with headquarters at Bonaventure Station, Montreal, reporting direct to assistant superintendent in matters pertaining to 2nd and 3rd districts.

W. W. Ashald, train-master 2nd, 3rd and 4th districts, with office at Montreal, has been transferred to 5th, 6th and 7th districts, with office at Belleville.

F. R. Porter, chief clerk in the Division Freight Agent's office at Hamilton, has been appointed city freight agent, succeeding A. Cowan, appointed travelling agent of the North West Transportation Co.

H. C. Martin, chief rate clerk of the general freight department of the G. T. Western Ry. at Chicago, has been appointed chief clerk of the same department, and is succeeded by C. B. Chapman, heretofore travelling freight agent. W. H. Spicer, heretofore lost car agent, succeeds Mr. Chapman, with office at Battle Creek, Mich.

H. C. Martin has been appointed chief clerk of the freight department at Chicago, succeeding W. N. Ross, appointed agent of the Great Eastern Fast Freight Line.

R. McC. Smith, Southern Passenger Agent at Cincinnati, has been appointed as the Co.'s representative at the Pan-American Exposition.

The following station agents have been installed:—Gorham, D. J. Scully; Stratford Hollow, F. Houde; Norton Mills, W. S. Wilson; Newtonville, A. McDougall; Lucan, A. L. Shipley; Granton, T. S. Hill; Cargill, G. A. Somerville; Swansea, P. Lautenslayer; Tilsonburg, L. L., J. A. McDonald; Harley, W. Murray; Alma, W. Henry; Bluevale, J. Collie; Olivet, R. E. McEntee; Charlotte, W. F. Lybrook; Slocum, W. W. Thompson.

Great Eastern Fast Freight Line.—W. N. Ross has been appointed agent at Chicago, vice I. W. Gantt, appointed general freight agent of the Central Vermont Ry. Mr. Ross has been chief clerk of the freight department at Chicago for the past twelve years.

Great Northern, U.S.A.—C. E. Stone, who was, prior to its absorption by the Northern Pacific, General Passenger Agent of the St. Paul and Duluth, and afterwards Assistant General Passenger Agent of the Northern Pacific, has been appointed Assistant General Passenger Agent of the Great Northern Ry., to succeed T. B. Lynch.

Halifax and Yarmouth.—G. L. Romans has been appointed master mechanic at Yarmouth, N.S.

Intercolonial.—The Boston passenger agent's office has been closed, W. H. Price, who has had charge, returning to Moncton to resume his old position as chief clerk in the general passenger department, succeeding H. H. Melanson, who has been appointed General Baggage Agent in place of A. W. Morrison.

Traffic Manager Tiffin has appointed E. Sunley as his secretary. —Colcleugh, formerly secretary to General Supt. Price, has been appointed secretary to Manager Russell, J. Gloster succeeding him as secretary to General Supt. Price.

London and Port Stanley.—The officers for the current year are:—President, F. G. Rumball; Vice-President, J. H. Pritchard; other directors, A. Greenlees, J. H. A. Beaty, H. B. Cronyn, S. Stevely, G. C. Jolly, W. H. Winnett, J. Mallinson, W. Bartlett; Secretary, C. A. Kingston; Treasurer, J. Pope; Engineer, A. O. Graydon; Solicitor, T. G. Meredith. The railway is owned by the City of London, and is leased to the Lake Erie and Detroit River Ry.

Michigan Central.—D. R. MacBain has been appointed Division Master Mechanic at St. Thomas, Ont., vice M. L. Flynn resigned on account of ill-health. E. R. Webb has been appointed Division Master Mechanic at Michigan City, vice D. R. MacBain promoted. W. R. Black has been appointed Travelling Engineer U. S. Division, vice E. R. Webb promoted.

Niagara, St. Catharines and Toronto.—E. F. Seixas has been appointed General Manager, with office at St. Catharines, succeeding F. A. Cheney.

Northern Navigation Co. of Ontario.—F. P. Belcher has been appointed Travelling Agent, with headquarters at Toronto, having been transferred from Vancouver, where he represented both the N.N. Co. and the North West Transportation Co.

North West Transportation Co.—A. Cowan, heretofore soliciting freight agent of the G.T.R. at Hamilton, has been appointed Travelling Agent of the N.W.T. Co., with headquarters at Toronto.

Pennsylvania.—E. D. McKenzie, formerly travelling agent for the Empire Line, has

been appointed Canadian Freight Agent for the Pennsylvania Rd., with office in Toronto.

Quebec and Lake St. John.—S. S. Oliver, heretofore accountant, has been appointed Auditor.

Quebec Southern.—P. L. Raymond has been appointed Superintendent of Motive Power, with headquarters at St. Hyacinthe.

Richelieu and Ontario Navigation Co.—Capt. A. Malone has been appointed Freight Agent and Wharf Manager at Toronto, vice Capt. Craig resigned. Capt. Malone has been with the Donnelly Wrecking and Salvage Co. of Kingston.

Mainly About People.

Supt. Brown, of the Hull Electric Ry., is recovering from a serious illness.

Wm. Butze, son of the General Purchasing Agent of the G.T.R., died in St. Louis, Mo., early in March.

James Huddart, founder of the Canadian-Australian Steamship Line, died at Eastbourne, Eng., Feb. 27.

F. B. Polson, of the Polson Iron Works, Toronto, was married Mar. 20, to Miss Bessie Thomson, of Toronto.

Mrs. Pottinger, mother of the General Manager of the Government railways, died at her son's residence, Moncton, N.B., Mar. 25, aged 91.

R. Atkinson, formerly Supt. of Rolling Stock for the C.P.R., has been appointed Asst. Supt. of the Locomotive Works at Kingston, Ont.

L. D. Parker, for 18 years General Supt. of the Postal Telegraph-Cable Co., died at Evanston, Ill., Mar. 19. He was born in Canada in 1837.

W. Kelley, formerly General Passenger Agent of the Niagara Gorge Ry., has been appointed New England Passenger Agent for the Wisconsin Central.

John Tough, local manager at Montreal for the Shedden Forwarding Co., was stricken with paralysis in Toronto, Mar. 12, and died there a week later.

Frank Lally, the old-time lacrosse player and manufacturer of lacrosse sticks, has been appointed Superintendent of the Cornwall canal, vice J. Ramsay, retired.

G. H. Ham, of the C.P.R. advertising department, returned to Montreal about the middle of March, after having been seriously ill at Winnipeg for several weeks.

Lord and Lady Mount-Stephen, who have left London for Paris on their way to the Riviera, intend to spend next winter at Bombay with Lord and Lady Northcote.

Lieut.-Col. R. L. Nellés, G.T.R. freight agent, Toronto, has resigned the command of the 37th Regt., Haldimand Rifles, and has been placed on the reserve of officers.

Among the subscribers to the memorial to be erected at Kingston to the late Sir Geo. Kirkpatrick are six of his fellow directors on the C.P.R., who contributed \$50 each.

Capt. Robertson, of Sarnia, Ont., who has been on the Empire and Monarch steamers of the Northwest Transportation Co., has resigned after serving the Co. for 20 years.

J. E. Shaughnessy, who recently resigned the purchasing agency of the Minneapolis, St. Paul and Sault Ste. Marie Ry., has gone into the railway supply business at Minneapolis.

Capt. C. Starkey, for many years in command of the str. David Weston, and later of the str. Victoria, of the Star Line on the St. John river, N.B., died recently in New York, aged 57.

Miss Annie Galt, youngest daughter of the late Sir A. T. Galt, and sister of E. T. Galt,

President of the Alberta Ry. and Coal Co., will be married in June to Dr. Harvey Smith, of Winnipeg.

C. W. Wason, who is closely identified with H. Everett in numerous telephone and street railway enterprises in Cleveland and vicinity, was married recently to Miss Breckenridge, of Hamilton, Ont.

W. Grierson, who was in charge of the car and wood-working department of the Dominion Atlantic Ry. from its inception until within the past few years, died at Kentville, N.S., Mar., 27, aged 78.

Geo. Lumsden, locomotive engineer, who was severely injured in the C.P.R. accident at St. Polycarpe, Mar. 14th, is a cousin of H. D. Lumsden, C.E., and of Sir Peter Lumsden, of Afghanistan fame.

Capt. R. McIntosh, who died at New Glasgow, N.S., Feb. 27, aged 67, was for many years in command of vessels owned by J. W. Carmichael & Co. of that town, retiring from the Helga about a year ago.

Miss Nellie Egan, daughter of J. M. Egan, President of the Central of Georgia Ry., and formerly General Superintendent of the C.P.R. at Winnipeg, died at Savannah, Ga., Mar. 14, as the result of an operation.

L. A. Hamilton, ex-Land Commissioner of the C.P.R., left Toronto for Europe, April 4, expecting to be absent for about three months. Mrs. Hamilton will leave about the end of April to join him in England.

M. McGovern, eldest son of J. McGovern, track master of the I.C.R. at Campbellton, N.B., has had one of his legs amputated in consequence of having had it crushed when getting off a train at Cedar Hill, N.B.

R. Gray, ex-station master of the G.T.R. at Stuart St., Hamilton, recently sued the Co. for \$100 damages for alleged wrongful dismissal and lost the case in the Division Court. He is now suing for \$200 in the County Court.

W. W. Colpitts, assistant to the Chief Engineer of Construction of the C.P.R. at Winnipeg, has been appointed assistant to the Chief Engineer in charge of construction on the Kansas City, Mexico and Orient Rd., at Kansas City.

A. W. Ross, ex-M.P. for a Manitoba constituency, died at Toronto Mar. 23. He was at one time Vice-President of the Manitoba and North Western Ry., and was a member

of the Howland syndicate, which offered to build the C.P.R.

Baltimore despatches say that F. D. Underwood, first Vice-President of the Baltimore and Ohio Rd., and formerly General Manager of the Minneapolis, St. Paul and Sault Ste. Marie Ry., has been offered the Presidency of the Erie Rd.

At a recent general meeting of the Perth, West Australia, Electric Tramways Co., in London, England, the Chairman expressed high appreciation of the services of the Manager and Engineer, H. J. Somerset, formerly of the Winnipeg Electric Ry.

B. E. Charlton, who died at Hamilton Mar. 12, was one of the directors of the Hamilton Steamboat Co. at its formation, continuing on the board for several years. He was a director of the Hamilton St. Ry. from 1885 to 1899, and President from 1886 to 1897.

Mrs. Ecclestone, who died at Hamilton, Mar. 18, was the mother of Mrs. S. R. Callaway, wife of the President of the New York Central Ry., and of Mrs. W. R. Callaway, wife of the General Passenger Agent of the Minneapolis, St. Paul and Sault Ste. Marie Ry.

B. W. Folger, Jr., who has been appointed General Superintendent of the Brooklyn Rapid Transit Co., is about 30 years of age. For several years past he has been Traffic Manager of the Thousand Islands and St. Lawrence Steamboat Co., with headquarters at Kingston, Ont.

A. Cowan, soliciting freight agent for the G.T.R. in Hamilton, who resigned to become general agent of the North-West Transportation Co., was presented by the business men of Hamilton with an address and \$600. The local freight staff of the G.T.R. gave him a handsome travelling bag.

W. S. Stout, Vice-President and General Manager of the Dominion Express Co., who left Toronto, Feb. 1, for England, sailed from there toward the end of Feb. for South America, where he now is. He will probably visit England before returning to Canada, and is not expected here until June.

F. L. Wanklyn, Manager of the Montreal St. Ry., has returned from Jamaica, where, as Chairman of the Board of Construction of the West India Electric Co., he made an inspection of the Co.'s property. He says that 23 miles of the road are in operation, and that the system is in excellent condition.

L. A. Sauve, Superintendent of the Soulanges Canal, was recently fined for having exceeded his duty as a justice of the peace. A number of residents of Soulanges, believing that he had acted in good faith and in the public interest, presented him with a purse to reimburse him for the amount of the fine and costs.

A. Hilton, who has been appointed Assistant General Passenger Agent of the Kansas City, Fort Scott and Memphis Rd., has spent nearly all his railroad life in the service of the Chicago and Alton. He was born at Hamilton, Ont., in 1863, and entered the service of the Great Western of Canada, in 1877. Two years later he took service with the Chicago and Alton.

Jno. Hislop, Chief Engineer of the White Pass and Yukon Ry., was killed in Chicago, Feb. 22, while boarding a suburban train on the Chicago, Rock Island and Pacific Ry., at 71st street. He was in Chicago on his wedding tour and a few minutes before the accident had been visiting at the home of his brother-in-law.

O. Lytle, who died at Barrington, Que., Mar. 30, aged 77, was probably the oldest station agent on the G.T.R. He was appointed in 1853, and kept at his post until two years ago, since which one of his daughters has filled the position. Among his sons is A. C. Lytle, Supt. and General Freight and Passenger Agent of the Orford Mountain Ry., at Eastman, Que.

John H. Whitman died at Chicago Mar. 19 of pneumonia, aged 78. He went to Chicago in 1865 as Western Passenger Agent of the Grand Trunk and Great Western roads, and was afterwards Western Agent for the Niagara Short Line. With the reorganization of the G.T. system he went into the general offices of the passenger department, where he remained until his death.

W. C. Hall recently resigned his position as Superintendent of the C.P.R. at Quebec, having undergone an operation, and in consequence finding that he was unable to properly attend to his duties. He hopes in a few months' time, should his eyesight become improved, to resume duty in some other capacity, as his relations with the Co. have not been completely severed.

H. C. Symmes, contractor, died at Drummondville, Ont., Mar. 9. The Welland canal, the Toronto water works, the cantilever bridge at Niagara Falls, the Chignecto ship railway,

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the Northern railway, and the development of power at Niagara Falls, are among the undertakings in which he took part. He was Vice-President of the Port Dalhousie, St. Catharines and Thorold Electric Ry.

Following is the railway record of Wm. Apps, Master Car Builder of the C.P.R., whose portrait appears on page 97:—May, 1881 to 1887, General Foreman Car Department, St. Paul, Minneapolis and Manitoba Ry.; Oct., 1887, to May, 1891, Master Car Builder Western Ry. of Alabama, and Atlanta and West Point Ry.; June, 1891, to Sept., 1891, Master Car Builder Chicago and Eastern Illinois R.R.; Oct., 1891, to Dec., 1895, Master Mechanic Illinois Central R.R. at Chicago; Dec., 1895, to date, Master Car Builder C.P.R.

E. A. Geiger, who has been promoted to the Superintendency of the Brockville, Westport and Sault Ste. Marie Ry., began his railway career as telegraph operator on the Georgian Bay and Lake Erie branch of the G.T.R. in 1881. After two years he went to Hamilton, and for four years was Vice-Principal of the Hamilton Business College. In 1888 he went to Brockville as Secretary for R. G. Hervey, Manager of the B. and W. R. R. Soon afterwards he was appointed Auditor, and in a short time he was also made General Passenger Agent.

J. D. Rowe, who has been appointed treasurer of the Central Ontario Ry., was born in Ameliasburg, Prince Edward County, Ont., Nov. 7, 1864. In 1878 he started as a clerk in a mercantile establishment, continuing in similar positions until 1889, with the exception of a course at Belleville Commercial College. On April 1, 1889, he entered the service of the C.O.R. as baggageman at Picton. After six months he was sent to Bloomfield as agent, and has since been employed at Ormsby, Trenton Junction and Trenton, being at the latter place for the past eight years.

H. C. Pearce, recently appointed Purchasing Agent of the Minneapolis, St. Paul and Sault Ste. Marie Ry., was born in Canada, June 1, 1865. He entered the service of the Minneapolis, Minnetonka and Lyndale Ry. in 1884, serving as Irakeman, conductor and cashier. He became a clerk for the Superintendent of Construction for the Minneapolis, St. Paul and Sault Ste. Marie Ry. in Sept., 1887. After the road was built, he was transferred first to the Auditor's office, and then served for two years as chief clerk to the General Superintendent. He was appointed General Storekeeper Sept. 1, 1892.

Capt. Jas. Moffat, aged 77, a Port Huron, Mich., pioneer and old-time vesselman, well known all along the chain of lakes, died recently as a result of a stroke of paralysis. For over half a century he had been identified with Port Huron's interests, and in 1851 he started a ferry line between there and Sarnia, operating a house boat at first. He afterwards built a little boat called the Union, which in 1859 was succeeded by the Sarnia. In 1877 he, with D. N. Runnels, purchased the str. Beckwith for the route, and subsequently built the str. Omar D. Conger. He had also been interested in other vessel properties, and at one time controlled the Moffat Tug Line. He was connected with the ferry business for 40 years.

E. H. Fitzhugh, who retired from the Vice-Presidency and General Managership of the Central Vermont Ry. Mar. 15, passed west through Toronto on his special car, Mansfield, a few days later. It was said that he was en route to San Francisco, but it is not known whether he went there. He returned east, passing through St. Thomas on April 3, and is reported to have gone to New York, from which place it was said he would proceed to New Orleans and go over the Southern Pacific to San Francisco with President

Hays, of the S. P. Press reports say Mr. Fitzhugh has been appointed General Manager and a Vice-President of the S.P., but up to April 8 no official announcement had been made. Going west his car was badly smashed while being transferred to the car ferry at Windsor. He was not on board at the time.

Jas. H. Cameron, one of the pioneer shipbuilders of the Great Lakes, died recently at Kenosha, Wis. He was well known to nearly every vessel owner on Lake Michigan. A Scotch-Canadian by birth he was raised on the banks of the St. John river, New Brunswick. From his earliest manhood he engaged in the business of shipbuilding, and when Chicago began to develop into a shipping center he went West and opened a small shipyard, where he built many of the early vessels which were used for the lake traffic. The schooner America, which recently went down on Lake Michigan, was one of the first boats turned out at his yard. After he had been in business in Chicago for some 10 years he went to Milwaukee in 1848, and for a while was engaged in shipbuilding there. In 1850 he went to Kenosha, and since that time he has resided there. At the time of his death he was in his 92nd year.

W. J. Singleton, who has been appointed Superintendent of the Ottawa division of the C.P.R., in addition to his previous duties as Superintendent of Montreal Terminals, is a native of Lancashire, Eng. He entered railway service Jan., 1865, since which his record has been:—Jan. 1865 to Dec. 1867, freight and passenger brakeman G.T.R.; Dec. 1867 to May 1871, freight conductor G.T.R.; May 1871 to June 1873, assistant agent and yardmaster G.T.R.; June 1873 to Dec. 1882, Agent at Point St. Charles, G.T.R.; Dec. 1882 to April 1884, Agent C.P. Ry. at Ottawa; April 1884 to Jan. 1886, Agent C.P.R. at Hochelaga and train-master G.T.R. at North Bay; Jan. 1886 to Aug. 1892, Assistant Superintendent Chapeau Division C.P.R.; Aug. 1892 to Oct. 1896, Assistant Superintendent Montreal Terminals C.P.R.; Oct. 1896 to Mar. 1901, Superintendent Montreal Terminals, C.P.R.; Mar. 1901 to date, Superintendent Montreal Terminals and Ottawa Division C.P.R.

P. R. Todd, who has been appointed second Vice-President of the New York, New Haven and Hartford Rd. in charge of traffic, was born at Toronto, and is a graduate of the Ottawa Collegiate Institute. He entered railway service as clerk and telegraph operator at Ottawa, in the office of the St. Lawrence and Ottawa Ry., which is now a part of the C.P.R. He was Canadian representative of the Ogdensburg and Lake Champlain Rd. for several years, and afterward was General Travelling Agent of the National Despatch Line at Chicago. In July, 1885, he entered the service of the New York, West Shore and Buffalo Rd. as commercial agent at Albany, and in the same year was appointed chief clerk of the general freight department of that road. In 1886 he became General Freight and Passenger Agent of the Canada Atlantic Ry. at Ottawa. In Dec. 1889, he returned to the service of the West Shore Rd. as General Freight Agent, and in 1892 was appointed General Traffic Manager, the office which he has just resigned to accept the position with the New Haven Co.

J. M. Herbert, who has been appointed Superintendent of the Missouri Pacific Ry.'s subsidiary, the St. Louis, Iron Mountain and Southern Ry., and leased, operated and independent lines, was born in Westmoreland Co., Pa., in 1863. He entered railway service with the Wabash, St. Louis and Pacific Rd., Mar., 1880, as night telegraph operator, and remained in the service of that Co. as telegraph operator, station agent, yard clerk, train despatcher, chief train despatcher, and

trainmaster until June, 1897, with the exception of a few months, during which he was connected with the C.C.C. and St. L. Ry. Entered service of the G.T.R.S., June, 1897, as trainmaster, Eastern division, Island Pond, Vt.; June, 1898, transferred to Belleville, Ont., as trainmaster, and in July, 1898, to Montreal as Superintendent Eastern division, which position he resigned Oct. 1, 1900, to accept a similar one with the Missouri Pacific at Ossawatimie, Kan. On April 1, 1901, he was appointed General Superintendent of the St. L., I.M. and S. Ry. and leased, operated and independent lines. The St. L., I.M. and S.R. comprises 1,773.77 miles of line, of which 490.19 are owned, the balance leased. The Missouri Pacific owns \$25,732,680 of the stock, leaving \$65,245 in the hands of the public.

Canadian Excursion Agreement and Pan-American Rates.

A meeting of passenger representatives of railway and steamship lines interested was held at the Queen's Hotel, Toronto, March 21 and 22, to revise and renew the Canadian excursion agreement, and to arrange Pan-American rates. The following were present:—

Canada Atlantic Ry.—J. E. Walsh, A.G.P.A.

Canadian Pacific Ry.—C. E. E. Ussher, G.P.A., E. J. Hebert, chief clerk, A. V. Fabian, excursion clerk.

Central Vermont Ry.—J. H. Hawley, chief clerk.

Grand Trunk Ry.—G. T. Bell, G.P.A., H. G. Elliot, A.G.P.A., G. W. Vaux, A.G.P.A., M. C. Dickson, D.P.A., J. R. Melville, excursion clerk.

Great Northern Ry. of Canada.—Represented by J. E. Walsh, of C.A.R.

Intercolonial.—J. M. Lyons, G.P.A.
Lake Erie and Detroit River Ry.—T. Marshall, A.G.P.A.

Michigan Central Rd.—G. E. King, A.G.P.A., W. H. Underwood, G.E.P.A., S. H. Palmer, C.P.A.

Muskoka Navigation Co.—A. P. Cockburn, Manager.

New York Central Rd.—E. J. Richards, 1st A.G.P.A., H. J. Carter, G.A., G. C. Gridley, G.A.

Niagara Navigation Co.—J. Foy, Mgr., B. Cumberland, V.P.

Northern Navigation Co.—W. Askin, Mgr., F. C. Belcher, T.A.

Northwest Transportation Co.—J. D. Beatty, Mgr., A. Cowan, T.A.

Niagara, St. Catharines and Toronto Ry.—W. N. Warburton, T.M., G. M. Neelon, G.P.A.

New York and Ottawa Ry.—H. K. Gays, A.G.P.A.

Ottawa and Gatineau Ry. and Pontiac Pacific Jct. Ry.—Represented by J. E. Walsh, of C.A.R.

Quebec Central.—J. H. Walsh, G.P.A.
Quebec Ry. Light and Power Co.—W. R. Russell, G.P.A.

Richelieu and Ontario Navigation Co.—T. Henry, T.M., H. F. Chaffee, W.P.A., W. F. Cloney, T.P.A.

Temiscouata Ry.—Represented by J. M. Lyons, of I.C.R.

Tilsonburg, Lake Erie and Pacific Ry.—A. L. Baker, G.P.A.

Toronto, Hamilton and Buffalo Ry.—F. F. Backus, G.P.A.

Wabash Rd.—J. A. Richardson, C.P.A.
White Star Line, Detroit.—C. F. Beilman, T.M.

International Traction Co., Buffalo.—J. E. Stephenson, G.P.A.

Ry invitation Acton Burrows, Publisher RAILWAY AND SHIPPING WORLD.

J. H. Walsh, Q. C. Ry., was elected chairman, and A. V. Fabian, C.P.R., secretary.

Nearly the whole of the first day was devoted to the consideration of the Canadian Excursion Agreement as arranged in 1900. Very few changes were made, but an important amendment was carried by which the time limit on excursions will be extended, and the territory from which excursions may be run changed. It has been impossible in the past to run excursions within a limit of 50 miles, but under the new arrangement excursions may be run within 50-mile territory, tickets good for one day; from 51 to 150 miles, tickets good for two days, and from 151 to 200 miles, tickets good for three days. This is an extension on tickets for practically a day, and while it is a concession to the travelling public the railroad companies hope by this method to encourage excursion business. The portions of the agreement relating to pilgrimages were left over to be considered at a later meeting in Montreal.

PAN-AMERICAN EXPOSITION RATES, ETC.

The second day's meeting was devoted entirely to Pan-American rates, and one feature was brought out quite prominently, viz.: that the lines propose to adopt the commercial principle of making the cheapest rates while they are doing their smallest business, that is to say, it having been shown that during the World's Fair and the Centennial the smallest portion of the business moved in May and June, and these two months not having as many local excursions as later in the season, the cheapest rates will be made during them, the rates from July 1 to the end of the Exposition being on a higher basis. Following are the conclusions arrived at:—

Regular tourist fares from points in Canada to Buffalo or Niagara Falls. Sale of tickets to both points to commence April 30.

From points in Canada more than 100 miles distant from Buffalo, fare and one-third for round trip, going and returning same route, continuous passage in each direction, iron-clad signature ticket requiring deposit and validation by joint agency at Buffalo, to be sold daily commencing April 30, with limit of 15 days including date of sale and Sundays.

From points in Canada 100 miles distant and less from Buffalo, fare and one-third for the round trip, going and returning same route, continuous passage in each direction. Open form of ticket, to be sold daily commencing April 30, with limit 10 days including date of sale and Sundays.

From points in Canada single fare for the

round trip going and returning same route, continuous passage in each direction from points 100 miles distant and less from Buffalo, open form of ticket. From points more than 100 miles distant from Buffalo, iron-clad signature ticket requiring deposit and validation by joint agency at Buffalo, to be sold daily commencing April 30, with limits as follows:—1 to 100 miles, two days, including date of sale, but excluding Sunday; 101 to 200 miles, three days, including date of sale, but excluding Sunday; 201 to 300 miles, five days, including date of sale, but excluding Sunday; 301 miles and over, eight days, including date of sale and Sundays.

Special excursions during May and June (not to be advertised prior to May 1). From points 100 miles distant and less from Buffalo, 1c. a mile each way. From points more than 100 miles distant from Buffalo to and including 400 miles (Montreal to be considered 400 miles distant from Buffalo), $\frac{3}{4}$ c. per mile each way, with minimum rate of \$2. Tickets good going and returning same route, continuous passage in each direction, requiring validation in Buffalo, are to be used where limit of ticket is more than 50 and return same day. Open form of ticket when limit is going and returning same day. Limits as follows:—1 to 150 miles, go and return same day; 151 to 275 miles, go one day, return same or next day; 275 to 400 miles, go one day, return same or next two following days, Sundays included. Dates of sale of special excursion tickets to be not more than two days in any one week, from any one station. Days to be agreed upon by lines interested.

Variable routes.—From points east of Buffalo, going rail, returning boat, 66 2-3% of the 1st class fares by route travelled, final limit 15 days, including date of sale and Sundays; subject to arbitraries of interested lines. Meals and berths on steamer lines extra. Excursion tickets at less than fare and one-third rate may be sold, returning via Kingston or Clayton and R. and O.N. Co., by adding boat arbitraries from Kingston or Clayton to the all-rail excursion rate from starting point to Buffalo and return.

Hotel, lodging, transportation, and other similar companies.—It being understood that none of the Buffalo terminal steam railway lines have done anything in connection with these companies, it is further understood that none of the Canadian lines will take independent action on requests from hotels, lodgings, transportation or other similar compan-

ies, but that they will refer such requests to the Buffalo Passenger Committee and be governed by the action of that Committee.

Mileages and fares to be used from common points, to be exchanged between lines interested.

All excursion and organized party rates to Buffalo and Niagara frontier and near-by points, which would have the effect of cutting agreed rates herein mentioned are cancelled from May 1 to Oct. 31 inclusive.

Rates must end in 0 or 5.—When necessary add sufficient to make them do so.

PILGRIMAGE RATES.

On April 2 a meeting was held in Montreal of representatives of the Canadian Pacific, Grand Trunk, Intercolonial, Great Northern, Canada Atlantic, Quebec, and Quebec Central Rys., and the R. and O. Navigation Co., to agree upon a scale of pilgrimage rates to the various shrines for 1901. A basis was adopted which does not materially differ from that in effect during 1900.

Montreal Harbor Elevators.

The provision of elevators at Montreal is giving the Harbor Commissioners much trouble and uneasiness, mainly on account of the number of proposals placed before them. At a meeting, held on Mar. 25, a deputation was appointed to interview the Ottawa Government, but was only able to see the Minister of Public Works. Subsequently the Commissioners sent a full statement of all the proceedings in connection with the Connors Syndicate agreement, and details of the various proposals since submitted to them to the Premier, and are now waiting the decision of the Cabinet on the question whether they will grant a guarantee to private capital embarked in building elevators.

The agreement with W. J. Connors, of Buffalo, was entered into Jan. 9, 1900, after nearly a year's negotiations, and the elevators were to have been ready for the opening of navigation this year. On Mar. 3 this year Mr. Kennedy, Harbor Engineer, reported that only a few piles had been driven in at Windmill Point for the foundations, and that generally the conditions of the contract had not been fulfilled. The Commissioners decided to submit the report to their solicitor with a view to the cancellation of the contract and the forfeiture of the deposit of \$50,000 made by Mr. Connors. The facts were laid before

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Mr. Trenholme, K.C., for his opinion, but on Mar. 17 he asked for a further report from the Engineer.

In the meantime suggestions and plans were being submitted to the Commissioners with a view to having elevators provided at an early date. H. & A. Allan, the Prescott Elevator Co., The Montreal Warehousing Co., The Montreal Terminal Co., from whom plans had been received in 1899, were invited to submit further proposals by Mar. 24, but did not respond. The plans submitted to the Commissioners are as follows:—

(1) Mr. Crathern proposed to ask the Dominion Government for a loan of \$1,000,000 at 3%, to build two elevators, each of 1,000,000 bush. capacity, to be placed on the shore wharf in the center of the harbor, the elevators to be exclusively under the control of the Harbor Commissioners. This proposition was withdrawn April 4.

(2) Capt. Wolvin, at present operating a fleet of Lake steamers between Buffalo and Duluth, proposes to take over from W. J. Conners all rights under the 1900 agreement; to erect elevators to cost \$2,000,000 on the sites obtained by Conners; to expend \$1,500,000 on building tugs and barges for the canal traffic, operating his present lake fleet from Duluth to Port Colborne. He asks for a guarantee of bonds up to \$750,000; he will not bind himself to a minimum rate for elevating, nor will he bind himself to bring any definite quantity of freight, but expects to carry 10,000,000 bush. of grain the first year.

(3) J. R. Booth, of the Canada Atlantic Ry., who had made a proposal in 1899, submitted a further one on Mar. 29. In return for a guarantee of \$850,000 of 3½% bonds, he will build a 1,000,000 bush. elevator, including some 8,500 ft. of grain carriers, and handle 12,000,000 bush. of grain; or in return for a guarantee of \$1,250,000 of 3½% bonds, he will build two elevators each of 1,000,000 bush. capacity, and handle 24,000,000 bush. of grain.

(4) J. A. Jamieson, builder of elevators, Montreal, proposes to build and operate two steel elevators of 1,000,000 bush. each, together with 7,500 ft. of belt conveyer, each conveyer to be capable of delivering 15,000 bush. an hour, and so arranged that six steamers may be loading simultaneously, on condition that the Commissioners grant a lease of the ground required and the necessary rights of way at a nominal rent, and guarantees the principle and interest on bonds to the extent of 80% of the cost of the works, or a maximum amount of \$800,000. The Commissioners to have the right to take over the elevators at any time after completion, on giving 12 months' notice.

On a Prairie Telegraph Pole.

By Arthur Stringer.

Past mountain and foothill, plain and lake,
Where it links the east and west,
The tense wire tingles from sea to sea,
A river that runs unrest.

As a two-stringed harp of haste it throbs
With the rise and fall of States,
And sings through a land of sun and peace
Of far-off wars and hates.

Through a glimmering sea of waving green,
Of silence, and golden suns,
As a thread of pain in the woof of peace
From world to world it runs.

But the tales it tells are idle tales,
And the songs it sings are strange
To us who follow the glad, gold trail
Of the sun on the Open Range.

Recent Provincial Legislation.

Among the Acts passed at the recent sessions of the Provincial Legislatures were the following:—

PROVINCE OF NEW BRUNSWICK.

To amend 39 Vict., Chap. 57, "An Act to incorporate the Hillsborough Branch Ry. Co."

To incorporate the New Brunswick Southern Ry. Co.

To incorporate the Canada Ry. and Coal Co.

To enable the City of St. John to give aid to any company that may establish in St. John the business of steel shipbuilding.

To incorporate the St. John Valley Ry. Co.

PROVINCE OF QUEBEC.

To amend the law respecting the repayment of subsidies by railway companies.

Respecting the town of Longueuil and the G.T.R.

To amend 63 Vict., Chap. 67, respecting the Quebec and St. John Ry. Co.

To incorporate the County of Montmorency Telephone and Electric Light Co.

To incorporate the Quebec and James Bay Co.

To further amend the Charter of the Quebec Central Ry. Co. (Two acts.)

To incorporate the Wolfe, Megantic and Lotbiniere Ry. Co.

To incorporate the Levis Electric Ry. Co.

To incorporate the Atlantic, Quebec and Western Ry. Co.

PROVINCE OF MANITOBA.

Respecting the Manitoba Central Ry. Co.

Respecting the Morden and N.W. Ry. Co.

Respecting aid to railways.

To provide for the construction of certain railway lines.

Confirming an agreement with the Northern Pacific Ry.

Confirming an agreement respecting certain railways and respecting certain freight and passenger rates. (This act ratifies the contract of the Canadian Northern Ry. Co., with the Manitoba Government.)

Canadian Pacific Railway Land Sales.

	Acres.		Amount.	
	1900	1901	1900	1901
Jan.	31,485	27,928	\$100,857.85	\$36,752.54
Feb.	23,613	29,370	75,771.19	91,189.58
Mar.	31,183	39,546	90,777.79	122,362.47
	86,281	96,844	\$267,406.83	\$250,304.59

G.T.R. Double-Tracking.

The double-tracking of the G.T.R. between Hamilton and Niagara Falls, 43.51 miles, has been completed from Hamilton to Jordan, 26.46 miles, leaving 17.05 miles still to be done. The surveys for the work were finished in Oct., 1899, and the contract was let in Aug., 1900, to Rogers & Taylor, of Montreal. Generally speaking, the work has been of a comparatively light nature, although there was one pretty big cut just west of Grimsby station, and a long fill between Beamsville and Jordan, 5.80 miles, besides the building of the Jordan creek bridge. On the section yet to be completed there will be a good deal of rock cutting between Merrittton and Niagara Falls, besides the grading and the building of a double track swing-bridge to get across the new Welland canal. Below are some details of the work already completed:—There has been no change in the alignment of the road except at the Jordan gorge, where the double track follows the original right of way instead of the reverse curve used as a single track. Regarding changes in gradients, the general instructions were to keep within 15 ft. to the mile, and there has been no difficulty in doing this. The heaviest grade on the double track will

be 263 per 100 ft., or about 14 ft. to the mile; this occurs at M. B. 40, where the original grade has not been altered. At M. B. 39, just west of Stoney Creek, the grades have been reduced from .40 to .26 per 100 ft.; at M. B. 31, between Winona and Grimsby stations, from .333 to .236 per 100 ft.; at M. B. 29, from .30 to .152 per 100 ft., and finally at M. B. 28, where the heavy cut just west of Grimsby occurs, from .50 to .215 per 100 ft.: equivalent to a cutting down of the grade of rather more than one half.

Between Hamilton and Stoney Creek, 6.36 miles, there are three fair sized cuttings containing respectively 3,840, 3,095 and 1,440 cubic yards; outside of these the banks on this section were made up principally from side ditches, and average about 6,000 cubic yds. per mile. From Stoney Creek to Winona, 5.30 miles, the work was quite light, there were no cuttings, the banks averaging 7,100 cubic yds. per mile. Between Winona and Grimsby, 4.84 miles, there were two small cuts and one (just west of Grimsby) which might be called a fairly large one, as it contained about 22,000 cubic yds. Changing the gradient at this point, of course, increased the excavation. The fills adjoining this large cutting would contain about 28,000 cubic yds. Between Grimsby and Beamsville, 4.16 miles, there is only one cut worth mentioning. It is just east of Grimsby station, and contains about 2,700 cubic yds. The balance of the work on this section consisted of a succession of deep gullies which had to be filled in from the high ground on either side. The remaining section from Beamsville to Jordan, 5.80 miles, was one long fill, averaging about 9,000 cubic yds. per mile, which necessitated the acquiring of extra land at several points where the banks were, running over 11,000 cubic yds. to the mile.

With the exception of the cut just west of Grimsby, completed Nov. 1900, with a steam shovel, where a sort of hard shale constantly outcropped, the character of the grading has been of a rather light nature, consisting, generally speaking, between Hamilton and Grimsby of a reddish clay subsoil, covered in places with either a loam or a blue clay deposit. Between Grimsby and Jordan, 9.96 miles, the soil changes, being of a distinctly sandy nature, and very easy to work.

The rails laid weigh 90 lbs. to the yard, and have a base 6 ins.—much wider than is usual. So wide a base as this should add considerably to the life of the ties, but experience only will show how much.

Halifax and Yarmouth Railway.

The provision of railway accommodation between Halifax and Yarmouth, by what is called the South Shore route, has been before the Nova Scotian Legislature in different forms for some years past, and the net result of all efforts has been the construction of 51 miles of line between Yarmouth and Barrington by the Coast Ry. Co. of Nova Scotia, now the Halifax and Yarmouth Ry. Co., and the spending of about \$200,000 in abortive schemes in North Queen's County. By an Act just passed, the whole position has been changed, and the immediate construction of the line may now be reasonably expected.

By the new Act the Governor-in-Council may purchase the existing Yarmouth-Barrington line, and he is also authorized to accept any part of the line already built, and apply all the provisions of the Act thereto. The object of the insertion of these clauses is to ensure the entire 170 miles of line between Halifax and Yarmouth being under one management. The financial arrangements proposed provide for the loan by the Government, to a responsible contractor or company, of cash or Provincial debentures, not

exceeding \$10,000 per mile of line built, for such term as may be fixed by the Governor-in-Council at $3\frac{1}{2}\%$ interest and $1\frac{1}{2}\%$ sinking fund, the principal being secured on a first mortgage of the franchise, the land, buildings, railroad, rolling stock, etc.; and the interest being a first charge on all receipts and revenues. If default be made in the payments the road can be seized under foreclosure and sold; and the contractor has the right to pay off the mortgage by pay-

ment of the amount lent, less \$3,200 a mile (that being the subsidy offered for the building of this road under a statute of 1886), together with any sums paid as a sinking fund. The freight and passenger rates are to be subject to the approval of the Governor-in-Council, who may also appoint two directors on the Board.

The line will open up a well-inhabited and prosperous district, which at present is dependent upon stage lines and the coasting

steamers for communication with the outer world. The line will also open up some of the most attractive tourist resorts in the Province.

The Boundary Auto-Traffic and Transportation Co. has been incorporated under the British Columbia Companies' Act with a capital of \$25,000, being given power among other things to operate steamboats and other vessels.

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You are within from half a minute to fifteen minutes of 77 hotels, 85 clubs, and 31 theaters. All this, provided you arrive in the second city of the world at **Grand Central Station**, this being the Metropolitan terminus of the **New York Central**, which is the only trunk line whose trains enter the city of New York.

The following remark of an experienced traveler tells the whole story:

"For the excellence of its track, the speed of its trains, the safety and comfort of its patrons, the loveliness and variety of its scenery, the number and importance of its cities, and the uniformly correct character of its service, the **New York Central** is not surpassed by any similar institution on either side of the Atlantic."

Call on nearest ticket agent of the C.P.R. or T.H. & B. for further information, or address

LOUIS DRAGO, Can. Passr. Agent, TORONTO, ONT. **H. PARRY,** Genl. Agent, BUFFALO, N. Y.

GEORGE H. DANIELS, Genl. Passr. Agent, Grand Central Station, NEW YORK.

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We offer an issue of \$136,000 7 per cent. Cumulative Preference Shares of \$100 each **at par**. And also fully paid Common Shares at \$25.00 per share to subscribers for Preferred Shares equal in amount, but in no case exceeding their subscriptions therefor

**IN THE CAPITAL STOCK OF
The Muskoka Navigation Company, Limited,**

Incorporated under the provisions of the Ontario Companies' Act.

Payable 10 per cent. on application, 40 per cent. on allotment, 50 per cent. three months thereafter.

Board of Directors—F. J. PHILLIPS, President Cobban Manufacturing Company, Limited, Toronto; WM. CHAPLIN, President Welland Vale Manufacturing Co., Limited, St. Catharines, Ont.; M. C. DICKSON, District Passenger Agent G. T. Ry., Toronto; LIEUT.-COL. H. MCLAREN, Hamilton; A. P. COCKBURN, General Manager, M. & G. B. N. Co., Limited, Toronto; E. L. SAWYER, Broker, Toronto; CAPT. SAMUEL CRANGLE, Supt. St. Lawrence & Chicago Steam Nav. Co., Limited, Toronto.

Bankers—IMPERIAL BANK OF CANADA. **Solicitors**—BLAKE, LASH & CASSELS. **Brokers**—SAWYER, ROSS & CO., TORONTO.

Transfer Agents and Registrars of Stock—NATIONAL TRUST COMPANY, LIMITED.

Capital—2,000 Shares of 7 per cent. Cumulative Preference Stock, par value \$100 each, \$200,000. 3,000 Shares Common Stock, par value \$100 each, \$300,000.

Head Office—42 KING STREET WEST, TORONTO, ONT.

PREFERRED STOCK.

This stock is preferred both as to Capital and Dividends, and holders have the right in the event of liquidation, dissolution or winding-up proceedings to repayment in preference to ordinary stockholders. Holders are entitled from the net earnings of the Company to a fixed cumulative dividend of 7 per cent. per annum only, payable on the first days of May and November in each year.

RESERVE ACCOUNT.

The charter of the Company provides that 10 per cent. of the net earnings after paying 7 per cent. on the preferred stock, shall annually be carried to a reserve fund in the books of the Company, the better to secure to the preferred shareholders the payment of the 7 per cent. dividend. Such annual transfers to continue until the amount of said account reaches the sum of \$25,000. This fund to be maintained at the said sum, and if at any time drawn upon to be in a like manner restored.

COMMON STOCK.

Save as above, the holders of preferred stock will not share in the profits of the Company; the holders of common stock alone being entitled to share in such profits.

PROSPECTUS.

Recognizing that increased and improved steamboat service is necessary on the Muskoka Lakes, and that more adequate hotel accommodation is badly needed, this Company has been organized:

First.—To build hotels in the Muskoka District that will be modern and first-class in every respect.

Second.—To take over the stock and assets of the Muskoka & Georgian Bay Navigation Company as a going concern. The latter Company is now practically the only Company engaged in transportation on the Muskoka Lakes and River, owning and operating the following boats:—

NIPISSING—Length, 125 feet; Beam, 21 feet; Gross tonnage, 225 tons. Licensed to carry 500 passengers.

MEDORA—Length, 122 feet; Beam, 25 feet; Gross tonnage, 298 tons. Licensed to carry 416 passengers.

MUSKOKA—Length, 116 feet; Beam, 18 feet; Gross tonnage, 196.73 tons. Licensed to carry 300 passengers.

KENOZHA—Length, 120 feet, 6 inches; Beam, 18 feet, 6 inches; Gross tonnage, 225 tons. Licensed to carry 267 passengers.

WANITA—Length, 60 feet; Beam, 14 feet. Licensed to carry 125 passengers.

WENONAH—Length, 94 feet; Beam, 18 feet; gross tonnage, 160 tons. Licensed to carry 200 passengers.

ISLANDER (New Boat)—Length, 110 feet; Beam, 17 feet; Gross tonnage, 165 tons. Licensed to carry 107 passengers. When equipment completed, capacity 300.

ORIOLE—Length, 80 feet; Beam, 14 feet; Gross tonnage, 74 tons. Licensed to carry 97 passengers.

AHMIC—Length, 60 feet; Beam, 12 feet. Licensed to carry 34 passengers.

HOUSEBOAT—Victoria.

SCOWS—Extenuate, Otter, Homer, Mink, Beaver.

These boats are in a good state of preservation, well kept up and complete in every essential for the safety and comfort of passengers, built with especial regard to the business on the lakes.

The property of the Muskoka & Georgian Bay Navigation Company, Limited, besides the above-mentioned boats, consists of a Marine Railway and ship repair plant capable of holding the largest boats on the lakes, workshops at Gravenhurst; wharves and storehouses at Bracebridge, Gravenhurst, Burk's Falls and Ahmic Harbor, and office and buildings at Gravenhurst. All these buildings are in good condition, most of them being new.

The new Company has acquired a large controlling interest in the Capital Stock of The Muskoka & Georgian Bay Navigation Company, Limited, and ultimately intends acquiring the whole of the capital stock and assets.

Traffic arrangements for the interchange of business with the Grand Trunk Railway Company, and postal contracts with the Dominion Government have been made.

An arrangement with the new Company with the Grand Trunk Ry. System has also been effected, which will result in greatly improved train service. In addition to the fast express from Toronto to Muskoka Wharf, a new limited express train will be run from Buffalo, via Hamilton and Toronto, to Muskoka Wharf, leaving Buffalo about 8 a.m. and arriving at Muskoka Wharf about 2.40 p.m., connecting there with through express service on the Lakes.

The following statement furnished by Clarkson & Cross, Chartered Accountants, outlines the increase in business for the last five years:—

ONTARIO BANK CHAMBERS,
Scott Street, Toronto,
4th April, 1901.

The Muskoka Navigation Co., Limited,
Toronto, Ont.

Gentlemen,—We have examined the records of The Muskoka & Georgian Bay Navigation Company, and certify to the correctness of the following receipts and expenditure during the past five years:—

YEAR.	EARNINGS.	EXPENSES.	VESSEL MAINTENANCE.
1896	\$37,784.97	\$29,297.37	\$2,827.77
1897	38,131.61	27,662.82	1,946.30
1898	41,187.09	29,374.66	2,730.07
1899	53,779.91	30,929.44	4,631.18
1900	61,482.20	39,661.75	5,167.88
Total.	\$323,365.78	\$156,926.04	\$17,303.20

In addition to the above charge as Vessel Maintenance a further sum of \$34,974.90 was expended in the construction of three entirely new vessels, "Wanita," "Ahmic" and "Islander," and in the enlargement of other vessels. Yours truly,

(Sgd.) CLARKSON & CROSS.

HOTELS.

The Company has already made arrangements to build a modern and first-class hotel, the "Royal Muskoka," to be erected on a point on Lake Rosseau. Plans and specifications can now be seen at the Company's office. This hotel is to be modern in every respect, contain 64 bathrooms with running water in every room, and have accommodation for about 300 guests. It is the intention of the Company to erect another large modern hotel this year on Lake Joseph, site to be selected, which cannot, however, be open for business until 1902.

NET PROFIT ESTIMATE FOR YEAR 1901.

The net profits of the Company in connection with its steamboat and hotel interests for 1901 are estimated at \$45,000.

(It is hardly necessary to point out that the holding of the Pan-American Exposition will undoubtedly cause a great increase of business in Muskoka.)

The following letter from the Passenger Traffic Department of the Grand Trunk Railway System explains their position:—

GRAND TRUNK RAILWAY SYSTEM.

MONTREAL, QUE., April 6th, 1901.

DEAR SIR:—Having reference to the change of ownership and proposed enlargement of scope of The Muskoka Navigation Company.

There is apparently nothing in the scheme, as we understand it, that would in any way conflict with the interests of this company, on the contrary rather the reverse. The only requirement that we would properly insist upon is improved transportation service. We think that Express boats should be run to the upper lakes and arrangements so made that the advertised time of the boats can be depended upon.

As to the proposition of the new management owning, running or managing the hotels in the Muskoka Lakes, it would in no way conflict with our interests. We, like the Navigation Company, are anxious to get as many people as possible into the Muskoka Lakes. **From a transportation standpoint our interests are mutual, and we can assure the new organization of the warmest and heartiest support.**

As to the hotel accommodation in the Muskoka Lakes district—we have found for several years past that our ability to increase the traffic to the lakes has been limited, owing to the hotel accommodation not being adequate to take care satisfactorily of all of the business offered, and we feel sure that this business is likely to continue for many years to come and that the traffic to the

lakes will fully keep pace with the extension of the hotel accommodation. We also find that many people who desire to visit the lakes would be willing to pay for the very best class of hotel accommodation that can be offered, and we are satisfied that the traffic to be moved by the Grand Trunk and the Navigation Company would be materially augmented by suitable increased hotel accommodation.

Yours truly,

(Signed) W. E. DAVIS,
Passenger Traffic Manager.

The Company enjoys the enviable position of having not only the Grand Trunk

Railway, but all the southern railway systems, advertising the beauties of Muskoka, and as the lakes become better known greatly increased business will result.

Applications for shares should be made on the prescribed form and forwarded to us, together with remittance for the amount of the deposit.

Cheques and drafts to be made payable to the National Trust Co., Limited.

The right is reserved to allot such subscriptions only as we may see fit.

If the whole amount applied for be not allotted, the surplus paid on deposit will be appropriated towards the sum due on allotment. Where no allotment is made the deposit will be returned in full.

Prospectus and forms of application can be obtained at the Company's office.

Application will be made in due course to have the stock listed on the Toronto Stock Exchange.

SAWYER, ROSS & CO., 42 King St. W., TORONTO.

Manitoulin & North Shore Ry.

This company will receive by an Act just passed by the Ontario Legislature, a land grant totalling 2,542,000 acres. This with the \$211,200 voted by the Dominion Government in 1900, will enable the Co. to proceed with the construction of this line which has for its object the opening up of a new and short route to Sault Ste. Marie.

The railway will be about 300 miles in length—285 miles is one estimate—and will with the intervening 15 miles of ferry, connect Sudbury with Meaford, Ont. Starting from Little Current, Manitoulin Island, the railway will run south-easterly to Fitzwilliam Island, off the south shore of Manitoulin Island, from which point to Tobermory, at the end of Bruce Peninsula—a distance of 15 miles, of which 7 is open lake—there will be a car ferry; and from Tobermory the railway will be continued to Meaford, making connection with the G.T.R. there as well as at Owen Sound and Wiarton, and with the C.P.R. at Owen Sound. From Little Current the line will proceed northerly and easterly 105 miles, making the connection with the mainland by several bridges, to White Fish River, Algoma; thence to Onaping, on the C.P.R. main line, 45 miles; from a point on the railway near the south-east corner of Trill township to Sudbury, 30 miles; and from the same point in Trill township to a point 85 miles westerly towards Michipicoton or Balchewana Bay.

The minerals are granted with the land, but all red and white pine are reserved to the Crown. The Co.'s line between Meaford and Owen Sound, and Wiarton and Sudbury, are to be surveyed and located by June 1, 1902; and at least 30 miles of the line completed by May 1, 1902, and the whole line completed by June, 1906, the work on the different sections to proceed simultaneously. Pending the construction of the line, the Co. is to operate a steamship line for the transportation of freight and passengers between Windsor, Sarnia, Goderich, Kincardine, Southampton and Little Current, and within six months after the passing of the Act has to commence the erection of a smelting works and complete the same to 300 tons capacity per day at some point convenient to the line. At least 1,000 male settlers per year have to be brought in and located on the Co.'s lands for 10 years. Running powers are given to the G.T.R. and the C.P.R., or any other company over the line; the rates are to be subject to the approval of the Lieut.-Governor-in-Council, and the Government reserves the right to acquire the railway and franchises of the Co. at any time within the next 15 years by paying to the Co. the actual cost of the works with not less than 6% cumulative interest, less the land subsidy calculated at 50c. an acre, the traffic receipts of the railway, and 50% of any subsidies that have been or may be granted by the Dominion Parliament.

The Manitoulin and North Shore Ry. Co. was originally incorporated by the Ontario Legislature in 1888, and by an Act of 1900 its head offices were transferred to Sault Ste. Marie; the time for the construction and com-

pletion of the railway was extended, its capital stock increased; power was given to operate the railway by electricity in the unsettled parts of the Algoma district, and the original charter otherwise amended. The capital was fixed at \$5,000,000, with power to increase, and the Co. was given 5 years to build the line.

The Manitoulin and North Shore Ry. Co. was incorporated by the Dominion Parliament in 1900, and was voted a cash subsidy of \$211,200 towards the construction of 66 miles of line between Little Current and Sudbury, the Co. to construct a bridge from Manitoulin Island to the mainland sufficiently large for vehicular traffic as well as for the railway. This charter was acquired by F. H. Clergue and others owning the Algoma Central Ry., and power is given to amalgamate it with their undertakings under the title of the Algoma Central and Hudson's Bay Ry. Co., by an Act passed this session.

In 1899 the Dominion Parliament voted a subsidy of \$3,200 a mile towards the construction of a railway between Owen Sound and Meaford, not exceeding 21 miles, although no company had been chartered to build the line, and no application had been made for the granting of a subsidy. The G.T.R. was approached by the town of Owen Sound to undertake the work, but Mr. Hays replied that the Co. would not do so. This subsidy may be available for the Manitoulin and North Shore.

Ontario Railway Subsidies.

The Ontario Legislature, at its session just closed, voted the following subsidies:

1. To the Bracebridge and Trading Lake Ry., from Bracebridge to the township of McLean, at or near Baysville, 16 miles, \$3,000 a mile—\$48,000.
2. To the Bruce Mines and Algoma Ry., from or near Bruce Mines, to or near Rock Lake copper mines, 13 miles, \$3,000 a mile—\$39,000.
3. To a railway at or near Bolton creek, Oso township, to the iron mines in Lanark township, 25 miles, \$3,000 a mile—\$75,000.
4. To the Norwood and Apsley Ry., from Norwood, on the C.P.R., to or near Apsley, 25 miles, \$3,000 a mile—\$75,000.
5. To the Thunder Bay, Nepigon and St. Joe railway, from Port Arthur north-easterly towards Lake Nepigon, 30 miles, \$2,000 a mile, and a land grant of 5,000 acres a mile.

All these grants are subject to the ordinary conditions governing subsidies and to a number of special conditions. The most important of these is that the Cos. shall use only Canadian manufactured supplies and rolling stock for the construction and equipment of the lines, unless specially authorized otherwise by the Lieut.-Governor-in-Council. Other clauses make it clear that the Government shall have power at any time after 10 years to acquire or expropriate any or all of the lines aided under the bill; also enacting that there should be no secret special rates, rebates, drawbacks or concessions to favored shippers, nor any act that will affect free competition on any of the lines so aided. Another

clause requires the various lines to carry roadmaking material for improving the local roads, at the actual cost of handling and carriage.

The Bracebridge and Trading Lake Ry. Co. was incorporated by the Ontario Legislature, in 1900, to build a line from Bracebridge to Baysville, 14 miles, also to a point on Muskoka Lake, near Beaumaris. The Dominion Government in the same year voted a cash subsidy of \$48,000 towards the construction of this line.

The Norwood and Apsley Ry. Co. was incorporated at the recent session of the Ontario Legislature, the promoters having an understanding with the C.P.R. that if a charter and a subsidy were obtained that Co. would build and operate the line.

Fuller particulars about the Thunder Bay, Nepigon & St. Joe Ry. will be found below.

Thunder Bay, Nepigon, and St. Joe Ry.

This Company, to which the Ontario Legislature has just granted a cash subsidy of \$2,000 and 5,000 acres of land per mile, was incorporated in 1899 by the Ontario Legislature to construct a railway from Port Arthur and Fort William to the south-west shore of Lake Nepigon, and thence to the northern boundary of the Province, the Albert River at the outlet of Lake St. Joe. The length of the projected line is 190 miles, and the subsidies now granted provide for the construction of the first 30 miles, which were surveyed in 1899. A preliminary survey has been made as far as Lake Nepigon, 80 miles, and a location survey for the first 30 miles. The line is to start from or near Port Arthur, and the Co. proposes to make a connection with Fort William, and will proceed north-easterly towards Lake Nepigon for a distance not exceeding 30 miles, through the townships of McIntyre and Gorham to near Dog Lake.

The land grant, therefore, amounts to 150,000 acres, all of which shall be selected not less than 10 miles from Port Arthur. Each block is to be rectangular in shape, and to contain as nearly as possible 50,000 acres, the Co. having the right to all minerals, but not to the pine. The first grant of land to be made as soon as 10 miles of line has been equipped and ready for traffic. The construction of the line is to be commenced by April 1, 1902, and is to be completed within 12 months or the subsidies may be cancelled. A station is to be erected in the middle of each block of land granted to the Co., and when requested by the Commissioner for Crown Lands the Co. undertakes to lay out a town-plot in each block in the vicinity of the stations. The Co. also undertakes to settle on its lands 100 male settlers a year for 10 years, and when necessary shall build a school-house and a public hall sufficient for a population of 500.

The Hampton and St. Martin's Ry. in New Brunswick, which has been closed down since early in Feb. on account of snow—an annual occurrence—is being re-opened for traffic.

Canadian Rails for the I.C.R.

In the House of Commons, April 10, in committee of supply on the railway and canal estimates, the first item considered was \$500,000 for steel rails and fastenings. The Minister of Railways explained that the Intercolonial is being rerailed. During the past year 75 miles of the line in Cape Breton had been done. There had been some scarcity of labor, so that the whole road in the island could not be completed. Last year rails had been purchased from the Illinois Steel Co. and the Cambria Co. at \$32.60 a ton. The arrangement for this year is that rails will be supplied by the Sault Ste. Marie Manufacturing Co. "We had," Mr. Blair said, "a proposition from them to put in a steel rail plant to manufacture these rails in Canada. They satisfied us of their ability to do this work, and that they would be capable of establishing a very efficient rail manufacturing plant. They had ores of a superior quality, and the steel made from them would contain a percentage of nickel, which would be found in the rails this company proposed to make for us. This, while it did not form an element in the price, would add materially to the durability of the rail, and we felt that was an additional inducement to us to make this arrangement with them. The establishment of this industry was contingent upon their securing from the Government a fair order, and an order for a sufficient quantity to guarantee them that they would have employment for their plant as a basis from which to invite and encourage the introduction of capital for that purpose, and, as the Government viewed the matter, it was one which would appeal to the sympathetic consideration of the Canadian people, would result in the establishment of a permanent industry, and would secure to the railway companies and others who would require rails that such rails would be obtained in Canada, and give employment to a large number of people, directly and indirectly. We made an arrangement with them similar to that existing before they prepared to undertake to deliver these rails, at such price as similar rails of equal standard could be obtained in the open market. We made inquiry as to the current price of rails, and found it would be impossible for us to place orders for delivery earlier than the fall of the present year, and that the price at which they were obtainable would be at all events equal to the price we were paying last year, contracted for the year before, so we made a contract with this company to deliver to us 25,000 tons of the quality and standard adopted, 80 lbs. in weight, and we were to pay them \$32.60 a ton for a delivery which would commence in the first week in Aug. and continue so that we would be able to lay them before the snow fell. The rails were to be delivered to us in Montreal. We have made no explicit contract with them for the future, although in their proposition they asked us to give them a contract for a term of five years, and they wanted 50,000 tons with which to commence the establishing of their industry. We finally concluded upon 25,000 tons. While we have made no contract with them for any term beyond the year we are now entering, we have an understanding with them under which, if they are prepared, as they engaged to do, to furnish us with rails of the quality and standard we asked for at the current price in the English market, which is the ruling price, we are prepared to consider buying our rails from them. Their machinery is now all constructed, their buildings are being rapidly put into shape, and I have had very late word from them to the effect that we will receive, commencing the first week in Aug., a delivery of 500 tons a day. As to the amount, we have inserted in this estimate \$500,000. After making deductions for the

value of the old rails which we are taking up, we will have to ask Parliament in the supplementary estimates for an increased sum above this amount sufficient to cover the cost of the 25,000 tons."

Messrs. Haggart and Barker argued against charging the whole \$500,000 to capital account.

Continuing the discussion on Mar. 12, Mr. Haggart complained that while in this return reference was made to seven tenders at an almost uniform price of \$32.85 the Government had not ascertained what the G.T.R. and the C.P.R. were paying and stated that the price of rails had not varied since the contract was made.

Mr. Blair said that the reduction in price had been \$5 or \$6 a ton since then.

Mr. Haggart continued by observing that \$25 a ton was the most that had been paid for rails during the past six months. The contract with the Clergue Co. was dated one month before the election, and was for 25,000 tons of rails annually, for five years, 125,000 tons in all, involving an expenditure of \$4,000,000 for which the Minister had not asked the consent of Parliament.

Mr. Blair said this statement was misleading. Investigation would show that the Government had taken a step which would result, without costing the public treasury a single dollar, in the establishment in Canada of an industry which would be of enormous advantage to the country, and which would give employment to many men. Mr. Clergue had approached the Government in June last with a proposal to establish a steel rail industry in the Dominion, and he did not think that they were to be found fault with for entering into an agreement merely because an election was pending. The Government was to pay for the rails a price not in advance of the current market rate, and the price named in the contract was that at which anyone going into the market in August or Sept. last would have had to have agreed to pay for rails to be delivered at the dates contracted for. He doubted whether a contract could be made to-day for delivery within 12 months.

Mr. Osler said the Minister was in error as contracts could be made now for early delivery.

Mr. Blair accepted the correction and went on to observe that the price of rails next year was, according to the contract, to be that current in the British market, and this no one could say was too high.

Dr. Sproule pointed out that the Government had entered into a contract on a falling market for rails for one year ahead of its necessities and at a time when an election was pending.

Mr. Maclean said the people would condemn a contract under which this Co. would receive, including the bounties, some \$40 a ton for the rails. U.S. makers had recently sold rails, delivered in England, at \$24 a ton. Rails containing a percentage of nickel could not be manufactured cheaply in England, and therefore the Government would have to pay a higher price.

Mr. Blair said the U.S. price for the rails was \$35 a ton, but the manufacturers, as soon as they found they were for the English market, dropped the price.

Mr. Borden said the contract was a binding one for five years. Did not the Minister know that there were other companies in Canada that proposed to manufacture steel rails? There was a company in Nova Scotia which contemplated the manufacture of steel rails.

Mr. Blair had not heard of this company when the contract was made.

Mr. Borden said the Nova Scotia Co. was better prepared to undertake the manufacture of steel rails than was Mr. Clergue, and the contract should not have exceeded a period of two years.

Mr. Fielding said the Nova Scotia Co.

would have an opportunity of supplying the Government with steel rails whenever it made a proposal to do so.

The vote was finally passed.

We are advised that the rails will be made to the A.S.C.E. standard.

Following are the principal

CLAUSES OF THE AGREEMENT.

Whereas, for the purpose of encouraging the erection and equipment within Canada of plant and machinery for the manufacture and production on most modern principles of steel rails, and plate and bridge material, the Minister of Railways has been authorized to execute a contract guaranteeing the Co. the acceptance by her Majesty during the five years next following of 25,000 tons of steel rails, at prices fixed as hereinafter specified. It is therefore agreed by and between her Majesty, for herself, her successors, and assigns, and the Co. for itself, its successors, and assigns:

That her Majesty will in each year during the years 1901 to 1905, both inclusive, purchase from the Co. and take delivery of 25,000 tons (of 2,240 lbs. to the ton) of first quality steel rails, 80 lbs. to the yard, of section from time to time prescribed and approved by the said Minister.

That the Minister shall, on behalf of her Majesty, each year during the said five years, enter into a contract with the Co. specifying, in greater detail than herein set forth, the time and place of the delivery of such rails, the section approved, the price and mode of payment, with other incidental particulars and provisions at the discretion of the Minister.

That with the exception of the year 1901, for which year the price per ton is hereby fixed at \$32.60 a ton, the price for such rails per ton shall be the same as the price obtainable for the same quality of rails in the open market in Great Britain at the time when the respective orders for such rails are given under the said contracts.

That the rails delivered under the contract for the first year's supply thereof shall be delivered (c.i.f.), either at Levis or Montreal, as the Minister may specify, delivery to be made, as far as practicable, in equal quantities per month, and shall commence in the month of June, and be completed before the end of the following Sept., the rails deliverable during the balance of the said period of five years shall be delivered either at Halifax, Port Mulgrave, Levis, or St. John, as may be required by the Minister, and either specified in the said contracts relating thereto, or by the said Minister named from time to time during the progress of delivery.

That the Co. will execute all such contracts as may during the said period of five years be drawn in accordance herewith, and presented by the Minister for execution, and will manufacture and deliver the said rails for the said prices, and in all respects will comply with the provisions of the said contracts or any of them.

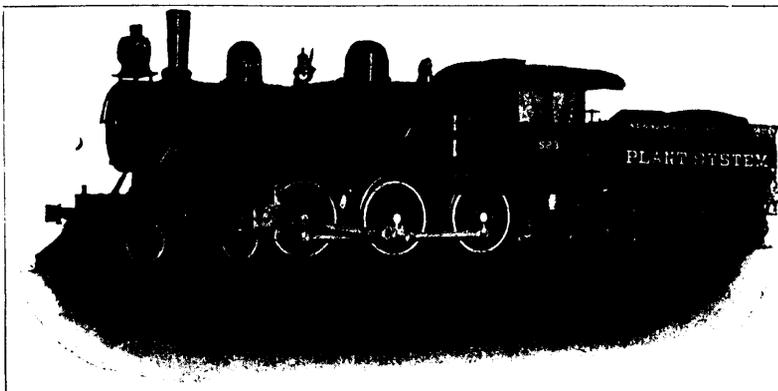
Temiscamingue Ry.—In the supplementary estimates, which were brought down in the Ontario Legislature by the Premier on April 2, \$10,000 was appropriated for the purpose of surveys for the Temiscamingue Ry. which the Government proposes to build. The suggestion is that a line be constructed from North Bay to Lake Temiscamingue, for the purpose of opening up a large agricultural territory upon which extensive settlements have been made during the past two years. Immediately north and east of North Bay, there is a large mineral belt, and beyond this the agricultural settlement has sprung up. Some small villages have already been established on the shores of the lake, and a large traffic is done by steamers which connect with the C.P.R. Mattawa branch.

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MANITOBA

The Government Crop Bulletin issued Dec. 12th, 1899, gives the following statistics for the year:

CROPS.		
ACRES.	AVERAGE YIELD.	TOTAL.
Wheat.....1,629,995	17.13 bus.	27,922,230 bus.
Oats..... 575,136	38.80 "	22,318,378 "
Barley.... 182,912	29.4 "	5,379,156 "
Potatoes.. 19,151	168.5 "	3,226,395 "

STOCK.
Beef Cattle exported during the year 12,000
Stockers exported..... 35,000
Total value dairy products..... \$470,559 09

10,500 FARM LABORERS

Came from Eastern Canada to assist in the harvest fields of Manitoba in 1899—and the demand was not fully satisfied.

MANITOBA FARMERS ARE PROSPEROUS.

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

MANITOBA LANDS—For sale by the Provincial Government. Over 1,600,000 acres of choice land in all parts of the Province are now offered at from \$2.00 to \$5.00 per acre. Payments extend over eight years. **Special Attention** is directed to 500,000 acres along the line of the Manitoba and Northwestern Railway at \$3.00 and \$3.50 per acre.

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

For full information, maps, etc., FREE, address
HON. R. P. ROBLIN, Minister of Agriculture and Immigration, Winnipeg, Manitoba.
Or JAMES HARTNEY, Manitoba Emigration Agt., Union Station, Toronto, Ont.

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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.

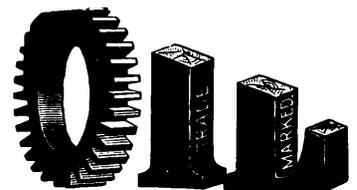
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Coast-Boundary Railway in B.C.

The British Columbia Government recently invited offers for the construction of a Coast-Boundary railway to be submitted to them by April 15. The Co. desiring to construct the line must pay the Government 4% of the gross earnings of the road, such percentage to be a first charge on the railway; all contracts to be subject to the approval of the Lieut.-Governor-in-Council, who will also approve of all material used in the construction of the road; no aliens to be employed unless it can be shown to the Lieut.-Governor-in-Council that the road cannot be built without them; a daily ferry must be operated to some point on Vancouver island from the mainland and all rates are to be subject to the supervision of the Lieut.-Governor-in-Council.

In the spring of 1898 the Government voted a cash subsidy of \$4,000 per mile to the Victoria, Vancouver and Eastern Ry. Co., which had been incorporated to construct a line from the mouth of the Fraser River, proceeding along its southern bank, thence through the Similkameen country to the eastern boundary of the Province. On the strength of this subsidy it is claimed that work was commenced at several points along the proposed line. The Semlin-Cotton Government revoked the subsidy and claimed that the work done was confiscated, and that the charter was forfeited by reason of the fact, among others, that the Co. had not obtained a subsidy from the Dominion Government. The Co. have also a Dominion charter, and is negotiating with the Ottawa Government for a subsidy; and holds that the powers under Provincial charter have not lapsed. The V. V. & E. Ry. Co. has behind it Mackenzie & Mann, and the Great Northern Ry., U.S.A., as the following telegram addressed to E. V. Bodwell, Victoria, shows:

"New York, March 21.—If you think it advisable you may announce that the Great Northern Ry. and Mackenzie & Mann are equally interested in the V. V. & E. Ry. Co. stock. (Signed),

"J. J. HILL,
"WM. MACKENZIE."

This Co. asked for a renewal of the subsidy, and those interested in the development of the country through which the line will pass have petitioned in favor of it, asking the Government to secure the building of the line by a Co. independent of the C.P.R. The petitioners further ask that the Government do not give a charter to the C.P.R. even if it offers to build without a subsidy, which it is reported it has offered to do.

The C.P.R. is interested in two bills before the Legislature, one of which is to incorporate the Coast-Kootenay Ry. Co., and the other to authorize the construction of a Vancouver-Grand Forks line.

The V.V. and E. is projected to cross the Fraser River at Westminster, then running along the south bank of the river through an agricultural country to Hope landing. From here, where the mining regions commence, the line will leave the Fraser river and follow the windings of the Coquehalla river to Coldwater, where a short spur will tap the Nicola coal fields. The main line will follow a branch of the Coldwater down to the Otter, where another spur will be built to reach the Aspen Grove camp. The Otter valley will be followed to Otter lake and along its shores to the Tulameen river, the mining camp near here having been tapped by work done in 1900. At the junction of the Otter and the Tulameen the Provincial Government owns a town site which is being developed, and from here a third spur line will be carried up the Tulameen river to the Slate Creek, Bear Creek, Kelly Creek and Summit City camps. The main line will be carried past Collins' Gulch to Granite Creek and thence to Princeton, from whence a spur will be built to reach

the Copper and Kennedy mountain, Friday Creek and the Roche river mines. The line will follow the Similkameen to its confluence with the Okanagan. The survey now being made, of which J. H. Kennedy has charge as chief engineer, will leave the Similkameen at this point and follow up the Tonasket Bonaparte pass to Myers' Creek, down Myers' Creek to Rock Creek, and down that stream to Kettle river. In going this way the line will be carried across the mountains with nearly 1,000 ft. less climbing than by any other route.

The Manitoba Railway Contracts.

The question of the ratification of the agreement entered into by the Manitoba Government and the Northern Pacific Ry. Co., for the taking over of the lines owned and operated by that Co. in Manitoba, and of the agreement between the Government and the Canadian Northern Ry. Co. for their future operation (see R. and S.W., Feb., pg. 39), was the principal subject for discussion during the last session of the Manitoba Legislature. The act confirming the agreement with the N.P. was passed on Mar. 12, by a party vote of 23 to 12, after an amendment that the bill be read that day six months had been defeated by a similar vote. On the following day the bill ratifying the agreement with the C.N. was passed by 23 to 10. The Lieut.-Governor gave his assent to the first on Mar. 15, and to the second on Mar. 20.

From the time of the publication of the agreements with the railway companies there has been considerable discussion in all parts of the province and resolutions approving or disapproving of the Government's action were adopted for presentation to the Dominion Parliament which has to approve of the acts before they become operative. The most important of these gatherings was one held in the Winnipeg Opera House on Mar. 15, when a resolution was passed protesting against the confirming of the agreements and authorizing a deputation to go to Ottawa to oppose the legislation in the House of Commons. The resolution passed sets forth "that the said contracts are not in the interests of the Province of Manitoba, inasmuch as the said contracts do not secure the building of any additional railroads, and there is no positive assurance that they will bring about any regulation of rates, and inasmuch as they involve the Province of Manitoba in a liability which, if called upon to pay, would seriously embarrass the financial position of the Province, that the contracts should not be ratified unless and until the electors of the Province of Manitoba have had an opportunity of signifying their wishes at the polls with reference to the same." In conformity with this resolution a deputation waited on the Government and presented their views. They have also issued a pamphlet setting forth at length the grounds of their opposition. There is appended to the general statement of opposition an opinion signed by C. Robinson, K.C., Geo. F. Shepley, K.C., A. B. Aylesworth, K.C., Wallace Nesbitt, K.C., on the contracts; and the resolution of the Winnipeg Board of Trade, which has been assented to by 65 public meetings in various parts of the Province.

The Dominion Parliament has the agreements before it in two bills, both of which have been given a second reading, the first before the Easter recess, and the second April 15, and will now go before the Railway Committee for consideration. The first bill was one introduced by Mr. McCreary to confirm agreements between the Canadian Northern Ry. Co., and the Manitoba and Southeastern and Ontario and Rainy River Ry. Co.'s, to which was subsequently added clauses confirming the agreement of Jan. 15 between the Manitoba Government and the Northern Pa-

cific Ry. Co., and the agreement of Feb. 11 between the Manitoba Government and the C. N. Co. Other clauses give an option to the Provincial Government to acquire at any time during the 999 years of the lease, the N. P. lines in Manitoba with their rolling stock and equipments for \$7,000,000, and further provides that the C. N. may, in the mortgage, securing the bonds at the rate of \$20,000 per mile for its 290 miles of railway from Port Arthur to Rainy River, agree to such terms to amplify and carry out the provisions of the contract and such other terms as the Lieut.-Gov.-in-Council of Manitoba may deem necessary in the public interest, though the same may be at variance with any of the provisions of the contract. The second bill is a private one, to introduce which a petition was presented to have the usual rules dispensed with. It is this bill which was read a second time without discussion on April 15.

A deputation from Manitoba will appear personally and by counsel before the Railway Committee to oppose the bills when they come up.

Branch Lines in Manitoba.

The Manitoba Act of last session to grant aid for the building of branch lines in various parts of the province provides for the construction of 110 miles of line. The aid is to take the form of a guarantee of the first mortgage bonds of the lines constructed to the extent of \$8,000 a mile, and is accompanied by conditions as to the control of rates by the Government. The Act, passed on Mar. 28, provides that the aid guaranteed by the Greenway Government in 1898 to the Canadian Northern Railway Co. for the construction of a line from Sifton to a point on the Saskatchewan river shall be varied. Of this line 132 miles were to be in the N.W.T., and 22 miles have been built. The Act provides for the revoking of the guarantee of \$8,000 a mile to the 110 miles of this railway not constructed, and its application to aiding the construction of a similar mileage of branch lines within the province.

The lines to be constructed include the following:

From Brandon, northwesterly, about 50 miles.

From the terminus of the Waskada line towards Souris, about 12 miles.

From Carman to Union Point or some other point on the N.P. line, about 24 miles through the Bates district.

From Beaver to Neepawa, with short spur line of 8 miles to Gladstone.

A Big Jump for the Q. and L. St. J. R.

The following, copied from the Railroad Gazette, New York, will be "news" to Manager Scott:—

"Quebec and Lake St. John.—The company has decided to build from Valcartice to St. Catharines, Ont., four miles."

It need hardly be said that the distance between the Q. & L. St. J. Ry., and St. Catharines, Ont., is something over 500 miles. What the Co. is doing is building from Valcartice, not Valcartice, to St. Catharines, Que., not Ont., a distance of about 4 miles. This cut-off will save 1¼ miles in distance, and will reduce the grades about 6-10's of 1%.

Hereafter the Baltimore & Ohio Rd. will not engage engine-drivers weighing 200 lbs. or over, although those now in the employ of the Co. will not be dismissed for this cause. The reason for the rule is said to be the narrowing of the space for the engine-driver caused by the extension of the boiler through the cab of the newer types of engine, & large engine-drivers might not be able to move rapidly enough in emergencies.

Folder Display and Distribution.

The Railway and Steamship Folder Display Co., Toronto, which is already handling the folders of a number of railway companies, has taken several new contracts lately. It has contracted to display the folders of the Pennsylvania Rd., the Quebec and Lake St. John Ry., the Niagara Gorge Rd., and the Richelieu and Ontario Navigation Co. in its folder racks. It will make a similar display for the Northern Navigation Co. of Ontario, the Northwest Transportation Co., and the Niagara, St. Catharines, and Toronto Ry., and in addition will handle the entire distribution of folders of the three last-named companies to ticket agents in Canada. The first distribution of them will be made beginning about the end of April, after which ticket agents requiring further supplies should apply direct to the Railway and Steamship Folder Display Co. for them.

This Co. has considerably increased its equipment of folder racks, and has compiled an accurate list of all ticket agents in every province of the Dominion and in Newfoundland, which is the first complete list that has been got out. It has been copyrighted so as to reserve it for the exclusive use of the Co.

The Magnetawan River from Burk's Falls to Ahmic Harbor, Ont., covers a stretch of navigation over 40 miles in extent. The surrounding townships are settled by a pioneer hardy race of Anglo-Saxon people, who are cultivating their free grant lands under exceptional difficulties owing to the fact that their farm produce, together with their forest products, have to be floated up the river to Burk's Falls, where they encounter a portage of about 2 miles before they can place their supplies upon railway cars; and this portage,

owing to the hilly nature of the country, costs more than the average profit obtainable upon the commodities the settlers are in a position to ship. The Ontario Legislature, when Sir Oliver Mowat was Premier, took in the situation and granted a subsidy of \$7,500 towards the construction of a railway across the portage, and later, at the instance of Premier Ross, finding this subsidy insufficient, has supplemented it by an additional \$2,500. Application is now being made by the Magnetawan River Ry. Co. to the Dominion Government for an additional subsidy of \$15,000, under an arrangement by which the colonists will only be taxed \$1 a car for their produce across the portage. At a conference recently with the Dominion Government, the propriety of giving the required aid was carefully considered, and it is hoped that the Minister of Railways, who is thoroughly conversant with the territory, will recommend the subsidy applied for. If this is done, more than a dozen townships will be benefited by immediate access to markets, as the railway will be completed and in operation before July 1 next. (Nov., 1900, pg. 334.)

Development of Street Railways in Canada.

By W. G. Ross, Comptroller Montreal Street Railway.

In view of considerable climatic difficulties, the development of electric street railways in Canada has points of special interest, among which are:—1. The early start and rapid progress. 2. Invincibility to weather. 3. Liberal fares and universal free transfer. 4. Remarkable popular and financial success.

Canadian street railways were among the first roads on the American continent to change from horse to electric traction, and

the progressive development of the electric street railways in Canada has been nowhere surpassed in the world; this notwithstanding the exceptional conditions offered in most cities by the severe and prolonged winter. The enterprise and courage required to face the first experiment of a trolley system in Canada were no ordinary qualities. There was a theory, so Canadians have heard tell, in vogue once among some of our neighbors south of line 45, that Canadians were slow. If the theory exists and has reason, the introduction and spread of electric street railways presents an exception to the rule. The Cana-

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Pittsburgh, Pa.

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LOW RATES WEST AND NORTHWEST.

On February 1st, and on each Tuesday until April 30th, the Chicago, Milwaukee & St. Paul Railway will sell one-way second-class tickets at the following very low rates:

To Montana points	\$25.00
To North Pacific Coast points	30.00
To California	30.00

These tickets will be good on all trains, and purchasers will have choice of six routes and eight trains via St. Paul and two routes and three trains via Missouri River each Tuesday. The route of the Famous Pioneer Limited trains and the U.S. Government Fast Mail trains.

All Ticket Agents sell tickets via the Chicago, Milwaukee & St. Paul Railway, or for further information address A. J. Taylor, Canadian Passenger Agent, 8 King Street East, Toronto, Ont.

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Etc.

dian grasp of the electric idea was early, quick and strong, despite uncertainties and difficulties which are not easily appreciated save to those who know the winter conditions in a majority of cities on the northern side of the line.

What the first electric railway promoters in Canada had to face was a problem, popularly considered insoluble, of moving the winter snowfall bodily from the streets as fast as it came. The public laughed at the idea. Investors shied at it. Consider what snow is in most Canadian cities. The average annual fall in many is 10 ft. on the level or for the streets probably twice or three times that depth, as each street receives finally the snowfall of a large adjoining area. In March, 1900, alone, there fell over 4 ft. on the level in Montreal. To this add severe grades and streets sometimes not any too wide—what a prospect for capital!

Notwithstanding this outlook, Canada as already said was in the electric race from almost the first. The first electric railway in America was started, I think, in Richmond, Va., late in 1888. Ottawa, the capital of the Dominion, ran the first electric car in Canada in June, 1891. The following year saw a general change from horse to electric traction. Hamilton began in June, 1892; Toronto on Aug. 17, 1892; Montreal on Sept. 21, 1892, and Winnipeg in the same month. St. John, N.B., started April 6, 1893; Halifax, Feb. 13, 1896, and the ancient city of Quebec on July 3, 1897, running a close race with the comparatively new and progressive coast city of Vancouver.

Perhaps the very climatic difficulties had much to do with the great financial success and the rapid spread of the electric systems, as nowhere (with the exception of Toronto, where climatic conditions are not so severe as in most cities in the Dominion) did the street railways under the old horse traction afford the travelling public as poor accommodation as in Canada. Use of the cars, sleighs or busses was then confined to the unfortunates who traveled on them only in cases of necessity, especially in winter. The circumstances may be glanced at profitably, perhaps. Horse power could not keep a street car track clear of snow and ice during winter in most Canadian cities, and no attempt was made to do it. Two sets of street railway equipment were thus required in the horse days—horse cars and busses for summer, sleighs for winter. The expense and trouble of this were not the deadly considerations. The winter upset all possibility of cleanliness and comfort; to keep people's feet warm straw was loaded into the bottom of the cars, where no possible amount of renewal could keep it clean or decent; there it would lie, unkempt and unsightly, dirty and unsanitary, particularly on wet days, contributing dubious odors to the atmosphere of the cars. Such conditions did not tend to make street railway service popular. A street car in winter was decidedly not a drawing card. As the horse car service was in part repellant, so was it slow, and being repellant and slow, it was unpopular, paid poorly, and, like other poorly paying things, was half-hearted in every respect and correspondingly ineffective. There came a magic change with electricity.

The advent of the electric cars was a transformation indeed. The slow dirty busses or sleighs, disease-breeding vehicles, confined to the condensed portion of the towns, running at intervals anywhere from fifteen minutes to half an hour, were replaced by something infinitely better. People jumped to patronize the improvement which in turn responded to the patronage, and now are seen magnificently appointed cars following closely one after another to all parts of cities and their suburbs at a speed no one just before the change thought possible. The enterprising men who have been chiefly instrumental in revolutioniz-

ing the antiquated street railway systems deserve all honor and credit for the successful manner in which they have developed the new systems and made them what they are; such men are Jas. Ross, W. Mackenzie, Hon. L. J. Forget, T. Ahearn, W. Y. Soper and H. A. Everett, whose names will go down to history as marking a period of the complete and perfect development of electric street railways in the Dominion.

The construction and equipment of the Canadian roads were the best at the time, and have been kept up with all modern improvements, Montreal being the first road on the American continent to lay rails in concrete without ties, a fact that was an education to many U.S. roads, and favorably commented on at the annual convention of the American Street Railway Association held in that city in 1894. All the roads are equipped with open and closed cars, rendered absolutely necessary by the severe changes in temperature, and carry a full complement of sweepers and other mechanical devices for the handling of snow.

The roads are thoroughly equipped in the way of car sheds, power houses and modern machinery. Almost all generate their electricity by steam, though water-power is used. Ottawa, Quebec and Hamilton, and Montreal will shortly get their electrical energy from that source.

In the matter of street railway accounting, Canada has led the way, the standard system of accounts recently adopted by the Street Railway Accountants' Association of America showing surprisingly little change from the system in practice in the principal Canadian companies since 1893.

Steam railway service meets no such problem in snow in winter as street railway service does. In a city street there is more than the natural fall of snow on that area. From the roof tops and the sidewalks, the snow comes on the street, a double accumulation, and as the snow lodges, it is beaten solid by traffic. The street railway cannot shove the snow aside; practically there is no room. The snow must be moved bodily, and not merely the snow from the car tracks, but from the whole street, for otherwise the car tracks would soon be obliterated.

Canadian street car companies take no chances with winter storms. The companies keep a keen weather eye both on "probs" and on the local weather manifestations, and the moment trouble is sniffed, the enemy is tackled. Any symptom of a heavy snowfall, let alone a storm or a blizzard, calls out the electric sweepers, and promptly if necessary the snow sleighs. As a result it is probably correct to say that winter street car service in Canadian cities has fewer interruptions than in the northern cities in the neighboring states; for the simple reason that not so often subjected to attack, and fearing danger less, the U. S. companies are less effectively equipped.

Fighting the climatic conditions in some Canadian cities is a matter of money of course, as well as brains. Apart from the equipment necessary in the shape of sweeper cars and their crews, the mere cost of removal of snow is a large item. As an instance of what this may cost, the Ottawa St. Ry. Co. paid out for merely the removal of snow about 1½% on its capital, while in Montreal last winter the total cost of handling snow was equal to 3% on the capital of the Co.; so it is apparent that Canadian companies, or most of them, are pretty heavily taxed by the snow fighting. Yet in face of this great special expense, the operating expenses per cent of earnings will compare favorably with that of roads south of line 45.

A powerful factor in the popularity of street car service in Canada is the universal system of free transfer. Everywhere one fare carries to any point in a city. This privilege to the passenger has been facilitated by sev-

eral things—above all by the fact that there is but one company in each city. Yet despite the complete transfer privilege, fares are low. Five cents is the highest fare, but always 6 tickets are given for 25c., making the regular fare practically 4 1-6c. But there are special tickets, all roads issuing workmen's tickets limited to certain hours morning and evening at 8 for 25c., or 3 1-8c. a fare. Tickets for children are issued at 2½c. by most roads, and some roads give Sunday tickets good all day at 8 for 25c. About 20% of the passengers use workmen's tickets, and 5% the children's. Thirty-five per cent. of the passengers on Canadian lines—over one-third—used transfers during the past year.

Excellent service, handsome open cars in summer, thoroughly heated ones in winter, liberal concessions in fares and transfers, testify to the conviction of the companies that it pays to be in advance of the requirements of the public. Little is left undone to meet the wishes and comforts of passengers. It is fitting that most of the companies should enjoy, as they unquestionably do, not only great financial success, but popularity.

That demand creates supply is a popular axiom. That supply creates demand is proved by electric car service if by nothing else, and proved particularly in the Dominion. The supply of first-class street car service has brought out a patronage which is unquestionably remarkable.

While it is difficult to give actual statistics of the development of the street railway systems of Canada, so far as the statistics previous to the introduction of electricity go, the following interesting comparison will tend to show the great development that has taken place between the years 1892 and 1899, the statistics being for eight of the principal roads:—

	1892.	1899.	P. c. increase.
Gross earnings.....	\$1,702,685.00	\$3,797,086.00	123
Operating expenses..	\$1,299,650.00	\$2,088,355.00	61
Net earnings.....	\$403,035.00	\$1,708,729.00	424
Passengers, number..	37,323,810	90,362,198	142
Track mileage.....	156	335	115
Miles run.....	9,662,363	23,224,592	140
Population served...	592,000	809,000	37
Gross earnings per capita.....	\$2.88	\$4.69	..
Capitalization per mile of track.....	\$18,395.00	\$59,985.00	..
Expenses, per cent of gross earnings....	76	55	..

During this period the gross and net earnings of the larger roads have increased as follows, the figures being the per cent of increase:—

Montreal—Gross 195; net, 665. Ottawa—Gross, 268; net, 222.

Toronto—Gross, 63; net, 198. London—Gross, 196; net, 526.

Toronto leads all roads in Canada in earnings per capita of population, \$6.37, and is lowest in operating per cent of earnings, 48.76; but Montreal has increased her gross earnings per capita of population more than any other road, from \$2.56 in 1892 to \$5.53 in 1899, closely followed by Ottawa, \$1.75 in 1892 to \$4.62 in 1899; while Ottawa leads in increased miles run, 557%.

The total number of passengers carried in the Dominion for 1899 approximated 105,000,000, or about 20 rides per capita of the whole population of the Dominion.—Street Railway Review.

Niagara, St. Catharines and Toronto Ry.

This line, which extends from Niagara Falls, Ont., to Port Dalhousie, 18.1 miles, embraces the old St. Catharines and Niagara Central, 12.3 miles, with an extension at the Niagara Falls end from the M.C.R. junction to the foot of Bridge St., 1 mile, and at the Port Dalhousie end from St. Paul Street, St. Catharines, to Port Dalhousie, 4.8 miles.

The St. C. and N.C.R. was operated as a steam line prior to its purchase by its present

owners, who have converted it into an electric line. The entire road bed has been rebuilt and a first-class overhead line installed, consisting of part bracket construction and part span wire using 00 figure 8 trolley, two lines being used a foot apart directly over the track, one of which is feed wire, both of which can be used as trolley wire.

Power is generated by the Canadian Niagara Power Co., and is received at sub-station 1 at 2,200 volts and converted through a rotary converter to 600 volts, also into step up transformers and run at 11,000 volts to sub-station 2, where it passes through a step down transformer and rotary converter to 600 volts; therefore feeding in from both ends of the line.

The rolling stock consists of four 50 ft. double truck closed cars, with smoking and baggage compartments; ten 20-bench double truck open cars, 4 small open cars, 4 small closed cars, a rotary snow plow, a nose plow, an electric locomotive, a steam locomotive and 15 flat cars.

Ten trips a day each way are being made between Niagara Falls and St. Catharines with a service every two hours between St. Catharines and Port Dalhousie. Later on it is the intention to inaugurate a 20-minutes service between Niagara Falls and Port Dalhousie. About April 1 the Co. will commence its boat service between Port Dalhousie and Toronto, making one trip a day until about May 15, when both boats will be on the route, each making two round trips a day. Fuller particulars of the boat service are given on pg. 119.

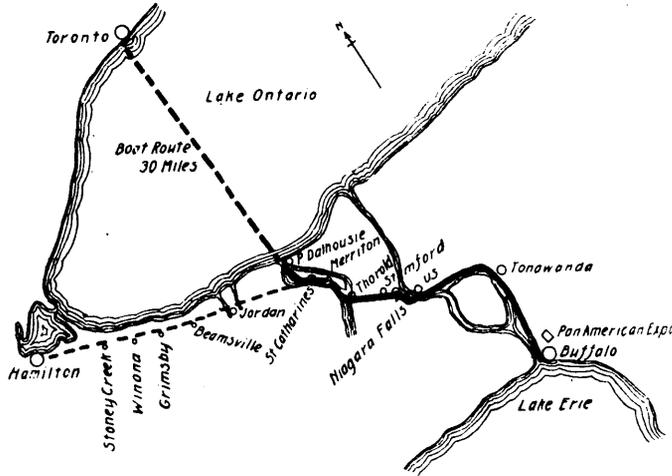
Arrangements have been made with the International Traction Co. by which the N. S. C. and T. R. cars will run over the I. T. Co.'s tracks from Niagara Falls, Ont., across the steel arch bridge to Niagara Falls, N.Y.

It is said the N.S.C. & T. Co. is negotiating for control of the Port Dalhousie, St. Catharines and Thorold Electric St. Ry. Co., whose line of 9.5 miles runs from St. Catharines through Meriton to Thorold.

Preliminary surveys have been made for an

has been thoroughly refitted. The Garden City will not go into commission until later.

The officers of the Co. are: J. A. Powers, President, Lansingburgh, N.Y.; J. W. Herbert, Vice-President, New York City; A. B. Colvin, Secretary-Treasurer, Glen's Falls, N.Y.; E. F. Seixas, General Manager; G. M. Neelon, General Passenger Agent; W. N. Warburton, General Freight Agent. The three latter are located at St. Catharines, Ont.



NIAGARA, ST. CATHARINES AND TORONTO RY. AND CONNECTIONS.

extension of the N.S.C. & T. Ry., to Hamilton, but nothing further has been done in this connection.

The str. Lakeside will commence running regularly between Toronto and Port Dalhousie on April 10, leaving Port Dalhousie each morning (Sundays excepted) at 8 on the arrival of the 7.25 car from St. Catharines. Returning will leave Toronto each afternoon at 3.15, connecting with 6 o'clock car from Port Dalhousie for St. Catharines, Niagara Falls and intermediate points. The Lakeside

Grand Trunk Railway Company of Canada.

Notice is hereby given that the Ordinary General Half-Yearly Meeting of the Grand Trunk Railway Company of Canada will be held at the City Terminus Hotel, Cannon Street, London, E.C., on Tuesday, the 30th day of April, 1901, at two o'clock p.m., precisely, for the purpose of receiving a Report from the Directors, for the election of Directors and Auditors, and for the transaction of other business of the Company.

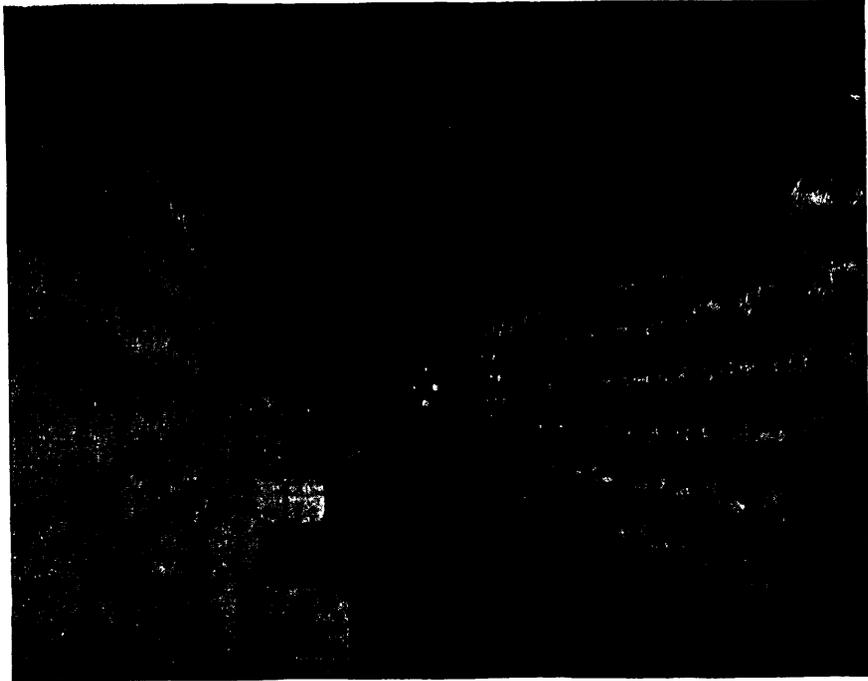
Notice is also given that an Agreement, dated 28th December, 1900, between the Cincinnati, Saginaw and Mackinaw Railroad Company, the Grand Trunk Railway Company of Canada, the Chicago and Grand Trunk Railway Company, and Wellington R. Burt, A. W. Wright, George H. Russell, Albert M. Marshall and T. H. Marshall, providing for the lease of the Cincinnati, Saginaw and Mackinaw Railroad Company's railway to the Grand Trunk Railway Company of Canada, its successors and assigns, for the term therein mentioned, and the Act of the Parliament of Canada ratifying and confirming the same, will, at the same time and place, be submitted for the acceptance and approval of the Proprietors.

Notice is also hereby given that the Act of the Parliament of Canada, ratifying and confirming the Agreement dated 22nd November, 1900, between the Grand Trunk Western Railway Company and the Grand Trunk Railway Company of Canada, and authorizing the application of certain specific borrowing powers in said Act mentioned to the general purposes of the Company in Canada, will be submitted to the Proprietors for acceptance and approval as required by said Act, and also a resolution will be submitted to authorize the Directors to exercise such powers.

And Notice is further given, that the Transfer Books of the Company, in London, will be closed from Saturday, the 6th day of April, to the day of Meeting, both days inclusive.

By Order,
C. RIVERS WILSON, President.
WALTER LINDLEY, Secretary.

DASHWOOD HOUSE,
9 New Broad Street, London, E.C.,
March 29th, 1901.



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LIMITED.
CROSS ARMS, TOP PINS,
AND SIDE BLOCKS,
TORONTO.

SHIPPING MATTERS.

Government Steamer for Halifax District.

The Minister of Marine and Fisheries invites tenders, to be sent in by May 16, for the construction of a twin-screw steamer for the Atlantic coast service, which includes buoy, lighthouse and cable work. The specifications call for the delivery of the vessel within 10 months after the acceptance of the tender. She is to be a twin-screw, steel steamship, to be built under Lloyd's special survey to class 100 A1. Her dimensions will be: length of keel, 210 ft.; breadth, moulded, 34 ft.; depth, moulded, 18 ft. She will be built with a double bottom extending her whole length, except under the water ballast tanks, of which there will be two; and the well under the boiler. The ballast tanks will have longitudinal midship partitions for trimming. Six bulkheads are to be provided, thus dividing the hull into eight watertight compartments, and with the double bottom making her practically unsinkable.

In the engine-room will be two sets of direct acting surface condensing tri-compound engines, with three inverted cylinders over crank shaft, to be of sufficient power to maintain a speed of 14 knots an hour at sea in ordinary weather. Steam will be provided by two single-ended cylindrical return tubular boilers to supply steam continuously at 180 lbs. pressure, but tested with cold water to twice the working pressure. The latest system for hot air forced draught to be fitted.

Steam and hand steering gear is to be provided; the latest improved steering engine being specified. This will be fitted in the chart-room, underneath the pilot house, with wheel in the pilot house; the hand steering gear will be placed aft.

On the main deck will be constructed two deckhouses, in the forward one of which will be four staterooms for the engineers, and the chartroom, while the after one will contain the superintendent's state-room and office. The bridge with officers' lookout and pilot-house will be built over the forward deck-house. From the bridge electrical communication will be had with the engine-room, a telegraph being placed in the pilot-house, and on the bridge. There will also be a voice pipe from the pilot-house to the engine-room, to the commander's cabin, to the fo'castle head and the crew's nest; while the chief engineer will have voice tube communication with the engineer in charge from his state-room. A spiral compass in binnacle will be provided in the pilot-house; a light card binnacle compass will be placed at the aft wheel, and a spring stay compass will also be provided.

The officers and petty officers will be quartered in the poop, where also will be two messrooms, galley, and various storerooms, while separate accommodation will be found for 12 seamen and 12 firemen under the top-gallant fo'castle deck.

Electric light is to be provided throughout, a plant capable of supplying 150 sixteen candle power incandescent lights, and one large search light, which will be fitted on the top of the pilot-house, being specified for.

The vessel will be supplied with four boats, one being a steam launch 28 ft. long, 8 ft. beam, and capable of steaming 8 knots an hour. The others are to be: the captain's gig, one compressed steel, and one ordinary lifeboat.

Two pole masts are specified, the forward one to be of steel, and to be fitted for hoisting purposes, the derrick on the after side being sufficient to hoist 12 tons. Two steam winches are also to be provided, capable of lifting 12 tons.

As the vessel is to be used for cable repairing and laying, she will have a special cable

tank, and an over-hang stem, provided with a cable-wheel over the stemhead, and a small wheel fitted to each bow for hauling in and paying out the cable.

Canadian Pacific Navigation Co.

Since the acquisition of this Co. by the C. P. R. Co., its organization has been changed as follows:—Chairman, J. A. Thomson, formerly Manager of the C.P.N. Co.; other directors, R. Marpole and G. McL. Brown, of the C.P.R., H. Abbott, formerly of the C. P. R.; Manager, Capt. J. W. Troup; Secretary-Treasurer, F. W. Vincent. Capt. Troup will make his headquarters at Victoria.

Some changes are being made in the local offices. The freight and passenger departments are to be removed from Victoria to Vancouver, the freight business being merged into the department of F. W. Peters, A.G.F. A., of the C.P.R., at Vancouver, and the passenger business will be merged into the department of E. J. Coyle, A.G.P.A., of the C.P.R., at Vancouver. The offices on Wharf st., Victoria, will be the headquarters of Capt. Troup, F. W. Vincent, G. A. Carleton and others, who will form the operating staff of the Co. B. W. Greer, local agent of the C.P.R. at Victoria, will also be the local agent of the C.P.N. Co., C. S. Baxter, General Passenger Agent, severing his connection with the Co. to enter business for himself.

These appointments are announced: Capt. Hughes, formerly of the str. Queen City, to command the Tees; Capt. J. Townsend, formerly in charge of the West Coast steamer, to command the Queen City; Capt. Gosse, formerly in charge of the Tees, will, it is said, be appointed pilot of the Vancouver-Victoria steamer.

In a recent interview Capt. Troup said many improvements would be made in the service. The improvements to the Lynn Canal route are to be begun at once. The str. Islander will be placed on the Skagway route at once, and will be run on a 10 day schedule. She will be run as a fast passenger steamer, leaving Victoria every 10 days for the North, and sailing from Skagway for Victoria every 10 days. The str. Amur is to be run in connection with the Islander, sailing every 10 days on a similar schedule, alternating with that of the Islander, which will give a five day service—a steamer going and coming every five days on regular time. New steamers are to be secured for this route, but negotiations for their purchase have not been completed. It is the aim of the Co. not to hurry the purchase, in order that the steamers secured will be the best that can be obtained for the service, and they will be the fastest and best of all on the route, so as to get the business. Capt. Troup said he had been up and down the Atlantic coast and elsewhere looking at many steamers, but no vessels had been secured that came up to the requirements. The other steamers now in the northern service will continue as at present, but the Islander and Amur are to be the passenger liners.

The Charmer will continue on the Vancouver route for the present, on the same time as she now runs; in fact, from what can be learned, the daylight service of the Islander leaving Victoria outer wharf at 7 a.m. did not seem to meet with favor. When the run can be made in four hours, then of course a daylight service will be the popular one. It is the Co.'s intention to improve this, as well as the other services, but as yet there is nothing to announce. The service will be made as convenient as possible, and keep the train connections.

Since the above was put in type a Montreal despatch says the Co. has bought the steamer Hatling from C. Morty, of Hong Kong, for the Victoria-Skagway route. She is a 1,400-ton vessel, 250 ft. long, speed 16 knots.

The Lakeside Navigation Co.

This Co. has been acquired by J. W. Flavelle, Z. A. Lash, K.C., and J. H. Plummer of Toronto, who are associated with the New Yorkers who own the Niagara, St. Catharines and Toronto Ry. With the franchise of the Co. passes the ownership of the str. Lakeside, which it is intended to run in connection with the str. Garden City, which has also been purchased by the same gentlemen, between Toronto and Port Dalhousie, as part of the Co.'s route to Niagara Falls and Buffalo, full particulars of which were given in an earlier part of this issue.

The Lakeside Navigation Co. was organized by Hiram Walker & Sons, of Walkerville, for the purpose of acquiring and operating the str. Lakeside. Messrs. Walker were practically the sole owners, the other shareholders being the officers who each held a small interest. The steamer was run for about four years on Lake Erie, and was in 1892 transferred to Lake Ontario, being put on the Toronto-St. Catharines route. W. G. Thurston, of Toronto, was at that time acting as solicitor for the Co. and for some years was purchasing stock, until 1897, when he, Mr. Hamlin and Captain Wigle, had secured a controlling interest. Soon after the Lakeside was put on the St. Catharines route, the Empress of India and the Garden City commenced competing for traffic. The owners of the three boats decided to pool their receipts, but this agreement was broken up in 1894 or 1895, when a war of rates began. The Garden City was the first to give in, and the Empress of India retired in 1898, leaving the Lakeside in possession. In the following summer a second steamer—the Lincoln—was put on the route, and a full service was maintained during 1899 and 1900.

The Lincoln, at the time of her purchase by Messrs. Thurston & Hamlin, was known as the Greyhound, and was renamed after Lincoln county. The Greyhound was built by Mr. Simpson for the Oakville route, but passed into the hands of the Messrs. Gooderham, who ran her to Oakville for some time. The new owners chartered her to the Lakeside Navigation Co., to run in conjunction with the Lakeside, and she does not pass to the new owners of the Lakeside, but remains the property of Messrs. Hamlin & Thurston, who have chartered her for one year to the International Navigation Co. for its Chippewa-Buffalo route.

The screw-steamer Lakeside, was built at Windsor, Ont., in 1888. Her dimensions are: length, 121 ft.; breadth, 26 ft.; depth, 9 ft. 3 ins.; tonnage, gross, 348; register, 220.

The side-wheel steamer Garden City, which has been sold by T. Nihan, of St. Catharines, to run in connection with the N.S.C. and T. Ry., was built in Toronto in 1892. Her dimensions are: length, 177 ft. 9 ins.; breadth, 26 ft. 1 in.; depth, 10 ft.; tonnage, gross, 637; register, 401.

The steamer Lincoln, originally the Greyhound, propeller, was built at Hamilton in 1888. Her dimensions are: length, 130 ft.; breadth, 25 ft. 2 in.; depth, 9 ft.; tonnage, gross, 337; register, 219.

A daily press report recently stated that the American Shipbuilding Co. of Cleveland intended establishing a shipbuilding yard on the St. Lawrence, near Montreal. The Co. informs us that it has no intention whatever, at the present time, of establishing, or building, or having anything to do with a shipyard in the Dominion.

The British Yukon Navigation Co. (Ltd.) has been incorporated under the British Columbia Companies' Act with a capital of \$100,000, with power among other things to acquire and operate vessels.

Hydraulic Dredger for Fraser River.

The people of New Westminster, B.C., are elated over the construction of a hydraulic dredger there by the Polson Iron Works, of Toronto, for the Dominion Government, and they go down to the water front in crowds daily to watch the progress of the work. To obtain this dredger has been a matter of years' agitation, and on more than one occasion it has been looked upon as almost hopeless, but success has finally been achieved.

The necessity for this plant is undoubted, as the city, which is 15 miles from the mouth of the Fraser River, is only prevented from being easily accessible to ocean steamers at all states of the tide by the formation of sand-banks which the dredger is designed to remove, and it is confidently expected that within a year or two New Westminster will be to all intents and purposes an ocean sea port in fresh water. One great advantage which will accrue to steamers and other vessels using this port is that on arriving there after a long ocean voyage with their bottoms covered with barnacles and weed, a few hours in the fresh water will cause all foreign substances to fall away from their bottoms, and leave them as clean as if they had been docked, scraped and painted.

Full particulars of the dredger were given in our issue of Dec., 1900. It was constructed by the Polson Iron Works in Toronto, where it was all put together and bolted up ready for riveting. It was then taken apart and shipped to New Westminster by rail, where it has been re-erected under the super-

vision of W. E. Redway, M.I.N.A., the builder, who has just returned to Toronto after completing the work, and who states that the hull will be ready for the water early in May. The propelling engines are on the ground, the pumping engines are finished ready to go forward, and the remainder of the machinery and equipment are well forward towards completion, and will be despatched shortly, so that within the next three months one of the most efficient dredging machines on the continent will be busily engaged removing all obstructions to navigation in the Fraser River.

Notices to Mariners.

The Dominion Department of Marine has issued the following notices:—

No. 2. Mar. 8. Quebec.—Regulation against anchorage at Beaujeu bank.

No. 3. Mar. 13.—International code signals. This is given fully below.

No. 4. Mar. 13.—British Columbia. 1. Time gun in Vancouver harbor. 2. New name of northern Galiano island.

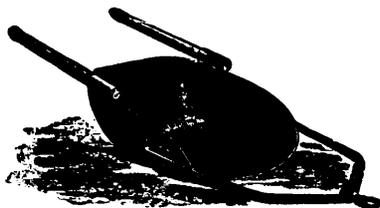
INTERNATIONAL CODE SIGNALS.

With reference to the new International Code of signals, which was brought into use on Jan. 1, 1901, information is given that—During 1901 either the new edition or the old may be used, but on and after Jan. 1, 1902, the new edition only is to be used. To prevent any misunderstanding during 1901, as to whether the old or new code is being used, when signals are made by the new code, the code pen-

nant is to be doubled, that is, the fly of the pennant, as well as the tack, is to be made fast to the halyards, and hoisted below a black ball or shape. On and after Jan. 1, 1902, the code pennant will be hoisted in the ordinary way, without the black ball. Signals for a pilot can be made during 1901 either by the old or new code, but in the event of using the latter, the pennant must be hoisted, as notified above. All signal stations in the Dominion have been supplied with the new code and British code list of vessels, and it is expected that they will be equipped with the additional flags by May 1 next.

The G.T.R. has made an arrangement with the Port Huron-Duluth Steamship Co., successors to the Port Huron, Washburn and Duluth line of steamers, to operate a steamship line between Port Huron, Mich., and Duluth and Itasca, Minn. This line will commence to run on April 20. It consists of two large modern steel package freight vessels, and each steamer will make the round trip in seven days. The line has been put on to care for the traffic to and from U.S. points which cannot be carried in Canadian bottoms. The G.T.R. Co.'s steamer line connection between Sarnia and Duluth has been strengthened by the North-West Navigation Co. adding an additional steamer—the City of Collingwood, of the Northern Navigation Co.'s line—to care for the Canadian traffic. With the combined lines there will be five steamers running between Sarnia and Port Huron, and Duluth and Fort William.

WIRE ROPES, MARION STEAM SHOVELS, BALLAST UNLOADERS.



Columbus Pressed Bowl Wheel and Drag Scrapers.

.....Wheelbarrows, Picks, Shovels, Mattocks, Etc.

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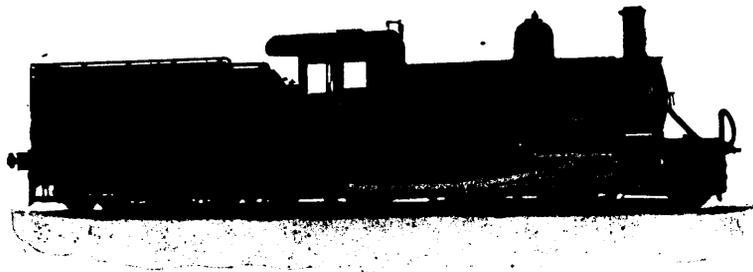
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SINGLE EXPANSION AND COMPOUND LOCOMOTIVES.



Built for the Great Northern Railway.

Broad and Narrow Gauge Locomotives; Mine and Furnace Locomotives; Compressed Air Locomotives; Steam Cars and Tramway Locomotives; Plantation Locomotives; Oil Burning Locomotives.

Adapted to every variety of service, and built accurately to gauges and templates after standard designs or to railroad companies' drawings. Like parts of different engines of same class perfectly interchangeable.

Electric Locomotives and Electric Car Trucks with Westinghouse Motors.

Burnham, Williams, & Co., Philadelphia, Pa., U.S.A.

Established 1849

CHAS. F. CLARK, Pres. JARED CHITTENDEN, Treas.

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THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

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OFFICES IN CANADA:

Halifax, N.S.	Hamilton, Ont.	London, Ont.
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Victoria, B.C.		Winnipeg, Man.

THOS. C. IRVING,
Gen. Man. Western Canada, Toronto.
JOHN A. FULTON,
Gen. Man. Eastern Canada, Montreal.

The Department of Marine.

The report of the Department for the year ended June 30, 1900, has been issued. Following are extracts from the Deputy Minister's report:—

The amount expended on the various branches of the public service comprised in the Marine Branch of the department during the year was \$919,616.94; the expenditure for the previous year was \$1,020,259.93. The expenditure for civil government, including the Marine and Fisheries branches, amounted to \$54,368.71, and for civil government contingencies \$8,962.60.

The number of persons in the outside service of the Marine branch is 1,910.

The expenditure for maintenance of light-house and coast service was \$456,254.48; construction, \$60,239.92; total, \$516,494.40.

The number of light stations, light-ships, and fog alarm stations in the Dominion on June 30, 1900, was 693, and lights shown 869; the number of steam whistles and fog-horns, bells and guns 88; the number of light-keepers and engineers of fog alarms, with masters of light-ships, was 693.

Buoys and Beacons.—The extended coast line of Canada, and numerous bays, inlets, rivers, lakes, harbours, and other navigable waters require a large number of buoys, which are maintained at an average cost of \$55,000 a year. For the year ended June 30, 1900, the service cost \$66,980.48. The cost is increased in years when new contracts are given for steel signal and other coast buoys. The Department has been substituting steel coast buoys for wooden buoys with favourable results. The districts now buoyed in all parts of the Dominion number over 300, and the buoys number over 3,000. The contract system has been found to work most economically and efficiently; in the majority of instances the contracts are immediately under the supervision of departmental officers, whose duty it is to report to the Department any neglect of work on the part of the contractors. There are now existing about 275 contracts, some of which will shortly expire, but new contracts will be entered into in the spring. The contractors are paid semi-annually upon the certificate of the superintending officer. There are, however, some districts not under contract; the work is being attended to by the harbour masters. In these cases it has been found more advantageous to place the work immediately in the hands of these officers. A large number of whistling, bell and other iron buoys are maintained along the coasts of the several provinces by Dominion steamers, particularly the Nova Scotia, New Brunswick and British Columbia coasts. The cost of this maintenance by the steamers is not charged directly to the buoy service, but is included in the cost of maintenance of steamers which frequently perform the double duty of attending to lighthouses and the coast buoy service on the same trip.

The expenditure in connection with the buoy service for the year ended June 30, 1900, was:—

Province of Quebec, including port of Montreal	\$30,527 61
Above Montreal, including Ontario	7,489 58
Nova Scotia	11,067 28
New Brunswick	9,390 82
British Columbia	6,111 60
Prince Edward Island	2,393 59
Total	\$66,980 48

In addition to the buoys for marking dangers, there are 11 gas buoys below Quebec and one spare buoy, also gas works and supply tanks, etc. Two gas buoys are maintained in Pelee Passage, Lake Erie, and three in Parry Sound, Ont. All of these buoys assist vessels at night by their light.

The steam barge Shamrock, built in 1898, was engaged in the buoy service in the ship channel between Montreal and Quebec, and

was immediately under directions from the Department in carrying out the work of buoying the channel. The buoys were increased in number, and various changes and improvements were made, especially in the stretches of the dredged channel improved by the Public Works Department.

Tenders were invited and contracts entered into for the following steel buoys during the year, viz., 3 whistling buoys, 2 bell buoys, 4 conical buoys and 9 can buoys for the Nova Scotia agency; 18 conical buoys for the New Brunswick agency, and 2 conical buoys for the Quebec agency.

Steamer Minto.—The Minto is a new iron steamer 225 ft. long, breadth 32.6 ft., and depth 20.6, gross tonnage 1,089, net tonnage 371; indicated h.p., 2,900, and nominal h.p., 216. She is commanded by Capt. Allan Finlayson, and has a crew of 35 in all. She left Dundee, where she was constructed, on Sept. 14, 1899, and arrived in Charlottetown Sept. 25, having experienced a rough passage. She proceeded to Pictou for coal on Sept. 27, and from there made a trip to Sable Island, returning to Charlottetown on Oct. 11. She left for Pictou on Dec. 18 to coal up for the winter service and entered upon this work on Jan. 2, when she left Charlottetown for Pictou. One round trip was made on this route, but on returning from Pictou the second time the Captain deemed it unsafe to enter Hillsboro Bay on account of the condition of the ice, and went to Georgetown. She continued on the Pictou-Georgetown route until April 6, 1900, on which date she went to Charlottetown. The Charlottetown-Pictou route was resumed, and she continued until April 16, when she was withdrawn from the service. On May 30 she left for Pictou to go on the slip to have the bottom cleaned and painted; this was completed about the end of May, and she returned to Charlottetown, where she was laid up at the wharf. She was still there at the end of the fiscal year, overhauling gear, painting, etc. The gross earnings of the steamer amounted to \$11,654.56. She made 81 trips and carried 2,104 passengers and 89,626 packages of goods, besides doing mail service the whole winter; there was therefore no necessity for opening the mail service between Capes Traverse and Tormentine in the small ice boats as usual in former years.

The cost of maintaining the Dominion steamers, which was \$145,270.75 in 1898-9, rose to \$180,975.45 in 1899-1900. The latter figures, however, include the outfit and stores to the str. Minto in Scotland, also alterations of the str. Aberdeen.

Masters and Mates.—The Board of Examiners of Masters and Mates held examinations at Halifax 13 times, at St. John 6 times, at Yarmouth 3 times, but none at Quebec. There were also 5 examinations held at Victoria, B.C.; the papers and problems were forwarded to the Agent at that place and returned to Halifax, for inspection of the Chairman of the Board.

Wrecks and Casualties.—The total number of casualties to British and Canadian sea-going vessels reported to the Department, as having occurred in Canadian waters and to Canadian sea-going vessels in waters other than those of Canada, during the year, was 151, representing a tonnage of 59,066 tons register, and the amount of loss both partial and total, to vessels and cargoes as far as ascertained, was \$356,848. The number of casualties to inland vessels, so far as have been reported, were slight and unimportant. The number of lives reported lost in connection with the casualties was 74.

Sick and Distressed Mariners.—A duty of 2c. a ton register is levied on every vessel arriving in any port in the Provinces of Quebec, Nova Scotia, New Brunswick, Prince Edward Island and British Columbia, the money thus collected forming the Sick Mariners' Fund.

Vessels of the burden of 100 tons and less pay the duty once in each calendar year, and vessels of more than 100 tons, three times in each year. No vessel, which is not registered in Canada and which is employed exclusively in fishing or on a fishing voyage, is subject to this duty. The receipts for the year were \$59,954.50, and the expenditures were \$32,743.30. Since 1869 \$127,291.10 has accumulated to the credit of this fund. The Sick Mariners' Act does not apply to Ontario, and consequently no dues are collected from vessels in that Province, although a small expenditure is incurred on account of sick seamen. An appropriation is made by Parliament to cover the expenditure at Kingston and St. Catharines, where general hospitals have been established and sick seamen are attended. During year sick seamen were paid for at a per diem rate of 90c.

Steamboat Inspection.—The total number of steamboats reported in the several districts in the Dominion is 1,491, of which 106 are new vessels, the gross tonnage being 244,401. Fees were collected for inspection amounting to \$35,465.83; the fees from engineers for certificates amounted to \$809, and fees for inspection of tow barges to \$200, making the total receipts \$36,474.83, but out of this amount refunds were made to date which should have come out of former years' receipts. Owing to the increase of tonnage of steamers, mainly caused by the Yukon trade, and the additional work of inspecting steamers without certificates, not registered in the Dominion, the work of inspection has been increased in most of the divisions. The total expenditure in connection with inspection was \$27,965.92.

Signal Service.—Arrangements have been completed between the Government and the Society of Lloyd's, whereby the following signal stations, maintained by the Dominion, have been included in Lloyd's system of reporting stations. Orders forwarded to Lloyd's can be notified to vessels by means of these signal stations on the same terms and conditions as observed at Lloyd's signal stations, and vessels signalling to these Canadian signal stations will be reported to Lloyd's for insertion in the Lloyd's List and Shipping Gazette, and daily press, in the same manner as reports from Lloyd's signal stations:—Cape Ray, Newfoundland; St. Paul's Island and Cape St. Lawrence, Cape Breton; Heath Point, South Point, Southwest Point and West Point, Anticosti; Cape Rosier, Fame Point and Cape Magdalen, Gaspé Coast; Amherst Island, Magdalen Islands.

The government telegraph system was, during the past season, extended along the north coast of the Gulf of St. Lawrence to the Strait of Belle Isle, and it was intended to connect Belle Isle, last fall, with the shore telegraph system by a cable, but the loss of the str. Newfield has postponed the completion of this work.

Lloyd's have been in communication with this Department on the subject of establishing one of their reporting stations on Belle Isle, and have been offered the active assistance of this Department in doing so. They are also considering the feasibility of connecting Belle Isle with the mainland by a system of aerial telegraphy, so that communication would not be interrupted by a break in the cable.

Arrangements have been completed by the Department whereby all inward bound vessels showing their official numbers will be reported from marine signal stations in the river and gulf of St. Lawrence immediately, and all reports will be promptly posted on the bulletin board of the G.N.T. Co.'s office in Montreal. Weather and ice reports will be forwarded twice a day, as formerly, and similarly posted. Arrangements have also been made for repeating all reports received to the

pilot station at Father Point, so that pilots will be promptly advised of the locality of inward bound vessels.

Marine and Railway Work in Toronto.

The Polson Iron Works has contracted with the Dominion Government for a large hydraulic dredge for the St. Lawrence. The dimensions are 160 ft. long, 42 ft. beam, and 12 ft. 6 ins. deep. She is to be built of steel, and when completed will class 10% above A1 at Lloyds. Her pump suction is to be 36 ins. diameter, and will have a capacity of 2,000 cubic yards an hour. To drive this massive pump it will require 1,200 i.h.p. furnished by a triple expansion engine with cylinders 20, 31 and 50 ins. diameter x 25 ins. stroke. Steam will be furnished by 4 boilers of the locomotive type, 6 ft. diameter x 25 ft. long.

The following orders are under construction at the Polson Iron Works: A steel passenger ferry for the Sault Ste. Marie Ferry Co., 104 ft. long, 26 ft. beam of hull, 33 ft. over the guards, with a draft aft of 10 ft. She will be fitted with a fore and aft compound jet condensing engine, having cylinders 18 ins. and 36 ins. diameter x 24 ins. stroke, and a Scotch boiler 11 ft. diameter x 12 ft. long. This boat is very strongly constructed so as to withstand the ice, and is designed similar to the ice crushers in the Sault.

Two very handsome launches, one a composite launch for W. J. Gage, Toronto, to be used on Lake Muskoka. She is 56 ft. long, 9 ft. beam, with a draft of about 3 ft. 6 ins. Power will be supplied by a fore and aft compound engine with cylinders 4 1/2 ins. and 8 ins. diameter x 6 ins. stroke, and a vertical

submerged tubular boiler. The other is a very pretty little gasoline launch for E. Leadley, of Toronto, 25 ft. long, 5 ft. beam and drawing about 2 ft. of water, to be fitted with a double cylinder 6 h.p. Sintz gas engine (for which the Polson Iron Works is Canadian agent) and will make about 7 to 8 miles an hour.

A marine outfit for Jos. Mayers, of New Westminster, B.C., consisting of a fore and aft compound surface condensing engine, having cylinders 12 ins. and 26 ins. diameter, 18 ins. stroke and Clyde boiler 9 ft. diameter x 10 ft. long to pass Government inspection for 150 lbs. steam.

A Clyde boiler for str. Van Allan, belonging to the Toronto Electric Light Co., boiler to be 10 ft. diameter x 11 ft. long, containing 1,200 sq. ft. of heating surface; 2 furnaces each 40 ins. diameter, built to pass Government inspection for 125 lbs. steam.

For J. Playfair, of Midland, Ont., a Fitzgibbon boiler 66 ins. diameter x 12 ft. long, containing 88 tubes 3 ins. diameter x 10 ft. long, to pass Government inspection for 140 lbs. steam.

For the steamer Persia of the Toronto and Montreal Steamboat Co., a steel marine boiler 8 ft. 6 ins. diameter x 14 ft. long, containing 2 furnaces each 5 ft. 6 ins. long, with centre water leg and a combustion chamber at end of furnace to be 2 ft. long. From the end of the combustion chamber to the back smoke connections are 2 flues, one 26 ins. diameter and one 12 ins. diameter x 4 ft. long. Tubes running from the back connection to the front head 3 1/2 ins. diameter x 11 ft. 6 ins. long. Boiler to be made and stayed to pass Government inspection for 125 lbs. working pressure.

A small marine outfit for H. L. Christy, Pittsburg, Pa., to be used in the upper Muskoka lakes, consisting of engine vertical, 4 ins. x 6 and vertical boiler 33 ins. diameter x 48 ins. high, to have 140 tubes 1 1/2 ins. x 25 ins. long and to be built for a working pressure of 125 lbs. steam.

A vertical marine engine 9 x 9 for Austen Bros., Halifax, N.S.

The Polson Engine Works has just completed and shipped to the C.P.R. 2 pairs of hoisting engines having cylinders 8 ins. diameter x 12 ins. stroke and 2 fire box boilers each 48 ins. diameter x 84 ins. long with outside part of fire box 4 ft. long, having dome 30 ins. x 30 ins. These outfits are placed in cars specially built and fitted up for pile drivers and used in construction work.

Steel Shipbuilding in Canada.

By W. E. Redway, of the Polson Iron Works.

The question has been asked recently, "Why cannot steel ships be built as cheaply in Canada as in Great Britain? There is no duty on the plates or bars imported for shipbuilding, and the extra freight cannot add much to the cost of a Canadian over a British built ship." A concise but comprehensive answer to this question can be readily given:

In the first place, a steel ship is composed of something more than the mere framework and plating forming her hull. She contains within herself probably a greater diversity of manufactured materials than any other structure. Into the completion and perfection of a first-class passenger boat go the united productions of almost every manufacturing industry, from the coal and iron mine down

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 remainder annually thereafter, except in the case of the settler who goes into actual residence on the land and breaks up at least one-sixteenth thereof within one year, who is entitled to have second instalment deferred for two years from date of purchase.

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

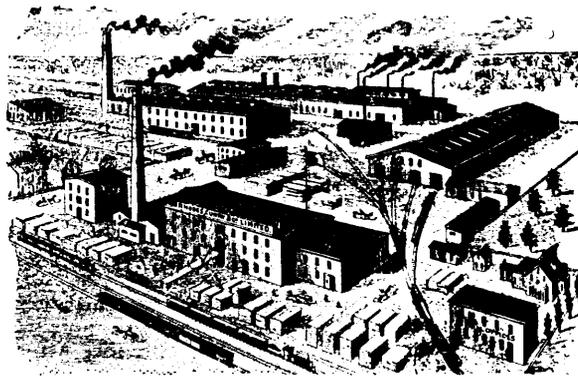
- 160 acres at \$3.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.
- 160 acres at \$3.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.
- 160 acres at \$4.00 per acre, 1st instalment \$95.85, and nine equal instalments of \$80.
- 160 acres at \$4.50 per 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.

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

Write for maps and full particulars.

F. T. CRIFFIN, - Land Commissioner,
WINNIPEG.



Rhodes, Curry & Co.,

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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.

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A partial list of elevators which have been designed and constructed by us and under our supervision.

Burlington Elevator, St. Louis, Mo.	Capacity	1,300,000 Bushels
Grand Trunk Elevator, Portland, Me.	"	1,000,000 "
Export Elevator, Buffalo, N.Y.	"	1,000,000 "
J. R. Booth Elevator, Depot Harbor, Ontario	"	1,000,000 "
Cleveland Elevator Company's Elevator, Cleveland, O.	"	500,000 "
Erie R. R. Transfer & Clipping House, Chicago, Ill.	"	100 cars in 10 hrs.
Manchester Ship Canal Co.'s Elevator, Manchester, Eng.	"	1,500,000 "
Burlington Elevator Co., Peoria, Ill.	"	500,000 "
Canada Atlantic Railway Elevator, Coteau Landing, Que.	"	500,000 "
Northern Grain Co., Manitowoc, Wis.	"	1,350,000 "
Union Elevator, East St. Louis, Ill.	"	1,100,000 "
Montreal Warehousing Co.'s Belt Conveyor System	"	"

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through the whole engineering world, from the main engines and boilers to the captain's sextant and chronometer, from the trees in the forest down through the woodworking section, from the main deck to the high art furniture and carvings in the saloon. Her equipment cannot be provided without the assistance of the cloth-maker, the potter, the glass-worker, the cutler, and without the hundred-and-one other members of the world's industrial organization, contributing each his share to the production of the finished article. The cost of almost every article in the ship, coming under either of the above headings, is at least one-third higher in Canada than in Britain.

Next, heavy forgings, such as stern frames, rudder frames, connecting rods, propeller shafts, steel engine castings, etc., are considerable items in the cost of a modern steamship. All have to be imported and pay a heavy Customs duty, because the larger sizes are not made in Canada, and even the smaller sizes which are made here are excessively costly, owing to the extremely limited demand for them. The same remark applies to steam windlasses, steam winches, electric lighting machines, steam steering gears, and scores of other items too numerous to mention.

In all these matters the British shipbuilder is 25 to 35% ahead of the Canadian. The latter cannot lay down his raw material (plates, bars and rivets) at so low a price as the former by 10%, exclusive of freight charges, if he desires to save time by purchasing in the U.S.

However desirable it may be that Canadian makers of these goods should be protected to the extent of this preference during the earlier stages of manufacture, and until an increased demand will justify its discontinuance, that does not make it any easier in the meanwhile for the shipbuilder who has to compete with those who can obtain the same articles at 25 or 30% less cost. It is true that a Customs tariff of 25% on machinery and 10% on the hull is levied on new ships purchased abroad and registered in Canada which, apparently, is so much in favor of the Canadian builder, but this is purely a negative concession, and is really operative only as to ships purchased in the U.S., because British ships registered in Britain or Newfoundland are not subject to the tariff, and, consequently, are brought in freely, clear of duty.

Then, as to labor: It was recently shown at the meeting of naval architects in New York, last Dec., that the difference in cost of wages, paid by daywork, between American and British shipbuilders, averaged 25% throughout all trades in favor of Britain. Now, the wages paid in Canada for mechanics and laborers differ but little from the wages paid on the other side, certainly not more than from 10 to 12½%, consequently the British shipbuilder is also 12½ to 15% ahead on his cost of labor. Even assuming that the Canadian mechanic, although paid higher wages, can, by reason of his superior energy and ability (which is at least questionable), perform the labor of building the hull at as low cost per ton of material used as the British mechanic, it is still manifestly impossible for the Canadian shipbuilder to produce the finished ship at the same cost as the British shipbuilder.

Many steamers have been brought into Canada during the past 10 years from Britain, sufficient in number and importance to have permanently established steel shipbuilding had conditions been favorable for building them here, but the industry has been carried on since the building of the first steel ship, the Manitoba, in May, 1889, in a desultory and perfunctory manner, producing only a class of vessels mostly too small or otherwise unsuitable for crossing the Atlantic; in fact, although the business has had a precarious ex-

istence of 12 years, only two cargo steamers have been built during that time.

It will be argued that the manufacture of plates and bars in Canada, which is at last within measurable distance, will give the Canadian manufacturer a better chance to compete with the British, and to a limited extent this is true, but it will not go far to offset the wide difference that exists in the general conditions.

Canada as a manufacturing nation is just emerging from the age of swaddling clothes, but, even after arriving at maturity, she will never be in a position to compete economically with Great Britain in the building of ships, until fiscal and other conditions are so equalized that the Canadian and British shipbuilder can meet on equal terms. By a wise policy of fostering the manufacture of steel, she has laid the foundation stone of her future greatness and prosperity (and no nation in these days can become great before making iron, for that is the condition precedent in this industrial age), but it must not be forgotten that a foundation without a superstructure is of little utility.

The future development of the iron and steel industry in Canada will require cargo steamers to handle its raw materials and finished products to an extent that cannot be gauged at this moment, and the possibilities of future requirements for moving the products of the Northwest, which will be equally in proportion to the growth of the country, are simply incalculable. The coming century will probably witness in Canada a gigantic industrial development similar to that which occurred on the other side of the line during the last century, and the Canadian shipbuilder is wondering how he is to be able to participate. The only way to create a flourishing and successful industry is to encourage the establishment of works in which everything necessary for the building and equipment of a ship from keel to truck shall be made right here in Canada, and to provide some means whereby the Canadian shipbuilder can obtain an equivalent for the superior conditions enjoyed by his British rival.

Our astute friends and neighbors to the south realize the magnificent possibilities foreshadowed by the creation of a merchant marine, and are organizing a national attempt to place the shipbuilders of the U.S. upon an equal footing with those of Great Britain and Germany (other nations do not count in this connection), and they propose to spend \$20,000,000 a year for the next nine years to achieve that object. Who can doubt that such a step will prove a profitable investment, or that its effect will have world-wide reaching consequences? What better precedent can be found for similar action on this side when the conditions are so nearly alike? Until something of the kind is accomplished, steel shipbuilding will continue to languish in Canada, for capitalists are naturally conservative, prone rather to embark in undertakings where a moderate return is certain, than to venture into the realm of experiment where the alluring brightness of possible results is too often obscured by events unforeseen and unprovided for.

This subject forms an essential portion of the still unsolved transportation problem, the most vital public question of this generation to the people of Canada. The construction and enlargement of the canals of the Dominion have cost over \$70,000,000, but where are the Canadian cargo steamers which should be utilizing them on the Great Lakes? Unfortunately they can almost all be counted on one's fingers, and those mostly British-built ships. Until means are adopted for fostering the construction of steel ships in Canada, the transportation problem will remain unsolved, and the first story of the superstructure of Canada's future greatness (to be raised upon the foundation laid by the manufacture of iron and steel), will remain unbuild.

Aids to Navigation on the Great Lakes.

A joint deputation representing the Lake Carriers' Association, the Underwriters' Association of Canada, and Canadian vessel owners visited Ottawa recently to submit a number of recommendations to the Department of Marine. The deputation comprised Capt. T. Donnelly, of Kingston, Chief Inspector of the Canadian Lloyds; Capt. J. Gaskin, Capt. G. P. McKay, of Cleveland, Chairman of the Lake Carriers' Association's Committee on Aids to Navigation, and W. J. White, K.C., of Montreal.

In the absence of the Minister of Marine they were received by the Deputy Minister, and after a discussion of the various points written recommendations were handed in as follows:—

RULES OF THE ROAD.

On behalf of the Lake Carriers' Association I am instructed to call your attention to the difficulties which have arisen in regard to the rules of the road which now prevail upon the Great Lakes. After careful consideration the U.S. Government has adopted certain modifications in the rules which prevail upon the high seas, and these modifications have been made applicable to all vessels navigating in American waters upon the Great Lakes. The rules which govern Canadian vessels within the territorial jurisdiction of Canada are contained in the Revised Statutes, chap. 79. It has been found in practice that particularly during the periods when fog prevails great difficulty is experienced by navigators in exactly locating the boundary line. Cases have arisen in which accidents have happened very close to this line, and had the commander been following the rules of the nation outside of whose territorial jurisdiction he was, the courts would in all cases have decided adversely to the owners of his vessel.

We think there is no doubt that the matter is fully within the jurisdiction of the Parliament of Canada, inasmuch as it was found necessary by the legislation we have referred to, to make the international rules applicable in Canadian waters. We, therefore, desire that legislation should be introduced amending the present rules in one or two important particulars, viz.:—

That sec. 2 of sub-sec. 3, which is referred to as article 3, should be amended in such a way that in all cases only two lights should be displayed at the mast head instead of three as now provided for. The rule in the U.S. reads as follows:

"Rule 4. A steam vessel having a tow other than a raft shall, in addition to the forward light mentioned in sub-division (a) of rule 3, carry in a vertical line not less than 6 ft. above or below that light a second bright light of the same construction and character, and fixed and carried in the same manner as the forward bright light mentioned in said sub-division (a) of rule 3. Such steamer shall also carry a small bright light abaft the funnel or after mast for the tow to steer by, but such light shall not be visible forward of the beam."

Article 15, sub-sec. (a) of the Canadian act provides that a steam vessel having way upon her shall sound at intervals of not less than two minutes a prolonged blast. The American rule applicable in such cases is that a steam vessel under way, excepting only a steam vessel with raft in tow, shall sound at intervals of not more than one minute three distinct blasts of her whistle.

Under article 28 of the Canadian rules, one short blast means, "I am directing my course to starboard."

It has been found in practice that those in control of the vessels have sometimes confused the fog signal under the British and Canadian rules with the signal under the American rules to pass to starboard. As has been pointed out above, if this mistake occurs in

Canadian waters the long blast would be held to be the proper signal simply for preventing accidents in fog, but if the accident should occur in American waters it would be a matter of proof as to the duration of the blast, a matter which would be almost impossible to satisfactorily establish.

The Lake Carriers' Association, which we represent, is composed not only of ship-owners and those interested in the carrying trade from the United States, but also of Canadian ship-owners, and those who have large interests in the Great Lakes. It is unnecessary to call your attention to the great importance of securing for Canada as large a proportion as possible of the trade coming from American ports on these lakes, and of encouraging in every way the bringing of the American boats to Canadian ports. We feel that we should mention this particularly in connection with the large expenditure which the Government has made in improving the canal system and the works which are now being carried forward at Port Colborne. The interests of the two nations in matters of commerce are so closely allied that we feel confident that your Government will do everything which can reasonably be asked to encourage that friendly intercourse which must be beneficial to the people of both countries.

We may add that this question has only become of importance lately when American ship-owners have had their attention directed to Canadian ports of export, and the present conditions, due to the enlargement of the canals and other improvements which have been brought about by your Government, lead us to hope that there will be a very great increase in this direction in the near future.

POINT PELEE LIGHT.

As representatives of the Lake Carriers' Association, the Underwriters' Association of Canada, and the Canadian boat-owners, we beg to lay before you the necessity of better lighting of the channel near Point Pelee, in Lake Erie. Up to the close of navigation in 1899 a lighthouse existed on Point Pelee, which was burnt early in the spring of the following season. Since then the only aid to navigation in this important channel has been a gas buoy placed upon the southeast shore. The insufficiency of this light has been shown several times when steamers have not only been unable to satisfactorily locate it but have in some cases actually found this buoy. We understand that the department has decided to place a lighthouse on the middle ground inside the passage. We would respectfully submit that while it would be an advantage to have this light on the middle ground, it is much more important that a lighthouse should be placed upon the southeast shore, as this is the objective point of all vessels approaching this channel. In some ways if there were no lighthouse on this shoal

and a lighthouse on the middle ground it might be almost a disadvantage to vessels approaching from the eastward, although if the lighthouse were placed on the southeast shoal as well no possible mistake or difficulty could arise. While we fully appreciate the advantage of having a lighthouse on the middle ground, and the necessity of having this in operation as early as possible, we would respectfully submit the absolute necessity of properly lighting the southeast shoal with a permanent and satisfactory light and fog whistle. It is unnecessary to point out that through this particular channel more tonnage passes than at any other point in Canadian waters, or indeed at any other one point in the world. The trade has grown so quietly, but so continuously, that this is not generally known, but we have no hesitation in asserting it as a fact that this is one of the most important points in the navigation of the world.

LIGHT ON MIDDLE ISLAND, LAKE ERIE.

On behalf of the Lake Carriers' Association, the Underwriters' Association and the Canadian vessel owners, we beg to call your attention to the fact that the existing light on Middle Island in Lake Erie has become obscured and its usefulness destroyed as an aid to navigation by the fact that trees have grown up between the channel and the light in such a manner as to intercept the view of the light from the steamers and passing vessels. We trust the matter will receive your early attention.

COMMUNICATION WITH LONG POINT, LAKE ERIE.

The following was addressed to the Minister of Public Works.

On behalf of the Lake Carriers' Association, the Underwriters' Association and Canadian boat owners, we beg to call your attention to the necessity of establishing some satisfactory means of communication between Long Point on Lake Erie and the nearest point of communication which is at Port Rowan. The harbor in question is largely used in the fall of the year as a port of shelter and refuge by vessels which are stormbound and it has happened that during long periods the masters of these vessels are unable to communicate with their owners owing to the fact that there is no telegraph or telephone line to this harbor. It has also happened in many cases that vessels requiring assistance through accident were unable to obtain any help and much valuable property has been lost through the delay. We would respectfully suggest that a telephone line be constructed to connect Port Rowan with Long Point lighthouse. Apart from the practical utility of such a service in the direction we have already pointed out there is no doubt that communication with Long Point would be a valuable aid to the weather bureau.

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The Muskoka Navigation Co.

E. L. Sawyer, of Sawyer, Ross & Co., stock-brokers, Toronto, has bought a controlling interest in the Muskoka and Georgian Bay Navigation Co., Ltd., and is organizing the Muskoka Navigation Co., Ltd., to be incorporated under the Ontario Companies Act, with a capital of \$500,000, of which \$200,000 will be preference and \$300,000 common stock, to take over the property, franchises, etc., of the present company, and to extend its operations. It is the intention to improve the fleet by putting in electric lighting and in other ways, and to add other vessels as required. It is also proposed to build several hotels, one of which is expected to be ready for this summer's business.

The authorized capital of the M. & G. B. N. Co. is \$100,000, of which \$72,300 has been subscribed, and \$65,610 paid up. The steamers and other assets of the Co. are valued at about \$125,000, a considerable amount of earnings having been applied to additions to the fleet, etc., besides which the Co. have paid annual dividends of 6 to 8%, last year's being at the latter figure. Of the paid-up stock, A. P. Cockburn, the Manager of the Co., held a majority, amounting to \$39,300, which has been bought by Mr. Sawyer, who has also secured some small holdings, putting him in control of \$41,000 of stock altogether.

The provisional directors of the Muskoka Navigation Co., Ltd., will be A. P. Cockburn and J. S. Playfair, who are now directors of the M. & G. B. N. Co., E. L. Sawyer, E. W. McNeill, R. Gowans, J. Stellar Lovell and W. Bain.

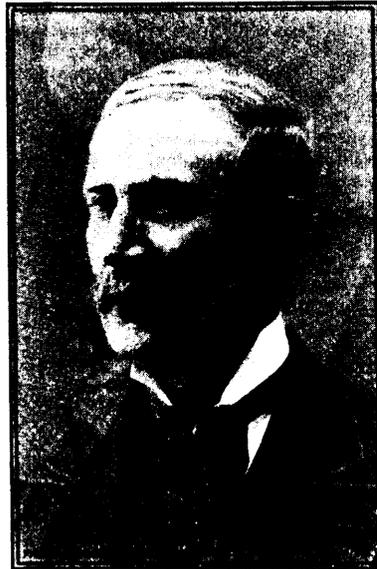
It is understood that when the organization of the M. N. Co. is completed, the directors for the first year will be E. L. Sawyer, A. P. Cockburn, F. J. Phillips, M. C. Dickson and probably two others who have not yet been decided on.

The pioneer of modern navigation on the Muskoka lakes was A. P. Cockburn. It was in 1866 that his first steamer appeared on Lake Muskoka, this being the Wenonah, which was followed by the purchase of a small steamer from Lake Simcoe, to which the name Wabmik (or White Beaver) was given. In 1871 there was added to this fleet the paddle-steamer Nipissing, which was also built on the Lake. In the fall of 1875 the Simcoe, which had been plying on Lake Simcoe, was secured, and was taken by train from Barrie, the railway having then been opened but a short time, and put on Muskoka Lake. The steamers Muskoka and Lake St. Joseph were built in the winter of 1881 at Gravenhurst, and the Interocean on Lake Nipissing. Following on this development and the increasing numbers of visitors that were being attracted to the district, mainly through the circulation of the guide books, the first of which was compiled by Mr. Cockburn and published in 1874, the Muskoka & Nipissing Navigation Co. was incorporated in 1881 for the purpose of acquiring the boats owned by Mr. Cockburn, and of developing the business carried on by him, as well as of opening up an additional route on the Magnetawan River. The original organization comprised: President, Hon. A. Mackenzie; Manager, A. P. Cockburn; other directors, J. S. Playfair, H. H. Cook, L. W. Smith, and R. Power; Secretary-Treasurer, J. A. Link. In 1886 the Parry Sound Navigation Co. was merged into this Co., and later the Co. became the Muskoka & Georgian Bay Navigation Co.

To the boats taken over by the Co. there was added, in 1886, the paddle and screw boat Wenonah, the second of the name. This steamer was built at Burk's Falls, and was so constructed in order to more easily navigate the narrow and tortuous channel of the Magnetawan River. The other boats added to the fleet by the Co. were:—Muskoka, built at Gravenhurst in 1881; Kenozha, built at

Gravenhurst in 1883; Oriole, built at Gravenhurst in 1886; Wenonah, built at Burks Falls in 1886; Nipissing, built at Gravenhurst in 1887; Medora, built at Gravenhurst in 1893; Ahmic, built at Gravenhurst in 1896. The original Wenonah was broken up, as also were the Simcoe and Interocean; the Wabmik was sold and transferred to the Lake of Bays; the old Nipissing was burned on Lake St. Joseph in 1896; the Lake St. Joseph was sold and afterwards burned, and the Cyclone had her name changed to the Wanita.

Mr. Playfair succeeded Hon. Alex. Mackenzie as President; and Mr. Cockburn has been Manager from the time the Co. was organized. At the last annual meeting, held in Toronto in Jan., the following board was elected:—President, J. S. Playfair; Vice-President, L. W. Smith, K.C.; Manager and Secretary, A. P. Cockburn; other directors, H. H. Cook and G. Homer. Mr. Playfair is a retired wholesale dry goods merchant, formerly of the firm of Bryce, McMurrich & Co., Toronto; Mr. Smith is President of the Consumers' Gas Co., Toronto; Mr. Cockburn was formerly M.P. for Muskoka; Mr. Cook is President of the Ontario Lumber Co.; and Mr. Homer is a general storekeeper at Gravenhurst.



A. P. COCKBURN.

From a photograph taken when he was aged 48.

The Co.'s operating headquarters are at Gravenhurst, and its steamers are run on the following routes:—(1) Lake Joseph route, from Muskoka Wharf to Port Cockburn; (2) Lake Rosseau route, from Muskoka Wharf to Rosseau, transferring passengers at Beaumaris to another boat for Bala, Milford Bay, Mortimer's Point, and Hutton House; (3) Bala and Bracebridge, across Muskoka Lake; (4) Burk's Falls to Ahmic Harbor on the Magnetawan River. Of the Co.'s fleet of steamers, the Medora, Nipissing and Muskoka are run regularly on the first three routes in the order named, while the Wenonah and Wanita are on the Magnetawan River. The Kenozha and Islander are run daily on excursion routes, the former for Port Cockburn and intermediate places, and the Islander plying between Bala and Port Carling. The steamer Ahmic is available for special parties and emergency service. Other boats operated by the Co. are the Oriole and Muskoka. The service will be opened this year on June 15, and will be continued until early in October.

Following are the dimensions, etc., of the present fleet:—

Medora, screw-steamer, built at Gravenhurst, 1893; length, 122 ft. 6 ins.; breadth,

25 ft. 4 ins.; depth, 8 ft. 5 ins.; tonnage, gross 299, register, 203.

Muskoka, screw-steamer, built at Gravenhurst, 1881; length, 94 ft.; breadth, 18 ft.; depth, 7 ft. 3 in.; tonnage, gross 99, register 67.

Nipissing, screw-steamer, built at Gravenhurst, 1887; length, 125 ft.; breadth, 21 ft.; depth 7 ft. 6 in.; tonnage, gross 275, register 207.

Wenonah, side-wheel steamer, built at Burk's Falls, 1886; length, 94 ft. 6 in.; breadth, 18 ft.; depth, 6 ft. 8 ins.; tonnage, gross 99, register 84.

Kenozha, screw-steamer, built at Gravenhurst, 1883; length, 100 ft. 8 ins.; breadth, 18 ft. 2 ins.; depth, 6 ft. 2 in.; tonnage, gross 191, register 124.

Ahmic, screw-steamer, built at Gravenhurst, 1896; length, 61 ft.; breadth, 12 ft. 8 ins.; depth 4 ft. 6 ins.; tonnage, gross 43, register 29.

Oriole, screw-steamer, built at Gravenhurst, 1886; length, 75 ft.; breadth, 12 ft. 8 ins.; depth, 4 ft. 8 ins.; tonnage, gross 75, register 48.

Wanita, originally called the Cyclone, screw-steamer, built at Ahmic Harbor, 1896; length, 60 ft. 4 ins.; breadth, 12 ft.; depth, 5 ft. 8 ins.; tonnage, gross 44, register 30.

Islander, composite screw-steamer, frame and machinery built by the Polson Iron Works, Toronto, and put together at Gravenhurst in 1890; length, 100 ft.; breadth, 17 ft., 4-10 in.; depth, 5 ft., 9 in.; tonnage, gross, 165.03; register, 77.56.

The Co. has traffic arrangements with the G.T.R., and enjoys the full advantages of coupon ticket arrangements.

A portrait of A. P. Cockburn is given on this page, being reproduced from a photograph taken when he was 48 years of age; he is now 64, but still hale and active. Mr. Cockburn, whose father was a native of Berwickshire, was born in Finch township, Stormont, Ont., April 7, 1837. After being educated at the local schools he commenced his business career at Eldon, Ont., of which township he was subsequently elected Reeve. At Confederation, in 1867, he was elected to the Ontario Assembly for North Victoria, and while there aided the late Hon. John Sandfield Macdonald in maturing and carrying into effect a liberal land and railway policy. He first visited the Muskoka district in Sept., 1865, subsequently taking up his permanent residence there, and he labored zealously in bringing the resources of the Muskoka and Parry Sound region to public notice, writing largely and effectively of its attractions. He sat for Muskoka in the House of Commons from 1872 to 1882, and for North Ontario from 1882 to 1887, when he was defeated, and he was again defeated at the General Election of 1891; he also unsuccessfully contested the Muskoka district for the Ontario Assembly in 1894. He is a Liberal.

As showing some of the difficulties with which Mr. Cockburn had to contend, it may be mentioned that when his first boat—the Wenonah—was built there were no saw mills in the district, and the whole of the lumber, even for the cabins, had to be cut by whip-sawing. After the passing of the Free Grants and Homestead Act of 1868, the success of the steamship enterprise was assured, as a good trade was done in carrying in settlers from the older districts. The lock at Port Carling was not built until 1871.

Mr. Cockburn is an omnivorous reader, and has now almost ready for the press "A Short History of Administrations," from 1608 down to the present time.

In addition to Mr. Cockburn being a director of the new Muskoka Navigation Co., an arrangement has been made by which his active services will be secured for three years in connection with the management, but it is probable that an outsider will be appointed as active manager.

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- 9.—A Funeral Benefit of \$50 at death of a member enrolled in Sick and Funeral Benefit Department.
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1883	2,210	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	5,804	28,499 82	53,981 28	9 30	4.85
1887	7,811	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	24,604	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
1899	163,610	1,430,200 33	3,778,543 58	23 09	6.30
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Maritime Provinces and Newfoundland.

Commencing July 3 the Dominion Atlantic steamship line will reduce the passenger fare each way between Yarmouth and Boston to \$1.40.

A charter is being asked from the Nova Scotian Legislature to incorporate the Dominion Shipbuilding Co. (Ltd.), with a capital of \$3,000,000, and power to increase its capital to \$5,000,000.

The Newfoundland sealing fleet is reported to have had an excellent season. The steamer Newfoundland was the first of the fleet to reach St. John's, her catch being 20,000 seals valued at \$30,000.

It is reported that negotiations are in progress between the Dominion Atlantic Ry. and the St. John, N.B., Board of Trade, to have a steamer take up the route formerly covered by the City of Monticello. The D.A.R. proposes to put the Prince Edward on the service, and asks \$20,000 subsidy for about 46 trips a year.

The City Council of St. John, N.B., has had an interview with J. Thomson, G. McAvity, and H. Harding, and as a result a bill has been introduced in the local legislature authorizing the city to grant \$200,000, half in land for the site, or cash to pay for it, the other half in cash for machinery, to be paid only after the works have been established; to aid in establishing and equipping a steel ship-building plant in that city.

The Department of Marine has issued two pamphlets, one containing the tidal tables for Halifax, Quebec, St. John, N.B., and St. Paul Island for 1901, with tidal differences for the Atlantic coast of Nova Scotia, the St. Lawrence River and Gulf, and the Bay of Fundy. The other contains tidal tables for Charlotte-town, Pictou, and St. Paul Island, C.B., for 1901, with tidal differences for Northumberland Straits, also for the open Gulf shore from Miramichi along the north coast of Prince Edward Island.

The Halifax, N.S., City Council has a bill before the local legislature seeking authority to bonus a steel ship-building plant in that city. The bill provides for the payment of \$100,000 for the equipment of a yard of sufficient size for the construction of at least four ships a year of a dead weight capacity of 5,000 tons each or their equivalent, and of an additional \$100,000 on the establishment of a modern and complete plant, sufficiently large and with the necessary facilities for equipping with machinery and boilers at least 20,000 tons of steam-shipping annually.

A delegation from the St. John, N.B., Board of Trade recently visited Ottawa and waited on the Minister of Public Works to urge the necessity of dredging the entrance to St. John harbor before the large Allan steamers were put on the St. John-Liverpool route. Mr. Tarte said he was having a suction dredge constructed for the St. Lawrence, and his intention was to get another for the ports of the maritime provinces. It would save the Government a lot of money if St. John could wait, because the work on the suction process was so much cheaper than by contract. The delegates said they wanted the work done at once, adding that the Connolly dredge, which was in St. John, was available and could do the work. Mr. Tarte then gave the committee to understand that if a contract could be made at a reasonable figure with Mr. Connolly, or for a U.S. dredge, he would urge the Government to do the work by contract. Mr. Tarte showed the delegates the plans prepared for the proposed work to the entrance to the harbor. An area of 8,000 ft. long and 400 ft. wide is specified. It is estimated that the operation will require the removal of 1,000,000 cubic yards of soft material. Two seasons will be necessary to com-

plete the dredging. The suction dredge in the course of construction is capable of removing 30,000 to 40,000 cubic yards a day.

Province of Quebec Shipping.

Several improvements are being made in the Lachine canal. The foundation of the wall in No. 2 basin, near Wellington Bridge, will be lowered from 9 to 14 ft. to allow larger vessels to load and discharge there. At present only barges drawing 9 ft. of water can use that basin. A new supply wheel is to be put in at Lachine, which will give about 33% more water to the canal. An electric powerhouse for the lights and bridges of the canal, is to be erected at Cote St. Paul.

The Premier and several other members of the Dominion Government received on Mar. 29 a deputation of Montreal shipping men upon the subject of improved facilities to navigation on the St. Lawrence. It was represented that the present aids to navigation were insufficient to meet present-day requirements. While a few years ago the facilities were very good, to-day, with the increasing number and size of ships, they were inadequate. It was also claimed that the buoys and lights should be increased in number, and the latter be of greater strength. The ship channel, furthermore, should be deepened, broadened and straightened. Sir Louis Davies pointed out that two years ago he sent the Chief Engineer of his department down the St. Lawrence with a party of shipmen, merchants, pilots and others to point out the improvements deemed to be necessary, and such as were pointed out on that occasion were conceded. As regarded the navigation between Quebec and the Straits of Belle Isle, the Minister mentioned that on four successive occasions he had crossed and returned in the Dominion and Allan Line vessels, and made it a special point to inquire of Captains James, Moore, McNicholl and Wallace where the existing aids to navigation could be improved or where there was anything wanting that could be supplied. None of the four commanders could suggest anything. Sir Louis touched upon the other points raised, and admitted the desirability of omitting no reasonable expenditure in order to put the navigation facilities on a thoroughly modern and satisfactory basis.

The steam schooner Diver, chartered by La Presse, of Montreal, to test the winter navigation of the St. Lawrence, and re-named after the chartering paper, left Quebec Mar. 8, and reached Anticosti Island Mar. 25, having touched successively at Lese Boulements, St. Irene, Murray Bay, Tadouac, Rimouski, Menicouagen, Godbout, Pointe des Monts, Pontecote and Seven Islands. These hundreds of miles were covered by La Presse nearly all along through broken ice fields and floes of 3, 4 and 5 ft. thickness. A single stretch of 80 miles was accomplished without injuring the boat in any way, not delaying her more than could reasonably be expected on a steamer of such small tonnage. Patches of clear water are plentiful enough in winter below Quebec, but as the object of the cruise was to try the resistance of ice La Presse of course purposely avoided them, and that accounts for her slow progress. A second impediment was the task she had undertaken of carrying and distributing the mails along the north shore, where regular mail boats are never to be seen before the end of April. Everything taken into consideration, the La Presse expedition already may be pronounced a success, as it proves the practicability of winter navigation in the St. Lawrence gulf and river below Quebec, the more so on account of the cruise having been undertaken in Mar. which is, according to the best authorities, the worst month of the year. La Presse

spent two days investigating the St. Olaf's foundering on Seven Islands last fall, a foundering which caused the death of all on board.

Ontario and the Great Lakes.

A turtle deck is being placed on the C.P.R. Co.'s upper lake steamship Manitoba, now lying at Owen Sound.

W. Marlton, Goderich, is building two tugs, each 70 ft. in length, for the Dominion Fish Co., and has considerable repair work on hand at his shipyard.

A steamer to ply between Kingston and Valleyfield in the excursion trade, for the St. Lawrence Ferry Co., was launched at Kingston, Mar. 25. Her dimensions are: length, 112 ft., breadth, 21 ft., depth, 5 ft. 6 in.

L. Solomon and A. Small, manager of the Toronto opera house, have leased for one year all the properties of the Toronto Ferry Co. W. Galt has been retired from the management and has been succeeded by L. Solomon. A. Small will have charge of the attractions at Hanlan's point.

The Northern Navigation Co. of Ontario will not operate on Lake Superior this year, but will confine its boats to Lake Huron, with the exception of the City of Collingwood, which will run between Windsor, Sarnia, Port Arthur, Fort William and Duluth in conjunction with the steamers of the Northwest Transportation Co.

On page 122 are particulars of a steel passenger ferry boat being built by the Polson Iron Works, Toronto, for the Sault Ste. Marie Ferry Co., Sault Ste. Marie, Ont. The officers of this Co. are: President, F. Perry; Vice-president, G. Kemp; Secretary, R. D. Perry; Treasurer, W. Weaver; all of whom reside at Sault Ste. Marie, Mich.

The G.T.R. and the recently reorganized Port Huron and Duluth Co. has made an agreement to re-establish a line of steamships for packet, grain and freight traffic between Port Huron and Duluth at the opening of navigation. The G.T.R. is not financially interested in the steamship line, but it needs greater assistance in handling New England business.

The Montreal Transportation Co. is having built at Hamilton a steel barge, length, 206 ft., breadth, moulded, 40 ft., depth, moulded, 15 ft. 6 in. She has steel decks and sides and a steel frame throughout with 6 in. wood bottom for additional safety for canal traffic; wooden inner bottom; three masts; capacity about 65,000 bush. on 14 ft. draught; dead-weight about 360 tons.

The Canada Atlantic Transit Co. is having built in Toronto a sister steamer to the Ottawa which was built last year. She will probably be ready for launching in May. Like the Ottawa, she will be entirely of steel, even to her cabins. The principal dimensions are: length over all, 257 ft., beam, 43 ft., depth, 25 ft. 6 in. She will carry 70,000 bush. of grain on a canal draught of 14 ft. On the upper lakes, where she can load deeper, she will carry 105,000 bush.

It is stated that while the Michigan Central Rd. had not given up all hope of the passage of a bill authorizing the construction of a Detroit river bridge, it is all prepared, once the project is doomed, to give a contract for a mammoth ice-crushing car ferry, to cost about \$500,000 at least, and possibly more. The idea of President Ledyard, it is stated, is a steamer longer, wider and deeper than the Ste. Marie, to have side wheels, and a screw at the stern and at the bow. This will give her much greater power than has the famous Straits crusher, and will practically make her the most powerful craft of her kind in the world, far surpassing the big Russian crush-

ers. A steamer of this kind would be able to tour Lakes Erie, Huron and Michigan during any hard winter, and pass in and out of any of the larger harbors bordering on these waters.

The International Navigation Co., of New York, has secured the Niagara River excursion docks in Buffalo, and the docks on the Canadian and U.S. sides of the river at Niagara Falls. The Co. proposes putting on steamers this summer to handle the excursion travel between Buffalo and the Falls, as well as to form an important link in the route between Buffalo and Toronto. The Company has completed contracts which will enable it to carry passengers over a belt line covering the Niagara frontier. From Buffalo passengers will be taken by steamer to Slater's Point, Ont., above the Falls, where electric cars will be taken to Queenston. Thence the new bridge will be crossed to Lewiston, where the cars will be run over the Gorge line to Niagara Falls, and thence to Buffalo, over the Buffalo and Niagara Falls electric railway.

The Northern Steamship Co., a subsidiary of the Great Northern Ry., U.S.A., operating the steamers North West and North Land, has changed its route from Buffalo, taking in Chicago with the two boats mentioned, instead of Duluth, and caring for the latter trade by the addition of the steamer Miami from the Atlantic coast. She is a twin-screw boat, 254 ft. in length, and can be taken to the lakes through the St. Lawrence system and the Welland canal. She is a speedy boat, fully 20 miles an hour, and her appointments are sumptuous. She has 150 state-rooms, and it is expected that she will make two trips a week between Duluth and Mackinac Island, making close connections with the North Land and North West. The Miami will leave New York for the lakes about June 1. She has been chartered for one season only.

In reference to a rumor that F. H. Clergue, of the Algoma Central Ry., was negotiating for the control of the Northern Steamship Co. of Ontario, Mr. Clergue recently said he was negotiating with the N.N. Co., not with the intention of buying it out, but with the idea of acting in conjunction with it. The Algoma Central steamers will ply on Georgian Bay, but will not compete with those of the N.N. Co., as under the arrangement they will not call at the same ports. Mr. Clergue stated that his steamers will also run in conjunction with the boats of the Lake Huron line. "This means," said Mr. Clergue, "that there will be a service between the Sault and every port on the Georgian Bay, and we shall get the benefit of their trade in agricultural products and foodstuffs, while we carry our own ore and manufactured material. The boats will also cater to the summer resorts and call at Parry Sound, Sans Souci, and other places where there are summer hotels."

It is said that the establishment of a passenger and package freight service on the upper lakes has been determined upon by the capitalists represented by F. H. Clergue, of Sault Ste. Marie, and will be inaugurated this spring. Two new steamship routes will be established in order to attract tourists from points on Lake Erie, Lake Huron, and the Georgian Bay, to Lake Superior, and to points in the interior which the Algoma Central Ry. northward will open up. The main object, however, is to make known the charms of the Nepigon district. One route will be from Midland via Parry Sound and Little Current to the Sault, the other will start from Toledo, and on its way to the Sault will make Detroit, Port Huron, Goderich, Kincardine, Southampton, Owen Sound, Collingwood and Parry Sound points of call. The latter route would be far the longer and would bring the steamships into touch with the Grand Trunk,

Canadian Pacific and Canada Atlantic railways. Five steel vessels built on the Clyde are to form the new fleet at first.

The Massachusetts Supreme Court has decided that an accident policy is not rendered void should an accident happen to the holder while riding on the front part of a street car, although such practice is forbidden by the

rules of the street car company. The company must, therefore, enforce its regulations.

Sixteen laborers who had been brought from Spokane, Wash., to work on the Red Mountain Ry. at Rossland, B.C., by the contractors, were, on March 4, sent back over the line by order of Special Officer Williams, under the provisions of the Alien Labor Act.

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Private Office.	Dining Room.
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Telegraph Office.	Restaurant.
Baggage Room.	Ladies' Toilet.
Smoking Room.	Men's Toilet.
Smoking Prohibited.	No Admittance.
	Trespassers Prosecuted.

NO ADMITTANCE

Size 10 x 2½ inches. Oblong, oval ends, white ground, blue letters, lined & tipped, hollowed:

Bar Room.	Men.
Luggage Room.	Private.
Office.	No Admittance.
Refreshments.	No Road.
Exit.	Boarding House.
Fire Escape.	Private Board.
Lavatory.	Dressmaking.
Ladies.	Fresh to Day.
Women.	Teas Provided.
Gentlemen.	Please Shut the Gate.

Size 14 x 3 inches. Oblong, oval ends, white ground, blue letters, lined and tipped.

No Admittance.

STICK NO BILLS

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

Furnished Apartments. Stick no Bills. Please Shut the Door.

PUSH PULL

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

Oblong, square ends, 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 perpendicularly, **Push, Pull**.

Oblong, square ends, size 12 x 3 inches, white ground, blue letters, lined and tipped, lettered horizontally, **Push, Pull**.

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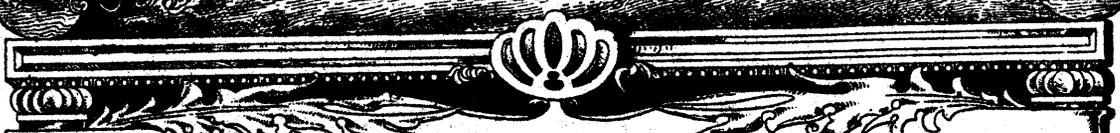


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