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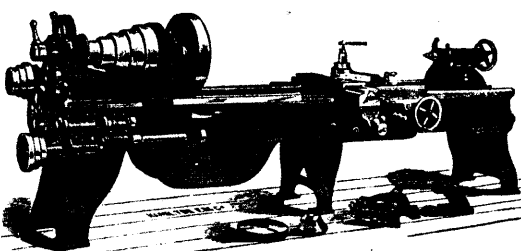
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C.P.R. ANNUAL MEETING.

The 20th annual meeting of shareholders was held at Montreal Oct. 2, the Chairman of the Board, Sir Wm. Van Horne, presiding.

The President, Sir Thos. G. Shaughnessy, in moving the adoption of the report for the 18 months ended June 30, 1901, which was published in our last issue, said:—

"In moving the adoption of the annual report, I may be permitted to direct your attention to the excellent result of the operations of the Co. during the past fiscal year, notwithstanding the loss of revenue resulting from the serious shrinkage in the grain crops of Northwestern Canada last autumn, caused by unfavorable weather conditions. The grain tonnage from Manitoba and the Northwest Territories was only about one-third of that received from the crop of 1899 and, according to most authentic reports, less than one-fifth of the tonnage available from the crop just harvested. A few years ago, such serious injury to these crops would have been almost disastrous in its effect on the Co.'s revenue, and, therefore, the development of other traffic in sufficient volume to materially reduce the comparative importance of the grain business as a factor in your gross earnings is most gratifying.

"As indicated by the report, 5% land grant bonds, to the amount of \$428,500, were redeemed and cancelled since the last meeting of the shareholders. Your directors expect to reduce the outstanding bonds by a still larger amount during the current year, the land sales for the past three months being 75% in excess of those for the corresponding period in 1900. None of these sales were in large blocks.

"The desirability of making some provision for the pensioning of faithful officers and employes, who, after a long term of service, become incapacitated for their respective positions by reason of advanced age, has suggested to the directors the propriety of asking your consent that \$250,000 be set aside as the nucleus of a pension fund, so soon as your directors have succeeded in formulating a feasible and satisfactory plan for its administration. It is hoped that this will be accomplished shortly, but the large number of employes, and the varied conditions of service, make it necessary that the details of the scheme should receive the gravest consideration before it is put into operation. In this connection, I desire to express for the directors their hearty appreciation of the zeal and fidelity displayed by the officers and employes in the performance of their respective duties during what has been, in some respects, a most trying year."

In submitting the report for adoption, Sir Wm. Van Horne said he was sure he had the permission of the meeting to express his very high appreciation of the able and careful manner in which the affairs of the company had been handled by their President and by the entire staff. The zeal and enthusiasm which were displayed in the interests of the shareholders by everybody connected with the road from the President down to employes occupying the most humble position, Sir William felt, justified him in saying that such service was a most potent factor in ad-

apart for steamships was available to-day for new property, and was set aside to replace steamers and to provide against accident.

The report was unanimously adopted.

AGREEMENTS WITH SUBSIDIARY LINES.

The lease to the C.P.R. Co. of the Kootenay and Arrowhead Ry., dated Aug. 15, and referred to in the annual report, was explained and submitted, and it was unanimously resolved that it be approved and confirmed. It demises for 999 years the K. and A. Ry., whether constructed or to be constructed,

from, at or near Lardo, near the head of Kootenay Lake, to or near Duncan, and thence generally north-west to Arrowhead on Arrow Lake, B. C., by a route passing near Trout Lake, and the north side of the east arm of Arrow Lake, together with all branches, etc., at a rental equal to the interest payable on all bonds, carrying interest at a rate not exceeding 5% per annum, to be issued by the K. and A. Ry. Co., with the consent of the C.P.R. Co., the aggregate of such bonds not at any time to exceed a sum equal to the rate of \$25,000 per mile of the K. and A. Ry. and branches then either constructed or under contract to be constructed.

The lease to the C.P.R. Co. of the Vancouver and Lulu Island Ry., dated Aug. 31, 1901, and referred to in the annual report, was explained and submitted, and it was unanimously resolved that it be approved and confirmed. It demises for 999 years the V. and L. I. Ry., whether constructed or to be constructed, from Vancouver southerly to the north arm of the Fraser river, thence across the north arm to Lulu island, thence southerly across Lulu island to the south arm of the Fraser river; thence to be connected by a steam ferry or otherwise with some point on the south bank of the Fraser river near Ladner's landing, together with all branches, etc., at a rental equal to the interest payable on all bonds, carrying interest at a rate not exceeding 5% per annum, to be issued by the V. and L. I. Co., with the consent of the C.P.R. Co., the aggregate of all such bonds not at any time to exceed a sum equal to the rate of \$17,500 per mile of the V. and L. I. Ry. then either constructed or under contract to be constructed.

The lease to the C.P.R. Co. of the western section and certain branch lines of the British Columbia Southern Ry., dated Oct. 1, 1900, and referred to in the annual report, was explained and submitted, and it was unanimously resolved that it be approved and confirmed. It demises that portion of the western section of the B.C.S. Ry. therein described, also a railway which the B.C.S.R. Co. has been authorized to construct between its railway



G. L. COURTNEY,

Freight and Passenger Traffic Manager, Esquimalt and Nanaimo Railway.

vancing the prosperity of the Co. It was better, in fact, than good crops and the most favorable commercial condition.

John Morrison thought the report was somewhat meagre in some details, and asked why the working expenses were 2½% higher than last year.

Sir Thos. Shaughnessy replied that there was one point made by Mr. Morrison worthy of explanation. The shrinkage in the business of the Northwest had been the cause of the increased working expenses. That is, they could have handled a much larger tonnage at the same expense. The amount set

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Canadian Excursion Agreement Meeting.

CHAIRMAN, J. H. Walsh, Sherbrooke, Que.
SECRETARY A. V. Fabian, Passenger Department
C.P.R., Montreal.
NEXT MEETING, probably in March, 1902.

Canadian Freight Association.

PRESIDENT, W. Woollatt, Walkerville, Ont.; 1st VICE-
PRES., M. T. Donovan, Boston, Mass.; 2nd VICE-PRES.,
E. Tiffin, Moncton, N.B.; SEC.-TREAS., J. Earls, To-
ronto.

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Howard, F. J. Watson, J. H. Hanna, J. Hardwell, W.
P. Hinton, T. Marshall, C. Howe, C. A. Jaques.

FREIGHT INSPECTION COMMITTEE.—G. Collins, F. Con-
way, F. F. Backus, J. Hardwell, C. A. Jaques, C. E.
Dewey, W. B. Lanigan, W. N. Warburton.

CAR SERVICE COMMITTEE.—J. B. Morford, T. Mar-
shall, M. C. Sturtevant, G. S. Cantlie, W. P. Hinton, J.
J. Mossman, E. Fisher, J. F. Chapman.

EXECUTIVE COMMITTEE.—W. B. Bulling, J. Pullen,
W. P. Hinton.

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Toronto.

Canadian Roadmasters' Association.

PRESIDENT, A. McAuley, Toronto Jct., Ont.; VICE-
PRESIDENT, J. R. Brennan, Ottawa, Ont.; SECRETARY-
TREASURER, J. Drinkwater, Winchester, Ont.

EXECUTIVE COMMITTEE.—The above & J. Jelly, Car-
leton Jct., Ont.; T. Graham, Depot Harbor, Ont.; F. J.
Holloway, Toronto Jct., Ont.; N. Delaire, Montreal.

OFFICIAL ORGAN.—THE RAILWAY & SHIPPING WORLD,
Toronto.

Canadian Society of Civil Engineers.

PRESIDENT, E. H. Keating; VICE-PRESIDENTS, G. H.
Duggan, E. Marceau, C. H. Rust; TREASURER, H. Irwin;
SECRETARY, C. H. McLeod; LIBRARIAN, E. A. Rhys-
Roberts.

HONORARY COUNCILLORS, W. G. McM. Thompson, W.
T. Jennings, H. T. Bovey. COUNCILLORS, G. A. Moun-
tain, D. MacPherson, J. Kennedy, J. Ross, J. Galbraith,
R. Hering, W. P. Anderson, P. S. Archibald, H. J.
Cambie, W. Chipman, W. R. Butler, H. S. Poole, R. B.
Rogers, C. B. Smith, B. D. McConnell.

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

Canadian Ticket Agents' Association.

PRESIDENT, F. W. Churchill, Collingwood, Ont.; 1st
VICE-PRESIDENT, W. Jackson, Clinton, Ont.; 2nd 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. Falmer, St. Thomas, Ont.

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

NEXT ANNUAL MEETING at Montreal, Nov. 6, 1901.
OFFICIAL ORGAN.—THE RAILWAY & SHIPPING WORLD,
Toronto.

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.

PRESIDENT, W. J. Barton, St. John, N.B.; VICE-
PRESIDENT, D. McQuade, Collingwood, Ont.; SEC.-
TREAS., J. A. Findlay, Toronto; CONDUCTOR, J. A.
McArthur, Montreal; DOORKEEPER, N. J. Morrison,
St. John, N.B.; AUDITOR, D. L. Foley, Toronto.

NEXT ANNUAL MEETING of the Grand Council in
Toronto, Jan. 1902.

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.

PRESIDENT.—F. E. Came, Montreal.
FIRST VICE-PRESIDENT.—R. J. Davidson, Hillburn,
N. Y.
SECOND VICE-PRESIDENT.—A. O. Norton, Coaticook,
Que.

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Michel creek to Martin creek, together with
all such branches from any of the above men-
tioned railways or from its main line, and all
such branches from those branches as the
B.C.S.R. Co. is now or may be hereafter em-
powered to construct, together with the ap-
purtenances described in the lease, at a rental
equal to the interest payable on all bonds,
carrying interest at a rate not exceeding
5% per annum, payable half-yearly, to be
issued by the B.C.S.R. Co. with the con-
sent of the C.P.R. Co.

The agreement, dated Jan. 1, 1901, entered
into between the C.P.R. Co., the Duluth
South Shore and Atlantic Ry. Co., and the
Mineral Range Rd. Co., under authority of
the act 53 Vic., chap. 47, referred to in the
annual report, providing for a permanent
traffic arrangement between the said com-
panies, and containing the guaranty by the
C.P.R. Co. of the interest upon 1st mortgage
4% bonds issued, and to be issued with the
consent of the C.P.R. Co., by the Mineral
Range Rd. Co., to the extent and at the times
therein set forth, provided that the outstand-
ing unpaid bonds of the last mentioned Co.
shall not at any time exceed in the aggregate
a sum equal to \$25,000 per mile of its rail-
ways then constructed or under contract to

be constructed; and the mortgage securing
the same, were submitted and explained, and
it was resolved, that the terms of the agree-
ment be approved and that the guaranty of
the payment of interest upon the bonds to the
amount of \$1,254,000 be endorsed upon such
bonds and be executed by the Secretary.

It was resolved that, whereas, by Dominion
act, 63-64 Vic., chap. 55, authority was confer-
red upon the Co. to construct, acquire and
operate certain branch lines of railway therein
specified, and to issue, in lieu of bonds, in aid
of the construction and equipment of the
lines, consolidated debenture stock to an
amount not exceeding \$20,000 per mile there-
of. And whereas, the shareholders at the
last annual meeting authorized the issue of
4% consolidated debenture stock to the extent
of \$15,000 per mile of the following lines:—
Waskada branch 18 miles, Snowflake branch
16 miles, West Selkirk and Lake Winnipeg
branch 24 miles, total 58 miles. And whereas,
the actual length of the said lines now under
construction, when completed, will be as fol-
lows:—Waskada branch 37 miles, Snowflake
branch 25 miles, West Selkirk and Lake Win-
nipeg branch 26 miles, total 88 miles, or an
additional mileage of 30 miles, and it is desir-
able to provide for a further issue of consoli-
dated debenture stock to cover such addi-
tional mileage. It is therefore resolved, that
for the purpose of aiding the construction
and equipment of the said additional miles of
railway, the directors may issue and dispose
of consolidated debenture stock of the Co. to
such amounts as they may deem expedient,
not exceeding in the aggregate an amount
equal to \$15,000 a mile for such additional
mileage, and at the same rate for any portion
of a mile, bearing interest at the rate of 4%
per annum.

A number of by-laws, passed by the direc-
tors since the last annual meeting, were sub-
mitted and approved.

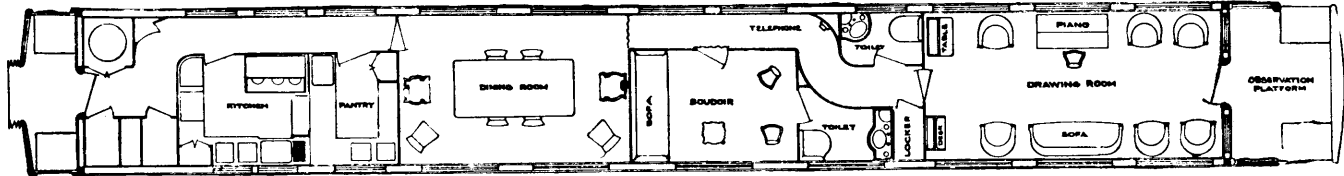
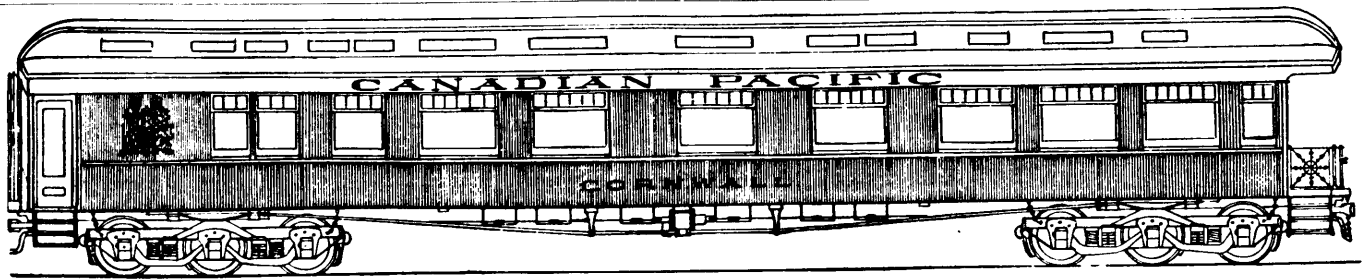
It was resolved that, whereas, in the opin-
ion of the shareholders it is advisable that
definite provision be made for the relief of
employees of the Co. who have rendered long
and faithful service to the Co., and for the
purpose of enabling them to retire when age
or bodily infirmity necessitates relief from
duty; therefore, it is resolved that the direc-
tors be empowered to set apart from the
funds of the Co. not exceeding \$250,000 as a
nucleus for a fund to be known as "The Pen-
sion Fund" of the Co., to assist in the estab-
lishment of a system of pensions payable to
such employees; to invest and keep the said
funds invested for the aforesaid purposes; to
establish a department for the administration
of such fund, and of any additions that may
be made thereto in the future; to adopt such
rules and regulations as the board may in its
discretion deem necessary or advisable for
the organization of such department and the
administration of such fund, and for deter-
mining what employees, or class of em-
ployees, shall be entitled to participate therein,
and the terms and conditions upon which they
shall so participate.

The President explained that the scheme
contemplated by this resolution did not involve
any contribution by the employees.

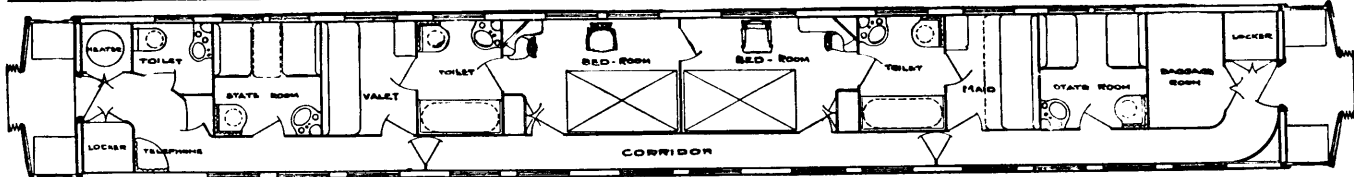
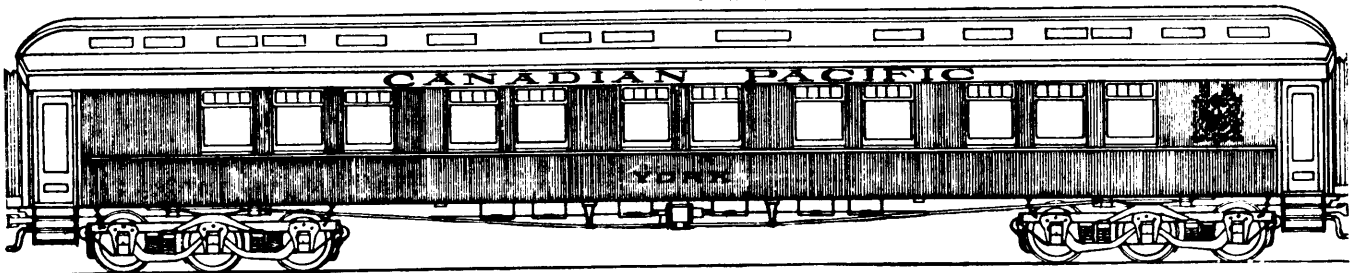
After some remarks of congratulation to
the President on his knighthood, the old board
of directors was re-elected as follows:—Lord
Strathcona, Sir Wm. Van Horne, Sir Thomas
Shaughnessy, R. B. Angus, E. B. Osler, W. D.
Matthews, G. R. Harris, Sir Sandford Flem-
ing, T. Skinner, Gen. S. Thomas, J. W. Mac-
kay, C. R. Hosmer.

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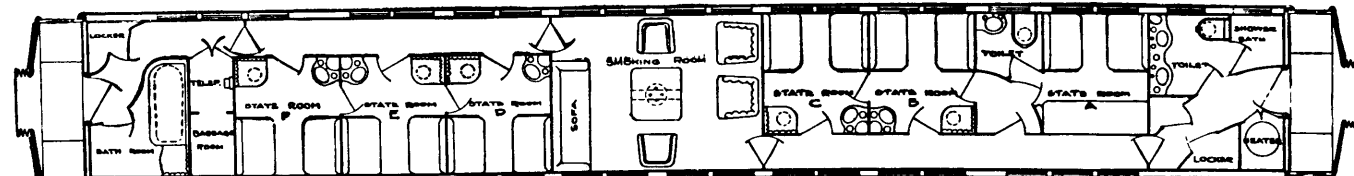
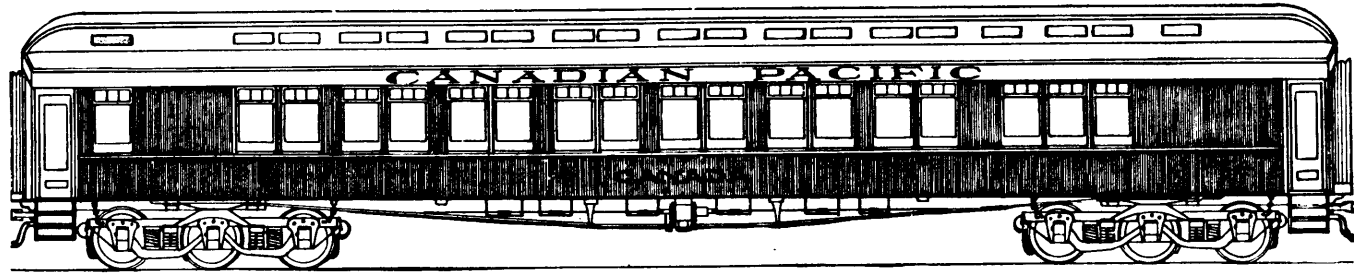
The meeting having been made special, it
was resolved to issue bonds of the Co. not
exceeding £480,000 payable in 20 years, and
bearing interest at 5% per year, the bonds to
be secured by a mortgage on the vessels here-
inafter mentioned, to be given to the Royal



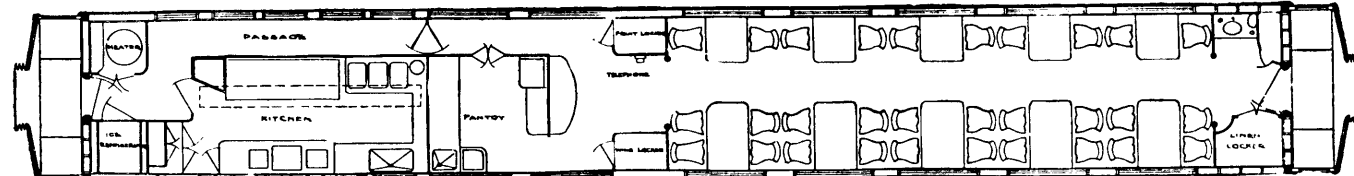
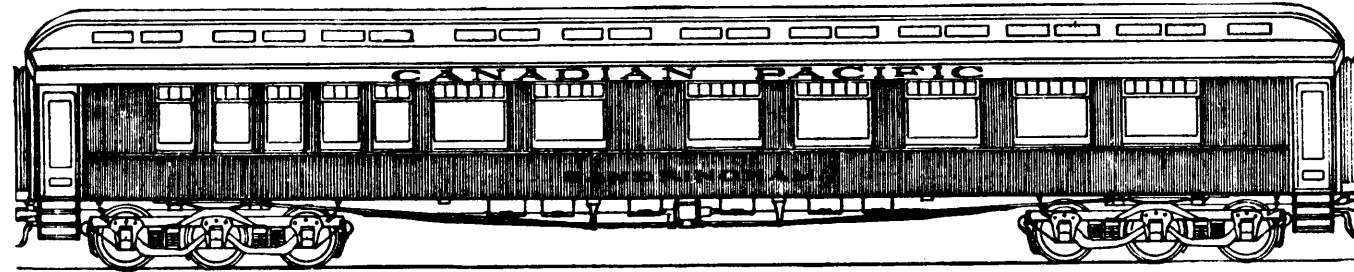
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DINING CAR SANDRINGHAM

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Trust Co. as trustees, to aid in the acquisition of the following vessels:

The steel screw steamship Charmer, built at San Francisco, Cal., in 1886—length 200 ft., beam 42 ft., depth 12 ft., gross tonnage 1,044 tons; the iron screw steamship Danube, built at Fairfield, Scotland, in 1869—length 215 ft., beam 28 ft., depth 20 ft., gross tonnage 886 tons; the screw steamship Amur, built at Sunderland in 1890—length 216 ft., beam 28 ft., depth 20 ft., gross tonnage 907 tons; the screw steel steamship Tees, built at Thornby-on-Tees, in 1893—length 165 ft., beam 26 ft., depth 10 ft., gross tonnage 569 tons; the wooden side-wheel steamship Yosemite, built at San Francisco in 1862—length 282 ft., beam 34 ft., depth 13 ft., gross tonnage 1,525 tons; the wooden side-wheel steamship Princess Louise, built at New York in 1869—length 184 ft., beam 30 ft., depth 13 ft., gross tonnage 931 tons; the wooden stern-wheel steamship R. P. Rithet, built at New Westminster in 1882—length 177 ft., beam 33 ft., depth 8 ft., gross tonnage 816 tons; the wooden screw steamship Queen City, built at Vancouver in 1894—length 116 ft., beam 27 ft., depth 10 ft., gross tonnage 391 tons; the wooden screw steamship Willapa, built at Astoria, Ore., in 1891—length 136 ft., beam 22 ft., depth 10 ft., gross tonnage 373 tons; the steel stern-wheel steamship Beaver, built at Victoria 1898—length 140 ft., beam 28 ft., depth 5 ft., gross tonnage 545 tons; the wooden screw steamship Otter, built at Victoria in 1900—length 128 ft., beam 24 ft., depth 11 ft., gross tonnage 366 tons; the wooden screw steamship Maude, built at Victoria in 1852—length 113 ft., beam 21 ft., depth 9 ft., gross tonnage 175 tons; the wooden stern-wheel steamship Transfer, built at New Westminster in 1893—length 122 ft., beam 24 ft., depth 5 ft., gross tonnage 246 tons, now being operated by the Canadian Pacific Navigation Co., Ltd., and the twin screw steamship Hating, built at Newcastle-on-Tyne in 1888—length, 250 ft., breadth 34 ft., depth 18 ft., gross tonnage 1,394 tons, together with their rigging, appurtenances and auxiliaries, and all of which vessels are now engaged in navigating the waters of the Pacific ocean, and are intended to be continued by the Co. on such waters which are reached by or connected with the Co.'s railway; a steamship for the North Pacific coast trade to be hereafter constructed or acquired, being a screw steel steamship of about 290 ft. in length, beam 40 ft., depth about 23 ft., gross tonnage of about 1,800 tons, somewhat similar in size, style and arrangement to this

Co.'s upper lake steamship Manitoba; a steamship to be hereafter constructed or acquired for service between Vancouver and Victoria, being a steel steamship of about 280 ft. in length, beam about 38 ft., depth about 15 ft., gross tonnage about 1,500 tons, somewhat similar in style to the steamship Charmer, and a steamship somewhat similar in style and arrangement to the Co.'s steamships now engaged in the trans-Pacific trade, but of a larger size and greater speed and cost, and to be hereafter constructed or acquired.

At a subsequent meeting of the Board, Sir Wm. Van Horne was re-elected Chairman of the Board, and Sir Thos. Shaughnessy President of the Co., and the following were appointed the Executive Committee, Sir Wm. Van Horne, Sir Thos. Shaughnessy, Lord Strathcona, R. B. Angus, E. B. Osler.

The C.P.R. purposes reclaiming by irrigation some 3,000,000 acres of arid land situated between Calgary and Medicine Hat, N. W.T., to the north of the main line. The land has been inspected by Mr. Armstrong, an engineer experienced in irrigation work, and a report with plans is before the directors.

The C.P.R., and the Hudson's Bay Co., have decided not to appeal against the decision of the N.W.T. Supreme Court, compelling them to pay road taxes in large local improvement districts. The case has been before the courts since 1898. The C.P.R. has paid \$16,000 and the Hudson's Bay Co., \$30,000 in respect of such taxes.

G.T.R. SEMI-ANNUAL REPORT.

The following report for the ½-year ended June 30 was submitted at the semi-annual meeting in London, Eng., Oct. 8.

The following summary shows a comparison of the ½-year's revenue account with that of the corresponding ½-year, ended June 30, 1900:—

	June 30, 1900.	June 30, 1901.
£2,139,691	Gross receipts.....	£2,287,795 1 11
1,442,549	Deduct—	
	Working Expenses, being at the rate of 67.52% as compared with 67.42% in 1900.....	1,544,611 13 9
697,142	Net traffic receipts.	743,183 8 2
12,930	Add—	
	Received from International Bridge Co.	12,930 12 9
6,898	Interest on Toledo, Saginaw, and Muskegon bonds	3,261 16 11
3,088	Interest on bonds of Central Vermont Ry.	3,087 10 8

62,215	Interest on securities of controlled lines and on St. Clair tunnel bonds acquired by the issue of G. T. 4% debenture stock.	56,271 9 9
20,498	Balance of general interest account	9,070 2 9
£802,771	Net revenue receipts ...	£827,805 1 0

NET REVENUE CHARGES FOR THE HALF-YEAR.

Rents (leased lines)	£77,615 6 9
Interest on debenture stocks and bonds of the Co.	458,460 4 8
Interest on debenture stock and bonds of lines consolidated with the G. T. Co.	65,258 1 10
Interest on Michigan air line bonds	7,750 0 0
	609,083 13 5

Advanced to G.T.W. Co. towards payment of interest on its 1st mortgage bonds, ½-year to June 30, 1901, for which interest coupons are held..... £6,221 9 6

Amount advanced to Detroit, Grand Haven, and Milwaukee Co., towards payment of interest on its bonds, under agreements, ½-year to June 30, 1901..... 18,210 3 8

	24,431 13 2
	£633,515 6 5
Leaving a surplus of.....	194,289 14 7
	£827,805 1 0

Adding the balance of £2,545 13s. 3d. at the credit of net revenue account on December 31, 1900, to the above surplus for the past ½ year, the total amount available for dividend is £196,835 7s. 10d. The directors recommend the payment of the ½-year's dividend on the 4% guaranteed stock, amounting to £104,395 17s. 6d., and on the 1st preference stock, amounting to £85,420 15s. 0d., leaving £7,018 15s. 4d. to be carried forward to the next ½-year's accounts.

The net revenue surplus for the ½-year ended June 30, 1900, was £152,066 os. 2d. The result of the past ½-year's operations shows, therefore, an improvement of £42,223 14s. 5d.

There has been an increase of 54 miles in the length of lines worked, by the addition of 1 mile caused by fractional readjustments, and of 53 miles by the leasing of the Cincinnati, Saginaw, and Mackinaw Rd., sanctioned by resolution passed at the General Meeting of the Co., on April 30, 1901. The receipts and working expenses of the Cincinnati, Saginaw, and Mackinaw Rd. are included in the revenue accounts of the past ½-year.

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HAMILTON, ONT., CANADA.

GROSS RECEIPTS.

Comparison of receipts for ½-years ended June 30, 1901 and 1900:

	1901	1900	Increase.	Decrease.
Passengers.....	£ 554,117	£ 526,951	25,166	.....
Mails and express.....	101,459	100,117	1,342	.....
Freight and live stock.....	1,561,256	1,437,016	124,240	.....
Miscellaneous.....	72,963	75,607	.....	2,644
Total.....	2,287,795	2,139,691	148,104	.....

TRAFFIC STATISTICS.

	1901	1900	Increase.	Decrease.
Passengers carried.....	3,205,441	3,001,414	204,027	.....
Average fare per passenger.....	3s. 5½d.	3s. 6d.	.....	½d.
Tons of freight and live stock.....	5,613,013	5,217,131	396,482	.....
Average rate per ton.....	5s. 6½d.	5s. 6d.	.....	½d.
Tons carried one mile.....	1,244,481,637	1,162,433,186	82,048,451	.....
Earnings per train-mile.....	60.35d.	55.80d.	4.55d.	.....

The average rate per ton per mile on the entire freight business was 0.61 of a cent, compared with 0.60 of a cent in the corresponding half-year.

The working expenses, including taxes, amounted in the ½-year to £1,544,611, or 67.52% of the gross receipts, as compared with £1,442,549, or 67.42%; an increase in amount of £102,062, and in the proportion to the gross receipts of 0.10%.

Comparison of revenue expenditure, excluding taxes, for the ½-years ended June 30, 1901 and 1900:

	1901	1900	Increase.	Decrease.
Maintenance of way, and structures.....	£ 223,842	£ 203,445	20,397	.....
Maintenance of equipment.....	344,002	307,440	36,562	.....
Conducting transportation.....	905,255	860,000	45,255	.....
General expenses.....	58,162	59,004	.....	842
Total.....	£1,531,261	£1,429,849	101,412	.....
Percentage of gross receipts.....	66.93	66.82	0.11	.....
Expenditure per train-mile.....	40.39d.	37.99d.	2.40d.	.....

Train mileage for ½-years ended June 30, 1900 and 1901:

	1901	1900	Increase.	Decrease.
Passenger.....	3,313,169	3,210,759	102,410	.....
Freight.....	5,250,887	5,497,063	.....	246,176
Mixed trains.....	534,520	544,137	.....	9,617
Total.....	9,098,576	9,251,959	.....	153,383

The G.T. gross receipts for the ½-year show an increase of £148,104, or 6.92%; the working expenses, including taxes, an increase of £102,062, or 7.07%. The train mileage, however, shows a decrease of 153,383, or 1.66%.

The expenditure on capital account amounted to £55,549 13s. 3d. The outlay consists chiefly of £14,911 18s. 9d. for new works, including £9,658 3s. on account of the proportion chargeable to capital for the construction of the new general offices at Montreal; £22,990 1s. 6d. expended on account of the double track between Hamilton and Niagara Falls, and £13,882 12s. 1d. for the further equipment

of engines and freight cars with air brakes, automatic couplers, etc.

Four per cent. debenture stock for £500,000 was issued at the commencement of the ½-year, and £1,400 of bonds were acquired. £209,700 5% bonds of the G.T. Junction Co. maturing on Jan. 1, 1901, have been taken up, the amount being shown as an asset in the general balances pending an adjustment of account between the two companies.

The amount invested in other securities, as stated in the general balance sheet, is increased by £254,019, caused mainly by the transfer to that account of £227,448, being the balance of the advances formerly made to the C. and G.T. Co., which, with £4,894 originally invested in the ordinary stock of that Co., is now represented by \$6,000,000 ordinary stock of the G.T. Western Ry. Co. The remaining increase is represented by \$102,000, Toledo, Saginaw and Muskegon bonds, and \$27,761.71, shares of the Cincinnati, Saginaw and Mackinaw Ry. Co., received for advances on capital account to these companies respectively.

Of the total distance of 41 miles of single track railway between Hamilton and Niagara Falls, the double tracking of 25 miles from Hamilton to Jordan has been completed, and is now in operation. The double tracking of the remaining 16 miles from Jordan to Niagara Falls will be proceeded with forthwith. With a view of further facilitating the movement of traffic, the directors have authorized the immediate laying of a second track from Port Union to Whitby, 11¼ miles, leaving only 34¼ miles of single track between Montreal and Toronto, the doubling of which it will be desirable shortly to accomplish.

In addition to £15,402, being the proportion of the bridge renewal expenditure chargeable to revenue on the basis sanctioned by the proprietors in 1898, £10,000 has been included on that account in the maintenance of way charges for the past half-year. The proportion chargeable to revenue of the cost of reconstructing the Victoria jubilee bridge, and the cost of renewing the bridges between Montreal and Portland, which have now been completed, amounted to £202,765 16s. 0d., being £8,716 2s. 11d. in excess of the original estimate, caused chiefly by the advance in the prices of material. Nearly the whole of the work of reconstructing the bridges on the Southern division, the estimates for which amounted to £47,260, has still to be accomplished, and, after deducting £1,515 already expended, and £10,016 at the credit of the bridge renewal account at June 30 last, there will remain about £35,729 to be charged to revenue on that account.

No additions to the stock of engines and cars have been made at the expense of capital during the ½-year. Fourteen passenger and 667 freight cars were built in the shops during the ½-year by way of renewal, in replacement of cars out of service. Eleven new engines were purchased or constructed during the ½-year on revenue account, and at June 30 there were two locomotives in excess of the official number, when £36,760 17s. 10d. remained at the credit of the engine renewal fund, and £32,081 4s. 8d. at the credit of the car renewal fund, applicable to future renewals.

The gross receipts of the G. T. Western Ry. Co. for the ½-year were £436,796, and the working expenses £386,518, leaving a net profit of £50,278. The net revenue charges for the ½-year were £56,499, so that there was a net revenue deficiency of £6,221, payable by the G.T. Co., under the terms of the agreement approved by the proprietors at the special general meeting held December 11, 1900. The number of passengers carried during the ½-year was 601,124; and the passenger train receipts, including mails and express receipts, were £115,993. The quantity of freight moved during the ½-year was

1,348,476 tons, and the receipts from it were £320,217.

The gross receipts of the Detroit, Grand Haven and Milwaukee Ry. for the ½-year were £97,167, against £90,415 in 1900, an increase of £6,752; the working expenses were £78,071, against £75,900, an increase of £2,171; leaving a balance of £19,096, against £14,515, an increase of £4,581, compared with the corresponding ½-year of 1900. The net revenue charges for the ½-year were £37,306, against £37,410 in 1900, so that there was a net revenue deficiency of £18,210, as compared with £22,895 for the corresponding period of 1900. The number of passengers carried during the ½-year was 288,785, against 258,970, an increase of 29,815, or 11.51%; and the passenger receipts, including mails and express receipts, were £44,223, against £40,715, an increase of £3,508, or 8.61%. The quantity of freight moved was 399,042 tons, against 418,601 in 1900, a decrease of 19,559, or 4.67%, and the receipts from freight were £50,150, against £48,404 in 1900, an increase of £1,746, or 3.61%.

The directors take this opportunity of impressing upon the proprietors that the progress shown for some time past in the Co.'s revenue, has largely resulted from the expenditure which has been incurred for affording increased traffic facilities by the gradual reconstruction of bridges in heavier materials, by double tracking and reducing the gradients of portions of the line, and by increasing the haulage power of engines and the carrying capacity of freight cars; and they are convinced that it is only by continuing this policy that the measure of improvement which has already been attained can be maintained or augmented.

REPORTS OF OFFICIALS.

Following are extracts from appended reports of officials:

The Chief Engineer reports that the charges for the maintenance of the Co.'s property during the ½-year were \$99,364.93 in excess of the corresponding period of 1900, which is accounted for by the increased outlay on repairs of roadway and on repairs and renewals of bridges.

The Superintendent of Motive Power reports the expenditure, mileage, etc., as follows:

½-year ended	Total Expenditure.	Train Mileage.	Rate of Expenses per Mile.		
			Train	Engine	Car
June, 1901	Dollars. 2,954,871	9,098,576	Cents 32.48	Cents 26.01	Cents 1.88
" 1900	2,765,572	9,251,959	29.90	24.25	1.88

An increase in expenditure of \$188,899, or 6.83%, compared with a decrease in train miles of 153,383, or 1.66%.

Passenger Freight Mixed Trains. Trains. Trains.

The average number of cars moved per train was.....	4.1	26.3	10.1
And for the corresponding period.....	4.2	23.4	9.9

During the ½-year 8 engines were scrapped or sold. 6 mogul freight engines were purchased. 2 mogul freight and 3 mogul compound freight engines were built in the Co.'s shops, Point St. Charles. The actual stock at June 30, 1901, was 805 engines, against the official stock of 803.

The comparative cost of repairs per train, engine and car mile was:

	Repairs and renewals of locomotives.		All repairing charges including shop machinery, tools, and marine equipment, etc.	
	1901.	1900.	1901.	1900.
Train.....	Cents. 8.13	6.87	9.67	8.82
Engine.....	6.51	5.57	7.75	7.15
Car.....	0.47	0.43	0.56	0.53

The Superintendent of Car Department reports the expenditure, mileage, etc., as follows:

1/2-year ended	Cost of repairs and renewals.		Miles run by cars.		Cost per mile.
	Dollars.	Cents.	Passenger.	Freight.	
June, 1901	794,240	873	14,972,734	142,339,092	157,317,736
" 1900	686,484	730	14,992,372	134,392,768	147,495,080
					Car. Train.
					Cents. Cents.
					873 730

An increase in expenditure of \$113,758, or 16.7%, with an increase in car miles of 9,816,656, or 6.7%.

At cost of capital 421 freight cars were equipped with automatic couplers and Westinghouse air brakes, and 811 with automatic couplers only. This work is about completed, and there will be a very light charge to this account in the next half-year. At cost of revenue 10 day coaches, 2 parlor café and 2 composite, baggage, and 2nd-class cars were built at our shops; also 654 box cars, 1 furni-

ture car, 5 caboose cars and 7 platform and coal cars. The testing and keeping in repair of air brakes under our car stock at terminal points has, to a certain extent, been an increase to the pay rolls; also the necessity of establishing testing plants at these points has tended to increase the expenditure.

The revenue account for the 1/2-year was as follows:

	£	s.	d.
Passengers.....	556,466	13	8
International bridge tolls.....	619	1	2
St. Clair tunnel tolls.....	3,730	6	10
Toledo, Saginaw, and Muskegon Ry. under traffic agreement.....			
Cincinnati, Saginaw and Mackinaw Rd., under traffic agreement.....	4,349	8	0
Mails and express.....			
Freight and live stock.....	582,117	5	8
Less—			
Carriage, etc.....	40,422	0	4
International bridge tolls.....	12,161	6	0
St. Clair tunnel tolls.....	22,379	11	0
Toledo, Saginaw and Muskegon Ry. under traffic agreement.....			
Cincinnati, Saginaw and Mackinaw Rd., under traffic agreement.....	74,062	7	3
Miscellaneous receipts, rents, tolls, etc.....	1,561,255	11	3
	72,962	18	10
	2,287,795	1	11

	£	s.	d.
Maintenance of way and structures.....	223,842	9	2
Maintenance of equipment.....	344,002	7	7

Conducting transportation.....	905,255	5	1
General expenses.....	58,161	19	3
Total working expenses.....	66.93%	1,531,261	14 1
Taxes.....	4.59%	13,349	19 8
	67.52%	1,544,611	13 9
Balance to net revenue account.....		743,183	0 2
		£2,287,795	1 11

STATEMENT OF TRAIN MILEAGE.

June 30, 1900	Description.	June 30, 1901
3,210,759	Passenger trains.....	3,313,169
5,497,063	Freight trains.....	5,250,887
544,137	Mixed trains.....	534,520
9,251,959		9,098,576

In moving the adoption of the report, the President, Sir C. Rivers Wilson, said that the past 1/2-year's dividends were the best since 1884. He congratulated the shareholders on the steady progress of the Co.'s affairs, and said that the directors attached great importance to continuing the policy of an expenditure of money upon improving the permanent way, which policy in the past had been responsible for the progress of the revenue. Referring to his recent visit to Canada, he said he was satisfied with the forward condition of the new Montreal offices, which he hoped would be occupied in Jan. He declared that the relations with the Canadian Government were most cordial and gratifying. He spoke in sympathetic terms of the late President McKinley. He hoped that his reciprocal policy might be carried out under President Roosevelt, when they might look forward to a removal of some of the existing high duties upon the Co.

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

The annual report for the year ended June 30, calls attention to the large decrease in gross earnings and surplus, occasioned by the disastrous failure of the grain crop of 1900 on the line west of Minneapolis. This grain shortage and the loss of traffic incident thereto occasioned a loss of probably \$750,000. The Co.'s gross earnings from all sources were \$4,537,296.11; operating expenses, \$2,564,337.16; net earnings, \$1,972,958.95; fixed charges, etc., \$1,645,085.73, which leaves a surplus of \$327,873.22.

The gross earnings per mile of road were \$3,442.05, compared with \$4,006.39, and the operating expenses \$1,954.05, compared with \$1,986.86 per mile of road the previous year. The average rate per ton per mile was 6.17 mills, compared with 6.58 the previous year. The reduction in rate per ton per mile is occasioned by the reduction of grain tonnage, otherwise the rate per ton per mile would have shown an increase.

The operating expenses were 56.1% of the gross earnings, compared with 49.6% the preceding year, 56.6% in 1899 and 54.1% in 1898. Improved motive power and road bed resulted in the more economical handling of freight, the average number of freight cars per train being 27.37, compared with 25.66 the previous year. The average tons of freight per train was 314.49, previous year 301.24. Average tons freight per car 15.24, previous year 15.13.

The mileage was increased during the year 24.96 miles by the purchase of the Rice Lake, Dallas and Menominee Ry., Cameron to Rice Lake, Wis., 6.63 miles, and the construction of a line from Barron to Ridgeland, Wis., 18.33 miles. This line runs through a very rich farming territory and should prove a good feeder to the main line. The total mileage under operation June 30 was 1,301.90 miles.

The Company's new Minneapolis terminals were completed at a cost, including the land, of \$356,147.92. In addition to the direct benefits derived from the improved facilities thus obtained, there is a saving of over \$16,000 a year in rentals after allowing 4% interest on the cost of the plant. Thirty-four 64-100 miles of 60 lb. rails were replaced with 80 lb. rails. Fifty miles of road were ballasted with gravel during the year, the cost being charged to operating expenses. Three steel bridges were built to replace wooden structures, the original cost of the wooden structures, \$35,389.05 being charged to operating expenses. Two additional bridges are building and will be completed before the fall traffic is moved.

The Co. purchased 3 consolidated and 1 decapod locomotives, and 399 box cars. The Co. sold 1,141 of its consolidated bonds, and the proceeds are being used in the construction of 109.2 miles of road in North and South Dakota and Wisconsin, all of which was to be completed by Oct. 30, 1901. To handle the traffic of this increased mileage and on account of the large tonnage promised by the bountiful grain crop of this year, just harvested, there have been purchased 300 more freight cars and 4 consolidated locomotives of the latest most improved type. All of this equipment will be delivered during the fall of 1901. The Co.'s road bed, buildings and equipment are all in excellent condition.

Cornwall Bridge Disaster.—The suits growing out of the collapse of the New York & Ottawa Ry. bridge at Cornwall in 1898 are said to have been practically settled at a conference of the attorneys interested in Ogdensburg recently. The claims aggregated \$250,000, and negotiations for their adjustment out of court have been under way since last spring.



THE CANADIAN PACIFIC RAILWAY'S ROYAL TRAIN.

White Pass and Yukon Railway.

At the annual meeting in London, Eng., recently, Hon. S. Carr Glyn, Chairman, gave a very encouraging report as to the present position and future outlook. The Co.'s financial year ends June 30, while that of the subsidiary companies ends Dec. 31, so that the accounts include the audited accounts of these latter for six months later than were presented at their annual meetings. The net profits for the year amounted to £261,057, but the total amount available for dividend was increased to £344,373 by the balance brought forward from June 30, 1900. Out of this an interim dividend of 5% was paid in March, and the balance was returned to the subsidiary companies to be spent on capital account. In respect of such profits so applied the directors proposed to declare a bonus dividend of stock equal to 25%, on account of which £275,000 would be transferred from profit and loss to capital account. The receipts from dividends on shares in local companies amounted to £287,029. Up to the end of July the gross receipts on the railway amounted to \$1,182,277, or £243,770, in round figures, an increase of £53,800 compared with the same period of 1900. The earnings for July showed a decrease of \$30,000, but this was explained by the fact that shippers had rushed in goods early and were now holding back shipments until the Dawson markets assumed a more favorable tone. Up to the end of May 10,077 tons of freight was carried on the railway, against 6,346 in 1900; and during the same period the earnings from passenger traffic amounted to £16,816 against £9,633 in the same period in 1900.

Regarding the river transportation, the Chairman stated that the agreement with the Canadian Development Co. was carried out, and the British Yukon Navigation Co. formed to operate the fleet. Three boats were purchased from the C.P.R. and taken to Skagway, where they were dismantled, and the engines and fittings taken over the railway to White Horse, where they were put into new hulls built there. The Selkirk and the Dawson are mainly freight carriers, and the White Horse is almost entirely a passenger boat. The whole fleet of the Canadian Development Co. had been put into thorough repair, the total cost, including the three new boats, being £65,000, provided by the Canadian Development Co. for that purpose. Some other boats had been purchased, and the British Yukon Navigation Co. had now 18 steamers

on the Yukon river, and two operating between Caribou and Atlin.

The directors have decided to publish from time to time in the press statements showing the gross earnings of the railway as the reports are received by cable. The statement of accounts was approved, and the stock dividend of £2 10s. a share was declared.

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

Gross earnings, working expenses, net profits and increases or decreases over 1900, from July 1, 1901:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July	\$2,851,455.31	\$1,755,588.37	\$1,095,866.94	\$211,493.04+
Aug.	3,118,551.32	1,812,919.23	1,305,632.09	251,156.49+
	\$5,970,006.63	\$3,568,507.60	\$2,401,499.03	\$462,649.53+

Approximate earnings for Sept., \$3,218,000; increase over Sept., 1900, \$605,000.

DULUTH, SOUTH SHORE AND ATLANTIC.—Gross earnings for Aug., \$243,519.28, net earnings \$97,475.61, against \$254,439.90 gross and \$110,083.26 net, for Aug., 1900. Net earnings for two months ended Aug. 31, \$207,784.58 against \$203,515.27 for the same period 1900. Approximate earnings for Sept., \$241,440, against \$222,083 in Sept., 1900.

MINERAL RANGE AND HANCOCK AND CALUMET.—Approximate earnings for Sept., \$48,589, against \$53,370 for Sept., 1900.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE.—Gross earnings for Aug., \$482,589.02, net earnings \$240,388.43, against \$348,111.27 gross and \$118,958.51 net for Aug., 1900. Net earnings for 2 months ended Aug., \$444,250.25, against \$241,615.82 for same period, 1900. Approximate earnings for Sept., \$540,156, against \$374,477 in Sept., 1900.

Canadian Pacific Railway Land Sales.

	Acres.		Amount.	
	1900	1901	1900	1901
July	40,715	49,089	\$129,483.42	\$154,646.84
Aug.	59,747	32,178	165,871.16	103,480.78
Sept.	60,060	21,807	197,057.61	69,012.54
	151,522	103,074	\$492,412.19	\$327,140.16

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	.....
Mar.	2,373,980	2,188,635	185,345	.....
April.	2,358,286	2,189,859	168,427	.....
May.	2,339,941	2,219,400	111,481	.....
June.	2,327,119	2,278,937	48,182	.....
July.	2,305,970	2,177,495	128,475	.....
Aug.	2,645,340	2,439,043	206,295	.....
Sept.	2,631,773	2,468,948	162,825	.....
	\$21,251,780	\$20,101,907	\$1,149,873	.....

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

GRAND TRUNK RAILWAY.

Revenue statement for August :

	1901.	1900.	Increase.	Decrease.
Gross receipts	£453,400	£411,800	£41,600	.....
Working expenses	296,400	270,300	26,100	.....

Net profit. £157,000 £141,500 £15,500

Aggregate July 1 to Aug. 31 :

	1901.	1900.	Increase.	Decrease.
Gross receipts	£855,000	£774,700	£80,300	.....
Working expenses	566,400	514,700	51,700	.....

Net profit £288,600 £260,000 £28,600

GRAND TRUNK WESTERN RAILWAY.

Revenue statement for Aug., 1901 :

	1901.	1900.	Increase.	Decrease.
Gross receipts.	£69,700	£69,300	£400	.....
Working expenses	62,400	58,700	3,700	.....

Net profit. £7,300 £10,600 £3,300

Aggregate July 1 to Aug. 31 :

	1901.	1900.	Increase.	Decrease.
Gross receipts	£132,900	£135,400	.....	£2,500
Working expenses	123,200	121,000	£2,200	.....

Net profit £ 9,700 £ 14,400 £4,700

DETROIT, GRAND HAVEN AND MILWAUKEE RY.

Revenue statement for Aug., 1901 :

	1901.	1900.	Increase.	Decrease.
Gross receipts.	£20,300	£20,100	£ 200	.....
Working expenses	15,200	17,500	.....	£2,300

Net profit. £5,100 £2,600 £2,500

Aggregate July 1 to Aug. 31 :

	1901.	1900.	Increase.	Decrease.
Gross receipts	£41,600	£38,600	£3,000	.....
Working expenses	28,600	30,800	.....	£2,200

Net profit. £13,000 £ 7,800 £5,200

TRAFFIC RECEIPTS OF THE SYSTEM.

Traffic receipts, July 1 to Sept. 30 :

	1901.	1900.	Increase.	Decrease.
Grand Trunk.	£1,292,193	£1,193,265	£98,928	.....
G. T. Western.	217,859	204,678	£13,181	.....
D., G. H. & M.	59,826	57,998	1,828	.....

Total. £1,569,878 £1,455,941 £113,937

Grand Trunk Appreciation.

Following is a comparison of the lowest quotations of the G.T.R. Co.'s stocks in 1895 with the highest recently touched :

Stock.	Lowest 1895.	Highest touched recently.	Adv.
4% debenture.	67 1/4	108 1/2	40 3/4
4% guaranteed.	35	100 1/4	65 1/4
5% 1st preference.	26 1/8	101 1/2	75 3/8
5% 2nd preference.	17 7/8	87 7/8	70
4% 3rd preference.	9 15-16	39	29 1-16
Ordinary.	4 3/8	12 7/8	8 1/2

This appreciation means the following improvement in capital values since 1895.

Stock.	Amount.	Appreciation.
4% debenture.	£13,434,000	£ 5,249,000
4% guaranteed.	5,220,000	3,490,000
First preference.	3,420,000	2,660,000
Second preference.	2,530,000	1,770,000
Third preference.	7,163,055	2,078,000
Ordinary.	22,475,985	1,910,000
	£54,248,040	£16,958,000

RAILWAY FINANCE MEETINGS, ETC.

Algoma Central Ry.—The suit of A. S. Miller, instituted in the U.S. Circuit Court at Hartford, Conn., against the directors of the Consolidated Lake Superior Co. for an injunction to restrain them from purchasing the stock of the Ontario Lake Superior Co., to which reference was made in our Sept. issue, pg. 267, has been withdrawn, the plaintiff paying all costs. The Companies referred to are financing the Clergue enterprises at Sault Ste. Marie, Ont., and elsewhere.

Atlantic and Lake Superior Ry.—By the decision of Justice Davidson, in the Quebec court recently, the question of whether the 20 miles of line from New Carlisle easterly, which was seized to satisfy a judgment obtained by Dillon & Co., will be sold or not, will come before the courts in due course. When the seizure was made an objection was filed by Caldwell, Asworth and others, on the ground that a part or portion of a going concern could not be seized or sold, and that they were in possession of the line as trustees for the bondholders and as such owned and operated it, and not the A. and L.S.R. Co. The action just decided was a motion to have this opposition dismissed on the ground that it was frivolous and made in order to unjustly retard the sale. Justice Davidson held that the title urged by Caldwell et al. was sufficiently serious to justify bringing the issue to trial, and they were given permission, on payment of costs, to amend their opposition by

adding references to Acts of Parliament to show that the 20 miles of line seized did not constitute a section of the road.

Bay of Quinte Ry.—Unconfirmed reports state that this line is likely to pass into the hands of the C.P.R. The B. of Q. R. extends from Deseronto Jct. to Deseronto, Ont., 4 miles; from Napanee to Tweed, 49.45 miles; Yarker to Sydenham, 11.37 miles; total, 64.82 miles. It has trackage rights on the Kingston and Pembroke Ry. from Harrowsmith to Kingston, 19 miles.

Calgary and Edmonton.—Net earnings for Aug., \$20,410.05 against \$15,285.82 for Aug., 1900, making for the eight months to Aug. 31, \$926,209, an increase of \$21,843 over corresponding period of 1900.

The annual meeting called to be held in Toronto, Oct. 2, was adjourned, no business being transacted.

Canada Atlantic Ry.—At the recent annual meeting the following directors were elected:—President, C. J. Booth; Vice-President, W. Anderson, N. McIntosh, C. McLachlin, J. F. Booth, and J. A. Seybold.

Central Ry. of Nova Scotia.—It is said that Mackenzie, Mann & Co. are likely to acquire this line and to include it with the Halifax and Southwestern Ry., which they are about to build. The C.R. runs from Middleton, on the Dominion Atlantic Ry., to Lunenburg, on the Atlantic ocean, 74 miles.

Dominion Atlantic.—Gross receipts for Aug., \$141,000, an increase of \$19,952 over Aug., 1900, making for the seven months to Aug. 31, \$591,531, an increase of \$63,566 over corresponding period.

G.T.R. Subsidiary Companies.—Stockholders of five of the constituent companies of the G.T.R. held their annual meetings at Detroit, on Oct. 7, and elected directors and officers. The G.T. Western Ry. Co. elected the following:—President, G. B. Reeve, Montreal; Secretary-Treasurer, J. H. Muir, Detroit; directors, G. B. Reeve, F. W. Morse, F. H. McGuigan, Montreal; D. F. Skinner, Valparaiso, Ind.; A. Dixon, Chicago; E. W. Meddaugh, W. J. Spicer, Detroit, and A. W. Wright, Alma. Similar officers were elected for the Detroit, Grand Haven and Milwaukee, Michigan Air Line, Chicago, Detroit and Canada, Toledo, Saginaw and Muskegon, and the St. Clair Tunnel Co.

Great Falls and Canada Ry.—A deed transferring this line to the Great Northern Ry., U.S.A., has been filed in Cascade county,

Pipe Coverings - - Boiler Coverings

Fireproof Cement

THE

BOILER MICA COVERING

CO'Y, LD.

86-92 Ann St., MONTREAL, QUEBEC

90-100 King St. W., TORONTO, ONTARIO

24 Old Broad St., LONDON, ENGLAND

For Particulars Apply to

Mont. The consideration named is \$750,000, and the deed is signed by E. T. Galt and J. J. Hill. By the terms of the sale, the G.N.R. agrees to widen the road to standard gauge by Oct. 30, 1902.

Hereford Ry. (Que.)—At the recent annual meeting the following directors were elected: Hon. F. Jones and C. Page of Portsmouth, N.H.; S. N. Bond, W. H. Goodman and P. W. Whittemore of Boston, Mass. The Secretary-Treasurer is H. B. Brown of Sherbrooke, Que. The Hereford Ry. is leased to the Maine Central Rd. for 999 years.

International Bridge Co.—At the annual meeting at Buffalo, N.Y., Oct. 5, the following directors were elected:—President, G. B. Reeve, Montreal; Vice-President, J. Bell, Belleville, Ont.; other directors, F. W. Morse, J. Hobson, and F. H. McGuigan, Montreal; H. W. Sprague, Buffalo, N.Y.; E. W. Meddaugh, Detroit, Mich.; Secretary, J. H. Muir, Detroit, Mich.; Treasurer, F. Scott, Montreal.

Kingston and Pembroke Ry.—It is persistently rumored that this line has been acquired by, or in the interest of, the C.P.R., and the impression prevails in Kingston that at the next annual meeting there will be a radical change in the board, and that in all probability the line will be operated by the C.P.R. In a recent interview, President Shaughnessy, of the C.P.R., is reported to have said:—"The Kingston and Pembroke Ry. has been for many years past a close connection of the C.P.R. The stock of the K. and P. was somewhat scattered, but it has recently been concentrated into the hands of comparatively few people, with a view, no doubt, to a more permanent arrangement with the C.P.R."

The stock is listed in New York where it sold in Feb. last at \$8 a share, since which it has advanced to \$11. The line runs from Kingston, Ont., to Renfrew, 103.10 miles; Bedford to Zanesville, 4 miles, with branches to iron mines and mills, 5.75 miles, total 112.85 miles. It connects with the C.P.R. at Renfrew and Sharbot lake, and would give the C.P.R. a lake connection at Kingston. The directors are C. F. Gildersleeve, Kingston, President; F. S. Flower, New York, Vice-President; H. Seibert, New York; H. Porter, Chicago; B. W. and H. M. Folger, R. V. Rogers, J. Swift and W. D. Hart, Kingston.

Lake Erie and Detroit River Ry.—The negotiations between this Co. and the London City Council respecting the extension of the lease of the London and Port Stanley Ry. have not been concluded. The matter has been under consideration for nearly a year, and on Oct. 10 it was reported that some points in the draft lease were being reserved in order that the opinion of the city solicitor might be secured thereon. The proposal by the L. E. & D.R.R. was to surrender the present lease, which has

13 years to run, for a new lease for 30 years, the rental to be \$17,500 for the first 13 years, and \$20,000 for the remaining 17 years, which proposal the city accepted, provided there could be a re-adjustment of rates. President Walker and General Manager Woollatt met the directors of the L. & P.S.R. and discussed the matter of rates, and by a system of mutual concessions arrived at an understanding, and the city solicitor was authorized to draw up clauses in conformity therewith. The L. E. & D.R.R. agreed not to close Port Stanley harbor in any event; to grant a rate on coal and pig iron of 50c. a ton inclusive of terminal charges and 40c. a ton exclusive of terminal charges; and to keep bridges and culverts in repair, and to maintain insurance on railway property; while the Council agreed to the striking out of the clause requiring that the L. & P.S.R. headquarters should be maintained in London.

New Brunswick Ry.—At the recent annual meeting at St. John, a dividend of \$1.50 a share was declared for the year ended June 30. The previous year's dividend was \$1.80 a share.

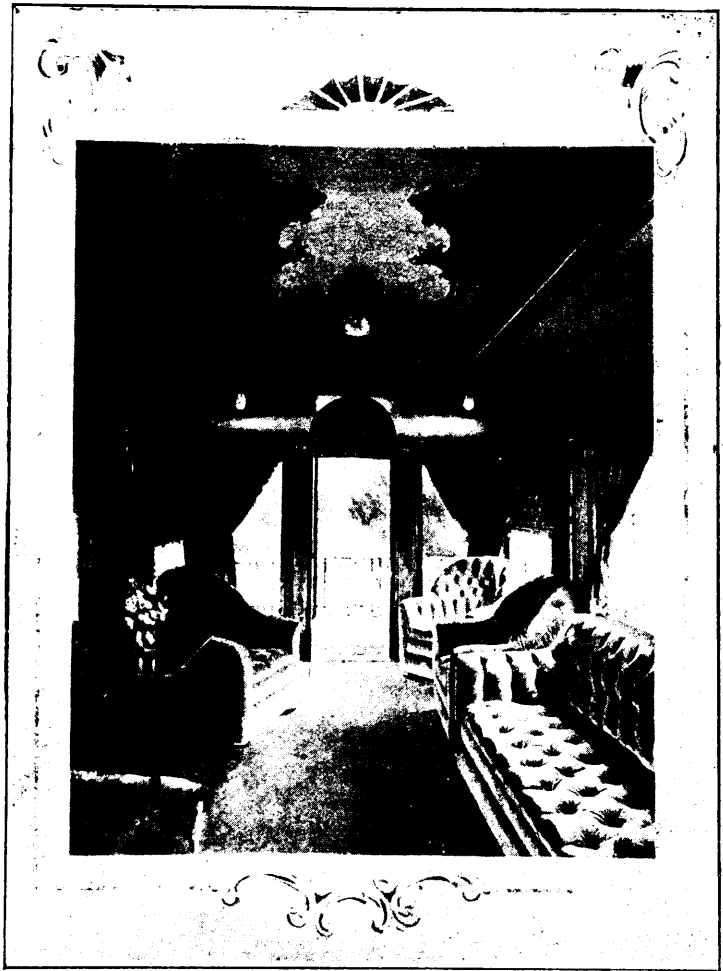
Newfoundland Ry.—Glyn, Mills, Currie & Co., of London, Eng., were recently authorized to receive subscriptions for £465,000 Government of Newfoundland 3½% bonds, repayable at par on Oct. 1, 1951, at the price of £93 for each £100. The bonds are issued under the terms of the Newfoundland Railway Amendment Act, 1901, and the interest is payable out of the funds of the colony. The proceeds of the loan will be applied in discharging the obligations of the Government under the agreement recently made with R. G. Reid.

Northern Pacific Ry.—The past 12 months have been full of events of consequence to the Co., which have permanently affected its history and development. It has acquired within that time absolute control of the great Burlington railroad, and, with the Great Northern Ry., now holds 98% of the Burlington's capital stock, against which joint bonds of the two companies have been issued on a basis of value of 200% for the Burlington shares. The bonds so far issued amount to \$215,154,000. The success of this purchase roused the powerful interests controlling the Union Pacific, who made heavy purchases of N.P. stock in the open market, which culminated in the May corner and the Wall street flurry. These purchases, it is now generally admitted, gave U.P. a majority of the outstanding N.P. stock. Thus this great property, controlling and operating over 5,000 miles of road and earning in the 12 months to June 30 last \$32,561,000, has practically no public stock-holders, the shares being mostly held by one or the other of two great financial interests. This change in the public status of its stock, however, in no wise affects the course of its financial, revenue and operating results in the past year, which have been of peculiar interest. The increase in earnings as shown in the report is \$2,540,000, and in net is \$294,150. Figures in 1901 are based on an average of 5,100 miles of operated road, as against 4,714 in the previous year. Changes in mileage are accounted for in part by the lease effective May 31, of the Manitoba lines of 355 miles to the Provincial Government, on a rental fixed at \$210,000 for the first 10 years, and increasing at the end of each 10 years until a maximum of \$300,000 is reached. Addition of new branch lines more than offset deduction of these Manitoba lines. The new mileage is

mostly in Washington and in North Dakota and amounted to 165 miles on eight different lines.—Railroad Gazette.

The annual meeting of stockholders was held Oct. 3, but beyond the re-election of the old board of directors nothing was done. These are: R. Bacon, E. E. Harriman, J. J. Hill, J. J. Kennedy, D. S. Lamont, C. S. Mellen, S. Rea, W. Rockefeller, C. Steele, J. Stillman, E. S. Thomas, H. McK. Twombly, G. F. Baker, D. W. James and B. Ives. This is the same board as that nominated by J. P. Morgan in the early summer as a compromise after the famous fight for control of the N.P.

Ottawa, Northern and Western Ry.—An important railway amalgamation is reported to have been brought about in the Ottawa Valley through the medium of Montreal capitalists, and only waits ratification by the shareholders of the companies affected before it goes into effect. The companies interested are the old Ottawa and Gatineau, which was given power at the last session of the Dominion Parliament to change its name to the Ottawa, Northern and Western Ry. Co., and to amalgamate with various other companies; the Pontiac and Pacific Jct. Ry., the Hull Electric Ry. and the Interprovincial Bridge. The title of the amalgamated companies will be the Ottawa, Northern and Western Ry. Co., and the capital involved in the amalgamation is \$5,000,000. The mileage involved is 156 exclusive of the Interprovincial bridge, of which 131 is steam and 25 miles electric road. The charter powers of the amalgamated companies include lines to Sault Ste. Marie, and to Hudson's Bay. A. F. Gault, S. H. Ewing, S. Finley, and Hanson Bros. of Montreal, are concerned in the syndicate responsible for bringing about the amalgamation.



RECEPTION ROOM, DAY CAR CORNWALL, C.P.R. ROYAL TRAIN.

At the annual meeting of the Ottawa, Northern and Western Ry. Co. in Montreal, Sept. 4, the following were elected directors: H. G. Beemer, M. S. Louerger, J. Rielle, W. Hanson, S. Finley, J. G. Pyke, Hon. J. S. C. Wurtele. The meeting was adjourned, the special business which it was proposed to transact not being ready.

Qu'Appelle, Long Lake and Saskatchewan.—Net loss for Aug. \$3,681.81 against net loss of \$1,271.85 for Aug., 1900, making for the nine months to July 31 a net loss of \$3,068.87, against a net loss of \$15,348 for same period 1900.

Quebec Central.—Gross earnings for Aug. \$67,289.96, working expenses \$40,016.79, net earnings \$27,273.17, against \$22,855.10 for Aug., 1900.

Gross earnings from Jan. 1 to Aug. 31, \$413,886.21; working expenses, \$276,731.94; net earnings \$137,154.27, against \$115,885.82 for same period, 1900.

Quebec Central Ry.—In accordance with the terms of a resolution passed at the annual meeting of the income bondholders in London, Eng., June 5, holders of such bonds are required to deposit them that they may be exchanged by the end of the year for the new securities, authorized to be issued by the act passed at the last session of the Quebec Legislature. In respect of each income bond for £100 surrendered, there will be issued £50 of 3% 2nd debenture stock, and a £50 income bond entitled to interest not exceeding 7%. Both these new securities may be redeemed at par on six months' notice being given.

Queenston Heights Bridge Co.—At the annual meeting at Clifton, Ont., Sept. 10, the following were elected directors: W. C. Ely, W. B. Rankine, B. Van Horn, Buffalo, N.Y.; T. G. Blackstock, W. Nesbitt, W. H. Beatty, E. B. Osler, Toronto.

Rutland Rd.—The stockholders of the various lines controlled by the Rutland Rd. Co. met at Ogdensburg, N.Y., Sept. 28, to vote on the proposed consolidation of the Ogdensburg and Lake Champlain, the Rutland, the Rutland Canadian, and the Bennington and Rutland railroads. Of the 44,000 votes, all but 10 were represented. Louis Hasbrouck, an Ogdensburg attorney, held a large number of the proxies. The vote was unanimous for consolidation. The new concern has been incorporated, and the amalgamation took effect Sept. 30. The object in placing all the branches under one management is to increase the efficiency of the various lines, and to reduce the operating expenses. The Ogdensburg and Lake Champlain Co. has really passed out of existence, but the Co. will retain its name until all indebtedness has been liquidated.

The Rutland and Noyan Rd. Co. held its annual meeting recently. The directors and officers for the current year are: President, F. H. Button; Vice-President, H. A. Hodge; Secretary, H. G. Smith; other directors, P. W. Clement and J. W. Burke; Treasurer, O. F. Harrison; Chief Engineer, P. Canfield.

The Shore Line Ry., extending from St. John, N.B., to St. Stephen, on the Maine boundary, 82 miles, was sold recently, Russel Sage, of New York, being the purchaser, at \$25,000. Mr. Sage previously held a controlling interest in the road, and the sale was necessary in order to reconstruct the Co.

Shuswap and Okanagan Ry.—The gross receipts for the three months to the end of June were \$7,534, and the net \$3,014, making for the six months to the end of June gross earnings \$14,521, and net \$5,809.

South Shore Ry. (Que.)—The sale of the controlling stock to R. J. Campbell is being made the subject of an action brought by H. A. Hodge, of Rutland, Vt., who alleges that the directors of the Co. entered into an agree-

ment with him to sell the line. Mr. Campbell, who is the vice-president of the Cape Breton Ry. Extension Co., bought up a majority of the shares, re-organized the directorate with himself as vice-president, and has since been acquiring any additional stock that could be secured. Mr. Campbell is reported to have been acting on behalf of the St. Lawrence and Adirondack Ry., and Mr. Hodge for the Rutland Ry. Security for costs has been furnished, and the litigation is likely to last for some time. The line extends from Montreal to Sorel, 45 miles.

The directorate has undergone some changes recently and is now composed as follows: President, H. A. Hodge, of the Quebec Southern and Rutland railways; Vice-President, A. L. Meyer; Secretary-Treasurer, F. D. White; other directors, W. S. Webb, P. W. Clement, F. X. Choquette and B. P. Moore.

It is said that a meeting is to be held to authorize the bonding of the road from St. Lambert to Levis, to the extent of \$20,000 a mile, for purposes of equipment and reballasting of the line among other things, the bonds to be 4% and to run for 50 years.

Temiscouata Ry.—The bondholders of the St. Francis branch, in view of the fact that the interest is in default, are asked to follow the example of the main line bondholders, and deposit their bonds with the Temiscouata Ry. Bondholders Committee (Ltd.), receiving therefor the Co.'s certificate of transfer, which can be dealt with on the London Stock Exchange. The Committee state that they hold £270,000 of the £320,000 main line bonds, that they have secured a change in the management of the line, and that under the new President, F. Grundy, the net earnings of the line have shown a considerable net increase.

Vanderbilt Schemes in Canada.—Press reports state that the Vanderbilt interests, represented in the transactions by W. S. Webb, are at work on plans which will give them a through line to Sydney, N.S., from Montreal, shorter than the I.C.R. route, and giving a shorter route to Halifax than by the C.P.R. Whatever truth there is in these rumors arises from the fact that W. S. Webb is president of the Cape Breton Ry. Extension Co. (Ltd.), which is building a line from the Strait of Canso to Louisburg; and that R. J. Campbell, Vice-President of that Co., has acquired a controlling interest in the South Shore Ry. of Quebec, which is extending its line in the direction of Point Levis. W. S. Webb and R. J. Campbell, with those associated with them in these enterprises, are also interested in the building of a bridge across the St. Lawrence between Longueuil and Montreal. Only a few weeks ago newspaper reports had it settled that the line from Halifax to Barrington was to be constructed by this combination, and that transatlantic travel from New York was to be revolutionized by the amalgamation of lines that was to take place. There is perhaps a little more probability in the present story than in the first, as the U.S. railway men have really obtained the lines at each end of the projected amalgamated line.

White Pass and Yukon Ry. gross earnings Aug. 1 to Sept. 14, \$338,942.

The Pacific Coal Co. has been incorporated under the Dominion Companies' Act, with a capital of \$1,000,000, to open collieries in British Columbia. Among those connected with the enterprise are: Sir Wm. Van Horne, E. B. Osler, R. B. Angus, C. R. Hosmer, and W. D. Matthews of the C.P.R. directorate.

The I.C.R. management has under consideration the question of establishing reading or recreation rooms and libraries for its employes at various points on the line.

Train Dispatchers' Daily Programme.

G. J. Bury, Superintendent C.P.R., Cranbrook, B.C., writes:—In order that trick dispatchers may be conversant with movements of traffic, and in a position to act in any emergency that may crop up in the absence of the Chief Train Dispatcher, it is the rule here for the Chief Train Dispatcher to make out a programme daily about 19K*, which is hung on a hook in front of the trick dispatcher. I enclose a sample of these programmes, as it may be of interest to many of your readers. One of the many advantages of this system on a single track line, is that the dispatcher, in ordering his own trains, can have them leave terminal points at times when they will make good meets with trains going in the opposite direction. It also enables the dispatcher to answer the countless questions daily asked him, etc., without having to call up the chief.

[19K, under the 24-hour system, is 7 p.m. standard time.—EDITOR.]

LETHBRIDGE SECTION.

Rate east—

One double header extra ordered to connect with the 2 exas. reported to arrive Dunmore Jct. 2 and 1K empty stock cars ordered in preference to dead frt.

Order exa. west train mty. stock cars out Med. Hat to arrive Woodpecker not later than 12.30, and instruct this train to move extra gang outfit from spur MP33 to spur MP40, and figure it will take 3 hours to do this work.

Instruct this train to unload 4 cars ties east of Woodpecker if stock not in yard waiting when train arrives.

If any red disc cars on no. 101 into Dunmore Jct. order exa. to connect.

Order double header exa. out Med. Hat to arrive Lethbridge 19.30 to-morrow for train coal for the east.

Order exa. east connecting exa. 703 ore and red disc cars preference.

Order exa. east from McLeod for'n empts. preference to arrive Lethbridge not later than 6.30 to-morrow morning for coal. Turn this crew at Lethbridge.

Order exa. east out McLeod at 7K train of empties for mines at Lethbidge, and instruct this crew pick up train of ties and distribute them between Lethbidge and Winnifred, and set out cars soon as made empty.

Order exa. east connecting exa. 436 time frt. pref. and fill out on for'n mts.

Empty stock cars go west far as McLeod.

Empty coal and box cars go west far as Lethbridge.

Empty coal and box cars go east far as Lethbridge.

ELK RIVER SECTION.

Rate east and west from Fernie—

Order exa. east at 22.30 to go through; loads preference except 6 empty foreign cars for ties at Jaffray, and instruct this train fill out on loads of ties after setting out mty. and take coke in preference to coal from Fernie. Take 1,600 tons east from Crow's Nest and double where necces ary.

Order exa. east at 24.30 loads pref. to turn at Crow's Nest, taking Great Northern coal in preference from Fernie on return trip.

Order exa. east at 4K G N. empts. pref. to turn at Fernie coke pref.

Order exa. 5K to turn at Wardner.

Order exa. east connecting exa. 546 to go through, give him way cars and fill out on through loads; switch Gebo and Blairmore mill.

Order exa. at 9.30 to turn at Wardner.

Order exa. east 13K (empties) to turn at Fernie.

Order exa. east 14.30 two loads piles, and fill out on empties to turn at Fernie. Piles unload at bridge 281. Set out flats at Jaffray.

Order exa. 17K to turn at Wardner.

When work train 623 is through at Loop for the day, instruct him take train east to McLeod.

Order exa. west connect stock at McLeod 10% light.

Order exa. west connect time frt. at McLeod 10% light.

Order exa. west connect coal train at McLeod and put way cars on it.

Double Michel work train to Fernie for a train to Crow's Nest fast as Fernie can furnish trains.

When Ditcher is through for the day run train from Michel to Crow's Nest with loads. Lay up at McGillivray.

Order exa. west connecting with branch train at McLeod, and if any stock let them out 10% light.

If Stocks reports through with pile driver at Cowley run the eng. and crew to McLeod.

GOAT RIVER SECTION.

Rate east and west protect east bound rate.—

Order exas. west 22.30, 23.30, 24.30 2K. Order the 5th exa. west if enough loads for full train.

Order exa. west connecting stock train 10% light.

Order exa. west connecting time frt. 10% light.

Order exa. west eng. headed east to arrive Kitchener 6.30, and order 23 flats on this train to work between Goat-fell and Kitchener.

Order exa. 13K for Kimberly, 7 empty box and Kimberly loads.

Order work extra 10 flats to load piles Yahk to arrive Yahk 7K.

Order extras east from Sirdar soon as full trains.

Double every 4th east bound train to Goat-fell.

Canadian Roadmasters' Association.—In our last issue it was stated that the annual meeting would be held in Hamilton, Oct. 16, that being the date fixed at the meeting in Montreal last year. We received no intimation from the Secretary that the meeting would not take place, but have since learned that on Oct. 9 he issued a circular to the members stating that the executive deemed it desirable to refrain from holding the meeting for this year "on account of over-pressure of work due to the recent trackmen's strike." (presumably on the C.P.R.)

Who are they?—Leonard's Railway News says: "A company of Canadian capitalists has been organized for the purpose of building a railroad from Corpus Christi to Brownsville, Tex., about 150 miles. The company claims to have a capital stock of \$4,000,000, and says that it is prepared to begin the construction of the road in a very short time. Such a road would be an invasion of a large section of territory which now naturally belongs to the Southern Pacific."

The Mica Boiler Covering Co. of Montreal has been awarded a gold medal at the Pan-American Exposition.

General Passenger Agent Ruggles, of the Michigan Central Rd., is in possession of the original order issued by that Co. 41 years ago, regarding the operation of the Prince of Wales' special train from Detroit.

Improving C.P.R. Station Grounds.

About two years ago N. S. Dunlop, then in the C.P.R. solicitors' office at Toronto, and now Tax Commissioner of the Co. at Montreal, took in hand the organization of the work for the improvement of waste ground at railway stations and section houses on the Co.'s eastern lines. Prior to that time, here and there a station would have an attractive garden or lawn beside it, but in most cases the vacant spaces were made depositories for ashes, or were allowed to become overgrown with weeds. Mr. Dunlop started out with the idea of enlisting the station agents and section-men in the work of making their surroundings beautiful, and started in a modest way by sending to every agent and section-boss

it is not unlikely that the work will be extended all over the system.

The G.T.R.'s Liability.—In an action brought by J. Lucy, an employe of the G.T.R., against that Co. for damages for injuries received at his work, recently heard at Kingston, Ont., Chief Justice Meredith decided that the plaintiff's membership in the G.T.R. Provident and Insurance Society did not debar him from bringing the action. The Quebec courts have decided in favor of the G.T.R. in a similar case.

General Passenger Agents.—The American Association of General Passenger and Ticket Agents met at Asheville, N.C., Oct. 15, 16 and 17, the attendance being the largest in the history of the Association. The following officers were elected: President, J. R. Wood, Pennsylvania Rd.; Vice-President, J. Sebastian, Chicago, Rock Island & Pacific; Secretary, A. J. Smith, Lake Shore & Michigan Southern; Executive Committee, E. N. Armstrong, Toledo, Peoria & Western; W. J. Lynch, Cleveland, Cincinnati, Chicago & St. Louis; J. C. Pond, Wisconsin Central; Standing Committee, C. M. Burt, Central Rd. of New Jersey; E. A. Ford, Pennsylvania lines. Next year's meeting will be at Portland, Me.

The Jas. Barnes Construction Co., Ltd.—J. Barnes, M.L.A., and E. D. Barnes, of Buctouche, W. T. Whitehead, F. P. Thompson, and R. A. Estey, of Fredericton, have applied for incorporation under the New Brunswick Companies' Act, under the above title, with headquarters at Fredericton, N.B., and a capital of \$40,000, for the purpose of building railways and telegraph lines; dealing in railway and engineering supplies; and to deal in railway stocks, land grants, bonuses, etc. It is understood that the Co. will take over the business of J. Barnes, railway contractor, Buctouche, who has recently secured the contract for building 15 miles of line for the New Brunswick Coal and Ry. Co.

Free Passes for Bridge Directors.—The Ontario Court of Appeal has given judgment in the action brought by the Niagara Falls Suspension Bridge Co., against the G.T.R. Co., which came before it on appeal and cross appeal, particulars of the hearing of which were given in our issue of April, 1900, pg. 101. Justices Osler, MacLennan, Moss and Lister held that clause 11 of the agreement was wide enough to entitle the directors of the plaintiff company to free passes from the G.T.R., and that such clause had not been modified by any subsequent agreement. It was further held that the plaintiffs were not entitled to specific performance, but only to such damages, if any, as they may have sustained. The trial judge not having made any findings on this point, the measure of damage the plaintiffs have sustained was made a matter of reference. With the judgment of the court below thus modified, the appeals were dismissed without costs.



THE DUCHESS OF CORNWALL AND YORK'S BEDROOM, CAR YORK, C.P.R. ROYAL TRAIN.

between Port Arthur and the Atlantic coast a few packets of flower seeds, such as are easily grown and require little attention, but which blossom luxuriously. The work was taken hold of enthusiastically by the Co.'s employes, and the resulting improvement in the appearance of the buildings was such that the management not only expressed their approval of the work but gave Mr. Dunlop an appropriation to carry on the work. That the work is an educative one is shown by interesting circulars sent out by Mr. Dunlop, and the class of literature distributed with the co-operation of publishers of floricultural magazines, as well as by the increasing number of queries on many subjects coming in from station agents and others interested. In sending out packets of tulip and other bulbs, Mr. Dunlop gives instructions how to grow them, some hints on caring for house plants, and for the wintering of hardy annuals. Now that Mr. Dunlop has been moved to Montreal

RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alaska.—M. J. Heney, who has returned from a trip from Valdez to Eagle City, Alaska, for the purpose of looking over the route of a proposed railway, said in an interview at Vancouver: "So far as I can see, there is absolutely no excuse for promoters or capitalists interesting themselves in the construction of a railway through that part of the country, or, in other words, from Valdez to Eagle City. If the conditions were such as to warrant the construction of a railroad it would have been done long ago, but it will be many years before a locomotive is seen in the Copper river valley." (Sept., pg. 271.)

The Cape Nome and Golofin Ry. Co. has been incorporated in the U.S. to build a line from Cape Nome to Golofin Bay, 65 miles, thence to Nulato, on the Yukon river, 160 miles; and from Weare, on the Yukon, to Port Valdez, 650 miles. The intervening distance between Nulato and Weare will be covered by steamer in summer and sledges in winter. O. W. Button, Kansas City, Mo., is President; E. F. Adams, San Francisco, Manager; and E. Bivert and J. H. Glendenning, Chicago, engineers.

The Trans-Alaskan Ry. Co. has been incorporated under the laws of the State of Washington, with officers at Seattle, to build a line across Alaska to connect with a line of ferry boats with the Siberian railroad at a point opposite Cape Prince of Wales. J. J. Frey, formerly General Manager of the Santa Fe system, is President. The Co. has an authorized capital of \$50,000,000.

Alberta Ry. and Coal Co.—See Great Falls and Canada Ry.

Algoma Central and Hudson's Bay Ry.—Hon. J. S. Stratton, Provincial Secretary, and other members of the Ontario Cabinet, have been visiting Northwest Ontario, and recently made a trip over the main line for about 30 miles from Sault Ste. Marie. At that time 67 miles of the Co.'s lines were in operation, viz: 43 miles from Sault Ste. Marie northerly; and 24 miles on the Michipicoten branch, which will join the main line at Park Lake Jct. The track has been laid with 85 lb. steel rails and the bridges and culverts have been built in a most substantial manner.

We were recently officially informed that it is expected that track-laying will be completed to the 71st mile before snow comes. This will bring the track to a little beyond the Chipewewa river, 100 miles south of Park Lake Jct.

The Josephine branch is 10½ miles in length from the line from Michipicoten harbor to Park Lake Jct., to the Josephine Mine. Of this 3 miles had been completed in Aug., and, at our last advices, tracklaying was being pushed on the remaining 7½ miles, which was expected to be in operation early in Oct. (Sept., pg. 271.)

Atlantic and Lake Superior Ry.—The Chief Engineer of Government Railways has reported to the Dominion Government that between the construction of bridges and the other work done about \$80,000 of the subsidy voted last session has been earned, and an order-in-council has been passed authorizing the payment of this amount. (Sept., pg. 271.)

Battleford and Lake Lenore Ry. Co.—Hannon & Lamont, solicitors, Prince Albert, Sask., give notice of application to the Dominion Parliament to incorporate a company under this title to construct and operate a railway commencing on the Calgary and Edmonton Ry. line at or near Hobbema, Alberta, thence easterly to the South Saskatchewan river in townships 39 or 40, thence easterly to Lake Lenore, thence north-easterly to the Canadian Northern Ry. at or near Crooked river, Sask., also a branch line from the proposed line at or near township 40 or 41 in range 24 west of the second meridian to or near Yorkton, Assa., and for other powers.

Bracebridge and Trading Lake Ry.—Mr. Brunel, C.E., has been engaged to make a survey for this line which is projected from Bracebridge to Baysville, on Trading Lake, 14 miles. E. A. C. Pew, of Welland, Ont., a promoter, has met the directors, and may be given a contract to build the road. Subsidies have been voted by the Dominion Parliament and the Ontario Legislature. (May, pg. 153.)

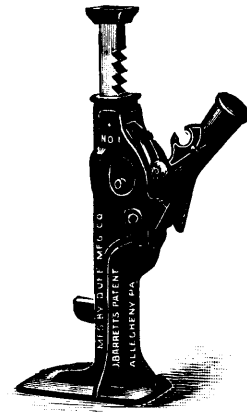
Brockville, Westport and Sault Ste. Marie Ry.—Considerable ballasting is being done, an engine house is being built at Westport and the stations are being renovated.

Bruce Mines and Algoma Ry.—Plans have been approved by the Ontario Department of Public Works for the construction of this line from Bruce Mines on the C.P.R. to the Rock Lake Copper Mines, 14½ miles, for the construction of which a contract has been let. The right-of-way has been cleared and considerable grading done on the first five miles. Tracklaying was reported to have commenced early in October on the first four miles to the ballast pit, and it is expected the whole 14½ miles will be laid with track this season. (Sept., pg. 271.)

Canada Atlantic Ry.—The reports that the construction of the proposed cut off from Glen Robertson to Vaudreuil, which was surveyed in the spring, would be proceeded with immediately, are, we are officially informed, incorrect. (June, pg. 170.)

It is said that the Co. will erect another elevator at Depot Harbor, with a capacity of 2,000,000 bush, but plans have not been prepared or bids asked.

The Canada National Ry. and Transport Co. is asking the Collingwood town council to vote it \$500 to make surveys so as to meet the requirements of its act of incorporation. J. H. Boyle, Secretary, in his letter to the council says: "The cost of obtaining the engin-



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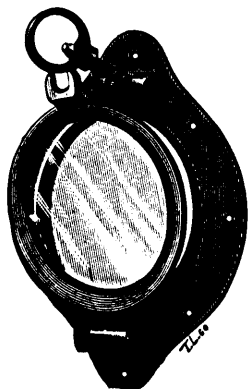
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earing work will amount to several thousand dollars, and at this juncture we are met with difficulty in financing. . . . We will, of course, willingly acknowledge your advance to us as a charge upon the Co. to be compensated for in paid-up stock upon appointment of the regular board next year, or in such other manner as you may direct." The letter has been referred to the Harbor and Industries Committee.

R. E. Stewart, C.E., is making a survey and expects to have it completed by Christmas. The line is proposed to be as near as possible an air one, and will pass near Schomberg, Beeton, and Alliston. (Aug., pg. 226.)

The Canso and Louisburg Ry., which had a charter to build between the Strait of Canso and Louisburg, has closed its office at Port Hawkesbury and removed its effects. The Co. graded about a quarter of a mile of road in the woods. (Aug., pg. 226.)

Cape Breton Ry. Extension Co.—The first sod of the first section of this line from Port Hawkesbury to St. Peters was turned at Port Hawkesbury, Aug. 23, by Mrs. Carleton, a niece of D. VanAken, President of the Manhattan Construction Co., assisted by Mrs. Leonard, wife of R. W. Leonard, Chief Engineer and manager of construction. Leaving Port Hawkesbury the line follows the coast, (within 9 miles of Arichat, on the island of Maclaine, to which point a branch line is projected, the Dominion Government having already voted a subsidy) to Grandique; it then winds through a country well adapted for grazing and farming until it reaches St. Peters, at the entrance to the canal, a distance of 30 miles. It is expected that this section will be completed this year. Eighty-pound steel rails have been ordered in England for the main line, and 72-lb. rails have been delivered at Point Tupper for sidings, etc.

The surveys for the line from St. Peters to Louisburg were made by A. J. Proctor and Mr. McCarthy, and the plans for this section have been completed and have been deposited in the Public Works Department at Halifax. From St. Peters the route turns eastwards skirting the town, thence to Loch Lomond, passing it on the eastern side to the Mira river, the valley of which is followed on the north side to Marion bridge, from which point the route to the northerly terminus is almost direct.

W. S. Webb, President of the Co., recently paid a visit to Cape Breton to see the progress of the work, and on his return to Montreal denied that the line was being built as part

of a combination of lines to connect U.S. lines via Montreal with Louisburg, from which point fast steamers would sail for British ports, as currently reported in the daily papers. (Sept., pg. 271.)

Central of New Brunswick.—The work of renewing and repairing bridges is being pushed forward. E. Briggs is the contractor. (Oct., 1899, pg. 293.)

Chateauguay and Northern Ry.—Smith & Abbott of New York have abandoned their contract for the building of this line from a junction with the Great Northern at Joliette, Que., to Montreal, including the building of the Bout de L'Isle bridge, and it has been re-awarded to Loss & McCrea, also of New York. Mr. Loss has been looking over the ground and arranging for an early start. Sub-contracts for grading will be let, and work will be pushed on each section simultaneously so as to get the line completed, if possible, by July next. (Sept., pg. 271.)

Crow's Nest Southern Ry.—The surveys for this line from Michel, B.C., to the International boundary at Tobacco Plains, including a branch up Morrissey Creek, were made by J. M. Stark, C.E., who is also engineer in charge of construction. Mr. Stark was in Victoria, Sept. 6, filing the completed plans with the Department of Public Works, and in an interview stated the contractors for the line were ready for commencing work immediately. It is only proposed at present to construct the line from the boundary to Fernie and for this work A. Guthrie & Co. have the contract. Sub-contracts have been let as follows: Twohey Bros. of Spokane, six miles of steam shovel work averaging 80,000 cu. yds. to the mile, north of the international boundary; Burns & Chapman, six miles, adjoining; Poupore & McVeigh six miles, principally wheel scraper work, about 400,000 cu. yds. in all, from Elk river to Elko; Grant & Smith, three miles east of Eholt, averaging 80,000 cu. yds. a mile; J. G. McLean, Nelson, B.C., 2½ miles of rockwork, adjoining; Foss & McDonald, Slocan, B.C., 2½ miles of rockwork adjoining. Breckenridge & Lund, the Morrissey Creek branch, and 5 miles of the main line adjoining. Other contracts will be let for the balance of the construction to Fernie. The U.S. continuation of the line from Jennings to the boundary is all under construction and a considerable amount of grading done. The grading on both the Canadian and the U.S. sections of the line is to be completed before winter, and



ROOM IN COMPARTMENT CAR CANADA, C.P.R. ROYAL TRAIN, SHOWING TELEPHONE.

the line from Jennings to Fernie will be opened for traffic by the beginning of the year. (Sept., pg. 276.)

The Cuba Co., it is reported, has a thorough understanding with the British financiers who control the other Cuban railways, in regard to the future working of the lines in the island. The Cuban Government will soon be established and will deal with any difficulties as to rates which may arise. The old stories about difficulties in the way of building the railway are again in circulation and Sir Wm. Van Horne, President of the Co., says:—"I have persistently denied these stories, but they as persistently crop up again. The work is progressing satisfactorily, we have 3,500 men employed and the construction portion of undertaking will be completed in eight or nine months. We haven't any more sickness amongst our men than would occur in any other works in America. Of course, our sanitary regulations are strictly enforced, and there are not any more men in hospital to-day than we had during the building of similar undertakings in the north."

Duluth and Iron Range Rd.—An amendment to the articles of incorporation has been filed authorizing the building of an extension of this line from Ely, Minn., to the Canadian boundary where a connection will be made with the Duluth extension of the Canadian Northern Ry. See Canadian Northern Ry., pg. 338.

Duluth, Virginia and Rainy River Ry.—Surveys are reported to have been completed for this line from Virginia to Koochiching Minn., on the opposite side of Rainy river to Fort Frances, Ont., where it is proposed to make a connection with the Canadian Northern Ry. either by a bridge or a ferry. The Minnesota Land and Construction Co. has been organized to build the line, and work on the first 20 miles is reported to have been commenced. W. H. Cook, of the Cook and Turrish Lumber Co., is President of the Co., which has just filed amended articles of association increasing its capital to \$2,000,000. Mr. Cook, in the course of an interview recently, said the Co. had on hand steel for 31 miles of track, 51,000 cedar and tamarack ties, and proposed cutting 250,000 more this winter. Three construction camps were working on the first 10 miles of the road, and two more would be put on at



CAR USED BY THE PRINCE OF WALES, NOW KING EDWARD VII., IN CANADA, 1860.

once. There are 400 men employed, and 500 more can be taken on just as fast as they come along. (June, pg. 177.)

The Edmonton and Slave Lake Ry. Co. gives notice of application to the Dominion Parliament for an act to revive the act incorporating the Co. passed in 1899, and to extend the time for the commencement and completion of the railway. The original incorporators of the Co. were: Hon J. Costigan, J. W. McRea, E. C. Whitney, W. J. Poupore, G. Goodwin, M. P. Davis, W. C. Edwards, and F. X. St. Jacques, of Ottawa; F. H. Hale, Woodstock, N.B.; J. Robinson, Newcastle, N.B., and H. J. Beemer, Quebec. The Co. was authorized to construct a standard gauge railway from the Edmonton District Ry. Co.'s station in that town via Athabasca Landing and Lesser Slave Lake to Peace river, about 400 miles, and with power to build and operate vessels on the Athabasca river, Lesser Slave Lake, and any other navigable waters adjacent to the railway.

A survey has just been completed by F. Deggendorfer, C.E., to ascertain the most feasible route for a line between Edmonton and Athabasca landing. The country offers no difficulties to the construction of the line, which Mr. Deggendorfer says would follow the trail to 16 miles beyond the Sturgeon river, then bending westerly for 16 miles to the head of the Tawatinaw river, and down the valley of that river 34 miles to its mouth at Athabasca landing. The total length of the projected line is 96 miles. The country is well settled to the Sturgeon river. An alternative route has been suggested by way of St. Albert, Morinville and Legal, reaching the head of the Tawatinaw at the same point as the other. Mr. Deggendorfer is making a preliminary location survey.

Edmonton, Yukon and Pacific.—It was expected that grading would be completed between Strathcona and Edmonton by the end of Oct., and that tracklaying would be finished and the line opened a couple of weeks thereafter. On Oct. 13 Mr. Armstrong, engineer in charge of construction, said 60% of the grading had been completed, but that work was being delayed, owing to wet weather and scarcity of men and teams. M. McCaulay has a subcontract for grading on the town side of the Edmonton bridge. The line will join the Calgary and Edmonton Ry. about a mile south of its terminus at Strathcona station, and will proceed due east one mile to Little Mill creek, then northwesterly to the bridge across the Saskatchewan, following the course of the Little Mill and Big

Mill creeks, and from the bridge the line is a straight one into Edmonton. There has been considerable cut and fill work, and three bridges, two of 150 ft. each and one of 220 ft., have been built. The station yard is being laid out on the east side of Second St., Edmonton. There will be 1,200 feet of siding accommodation, in addition to spur tracks for unloading car lots by teams. Sites have been laid off for elevators adjoining the siding which will be used for through traffic.

Reports were in circulation that the Calgary and Edmonton Ry. was seeking by injunction to prevent the E.Y. & P. connecting its tracks with the C. & E., but N. E. Brooks, Inspector of the C. & E., says the story is quite incorrect. (Sep., pg. 272.)

Fraser River Bridge.—The surveys for this bridge at New Westminster, B.C., are being pushed by M. J. Maher, resident engineer in charge of construction. From soundings taken on the Stoess survey made some years ago it would appear that the foundations will have to be carried to a greater depth than was at first anticipated. It is expected that as soon as this work is completed and the cross-sections prepared, the Government will call for tenders. The bridge will be built of steel, and will cross the river between Brownsville and a spot near the milk factory, on the top of Columbia St. rise known as the Crescent. The railway part will reach Columbia St., and will be 20 ft. above the C.P.R. track, with approaches on Front St. The approaches will be T shaped, and it will be possible to enter and leave the bridge from either side, the grade of the approach being 1%. There will be two main spans of 400 ft. each, but how many others has not been determined. (Sept., pg. 272.)

Grand Falls and Kettle River Ry.—This line, which is being built under a B.C. charter, is the Canadian section of a line connecting Grand Forks, B.C., with Republic, Wash., and a portion of a larger Canadian undertaking covered by a Dominion charter granted to the Kettle River Valley Ry. Co. The line, now under construction, is 42 miles in length, of which 5 miles is in B.C. The northern terminus will be in the Ruckles addition of Grand Forks, just south of the city limits. After crossing the C.P.R. tracks the railway, following an air line, traverses the Kettle River Valley south to the international boundary. Here it crosses the Kettle river, and passing through Nelson, Wash., ascends the west bank of the river over nine miles to 1½ miles north of Curlew, and recrosses the Kettle river on a 65 ft. truss bridge. Leaving the river at Curlew on its southeasterly descent

from Canada, the line continues south through the open valley of Curlew creek to the north end of Curlew lake. Thence following the west shore of the lake the line begins the nine-mile ascent in a southwesterly direction to the summit, which is overcome through a natural pass. Two miles beyond on the other slope the line taps the Tom Thumb mine and then the Mountain Lion, and then swinging round the mountain, proceeds along Granite creek, north up Eureka creek, and passing the San Poil and a number of other mines, reaches the old Ida mineral claim in the old town of Republic, where the station will be located. Republic has an elevation of 1,000 ft. above Grand Forks, which is overcome by a compensated minimum grade of 1½%. Going north from Republic the descending grade after the summit is passed is only 8-10 of 1%. The only heavy work encountered along the entire line is at Trout creek near the summit, where considerable rock cutting was found necessary, and some earth excavation near Deer creek also on the north slope of the summit. About 2,000,000 ft. of timber was required for the bridges and culverts. The contract for the construction of the entire line was let to C. Ferguson & Co., of Spokane, who let a number of subcontracts. Tracklaying is proceeding on the B.C. section, and also between Curlew and Nelson. The grading was expected to be finished by the end of Oct., and the tracklaying by the end of this year. The Co. has entered into contracts for hauling ores from the Republic mines to the Granby smelter at Grand Forks, and it is expected that 1,000 tons a day will be carried within a year from the opening of the line. (Sep., pg. 273.)

Great Falls and Canada Ry.—We are informed that this line, between Great Falls, Montana and Sweet Grass, at the International boundary, will be transferred to the Great Northern Ry., U.S.A., as soon as the gauge is widened, and that it is expected the entire line from Great Falls to Lethbridge, Alberta, which includes the Alberta Ry. and

CANADA SOUTHERN RAILWAY COMPANY

NOTICE is hereby given that application will be made to the Parliament of Canada, at its next session, for an Act to extend the times limited for the commencement and completion of the unconstructed lines or branches of railway of the Canada Southern Railway Company.

Kingsmill, Hellmuth, Saunders & Torrance,

Solicitors for the applicants.

Dated at Toronto, this 12th day of October, 1901.

CANADA AND MICHIGAN BRIDGE AND TUNNEL COMPANY

NOTICE is hereby given that application will be made to the Parliament of Canada, at its next session, for an Act to extend the times limited for the commencement and completion of the undertaking of the Canada and Michigan Bridge and Tunnel Company.

Kingsmill, Hellmuth, Saunders & Torrance,

Solicitors for the applicants.

Dated at Toronto, this 12th day of October, 1901.

RIVER ST. CLAIR RAILWAY BRIDGE AND TUNNEL COMPANY

NOTICE is hereby given that application will be made to the Parliament of Canada, at its next session, for an Act to extend the times limited for the commencement and completion of the undertaking of the River St. Clair Railway Bridge and Tunnel Company.

Kingsmill, Hellmuth, Saunders & Torrance,

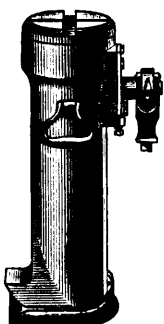
Solicitors for the applicants.

Dated at Toronto, this 12th day of October, 1901.

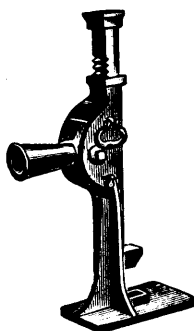
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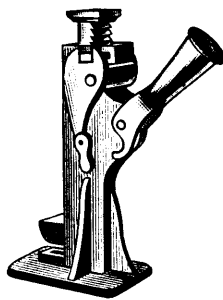
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Prov. Quebec.

Coal Co.'s line from Coutts, at the International boundary, to Lethbridge, will be widened by Oct., 1902. The work on the G.F. & C.R. will be done by the Great Northern Ry., and that on the Alberta Ry and Coal Co.'s line by the latter company, 60-lb. rails will be laid, and in general respects the line, as widened, will be up to the standard of the prairie sections of the various trans-continental lines. The consideration to be paid by the Great Northern Ry. for the G.F. & C. Ry., is \$750,000, and the deed making the transfer has been filed in Cascade county, Mont.

Great Northern Ry. of Canada.—Work is reported to have been commenced on the doubling of the terminal facilities at Quebec, in order to accommodate the increasing freight business which the G.N.R. is bringing in for shipment to Great Britain. Increased equipment has been provided for the elevator, and the discharging of barges and other vessels having cargoes of western grain can now be carried on by means of a marine leg simultaneously with the elevating of grain from railway cars. All the available storage on the wharves is taken up, and new sheds, one being already completed, 850 ft. long by 80 ft. wide, are being constructed to provide for the handling of the business. Four vessels are being operated in connection with the G.N.R., by the Leyland line instead of two, as was arranged at the beginning of the season, and it is expected that these will be run until Jan.

Bids are asked for bridges as follows: 160 ft. span over River Ste. Anne; 100-ft. deck span over Blanche river; 100-ft. span over Moine river; one span 200 ft., one span 100 ft. and 2 spans each 50 ft. for bridge over Batiscan river; 3 0-ft. span over River des Envies, and 125-ft. span over Charest river. Also for four viaducts, 325 ft., 330 ft., 400 ft., 560 ft. long, composed of 30, 40 and 60 ft. spans. All steel to be built to class 1, Dominion Government specifications. Tenders are to be sent to A. E. Doucet, Chief Engineer, Quebec.

We were recently officially informed that contracts had not been awarded for the cut-offs between Garneau Jct. and St. Catherines, Que., and between Hawkesbury and South Indian, Ont. (Sept., pg. 273.)

Great Northern Ry. (U.S.)—

Work is reported to have been commenced on two additional tunnels on the line between the International boundary opposite Cascade, B.C., and Republic, Wash. The longest tunnel is near Cascade, and is 850 feet long, whilst the second is to be 250 feet in length, and is situated near Curlew, Wash. P. Welch has the contract for the Cascade tunnel. Porter Bros. are building all the bridges as well as the false work for the steel bridge over the Columbia; and Mr. Van Norman is the contractor for the culverts on the section of the line between Marcus and the boundary at Cascade, B.C.

Surveys are reported to have been completed for the construction of a line about 60 miles in length from Jocko, Mont., on the Northern Pacific Rd., to the Great Northern Ry., in order to give a more direct connection between the Crow's Nest coal-fields and Butte, Mont. The probable point of junction with the G.N.R. will be near

Athens, 18 miles west of Kalispell, and 63 miles east of Jennings, the junction with the line now in construction from the Crow's Nest district.

It is reported that a line will be built from Great Falls, Mont., to Billings, Mont., about 190 miles, as an extension of the Great Falls and Canada Ry., recently purchased by the G.N.R., and now being widened to standard gauge.

See also Crow's Nest Southern Ry., Red Mountain Rd., Vancouver, Westminster & Yukon Ry., and Victoria, Vancouver & Eastern Ry.

The Hallburton, Whitney and Mattawa Ry. Co. gives notice of application to the Ontario Legislature for an Act extending the time for the commencement and completion of its railway, and for altering the location of

construction of the line is to be at the rate of \$13,500 a mile instead of \$10,000, the Government having been unable to enter into a satisfactory agreement at the lower figure. This loan is to be advanced either in cash or in Provincial stock or debentures bearing interest at 3½%, as the work progresses, provided that up to the time of the laying of the tracks the sum advanced shall not exceed 75% of the total sum to be loaned a mile; that a further 20% shall be loaned as track-laying proceeds, and that the remaining 5% shall be paid on the final completion of the whole undertaking.

In return for this loan the Co. agrees to construct a standard gauge line from a point on the I.C.R., near Halifax, to Barrington Passage, and also from the junction with the Nova Scotia Central Ry., at or near New

Germany to Caledonia Corner, in accordance with specifications attached to the contract, unless deviation therefrom be authorized by the Government, and to have the lines in operation by Dec. 31, 1903. No work is to be commenced unless plans and profiles have been deposited with the Government. Due provision is made for the equipment and operation of the line, for the making of traffic arrangements with other lines, and for the approval by the Government of the passenger and freight rates. Provision is made for the repayment of the loan, less \$3,200 a mile, the usual Provincial bonus, at the end of 40 years, with interest at 3½% a year, but the Co. may repay the loan at any time without notice. Interest is to be paid to the Government for temporary advances during the construction of the work, such interest to cease on the full completion of the work. A first mortgage of the line and all its franchises and equipment is to be executed to the Government, which may enter into possession if default be made in the payment of interest, but not unless such default occurs after three years from the opening of the line.

The total mileage to be constructed under this contract is said to be 180 miles, including the New Germany-Caledonia branch, which was commenced under the Nova Scotia Southern Ry. Co.'s charter, (April, 1900, pg. 115). As stated in our Sept. issue, H. K. Wicksteed, C.E., is making a survey for the line. He recently started at Shelburne, and is working towards Halifax. Location parties are fol-

lowing up the general survey as fast as possible. The line will be located as close to the Atlantic coast as the physical features of the country will allow, and the principal places to be served will be Shelburne, Lockport, Liverpool, Bridgewater, Malone Bay and Chester. The work will be a big undertaking, owing to the nature of the country through which it will pass, and the large number of heavy bridges that will have to be built. The engineers in charge of parties are: L. H. Wheaton, M. Murphy and J. J. Taylor.

Reports are being circulated to the effect that the charter of the Nova Scotia Southern will be absorbed by the H. & S.W., and that the Midland Ry., together with the lines to be constructed by the Nova Scotia Eastern Ry., will also be acquired, so as to give Mackenzie, Mann & Co.'s lines a through connection from Yarmouth to the Strait of Canso, and thence to the coal fields of Cape Breton



THE DUCHESS OF CORNWALL AND YORK'S BOUDOIR, CAR CORNWALL, C.P.R. TRAIN.

the proposed line between Whitney and Mattawa on the Ottawa river, so as to assure a more direct route between these two points.

Halifax & Southwestern Ry.—The contract between the Nova Scotia Government and the Halifax and Southwestern Ry. Co. for the construction of a railway from Halifax to Barrington Passage, was signed at Halifax on Aug. 30 by C. E. Church, Commissioner of Public Works, and W. Mackenzie, of Mackenzie, Mann & Co., of Toronto, for himself and co-directors. The contract has been entered into under the terms and conditions of the special act passed last session providing for the construction of a line from Halifax to Yarmouth, and the charter recently granted to Mackenzie, Mann & Co., details of which were given in our Sept. issue, pg. 257.

Under the provisions of the contract the terms proposed by the Government in the act are varied and the loan to be granted for the

by their Inverness and Richmond line. (Sep., pg. 273.)

Hope Mountain Exploration.—The survey ordered by the B.C. Government has been completed, and Hon. E. Dewdney is preparing his report for the Commissioner of Lands and Works. Two lines were surveyed, viz.: the Railroad pass route, 75 miles, and the Coldwater-Otter route, 93 miles. A reconnaissance survey of a probable third route was made through the canyon of the South Similkameen, but it was found to be altogether impracticable. The principal feature of the Railroad pass route will be a loop or switchback of 12 miles to make the drop from the 4,000 ft. altitude of Unknown mountain to the Unknown creek 1,500 ft., up which the line will proceed of Railroad pass. On the Coldwater route the summit will be overcome at an altitude of 500 ft. lower than through Railroad pass. One of the richest mineral belts of the Province, tapping as it does the rich ores of Summit City and the adjacent Boulder, Bear and Kellie creek camps of the Tulameen, is traversed by the Railroad pass route. No mineral has been yet met with in the Coldwater route, although it presents a magnificent, well watered grazing country. (Sept., pg. 277.)

Intercolonial Ry.—The old tubular girder bridge at Etchemin, Que., has been replaced

with a modern girder bridge, and new bridges have been built at Causapsal, Que., and Millstream, Que.

On the northern division 30 miles of 67-lb. rails have been replaced by 80-lb. rails, between Campbellton and River du Loup, Que.

Tenders have been asked for the extension of the station buildings at Denmark, N.S., for the erection of a new station and freight house at Trois Pistoles, Que., and for a 50,000 gallon water tank with foundation at Chaudiere, Que.

A suite of offices for the mechanical department is to be erected at Moncton, N.B., and a brick boiler house is to be erected at the shops at the same place.

The reconstruction of the yards at Stellarton, N.S., is to be taken in hand at once.

W. Kitchen, Fredericton, N.B., has been awarded the contract for the erection of the wharf and freight shed at Pictou, N.S. The contract calls for the completion of the work by Dec. 31.

A siding has been put in at Westchester, N.S., to allow trains to cross. Other improvements are being made at the station, \$5,000 having been voted for this purpose by Parliament.

During the season 600,000 new ties have been put in on the track, and a large amount

of ballasting has been done between Truro and Halifax, Truro and Springhill, Campbellton and St. Flavie, Moncton and Springhill, and on the Drummond county section, Que.

The cuttings between Rothsay and Quispamsis, N.B., are being widened.

A tract of 30 acres of marsh land at Gilberts lane, St. John, N.B., has been purchased by the Government for the purpose of extending the yards. The price paid is said to have been \$17,537. The land acquired is situated on both sides of the present tracks. A track

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has been laid along the land for the purpose of filling up the lowlands. On the newly acquired land it is proposed to build an engine house and to lay out an addition to the yards.

T. M. LeBlanc, of Moncton, N.B., has been given a contract to build a reservoir capable of holding 10,000,000 gallons of water, at Point Tupper, N.S., and to lay two miles of 6 in. pipe in connection with it.

The Clergue Co. has failed to supply Canadian steel rails according to contract, and the Minister of Railways has accordingly purchased 15,000 tons of 80-lb. steel rails in England for immediate delivery, on account of Mr. Clergue. The rails are required for relaying the line between New Glasgow and the Strait of Canso.

Work on the improvements in the tracks and on the coal trestles at the Halifax terminals is being carried out under the direction of E. T. Horne, Assistant to the Manager, and Trackmaster C. W. Archibald.

The station commenced recently at Levis will be 136 by 50 ft., two stories high, with attic rooms at either end for the accommodation of the caretakers. According to present plans the yard track accommodation will be doubled.

Inverness & Richmond.—At the Co.'s collieries at Broad Cove, N.S., considerable development work is being done, driving slopes, putting up buildings, bank head, etc. The Co. is now ready to mine from 300 to 500 tons a day, and by the end of the year its capacity will probably be increased to 1,000 tons a day. Active mining and shipping operations are expected to start at an early date. The Co.'s shipping point for the present will be Port Hastings and also via the I.C. R. at Point Tupper. Ultimately Cheticamp will probably be the principal shipping point, being nearer to the collieries and easier of access. During the coming winter or next spring shipping yards and piers will be built at Port Hastings. (Sept., pg. 273.)

In connection with the building of this line now in operation from the northern shore of the Strait of Canso to Broad Cove, N.S., difficulties arose between Mackenzie, Mann & Co., who contracted with the N.S. Government to construct the line, and Ryan & MacDonnell, who had a sub-contract under them. These difficulties will now be investigated by the courts, as writs have been issued by both firms against each other. Ryan & MacDonnell seek to recover from Mackenzie, Mann & Co., and D. D. Mann personally, \$195,154.97 for work done in connection with the building of the line, value of plant, extra work done and expenditures made. The statement of claim sets forth that plaintiffs had a contract for building the line, the work to be done by Dec., 1900; this they were not able to do owing, it is alleged, to the default of the defendants. In consequence of this default the defendants took possession of plaintiffs' horses and implements, etc., and completed the work. Plaintiffs stated that they were retarded in their work by reason of defendants having failed to grade 10 miles of road leading to where the contract began; by reason of the right-of-way not being furnished in time, and by the usurpation by the defendants' Manager of Construction of the duties of the Engineer, and by delays in getting estimates from the Manager. They also allege that the plant, etc., was taken possession of before the expiration of the notice given by defendants' Manager that they would seize if work was not gone on with. Mackenzie, Mann & Co. make a general denial of all these allegations and counter-claim for \$200,000 damages sustained by reason of Ryan & MacDonnell having failed to carry out the terms of their contract.

James' Bay Ry.—The grading on the 5 miles of line to connect the Canada Atlantic Ry. with Parry Sound, is very nearly com-

pleted, and it is expected that the work will be finished and track laid before winter. Surveying for the extension of this line in the direction of Sudbury across the French river, will be prosecuted in the spring, and further building done. It is understood that this line will form part of the eastern extension of the Canadian Northern Ry. (Sept., pg. 273.)

Manitoulin and North Shore Ry.—No further contracts have been let for construction on the main line, but a short branch has been built from the main line 3.9 miles from Sudbury, Ont., to the Elsie mine, a distance of one mile. The plans for the 18 miles of line between Sudbury and the shore of Georgian Bay have been approved by the Provincial Government.

Three routes have been surveyed for the southern end of the line between Owen Sound and Meaford, 22 miles. The route which will probably be selected is the longest one, but it is almost without grades. It passes through Leith, Annan and Balacava. Surveys are in progress for the section of the line between Wiarton and Tobermory, 55 miles. At the northern end the line has been located to Little Current, on Manitoulin island, and surveys across the island to a point opposite Tobermory, between which points a car ferry will be operated, will be gone on with at once.

The Co. will, it is said, apply to the Ontario Legislature for power to also build from Wiarton to Goderich.

Midland Ry. Co. of Nova Scotia.—By an act passed by the Nova Scotia Legislature in 1899, the town of Truro was authorized to borrow \$30,000 as a subsidy to this Co. in the event of its building a railway from Windsor to the Shubenacadie river, and thence to Truro, via Clifton. By an amendment to this act, passed last session, the town council is given authority to borrow this money for 30 instead of 20 years, and to assess 2½% of the amount annually on the property in the town to provide for the repayment of the money so borrowed.

The remaining spans of the bridge over the Shubenacadie river have been floated into position. The last span weighed 180 tons, and was 220 feet long. It was floated out on scows 80 ft. long by 22 ft. wide, and anchored in position at high tide, and on the ebb rested in the place prepared for it. The work was done in about 30 minutes. The first through train was run from Windsor to Truro on Oct 10. It is said the Co. will build shops at Truro. (Sept., pg. 274.)

At a meeting held at Earlton, N.S., recently, a committee was appointed to interview the directors of the M.R. of N.S., with a view to securing their aid in promoting a line to be called the North Colchester Ry., and to run between Truro and Brule. It was also decided that the committee should draft a bill for the next session of the Provincial Legislature and for the Dominion Parliament next year.

The Mount Sicker Ry., which connects with the Esquimalt and Nanaimo Ry., 400 yards south of Westholme station, 44 miles from Victoria, B.C., is a private line operated by the Lenora-Mount Sicker Copper Mining Co. (Ltd.), which is at present shipping 2,500 tons of ore a month. It is in operation from the E. & N.R. to the Lenora mine, and is being extended across the E. & N.R. to the coast at Osborne Bay. H. Croft is General Manager. (Sept., pg. 274.)

Nanaimo and Alberni Ry.—It was recently decided to have a further survey made of the route of the projected line between these points on Vancouver Island. D. R. Harris, C.E., who made the survey, says the route follows the main branch of the Nanaimo river. A great hollow formed by the triangle of three mountains, in which Moriarity and Rocky run are included, afforded greatest difficulty to the party. Here the divide which

separates the waters of the Nanaimo and Cameron rivers occurs. The divide is only 150 ft. above the level of the Indian lake. By means of a detour between these mountains, it has been found practicable to make a very easy ascent of the 3,100 ft. to be reached. From that out the route is a very good one, following the mountains forming side hills on the south side of Cameron river to Roger pass. Yellowstone creek is the only necessity for trestle-work that will be required. Along the first part of side hills a little difficulty will be encountered on account of there being rather heavy side cuts, which will have to be made for a roadway. Cameron river has a succession of rapid falls, which can be overcome by keeping well upon the side of the hills till the headwaters of Roger creek are reached at an altitude of 1,375 ft. From this the foothills of the Beaufort range are followed, until the valley is reached, when a bend is made in the course, and the route leads southward to Alberni. (Sept., pg. 274.)

Nipissing and James Bay Ry.—The charter for the construction of this railway held by Mackenzie, Mann & Co. would have expired had work not have been commenced by July. A contract was let for the grading of an undefined mileage, and work was commenced some distance out of North Bay within the limit of time, the contractor working close behind the location surveyor. From 100 to 150 men have been employed in the work all summer, and good progress has been made. No track will be laid this year. No decision has been arrived at as to a connection with any other line at North Bay. A plan and profile of the line being graded has been filed at the registry office at North Bay. (Sept., pg. 274.)

North Colchester Ry.—See Midland Ry. of Nova Scotia.

Nova Scotia Southern Ry.—See Halifax and South Western Ry., pg. 335.

Nova Scotia Steel and Coal Co.—H. Donkin, C.E., is reported to have been appointed chief engineer, and to be in charge of the Co.'s operations in Cape Breton. It is reported that a line is to be constructed from Sydney to the coal areas in Boularderie, with a bridge across the Bras d'Or Gut. Plans and specifications have been prepared for the construction of a shipping pier 500 ft. long, to be fitted with the latest apparatus for handling coal, at North Sydney.

The Ottawa Northern and Western Ry. is building a station at Hull. It is in the Elizabethan style of architecture, and is built of stone and pressed brick to the height of the first story, above this in half-timbered work. The dimensions of the building are 50x24 ft. It contains a large general waiting-room with lavatories connected, a ladies' waiting-room about 16 ft. square with lavatories, etc., and dispatchers' office opening into the general waiting-room, all on the ground floor. In the basement is a hot water heating apparatus. The first floor is arranged for the stationmaster's house, with six good-sized rooms, including a large living-room, kitchen and bath-room. The baggage-rooms are 136x20 ft., and in close proximity to the station, and practically under the same roof, which is extended from the station to cover them. The architects are Finley & Spence, of Montreal.

The Co. is negotiating with the C.P.R. for permission to cross the tracks of that Co. in order to obtain an entrance into the Central station at Ottawa.

Canadian Northern Ry. Construction.

The terminal and shipping facilities at Port Arthur and Fort William are being rapidly pushed forward so as to be ready to handle traffic when the line through to Winnipeg is opened. Large areas of land are being reclaimed along the waterfront at Port Arthur between the elevator dock and the round

house, which latter is being enlarged to accommodate an additional five engines. The package freight dock is to be enlarged, a spur track laid on it, and a shed is being built on it. No. 5 dock is to be enlarged and used for the Co.'s through freight and coal docks are being constructed. A new track has been laid to West Fort William, and other tracks are being laid for the handling of freight, etc., between the two points. The laying of these tracks enables the straightening out of a heavy curve on the street railway. At West Fort William the Co. has purchased or obtained options on about 1,000 acres, valued at \$25,000. A temporary station is to be erected on South Water St., and it is proposed, if the Pither's Point property can be secured from the government, to erect a large hotel there next year. Large coal docks have been constructed on the banks of the Kaministiquia river, which is navigable for the largest vessels from the lake for several miles.

The Duluth extension, the portion of the old Port Arthur, Duluth and Western Ry., beyond Stanley, 19 miles from Port Arthur, has been cleared and the track put in running order to Gunflint narrows, at the International boundary, 66½ miles. W. Mackenzie says it is the intention to build between Gunflint narrows and Ely, Minn., 45 miles, the present terminus of the Duluth and Iron Range Ry. The distance from Ely to Duluth is 117 miles, which will make the distance between Port Arthur and Duluth, 247½ miles.

Track laying on the Ontario division of the main line between Stanley and Fort Frances was reported on Oct. 31 to have reached some distance beyond Sturgeon Falls, on the Seine river 162 miles west of Port Arthur and 50 miles from Fort Frances, to which point the line has been built from Winnipeg. The Seine river is crossed by a span of 140 ft. Mine Center is the next point to be reached. The work on this section is being retarded by the difficulty in obtaining men, although as much as \$2 and \$2.50 a day is being offered. There are some pieces of grading to be completed yet, but this is not delaying track laying. The line will not be through to the Rainy

river before the end of Nov. The section of the line connecting Beaudette, Minn., where the line from Winnipeg crosses the Rainy river, to Fort Frances is completed and the first train was run into Fort Frances on Oct. 12. For some days prior trains had been running to Emo. The Co. had expected to have the road through from Winnipeg to Port Arthur by Oct. 1, when a reduction of 2c per 100 lbs. on grain freight would come in operation. W. Mackenzie has informed the Manitoba Government of the reason why the Co. was unable to complete the road by the date mentioned, and added that there was no reasonable doubt that the road would be completed to Port Arthur this season, and just as soon as it is the reduction would come into effect.

C. Schreiber, Deputy Minister of Railways, has just returned to Ottawa after a trip over the road and reports that the track is an excellent one and equal to the C.P.R.

The Minnesota State Railway Commissioners recently inspected the portion of the line in that state, and Judge I. B. Mills, in an interview, said: "I have never seen a better roadbed for a new line, the grading has been well done, the ties are of good size and well laid, the ballasting is very uniform, and the 60 lbs. steel rails used is suitable for very heavy and very fast traffic. I consider this line perfectly safe for heavy traffic, and may say that I am much pleased with the fine, substantial bridges that have been built. The big bridge over the Rainy river at Beaudette is as fine a structure as I have ever seen on any road. Moreover, the road has few grades of any account, and is remarkably free from sharp curves. It is built for the future, and is calculated to carry traffic 10 times its present requirements. The stations and other buildings are all of a permanent character, better than is usually seen on a new road."

The bridge over the Red river between St. Boniface and Winnipeg is completed and ready for traffic. A contract for the erection of the St. Boniface station has been let to Mayor Senecal of that town. A large block of land has been secured for the erection of freight sheds and repair shops in St. Boniface.

The grading of the branch from St. Charles to Carman, Man., has been completed and on Oct. 13, Premier Roblin said track had been laid to within 3 miles of Carman. The branch was expected to be open for traffic by Oct. 30. It is proposed to extend the line westerly through the Boyne valley through Somerset.

The 16 miles connecting Beaver, Man., the terminus of the Northern Pacific branch from Portage la Prairie, with Gladstone Jct., the original starting point of the Lake Manitoba Ry. and Canal Co.'s line, now the C.N.R., has been completed, thus making through connection between Fort Frances, Ont., and the track end in Saskatchewan. Stations are being built on the extension.

Beyond Erwood, Sask., 280 miles from Gladstone Jct., to which point the main line is in operation, track laying was suspended early in the season in order that the steel might be utilized on other lines, and practically no additional mileage was laid. Over 20 miles have been graded and are ready for the steel, but it is not likely that much more work will be done this year. N. Keith is contractor for the grading.

W. Burns is in charge of a survey party engaged in locating the route for the continuation of the line to Prince Albert, 178 miles. J. Armstrong, lately in charge of construction on the line between Strathcona and Edmonton, has gone to Prince Albert to make an exploration survey for the further continuation of the line to Edmonton, about 330 miles. He will be joined later by M. C. McFarlane, who is in charge of construction of the Edmonton, Yukon and Pacific Ry. between Strathcona and Edmonton, Alberta. (Sept., pg. 279.)

The track of the old Northern Pacific line at Emerson, is being extended towards the Great Northern Ry. (U.S.), and this gave rise to a newspaper statement that the C.N.R. had arranged with the G.N.R. for an outlet to Duluth by that way for the through traffic. General Superintendent Hanna says the object of the C.N.R. in making the extension is to get the station nearer the center of the town than at present, so as to be in a better position to do business.

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RICHARD SOUTHAM, MANAGER

Canadian Ticket Agents' Association.

Secretary De La Hooke has issued two circulars to the members, detailing the arrangements for the annual meeting in Montreal. Following is the programme—

WEDNESDAY, NOVEMBER 6.

- 10.00 a.m. Reception at City Hall; address by Mayor Prefontaine.
 10.45 a.m. Annual meeting at Place Viger Hotel.
 1.30 p.m. Lunch on board the S.S. Tunisian on invitation of H. and A. Allan.
 3.45 p.m. Annual meeting to be resumed.
 8.30 p.m. Banquet at the Place Viger. Ladies will meet in the hotel parlors.

THURSDAY, NOVEMBER 7.

- 10.30 a.m. An interview with the photographer in front of hotel.
 11.00 a.m. Start for city and mountain trip, on the invitation of the Montreal St. Ry. Co.
 1.30 p.m. Lunch on board the S.S. Lake Simcoe, on invitation of the Elder-Dempster Co. The afternoon will be devoted to visiting places of interest in and near the city.
 7.00 p.m. Leave by Richelieu and Ontario Navigation Co.'s steamer for Quebec, taking supper on board.

FRIDAY, NOVEMBER 8, IN QUEBEC.

- 1.00 p.m. Lunch at the Chateau Frontenac.
 6.00 p.m. Steamer leaves for return trip to Montreal. Supper on board. Arriving back at Montreal on Saturday morning the party will disband.

The Richelieu and Ontario Navigation Company has extended a further invitation for a trip down the Saguenay.

The headquarters of the Association in Montreal will be at the Place Viger Hotel.

Mr. De La Hooke's circulars are always interesting reading. So as to confine the attendance at the meetings to members and their wives he says that "other relatives must necessarily be left at home to take care of the house and feed the bird."

Inspecting the Great Northern Ry.—

Messrs. Morley, McLeod, a son-in-law of Jno. Wannamaker, Hulm, Gowen & Beale, Philadelphia financiers, made a trip over the G.N. R. of Canada, on Oct. 22, in the private Pullman car Acantha, accompanied by Guy Tombs, G.F. & P.A. of the line. Good time was made, Hawkesbury to Joliette, 66 miles, taking 90 minutes, and Joliette to Shawanegan Junction, 55 miles, 60 minutes. Three stops were made after leaving Joliette, making the actual running time 55 minutes. The party inspected the Co.'s elevators and docks at Quebec, and then went to Montreal to look over the proposed terminals there. They expressed themselves well pleased with the line and its prospects.

With reference to the rumour mentioned in our last issue to the effect that the White Pass and Yukon Ry. intended using oil for its locomotives and steamships, we are advised by the General Manager that nothing will be done in the matter this year.

Mainly About People.

J. Murrode, Manager of the Brantford St. Ry., was married to Miss Cassie Donaldson Sept. 24.

Jas. Percival, a railway contractor of Portage la Prairie, Man., died there recently, aged 66.

G. R. Walkem, formerly Superintendent of the British Columbia Electric Ry. at Vancouver, has been appointed manager of the Vancouver Engineering Works.

J. J. Franklin, formerly Superintendent of the Montreal St. Ry. Co., died in Toronto, recently aged 64.

G. Bradley, Superintendent of the Cornwall Electric St. Ry., was married there Sept. 26, to Miss M. H. Weber.

Capt. J. Barry, harbor master of Chicago, Ill., died there recently, aged 34 years. He was born at Kingston, Ont.

The Duke and Duchess of Cornwall presented autograph photographs to T. Ahearn, President of the Ottawa Electric Ry. Co.

Mrs. Wm. Jackson, wife of the Trackmaster of the Central Ry. of New Brunswick, died at Hampton, N.B., Oct. 1, of paralysis, aged 71.

C. Stanton has been appointed chief clerk in the Department of Marine at Ottawa, and W. C. Gordon has been made a first-class clerk.

A. Colomb, City Passenger Agent of the G.T.R. at Biddeford, Me., died there Oct. 10. He was formerly station agent at St. John, Que.

W. S. Aldrich, consulting engineer, Toronto, has been appointed Director of the Thomas S. Clarkson School of Technology, Potsdam, N.Y.

H. P. Dwight, President of the Great Northwestern Telegraph Co., has presented 96 volumes of standard books to the Muskoka cottage sanitarium.

T. H. White, Chief Engineer of the Canadian Northern Ry., was married at Port Arthur, Ont., Oct. 14, to the widow of the late Thos. Marks.

W. R. Tiffin, Superintendent of the Northern division of the G.T.R., accompanied the Duke and Duchess of Cornwall and York on the portion of their trip over the G.T.R. lines.

T. Tait, Manager of Transportation of the C.P.R., left Montreal early in Oct. for a trip over the Co.'s lines to Vancouver, B.C., accompanied by his brother-in-law, Major Cockburn, V.C.

Hon. Jas. Sutherland, M.P. for North Oxford, Ont., is acting as Minister of Marine and Fisheries in succession to Sir Louis Davies, who has been appointed a judge of the Supreme Court.

Homer Pingle, formerly Superintendent of the C.P.R. Co.'s Telegraphs at Toronto, was found in his room at 84 Wellesley St., Toronto, with the gas turned on, on Oct. 5, and died soon afterwards.

W. H. Douglas, heretofore Superintendent of the Montreal Park and Island Ry. Co., has been given a position with the Northern Ohio Traction Co., one of the Everett-Moore syndicate's companies.

E. M. Bland, son of Canon Bland, of Hamilton, has been appointed assistant engineer on the eastern section of the Delagoa Bay Ry., with headquarters at Kaapmuiden Jct., Transvaal Colony.

J. Greenshields, of Danville, Que., who constructed a large section of the G.T.R., died at Iroquois, Ont., Sept. 23, aged 79. He was the father of J. N. Greenshields, K.C., of Montreal.

W. Wainwright, General Assistant and Comptroller of the G.T.R., returned to Montreal at the end of Sept., after spending about a month in England, where he had conferences with the President and directors.

T. Johnston, heretofore distributing agent and accountant of the passenger department of the C.P.R. at Montreal, has been appointed chief accountant of the Saranella and Moroto Ry., with office at Santiago de Cuba.

J. Bryce, Vice-President and General Manager Canadian Express Co., and Mrs. Bryce

returned to Montreal at the end of Sept., after spending some weeks in Europe.

C. E. E. Ussher, General Passenger Agent of the C.P.R. eastern lines, has been elected a member of the Executive Committee of the Canadian Forestry Association.

J. T. McKenna, ticket agent for the Canadian Northern Ry. at Winnipeg, was presented with a locket and chain by the Co.'s employes on his leaving for Livingstone, Mont., where he has been appointed station agent on the Northern Pacific Ry.

Wm. McCauley, who was injured in the smash-up on the C.P.R. at Proton, Ont., Aug. 10, died in the Toronto General Hospital, Sept. 27, aged 25. He was the only son of Alex. McCauley, Roadmaster of the Ontario and Quebec division, C.P.R.

Miss Estelle Beemer, daughter of H. G. Beemer, President of the Ottawa Northern and Western Ry., was married at Quebec, Oct. 30, to Rev. J. McP. Almond, of Grande Mere, who was Anglican Chaplain to the first Canadian Contingent to South Africa.

Prof. S. J. McLean, who has been conducting an inquiry into railway rates in Canada, on behalf of the Government, has concluded his investigation and returned to the University of Arkansas, where he will draw up his report and forward it to the Minister of Railways.

A. D. Shepherd, formerly General Freight Agent of the Southern Pacific Ry. Co. at San Francisco, has been appointed agent of the Pacific Improvement Co. at Vancouver, B.C. He will look after the Pacific Improvement Co.'s investments in the Esquimalt and Nanaimo Ry. and in the allied collieries.

T. Williams, General Superintendent of the Lake Superior division, C.P.R., at North Bay, was recently entertained at dinner at London, Ont., by the officials and employes of the district on the Ontario division, of which he was Superintendent prior to his promotion. The guests included officials from Toronto, Guelph and other places, as well as a number of the business and professional men of London.

F. P. Blackburn, of Chicago, who was one of the promoters of a company to build a transcontinental railway with its western terminal at Port Simpson, B.C., to be known as the British Pacific Ry., the bill for which was defeated in the Dominion Parliament in 1893, has filed a petition in bankruptcy showing debts of \$630,000, mostly contracted in connection with the project.

At the annual convention of the Master Car and Locomotive Painters' Association at Buffalo, N.Y., Sept. 10 to 13, the following were present from Canada: A. S. Colman, I.C.R., Moncton, N.B.; A. Gamble, C.P.R., Winnipeg; T. J. Hutchinson, G.T.R., London, Ont.; T. Jones, C.P.R., Montreal; E. A. Kimmerly, L.E. & D.R.R., Walkerville, Ont.; and W. Mackenzie, G.T.R., Montreal.

G. L. Courtney, whose portrait is given on pg. 321, was born at Chatham, Ont., Oct., 1868. He entered railway service in 1885, since which he has been consecutively to 1890 clerk G.T.R.; Aug., 1890, to Aug., 1898, with C.P.R., successively as clerk, travelling passenger agent, contracting freight agent and agent at Victoria, B.C.; Aug., 1898, to date, Traffic Manager Esquimalt and Nanaimo Ry. at Victoria, B.C.

W. Cross, who has been appointed Engineer of Tests of the C.P.R. at Montreal, was born at Birkenhead, Eng., 1842. He entered Canadian railway service in 1863, since which he has been consecutively to 1882 journeyman and foreman erecting shops at Montreal, G.T.R.; 1882 to 1887, Master Mechanic C.P.R. eastern division; 1887 to Mar., 1900, Master Mechanic western division, same road; April, 1900, to Oct., 1901, Consulting Mechanical Engineer western division, same road.

F. W. Bobbett, formerly Vice-President of the Spokane Falls and Northern Rd., a subsidiary of the Great Northern Ry., U.S., has left Spokane, Wash., for St. Paul, Minn., to assume the duties of cashier of the system. This change was delayed by the death of Assistant General Superintendent Downs of the Great Northern, who had been named as his successor. H. A. Kennedy, Mr. Downs' successor, has been elected to the vice-presidency of the western line, relieving Mr. Bobbett.

C. T. Malcolmson, chief engineer and manager of the department of machinery and electricity for the South Carolina Interstate and West Indian Exposition to be held at Charleston this winter under state and national auspices, is a graduate of the Armour Institute of Technology, of Chicago, with the degree of electrical engineer. He was born at St. Thomas, Ont., Jan. 31, 1872, and graduated from the Collegiate Institute at London, Ont., before going with his relatives to Chicago.

G. H. Webster, C.E., who has been appointed General Tie Agent for the C.P.R. was born at Creemore, Ont., Jan. 31, 1857. He entered railway service in 1872, since which he has been consecutively May, 1872, to Jan. 31, 1879, articled student Northern Ry. at Toronto; Jan., 1879, to April, 1882, assistant engineer Northern and Hamilton and Northwestern railways; April, 1882, to April, 1883, engaged in private practice in Winnipeg, Man.; June, 1883, to June, 1885, Assistant Engineer Manitoba and Northwestern Ry.; June, 1885, to July, 1900, Engineer-in-Charge same road; July, 1900, to Oct., 1901, Resident Engineer of main and branch lines on Western Division C.P.R., east of Moose Jaw.

Wm. Whyte, Assistant to the President C. P.R., had a short rest at Winnipeg after his recent trip across Siberia, and reached Montreal Oct. 1, to present his report to the President. The main object of Mr. Whyte's trip was to report on the trade requirements of Russia, and to discover what field there was open to Canadian commerce, via Vladivostok and the Trans-Siberian Ry., with a view to the establishment of a line of steamers from Vancouver to the Siberian port. Mr. Whyte has prepared a voluminous report on the subject which is under consideration by the President. Mr. Whyte has been asked to address the Canadian Manufacturers' Association at Montreal on Nov. 5 or 6. It is probable that his report will be made public shortly.

N. S. Dunlop, who has been appointed Tax Commissioner for the C.P.R., was born near Almonte, Ont., Jan. 17, 1861. He taught in the public schools of Lanark county for seven years, and having learned shorthand, went to Toronto in 1886, and took a position in a law office. He became Secretary and then President of the Canadian Shorthand Society; in 1888 he entered the office of the solicitors of the C.P.R. at Toronto, and in 1890 was placed in charge of the Co's. assessments and taxation in Ontario; he also had charge of gar-

nishee matters, inquests, investigations, etc., and did the expert shorthand court work for the Co. In 1893 he was elected to the council of the Canadian Stenographic Reporter's Society, subsequently becoming Secretary and afterwards President.

J. J. McCarthy, General Western Passenger Agent of the West Shore Rd. at Chicago, Ill., died in that city Oct. 19, after a lengthened illness. The funeral took place in London, Ont., Oct. 23, and was attended by a large number of railway officials. Mr. McCarthy was born at London, Ont., 1862, and entered railway service as office boy Great Western Ry. of Canada there, since which he has been consecutively in various clerkships and emigration agent same road; seven years joint passenger agent at Niagara Falls, N.Y.; four years travelling passenger agent New York Central and Hudson River and West Shore Rds.; to 1897 Canadian Passenger Agent same roads, and Rome, Watertown and Ogdensburg Rd. at Toronto; and from 1897 was at Chicago.

D. H. Purdon, now residing in Toronto, but formerly train despatcher on the C.P.R. at Winnipeg, is President of the Brandon and South Western Ry. Co., which holds a Dominion charter, and in that capacity had some dealings with S. Johnston, a contractor. In the course of negotiations the latter was in Aug., 1900, given a contract for the building of 100 miles of the line, and put up \$400 in cash and \$1,600 in promissory notes with the promoter, with the understanding, as Mr. Johnston says, that the cash and notes would be refunded if he didn't receive notice by July 1, 1901, when to begin work. He claims he did not receive any notice and that he subsequently found that Mr. Purdon's charter did not cover the 100 miles mentioned in the contract. As a result, Mr. Purdon was arrested in Toronto in Oct., on a charge of fraud and was committed for trial.

W. S. Kinnear, who has been appointed Assistant Superintendent of the Canada Southern division of the Michigan Central Ry., was born at Circleville, Ohio, May 25, 1864. He entered railway service in 1883 as axeman on construction Atchison, Topeka and Santa Fe Rd., since which he has been consecutively Sept., 1883, to Oct., 1884, rodman and draftsman on construction and transitman on location Southern Kansas Ry.; Oct., 1884, to April, 1885, rodman and assistant engineer on construction Kansas City, Clinton and Springfield Rd.; April, 1885, to April, 1886, assistant engineer maintenance of way Missouri Pacific Ry. at Kansas City, Mo.; April, 1886, to Aug., 1897, division engineer and office engineer Gulf, Colorado and Santa Fe Ry.; Aug., 1887, to Jan., 1889, in private practice in civil and hydraulic engineering at Los Angeles, Cal.; Feb., 1889, to Feb., 1890, office engineer, assistant engineer and acting Chief Engineer North and South American Construction Co., Santiago, Chili, South America; Feb., 1890, to April, 1895, assistant engineer maintenance of way Michigan Central Rd.; April, 1895, to

Jan., 1896, supervising engineer on construction Toronto, Hamilton and Buffalo Ry., at Hamilton, Ont.; Jan., 1896, to Oct., 1901, principal assistant engineer Michigan Central Rd., at Detroit, Mich.

Lacy R. Johnson, who has been appointed Assistant Superintendent of Rolling Stock for the C.P.R., was born at Abingdon, Berkshire, Eng., June 22, 1855, and educated at Abingdon grammar school. He entered railway service as apprentice at the Great Western Railway works, Swindon, June 1, 1870, serving till Dec. 20, 1875. He was Chief Engineer and Foreman of Mechanics, Jan. 1, 1876, to Aug., 1876, at the Royal arsenal at Woolwich; as fitter and erector Sept., 1876, to Nov., 1878; Manager of Davis & Sons engineering works, London and Abingdon, till Aug., 1879. In Sept., 1879, he went to India as draughtsman on the Scinde, Punjab and Delhi Ry., and was afterwards foreman of machine and erecting shops on same road. He left India Mar., 1882, on account of illness and entered the service of the G.T.R. at Montreal as draughtsman in June, 1882, left that Co. and entered the C.P.R. service as general foreman at Carleton Jct. Nov. 2, 1882. He was appointed Assistant Master Mechanic of Eastern division at Chapleau Nov., 1885, and in May, 1886, was appointed Master Mechanic of the Pacific division at Vancouver. With the advent of the Co.'s steamships on the Pacific, his duties were extended over the engineering department of the ships. He spent different winters in Hong Kong, superintending alterations and repairs to some of the Co.'s ships. In April, 1901, the C.P.R. having purchased the Canadian Pacific Navigation Co.'s fleet, he was appointed Superintending Engineer of both fleets, and severed connection with the locomotive and car department, being attached solely to the marine department. On Sept. 1 he was moved back to the locomotive and car department as Assistant Superintendent of Rolling Stock at Montreal.

RAILWAY APPOINTMENTS, ETC.

Algoma Central and Hudson's Bay Ry.—C. L. Vaughn is reported to have been appointed Car Accountant at Sault Ste. Marie, Ont., with charge of all car accounting as well as the distribution and movement of cars.

Canadian Pacific.—W. Cross, heretofore Consulting Mechanical Engineer of the C.P.R. Western lines at Winnipeg, has been appointed Engineer of Tests, with headquarters at Delorimier avenue shops, Montreal. He will look after the testing of materials and special devices for locomotives and cars, reporting to the Superintendent of Rolling Stock.

G. H. Webster, heretofore Resident Engineer of the main and branch lines of the Western division, east of Moose Jaw, has been appointed General Tie Agent for the entire system, with office in Montreal. His duties include the purchase of all track ties, piling,

Rails, Locomotives, Steam Shovels, Second-hand Plant, Dominion Wire Rope,	JAS. COOPER MONTREAL	Scrapers, Picks, Shovels, Wheelbarrows, Track Tools, Barrett-Jacks, Relaying-Rails
	CAMMELL STEEL RAILS	

telegraph poles and fence posts, for both maintenance and construction purposes. We are informed that it is not the intention at present to make any appointment to replace Mr. Webster as Resident Engineer at Winnipeg.

N. S. Dunlop, heretofore of the solicitors' office on the Ontario division, has been appointed Tax Commissioner, with office at Montreal. All assessment notices, tax bills and municipal notices about drainage matters and local improvements, such as the construction of roadways, sewers, sidewalks, etc., are to be sent to him direct.

It has been usual for some years past to open a dispatching office at Rat Portage, Ont., during the busy season, as the line between there and Winnipeg can be handled to better advantage from there than from Fort William. This season two sets of dispatchers have been placed at Rat Portage to handle work east and west of there over the Rat Portage and Ignace sections, with A. Hatton as chief dispatcher. The Fort William section is dispatched as usual from Fort William with A. W. Hodgson as chief dispatcher. The name of Wabigoon section has been changed to Ignace section, and Thunder Bay section to Fort William section.

B. W. Greer, heretofore freight and passenger agent at Victoria, has been appointed Assistant General Freight Agent of the Pacific division, with office at Vancouver, B.C. Agents will report direct to him on all matters affecting local freight traffic.

H. H. Abbott, heretofore freight and passenger agent at Portland, Ore., has been appointed freight and passenger agent at Victoria, B.C., succeeding B. W. Greer.

F. R. Johnson, heretofore freight and passenger agent at Tacoma, Wash., has been appointed freight and passenger agent at Portland, Ore., succeeding H. H. Abbott.

P. B. Thompson has been appointed freight and passenger agent at Tacoma, Wash., succeeding F. R. Johnson.

The partnership heretofore existing in Toronto between R. M. Wells, K.C., and Angus MacMurchy, under the name of Wells & MacMurchy, has been dissolved upon the retirement of Mr. Wells. Mr. MacMurchy has been appointed Solicitor for the C.P.R. Co., in succession to Wells & MacMurchy, retaining the offices at 212 Union Station, Toronto, and has entered into partnership with S. Denison and R. B. Henderson, under the name of MacMurchy, Denison & Henderson. The firm occupies offices for general business at 48 King Street West, Toronto.

W. E. McMullen, trackmaster of the northern section of the Atlantic division, with headquarters at Woodstock, N.B., has been temporarily transferred to St. John, N.B., to look after the construction of the bay shore yard, and of the new cattle sheds and other alterations and additions at West St. John, in connection with the winter port service.

The dispatching of trains between Port Arthur and Fort William has been transferred to the dispatching office at Schrieber. Although the track between Port Arthur and Fort William is on the Western division, Fort William is the western terminus for all trains running over the Lake Superior division, and it was considered advisable that they should be handled through to Fort William by dispatchers of the Lake Superior division. The only movement of trains or engines belonging to the Western division between Port Arthur and Fort William is that of the yard engine, which makes a couple of trips every 24 hours.

R. A. Bainbridge, division engineer of the Cascade and Thompson sections of the Pacific division, has been transferred to the Kootenay and Boundary district lines, succeeding F. P. Gutelius, transferred to the general offices at Montreal.

Grand Trunk Ry.—T. S. Scott having resigned, C. O'Dell has been appointed road-

master of district 16, and that part of district 15 between east semaphore at York and mile-age 3, west of North Parkdale; office at Toronto.

J. Henry has been appointed roadmaster on lines between Sarnia tunnel and London, Komoka and Glencoe, Glencoe and Kingscourt, and the Petrolia branch, vice C. O'Dell, transferred; office at Sarnia tunnel.

C. J. Crowley has been appointed Resident Engineer of the Western division, assuming all duties heretofore performed by E. French, who has resigned to take service with another company.

R. P. Dalton, Assistant Superintendent of the Western division, having resigned to become Superintendent of Terminals of the St. Louis, Iron Mountain and Southern Ry. at Fort Smith Crossing, Ark., the office of Assistant Superintendent has been abolished.

Jno. Ehrke, heretofore yardmaster at Elsdon, Ill., has been appointed trainmaster district 25, main line Port Huron to Battle creek, and district 26. Office at Battle Creek, Mich.

B. W. Murphy has been appointed yardmaster at Elsdon, Ill.

T. Fogerty has resumed charge as Roadmaster, district 25, between Port Huron and Lansing, vice J. Mullen assigned to other duties. Messrs. Fogerty and Mullen have merely exchanged places, Mr. Fogerty having gone on as general foreman in charge of construction on the 2nd main line track.

T. Fogerty has been appointed Roadmaster of district 25, between Port Huron and Lansing, Mich., with headquarters at Durand, Mich., vice J. Mullen, assigned to other duties.

W. J. Hunter has been appointed Commercial Agent, Pittsburg, Pa., with office at 404 Park building, vice G. W. Parker, Travelling Freight Agent, resigned to become General Freight and Passenger Agent of the Detroit United Railways.

R. W. Long has been appointed Commercial Agent at Buffalo, N.Y., with office at 285 Main St.

The office of New York State Agent has been abolished, and matters previously handled by Mr. Hunter will in future be under Mr. Long's jurisdiction.

S. A. Jones, heretofore travelling freight agent at Detroit of the Commercial Express line, has been appointed travelling freight agent for the G.T.R., with headquarters at Buffalo, N.Y.

Outside ticket offices have been opened and agents appointed as follows: Gore Bay, Ont., J. R. McGregor; Little Current, Ont., T. Sims; Sault Ste. Marie, Mich., C. H. Hill.

The following agents have been installed: Falmouth, W. Olson; Chaudiere Curve, Pass. L. Emond; Burks Falls, W. Maxwell; Sundridge, W. H. Stinson; Meaford, R. F. White; St. George, R. W. Morgan; Shallow Lake, S. N. Milligan; Centralia, C. H. Duplan; Belsay, A. Oliver; Drayton Plains, G. Rankin; Orchard Lake, Mrs. A. M. Reick.

Great Northern Ry. of Canada.—J. J. Corner, Master Car Builder, is reported to have resigned to enter the service of the Dominion Iron and Steel Co. at Sydney, N.S.

Intercolonial Ry.—F. B. Atkinson has been appointed to investigate claims and personal injuries. His jurisdiction will be between Montreal and Campbellton, not including Campbellton. He will be known as the Agent of Claims and Personal Injuries, with office at Levis. He will report to the Manager.

Since Oct. 15 the jurisdiction of G. Skeffington, Chief of Police, is from the north switch, Moncton, to Montreal. John Ring has been appointed Chief of Police for the remainder of the line. Both will have office at Moncton and report to the Manager.

The jurisdiction of F. J. Lozo, Master Mechanic, and J. Murphy, Road Foreman of

Locomotives, has been extended to the west limit of Moncton yard.

N. L. Rand, Road Foreman of Locomotives, has jurisdiction over all lines east of the west limit of the Moncton yard.

Michigan Central Rd.—W. S. Kinnear, heretofore principal assistant engineer at Detroit, Mich., has been appointed Assistant Superintendent of the Canadian Division. Office at St. Thomas, Ont.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—E. Pennington has been elected 2nd Vice-President. He will also continue as General Manager.

Quebec Southern Ry.—The office of H. A. Hodge, President, has been removed from Rutland, Vt., to Montreal.

Sydney and Lousburg Ry.—The position of Superintendent, formerly held by A. L. McLennan, has been abolished, the duties being assumed by Traffic Manager W. Coyne.

White Pass and Yukon Route.—E. C. Hawkins having resigned as General Manager, the duties of that office will hereafter be performed by A. B. Newell, Vice-President, with title of Vice-President and General Manager.

H. Weig has been appointed passenger and freight agent at Chicago, Ill. with office at the Chamber of Commerce Building.

November Birthdays.

Many happy returns of the day to

S. Burke, Cleveland, Ohio, President Central Ontario Ry., born in St. Lawrence, Co., N.Y., Nov. 26, 1826.

M. J. Butler, Chief Engineer Bay of Quinte Ry. and Navigation Co. at Deseronto, Ont., born at Deseronto, Ont., Nov. 19, 1856.

F. Conway, General Freight and Passenger Agent, Kingston and Pembroke Ry., at Kingston, Ont., born at Ernestown, Ont., Nov. 19, 1850.

W. L. Crighton, Advertising Agent, Intercolonial Ry., at Moncton, N.B., born at Derby, Eng., Nov. 9, 1871.

Wm. Downie, Superintendent C.P.R. at Nelson, B.C., born at Rock Currie, Ireland, Nov. 12, 1850.

R. Doyle, Trainmaster, Buffalo division Wabash Rd., at St. Thomas, Ont., born at Dudley, Ill., Nov. 12, 1862.

C. Drinkwater, Secretary C.P.R. at Montreal, Que., born at Ashton-under-Lyne, Eng., Nov. 17, 1843.

W. Hendrie, Hamilton, Ont., railway promoter and contractor, and President of Hendrie & Co., cartage agents G.T.R., born at Glasgow, Scotland, Nov., 1831.

C. R. Hosmer, Montreal, director C.P.R., born at Coteau Landing, Que., Nov. 12, 1851.

C. Murphy, Superintendent C.P.R. at Chappell, Ont., born Nov. 20, 1865.

F. Nicholls, Toronto, President Brantford Street Ry., born in England, Nov. 23, 1856.

P. A. Peterson, Chief Engineer C.P.R. at Montreal, Que., born at Niagara Falls, Ont., Nov. 8, 1839.

J. A. Rennie, Master Mechanic Caraqueet Ry. at Bathurst, N.B., born at St. John, N.B., Nov. 1, 1858.

W. B. Rosevear, General Traffic Manager Algoma Central and Hudson's Bay Ry., at Saulte St. Marie, Ont., born at Belleville, Ont., Nov. 28, 1864.

J. C. Shields, Superintendent Hancock and Calumet and Mineral Range Rd., at Hancock, Mich., born at St. Mary's, Ont., Nov. 29, 1853.

H. P. Timmerman, General Superintendent C.P.R. at Toronto, born at Odessa, Ont., Nov. 6, 1856.

Arthur White, Division Freight Agent G.T.R. at Toronto, born at Hadleigh, Suffolk, Eng., Nov. 17, 1840.

C. M. Hays and the Southern Pacific.

On Sept. 28 the rumors about Mr. Hays' resignation of the Presidency of the Southern Pacific Co. were confirmed in the following statement which he gave out: "The change in policy and organization of the company, consequent upon a change in the ownership and control of the Southern Pacific shortly after my taking service with the Co. has made the place, originally attractive to me, so much less so that I, several weeks ago, voluntarily placed my resignation and surrender of my contract with the Co. at the disposal of the executive committee, to take effect on such date and upon such conditions as might be agreeable to them. We have agreed upon Oct. 1 as the date upon which my resignation shall become effective. The announcement as to my successor, etc., will doubtless be made shortly. I have no definite plans as yet, but expect to remain some weeks enjoying the country with my family at Menlo Park, and will probably go east some time early in Dec."

A large number of rumors have been afloat respecting Mr. Hays' future, and the daily papers have appointed him to several positions, the last one being the Presidency of the Erie Rd.

Following Mr. Hays' resignation came those of E. H. Fitzhugh, Assistant to the President, and R. H. Ingram, Executive Secretary, both of whom left the Central Vermont Rd. to enter the S.P. service under Mr. Hays. J. M. Herbert, formerly of the G.T.R., has since resigned the managership of the Pacific division of the S.P., to which he was recently appointed.

E. H. Harriman, Chairman of the Executive of the S.P., has been elected President, succeeding Mr. Hays.

Passenger Traffic Matters.

The Lake Erie and Detroit River Ry. has opened a down-town office in the Masonic Temple, London, Ont.

The Advisory Committee of the Western Immigrant Bureau, at a recent meeting in New York, had a lengthened discussion on the question of through ticketing to Europe, a matter in which the C.P.R. is much interested. R. Kerr, Passenger Traffic Manager

of the C.P.R., was present. Although the matter was thoroughly discussed from all points of view no definite conclusions were reached, the representatives of U.S. lines being divided among themselves on the question. There is no deadlock, neither have the competitive conditions between the U.S. lines and the C.P.R. become more acute, as daily press reports say. The relations between the C.P.R. and the U.S. lines continue good and friendly, and every indication points to their remaining so.

The C.P.R. issued two very handsome publications in connection with the royal visit. The first is entitled "The Royal Visit to Canada," and is printed in two colors on heavy enamelled paper. It contains pictures of the royal train, and the descriptive letterpress of the route across the continent is illustrated by many pictures of the important, interesting or historic scenes. A special edition bound in English calf was sent to the Duke and Duchess of Cornwall and York, and an edition in a stiff paper cover with embossed gold lettering has been printed for general circulation. The second publication, entitled "Across Canada," is a specially printed edition of the annotated time-table. It gives a description of the royal train of a more technical character than is given in the first publication, with plans and particulars of the Co.'s steamers, etc., together with the timetable of the train. It is printed on rough-edged handmade paper, and has the coat of arms of the royal travellers embossed in gold on the cover. Both pamphlets were printed by the Mail Job Printing Co., Toronto, and are the highest class of typographical art that can be produced.

The G.T.R. souvenir of the Royal tour through Canada takes the form of a handsome octavo book finely printed on rough surfaced hand-made paper, and embellished with many engravings of scenes along the line, printed on heavy enamelled paper. Each view is enclosed on a grey toned border in which the rose, thistle and shamrock appear on the top of the page, maple leaves at the sides, and roses at the bottom. The introduction consists of seven pages of a well-written historical review of the growth of Ontario, together with references to its climate, the attractions it offers to sportsmen, and its geological and mineralogical features. The initial

letters and marginal headings are in red, and the pages are also adorned with heraldic lions rampant in grey. The annotated time table of the portions of the G.T.R. system travelled over follows, one page being devoted to this, while the opposite page is left blank for memoranda. The country through which the royal train passed is described in an interesting manner. At the end is a list of the chief officers of the Co. The cover is of stiff grey paper, with a title worked in four colors; the book is stitched with a silk cord tied on the outside, and is enclosed in an envelope to match the cover. Specially bound copies were presented to the Duke and Duchess.

Canadian Society of Civil Engineers.—Owing to the very small number of members who expressed their intention of attending the summer meeting, which it was proposed to hold at Buffalo, N.Y., Sept. 26, 27 and 28, the idea was abandoned.

SHIPPING MATTERS.

Maritime Provinces and Newfoundland.

Some damage was recently done to the Dominion cruiser Minto owing to a fire in the main engine room and the explosion of an oil tank.

The Reid Newfoundland Co.'s str. Fife, which went ashore on the Western Twin island, Newfoundland, Nov. 17, 1900, has become a total wreck.

The Charlottetown Steam Navigation Co. has under consideration the question of putting on a steamer between Prince Edward Island and Sydney, N.S.

The Plant liner La Grande Duchesse has been sold to the Ocean Steamship Co., of Savannah, Ga., and will be put on the route from that port to New York.

The Nova Scotia Steel Co. is erecting a pier at North Sydney, N.S., which it is expected will be completed in the spring. H. Donkin, C.E., is the engineer.

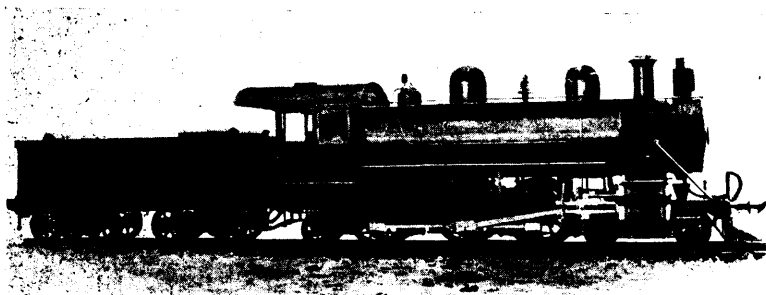
The Dominion Atlantic Ry. Co. is reported to have placed an order with Denny's ship-building yard, Dumbarton, Scotland, for a fast steamer to replace the Prince Rupert on the Digby-St. John, N.B., route, the business

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THOS. C. IRVING,

Gen. Man. Western Canada, Toronto.

JOHN A. FULTON,

Gen. Man. Eastern Canada, Montreal.

offering being larger than can be handled by this boat.

Application has been made for a patent in Newfoundland, by G. Makinson, of The Goulds, Brigus, Nfld., for a lifting apparatus to be used for floating stranded ships.

The Pickford & Black Steamship Co. is reported to be negotiating with the Furness line for the charter of the str. Dahome as an additional vessel for the West India route.

The str. Bona Vista has been chartered by the Plant line for its Boston-Halifax service to replace the Olivette, which goes on her usual winter route from Tampa to Havana.

A small steamer, it is reported, is to be built at Bridgetown, N.S., to run between that port and St. John, N.B., in summer, and St. John and Annapolis, N.S., in the winter.

The new steamers being built on the Clyde for the Dominion Government to replace the Druid and the Newfield, are expected to be completed and delivered in June and July next respectively.

The regulation requiring all boats to report at Customs, both inwards and outwards, is to be strictly enforced in the Maritime Provinces with a view to preventing U.S. tug boats illegally engaging in towing in Canadian waters.

The steam trawler Harbinger was given her trial trip at Yarmouth, N.S., recently. She is fitted with steeple-compound engines of 75 h.p., nominal, and her boiler is tested to a pressure of 135 lbs. Her speed is $8\frac{3}{4}$ knots an hour.

A fog whistle station is being erected at Louisburg, N.S. The building will be of brick, and the horn will be operated by a gasoline engine. It will shift automatically in a semi-circle, blowing a blast in three different directions.

The Plant line str. Halifax, which grounded on Minot's rock, Boston, recently, has been repaired and refitted at a cost of \$47,000, at Wilmington, N.C. The passenger accommodation has been rearranged, and the saloons re-upholstered.

Experiments at Cape Race have demonstrated that under certain atmospheric conditions the fog horns cannot be heard within certain areas, though further off, and within the extreme limits they are distinctly audible. There are several of these areas or zones.

Staff-Captain Tooker, of H.M. survey ship Gulnare, reports that the currents between the Newfoundland banks and the coast north of Cape Race are entirely in accord with the Admiralty charts so far as the area within about 25 miles of the coast are concerned.

The International Steamship Co., of Portland, Me., which operates a line between Boston, Mass., and St. John, N.B., has been purchased by C. W. Morse, of New York, who will amalgamate it with three other companies running from Boston to all the Maine coast ports.

Press reports state that owing to the increase of business between Newfoundland and Canada, the Reid Newfoundland Co. will next year place an additional steamer on the North Sydney and Port-au-Basque route, of a somewhat similar size to the str. Bruce, making a daily instead of a tri-weekly service.

Steps are being taken to raise capital at Isaac's Harbor, N.S., to organize a company to operate a steamship between Canso and Halifax. The statement is made that the Co. when organized and the boat ready for service will be entitled to a subsidy of \$4,000 a year from the Dominion and \$2,000 a year from the Provincial Government.

Col. Anderson, Chief Engineer of the Department of Marine, who has been inspecting the lights and fog signals at Cape Race and

at Belle Isle, recommends the erection of a new lighthouse on the north-east corner of Belle Isle, and a special investigation as to which form or size of whistle bell is most penetrating in the atmospheric conditions prevailing off Cape Race.

In Sept., 1900, the Dominion Atlantic Ry. Co.'s steamers made 24 trips from Boston to Yarmouth, and carried 3,733 passengers; in the same period the Yarmouth Steamship Co.'s boats made 21 trips, and carried 2,954 passengers between the same ports. This year the D.A.R. absorbed the Y.S.S. Co., and running all the steamers made 30 trips between Boston and Yarmouth, carrying 3,740 passengers. Owing to the removal of competition the D.A.R. receipts from this traffic are nearly double what they were in 1900.

Among the sailing ships on the stocks or just launched are the following:—a 550 ton barkentine for New York owners, at W. R. Huntley's yard, Parrsboro', N.S.; a 650 three-masted schooner, for H. Gillespie & Co., Parrsboro', at T. K. Bentley's yard, Port Greville, N.S.; a barkentine, 180 ft. over all, 38 ft. beam, and 14 ft. depth of hold, at J. Monteith's yard, Maitland, N.S.; and a three-masted schooner, 130 ft. over all, 33 ft. beam, and 12 ft. depth of hold, for Sumner & Co., Moncton, N.B., at the yard of H. H. Graves, Harvey Bank, N.B.

Province of Quebec Shipping.

A new fog alarm or siren is being established at Fame Point on the St. Lawrence.

Captain Bernier offers to navigate the Polaris, one of the Quebec-Levis winter ferries, to the island of Anticosti, in Jan. or Feb. next. He says the round trip can be made from Quebec in eight days.

A large and powerful dredge is to be constructed at the Government shipyards at Sorrel. It is to be larger than the one recently launched at the Polson Ironworks, Toronto, which is to be given an official test early in Nov.

During the four months ended Aug. 31, 469 vessels, representing a tonnage of 935,238 tons, arrived in Montreal from over-sea ports. Very few tramp steamers have arrived in the port this year owing to the low freights prevailing.

The Leyland line has decided to put on an increased number of steamers between Quebec and London next year, and the Great Northern Ry. Co. has contracted with three other lines to supply cargoes for their boats next year.

The Montreal Harbor Commissioners have asked the Dominion Government to utilize the Lord Stanley, or a similar steamer, to prevent the formation of the icebridge or jam at Cap Rouge, with a view of enabling navigation to be opened a couple of weeks earlier than is customary.

It is understood that the R. & O. Navigation Co. has disposed of three of its steamers, the Island Queen, Caspian and Riviere du Loup. Another boat is being built for the Montreal-Quebec run, and it is reported that two additional boats will be launched in the spring also for the lower St. Lawrence service.

The feasibility of the winter navigation of the St. Lawrence is to be tested this winter. F. H. Clergue, of Sault Ste. Marie, is going to operate the ice crusher Algoma, formerly used in the Straits of Mackinac, between Quebec and open water, but Chief Engineer Kennedy, of the Montreal Harbor Board, says she is too small for the work. Arrangements have been made for the loading of steamers at Quebec a month later than usual.

H. A. Allan, of Montreal, in a recent interview, denied that the Allan line will make its

Canadian headquarters at Quebec. He further stated that the slight imperfections of the Montreal route were being exaggerated in every quarter, particularly through the medium of the Montreal papers, to the detriment of the city and country. "Far from retrograding," he said, "the route is constantly becoming better. What is required now is the deepening of the channel between Montreal and Quebec. Mr. Tarte has promised that this will be done, and I have no doubt that ere long this will be accomplished."

Capt. Wolvin, having received a negative reply from the Dominion Minister of Public Works, in regard to his proposal to operate a fleet of grain steamers to Port Colborne, and bargesthence to Montreal, in return for certain privileges, is turning his attention to Quebec. Mr. Smith, who is Capt. Wolvin's representative, and who also represented the Connors syndicate in its abortive scheme at Montreal, has been in Quebec interviewing merchants and the heads of the railway and shipping companies there. Mr. Smith explained what his principals wanted to a gathering at which Hon. John Sharples, Hon. C. Fitzpatrick, W. Power and F. Grundy, and representatives of the Quebec Terminal Ry. were present. It is understood that the Terminal Ry. Co. will draw up some proposals and submit them to Capt. Wolvin.

Ontario and the Great Lakes.

Low water in the Ottawa river is impeding navigation, one authority stating that the water has not been so low for 15 years.

It is reported that next season a direct line of steamers will be run from Owen Sound to Mackinac.

T. E. Connors, Fort Frances, Ont., is building a ferry boat 45 ft. long and 10 ft. beam, to run between there and Koochiching, Minn.

The officers of the Department of Marine are making enquiries for a suitable vessel for conducting the hydrographic survey of Lake Superior.

The str. W. L. Brown, of the Canada Atlantic Transit Co.'s fleet, was recently loaded at Duluth, Minn., with 240,000 bush. of wheat in 6½ hours.

The National Transportation Co., having a capital of \$2,500,000, is being organized in New Jersey to engage in the freight trade on the Great Lakes.

The Northwest Transportation Co., a Dominion corporation, has been granted an Ontario license, and J. J. Long, of Collingwood, President of the Co., has been named its attorney.

The Marine Record contends that in making the entrance to lake ports only 200 or 300 ft. wide, an error has been committed, and that the entrance should be at least the length of a modern vessel.

For Sept. 4, 135,237 tons of freight passed through the Canadian and U.S. canals at Sault Ste. Marie, making an aggregate for the season of 20,369,065, or 467,592 in excess of the figures of 1900.

The Rainy River Navigation Co. has been running a daily service between Rat Portage and Fort Frances, the Keenora taking the lake service to Beaver Mills, and the Agwinde, the river service to Fort Frances.

It is reported that Folger Bros., Kingston, purpose having two new boats on the St. Lawrence next year, one to carry 1,500 passengers for the Kingston-Ogdensburg service, and the second to carry 250 passengers.

A two-decked steamer, the Pontiac, for passenger and towing purposes, and having a speed of 12 miles an hour, was recently completed at Arnprior by McLachlin Bros.

She will run between Arnprior and Portage du Fort.

The Algoma Central and Hudson's Bay Ry. Co. is maintaining lights at Michipicoten harbor, and the Dominion Government has put up a temporary light at Gros Cap point, pending the erection of a lighthouse there. Last year four steamers moved 30 cargoes of iron ore from the Co.'s pier.

A U.S. Co. is being organized under the title of "The Rapid Transit Co. of the Thousand Isles," to build a big excursion steamer to run between Ogdensburg and Kingston. The proposal is to have a 22 mile an hour boat, with a capacity of 1,200 passengers.

The Port Colborne harbor improvements are expected to be completed by 1902, and 20 ft. depth of water will be provided. The breakwater will be 5,800 ft. in length, and good progress has already been made with it by Hogan & MacDonnell, the contractors.

The Lake Carriers' Association, which is maintaining a lightship at the South-east Shoal, Pelee Passage, Lake Erie, has induced the U.S. Government to appoint a commission to investigate whether a lighthouse should be erected on the shoal, or if it will be sufficient to maintain a lightship.

In reference to the report in the daily papers that the Canada Atlantic Ry. had decided to change the U.S. terminal of its boats from Milwaukee to Duluth, we are informed officially that there is no change in any of the Co.'s ports of call, such ports being Chicago, Milwaukee, Duluth, and Fort William.

The Plant liner Miami, which was run between Mackinac and Duluth under charter to the Northern Steamship Co. during the past season, has returned to salt water, where she

will resume her former run between Miami, Fla., and Nassau, W.I.

During August 139,037 tons of freight was carried through the Soulanges canal, making 559,052 tons for the four months. Of the freight grain represented the greatest total, 2,087,990 bush. being carried in Aug., and 11,523,140 bush. in the four months.

The steamer proposed to be built for next season's trade for the Booth Line between Port Arthur and Duluth, in conjunction with the str. Argo, will have the following dimensions: length on water line, 170 ft.; breadth, 28 ft.; depth, 20 ft. She will have ninety staterooms and a cargo capacity of 200 tons.

As a result of two years of survey work carried on by Mr. Chapleau, of the Dominion Public Works department, maps have been prepared showing the different channels of the St. Lawrence between Kingston and Prescott. The Canadian channel is found to be 49½ miles, or 2½ miles shorter than the U.S. one, and there will be no difficulty in making an 18 ft. channel.

Major Fisk, of the U.S. engineering staff, who is investigating the lake levels, says the power plants at Niagara will not materially affect the level of Lake Erie, and that if the worst came it would not be a difficult task to build a dam across Niagara river and raise the lake level several feet. Major Fisk is gauging the quantity of water passing through the Detroit river.

The Montreal Transportation Co. has just had built at Hamilton a barge, 206 ft. long, 41 ft. beam, with a draught of 14 ft. 6 in. She is built of steel plates to the waterline, and below this of rock elm. The keel was laid on May 1, the launch took place on Sept.

23, and the barge arrived at Kingston Oct. 22 on her first trip.

The four boats built by the Northwestern Steamship Co. for the Chicago-European trade made two round trips each, and are being fitted out for the winter. They will take cargoes of provisions and grain, the latter being discharged at Buffalo, and the former at St. John's, Newfoundland, and will engage in a general coasting trade.

The steamer Richelieu, formerly in the R. & O. Navigation Co.'s service, and now under charter to the Lake Ontario and Bay of Quinte Steamboat Co., heeled over, owing to the shifting of her cargo, and sank in 100 ft. of water 10 miles from Kingston, Oct. 2. There was no loss of life. The steamer has been raised and towed into Kingston, where she will be overhauled.

The Port Stanley Navigation Co. (Ltd.) is in process of organization, with W. A. Day, J. E. Ellison, J. Arnell and J. Gough, of Port Stanley; and E. A. Smith and E. W. Honsinger, of St. Thomas, as provisional directors, to build a passenger steamer for service on Lake Erie. The dimensions of the vessel will be: length, 80 ft.; breadth, 21 ft.; depth, 9 ft.; on a draught of 7 ft. The proposed capital is \$8,000 in \$5 shares.

At the beginning of the season a contract was entered into between the G.T.R. and the Port Huron and Duluth line of steamers for carrying grain and package freight from Duluth for transhipment to the G.T.R. at Port Huron. The service has proved so satisfactory that the contract has been extended, and it is reported that four steel steamers are to be built for this trade. No Canadian traffic is handled by these steamers, the Northwest

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:

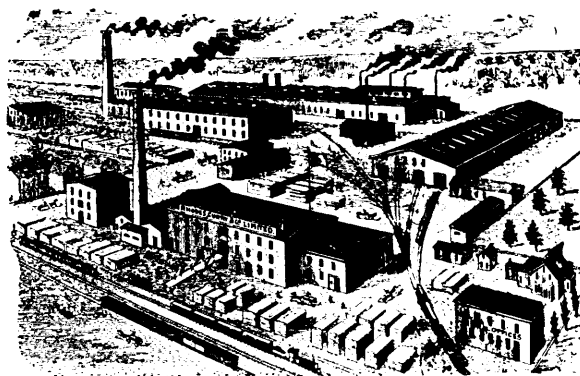
160 acres at \$3.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.
160 acres at \$3.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.
160 acres at \$4.00 per acre, 1st instalment \$95.85, and nine equal instalments of \$80.
160 acres at \$4.50 per acre, 1st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



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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.

	Capacity	
Burlington Elevator, St. Louis, Mo.	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		

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

Transportation Co.'s steamers sailing between Sarnia, Fort William and Duluth handling the Canadian business.

The Northwest Transportation Co.'s new steamer *Huronic*, now being completed at Collingwood, is the largest lake boat ever built in Canada. She is intended for the Co.'s passenger and package freight service, and was built under the Bureau Veritas survey, being placed in the highest class. At with a star for 20 years. The *Huronic* is built of open hearth steel throughout, her dimensions being: length 325 ft. over all, 308 ft. between perpendiculars; breadth, 43 ft.; depth 27 ft. moulded. The hull is divided into seven watertight compartments by six bulkheads, and is provided with water ballast tanks having a capacity of 800 tons. Accommodation is provided for 250 cabin, in addition to a large number of steerage passengers. The lower hold has a capacity for 80,000 bush. of wheat, and 700 tons of package freight can be carried on the main deck. The *Huronic* is to be propelled by a single screw, the engine being triple expansion, 26, 42 and 70 in. cylinders with a piston stroke of 42 ins., to which steam is supplied from 4 Scotch boilers 12½ ft. in diameter and 12 ft. long, at a pressure of 175 lbs. a square inch. She is expected to have a speed of 15 miles an hour in any weather, and to make 20 miles an hour under favorable conditions. The cost will be about \$300,000.

Manitoba Shipping Matters.

The Northwest Fish Co., Ltd., has been incorporated under the Manitoba Companies' Act, with a capital of \$18,000, and head office at Winnipegosis. It is among other things empowered to own and operate steamboats.

W. J. Stewart, C.E., who has been at work all summer on a topographical survey through Lake Winnipeg, has completed all the work that can be done at the lake this year. He has been getting information for the making of a Dominion Government chart of the shoals and depths of the waters along the coast. The undertaking is a necessary one, when it is known that no insurance can be secured for boats navigating there, owing to the dangers that beset the navigators. As the shipping on this lake will increase every year, and as it is now of no mean proportions, the survey will be of great benefit. The Government has voted about \$10,000 for the work, which will take about three years to complete.

Pacific Coast Shipping.

The B.C. Marine Ry. Co. is increasing its plant for ship repairing and ship building at Esquimalt.

Some information about the White Pass and Yukon Ry.'s steamers will be found in the report of the annual meeting of that Co. on pg. 327.

The cruiser recently built at Victoria, B.C., for the Dominion Government, was given a trial trip Oct. 11, and maintained a speed of 8 miles an hour.

Capt. Wallace and W. Haywood, who own and operate the steamer *Defiance* between Victoria and Howe Sound, have contracted for the building of a 15 knot steamer for the coast route.

Tenders have been invited by the Dominion Government for the erection of an improved lighthouse at Brocton point, Vancouver. The new building will be 34 ft. square, two stories high, with a tower for the light.

The Victoria and Sidney Ry. Co. has been operating the steamer *Iroquois* between Victoria, B.C., and the Gulf islands for some time. Now the Esquimalt and Nanaimo Ry.

Co. has put the *Thistle* on the same route, and the rates have been cut down one-half.

A navigable channel from Chatham sound into the Skeena river has been surveyed and buoyed by the Dominion cruiser *Quadra*. A low water depth of 2¼ to 13 fathoms exists, while the rise and fall of the tide is 21 ft.

The White Pass and Yukon Ry. is reported to be experimenting with California oil as fuel on its Yukon steamships plying between Whitehorse and Dawson. Oil costs 30c. a barrel at Bakersfield, Cal., and laid down at Dawson its cost is about 50% less than that of wood at \$5 a cord.

It is reported from Seattle that about 20 of the passengers on the *Islander* have entered suit in the U.S. court at that place against the Canadian Pacific Navigation Co. for loss of property and injury to health, while the relatives of passengers who were drowned are seeking damages for loss of life.

The Upper Yukon steamers are cutting rates, and the independent lines from Dawson to Whitehorse are quoting \$30 first-class and \$20 second-class. The White Pass & Yukon Ry. is giving an equally low rate for local traffic and cutting the rate for through traffic from Dawson on its railway from Whitehorse to Skagway.

The Dominion Department of Public Works is constructing 4,000 ft. of dams to confine the water at the head of Lake la Barge in one deep channel, removing one of the fingers at Five Fingers, and clearing some boulders from the Thirty Mile river, on the Upper Yukon. Superintendent Tache is in charge of the work.

The steamer formerly known as the J. R. McDonald has been rebuilt at Vancouver, and has been renamed by the Union Steamship Co. as the *Cassiar*. Her measurements now are: length, 127 ft.; beam, 28 ft. 8 in.; draught, 8 ft. 10 in. The *Cassiar* has a speed of 12 miles an hour; she will be put on the route between Vancouver and Port Neville.

The Alaska Steamship Association, which comprises in its ranks representatives of the various transportation companies having lines to Alaska from Victoria, Vancouver and Seattle, has been revived. It has decided to maintain present passenger and freight tariffs; that Canadian boats shall handle business of Canadian origin, and U.S. lines U.S. business and to discontinue the business of "absorbing the local fare."

The C.P.R. Co., as will be seen by reference to the report of the annual meeting on pg. 321, proposes to have built a steamship somewhat similar in style and arrangements to the *Empress* steamships now engaged in the trans-Pacific trade, but not of larger size, and of greater speed and cost. A. Piers, the Co.'s Superintendent of Steamships, will make a trip to Japan and China at an early date, after which he will probably go to Great Britain and arrange for the construction of the additional vessel.

A contract has been placed at Victoria, B.C., by the Imperial Government for the construction of two twin-screw steam launches for the submarine mining service at Esquimalt. The launches will each be 50 ft. in length, 13 ft. beam, and 5 ft. 9 in. depth. The engines will be of the fore and aft compound type, to which steam will be supplied by a Scotch boiler tested to 240 lbs. to the square inch. The launches are to be flush decked, and fitted with derricks for handling submarine mines, etc. The contract calls for delivery in nine months.

Three-fourths of the Upper Yukon steamers will tie up at Whitehorse, where several went into winter quarters towards the end of September. The British Yukon Navigation Co. operates a majority of the vessels, the management of which recently announced

that every steamer of the fleet would probably be tied up for the winter by Oct. 15th. Several of the Co.'s steamers will go into winter quarters at Dawson, as also a large number of the Lower Yukon fleet. Below Dawson, however, one or more steamers will tie up at practically every landing between Dawson and the mouth of the river. There are fully 75 vessels on the Yukon and its head-waters.

The Canadian Pacific Navigation Co.'s steamer *Hating*, which was only purchased and refitted for the Skagway service in June, ran on the rocks at the north end of Jervis island, 49 miles north of Vancouver on Oct. 12 at 2 p.m. The 175 passengers and the crew were all saved. The *Hating* was steaming at half-speed through the channel, which is very narrow, owing to a heavy fog. A survey showed the vessel was lying easily, and that the principal injury was a 6 ft. hole in the bow. The hole was stopped with canvas and cement, and the *Hating* was towed off, and proceeded to Vancouver under her own steam. She has been dry-docked for repairs, and the Co.'s officials say she will be on the run again by the end of Nov.

A list of the steamships comprising the Canadian Pacific Navigation Co.'s fleet, which are now controlled by the C.P.R. Co., is given in the report of the proceedings of the annual meeting of the latter Co., on pg. 321, with particulars as to the place and date of building, dimensions and tonnage. As stated in the annual report, the C.P.R. Co. paid \$531,000 for the property. At the annual meeting the directors were empowered to secure a screw steamship for the north Pacific coast trade of about 290 ft. in length, about 40 ft. breadth, and with a depth of about 23 ft. and a gross tonnage of about 1,800 tons, somewhat similar in style and arrangement to the Co.'s upper lake steamship *Manitoba*. Power was also given to secure a steel steamer about 250 ft. long, about 38 ft. beam, depth 15 ft., gross tonnage about 1,500 tons, somewhat similar in style to the steamship *Charmer*, now on the Vancouver-Victoria run, the new steamship to be placed on that run instead of the *Charmer*.

An investigation into the wreck of the C. P.N. Co.'s steamer *Islander* has been conducted at Victoria, B.C., by Captain Gaudin, local agent of the Department of Marine, with J. A. Thomson and J. G. Cox as assessors. They made a very minute investigation into the affair, and on Oct. 23 gave their decision, holding Pilot Leblanc open to censure for keeping the ship at full speed at the rate of nearly 14 knots an hour, after having seen floating ice 10 minutes before the accident. They also condemn the custom, apparently in vogue in coast waters, of leaving the bridge of any steamer at night, and especially a passenger steamer, in charge of only one officer. They also found that there was no proof that the loss of the *Islander* was due to interference by the master or officers. The master did not seem to realize the imminent danger in which the accident placed the ship; hence the lack of prompt and resolute means in arousing the crew and passengers, and placing the proper number of passengers in each boat, and the rush to the boats prevented the saving of many lives. Due praise is given the officers and crew who remained by the ship, and reference is made to the unpardonable lack of appreciation of existing danger to their fellow-passengers shown by those in the boats. While admitting that the vessel was generally navigated in a careful manner, it is remarked that no special instructions were issued by the captain to the pilot relating to the navigation in floating ice.

The directors of the R. & O. Navigation Co. have under consideration plans for several additions to their fleet, one being for a new boat to run between Prescott and Montreal.

Steel Shipbuilding and a Fast Line.

The questions of steel shipbuilding in Nova Scotia and the provision of a fast trans-Atlantic service between Canada and Great Britain seem to be intertwined. F. H. Smith, of Liverpool, Eng., a member of the Institution of Naval Architects and Shipbuilders, has pointed out to Nova Scotians that British shipbuilders will not establish a branch in the Dominion until they first have a guarantee of Canadian support; and another authority points out that nothing definite can be done until the structural steel necessary for shipbuilding is turned out in Canada; while a third authority states that the plant necessary to turn out the number and size of steamers to earn the Government and local bonuses would cost at least \$2,000,000.

Halifax, Dartmouth, Sydney and Louisburg are the ports in Nova Scotia seeking to have a plant located in their midst, whilst St. John, N.B., is going to establish a yard there in connection with the dry dock, for the building of which a company has been formed. The sites proposed for the yards at these ports have been visited by representatives of Swan and Hunter, shipbuilders on the Tyne, and by Sir Christopher Furness, shipowner, builder and steel manufacturer, and are all spoken favorably of, each having some special points of excellence.

In discussing the question of Government aid to the steel shipbuilding industry, Hon. W. S. Fielding, Dominion Minister of Finance, recently pointed out that there were several firms in Canada engaged in building steel vessels of different kinds, and promised consideration to any plans that might be suggested for the extension of the business done by such yards. "While the country would still be able to find employment for the wooden sailing vessels turned out," said Mr. Fielding, "if we are ever to engage in the carrying trade of the world, of which we formerly had so large a share, we must have steel vessels to do it. It would be better that we should buy them abroad than to be without them, but it would be still better to build them ourselves, if that would be feasible, and I have a strong hope that we shall gradually do so. All that I care to say on that point,

or on the general question of aid, is that the Government are most anxious to see the industry carried on in Canada in a large way, and any reasonable proposals looking to development of that kind would receive very favorable consideration."

In regard to a fast trans-Atlantic line Mr. Fielding said there was very little to be said, but he felt assured that at an early date such action would be taken as would assure a line of which the Dominion might be proud. So far as the building of the ships for such a line in Canada was concerned, Mr. Fielding did not look for anything of the kind, if the line was to be established in the near future. It would be too much to expect such a yard as would be required to turn out vessels of that class to be established in Canada at once.

Sir Christopher Furness was interviewed at various points during his tour. He pointed out that Canada would have to pay for a fast service if she wanted it, as such a line would not be self-supporting. He had been considering the question for eight or ten years, and thought a Canadian fast line was far more practical to-day than it was then. He had considered Quebec as the summer port, with Halifax, St. John or Sydney as the winter port. Sir Christopher was in communication with Lord Strathcona on the subject, and it is reported that the capital is ready for the establishment of a line if an arrangement can be made with the Government. Lord Strathcona said Sir Christopher was firmly convinced that only a first-class service would be of any use, a fast service such as could compete with the lines to the U.S. Speaking for himself, Lord Strathcona said the short sea passage should be adopted, and the Canadian port should be secured in Cape Breton, as it afforded good harbors and certain kinds of outward freight. "I have," he added, "always taken a very great interest in this question; I have been working at it for years, and I have always maintained that it was a necessary adjunct wherewith to maintain the reputation of our transcontinental route to the east. The Canadian Pacific Ry. is taking steps to accelerate the speed of its Pacific steamers, and we must have a fast service on the Atlantic."

J. M. Smith, of Windsor, N.S., affirms that

the days of wooden shipbuilding in the maritime provinces are not passed. There has been a considerable revival of late, the most prominent feature being the demand for three-masted schooners and barkentines to carry N.S. and N.B. lumber to South America.

The R. & O. Navigation Co. has declared a 3% dividend for the half year.

The Department of Marine calls the special attention of masters of passenger boats to sec. 45, and of lessees of wharves and landing places to sec. 46 of the Steamboat Inspection Act, respecting the provision of gang planks, and points out that in addition to penalties of \$20 to \$50 the master of a vessel is liable to have his certificate suspended or cancelled for neglecting to observe the law.

Notices to Mariners.

The Department of Marine has issued the following notices:

No. 68. Aug. 27.—British Columbia—1. Change in position of Range flagstaff on Goose spit. 2. Change in position of beacon off Grassy point.

No. 69. Aug. 28.—Nova Scotia—1. Temporary removal of Kingsport pier lighthouse. 2. Buoy off Old Man ledge.

No. 70. Sept. 3.—Quebec — Uncharted danger off St. Pancras Cove.

No. 71. Sept. 5.—Quebec—Changes in buoyage of River St. Lawrence ship channel between St. Augustin and Portneuf.

No. 72. Sept. 6.—Newfoundland, Cape Race—Change in characteristic of fog whistle, and notice as to height of light.

No. 73. Sept. 18.—Prince Edward Island —Georgetown harbor, hydrographic notes: 1. Position of buoys. 2. Position of Westway's farm lighthouse. 3. Railway wharf extended. 4. Leading mark indistinct.

No. 74. Sept. 18.—Quebec—Completion of the Gulf telegraph lines.

No. 81. Sept. 30.—Nova Scotia—1. Meagher beach light. New Brunswick, Bay of Fundy—2. Changes in shapes of buoys.

No. 82. Oct. 8.—New Brunswick—1. Gannet rock light, permanent character resumed. 2. Zephyr rock lightship placed for autumn off Point du Chêne, Shediac harbor.

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 300,000 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., 77 York Street, Toronto, Ont.

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ALBERTA and
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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.

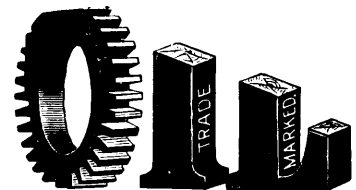
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No. 83. Oct. 10.—Quebec—St. Pancras coves, position of Comeau shoal.

No. 84. Oct. 11.—Ontario—1. South-east shoal, lightship placed. 2. South-east shoal, gas buoy to be removed. 3. Pelee passage lighthouse, progress of work. 4. Bar point cut, gas buoy to be established. 5. Detroit river, limekiln crossing, water signals.

No. 85. Oct. 12.—New Brunswick—1. Dipper harbor bell buoy. 2. Musquash harbor bell buoy.

The U.S. Hydrographic office has issued the following among others relating to the great lakes:

No. 35. Aug. 31.—Lake Superior—1. Devil's Island light, change in color of tower. 2. North shore, Nepigon bay, position of Blind channel. Lake Huron—3. Georgian bay, Parry Sound entrance, shoal off Black rock beyond. Lake Erie—4. Ashtabula harbor, crib to westward of entrance. 5. Conneaut harbor, breakwater advanced in construction.

No. 36. Sept. 7. Lake Superior—1. Duluth harbor, range lights established. Lake Huron—2. Georgian bay, Thornbury range lights established. 3. South end light vessel replaced on her station. Detroit river—4. Bois Blanc island buoy established. St. Law-

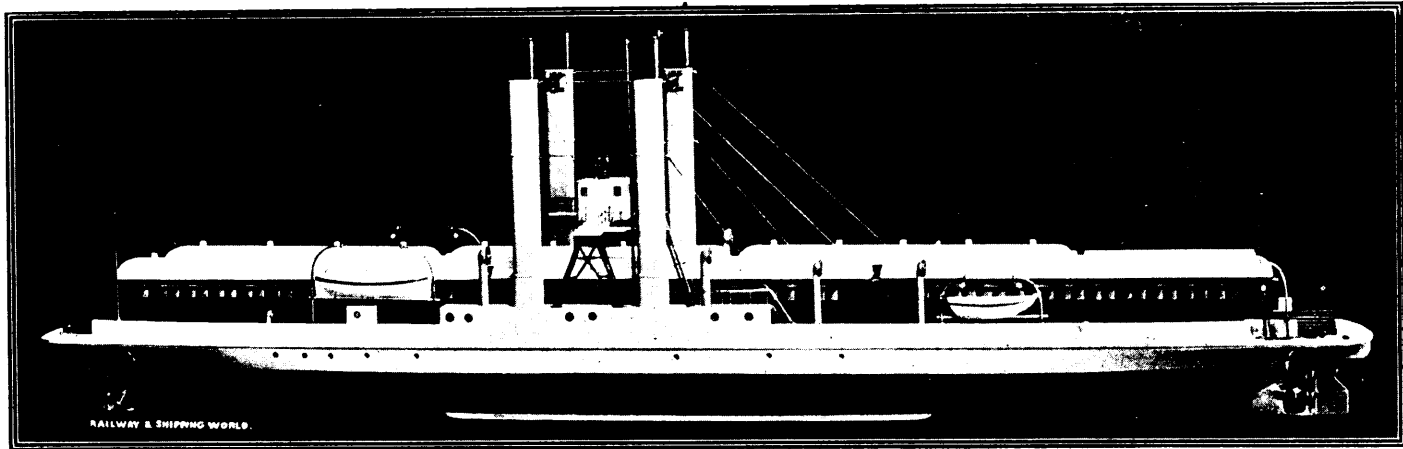
Strait of Canso Car Ferry.

The Scotia, the car ferry built for the I.C. R. to run across the Strait of Canso between Mulgrave and Point Tupper, N.S., by the Sir W. G. Armstrong, Whitworth & Co. (Ltd.), Newcastle-on-Tyne, Eng., reached Port Hawkesbury, N.S., Sept. 28, after a protracted and exciting voyage. The ferry left England, Aug. 29, and after being out a week bad weather set in and continued so bad that repairs to the bulwarks, etc., had to be effected on several occasions. Then on Sept. 16, coals and provisions began to run short and distress signals were hoisted. On the following day a U.S. yacht supplied the crew with provisions, and on Sept. 19 the Anchor liner Furnesia, from Glasgow to New York, was sighted, and an arrangement was made to tow the Scotia into St. John's, Nfld. That port was reached Sept. 20, where the peculiar construction of the Scotia excited a good deal of curiosity. The Furnesia has libeled the Scotia for \$30,000, and an action has been commenced in the Supreme Court of Newfoundland to recover that amount as salvage. Bail was furnished by the Reid Newfoundland Co. (Ltd.) and the Scotia was freed on Sept. 23. Repairs were then executed and the ferry boat left for Nova Scotia, which was reached

with equivalent weights to her working load on board, she made her contract speed, and developed the power necessary for icebreaking.

Transportation to the Yukon.

F. C. Wade, Crown Prosecutor for Yukon, says in reference to the Yukon:—In the last four years a remarkable change has occurred in almost everything affecting the country, particularly the methods of transportation, mining and commercial development. When the first administration party proceeded to the Yukon in 1897 there was no Canadian system of ocean steamers to Skagway, such as exist at the present time. We travelled to that point on the Quadra, a Government steamer, and had to scale the Chilcoot pass, while our supplies in the main were packed over the White pass by mules and oxen. Now the traveller leaving Vancouver can take passage on the magnificent ocean steamers of the Canadian Pacific Navigation Co. or some other Canadian company and proceed to Skagway with as much pleasure as could be enjoyed on a yachting trip in the Mediterranean or in crossing the Atlantic in one of the ocean greyhounds. The steamers are well officered and beautifully appointed, and even



CAR FERRY STEAMER SCOTIA FOR INTERCOLONIAL RAILWAY SERVICE ON THE STRAIT OF CANSO.

rence river—5. Traverse of St. Roch, change in position of Lower Traverse lightship.

No. 37. Sept. 14.—Lake Superior—1. Apostle Islands, shoal reported northward and eastward of Gull island. St. Lawrence river—2. Light established at Ste. Irene, below Quebec.

No. 39. Sept. 28.—St. Mary's river. 1. Alteration in lights Haylake channel. Lake Huron—2. Au Sable approach, wreck of the Baltimore, light discontinued. St. Lawrence river—3. Changes in buoyage between St. Augustin and Portneuf.

No. 40. Oct. 5.—Lake Superior—1. Thunder Bay, shoals in western or inside passage to Port Arthur. Detroit river—2. Amherstburg range, obstruction reported near Bois Blanc island; buoy carried away at Bois Blanc island, will not be replaced.

No. 41. Oct. 12.—Lake Superior—1. Post light no. 1, Duluth Harbor basin, carried away. Breakwater, Grand Marais harbor, Minnesota, completed. St. Clair river—2. Squirrel shoal buoy discontinued and obstruction buoy established. Detroit river—3. Reported obstruction abreast of Mullen's coal wharf. Lake Erie—4. Conneaut harbor, breakwater completed and temporary light discontinued; southeast shoal light vessel, Pelee passage re-established. Lake Ontario—5. Stoney point light station, increased height and change in color, of tower.

on Sept. 29. The Scotia will not be put on the ferry service for some time yet as the new wharf has not been completed, and will not be for a month or so.

The Scotia is built of steel of extra strength and weight so as to operate as an ice crusher, her dimensions being: length, 282 ft.; breadth, 48 ft.; depth, 17 ft. There are three tracks on the deck, so arranged that trains can enter at one end, and leave at the other, the tracks being capable of accommodating nine sleeping cars, or 18 box cars. Deck houses are provided at the sides of the vessel for the engineers and crew, while on the bridge there is a pilot house, with promenade over. There are four smoke stacks, and the Scotia is provided with a rudder at each end, as well as a propeller, so that she can be navigated either way. This will enable her to take on a train at one end, and discharge it at the other on reaching the dock at the other side of the strait. The vessel is provided with two sets of triple expansion engines of 1,200 h.p. each, to which steam is supplied by 4 large cylindrical boilers all working at a pressure of 160 lbs. to the square inch. The shafting is continuous from end to end of the boat. The Scotia is also constructed of extra strength and fitted with icebreaking propellers in order to overcome the drift ice in the strait during the winter months. On her trial trip at Whitby, Eng.,

from a tourist's point of view no greater pleasure could be desired than a sail by the inside passage from Vancouver to the foot of the Chilcoot and White passes. Instead of scaling mountain passes as before, the traveller who leaves the Canadian steamship at Skagway enters the train of the White Pass and Yukon Ry. at Skagway and is rapidly carried to Whitehorse and landed on the gangplank of one of the beautiful steamers travelling from that point to Dawson. You can travel now in your smoking jacket and slippers, instead of being encumbered with spiked boots, rubber hip boots, alpenstocks, shoulder straps and packs, and all the other paraphernalia which went with the troubles experienced in 1897 and 1898. The whole journey can be made in six or seven days instead of in several months, as used to be the case. Indeed, the time is not far distant when the trip from Vancouver to Skagway and thence down the Lewis and Yukon rivers to Dawson, and past the southern Alaskan point to the Bering sea, will rank as one of the most delightful pastimes which the tourist could enjoy instead of being a succession of the most extreme hardships.

The metamorphosis effected in the transportation of freight has been quite as startling. It is no longer necessary to re-enact the scenes of 1897, when 3,700 horses perished on the White pass in the transportation of

supplies. The dangers of the Miles canyon are no longer experienced. Whitehorse claims no more victims, and there are no more wrecks. All freight is landed at Whitehorse, below both the canyon and the rapids, and it is transported with safety and the utmost velocity to Dawson. This year the White Pass and Yukon Ry. added so many swift steamers to its fleet that it was able to carry 100,000 tons of freight to the Yukon in one month, the same amount which last year was carried the entire season.

The cost of transportation is still exceedingly high, \$125 a ton from Vancouver to Dawson, but the managers of the railway fully realize that these rates must be reduced as soon as possible. While the White Pass and Yukon Ry. and Steamboat Company is doing such effective work on the Lewis and upper Yukon, all the great mercantile companies have combined their fleets into one on the lower Yukon for transportation purposes. The N.A.T. & T. Co., the A. C. Co., A. E. Co., S. Y. T. Co. and the E. T. Co. are one and the same, and their fleets operate from St. Michael, in Bering Sea, to Dawson, while the upper river transportation question has been thoroughly solved. Unfortunately this year the upper river and down river fleets formed a combination to keep up the prices, which has been harmful, especially to the smaller dealers, but in time all this will be rectified.

Deadwater Near Coasts.

The Swedish and Norwegian Vice-Consul at Quebec, E. F. Wurtel, requests us to publish the following:

Among the Scandinavian, especially the Norwegian sailors, they often speak of a curious phenomenon, which they call "dodvand" (literally translated "deadwater"). It appears near the coasts, especially in the neighborhood of great river-mouths, and most frequently it is sailing vessels in light wind or ships in tow that are exposed to it, but sometimes also steamers. When a ship gets into deadwater, it is nearly helpless; it loses its speed and does not answer the helm. At the same time peculiar changes are to be observed in the surface of the water. An important example of the astonishing effects of the deadwater is given in Dr. Nansen's account of his voyage with the Fram along the coasts of Siberia at the beginning of his polar expedition. In the Taimyr sound the ship three times got into a very strong deadwater. Though the engine worked at full speed, the Fram hardly moved from the spot on account of the deadwater, and "it swept the whole sea along with it." This event has caused a scientific investigation on the phenomenon of the deadwater, which is now nearly finished and will be published in the general account of the scientific results of the Fram expedi-

tion. It is, however, of importance to learn what experience there is of deadwater in different countries, and the undersigned, therefore, appeals to the readers of this paper with a request for information in regard to the following questions: 1. Is the phenomenon known by English sailors and, if so, by what name? 2. At what times of the year does it usually appear, at what places and under what circumstances? Please describe the phenomenon as completely as possible. The undersigned would be especially obliged for any account of particular cases of deadwater which have happened. Please make the descriptions as complete as possible, stating time and place, but do not give any statements except fully reliable ones.

V. W. Ekman, licentiate, Stockholms Högskola, Stockholm, Sweden.

The Customs Department has issued a memorandum, giving a "summary of customs manifesting and coasting regulations." It is issued in its present form temporarily for convenient reference pending a more complete issue of general customs regulations. In addition to the general regulations respecting customs manifests, the memorandum contains the regulations applying to the admission of foreign owned and registered vessels to engage in the coasting trade of Canada. The former book of regulations was issued some years ago and has been amended from time to time, hence the necessity of the publication of a simplified form giving the regulations as amended.

Among the Express Companies.

The Dominion Ex. Co. has opened offices at Hargrave, Crandall, and Wellwood, Man., and Roche Percee, Assa.

W. S. Stout, Vice-President and General Manager of the Dominion Express Co., left Toronto early in Oct., for a trip of inspection to the Pacific coast. He will probably return about the middle of Nov.

The Dominion and Western Ex. companies have reduced their rates for money orders payable in Europe, making them the same as for domestic orders, particulars of which were given in our Sept. issue, pg. 287. These orders will be paid at branch agencies of Parr's Bank (Ltd.), in 56 of the principal towns in England and Wales.

Washington silver is being constantly shipped to China, where it is coined, silver being the chief circulating medium there. Forty thousand ounces, the product of the Monte Cristo Mines, refined by the Seattle Smelting & Refining Co., was recently sent via the Dominion Ex. Co. from Seattle to Vancouver, B.C., where it was placed aboard a C.P.R. Empress liner for transportation to

the Orient. The metal, in the shape of dore, (silver and gold bars) gave a value not only of \$22,000 silver, according to the current price of that metal, but also about \$12,000 in gold.

The Alaska Pacific Ex. Co. has issued the following winter tariff between British Columbia and Puget Sound ports and Dawson, Yukon: Merchandise weighing 200 lbs. or less: \$20 per 100 lbs., with an arbitrary of 50c. per lb. added to cover stage transportation, White Horse to Dawson. Minimum charge \$2.50. Shipments of 50 lbs. and under, graduate under table of charges, given in circular of June 15, 1900, then add

THE PLACE VIGER MONTREAL.

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

RATES: \$3 UPWARDS.

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

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A Single One Gives Relief.

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A case of bad health that R-I-P-A-N-S will not benefit R-I-P-A-N-S, 10 for 5 cents, or 12 packets for 48 cents, may be had of all druggists who are willing to sell a low-priced medicine at a moderate profit. They banish pain and prolong life. One gives relief. Accept no substitute.

Note the word R-I-P-A-N-S on the packet.
Send 5 cents to Ripans Chemical Co., No. 10 Spruce St., New York, for 10 samples and 1,000 testimonials.

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arbitrary. Over 200 lbs. to 500 lbs., single shipment, add 45c. a lb. Over 500 lbs., add 40c. a lb. arbitrary. In all cases use the \$20 rate to Dawson, then add arbitrary as above. For valuation, charge graduated currency rates. Intermediate agents will use their present rates to Dawson, adding above arbitraries, with a minimum arbitrary of \$1. Gold dust and bullion, 1% of the value of the shipment, minimum charge \$20. Marine insurance 1½% between Dawson and the Sound, 3-8 of 1% between Skagway and the Sound. The White Pass & Yukon Route, over whose line the Alaska Pacific Ex. Co. operates, will maintain a stage line between White Horse and Dawson, beginning about Dec. 1; it will operate twice a week for the first few weeks, when more frequent trips will be made, and as soon as the trails are in condition and business will warrant, will operate daily if necessary.

In 1864 Cariboo stages were running to Swift Current, and in 1866 the stage line was extended to Barkerville. The entire distance of the road is 287½ miles, or 575 miles, for the round trip, from Ashcroft to Barkerville and back. The stage line requires 80 head of horses to operate it and 20 vehicles; seven or eight drivers are required to meet the traffic demands. The record time on the trip was made a year or two ago by F. Carter-Cotton, then a member of the B.C. Government, who with special stages and drivers made the round trip from Ashcroft and back in 74 hours' actual travelling. The stage is operated by the B.C. Express Co., Manager J. B. Leighton. The Co. runs a number of branch stage lines such as the Lillooet, Ashcroft road, Dog Creek and other lines upon which regular stage lines are operated. It has a coach factory and repair shop, at which stages are built and repairs executed. This is situated at the 111-mile stopping point. Only passengers and express freight are carried by the B.C. Ex. Co. Under the head of express freight, however, it has handled some very large shipments, including one of 5,000 lbs. of cement, and another of 14,000 lbs. of hydraulic pipe and supplies for one of the large mining companies operating in the Cariboo. The Cariboo stage is peculiarly adapted for the travel over mountain roads, and quite recently two of the original Cariboo stages were purchased by a Dawson business man who intends opening up stage routes between Dawson and the creeks and outside mining centres of the Yukon.—Vancouver World.

Telegraph and Cable Matters.

The Newfoundland Government has had a wireless telegraph plant installed at Cape Race.

The G.N.W. Telegraph Co. has opened an office in the new G.T.R. station at Point St. Charles, Montreal.

The U.S. Government cable from Skagway to Juneau, Alaska, was completed Aug. 23, and a month later was reported to be a failure, it having been broken in nine places.

The Newfoundland telegraph system, hitherto controlled by R. G. Reid, was transferred to the Government on Oct. 3, and, so far as St. John's is concerned, the business will in future be transacted at the post office.

Hazel Hill, a little village two miles from Canso, N.S., possesses perhaps the largest and most interesting cable stations in the world. No fewer than 9 cables have their shore ends in the offices, 4 of them being transatlantic cables, and the others giving connection with various points of the continent. In the town of Canso the Western Union Telegraph Co. has its cable station.

The Dominion steamer, Tyrian, completed laying the cable from Chateau Bay to Belle

Isle, Newfoundland, and the first messages were transmitted along it Sept. 16th. Belle Isle is to be made a Government and Lloyd's signal station for reporting vessels, and arrangements are in progress for the establishment of a telegraph station at Point Amur lighthouse. The cable was reported as having been broken by an iceberg on Sept. 26, but this was repaired, and on Oct. 2 the ss. Tritonia reported a further break.

The Halifax and Bermudas Cable Company, Ltd., has issued its report for the year ended June 30. The net result of the year's working was a profit of £4,904, against £3,795 for the previous year. An interim dividend of 2½% has been paid, and it is proposed, after providing £258 for depreciation, to make a further equal payment, which will leave £2,078 to be carried forward. This will increase the amount to the credit of revenue account to £15,171. Offers for the sale of debentures to the trustees were invited in Dec. and June last, and £6,298 was paid for £6,300 of debentures, which amount has been written off capital expenditure.

In a work on wages recently issued by the U.S. Commissioner of Labor the following particulars are given of telegraph operators' pay and hours:

	Wages a day.	Hours a week.
Canada	\$1.32 to \$3.60	56
Great Britain	1.11 to 1.95	56
Australia	.80 to 2.67	56
New York	1.81	70
Kansas	1.75	84
Montana	2.31	58
North Carolina	2.70	56
Mexico	1.92	56 to 84
Russia	.26 to 3.00	84
Michigan	1.51	56
France	.99	56
Belgium	.98	63
Germany	.68 to .98	60
Italy	.90	56
Netherlands	.50 to .99	56
China	.79	56

The Commercial Pacific Cable Co., with a capital stock of \$100,000, has been incorporated at Albany, N.Y., by J.W. and C. H. Mackay, E. C. Platt, A. Beck, G. C. Ward, A. B. Chandler and W. W. Cook. J. W. Mackay says the Co. will lay a cable from California to the Philippine islands by way of the Hawaiian islands. The length of the cable will be about 8,500 miles. The part from California to the Hawaiian islands, Mr. Mackay expects, will be in operation within nine months and the whole cable within two years. The Co. asks no subsidy. The new cable will connect with the present submarine cables running from the Philippines to Japan and from the Philippines to China. At present cablegrams from China to the U.S. have to be sent by way of Europe. The Commercial Pacific Cable Co. will work in close connection with the Pacific Postal Telegraph Co., and the Postal Telegraph and Cable Co. in the U.S., and through them with the C.P.R. telegraphs in Canada. The Atlantic connection to Europe will be the Commercial Cable Co.

The whole of the survey work for the laying of the Pacific cable has been completed, the cable ship Britannia having completed her trip from Melbourne, Australia, to Fanning Island, to which point surveys from the B.C. coast had previously been completed by H. M. survey ship Egeria. R. E. Peake, of London, Eng., whose firm has charge of the work, has just been over the ground at the B.C. coast, and has completed arrangements for the building of wharves, etc., at the Banfield Creek, where the cable will be landed. A staff of 40 men will be kept at the cable station at this point. The Canadian telegraph system will be connected with the cable station by two routes, one by the land route line by way of Cape Beale, via Victoria to the mainland, and the other along the east bank of the Alberni canal to Alberni, and thence to Nanaimo, connecting with the cable crossing the gulf at Departure bay. The work of laying the

cable will be commenced early in Jan., 1902, the steamer Anglia laying from the B.C. coast, and the new 10,000 ton cable steamer Colonia laying from the Australian end, and the contract calls for its completion by the end of the year. The route as mapped out by the survey ships, says Mr. Peake, does not present any special obstacles in the way of laying the cable. Some 700 soundings were taken by the Britannia, and these revealed the existence of a submarine range of mountains, 100 miles from the Australian coast. The greatest depth obtained was 2,800 fathoms, and the most shallow 237 fathoms, the latter being the depth recorded when the ship was right above the tops of the mountains. The highest peak would thus be about the same distance from the bottom of the ocean as Mont Blanc is above the sea level.

Old-Time Telegraphers' Association.

The 21st annual meeting of this Association was held in Montreal recently, the U.S. Military Telegraph Corps meeting at the same time. The President of the O.T.T.A., L. B. McFarlane, General Superintendent of the Bell Telephone Co. of Canada, presided at the meetings of the O.T.T.A., the other officers being:—J. E. Hutcheson, Vice-President, Ottawa; J. Brant, Secretary-Treasurer, New York. Executive Committee: H. C. Hope, St. Paul, Minn.; H. J. Pennengill, Boston, Mass.; J. J. Dickey, Omaha, Neb.; J. Compton, Nashville, Tenn.; T. Ahearn, Ottawa, Ont.; J. Kent, W. J. Camp, W. B. Powell, F. H. Waycott, Montreal.

The question of establishing a home for aged and infirm telegraphers was brought up, a committee appointed last year reporting on various offers made them by the town of Colorado Springs. After a long discussion, it was decided that the project was at present impracticable.

It was decided to amalgamate the Telegraphers' Historical Society of North America.

The following officers were elected:—President, G. H. Corse, of Ogden, Utah; Vice-President, B. Brooks, Denver, Col.; Secretary-Treasurer, J. Brant, New York.

The next annual meeting will be held at Salt Lake City and Ogden, Utah, in Sep., 1902.

The U.S. Military Telegraph Corps elected the following officers:—President, Col. W. B. Wilson, Philadelphia, Pa.; Vice-President, W. M. Ives, New York City; Secretary-Treasurer, J. E. Pettit, Chicago, Ill.

The social features included a drive up Mount Royal, a luncheon, shooting the Lachine rapids, a theatre party, a visit to some electrical plants and a dinner. At the latter, H. P. Dwight, President of the G.N.W. Telegraph Co., made an interesting speech, in the course of which he said:—"The newspapers are beginning to refer to me as the Father of Canadian Telegraphy, and I do not hesitate to say that I am very proud to be so called. I confess that I am, in fact, vain of the title. But if I am in any sense the Father of Canadian Telegraphy, the Grandfather is O. S. Wood, who was Prof. Morse's first pupil, and was the first superintendent of the Montreal Telegraph Co., and is still living in retirement, a useful and honorable life—85 years of age—one of the purest and best men, honored and beloved by all who know him. We might take him for our Patron Saint. I said that I was glad to be called the Father of Canadian Telegraphy. Every man is proud to be the father of a numerous and respectable family; and I can point with pride to the numerous progeny in the business who have grown up under me, occupying respectable and prominent positions, not only on the lines under my charge throughout the Dominion, but on other lines in Canada and in the U.S.

ASSESSMENT SYSTEM



INDEPENDENT ORDER OF FORESTERS.

THE BEST FRATERNAL BENEFIT SOCIETY IN EXISTENCE.

Cost to Join the I.O.F.

(For \$1,000 Mortuary Benefit.)

Initiation fee (minimum).....	\$1 00
Certificate fee.....	1 00
Registration fee.....	1 00
Medical Examination fee.....	1 50

Total minimum cost.....\$4 50

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

Cost to take \$2,000 Mort. Benefit..	\$6 00
" " \$3,000 " " "	7 00
" " \$4,000 " " "	9 00
" " \$5,000 " " "	10 00

Sick benefits, when required, cost extra.

Benefits given by the I.O.F.

- 1.—The Mortuary Benefit of \$500, \$1,000, \$2,000, \$3,000 \$4,000 or \$5,000.
- 2.—A Total and Permanent Disability Benefit of one-half of face value of policy, with exemption from further payment of premiums or Court Dues.
- 3.—An Old Age Benefit consisting of exemption from payment of premiums and Court dues after age 70.
- 4.—An Old Age Disability Benefit of one-tenth of face value of policy payable yearly for ten years, on being declared totally and permanently disabled by infirmities of age after the seventieth birthday.
- 5.—An Old Age Pension payable during disability, which may be taken as a substitute for the Old Age Disability Benefit.
- 6.—Free Medical Attendance by Court Physician where not dispensed with by Court by-law; also trained nurses in certain cases.
- 7.—A Sick Benefit of \$3 to \$5 per week, subject to provisions of the Constitution and Laws of the Order; optional, and when taken costs extra.
- 8.—A Burial Benefit of \$100 at death of a Pensioner.
- 9.—A Funeral Benefit of \$50 at death of a member enrolled in Sick and Funeral Benefit Department.
- 10.—Social and Fraternal Privileges of the Court Room.

The Members, the Benefits, and the Surplus

At 31st December Each Year.

Year.	Total Membership.	Benefits Paid.	Total Surplus.	Surplus per Capita.	Death Rate per 1,000.
1881	1,019	\$ 1,300 00	\$ 4,568 55	\$ 4 48	4.50
1882	1,134	12,058 86	2,967 93	2 61	11.00
1883	2,210	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	283,067 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	102,833	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
1900	180,717	1,545,145 64	4,483,364 44	24 81	6.53

For Further Information Respecting this Great Fraternal Benefit Society, Apply to
 Oronhyatekha, M.D., S.C.R., Toronto, Ont. John A. McGillivray, K.C., S.S., Toronto, Ont.
 James Marshall, 24 Charing Cross, London, Eng. A. E. Stevenson, 431 E. Sixty-Third St., Chicago, Ill.
 Or Any Officer or Member of the Order.

—to say nothing of others who have left the service and are filling honorable positions in other walks of life. It has been a great pleasure, and I have been very proud to hear, as I have done from time to time, favorable reports from telegraphic superintendents in the U.S. of our Canadian operators in their service."

W. Maver said that, as an Old Timer and old Montrealer, he had to speak of old Montreal. He believed that thirty years ago he travelled every street in Montreal as a messenger, at a cent a message. The line of promotion was from messenger boy to delivery clerk, and then into the operating room. How well he remembered fellow operators J. R. McPhee, W. McKenzie, J. Kent, L. B. McFarlane, J. Allen, J. Cochrane, E. McConnell, W. J. Jackson, Mr. Duggan, and Dr. W. H. Drummond. The great difference in the systems of old Montreal and those of to-day were touched upon. Electricity was then in its infancy, and there was hard work to be done in comparison with the up-to-dateness of everything to-day.

Hon. Mr. McKay, of St. John's, Nfld., said it was a coincidence that the previous night he celebrated his 51st anniversary as an operator. There was a great outburst of applause when he said that he was the only man now living of those who first did duty, in a consecutive way, in connection with the Atlantic telegraph system.

The list of "Forty-Niners of the Telegraph" includes the names of the oldest-living telegraphers, who entered the service during the forties. In it are three Canadians. N. W. Bethune, of Ottawa, entered service 1847, at Montreal; H. P. Dwight, of Toronto, entered service 1847, at Montreal; R. F. Easson, of Toronto, entered service 1849, at Toronto.

The Yukon Telegraph Line.

The Dominion Government telegraph line from Ashcroft, B.C., where connection is made with the C.P.R. telegraph system, and Dawson, Yukon, has been completed, and the first messages were sent from Dawson to Vancouver and Ottawa Sept. 24. The total length of the main line is 1,865 miles, but with the branches there are 2,200 miles of line in operation north of Ashcroft. The first line to be constructed was from Bennett to Dawson, 564 miles; followed by a branch from Tagish to Atlin, 75 miles—now part of the main line from Ashcroft—both of which were in operation in 1899. In 1900 a branch was completed from Dawson to Fort Egbert, on the Alaskan boundary, 91 miles, where connection will be made with a line now under construction from Fort Gibbon, 300 miles, which is in telegraphic communication with St. Michael. The work on the line from Atlin to Ashcroft was commenced in April, 1900, and has been carried out under the supervision of J. B. Charleson, of Ottawa. The mileage of the different sections of the line are:

MAIN LINE.	
Ashcroft to Quesnel	225 miles.
Quesnel to Hazelton	405 "
Hazelton to Telegraph Creek	405 "
Telegraph Creek to Atlin	241 "
Atlin to Tagish	75 "
Tagish to Dawson	518 "
BRANCH LINES.	
Dawson to Fort Egbert	91 "
Tagish to Bennett	46 "
Hazelton to Fort Simpson	199 "
Total	2,200

The line traverses a wild and hitherto unexplored country and the work of construction was carried on under great difficulties. Between Quesnel and Atlin, over 1,000 miles, the builders had to cut their own trail, pack in all supplies and at times had to work in 5 ft. of snow at an elevation of 3,750 ft. Eleven bridges had to be constructed to cross un-

fordable rivers; one at Alexander river being 110 ft. long, and several long spans of wire were made across rivers and ravines. There have also been built 47 telegraph stations and linemen's houses. The houses are placed 40 miles apart, and half way between each is a refuge house for use by the linemen in repairing the line. The main storage electric batteries on the line are stationed as follows: Dawson, 400 jar battery; Selkirk, 175 jars; Bennett, 250; Telegraph Creek, 100; Atlin, 100; Hazelton, 150; Fort Simpson, 100; Quesnel, 150. Repeaters are fitted at the Ashcroft, Hazelton and Atlin stations, and at every refuge station a line-tapping equipment is provided to enable quick temporary repairs to be made.

It is expected that early next year an additional line will be strung from Ashcroft to Vancouver to handle the Yukon business, which will be received and distributed through the Vancouver office of the C.P.R. telegraphs.

The local rates at present in force on the line beyond Atlin are to be continued. The rate for any office on the line, above or below Atlin, to or from Ashcroft, is to be on the basis of 50c. for the first 100 miles, and 25c. for each additional 100 miles, which would figure out from Dawson to Ashcroft \$4.50 for 10 words and Atlin to Ashcroft \$3 for 10 words, the usual proportionate rate for additional words being 30c. and 20c. respectively. For through business the proposed rate contemplates 30c. for additional words where the 10 words rate is over \$4; 20c. for additional words \$3 up to \$4; 15c. for additional words \$2 up to \$3, and 10c. for additional words \$1 up to \$2. The cable rate will be 35c. a word with a minimum of \$4 from any point on the line. The press rate will be 1c. a word with a minimum of \$1 to all points from Ashcroft.

Mr. Crean, formerly of Quebec, has been appointed Superintendent of the Ashcroft-Dawson telegraph system, with headquarters at White Horse.

The Beavercell Townsite Co., Ltd., which has been incorporated under the British Columbia Companies' Act, is empowered to construct and operate telegraph and telephone lines.

C. F. Sise, Hon. R. McKay, R. Archer, H. Paton, and C. Cassils, of Montreal, are applying for incorporation under the Dominion Companies' Act as the Dominion Subway Co., Ltd., to construct, operate and dispose of underground conduits, wires, cables and pneumatic tubes, and with other powers. The capital is placed at \$100,000, and the chief place of business is to be at Montreal.

General Telephone Matters.

A quarterly dividend of 2% was recently declared by the Bell Telephone Co. of Canada.

The construction work of the telephone line between St. Stephen and St. Andrews, N.B., has reached St. George.

The erection of the new telephone exchange for the New Brunswick Telephone Co. at St. John is being pushed forward to completion by the contractors.

A private telephone line has been installed between Hope, B.C., and the railway station, two miles distant across the Fraser River. A small fee is charged for its use by the public.

J. M. Martin, heretofore manager of the Bell Telephone Co.'s office at Lindsay, Ont., has been transferred to Barrie, Ont., where he will have charge of the Barrie and Orillia exchanges.

Poles are being distributed for the construction of the long-distance telephone line between Victoria and Nanaimo, B.C., Langford Plains, Parsons' Bridge and Esquimalt being the distributing points.

Representations are being made to the Dominion Government with a view of having its long-distance telephone now in operation between Kamloops and Nicola, B.C., extended to Princeton via Aspen Grove.

W. F. O'Connell, it is reported, is to succeed Mayor Crowe as Secretary-Treasurer of the Eastern Telephone Co., Sydney, N.S.; and F. A. Bowman, late of the Dominion Iron and Steel Co. will, it is said, be appointed General Superintendent.

Dr. Ross' telephone line has been extended to Hartland, N.B. Ten years ago there was not a foot of telephone wire in the county outside of Woodstock, where now a network covers the county. Dr. Ross' line goes to nearly every district in the upper part of the county.

The Bell Telephone Co. has notified the Montreal City Council that it intends, under its charter powers, to open up a number of streets in the city for the purpose of laying conduits to carry its wires underground, and asks for the appointment of an officer to supervise the work.

The Nova Scotia Telephone Co. has abolished the "half-rate for five minutes or fraction thereof," on its long-distance wires, and now charges at a per minute rate after the initial five minutes. Thus for messages costing 25c for five minutes, the charge for any time over that is now 5c a minute.

Prof. Melville Bell, father of Prof. Graham Bell, inventor of the telephone, on behalf of the citizens of Brantford presented the Duke of Cornwall, during his recent visit there, with a silver-mounted long-distance telephone in a handsome casket of native Canadian woods. The Duke was greatly struck with the beauty and appropriateness of the gift, and promised to have it erected on his desk at home as a constant reminder of his brief and happy visit to Brantford. He was exceedingly courteous to the venerable Mr. Bell, and asked a number of pertinent questions about the origin of the telephone.

British Columbia Telephones, Limited.

The following report was presented at a general meeting in Huddersfield, Eng., Oct. 17: The number of subscribers to the subsidiary companies at June 30 last shows an increase of 812 over a year ago. During the year the directors have again had to meet very heavy capital expenditure, entailed by the rapid extension of the various systems consequent upon the large increase in subscribers. The old wires in the central areas of Vancouver have been taken down and cables substituted. This improvement removes nearly all risk of damage by storm, or contact with the trolley wires of the electric railway system; it also materially improves the service, and reduces the cost of maintenance. Arrangements have been made to connect Victoria with Nanaimo, and communication is expected to be established early in Nov. This extension forms part of a larger scheme by which the mainland will ultimately be connected with Vancouver Island.

The directors have considered it desirable to issue 2,000 ordinary shares, at par, to provide for these extensions and improvements. In Feb. last the subscribers in Vancouver, the largest of the Co.'s centres, were personally visited, and the report of the special agent employed revealed a most satisfactory state of affairs, both with regard to the efficiency of the service, and the satisfaction of the subscribers therewith. Before arriving at the profits of the subsidiary companies available for distribution, provision has been made for depreciation on construction, working and movable plant, office furniture, etc. The profits during the past year have been adversely affected by the competition of another

company working inland in the mining centres adjacent to the international border separating B.C. from the U.S. A joint contract has now been entered into between your Co. and a U.S. company (with which your Co. has a reciprocal working arrangement) of the one part, and the competing company of the other part, whereby the interests of the competing company in Canadian territory will be taken over on favorable terms by this Co., and those in the U.S. territory by the U.S. company.

The profits for the year (including £466 4s. 8d. brought from last year's account) after deducting the expenses of the English offices amount to :

	£8,352 18 11
Out of which have been paid :—	
Interest on debenture stock	
June 30, 1901	1,279 17 1
Dividend on preference shares	
to June 30, 1901	1,706 9 1
Interim dividend on ordinary shares @ 8% per annum	1,200 0 0
	4,186 6 2
Leaving a balance of	£4,166 12 9

Your directors recommend that this balance be appropriated as follows :—

To transfer to the reserve fund	2,000 0 0
In payment of dividend on ordinary shares @ 8% per annum free from tax, for the ½ year ended June 30, 1901	1,379 11 8
To provide for directors' remuneration and to carry forward to next year's account ..	787 1 1
	£4,166 12 9

The balance sheet shows the capital and liabilities of the Co. to be £108,550 16s. 5d. The assets are shares in the Victoria & Esquimalt Telephone Co. and the New Westminster & Burrard Inlet Telephone Co., which include the shares in subsidiary companies £88,380 3s.; profits from and amounts owing by subsidiary companies £18,661 3s. 1d.; cash in bank and in hand £1,509 10s. 4d.

Telephone System on the Royal Train.

The special train provided by the C.P.R. for the transcontinental tour of the Duke of Cornwall is equipped with very many conveniences and luxuries which are not found in the ordinary passenger train, amongst which is a telephone system connecting the cars of the train together, allowing intercommunication between all of them. The sets were specially designed for this train, and the cases are of the same wood and finish as the interior of the cars in which they are placed, one being of oak, one of prima vera and the rest of mahogany. Eight sets are provided, one for each car, each one being placed in a convenient but not obtrusive location. The cases are about 6 by 10 inches, the faces being equipped with a number of sockets each one marked with the name of one of the other cars. A plug which fits them is attached by means of a flexible cord to the side of the box, while a push button is located above the sockets with a vibrating bell on the top of all. To communicate with any car the plug is inserted in the socket marked with name of the car wanted and the button is depressed when a signal is sent in, power being derived from a battery of dry cells about the middle of the train. For talking, special combination telephones and transmitters are provided. If a transmitter were attached to the car in any way, the vibration of the train would disturb the transmitter, causing such a noise in the telephone as to make conversation next to impossible. These combination sets are arranged so that when the telephone is taken from the hook, the transmitter, being joined to it, is also removed. When the telephone is held to the ear the transmitter mouthpiece, which is curved, is at a convenient distance from the lips. By removing the transmitter from all connection with the body of the car

the noise due to vibration is reduced to a minimum and talking is good.

The cars are wired with rubber-covered wire cable run underneath the car. Under each platform is a brass case in which are placed insulated sockets or jacks, one for each line. To connect the cars, flexible cable of rubber-covered wire is used, provided with a case of plugs at each end (the plugs being

insulated from the case) which fits the case of sockets under the cars. The two cases of plugs are also connected by a chain, so that if the cars should break apart the plugs would be pulled out of the sockets without damaging the connecting cable. The sets were made by the Northern Electric and Mfg. Co., of Montreal, and the installation was done by the Bell Telephone Co. of Canada.

ENAMELED IRON PLATES

For Doors, etc., in Stations, Steamships, Ferries, Hotels, Offices, etc., carried in Stock for Prompt Delivery.

Any of these Plates can be shipped on the day an order is received.

SMOKING ROOM

Size 23 x 3½ inches. Oblong, fancy ends, white ground, blue letters, lined & tipped :

Agent's Office.	Waiting Room.
Express Office.	General Waiting Room.
Freight Office.	Ladies' Waiting Room.
General Offices.	Men's Waiting Room.
Private Office.	Dining Room.
Ticket Office.	Lunch Room.
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.



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**.

Oblong, fancy ends, size 3 x 1½ inches, white ground, blue letters, lined and tipped, lettered **Push, Pull**.

ENAMELED IRON SIGNS.

For Steam & Electric Railways, Steamship, Express, Telegraph, Telephone & Advertising Purposes, of every description, size & color, made to order.

Railway Station Names, Switch Targets, Semaphore Arms, Whistle & Diamond Crossing Signs, Numbers for Railway Bridges, Sections, Mileage Signal Houses, etc.; Street Car Route Signs; Steamship & Ferry Signs; Express, Telegraph & Telephone Office Signs; Agency, Office, Store, Wagon, Cart & Advertising Signs; Street Names & Numbers; Door Numbers.

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

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