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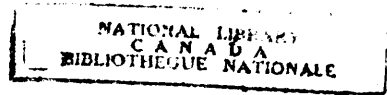
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The Reid Newfoundland Co., Ltd.

This Co. was formally organized at a meeting held at St. John's, Nfld., Aug. 29, when the following directors were elected: R. G. Reid, President; T. G. Shaughnessy, R. G. Reid, Jr., W. D. Reid, and H. D. Reid. The Co. is chartered under a special act of the Colonial Legislature, with a capital of \$25,000,000 in shares of \$100 for the purpose of acquiring and carrying on all the Reid interests in Newfoundland. The interests acquired by the Co. are: the agreement or contract made between the Government and R. G. Reid, as amended and finally settled by the Act passed at the last session of the Legislature (Sept. pg. 265); the Reid Lands Co., (Ltd.); the Reid Steamship Co., (Ltd.), and the St. John's Street Ry. Co. (including the electric lighting), with all their franchises, property and interests, the consideration being the allotment to Mr. Reid and his associates of \$15,000,000 in the shares of the Co. The Co. has been given the fullest powers for the purpose of carrying on and extending the various businesses acquired, and to sell or dispose of any or all of the undertakings either in whole or in part. The number of directors shall not be less than five or more than nine. Power is given to issue bonds and debentures, to increase the capital stock, and to issue shares at a discount. Under this clause a by-law has been adopted authorizing the issue of \$500,000 of shares at the discretion of the directors to applicants within the island. It is not proposed to offer any shares at present for public subscription. A clause in the charter provides that the stock, dividends, bonds, debentures, debenture stock, mortgages and other securities of the Co. shall be exempt from taxation.

The Co. took over on Sept. 1, from Mr. Reid, the railway contract and the subsidies attaching thereto; the nine steamers with their mail subsidies; 2,650,000 acres of land, with the mills and all improvements thereon; the dry dock at St. John's; and the St. John's Street Ry., with the contract for the lighting of the city. The Co. does not propose to enter into any new contracts for extension of the railway or steamship services at present but will devote all its energies to thoroughly organizing the services already in operation and consolidating all the various interests into harmony with the new contract.

The Maritime Board of Trade, in view of the loss of life last year, especially in New Brunswick, by railway bridge accidents, has recommended the Provincial Government to consider the advisability of appointing inspectors for bridges and culverts.

G.T.R. and C.P.R. Results.

The Railway Times, London, Eng., says: The half-yearly dividend of the G.T.R. is announced at the rate of 5% per annum on the first preference stock. This is after putting £10,000 aside for bridge renewals, which was not done a year ago, and we believe this result is practically a record for the G.T.R. in the first half of the year, and certainly is a remarkable improvement on recent achievements. In view of the fact that a year ago only 3% per annum was paid on the first pre-



F. H. MCGUIGAN,
General Superintendent, Grand Trunk Railway System.

ference stock, the improvement in the distribution represents £34,200. The deficiency in the second preference dividend last year, amounting to 1¼%, represents only £43,500, and it is thus being assumed that the Co. will this year be in a position to pay the full 5% on the second preference. If the net earnings of the current half-year are maintained, this is no doubt the case; but it must be borne in mind that the present G.T.R. board are generally conservative in their dividend distributions, and they may take this opportunity of wiping away the balance of the bridge renewal suspense account, which is at present

a blemish on the accounts. For the present the traffic outlook is cheerful enough, as throughout Canada the crops are phenomenally large, and in marked contrast with those of the U.S. Crop reports have, in fact, induced large buying of C.P.R. shares, as that road will, according to some authorities, have to handle the largest grain traffic on record during the next few months. A good crop will, of course, mean general prosperity—at least for a time—in a pre-eminently agricultural country like Canada. It may also lead to the settlement of further large tracts of land, and to an active demand for the lands which the C.P.R. itself has for disposal. So far as the dividend distribution for the period to June 30 is concerned, the expectations of an advance have not been realized, and though the C.P.R. is in a position to distribute about 7% out of current profits, it maintains its usual rate of 5%. The year of the Co. ended on June 30, and the accounts will soon be presented covering that period. Up to 1899 the accounts of this Co. were made up to Dec. 31. But for the period to June 30, 1900, a special account for six months was rendered, and now the date of the annual balance will be June 30. It is difficult to institute a comparison between the figures just presented and previous results. The best comparison possible is with the year to Dec. 31, 1899, and on that footing the past year's main results make the following exhibit. Gross receipts advanced by \$1,625,000, but expenses were higher by \$1,746,000, leaving net profits \$121,000 to the bad. After meeting all charges, the balance available for distribution was \$5,587,000 in 1900-1901, against \$6,408,000 in 1899. After paying the 5% dividend, as in 1899, the surplus is only \$1,114,000, against \$2,204,000 in 1899, so that the Co. earned barely 7% on its common stock in the past financial year, against about 9% in 1899. In all the circumstances, and especially in view of the large amount of fixed charges piled up on a very narrow basis of share capital, it is not surprising that the dividend was restricted to 5%. The substantial feature of the situation is that the phenomenal expansion of business will assure the maintenance of gross receipts for some time to come.

The C.P.R. Co.'s New Offices in London, Eng., are to be erected in Trafalgar Square, the point to which all continental and transatlantic travellers make in that city. The Co. has purchased four large shops in the Square, which it will pull down, and erect a large building on the site. It is expected that the new offices will be ready for occupation in about a year.

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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-
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E. Tiffin, Moncton, N.B.; SEC.-TREAS., J. Earls, To-
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Canadian Roadmasters' Association.

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PRESIDENT, J. R. Brennan, Ottawa, Ont.; SECRETARY-
TREASURER, J. Drinkwater, Winchester, Ont.

EXECUTIVE COMMITTEE.—The above & J. Jelly, Carle-
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Holloway, Toronto Jct., Ont.; N. Delaire, Montreal.

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

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

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-
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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.; and VICE-
PRESIDENT, M. McNamara, Walkerton, Ont.; 3rd

VICE-PRESIDENT, W. H. C. MacKay, St. John, N.B.;
SEC.-TREAS., E. de la Houke, London, Ont.; AUDITOR,
S. H. Palmer, 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.
HON. SECRETARY-TREASURER.—Acton Burrows, 33
Melinda Street, Toronto.
NEXT ANNUAL MEETING at Hamilton, Oct. 16, 1901.

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C.P.R. Land Grant.—An Ottawa despatch
says that out of 25,000,000 acres originally
granted to the C.P.R., about 9,000,000 have
been patented. This makes about half the
actual grant, as some 6,800,000 acres were
returned to the Government in part pay-
ment of the \$30,000,000 advanced to the
Co. A large area of the lands patented
extends along the main line, but there is also
an extensive tract in northern Alberta. In
addition to the lands referred to, about 1,100,
000 acres have been patented to the Alberta
Ry. & Coal Co. and 45,000 acres to the Cal-
gary & Edmonton Ry. Co., making a total of
over 10,000,000 acres patented since last Feb.

Amerlean Trade Index.—The National
Association of Manufacturers, with headquar-
ters in Philadelphia, have issued the American
Trade Index, a descriptive and classified
membership directory of the Association, ar-
ranged for the convenience of foreign houses.
It contains 670 pages, is printed in English
and French, and 7,500 copies are being dis-
tributed gratuitously among the principal busi-
ness houses of the world, and will prove an
agency for the foreign distribution of informa-
tion concerning U.S. manufactures. The ar-
rangement is admirable, and the alphabetical
list of articles produced by members of the
Association will certainly prove of the utmost
value. The registered cable addresses are
given.

A Business Necessity.

The Business Atlas, issued by Rand, Mc-
Nally & Co., Chicago, is one of those publi-
cations which is an essential in a business
office. The maps, including those of Canada,
are admirable in their clearness of engraving
and printing, and the railway lines are kept
well up-to-date, the most recently constructed
being shown. While, as a rule, maps of Can-
ada are shown on a useful scale, the Maritime
Provinces—Nova Scotia, New Brunswick
and Prince Edward Island—to which one
page is devoted, could with advantage be
given two. There is a good deal of railway
construction going on in Nova Scotia and New
Brunswick, and the small scale of the present
map makes it somewhat difficult to trace the
routes. In all the maps the railways are in-
dicated with especial clearness, and the num-
erical references to an index on the side of
each map giving the full name of the principal
railway lines with their divisions and subdivi-
sions, is a very useful feature. The figures
of the U.S. census for 1900 are used, and the
other information in the gazetteer portion,
giving additional stations opened, etc., adds
to the completeness of the edition of the atlas
of 1901.

Recent Canadian Patents.

Among the patents recently granted at
Ottawa have been the following taken out by
Canadians:

Rail joint fastener, No. 71,603. F. A.
Dixon, Ottawa, Ont.

Car brake, No. 71,701. T. E. McCallum,
Toronto, Ont.

Rotary engine, No. 71,852. R. Sanderson,
Nelson, B.C.

Car brake, No. 71,856. S. H. Pocock,
Hamilton, Ont.

Carline, No. 71,983. H. W. Gays, Ottawa,
Ont.

Piling machine, No. 71,990. D. J. Brophy,
Montreal, Que.

Non-electric telephone, No. 72,012. J. C.
Hunter and G. S. Denton, Douglas Harbor,
N.B.

The Liverpool and Milton Ry. does not
appear among the lines of which statistics
are given by the Department of Railways.
It runs from Liverpool, N.S., through Milton
to the pulp mills of the Acadia Pulp and Paper
Mills Co., a total distance of about five miles.
The gauge is standard, the steel rails of about
70 lbs. having been bought from the I.C.R.
The rolling stock comprises a steam motor, a
passenger car that belonged to the Halifax
horse car line some years ago, and three or
four platform cars. The President is A. W.
Moren, of Liverpool, and the Secretary R. H.
Gardner, of Brooklyne, N.S.

Louisiana Purchase Exposition.—It is
proposed to hold a World's Fair in St. Louis,
Mo., in 1903 in celebration of the centennial
of the purchase by the U.S. from France of
the Louisiana Territory in 1803. The Louisi-
ana Purchase Exposition Co. has been or-
ganized to organize and conduct the fair, and
\$15,000,000, the amount required to pay
France for the whole territory in 1803, has
been provided towards the expenses; \$5,-
000,000 by the Federal Government, the
balance being provided by St. Louis, and in-
dividual contributions. It is proposed that
the exposition will be both national and inter-
national in its character, but it will present in
a special degree, and in the most comprehen-
sive manner, the history, resources and de-
velopment of the States and territories lying
within the boundaries of the Louisiana pur-
chase, showing what it was and what it is;
what it contained and produced in 1803, what
it contains and produces in 1903.

An Automatic Pressure Retainer for Driver Brakes.

By J. E. Muhlfeld.

The following paper was written while Mr. Muhlfeld was Master Mechanic of the G. T. R. at Montreal, before his recent appointment as Superintendent of Machinery and Rolling Stock on the Intercolonial Ry.:

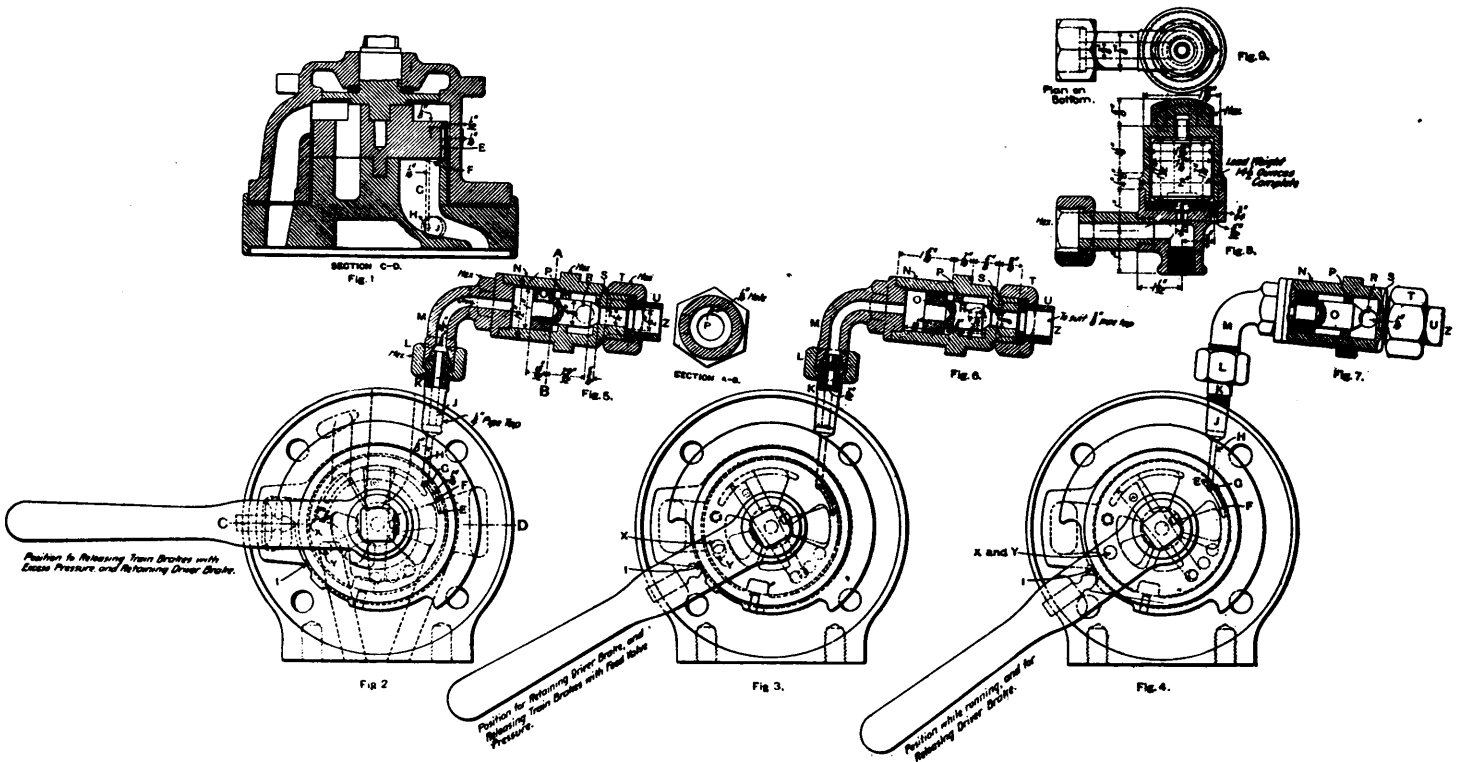
To facilitate the handling of air-braked freight and passenger trains, the length and speed of which are constantly increasing, the retained application of the locomotive driver brake, after the train brakes have been fully released, has been shown to be a decided advantage. This practice is of special benefit in the handling of long freight trains through side tracks and switches and down grades, and when making water crane, coal chute, grade crossing and despatching station stops. The retention of the application of the driver brake on freight locomotives when the train brakes are released, keeps the cars bunched, and prevents the locomotive from surging

action is not available without a corresponding irregular action of the brake valve. To satisfactorily make use of the retention of the application of the driver brake, the operation must be positive and entirely automatic in connection with the usual working of the engineer's brake valve handle when applying and releasing the train brakes. With this idea in view, the retaining device, shown by the accompanying drawings, has been designed and put in service.

Referring to the illustrations, figs. 1, 2, 3, and 4 show sectional views and top plans of the parts of a Westinghouse G-6 engineer's brake valve, which are affected, either in alteration or in the operation of the pressure retainer device, which is shown in section by figs. 5, 6 and 7. Figs. 8 and 9 show a sectional elevation and top plan of a pressure reducing valve which can be used in connection with the pressure retainer, or not, as desired. The relative positions of the brake valve handle and the retainer differential valve are shown as they are in actual operation. The reference letters are: E, air inlet port in rot-

ple valve exhaust port. If the pressure reducing valve is to be used in connection with the retainer it is attached between the retainer and the pipe leading to the triple valve exhaust.

X is the feed valve air inlet port in the rotary valve; Y the feed valve air inlet port in the rotary valve seat; and Z the pipe connection to the driver brake triple valve exhaust. With the brake valve handle in full release position, fig. 2, the air from the excess pressure storage will pass through inlet E, groove F and outlet port and passages G, H and J, to the retainer valve body N, forcing differential valve O to its seat and closing the triple valve exhaust opening Z. The leakage of air past the differential valve O to its seat and closing the triple P and the exhaust release port R. This action will remain so long as the brake valve handle is kept in full release position, retainer position, or intermediate of these positions, as shown in figs. 2 and 3. In fig. 2, it will be noted that while the warning port is closed and the brake valve feed valve to the train pipe is in operation the pressure



AUTOMATIC PRESSURE RETAINER FOR DRIVER BRAKES.—GRAND TRUNK RAILWAY.

ahead, and the slack from running out of the head cars before the rear car brakes are fully released; this latter action usually results in damage to merchandise and draft gear, and causes delays on account of break-in-twos. It also permits of water crane and coal chute stops being made without uncoupling the locomotive from the train, and with passenger trains it eliminates the back-lash of the cars, due to the trucks resuming their normal position when the train brakes are not fully released at the time the dead stop is made. Further, retaining a reduced driver brake cylinder pressure permits of the locomotive and train being moved with the driver brakes partially set for a sufficient distance to make good an irregular stop at a water crane, coal chute, or switch, and the starting of trains is facilitated through the train brakes being fully released by the time the stop is made. The results which can be obtained from the retention of the driver brake cylinder pressure with the devices now in use have been but fairly satisfactory for the reason that they are not entirely automatic, or that the automatic

ary valve; F, air passage groove on valve seat; G, outlet port to pressure retainer; H and J, outlet passages to pressure retainer; and I, stop notch for the brake valve handle latch. These are the alterations in the engineer's brake valve proper, which, as will be noted, are readily made, and do not in any way interfere with the construction, maintenance or operation of the brake valve itself.

The following letters refer to the pressure retainer: K, connecting nipple; L, nipple coupling nut; M, cap; N, valve body; O, differential valve; P, differential valve, air leakage and pressure equalizing port; R, triple valve exhaust relief port; S, pressure retainer valve seat; T, body coupling nut; and U, body coupling nut tail piece. The pressure retainer device can be made entirely of brass or malleable iron, and in the main consists of but two stationary parts, the valve body and the valve body cap, and one operating part, the valve. The retainer is attached to the brake valve body by the nipple, as shown, and the body coupling nut tail piece U is connected to a 3/8-in. gas pipe leading to the tri-

still remains in the retainer to prevent the release of the driver brake.

Fig. 4 shows the brake valve handle in running position when the supply of air is closed to the retainer. The immediate reduction by leakage of the confined pressure above the differential piston past its loose fit and the restricted passage through the air leakage port P causes a rapid equalization of pressure, when the differential valve O is promptly forced from its seat S by the driver brake cylinder pressure; the exhaust release port R providing for the latter's quick release to the atmosphere.

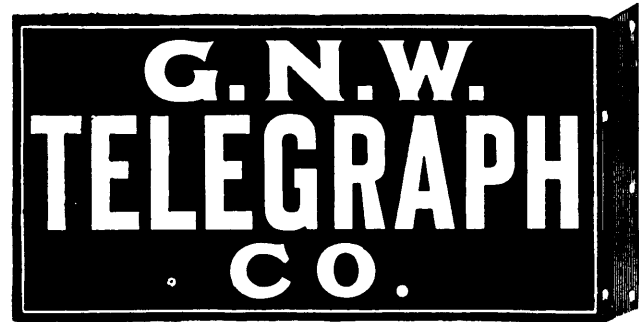
In the handling of long air-braked freight trains it is often necessary, to facilitate prompt release of the train brakes, to leave the brake valve handle in full release position some time before returning it to running position, while in the handling of passenger trains this practice would result in immediate overcharging of the train pipe and cause slid flat wheels. With the arrangement as described it will be possible to retain the driver brake pressure with the brake valve handle either in full

ENAMELED IRON TELEGRAPH SIGNS.

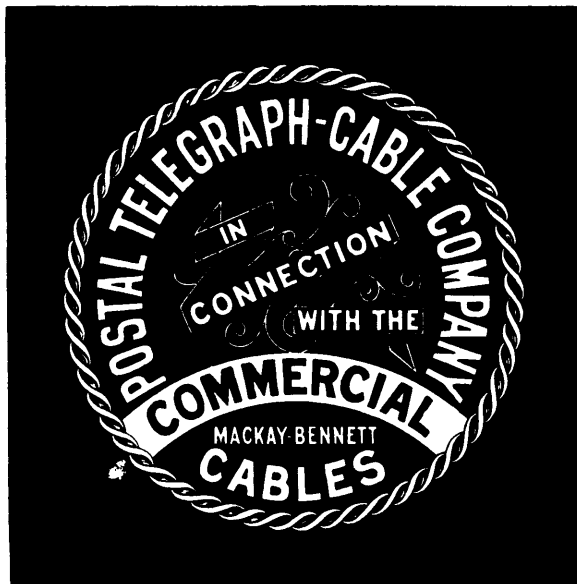
The only signs that are absolutely impervious to the weather.



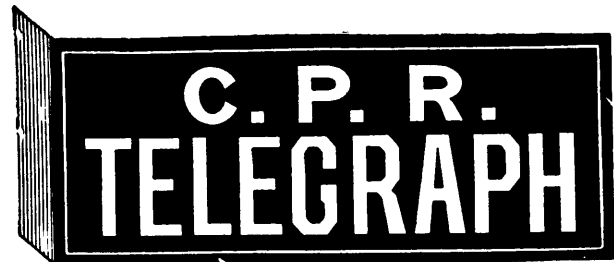
No. 1.—Double, 19 x 13 ins., including flange, white letters on blue ground.



No. 3.—Double, 21½ x 10 ins., including flange, white letters on blue ground.



No. 2.—Single, 30 x 30 ins., white letters on blue ground.



No. 4.—Double, 22 x 8 ins., including flange, white letters on blue ground.



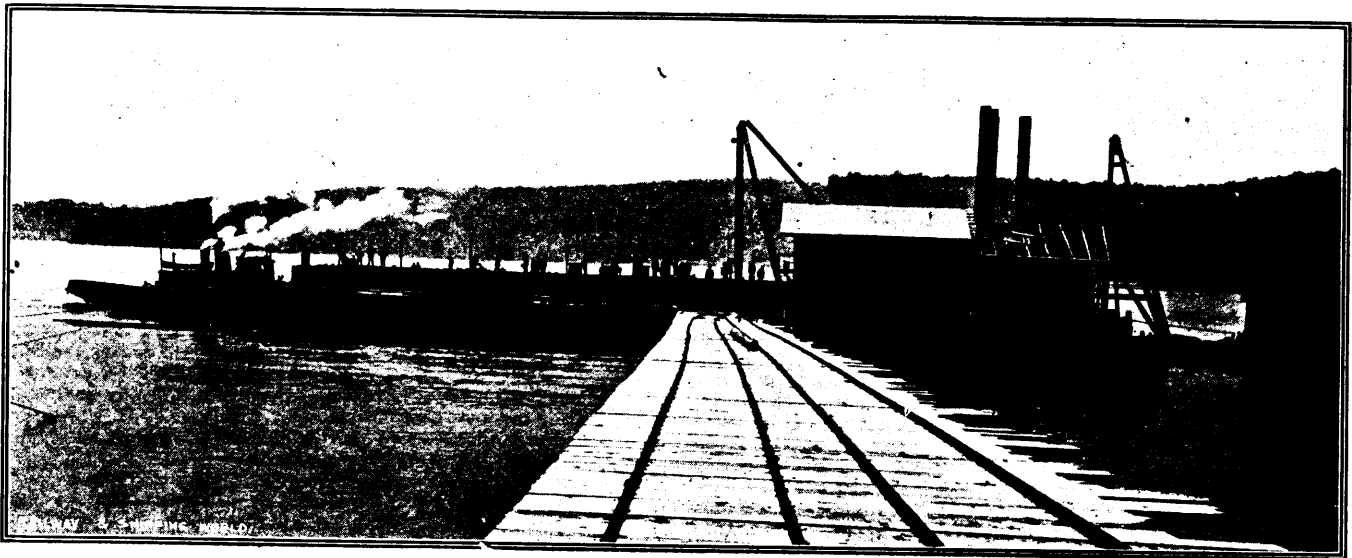
No. 5.—Single, 24 x 12 ins., white letters on blue ground.

Enamelled Iron Signs can be made in any shape, size or colors. Blue and white make the most striking contrast.

Prices and further particulars supplied on application.

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QUEBEC BRIDGE, FIG. 1.—AIR COMPRESSORS AND OTHER PLANT AT NORTH MAIN PIER.

release or at a partial running position, whichever may be desired, according to the length of the train being handled.

The alternate movement of the brake valve handle from the positions shown in figs. 3 and 4, with the train brakes released, permits the engineer to retain any desired amount of braking effect on the drivers, which is a decided advantage in making smooth and exact stops. In switching service, when the retaining device is not desirable, the regular movement of the brake valve handle from service application to full release and return to running position, gives immediate release of the driver brake.

The pressure reducing valve, shown in figs. 8 and 9, when desired, is located between the triple valve exhaust pipe and the retainer, and permits of the gradual reduction of all but 15 lbs. per square inch of the driver brake cylinder pressure, during the time the retainer valve is closed, which feature may be desirable in some localities and services. The driver brake retaining features described are operating successfully and patents have been applied for.—*Railroad Gazette*.

The Quebec Bridge and Connections.

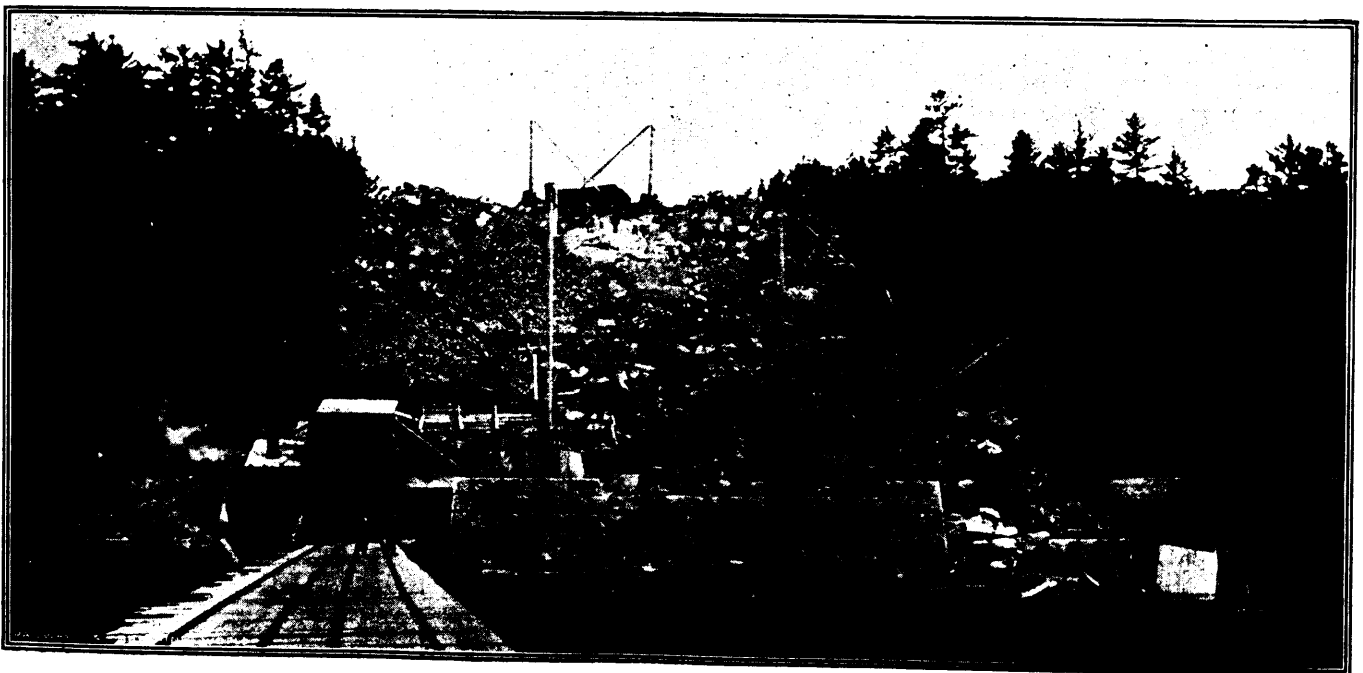
This bridge is being built about 6 miles west of the city of Quebec, over the narrowest portion of the river St. Lawrence between Montreal and Quebec. In selecting this site not only had the physical features of the locality to be considered for a bridge site, but the all important question of position for connections with the railway lines on both sides of the river, and also with the city and harbor of Quebec.

The channel will be crossed with a suspended span and 2 cantilever arms, making an unsupported structure 1,800 ft. long between centre of main piers, which will be the longest span in the world. The length of anchor arms on each side of the main span will be 500 ft., with one approach span of 210 ft. at each end between anchor piers and terminal abutments. The total length of the structure, including terminal abutments, will be 3,300 ft. The floor level of the bridge is so arranged that there will be a clear headway of 150 ft. between under side of lower chords and highest tides for vessels in the channel.

A clear width of 62 ft. 6 ins. will be provided between trusses for 2 steam railway tracks in the centre, divided by screens from a single electric track and highway on each side. The coping of main piers will be 30 ft. above high tide, and the highest point of superstructure above coping will be about 330 ft. The depth of the suspended span will be about 120 ft. at the centre.

The river at this point flows between high rocky cliffs on both sides, the waterway being about 1,900 ft. at low tide, and about 2,500 ft. at extreme high tide, the tidal rise varying from a minimum of about 14 ft. to a maximum of about 19 ft. The maximum depth of water in the channel is about 180 ft., the tidal current there being 6 to 7 knots an hour. The depth of water decreases rapidly towards the main river piers, where at extreme low tide it is 10 ft. deep, the maximum depth at high tide being 29 ft. These piers are 1,800 ft. apart between centres.

The substructure will consist of 2 main piers, 2 anchor piers, and 2 abutments. The north anchor pier, containing about 6,500 cubic yds. of masonry and 250 tons of anchorage metal, is



QUEBEC BRIDGE, FIG. 2—ANCHOR PIER IN COURSE OF ERECTION.

completed, and it is proposed to complete the north main pier and north abutment, containing together about 19,000 cubic yds. of masonry, this season, leaving the similar work on the south side to be completed next year. The foundations of the anchor pier and abutment on the north side have been carried to solid rock. The masonry in the north main pier is being built up as the caisson upon which it rests is gradually sunk to its final resting-place below the river bed. The masonry of the entire substructure will consist of huge blocks of granite facing backed with concrete.

The caissons for the two main piers are 150 x 49 ft. in lateral dimensions, by 25 ft. high, the height of underside of roof of working chamber above cutting edge being 7 ft. They are built of southern pine brought to the site in the rough and milled by a plant set up for the purpose, which comprises a circular saw, a butting saw, and a sizing machine cutting four sides at a time. The caisson was built on the north shore about 4,000 ft. east of the pier site, and was successfully launched on June 20, towed into position and made fast in a berth previously prepared, in the short space of 1 hour and 10 minutes. At the site of the two main piers the water having a depth of only about 10 ft. at low tide, and as the caisson draws about 12 ft. unloaded it grounded at low tide, but floated at high tide, the water there being about 29 ft. deep. The concrete was being placed in the cribwork on top of the working chamber of caisson for north pier on June 28, and excavation in the chamber was being carried on only during low tide, and it was so continued until sufficient concrete was put in to overcome the buoyancy of the air pressure, since which excavation has continued day and night.

View 1 shows the position of the air compressors and other working plant at site of north main pier.

View 2 shows north anchor pier and concrete mixing plant.

View 3 shows caisson before launching.

We are indebted to E. A. Hoare, Chief Engineer of the Quebec Bridge Co., for the above facts and for the views illustrating this article.

M. P. Davis, of Ottawa, is contractor for the substructure. The contract for the superstructure has been awarded to a United States firm, which has already furnished all the steel for anchorage, and will commence the erection of the superstructure for the approach span between the north anchor pier and abutment as soon as the latter is completed this autumn. The materials for the south approach span will be delivered this fall ready for erection early next year.

At the annual meeting of the Quebec Bridge Co., Sept. 3, it was reported that up to June 30 \$95,704.85 had been expended in preliminary surveys and works, including \$45,023 in steel works used in anchor piers. The following were elected directors: Hon. S. N. Parent, President; Hon. R. R. Dobell and R. Audette, Vice-Presidents; H. J. Beemer, V. Boswell, J. Breakey, Hon. N. Garneau, J. B. Laliberte, G. Lemoine, H. M. Price and N. Rioux.

A company is in course of formation to construct a line from Cap Rouge, at the city end of the bridge, along the coves lining the river front, east to the lower town as far as Champlain market. The Co. proposes to build wharves along the river front to accommodate ocean going steamers and running tracks close by to facilitate loading and unloading of vessels, and also the construction of a wharf 4,000 ft. in length, extending from the Louise embankment in the direction of Montmorency Falls, to provide deep water accommodation under all conditions. The promoters are: Hon. J. Sharples, President; Hon. S. N. Parent, J. Hearn, M.L.A.; V. Chateauvert, R.

Larue, W. Price, G. Lemoine and the Messrs. Davis, contractors for the Quebec bridge. The proposed capital is \$1,500,000. This work is covered by the charter of the Quebec Terminal & Ry. Co., granted by the Dominion Parliament last session. The Q. T. & Ry. Co. is part and parcel of the Bridge Co. E. A. Hoare is the Chief Engineer for this project as well as for the bridge. The precise location and terminals of the connecting lines to be constructed have not been finally determined on, although it is generally understood that the line along the river to develop the harbor front will be chosen. Mr. Hoare has surveyed two routes to the city connecting all railways on both sides of the St. Lawrence. The line between the south end of the bridge and the South Shore Ry. will be common to all. On the north side of the river the alternative route to the one already mentioned along the water front is inland, entering the city by the St. Charles valley.

Lifting Jack Patents.—The U.S. Court of Appeals at Cincinnati, O., has affirmed the decree of the Circuit Court upholding the validity of patents 455,993, 455,994 and 455,995 granted to Josiah Barrett for improvements in lifting jacks. The Barrett jacks are made by the Duff Manufacturing Co., Allegheny, Pa., which brought suit against the Kalamazoo Railroad Velocipede Car Co., with the result above stated.

Kootenay Ry. and Navigation Co.—Passenger service has been suspended on this line, which runs from Bonner's Ferry, Idaho, to Kuskonook, B.C. On Aug. 19 we were officially informed that it was uncertain when it would be resumed. A daily freight service is being maintained between Bonner's Ferry and Creston Jct., B.C., where the K. R. and N. Co.'s line joins the C.P.R.'s Crow's Nest line.

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W.P. & Y.R. Cantilever Bridge.

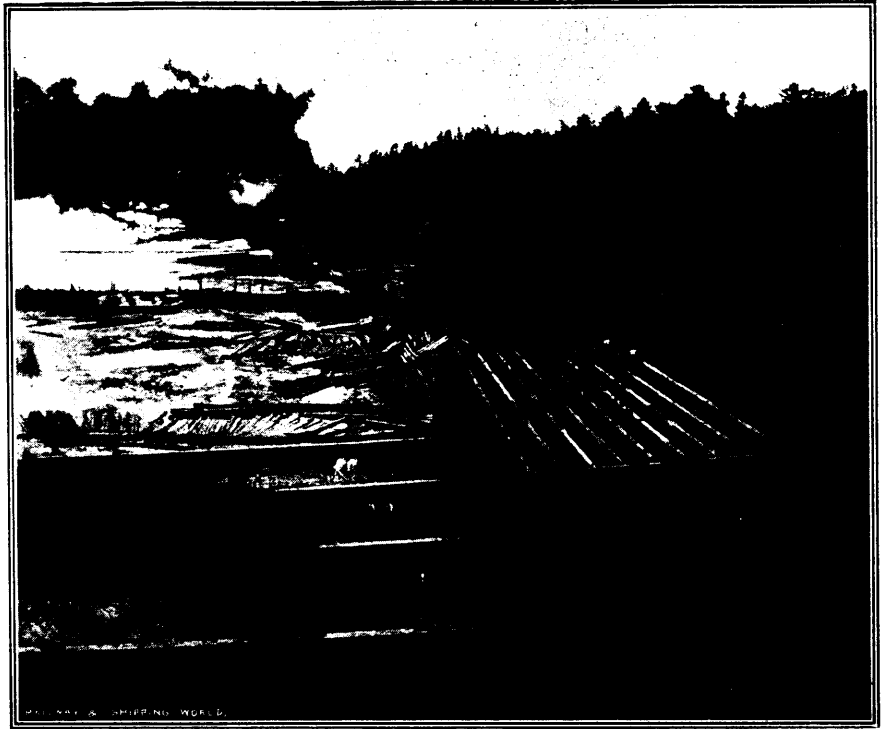
At the time of the construction of the White Pass and Yukon Ry. the topography of the country necessitated the construction of a switchback about two miles to the south of the summit of White Pass, for the purpose of carrying the line around a deep canyon at that point. The plans contemplated the construction of a bridge, but the desire to get the road quickly completed led to the postponement of the bridge and the building of the more-quickly-constructed switchback. Although the latter construction enabled the road to be opened more quickly than it could otherwise have been, the many inconveniences of operation and the expense of maintenance determined the company to put in the bridge with as little delay as possible. The illustration on this page shows the cantilever with which the canyon at this point is spanned. The clear span of the bridge is 240 ft., and the total length of the cantilever structure is 400 ft. At each end of the bridge proper is a wooden trestle, the total length of the crossing being 850 ft. At the center of the bridge the rails are 275 ft. above the bottom of the canyon. Considerable difficulty was experienced in building the concrete foundation piers of the cantilever, which had to be built on the steep, sloping sides of the canyon; and in excavating the foundations a large amount of ice was encountered in the crevices of the rocks, all of which had to be carefully removed. The work was commenced in Aug., 1900. The cantilever system of construction was adopted because of the difficulty and cost of erecting falsework over a canyon of such great depth. The shore arms were erected upon falsework in the customary way, and then the outer arms, bridging the canyon were constructed on the overhanging system, a movable traveler, carried on the deck of the completed structure, serving to handle the members of the bridge and swing them into position.

A test of the bridge was made in Jan. last, with a train which consisted of two locomotives and five carloads of steel (there being about 15 tons on each car), a caboose and a passenger coach. A rotary snowplow and two of the heaviest engines of the road were also run over the structure. In carrying out

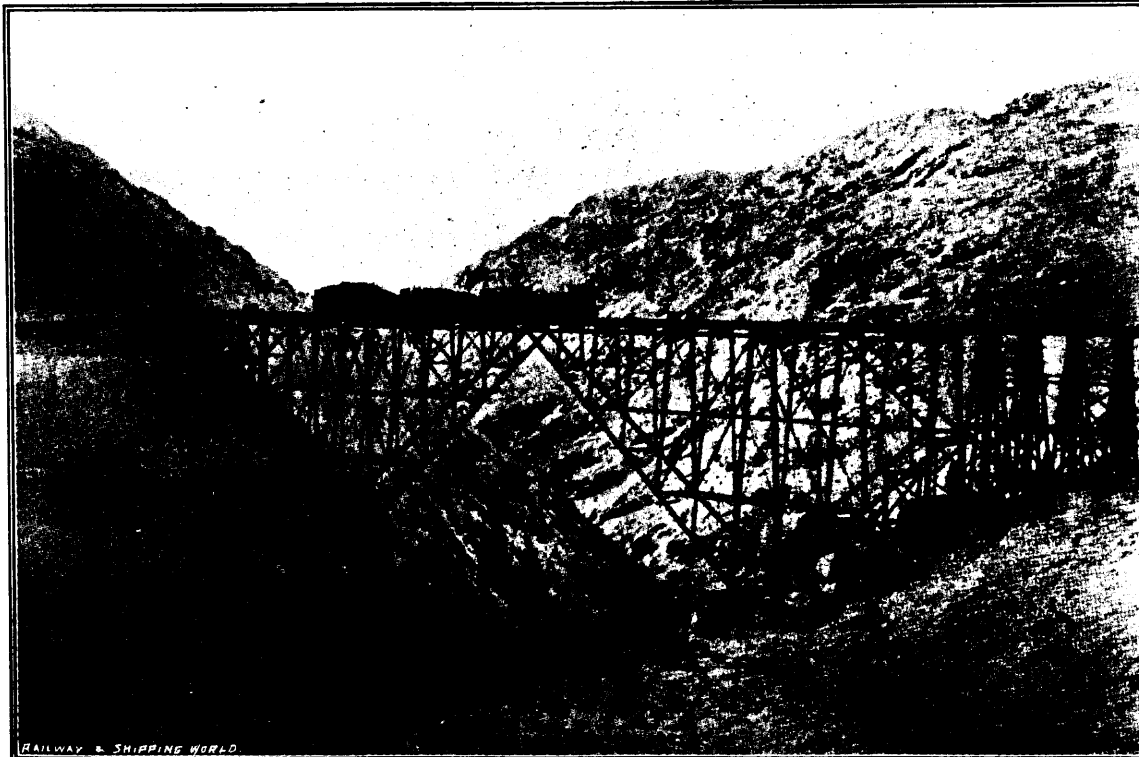
the test a series of level rods was placed on the floor beams, at the panel points of the bridge, and observations were taken with a level stationed on the adjoining hillside. The first test was made by pushing five carloads of rails on to the bridge, with the locomotive advanced upon the bridge only by the length of one panel. The greatest deflection of this loading was observed at the position occupied by the locomotive, where it amounted to $\frac{1}{4}$ in. In the next test the engine was run out

to the center of the bridge and then across the bridge and back again, when a maximum deflection of a quarter of an inch was observed throughout the middle third of the structure. Another test was made by coupling two locomotives together. This gave a maximum deflection of $\frac{1}{8}$ in. throughout the middle third. The next test was made with a rotary snowplow and two locomotives coupled together. This load was heavier than that of the rail train, but of the same length, and it gave a maximum deflection of $\frac{3}{8}$ in. at the center of the bridge and $\frac{3}{4}$ in. at the third panel from the center each way.

Compared with other cantilever structures of considerable height, the W. P. & Y. R. bridge is distinguished by the fact that each cantilever is made so deep that a separate carrying tower is not required, the bottom chords of the two arms of each cantilever meeting at the foundation. This system of construction reduces the stresses on the bottom chord, and the great depth of the cantilever conduces to vertical stiffness. When the eye becomes accustomed to the design, it is by no means unpleasant, and the cost of the bridge per foot is probably somewhat cheaper, than that of a cantilever built with the customary towers and arms of less depth.



QUEBEC BRIDGE, FIG. 3.—CAISSON BEFORE LAUNCHING. SEE PG. 294.



CANTILEVER BRIDGE OVER WHITE PASS CANYON, WHITE PASS AND YUKON RY.

C.P.R. ANNUAL REPORT.

Following is the 20th annual report covering the period of eighteen months to June 30, 1901:

Pursuant to the action of the shareholders at the last general meeting, changing the fiscal year to end June 30 instead of Dec. 31, the following report and statements are made to cover a period of a year and a half, excepting that the results of the Co.'s operations are given in two separate statements, one covering the first half of the calendar year 1900, previously published, and the other the fiscal year ended June 30, 1901.

The result of the Co.'s operations during the six months ended June 30, 1900, was as follows:—

Gross earnings.....	\$14,167,797.89
Working expenses.....	8,889,831.06
Net earnings.....	\$5,277,946.83
Add interest earned on deposits and loans.....	\$157,651.78
Add interest due from Duluth, South Shore & Atlantic Ry. Co. on consolidated bonds held by your Co. against debenture stock issued.....	\$302,140.00
Less advanced by your Co.....	167,140.00
Add interest from Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. on bonds held by your Co. against debenture stock issued.....	79,860.00
Add amount repaid by M.S.P. & S.S. M. Ry. Co. being balance in full of interest advanced.....	638,846.89
	<u>1,011,358.67</u>
Deduct fixed charges accrued during the six months including interest on land bonds.....	\$6,289,305.50
Surplus for the six months.....	3,434,244.67
From this there has been charged off the half yearly dividend on preference stock, 2% paid Oct. 1, 1900.....	\$599,086.67
And half yearly dividend on ordinary stock, 2½%, paid Oct. 1, 1900.....	1,625,000.00
	<u>2,224,086.67</u>
Leaving balance.....	\$630,974.16

The result of the Co.'s operations during the fiscal year ended June 30, 1901, was as follows:—

Gross earnings.....	\$30,855,203.55
Working expenses.....	18,745,828.20
Net earnings.....	\$12,109,375.35
Add interest earned on deposits and loans.....	\$336,705.25
Add interest due from Duluth, South Shore & Atlantic Ry., on consolidated bonds held by your Co. against debenture stock issued.....	\$634,280.00
Less advanced by your Co.....	167,280.00
Add interest from Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. on bonds held by your Co. against debenture stock issued.....	159,720.00
	<u>933,425.25</u>
Deduct fixed charges accrued during the year, including interest on land bonds.....	\$13,042,800.60
Surplus for the year.....	7,305,835.49
Deduct amount applied against cost of steamships.....	150,000.00
	<u>\$5,586,965.11</u>
From this there has been charged off the half yearly dividend on preference stock of 2%, payable April 1, 1901.....	\$599,086.67
And half yearly dividend on ordinary stock, 2½%, payable April 1, 1901.....	1,625,000.00
	<u>2,224,086.67</u>
	<u>\$3,362,878.44</u>
From this there has been declared a second half yearly dividend on preference stock, 2% payable Oct. 1, 1901.....	623,420.00
And a second half yearly dividend on ordinary stock, 2½%, payable Oct. 1, 1901.....	1,625,000.00

The working expenses for the year amounted to 60.75% of the gross earnings, and the net earnings to 39.25%, as compared with 58.16 and 41.84% respectively in 1899. The earnings per passenger per mile were 1.93c and per ton of freight per mile 0.79, as against 1.79 and 0.74 cents respectively in 1899.

Four per cent. consolidated debenture stock to the amount of £830,000 was created and sold for the purpose of acquiring the securities of the Manitoba & Northwestern Ry. Co., with its leased line, the Saskatchewan & Western Ry. and of the Great Northwest Central Ry. Co., on which your Co. had undertaken to pay interest by way of rental, in accordance with the terms of the leases of those lines approved by the shareholders at

their last meeting. Four per cent. consolidated debenture stock to the amount of £430,000 was created and sold to provide for the construction and equipment of branch lines constructed under authority given by the shareholders. Four per cent. preference stock to the amount of £900,000 has been issued and sold to provide for additions and improvements to the property authorized by the shareholders.

Since the last annual meeting, a further amount of \$428,500.00 of the 5% land grant bonds has been redeemed and cancelled.

Another section of the British Columbia Southern Ry., between Nelson and Balfour, 21 miles, was completed last year. You will be asked to approve a lease by your Co. of this section, and of the sections of the railway previously completed but not included in the original lease.

You will also be asked to approve the lease by your Company of the Kootenay & Arrowhead Ry. referred to in the last annual report.

Under an agreement made by your directors with the Government of Manitoba, in relation to the construction of certain branch lines within that Province, and involving the payment to this Co. of a cash bonus of \$70,000 your directors have undertaken that the Co. will construct, or cause to be constructed, a branch line from Forest, on the Great Northwest Central Ry., westerly 42 miles; an extension of the Waskada branch, 19 miles; an extension of the Snowflake branch, 9 miles; and an extension of the McGregor-Varcoe branch, 7 miles.

For the purpose of serving a section of country between Vancouver and the south arm of the Fraser river, in British Columbia, and of securing more direct connection with the fish canneries at the latter point, a line, about 16 miles long, has been commenced and will be completed during the current year. This line is being built under the charter of the Vancouver and Lulu Island Ry. Co., and a lease from that Co. to your Co. of the property will be submitted for your approval.

An agreement between your Co., the Duluth, South Shore and Atlantic Ry. Co., and the Mineral Range Rd. Co., whereby in consideration of certain traffic arrangements your Co. undertakes to guarantee interest at the rate of 4% per annum on \$1,254,000 bonds of the M. R. R. Co., will be submitted for your approval. Your directors are of opinion that the arrangement will be of substantial

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advantage to your Co., as well as to the D. S. S. and A. R. Co.

In accordance with the terms of the traffic contract between your Co. and the Minneapolis, St. Paul and Sault Ste. Marie Ry. Co., your Co. endorsed its guarantee of interest at 4% per annum on bonds of that Co. to the amount of \$1,141,000.00, representing additional mileage constructed.

In view of the rapidly increasing development of trade on the Pacific Coast, and the desirability of securing as much of that trade as possible for the Co.'s lines, your directors considered it advisable that a suitable line of coasting steamers should be provided by the Co. and as the steamers and other property and franchises of the Canadian Pacific Navigation Co., actively engaged in the business and with established trade relations, could be secured on terms that appeared to be advantageous, it was deemed desirable to acquire the same, at an expense of \$531,000.00. Since the purchase was made, another steamer has been added to the fleet at an expense of \$175,000.00. Before next season, it may be necessary to provide one more steamer for the northern or Yukon trade, and one for the route between Vancouver and Victoria. The growth of the Co.'s traffic on the Pacific Ocean suggests the importance of providing at an early date an additional steamship, somewhat larger and faster than the present Pacific steamships of the Co. In order to provide for these expenditures, you will be asked to authorize the issue of steamship bonds to the amount of £480,000 sterling.

The contract between the Imperial Government and the Co. for the transportation of mails to and from China and Japan, which expired in April last, has been renewed for a further period of five years on practically the same terms and conditions.

Your directors much regret to have to report the death in Dec. last of the Hon. D. MacInnes, one of their colleagues, and one of the oldest members of the Board, having been elected to the position in August, 1888.

CONDENSED BALANCE SHEET, JUNE 30, 1901.

Cost of railway and equipment.....	\$225,353,616.71
Ocean, lake and river steamships.....	\$5,791,815.86
Less applied in reduction of cost.....	1,668,224.69
Acquired securities held against debenture stock issued.....	4,123,591.17
Other acquired securities.....	34,589,455.54
Real estate, hotels and buildings held by trustees for the Co.....	2,192,161.94
Balances due on lands sold, deferred payments.....	1,448,381.48
Balances due on town-sites, deferred payments.....	3,467,394.33
Advances.....	185,475.05
To Montreal and Atlantic Ry. secured by \$500,000 1st mortgage bonds.....	424,144.80
To Duluth, South Shore and Atlantic Ry. car trusts, etc.....	236,213.19
Material and supplies on hand.....	2,924,912.78
Station and traffic balances and accounts receivable.....	4,266,942.27
Advances pending issue of securities, Columbia and Western Ry., \$761,770.10 Kootenay and Arrowhead Ry 373,967.79	1,135,737.89
Miscellaneous securities and advances.....	1,204,719.96
Imperial and Dominion Governments, amounts due for mail transportation, etc.....	172,361.53
Cash in hand.....	9,793,462.90
	\$291,518,571.54
In addition to above assets the Co. owns 16,104,403 acres of land.	
Capital stock.....	\$65,000,000.00
Four % preference stock.....	31,171,000.00
Four % consolidated debenture stock.....	60,369,082.53
Mortgage bonds.	
1st mortgage bonds, 5 %	
£7,191,500.....	\$34,998,633.33
Canada Central Mortgage 6 %.....	973,333.33
Due Province of Quebec on O. M. O. & O. & North Shore Rrs., at 4 1/2 %.....	7,000,000.00
Algoma Branch, 1st mortgage, 5 %.....	3,650,000.00
North Shore Ry., 1st mortgage, 5 %.....	616,119.67
	47,238,086.33

Land grant bonds.	
1st mortgage, amt of issue.....	\$25,000,000.00
Less amount redeemed or surrendered and cancelled.....	22,169,000.00
	2,831,000.00
3 1/2 % bonds, interest guaranteed by Dominion Government.....	15,000,000.00
	17,831,000.00
Current accounts, pay rolls and traffic balances.....	4,364,851.59
Interest on funded debt and rental of leased lines.	
Coupons due July 1, 1901, and including coupons overdue not presented.....	\$ 1,507,832.16
Accrued to date, not due.....	320,447.16
	1,828,279.32
Cash subsidies from Dominion and Provincial governments and municipalities.	29,930,590.07
Land grant.	
Net proceeds of sales of land.....	22,663,120.78
Surplus earnings' account.....	11,122,560.92
	\$291,518,571.54

RECEIPTS AND EXPENDITURES, JANUARY 1, 1900, TO JUNE 30, 1901.

Cash in hand, Dec. 31, 1899.....	\$10,904,247.38
	RECEIPTS.

Surplus revenue, as per statement—	
June 30, 1900, 6 months.....	\$2,855,060.83
June 30, 1901, 1 year.....	5,736,965.11
	\$8,592,025.94

Land Department.	
Net proceeds of sales.....	\$2,004,466.02
Less amounts remaining in deferred payments.....	1,741,356.30
	\$ 263,109.72

Collection of deferred payments of previous years on lands and town sites.....	404,018.39
	\$667,128.11

Bonuses.	
Realized from sale of bonds of Town of Selkirk.....	\$ 15,000.00
Dominion Government subsidy on Crow's Nest Pass extension.....	205,524.00
Dominion Government subsidy on Souris branch extension.....	158,848.00
	\$379,372.00
B. C. lake and river steamers—sale of steamers, less amount expended in completion of additional steamers.....	46,570.01

Four per cent. Preference Stock.	
Amount realized from issue of \$900,000 sold to meet capital expenditure.....	\$4,208,324.88
Consolidated Debenture Stock.	
Amount realized from issue of £ 430,000 for construction branch lines, 830,000 for acquiring guaranteed securities.....	£1,260,000.00
	6,494,472.92

	20,387,803.86
	\$31,292,141.24

Deduct Increase in Accounts Receivable.	
Stations and traffic balances	4,266,942.27
Advances pending issue of securities.....	1,135,737.89
Miscellaneous securities and advances.....	1,204,719.96
Due from Imperial and Dominion Governments.....	172,361.53
	\$6,779,761.65
Less, amounts at Dec. 31, 1899.....	5,914,226.95
	865,534.70

	\$30,426,606.54
--	------------------------

EXPENDITURES.	
Dividends on Preference Stock.	
2% paid April 1, 1900.....	\$ 535,820.00
2% paid Oct. 1, 1900.....	599,086.67
2% paid April 1, 1901.....	599,086.67
	\$ 1,733,993.34

Dividends on Ordinary Stock.	
3% paid April 1, 1900.....	\$1,950,000.00
2 1/2% paid Oct. 1, 1900.....	1,625,000.00
2 1/2% paid April 1, 1901.....	1,625,000.00
	5,200,000.00
Real estate, hotels and buildings held by trustees.....	253,784.21
Construction acquired and branch lines.....	2,509,128.80
Additions and improvements, main line and branches.....	2,413,289.89
Additions and improvements, leased lines	745,891.30
Rolling Stock, shops and machinery.....	1,218,104.76
Land Grant Bonds.	
Amount paid in redemption of \$428,500 bonds.....	471,350.00
Amount which was held in trust for Minn., St. P. and S. Ste. Marie Ry., repaid to that Co.....	1,359,629.12
Guaranteed Securities acquired by sale of 4% debenture stock.	
Manitoba and North Western Ry. system securities 3,312,678.77	
Great North-West Central Ry. 5% first mortgage bonds.....	876,567.31
	4,189,246.08
	\$20,094,417.50
Increase in material and stores in hand.....	324,877.32
Decrease in current liabilities.....	213,848.82
	\$20,633,143.64
Cash in hand June 30, 1901.....	9,793,462.90
	\$30,426,606.54

EARNINGS FOR YEAR ENDED JUNE 30, 1901.

From passengers.....	\$ 8,083,369.60
" freight.....	18,983,185.51
" mails.....	651,805.35
" express.....	691,208.56
" parlor and sleeping cars.....	472,181.91
" telegraph, grain elevators, and miscellaneous, including profit on Pacific steamships.....	1,973,452.62
	\$30,855,203.55

WORKING EXPENSES FOR YEAR ENDED JUNE 30, 1901.

Conducting transportation.....	\$4,476,123.74
Maintenance of way and structures.....	4,196,188.47
Motive power.....	5,745,730.55
Maintenance of cars.....	1,661,225.04
Parlor and sleeping car expenses.....	99,348.26
Expenses of lake and river steamers.....	447,249.10
General expenses.....	1,670,904.35
Commercial telegraph.....	449,958.69
	Total.....\$18,745,828.20

DESCRIPTION OF FREIGHT CARRIED.

Description.	Year ended Dec. 31.		Year ended June 30, 1901.
	1898.	1899.	
Flour.....brls.	3,292,450	4,005,226	3,735,873
Grain.....bush.	37,443,084	42,763,253	32,927,468
Live stock.....head.	715,018	810,559	945,386
Lumber.....feet.	840,145,338	957,702,349	899,214,646
Firewood.....cords.	203,336	202,441	204,818
Manufactured articles.....tons.	1,529,044	1,795,663	1,954,386
All other articles.....tons.	1,119,087	1,461,144	2,206,970

FREIGHT TRAFFIC.

No. of tons carried	Year ended Dec. 31.		Year ended June 30, 1901.
	1898.	1899.	
" " "	5,582,038	6,621,903	7,155,813
" " "	2,142,319,887	2,539,171,900	2,383,633,945
Earnings per ton per mile.....	0.76 cents.	0.74 cents.	0.79 cents.

PASSENGER TRAFFIC.

No. of passengers carried	Year ended Dec. 31.		Year ended June 30, 1901.
	1898.	1899.	
" " "	3,674,502	3,818,857	4,337,799
No. of passengers carried one mile.....	430,493,139	397,411,745	419,353,393
Earnings per pass. per mile.....	1.52 cents.	1.79 cents.	1.93 cents.

TRAFFIC TRAIN EARNINGS YEAR ENDED JUNE 30, 1901.

	Mileage.	Earnings.	Earnings per traffic train mile.
Passenger.....	7,765,584	\$ 9,585,693.12	\$ 1.23
Freight.....	10,415,831	18,459,536.26	1.77
Total.....	18,181,415	\$28,045,229.38	\$ 1.54

The above earnings of traffic trains include earnings from mails, express and sleeping cars, but do not include ocean, lake and river steamers, telegraph, elevators, rents, etc., the net earnings from which amounted to \$1,913,666.38.

EXPENSES PER TRAFFIC TRAIN MILE YEAR ENDED
JUNE 30, 1901.

Expenses.	Expenses per traffic train mile.
Maintenance of way and structures.....	\$ 4,196,188.47 0.231
Motive power.....	5,745,730.55 0.316
Maintenance of cars.....	1,601,225.04 0.091
Traffic and general expenses.....	6,246,376.35 0.344
	<u>\$17,849,520.41 0.982</u>

The mileage of all the Co.'s lines is as follows:—

Main line Montreal to Vancouver, 2,904 1/2 miles.	
Atlantic division.....	689.2
Eastern division.....	1,282.0
Ontario and Quebec division.....	784.2
Lake Superior division.....	973.7
Western division.....	3,717.2
Pacific division.....	909.8
	<u>8,356.1</u>

Mileage included in the C.P.R. traffic returns.....	7,563.3
" of other lines worked.....	732.4
" under construction.....	60.4
Mileage of Lines controlled:	
Minneapolis, St. Paul and Sault Ste. Marie Ry.....	1,409.0
Duluth, South Shore and Atlantic Ry.....	568.0
	<u>1,977.0</u>
	<u>10,333.1</u>

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

The fiscal year having been changed to end June 30, the monthly traffic comparisons are now made in accordance therewith.

Approximate earnings for Aug. \$3,957,000; increase over Aug., 1900, \$488,000.

DULUTH, SOUTH SHORE AND ATLANTIC.—Approximate earnings for Aug., \$243,519, against \$254,440 in Aug., 1900. Gross earnings for July, \$445,919.43, net earnings \$203,861.82, against \$358,867.03 gross and \$122,657.31 net, for July, 1900. Net earnings for seven months ended July 31, \$581,564.34, against \$600,214.56 for same period 1900.

MINERAL RANGE AND HANCOCK AND CALUMET.—Approximate earnings for Aug., \$52,211, against \$61,841 for Aug., 1900.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE.—Approximate earnings for Aug.,

\$430,224, against \$326,831 in Aug., 1900. Gross earnings for July, \$255,627.50, net earnings \$110,308.94, against \$244,427.64 gross and \$93,432.01 net for July, 1900. Net earnings for 12 months ended June 30, \$1,952,738.50, against \$2,596,604.92 for same period, 1900.

The increase in gross earnings in July amounted to 15.14%. The operating expenses were increased only 10.63%. The gain in net reaches the large figures of 23.91%. For some time past the Co.'s miscellaneous traffic has shown a steady expansion. It is expected that highly satisfactory financial results will be obtained in the current fiscal year, as the north-west wheat crop is large beyond precedent. The equipment of the road will be overtaxed to handle the immense crop this season, and exporters express themselves confident of a large demand from Europe.

Canadian Pacific Railway Land Sales.

	Acres.	Amount.
Jan. 1900.....	31,485	\$100,857.85
Feb.	27,928	75,771.19
Mar.	29,370	90,777.79
April....	31,183	181,775.78
May....	58,457	214,851.09
June....	48,874	188,779.64
July....	66,057	129,614.69
Aug....	50,168	161,352.28
	49,089	129,483.42
	32,178	165,871.16
	360,088	\$1,148,167.92
		\$951,844.88

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.	2,372,080	2,188,635	184,345	.....
April....	2,358,286	2,189,859	168,427	.....
May....	2,330,941	2,219,400	111,541	.....
June....	2,327,119	2,278,937	48,182	.....
July....	2,365,970	2,177,495	188,472	.....
Aug....	2,645,340	2,439,045	206,295	.....
	\$18,620,007	\$17,632,059	\$987,048	.....

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

GRAND TRUNK RAILWAY.

Revenue statement for July, 1901:

	1901.	1900.	Increase.	Decrease.
Gross receipts.....	£401,600	£362,900	£38,700	.....
Working expenses.....	270,000	244,400	25,600	.....
Net profit.....	£131,600	£118,500	£13,100	.....

Including the figures of the Cincinnati, Saginaw and Mackinaw Ry. for both periods.

GRAND TRUNK WESTERN RAILWAY.

Revenue statement for July, 1901:

	1901.	1900.	Increase.	Decrease.
Gross receipts.....	£63,200	£66,100	.....	£2,900
Working expenses.....	60,800	62,300	.....	1,500
Net profit.....	£2,400	£3,800	.....	£14,00

DETROIT, GRAND HAVEN AND MILWAUKEE. RY.

Revenue statement for July, 1901:

	1901.	1900.	Increase.	Decrease.
Gross receipts.....	£21,300	£18,500	£2,800	.....
Working expenses.....	13,400	13,300	100	.....
Net profit.....	£7,900	£5,200	£2,700	.....

The Canadian Construction Co. (Ltd.), which has a Dominion charter, has been licensed in Ontario. W. Sutherland, of Farran's Point, Ont., is attorney. The stockholders are D. S. Walker, L. A. Wilson, M. Perrault, and E. Daly. The Company has a canal contract at Farran's point, Ont.

The Annual Financial Review, compiled by W. R. Houston, of the Dominion Bank, Toronto, is intended to be a carefully arranged review of facts regarding securities listed on the Montreal and Toronto stock exchanges. The first issue, which is corrected up to July, 1901, gives the latest annual reports, with the highest and lowest prices of the stock or bonds on both exchanges for each month during the past 10 years; with some information as to the history of the companies, and a mass of other interesting and useful facts. The transportation and allied companies which are included in the work are the Hamilton Steamboat Co., Muskoka Navigation Co., Northern Navigation Co., Richelieu and Ontario Navigation Co., C.P.R. Co., Duluth, South Shore & Atlantic Ry. Co.; G. T.R. Co., British Columbia Electric Ry. Co., Halifax Electric Tramway Co., London Street Ry. Co., Montreal Street Ry. Co., Ottawa Electric Ry. Co., St. John Ry. Co., Toronto Ry. Co., Winnipeg Electric Street Ry. Co., Bell Telephone Co., Dominion Telegraph Co., and Montreal Telegraph Co.

A ticket-collector on a Scotch railway got leave to go and get married, and was given a pass over the line. On the way back he showed to the new collector his marriage certificate by mistake for his pass. The latter studied it carefully, and then said, "Eh, mon, you've got a ticket for a lang, wearisome journey, but not on the Caledonian railway."

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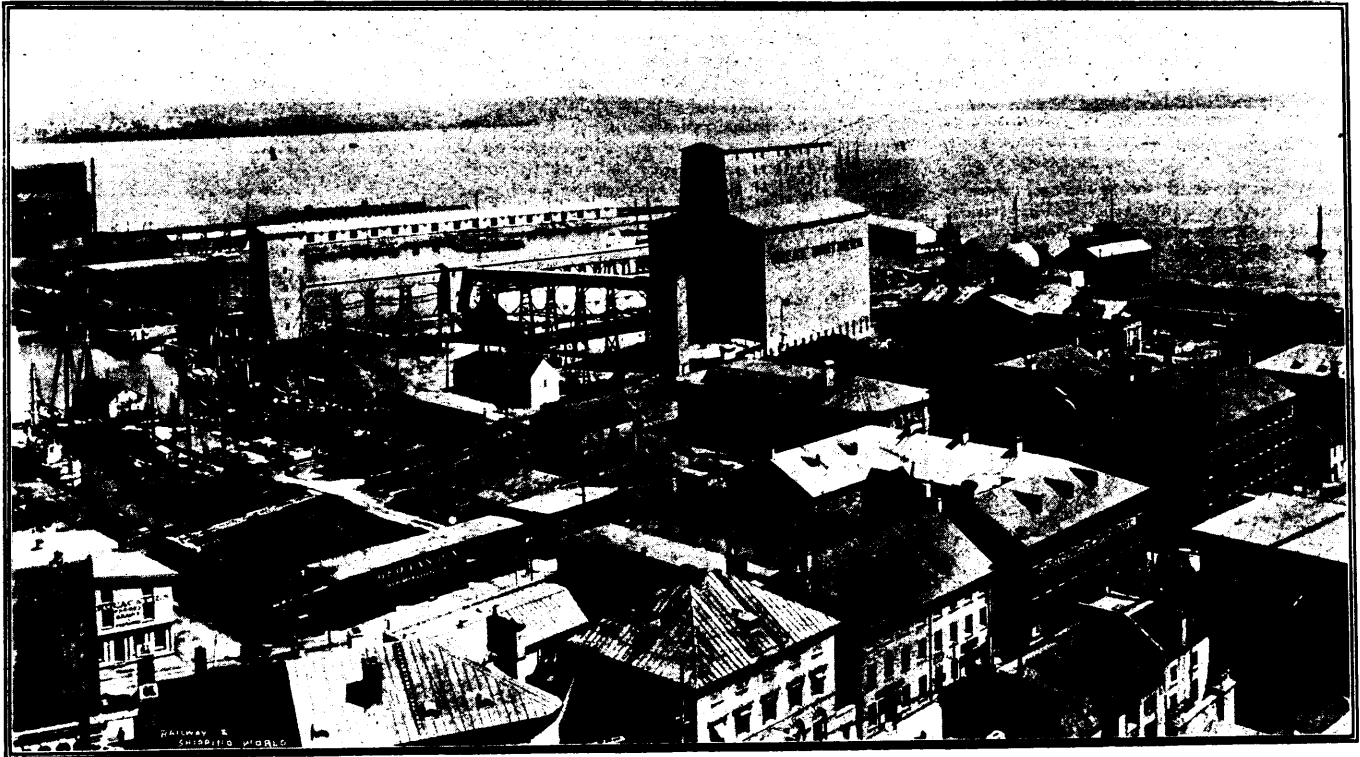
The C.P.R.'s Royal Train.

The train which has been built by the C.P.R. for the Duke and Duchess of Cornwall and York during their Canadian tour is 730 ft. long, and weighs 595 tons. It consists of the day coach Cornwall and the night coach York, for the especial use of their Royal Highnesses; the compartment car, Canada; the sleeping cars, Australia, India and South Africa; and the dining car, Sandringham—together with cars for the baggage and for the railway employes—nine coaches in all. The train will be hauled by locomotives of the Atlantic and Consolidation types of passenger engines of the C.P.R. These styles of engine weigh with their tenders, when loaded, about 132 tons, and the over-all length is between 61 and 62 ft.

The train is finished outside in natural mahogany. At either end of, and on both sides of each car are the armorial bearings of the Duke. The train is vestibuled throughout, and lighted by electricity. Telephones of a

quiet, grey-green shade. The sofa, arm chairs, table, escritoire and other articles of furniture are upholstered in blue velvet to match the draperies. A piano is also provided. One feature of the car is its admirable light and airy appearance, this being due to the eight large plate glass windows of the side, together with the glass panels of the door and rear wall. The Duchess' boudoir is between the reception and dining rooms, half way along the corridor adjoining them. Its prevailing shade is a pearl grey. The panels are painted à la Watteau. The lattice work of the ceiling, by which ventilation is secured, as well as the ornaments of the panels are touched lightly with gold. The draperies are of light blue moire silk, and divans, chairs and table are gilt to match the panels. The dainty table, the reading lamp and chairs are all heavily gilt, and adjacent to it is a most complete toilet room, containing a long mirror, reaching almost to the floor, practically a cheval glass. The front of the car has been devoted to a dining

A corridor extends throughout the length of the car. The central portion of the York is occupied by two bedrooms with servants' sleeping rooms adjacent. These Royal bedrooms are finished in pearl grey enamel, being panelled in silk to match the draperies. Each contains its own wardrobe, dressing table and large mirror. The brass bedsteads are heavily gilt. In addition to the ceiling lights, each room has a special fixture for the dressing table, which sheds a mellow light upon the person sitting before it. The draperies of the Duke's room are of crimson silk armure, and those of the Duchess' of pale blue moire. The furniture is of satinwood. Each of the Royal bedrooms has its own bathroom attached. These are draped in a soft, tasselled waterproof cloth of a pearl grey hue. The baths are full sized, upholstered round the borders with this same waterproof cloth, and have heavy curtains of a similar material. The remainder of the car is devoted to two state rooms finished in mahogany; the one for the lady-



THE GREAT NORTHERN RAILWAY'S ELEVATORS, PRINCESS LOUISE DOCKS, QUEBEC.

new pattern have been installed in every coach—one novelty being an arrangement by which all the instruments may be in use at the same moment, without any one of them interfering with any other.

The Cornwall will be the rear coach of the train, so that their Royal Highnesses may have an uninterrupted view of the scenery from the sheltered observation platform. The Cornwall is 78 ft. 6½ in. long, with a width of 10 ft. 3 in., an extreme height of 14 ft., and a weight of almost 60 tons. It contains reception-room, boudoir, dining-room and kitchen. The reception-room opens directly on to the observation platform, and is the largest room of the suite. It is panelled in Circassian walnut, and while it is undecorated save for a few ornamental moldings, it gives the effect of extreme richness, and is in admirable taste. The ceilings are finished in dead gold, and the moldings and ornaments are just touched with gold and blue, the decorations being of Louis XV. style. The hangings and drapings are of dark blue velvet, while the floor is carpeted with a heavy Wilton of a

room which is finished in African coromandel, ornamental cartouches in bas relief displaying at one end the armorial bearings of the King, and at the other the blended coats-of-arms of the Duke and Duchess, while the arms of the Dominion, and the family badge of the Duke embellish the remaining walls of the room. The draperies are of green velvet, and the decorations of the panels are in shades of gold and green to match. The upholstery is, however, of a warm, brown tone. The dining table is large enough to accommodate eight persons. A candelabrum of electric fixtures will cast a subdued light upon the table. The forward part of the car is devoted to pantry, kitchen, store-room and other necessary offices. The perfection of the arrangements is as conspicuous in the kitchen and pantry of the Royal car as in any part of the train. The china, silver and glassware were all specially manufactured in England.

The night coach York is 78 ft. 2 ins. long, and weighs 57¼ tons, its other dimensions being the same as those of the Cornwall.

in-waiting, the other for the gentleman-in-waiting, together with a general toilet, and a baggage room.

The Canada, which is the third coach from the rear of the train, is a compartment car, finished in prima vera or white mahogany, and upholstered in terra cotta and olive green plush. It contains six state rooms fitted with every convenience; in the centre of the car is a commodious smoking-room, with a large writing table, lounge and luxurious easy chairs. There is also a bath at one end of the car, and at the other a large lavatory and shower bath, the latter installed in a small chamber, and upholstered in grey waterproof cloth.

The Sandringham is the dining-car for the staff, and consists of the main dining saloon, pantry and kitchen. It is 77 ft. 2 in. long, weighs 57 tons, and is of uniform width with the other cars. The dining-room is finished in red mahogany; the ceilings are embossed in old gold; and the floor is carpeted with a soft, green Brussels. Ten large windows light the car by day, and at night 28 electric

lights, together with five double acme lights, achieve the same end. The draperies are green silk. Thirty persons can be seated at the tables, which are arranged on either side of the aisle. The upholstering of the chairs is leather. In the hallway, leading to the pantry on the left and to the corridor on the right, stands a large mahogany sideboard with silk coverings. The pantry and kitchen are most complete in their appointments.

The other cars which make up the train are of the C.P.R. standard patterns. They are the sleepers Australia, India and South Africa, such as are used on the Imperial Limited between Montreal and Vancouver. Certain changes have, however, been made in the South Africa, inasmuch as in addition to the usual staterooms a consulting and a dispensing room have been provided for the use of their Royal Highnesses' medical attendant and his assistant. The latest appliances in surgery, and a well-selected stock of drugs will be at the doctor's disposal. Two baggage cars complete the train. Each contains berths and accommodation for attendants, but while one has a large amount of space for baggage, a great portion of the other has been fitted up for cold storage. All the vestibules of the train have their diaphragms protected by velveteen curtains matching in shade the green tinted carpet.

Space in a good trade paper is fertile ground. Yet it is the advertiser who must till it and sow the seed before he can expect a harvest. Carelessly prepared ads in a trade paper are not only devoid of results to the advertiser, but they are directly harmful to the paper itself. Trade papers should insist that every advertiser fills his space with matter which does justice to advertiser and publication as well.—Printers' Ink.

Canadian Freight Association.

At a meeting at Picton, Ont., Aug. 15, rates on apples for the season of navigation of 1901 were fixed.

At a meeting of the Freight Committee in Toronto, Sept. 5, rates, etc., nos. 172 to 189 were agreed to.

The following committee was appointed to arrange minimum c.l. weights for all traffic carried under special commodity rates or tariffs—to report at next meeting:—S. P. Howard, convener; W. H. D. Miller, F. J. Watson, C. E. Dewey, J. Hardwell, T. Marshall and N. D. Chapin.

It was proposed that Canadian lines will not participate in eastern terminals on traffic between Canada and Eastern States points, in excess of 1½c. per 100 lbs., except that on traffic to or from New York and Philadelphia the Canadian lines will join, as far as New York is concerned, in lighterage or terminal deduction in the usual New York lighterage limits, not exceeding 3c. per 100 lbs., and, as far as Philadelphia is concerned, in a terminal deduction not exceeding 3c. per 100 lbs. The Canadian lines will require in all other cases full proportion of the rates to or from common points without deduction, and will not be parties to such through rates as may be authorized to or from points on roads in Eastern States connecting with eastern trunk lines, where, to such points, common point rates are authorized with an arbitrary deduction, for the eastern delivering or eastern originating road, before prorating. This proposition was left over for further consideration.

A banquet to the ticket agents might be interpreted an attempt to punch them.—Toronto Mail and Empire.

Fast Runs on the Michigan Central.

In our July issue we published particulars of a fast run made on June 19 between St. Thomas and Windsor, Ont., 110.99 miles, in 1 hour 49 minutes, or 1 hour 46 minutes after deducting 3 minutes for a stop made at Tilbury. Chief Despatcher Babbitt has furnished us the following particulars of a run made on July 25 by the Pan-American express no. 7, consisting of 4 cars drawn by Atlantic type locomotive 483, driver W. Cooper. The time occupied was 1 hour 36 minutes, an average of 69.37 miles an hour for whole run. Following are the details:

Station.	Time.	Mins.	Distance	Miles per hour.
St. Thomas.....	1.40 p.m.	..	...	...
St. Clair Junction.....	1.45 "	5	4.23	50.76
Shedden.....	1.50 "	5	4.83	57.60
Iona.....	1.53 "	3	3.93	78.60
Dutton.....	1.58 "	5	5.95	71.40
Bismark.....	2.03 "	5	6.53	78.36
Rodney.....	2.07 "	4	4.40	66.00
Taylor.....	2.11 "	4	3.39	50.85
Highgate.....	2.15 "	4	4.74	71.10
Ridgetown.....	2.20 "	5	5.64	65.68
.....
Mull.....	2.29 "	.....	.....	.....
.....
Fargo.....	2.34 "	5	5.87	70.44
.....	2.38 "	4	5.00	75.00
Charing Cross.....	2.40 "	2	2.38	71.40
Buxton.....	2.45 "	5	6.25	75.00
Fletcher.....	2.48 "	3	4.05	81.00
Tilbury.....	2.53 "	5	6.60	79.20
Comber.....	2.58 "	4	5.00	75.00
Ruscombe.....	3.02 "	3	3.93	78.60
Woodslee.....	3.05 "	4	5.52	68.25
Essex.....	3.09 "	4	4.31	64.65
Maidstone Cross.....	3.13 "	5	5.77	69.22
Pelton.....	3.17 "	3	1.19	.....
Roundhouse.....	3.22 "	.....	.....	.....
Windsor.....	3.25 "	.....	.....	.....

Commissioner Ross, of the Yukon territory, is reported to have stated recently that the White Pass and Yukon Ry. purposes using oil as fuel for its locomotives and steamships.

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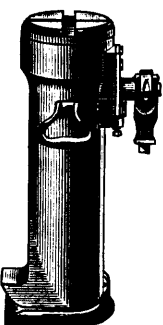
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THE WIRE AND CABLE COMPANY, MONTREAL.

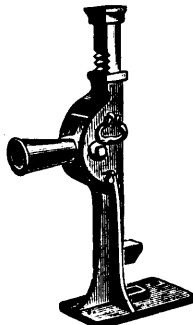
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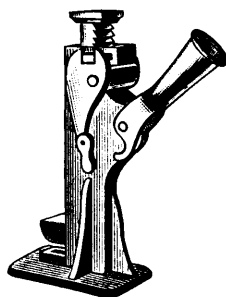
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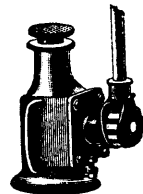
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Agent for Canada,

31 Melinda St., - Toronto

Canadian Ticket Agents' Association.

The annual meeting will be held at Montreal on Nov. 6. The headquarters will be at the charming Place Viger Hotel, which has made special and very liberal rates for the members. The annual dinner will also be held there. The social features of the meeting have not yet been settled, but it may be mentioned that H. and A. Allan have invited the members to dine on the S.S. Tunisian on Nov. 5, or to luncheon on Nov. 6,—the steamer sails at daylight Nov. 7. The invitation has been accepted for one of the functions, probably the luncheon, as some of the members may not reach Montreal until the morning of Nov. 6. The various railways leading to Montreal will as usual issue free transportation to members and their wives. Secretary de la Hooke will probably issue circular no. 1 about the meeting early in October, and he may be depended on to sustain his reputation for making complete arrangements.

October Birthdays.

Many happy returns of the day to
 E. P. Allen, Travelling Passenger Agent, C.P.R., at Syracuse, N.Y., born Oct. 21, 1839.
 T. C. Burgess, Commercial Agent, G.T.R., at Minneapolis, Minn., born at New York City, Oct. 2, 1853.
 C. Cooper, Assistant Treasurer, Secretary and Auditor, Halifax and Yarmouth Ry. at Yarmouth, N.S., born in New Jersey, Oct. 18, 1869.
 G. L. Courtney, Traffic Manager, Esquimalt and Nanaimo Ry. at Victoria, B.C., born Oct. 7, 1868.
 S. W. Cummings, General Passenger Agent, Central Vermont Ry. at St. Albans, Vt., born at Frankfort, Me., Oct. 20, 1843.
 J. Earls, Secretary and Treasurer, Canadian Freight Association at Toronto, Ont., born in Ireland, Oct. 30, 1838.
 W. P. Fitzsimons, Division Freight Agent G.T.R. at Detroit, Mich., born Oct. 27, 1868.
 C. F. Gildersleeve, General Manager Richelieu & Ontario Navigation Co. at Montreal, born at Kingston, Ont., Oct. 17, 1833.
 A. H. Harris, General Traffic Manager Quebec Southern Ry. at Montreal, Que., born in Devonshire, Eng., Oct. 15, 1855.
 S. Hopkins, ex-Manager G.T.R. Despatch, born at Boston, Mass., Oct. 13, 1846.
 J. F. Lee, Traffic Manager White Pass & Yukon Route at Seattle, Wash., born at London, Eng., Oct. 23, 1851.
 A. Leslie, General Auditor and Accountant Lake Erie & Detroit River Ry. at Walkerville, Ont., born at Toronto, Oct. 3, 1864.
 J. McGowan, General Superintendent and General Agent Carillon & Grenville Ry. at Carillon, Que., born in Scotland, Oct. 18, 1823.
 I. G. Ogdin, Comptroller C.P.R. at Montreal, born at New York City, Oct. 10, 1844.
 G. Olds, ex-General Traffic Manager C.P.R., born at Stapleton, Gloucestershire, Eng., Oct. 29, 1832.
 D. Pottinger, General Manager Canadian Government Rys. at Moncton, N.B., born at Pictou, N.S., Oct. 7, 1843.
 J. E. Price, General Superintendent I.C.R. at Moncton, N.B., born at Petitcodiac, N.B., Oct. 18, 1854.
 G. B. Reeve, Second Vice-President and General Manager G.T.R. at Montreal, born in Surrey, Eng., Oct. 23, 1840.
 P. W. Ressemann, General Superintendent Ottawa and Gatineau Ry. and Pontiac Pacific Jct. Ry. at Ottawa, Ont., born at Hankins, Sullivan Co., N.Y., Oct. 16, 1857.
 Sir Thomas G. Shaughnessy, President C.P.R. at Montreal, born at Milwaukee, Wis., Oct. 6, 1853.
 C. W. Spencer, General Superintendent C.P.R. Eastern Division at Montreal, born at Kemptville, Ont., Oct. 31, 1857.

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

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

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

J. Woodman, Division Engineer C.P.R. at Winnipeg, Man., born Oct. 5, 1861.

C.P.R. Western Division Organization.

The following circular has been issued: The General Superintendent will be assisted by a Superintendent of Transportation, a Master Mechanic, a Division Engineer, and superintendents of districts.

The Superintendent of Transportation will have supervision of the train, station and yards service, and of the distribution and handling of rolling stock over the general division.

The Master Mechanic will have direct charge of and be responsible for repairs and maintenance of rolling stock and equipment, in accordance with standard plans furnished by Superintendent of Rolling Stock; for the efficient and economical operation of all shops and engine houses; for the quantity of supplies used and cost of forces employed in connection therewith. He will report direct to Superintendent of Rolling Stock on all matters pertaining to the maintenance of standards, and to the General Superintendent on all other matters.

Superintendents will have charge of all the Co.'s property on their respective districts, unless such property is under the charge of the Co.'s Land Commissioner. They will be responsible for the safety and efficient maintenance of the transportation service, roadbed, bridges and buildings; for the cost of forces employed and the quantity of supplies used in connection therewith, and for the economical and efficient working of the district in their charge. They will report to the Superintendent of Transportation on all matters pertaining to station, yard and train service; to the Division Engineer on bridges, elevators, and water service matters, alterations and additions made in structures, roadbed, yards, fencing, etc., and on all other matters to the General Superintendent.

The Division Engineer will have supervision of maintenance and renewal of bridges, elevator and water service, and the maintenance of all standards, and will have charge of all plans of the Co.'s property, and keep a record of all changes, alterations and additions thereon, and keep such other records and perform such other duties as the General Superintendent may direct.

The Western Division will, for operating purposes, be divided into six districts as follows:

First District—Port Arthur to Winnipeg Jct. and connecting branches.

Second District—Brandon section, Portage la Prairie to Yorkton, Minnedosa to Rapid City Jct., Chater to Miniota, Menteith Jct. to Arcola, Kemnay to Estevan.

Third District—Winnipeg terminals, Winnipeg to Napinka, Snowflake and Waskada branches, Winnipeg to Souris; Emerson, Stonewall and Selkirk branches.

Fourth District—Main Line west of Brandon to Swift Current, inclusive, and all branch lines connecting therewith.

Fifth District—All main line west of Swift Current to Laggan, inclusive, and all branch lines connecting therewith.

Sixth District—Dunmore Jct. to Kootenay Landing, and North Star branch.

RAILWAY APPOINTMENTS, ETC.

Algoma Central and Hudson's Bay Ry.—H. M. Perry has been appointed Master Car Builder, with office at Sault Ste. Marie, Ont.

Canadian Pacific Despatch.—B. D. Weber, heretofore General Agent, has been appointed General Manager, with office at 4 Liberty Square, Boston, Mass. H. G. Leslie has been appointed New England Agent, with office at the same place.

Canadian Pacific Ry.—M. C. Colcleugh has been appointed acting General Superintendent's Accountant of the Western division, with office at Winnipeg.

G. M. Sherlock, heretofore Chief Train Despatcher at Winnipeg, has been appointed Chief Train Despatcher of the second district of the Western division, at Brandon, Man. J. G. Ferguson and M. E. Farwell, heretofore train despatchers at Winnipeg, have been transferred to Brandon.

J. T. Barnes, heretofore train despatcher at Winnipeg, has been appointed Chief Train Despatcher of the third district of the Western Division, at Winnipeg.

J. McGillivray has been appointed chief clerk to the Superintendent of Transportation of the Western division, at Winnipeg.

The office of J. B. Elliott, Master Mechanic, Eastern division, has been moved from Carleton Jct. to Montreal, Windsor St. Station.

J. J. Scully, heretofore assistant to the Master Mechanic at Toronto Jct., has been transferred to Winnipeg. On Sep. 5 we were advised that he was out on the line looking into the rating of loads for locomotives with the engine men and road foremen. No circular has been issued defining his new position.

A. Shields has been appointed locomotive foreman at Winnipeg, vice D. McLean, who has been promoted to road foreman from Swift Current to Laggan, and from Dunmore to Kootenay Landing, vice J. Brownlee, who has been transferred to the section from Swift Current to Brandon, including Brandon.

N. S. Dunlop, heretofore chief clerk in the solicitors' office of the Ontario division at Toronto, has been transferred to Montreal, to take charge of the taxes and assessment of the Co. On Sep. 14 we were advised that his title had not been decided.

Wm. McMullin, trackmaster of the Northern district of the Atlantic division has been transferred to St. John, N.B., to oversee the laying of new track to accommodate the increasing winter port business.

L. R. Johnston, heretofore Superintendent Engineer at Vancouver, with charge of the Vancouver shops and of the machinery of the Co.'s steamers, has been appointed Assistant Superintendent of Rolling Stock, with office at Montreal.

W. Stitt, Assistant General Passenger Agent of the Western Division at Winnipeg, will leave in about a month for Australia, where he will become General Agent of the Co.

F. P. Gutelius, heretofore engineer of the Kootenay and Boundary districts of the Pacific division at Nelson, B.C., has been transferred to Montreal, and it is reported that he has been appointed engineer in charge of the maintenance of way department.

H. T. Richardson, heretofore chief engineer of the R. M. S. Empress of China, has been appointed Superintendent Engineer of the Co.'s steamships, with office at Vancouver, B.C.

It is reported that John McLellan, for the last 12 years yard master at Winnipeg, has been appointed yard agent of the Winnipeg terminals; that F. McKenny, night yard master, has been appointed day yard master, and that W. Cooper has been appointed assistant to Roadmaster Rearton, with supervision over maintenance of way of the Winnipeg terminals.

Dominion Express Co.—V. G. R. Vickers, agent at Montreal, and W. Walsh, agent at Toronto, have been promoted to be general agents.

Grand Trunk Ry.—A. A. Maver, heretofore locomotive foreman at London, has been appointed Master Mechanic in charge of Montreal works to succeed J. E. Muhlfeld, who resigned to become Superintendent of Machinery and Rolling Stock on the I.C.R.

T. A. Summerskill, heretofore locomotive foreman at York, Ont., has been appointed Master Mechanic of the Northern division, with headquarters at Allandale, Ont., vice W. Ball, resigned.

J. Stortz, heretofore in charge of hands in erecting shop at Hamilton, has been appointed locomotive foreman at York, Ont., vice T. A. Summerskill, promoted.

A. S. Wright, heretofore in charge of hands in erecting shop at Stratford, has been appointed locomotive foreman at London, Ont., vice A. A. Maver, promoted.

R. P. Dalton, Assistant Superintendent of the Western Division at Battle Creek, Mich., has resigned. It is said that he has been appointed Superintendent of the St. Louis, Iron Mountain and Southern Ry.

Hamilton, Grimsby and Beamsville Electric Ry. Co.—G. Waller, heretofore Hamilton city agent, has been appointed manager, vice A. J. Nelles, resigned. A. Orr, heretofore conductor, succeeds Mr. Waller as city agent.

Intercolonial Ry.—J. E. Muhlfeld, heretofore Master Mechanic of the G.T.R. at Montreal, has been appointed Superintendent of Machinery and Rolling Stock, with office at Moncton, N.B., in place of G. R. Joughins resigned.

Inverness and Richmond Ry.—A Nova Scotia paper recently stated that F. Plummer, who had been accountant and paymaster since the beginning of construction, had been appointed General Superintendent, with headquarters at Broad Cove, and that he would also have control of the Co.'s mines there. On enquiry at Mackenzie, Mann & Co.'s head office in Toronto, Sept. 18, we were informed that no such appointment had been made. Angus Sinclair is Chief Engineer and Manager of Construction, and in general charge of the Co.'s operations.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—S. W. Derrick has been appointed Superintendent of the fifth district, Minnesota division, with office at Oakes, N.D.

Montreal Telegraph Co.—H. A. Allan has been elected President, succeeding his late father, Andrew Allan. A. T. Paterson has been elected Vice-President, succeeding H. A. Allan.

Pullman Co.—E. A. Benson, heretofore Manager of the East Buffalo shops, has been appointed Mechanical Superintendent, with headquarters at Chicago, Ill.

White Pass and Yukon Ry.—It is reported that E. C. Hawkins, General Manager, has resigned.

Mainly About People.

Capt. J. H. Rood, chief officer of the Government steamer Acadia, died in the Marine Hospital at Pictou, N.S., recently.

The Pacific Cable Board has appointed C. H. Reynolds, late Director-General of Telegraphs of India, to be its General Manager.

J. D. Beatty, General Manager of the Northwest Transportation Co. at Sarnia, Ont., has been making a trip through Manitoba and the Northwest.

Lord Strathcona has presented to the Royal National Mission to Deep-sea Fishermen a beautiful hospital ship for service on the Labrador coast.

J. Cassils, of Shaw, Cassils & Co., Montreal, who has been elected Vice-President of the Merchants Bank of Canada, is President of the Dominion Express Co.

Hector MacKenzie, Vice-President of the Montreal Telegraph Co., and a director of the Richelieu and Ontario Navigation Co., died at Montreal recently, aged 58.

R. Robertson, who recently resigned his position as G.T.R. and I.C.R. ticket agent at Bonaventure station, Montreal, on account of ill health, died in Montreal Aug. 30, aged 41.

W. R. Baker, Assistant to the Second Vice-President of the C.P.R., is in charge of the royal train conveying the Duke and Duchess of Cornwall and York across the continent and back.

W. H. Douglas, heretofore Manager of the Montreal Park and Island Ry., which has been absorbed by the Montreal Street Ry., has been appointed manager of the street railway at Akron, Ohio.

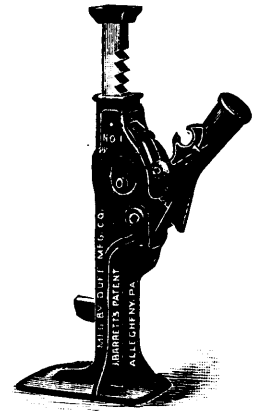
Lord and Lady Strathcona arrived in Montreal from England on Sept. 1, to entertain the Duke and Duchess of Cornwall and York. Lord and Lady Strathcona will return to England about the end of Oct.

J. Ward, chief clerk in the mechanical department of the I.C.R. at Moncton, N.B., died there from typhoid fever, recently, aged 45. He was born in Quebec, and until 18 months ago was connected with the G.T.R. mechanical department at Montreal.

John Sutherland, nephew of M. J. Haney, Toronto, contractor for the bridge over the Hillsborough river, P.E.I., was crushed to death by being drawn into the machinery of a dredge, on which he was working at the bridge, Aug. 19.

W. R. Woollatt, eldest son of W. Woollatt, General Manager of the Lake Erie and Detroit River Ry., was married in Toronto recently to Miss Mabel, daughter of the late W. Tyson, of Brantford. Mr. and Mrs. W. R. Woollatt will reside in Port Stanley, Ont.

Capt. H. Foot, commander of the Islander, who lost his life in the sinking of that vessel, near Juneau, was born in Ireland, and was engaged in navigating the Muskoka lakes be-



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An address by Joseph Choate, Ambassador to Great Britain, on the career and character of Abraham Lincoln—his early life—his early struggles with the world—his character as developed in the later years of his life and his administration, which placed his name so high on the world's roll of honor and fame, has been published by the Chicago, Milwaukee & St. Paul Railway, and may be had by sending six (6) cents in postage to F. A. Miller, General Passenger Agent, Chicago, Ill.



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tween 1871 and 1880, when he went to the Pacific coast. He leaves a widow and three children.

T. G. Shaughnessy, President of the C.P.R., who has been elected a director of the Reid Newfoundland Co. (Ltd.), says he is in the Co. in his individual capacity only, and that there is no significance in this apart from the fact that he is a small shareholder and an old friend of Mr. Reid.

J. J. Scully, who has recently been transferred from the position of assistant to the Master Mechanic of the C.P.R. at Toronto Jct. to a similar position at Winnipeg, was presented with a silver smoking service and \$200 before leaving Toronto Jct., by other employes of the Ontario division.

A. Hilton, who has just been appointed General Passenger Agent of the consolidated St. Louis and San Francisco-Fort Scott and Memphis Rd., at St. Louis, was born in Hamilton, Ont., June 19, 1863, entered the service of the old Great Western Ry. of Canada in 1878 and went to the U.S. two years later.

A report was recently published by a Montreal paper that P. A. Peterson, Chief Engineer of the C.P.R., was dangerously ill from paralysis, but his physician, Dr. Brown, said there was not a word of truth in it, and that beyond a little depression from the hot weather Mr. Peterson was all right.

A. J. Nelles, Manager of the Hamilton, Grimsby and Beamsville Electric Ry., has resigned. He recently said that he was going into a syndicate to build an electric line, but would not state its location. He was with the H. G. & B. E. R. for about six years, previous to which he was in the G.T.R. service at Brantford.

Wm. Campbell, the C.P.R. locomotive driver, who was killed in the recent accident at Proton, Ont., was a grandson of Capt. Alex. Campbell, who sailed the Highland Chieftain, and also the schooner General Brock, in 1833-34, from Toronto to Buffalo and other lake ports, and who was lost with all hands in Lake Erie, Nov., 1835.

C. E. Harris, Secretary and Manager of the Nova Scotia Telephone Co., died at Halifax, Aug. 25, aged 54. He was born at Aylesford, N.S., and was for some years in the service of the Western Union Telegraph Co. He subsequently managed a western ranch for B. W. Chipman, but returned to Halifax in 1887 as Manager of the Nova Scotia Telephone Co.

Lord Mountstephen has been presented with the freedom of Aberdeen in recognition of his benefactions to the city. While in the north he was the guest of General Sir Peter Lumsden at Buchrumb, near Dufftown, his native place, who won fame in India, while his fellow-townsmen was winning fame and fortune in Canada. Sir Peter is a brother of H. D. Lumsden, of the C.P.R. engineering staff.

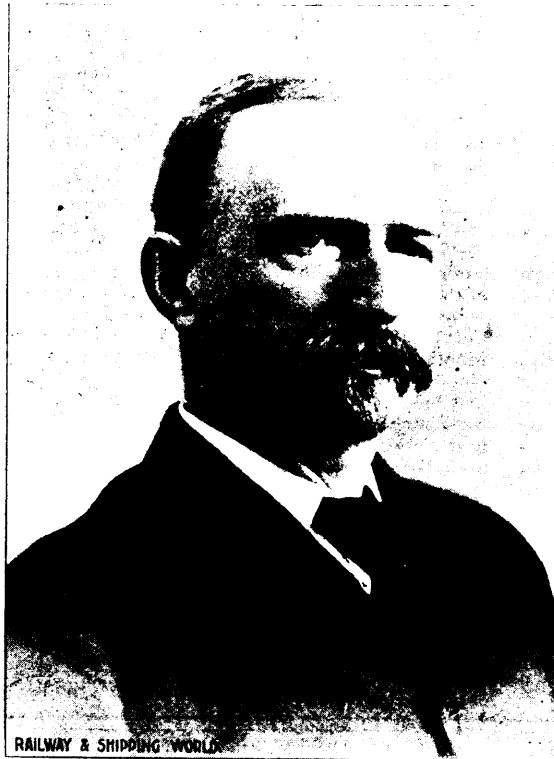
The members of the Order of Railway Telegraphers on the C.P.R. have elected the following delegates to the biennial convention at St. Louis, Mo., Oct. 14:—W. H. Allison, Toronto; A. E. Stevens, Vancouver; W. J. Harmer, Canmore, Alta.; W. J. Uren, Fort William; J. Morrison, Echo Bay, Ont.; J. E. Trotier, Montreal; H. L. Bailey, Debec Junction, N.B.; F. G. Sinclair, Montreal.

F. P. Gutelius, engineer of the Kootenay and Boundary districts of the Pacific Division of the C.P.R., who has been transferred to Montreal, on leaving Nelson, B.C., recently, was presented with a handsome album of

photographic views of the district, and a travelling bag, by the staff of his department; and with a liqueur set, salad bowl, biscuit box and tray from the Superintendent's department.

Capt. A. F. Crighton, Deputy Port Warden at Montreal, has resigned, to take effect at the close of navigation. The position will not be filled, in consequence of the falling off in business, caused by the smaller number of tramp steamers and sailing vessels arriving in Montreal. The work will in future be done by the Port Warden and one deputy instead of two. Capt. Crighton is said to have secured a position in London, Eng.

J. B. Palmer, the veteran vessel-builder and contractor of Detroit, Mich., who died recently, was born at Kingsville, Ont., 71 years ago. After receiving a common school education there he removed, at the age of 16, to New York, remaining there eight years. He went to Detroit in 1854 and made that city his home since then. He was known among vessel-



SIR THOMAS G. SHAUGHNESSY,

President of the Canadian Pacific Railway Co.

men all over the country, and was a pioneer in the shipbuilding industry in Michigan.

Wm. Whyte, Assistant to the President of the C.P.R., arrived in Victoria, B.C., Aug. 27, from his trip round the world. He travelled overland from St. Petersburg to Vladivostock, with a view of investigating trade conditions there, and the prospects of establishing a line of steamers between Siberian and B.C. ports. Mr. Whyte reached his home in Winnipeg four days later, and after a brief rest went to Montreal to present his report to the President.

The persistently circulated report that H. B. Ledyard has resigned the presidency of the Michigan Central Rd. is officially denied. It may be stated as a fact that President Ledyard, because of his long and useful service, will retain the presidency of the M.C.R. as long as he chooses to remain in active service. His retirement, however, will bring the M.C.R. directly under the jurisdiction of the New York Central's President.—New York Sun.

T. A. Summerskill, who has been appointed Master Mechanic of the northern division of the G.T.R., began his railway work as an apprentice in the Co.'s erecting shops at Montreal, 1873. He rose to the position of charge hand and then entered the service of the C.P.R. He left that Co. to become Master Mechanic on the Manitoba and Northwestern Ry. He afterwards became Master Mechanic on the Southern Pacific, and returned a short time ago to the G.T.R.

G. B. Reeve, 2nd Vice-President and General Manager of the G.T.R., has been spending a holiday fishing in the lakes near Westport, Ont., which gave rise to the report that the G.T.R. was about to acquire the Brockville, Westport & Sault Ste. Marie Ry. Mr. Reeve said the G.T.R. was not negotiating for the purchase of the B. W. & S.S.M.R., although it could be made a paying branch. Next season the G.T.R. would advertise the Westport sporting district in its folders.

A. A. Maver, recently appointed Master Mechanic of the G.T.R. at Montreal, began railway work as an apprentice in the Co.'s Montreal shops, and in a few years became locomotive foreman at Richmond. He was transferred from Richmond to Toronto, and while there was made Assistant Mechanical Superintendent of the Great Western Ry. Upon the fusion of that line with the G.T.R., he became erecting foreman at Stratford, and in 1896 was appointed locomotive foreman at London.

Reports were recently circulated that C. M. Hays, President of the Southern Pacific Co., had resigned, owing to differences with directors, and various stories were current as to their cause. It was stated that his successor had been appointed, and further that Mr. Hays was to be appointed President of the New York Central Rd., or to be reappointed to his old position with the G.T.R. On Aug. 28, Mr. Hays telegraphed to some friends that he had not resigned, and had no idea of doing so at that time.

J. McKay, a C.P.R. locomotive driver, was seriously injured recently by jumping in his sleep from a third-story window of an hotel in Owen Sound, Ont. During the night he walked to the window of his bed-room, shouting, "Jump, jump!" and sprang to the ground below, where he was picked up unconscious, seriously but not fatally injured. It is presumed that the recent accident on the C.P.R. at Proton, in which a driver met his death, had weighed on McKay's mind, and that he dreamt he was in a railway smash.

F. H. McGuigan, General Superintendent of the G.T.R., whose portrait appears on pg. 289, was born in 1850 at Cleveland, Ohio, and entered railway service in 1863 as water boy, Erie & Pittsburg division, Pennsylvania Rd., since which he has held consecutively to 1874 various minor positions same road; 1874 to 1880, roadmaster same road; April 10 to July 1, 1880, foreman construction train St. Louis & Omaha division, Wabash Rd.; July 1, 1880, to Jan. 1, 1885, division roadmaster same road; Jan. 1, 1885, to 1888, general roadmaster lines west of Mississippi river; 1888, to Dec. 31, 1895, superintendent Western division, same road, at Kansas City, Mo.; Feb. 15, 1896, to date, general superintendent G.T.R.

J. E. Muhlfeld, who has been appointed Superintendent of Machinery and Rolling Stock on the I.C.R., was born Sept. 18, 1872, and entered railway service Dec. 1, 1892, since which he has been consecutively to July, 1894, machinery apprentice Wabash Rd., at Fort

Wayne, Ind.; July to Nov., 1894, locomotive foreman, and Nov., 1894, to Nov., 1895, roundhouse foreman same road, at Peru, Ind.; Nov., 1895, to Feb., 1898, general foreman same road, at Tilton, Ill.; Feb., 1898, to Feb., 1899, general foreman Buffalo division, same road; Feb., 1899, to Feb. 1, 1901, master mechanic Western division G.T.R., at Port Huron, Mich.; Feb., 1901, to Aug., 1901, master mechanic in charge Montreal works, same road.

E. A. James, who has recently been appointed Superintendent of Transportation for the Western division of the C.P.R., was born in London, Eng., April, 1865, and entered the service of the C.P.R. Co. in June, 1881, at the age of 16, as operator at Winnipeg Jct. In 1882 he was transferred as operator at the head office in Winnipeg and remained in that position until 1884 when the head office was removed to Montreal. He was then transferred to the train despatcher's office at Winnipeg, and was employed as despatcher from 1884 to 1892. He was appointed Chief Train Despatcher in the fall of 1892 and remained in that position until 1897 when he was appointed Superintendent of the Brandon section, Manitoba branch lines and Winnipeg terminals.

E. J. Duchesnay, Assistant General Superintendent of the Pacific division of the C.P.R., was instantly killed by a fall of stone while superintending some work in Cariboo Joe's tunnel on the main line near North Bend, B.C., Sept. 4. The cribwork in the tunnel had been on fire, and at the time of the accident was being reconstructed. Mr. Duchesnay was born in Quebec in 1854, his father, who died in 1870, being one of the seigneurs of the old French colony, and a Dominion Senator. He went through the complete literary and scientific course of Laval University, and also took a complete short and long course of artillery, having joined B Battery for that term. He held diplomas as surveyor for Quebec, Ontario and the Dominion, and was a member of the Canadian Society of Civil Engineers. He was a member of the Quebec Government's engineering staff during the construction of the Q.M.O. and O. Ry., between Quebec and Ottawa, 1875 till 1877, and from then until 1880 was engaged on Dominion Government surveys for the C.P.R. From March, 1881, he was in the employ of the C.P.R. Co., as engineer in charge of surveys, exploration, construction and maintenance of way east of Port

Arthur till 1890, when he was moved to British Columbia, where he resumed similar duties until June, 1897, when he was appointed Superintendent of the mountain section of the Pacific Division, continuing until April 15, 1901, when appointed Assistant General Superintendent of the Pacific Division.

Sir Thomas G. Shaughnessy.

On Sept. 18, the Military Secretary to the Governor-General issued an announcement to the effect that on the occasion of the visit of the Duke and Duchess of York to Canada the King had been graciously pleased to confer a number of honors. Among them Thomas G. Shaughnessy, President of the Canadian Pacific Railway Co., is created a Knight Bachelor.

Sir Thomas G. Shaughnessy, whose portrait is given on page 303, was born in Milwaukee, Wis., of Irish parentage, Oct. 6, 1853. He started in railway service in the purchasing department of the Chicago, Milwaukee and St. Paul Ry. in 1869, becoming general storekeeper of that line in Jan. 1879, a position he held when Wm. C., now Sir Wm., Van Horne left the Co.'s service in 1881, to become General Manager of the C. P. R. In Oct. 1882 Mr. Van Horne selected him as General Purchasing Agent of the C. P. R., with headquarters at Montreal. Following are his subsequent appointments: Jan. 1884, Assistant to General Manager; Sept. 1885, Assistant General Manager; Sept. 1889, Assistant President; June 24, 1891, Director and Vice-President; June 12, 1899, President. He is also a director of a number of companies in which the C.P.R. has interests, and of the Reid Newfoundland Co., (Ltd.)

In religious belief Sir Thomas is a Roman Catholic. He resides at 1149 Dorchester St., Montreal. He is a member of all the chief clubs in Canada.

A biographer has pertinently remarked of Sir Thomas: "From the first day of his life as a railway man, there was no doubt in the minds of those who knew him that he would be a success. The qualities of his mind are thoroughly modern and fit exactly the service of this greatest branch of modern public service. Ardent and untiring he has the ability to do much work, and his shrewd common sense and prodigious memory enable him to guide that work to the very best advantage."

The Canadian Northern Ry. has adopted the 24-hour system in operating its trains.

International Association of Ticket Agents.

The 10th annual convention of this Association was held in Toronto Sept. 11 and 12, when a little over 100 men and a somewhat larger number of ladies were in attendance. Business sessions were held in the morning and afternoon of Sept. 11, and in the morning of Sept. 12, in the pavilion of the Horticultural Gardens, the use of which was tendered by the city, the chair being taken by the President, E. N. Blood, of Buffalo, N.Y.

The proceedings were opened by prayer by the Rev. F. G. Plummer, and addresses were delivered by the Mayor of Toronto, the President of the Board of Trade, Alderman E. Strachan Cox, Chairman of the Reception Committee of the City Council; G. T. Bell, General Passenger Agent G.T.R.; A. H. Notman, Assistant General Passenger Agent C. P.R.; M. C. Dickson, District Passenger Agent G.T.R.; Barlow Cumberland, J. E. Quick, General Baggage Agent G.T.R.; H. Foster Chaffee, Western Passenger Agent Richelieu and Ontario Navigation Co.; F. W. Churchill, President Canadian Ticket Agents Association; F. P. Dwyer, Eastern Passenger Agent, G.T.R., New York; W. Robinson, General Travelling Agent, I.C.R.; L. Drago, Travelling Passenger Agent, New York Central Rd.; Acton Burrows, and a number of officers of the Association, as well as by two ladies, Mrs. Fernald, of Old Orchard, Me.; and Mrs. Pratt, of Fort Atkinson, Wis.

The following officers were elected:—President, J. A. Robbins, Chicago, Ill.; Vice-President, W. F. Hambright, Lancaster, Pa.; 2nd Vice-President, F. S. Montgomery, Vincennes, Ind.; 3rd Vice-President, J. H. Sterling, Pittsburg, Pa.; Secretary, C. G. Cadwallader, Philadelphia, Pa.; Treasurer, E. Ramsey, Philadelphia, Pa.; Executive Committee, S. T. Swift, Lexington, Ky.; W. F. Fernald, Old Orchard, Me.; W. B. Peters, McKeesport, Pa.; S. J. Montgomery, Bedford, Que.; L. C. Boyle, Viroqua, Wis.

The selection of the place for holding the next convention was left to the Executive Committee. Salt Lake City appeared to be the favorite, an invitation having been received from the Governor of Utah and from the Mayor of Salt Lake. Invitations were also received from Saratoga and Milwaukee, and the Puget Sound country was suggested.

The Canadian members of the Association are: H. Foster Chaffee, Toronto; E. Cassel-

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man, Emerson, Man.; M. J. Fleming, Portage la Prairie, Man.; S. J. Montgomery, Bedford, Que.; W. M. McLeod, Winnipeg; J. Paul, London, Ont. The total membership is 283.

The Toronto City Council made a grant of \$400 for the entertainment of the delegates, the arrangements for which were carried out by a local executive committee consisting of John Foy, General Manager of the Niagara Navigation Co., Chairman; H. Foster Chaffee, M. C. Dickson, A. H. Notman and Acton Burrows, Hon. Sec.-Treas., who were assisted by W. Maughan, C.P.R. City Ticket Agent at Toronto. On Sept. 11, in the afternoon, the ladies were taken for a tally-ho drive around the city, and in the evening the members and ladies were entertained at Shea's theatre. On the afternoon of Sept. 12 the men were taken for a tally-ho drive around the city, refreshments being served at the Victoria Club. At the closing session of the Convention, ex-President W. B. Conard, on behalf of the Association, presented Acton Burrows with a souvenir key which he said would open any gateway to the U.S.

On Sept. 13 the members and a number of others were the guests of the G.T.R. and of the Muskoka Navigation Co. Toronto was left by special train at 7 a.m., and Muskoka Wharf reached at 10.20 a.m., where the str. Medora was boarded. Light refreshments were served on board, and after a delightful sail through Lakes Muskoka and Rosseau, dinner was served at the Royal Muskoka Hotel at 1 p.m. Muskoka Wharf was again reached at 5.30 p.m., and Toronto by special train at 8.30 p.m., supper having been served en route. General Passenger Agent Bell took charge of the trip, assisted by H. R. Charlton, Advertising Agent; M. C. Dickson, District Passenger Agent, and C. S. Proctor, Travelling Passenger Agent. The Muskoka Navigation Co. was represented by A. P. Cockburn, Manager, and E. L. Sawyer, one of the directors.

Toronto was left again about 9.30 p.m. by special G.T.R. train for Kingston, Ont., where the R. & O. N. Co.'s str. Toronto was taken at 5 a.m., on Sept. 14, for Prescott, where a change was made to the str. Columbian down the rapids to Montreal. The night was spent on the R. & O. N. Co.'s str. Canada at Montreal and next day the party went on, some by the R. & O. N. Co.'s steamer and some by rail to Quebec, where they dispersed, some going over the Quebec and Lake St. John Ry., others by boat to the Saguenay and the rest direct home.

The trip was a revelation to the members of the Association, very few of whom had been in Canada before. They were especially struck with the solidity of Toronto's buildings, with its picturesqueness and its attractions as a summer tourist resort, and of course with the charms of Muskoka. Their visit is certain to result in increased tourist travel.

A Newspaper deal.—A recent Vancouver, B.C., despatch said: "Lachlan, Hugh and Norman McLean, well-known contractors, have entered suit against the Vancouver World for \$20,523. Some time ago a large part of the shares of the World's capital stock were sold to eastern capitalists, and the McLeans carried through the deal as brokers. The total consideration to be paid for the shares was \$25,000. Of this \$20,000 was paid, but the McLeans claim that they were to receive \$5,000 as commission for putting through the deal on behalf of the eastern people, who are understood to be Mackenzie, Mann & Co. or persons representing them. This question of the commission is the bone of contention, which is the cause of the suit. If this case ever comes to trial, it is said that it will prove one of the most interesting and sensational ever heard in a Vancouver court."

Railway Committee of Privy Council.

The committee met in Ottawa Sept. 5, for the first time since the vacation, the ministers present being Messrs. Blair, Mills and Bernier.

The C.P.R.'s applications relative to the cost of the crossings at Dufferin and Bathurst streets and the arching of the York st. bridge, Toronto, were ordered to stand over.

The G.T.R. was given permission to make certain improvements, including the building of a culvert, partly in the Township of Murray and partly in the Town of Trenton, where the track was raised and carried across the Central Ontario Ry. This involves the construction of a highway, the cost of which is to be apportioned between the G.T.R. and the C. O. companies. The G.T.R. applied for an order dispensing with two overhead bridges, and sanctioning the closing of the Streetsville gravelled road and the Indian road, and their deviation to a subway under the Co.'s track by a new street north of the railway. It seemed to the committee that the application should be granted, on condition that the new road be 30 ft. wide.

The Tilsonburg, Lake Erie and Pacific Ry. applied for approval of plans of two proposed crossings at rail level of the Canada Southern Ry., and a proposed crossing of the G.T.R. by means of an overhead bridge. Mr. Saunders for the Canada Southern raised the objection that the charter of the T.L.E. & P.R. Co. had expired, inasmuch as the line had not been completed within the specified time. To this Mr. Senkler, for the T.L.E. & P.R., replied that Parliament had granted subsidies to the railway. In answer to this Mr. Saunders argued that Parliament had granted subsidies to a line not in existence, and therefore it did not revive the lapsed charter. The committee directed that an engineer be sent up to view the localities mentioned in the application, and suggested that the railways interested come to a friendly agreement.

The Sarnia Street Railway's plans for contemplated crossings of the G.T.R. were approved on condition that derailing switches be provided at the crossings.

The application of the city of St. Henri, Que., re the opening of Gareau st. across the G.T.R. tracks was postponed.

The Great Northern Railway applied for the approval of two crossings at rail level of the C.P.R. on St. Andrew's st., Quebec, and to put in a track from the Quebec and Lake St. John Ry. In the event of the plans being approved by the Chief Engineer, an order of the committee will issue granting the desired permission.

On Sept. 6 the committee considered the C. P.R.'s application for laying tracks on Main and Maple streets, Winnipeg. Mr. Blair said that it looked to him that it would be better to have a subway in view of the future growth of the City of Winnipeg. G. M. Clark, for the C.P.R., said that negotiations had been taken for a subway and a vote of the people, but the necessary majority did not consent to the by-law. W. Nesbit, for the City of Winnipeg, stated that the present council was, if anything, more adverse than the last one to paying the cost of a subway. Mr. Blair thought that the C.P.R. and city representatives should come together and see what they could arrange as to cost. Mayor Arbuthnot, of Winnipeg, said that the subway should be wider than was proposed. The committee adjourned to permit both parties to come together.

The Roadmasters' and Maintenance of Way Association (U.S.A.) will meet at Washington, D.C., on Oct. 8, 9 and 10. Business sessions will be held Oct. 8 and 9. On Oct. 10 there will be a trip by boat to Mount Vernon, and on Oct. 11 a trip by rail to Fredericksburg and Richmond, Va.

Freight Traffic Matters.

Reference was made in our last issue to action by the Trunk Line Association to do away with import agents. We have since learned that at a meeting of the Association on July 31, the following resolution was adopted:—"That no individual import agencies shall be employed by the lines parties to this agreement, and no commission or other form of compensation shall be paid on any kind of import traffic; that a General Import Agent shall be employed, whose duty it shall be to have supervision of all import traffic which such lines carry, who shall, from time to time, report to this committee the result of his investigations together with his recommendations. He shall be given any and all information required from any line with respect to its import arrangements and obligations, whether made by itself, its steamship line, or any other agency."

The Trunk Line Association is composed of the following railways:—Baltimore and Ohio, Central of New Jersey, Chesapeake and Ohio, Delaware, Lackawanna and Western, Erie, Grand Trunk, Lehigh Valley, New York Central, New York, Ontario and Western, Pennsylvania, Philadelphia and Reading, West Shore. The C.P.R. is not a member but was invited to be represented at the meeting referred to, and its Freight Traffic Manager, G. M. Bosworth, was appointed on the sub-committee to deal with the question of import rates.

The Cape Breton Coal, Iron and Ry. Co. (Ltd.) was incorporated by the Nova Scotia Legislature in 1895, was given an extension of two years within which construction was to be commenced in 1898, and last session, the charter having lapsed, a reviving act was passed and a further period of two years granted within which operations may be begun. The Co. has power to amalgamate with other companies, but the act of last session contains the proviso that no business so acquired shall carry on business in dry goods, groceries or other general merchandise.

The Halifax and Colchester Ry. Co. (Ltd.) was incorporated by the Nova Scotia Legislature in 1899, to construct a line from near Brookfield on the I.C.R. to near Eastville, Colchester County; with a branch to Musquodoboit. Construction was to be commenced in two years, under penalty of forfeiture of the charter. Last session an act was passed reviving the charter and giving the Co. an additional two years within which to commence work, and until 1907 to finish it.

Inverness and Richmond Ry.—Three acts were passed at the last session of the Nova Scotia Legislature affecting this railway, one a construction act, and the others fixing the appointment of arbitrators to assess the damages to be paid by the town of Port Hawkesbury and the Inverness County Council for acquiring the right-of-way. The third act confirms a resolution of the municipal council of Inverness by which a bonus of \$1,000 a mile was voted for the construction of a branch from the main line to the I.C.R., at or near Orangedale, such branch to be completed by July 1, 1905. Orangedale is 24 miles from Port Hawkesbury by the I.C.R., and its distance from Port Hood on the I. and R. is about 25 miles.

The Stewiacke Valley and Lansdowne Ry. Co. was incorporated by the Nova Scotia Legislature in 1886. The act was from time to time amended, and by an act of 1900 the Co. was discharged from all judgments and liabilities in connection with the proposals for the construction of the road, and the lands laid off for right of way by the county of Colchester for the line, which was to extend from near Brookfield station on the I.C.R. to Eastville, 25 miles, are declared to be vested in

the Government and held in trust, upon payment by the Government of the amounts awarded for the same, for the use and purposes of a railway between the points named. The schedule attached to the act showed the payment of \$14,712 in respect of the lands acquired. By an act passed last session a further sum of \$1,702.56 was provided for the payment of additional land that had been acquired and which is to be held in trust as provided for by the act of 1900.

I.C.R. Employes' Relief and Insurance Association.—The 12th annual report has been issued by Secretary Paver. The total receipts were \$66,544.60, and a balance of \$3,357.20 was brought forward from 1900; the expenditure was \$64,265.98, leaving a balance of \$5,635.82. The estimated liabilities outstanding amount to \$2,500. Ten members of the temporary employes' accident fund were accidentally killed during the year, and the claims paid in respect thereof amounted to \$2,500. Fifty members of the general fund died, eight being from accidents, during the year, and the total amount of death claims amounted to \$20,250, an increase of \$6,500 over 1900. Seventeen claims for total disability allowance, amounted to \$8,750, \$7,000 of which had been paid, and the balance of \$1,750 would be assessed at once. The expenses of management showed that the General Secretary received \$1,066.64; the auditor, \$75; the clerk and messenger, \$510; district secretaries, \$864; other expenses \$264.57; total \$3,780.21, less \$450 transferred, leaving net expenses \$3,330.21.

ELECTRIC RAILWAY MATTERS.

Maritime Provinces and Newfoundland.

The Bedford Electric Co. (Ltd.) was incorporated by the Nova Scotia Legislature in 1898, for the purpose of constructing an electric tramway or railway in Halifax county. In 1899 an amending act was passed by which the Co. was authorized to extend its lines into the county of Lunenburg, as well as to enter

Halifax and Dartmouth, and to engage in certain businesses. By an amending act passed last session E. F. Keefe and D. Keefe are included as incorporators, in place of E. T. Freeman, and the time within which the line was to be completed was extended from three years to five years.

The Cape Breton Electric Co. is going on with the work of providing electric railway accommodation in Sydney and Glace Bay, and to connect the two towns. Mr. Pratt, representing the Co., recently stated that the surveys for the proposed lines had been completed, and that a considerable amount of grading would be done this year, but he did not expect that any track would be laid. The Co. proposes to construct about 21 miles of track, consisting of a belt line in Sydney, a similar line in Glace Bay, and a line connecting the two belt lines. The cost of the lines proposed, the power house which will be built, and the other works the Co. has in hand or has in contemplation, is estimated at \$750,000. Arrangements have been made with the Sydney town council, as well as with the other municipalities interested, for right of way. The Co. is reported to be negotiating for the purchase of the Sydney and North Sydney steamship line, owned by Captain Farquhar, and to have bonded the Cabot hotel property at Sydney for \$13,000. (July, pg. 213.)

The Cape Breton Electric Co. (Ltd.), is the name given by the Nova Scotia Legislature last session to the Co. incorporated in 1900 as the Cape Breton Electric Tramway and Power Co. (Ltd.) The original company's powers are all

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conferred on the new company, which has been given considerably extended powers. It may construct its railway over private lands, lay conduits or string wires for the supply of power or electric light to towns or private consumers; carry its line across other lines on a level; purchase shares or bonds in similar companies, and amalgamate with the North Sydney Electric Light Co., the Sydney Electric Light and Gas Co., and the Sydney Ferry Co. (Ltd.), which are authorized to sell their undertakings to the C.B.E. Co.

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TORONTO.

Dartmouth to Cow Bay Beach.—A U.S. syndicate is reported to have purchased the Cow Bay beach near Halifax, and it is said it will build an electric railway there from Dartmouth.

Halifax Electric Tramway Co.—Gross earnings:—

	1901.	1900.	Increase or Decrease.
Jan.	\$ 9,543.14	\$11,474.26	\$1,931.12—
Feb.	8,042.11	8,982.41	940.30—
Mar.	9,448.32	9,765.83	317.51—
Apr.	9,370.98	9,359.13	11.85+
May.	9,467.45	9,185.10	282.35+
June	11,336.52	11,061.74	277.78+
July	14,203.82	12,936.14	1,267.68+
Aug.	16,330.33	14,680.23	1,650.01+
	\$87,742.57	\$87,444.83	\$ 297.84—

The Moncton, N.B., Street Ry. Co. has provided blocks to relay the streets from which the rails were recently removed, the town council bearing the cost of laying them.

The St. John's, Nfld., Street Ry. Co., one of the Reid enterprises, was transferred to the newly chartered Reid Newfoundland Co. (Ltd.), Sept. 1.

Quebec Electric Railways.

Chaudiere Valley Ry.—In 1899 the Canadian Electric Light Co. purposed constructing an electric railway to be known as the Chaudiere Valley Ry., and to run through Levis, Bellechasse and neighboring counties. Recently Hon. C. C. Colby, of Stanstead, Que., E. C. Crosby, of Brattleboro, Vt., and P. Lane, of Montreal, visited Levis and went over the projected route.

The Hull Electric Co., which operates an electric railway between Ottawa and Aylmer, is said to be about to be acquired by the Ottawa, Northern and Western Ry. Co., the consideration, it is stated, being over \$1,000,000 in cash and bonds. The basis of the transfer is said to have been agreed upon, but before it takes place legislation authorizing the amalgamation is necessary, which will be applied for at the next session of the Dominion Parliament. The negotiations for the sale were carried on concurrently with those for the running of the electric cars over the Interprovincial bridge, and, by the acquiring of the line, the Pontiac Jct. Ry., which is about to be amalgamated with the O.N. & W. Ry., will be relieved of building a portion of its line between Aylmer and Hull, which is now completed from Aylmer to Deschenes and will avoid some heavy rock cutting. The Aylmer-Hull electric line is laid with heavy rails. The electric cars commenced crossing the bridge July 13, but the regular service was not commenced until July 25. A 20-minute service has been inaugurated until noon, and a 15-minute service for the rest of the day. For the convenience of the traffic a platform has been erected under the Dufferin bridge, Ottawa. (July, pg. 213, Aug. pg. 232.)

Negotiations are going on with the Hull city council for the purpose of obtaining permission to construct a belt line from the Interprovincial bridge through the residential portion of the city. The proposition is to extend the present single track, which terminates at Laurier avenue, along that avenue, Chamberlain, Adelaide, Bridge and Wright streets to Brewery st., where the present line starts. The construction of this line, besides serving a thickly populated district, would ensure a more satisfactory through service between Ottawa and Aylmer.

The Montreal Park and Island Ry. Co. has ceased to exist as a separate corporation, the directors having resigned, and new ones, consisting of members of the Montreal

Street Ry. directorate, being appointed. Hon. L. J. Forget is President, and Jas. Ross, Vice-President.

It contemplated to double track the lines to Cartierville and the Sault and to build a link three or four miles in length, uniting these two sections and forming them into a belt line.

M. Connolly, of Quebec, has entered suit against the M.P. and I.R. Co. to recover \$1,710 for overdue interest on 57 coupons. The bonds are of the original issue of the Co.'s stock, which he declined to surrender at the time when practically all the original bondholders accepted the second issue of the road's bonds.

A meeting of the holders of the Jan. 1, 1897 bonds has been called to accept the resignation of D. Morrice and A. A. Thibaudeau as trustees, to grant them their discharge and appoint successors.

Montreal Street Ry. Co.—Gross earnings:—

Month.	1900-1.	1899-1900.	Increase.
Oct.	\$158,443.72	\$145,877.20	\$12,566.52
Nov.	146,923.29	133,489.12	13,434.17
Dec.	147,977.66	137,681.19	10,296.47
Jan.	142,886.49	136,086.33	6,800.16
Feb.	126,998.82	122,509.64	4,489.18
Mar.	140,870.10	127,212.18	13,657.92
Apr.	144,131.47	133,475.42	10,656.05
May.	160,611.82	151,890.14	9,071.68
June	180,370.55	168,244.48	12,126.07
July	177,583.25	171,331.99	6,251.26
Aug.	179,586.50	173,583.95	6,002.55

The directors have decided to call up the remaining \$500,000 of the issue of stock authorized some time ago. Most of this amount, President Forget explained, had already been spent in construction and equipment. The directors have authority from the shareholders to issue stocks or bonds at their discretion to the extent of \$1,500,000 in connection with the purchase of the Montreal Park and Island Ry.

The Co. is extending its tracks along Amherst st. north, Beaver Hall hill, and Dorchester st. An extension of about a mile has been completed and opened for traffic of the Notre Dame st. line to Cote St. Paul bridge.

The Co. is having set up a large switch board for motor generator sets, to control the output of its new water power plant. The board is to consist of 13 panels of blue Vermont marble, and all apparatus of the latest and most approved pattern, fireproof starting rheostats to be used, all apparatus to be capable of withstanding an insulation test of 5,000 volts alternating current.

A franchise will be asked for from the St. Louis council for an extension of the Co.'s tracks, and a committee has been appointed to consider the matter so as to be prepared to discuss it when the formal application is made.

Negotiations are in progress between the Co. and Westmount town council with a view of an additional line being constructed along the upper level of the mountain side.

The Montreal Terminal Ry. Co. has made an offer to the St. Louis de Mile End council to construct throughout the municipality extensions of the Co.'s proposed branch and circuit lines of electric lines in the city. The Co. sets forth that it is fully authorized by an act of the Dominion Parliament to lay out, construct and operate by electricity, branch or circuit lines of railway in the streets of the city, but that all routes must first be submitted to the council. On this account the Co. does not accept the recent deliberations of the city council as disposing of the Co.'s rights; and states that the application to the town of St. Louis is made with the fullest confidence that the rights and privileges of the Co. will be acknowledged by the council of the city, and that the Co.'s proposed system will be in operation within a year.

The Quebec Observation Car Co. is composed of F. Carrel and F. W. Wells of that city. During the tourist season a car, which is leased from the Quebec Ry. Light and Power Co., makes a tour of the city in charge of a guide, who gives a lecture on points of interest. The run takes about an hour and a half and is being well patronized.

The Quebec Ry. Light and Power Co. is spending \$50,000 in transforming the historic property overlooking the cataract at Montmorency Falls into a country hotel and park, and in erecting an elevator of the inclined plane type from its railway at the foot of the cliff to the heights, 300 ft. above.

Four special cars have been ordered by the Co. for the use of the Duke and Duchess of Cornwall on the occasion of their visit to Montmorency Falls.

St. Merreol to Ste. Anne de Beaupre.—It is reported that Ordway & Loomis of New York city contemplate constructing an electric tramway between St. Merreol and Ste. Anne de Beaupre, in order to bring out lumber and other products from timber limits they have purchased and a pulp mill they propose to erect thereon, along the Ste. Anne river.

Three Rivers.—An electric railway is reported to be under construction at Three Rivers, for which the city has given permission to lay tracks over the new iron bridge being built across the river. No information is given as to the Co. building the line.

Ontario Electric Railways.

The Belleville Traction Co.'s franchise, plant, and property, including a franchise for lighting the city, about two miles of steel rail track, now being operated through the business part of the city, between the G.T.R. station and the Bay of Quinte, four cars, power house and equipment complete, were offered for sale at Belleville on July 29, but there were no bidders and the property was withdrawn. Another effort is now being made to sell the line. The Bank of Montreal is operating the line under a mortgage, and with a view of guarding against a deficit obtained leave from the City Council to discontinue the service during Jan., Feb. and Mar.

Fort Erie Ry.—Plans and profiles for the electric railway, 20 miles in length, proposed to be constructed between Fort Erie and Chippawa, have been deposited with the Ontario Public Works department for approval. The Co. has a 21 year charter, and will pay a ground rental rising from \$1,000 a year for the first few years, and to \$2,000 in the concluding years. A width of 66 ft. has been acquired for a right of way, and the outside 26 ft. will be utilized for the electric road, and on the inside 40 ft. the Co. will build a wagon road, which is to be maintained by the municipality.

The International Rapid Transit Co. of Buffalo is said to own the charter, and it is reported that the Everett-Moore Syndicate is negotiating with it with a view of the amalgamation of all its undertakings in connection with their system of lines, which now practically covers the south shore of Lake Erie and has numerous branches. (July, pg. 214.)

Goderich and District.—Notice is given that application will be made at the next session of the Ontario Legislature for an act to incorporate a company to construct an electric railway from Goderich to Lucknow, thence through Wingham and Brussels, to Seaforth, returning to Goderich by way of Bayfield; and to construct a branch from Carlow through Auburn to Blyth, and from Dunlop to Kincardine, Port Elgin and Southampton to Warton. M. G. Cameron, of Goderich, is solicitor for the promoters.

Goderich Town Council has granted a 50 years franchise in trust for a company to be formed under the terms of the application to parliament, and a similar franchise has been granted the promoters by the township council of Colborne. The promoters are applying for franchises from the other townships and villages through which the proposed lines will pass, and are reported to have secured nearly all the rights of way required.

Hamilton Consolidated Lines.—The Everett-Moore Syndicate is reported to be negotiating with the Cataract Power Co. with a view of bringing it and the electric car lines it controls, the Hamilton Railway, the Hamilton and Dundas St. Ry., and the Hamilton Radial Electric Ry. into the Everett-Moore system.

Hamilton, Grimsby and Beamsville Electric Ry.—The Lincoln County Council has been considering a by-law giving a franchise to this Co. to extend the line from its present terminal in Beamsville to Vineland over the Queenston and Grimsby stone road. Under a by-law passed at a meeting prior to July a franchise over the same route had been given to the Niagara, St. Catharines and Toronto Ry. It is claimed that the Co. has not complied with the terms on which the franchise was passed, and the Council on July 23 proposed to transfer it to the H. G. and B. R. An interim injunction was obtained by the N., St. C. and T. Ry. to restrain the Council from passing the by-law, and the case is down for hearing in Toronto. In the mean-

time all matters are to remain in statu quo, all objections and rights being reserved to all parties.

Hamilton Radial Electric Ry.—Work is reported to have been commenced on the extension of this line from Burlington to Oakville. The agreement between the Co. and the Oakville Council has been signed. The railway is to have free right of way, and will have cars running through to Oakville before June 1 of next year. The Co. is to pay the Oakville Town Council \$1 a day for the privilege of using the large foot bridge on the west side of the town. A swing bridge is to be erected over another stream between Bronte and Oakville. The town reserves the right to any other electric or steam railway company to cross the Radial Co.'s tracks at any point it deems fit. (July, pg. 214.)

Hamilton Street Ry.—Ten large open cars have been added to the rolling stock this season.

The lines on York st. from Crooks st. to Queen St. are to be raised, and the line from Queen st. to Oxford st. is to be moved to the north 8 ft., in order to fit in with the improvements which the Council is making on the street.

London, Aylmer and North Shore Ry.—The organization of this Co. was recently completed, when the following directors were elected: W. H. Patterson, Philadelphia, Pa., President; M. E. Lyon, Aylmer, Vice-President; C. R. Luton, Grand Rapids, Mich., Sec.-Treas.; W. E. Stevens, Aylmer. It

was reported that franchises for 50 years had been secured from all the municipalities along the route, satisfactory to the Co. The only point where any difficulty was met with in obtaining the franchise was on the town line between North Dorchester and Westminster, where the right of way was refused. It is proposed to build the line southerly and easterly along concessions and side roads in Westminster, to come out at Belmont, and to take a side street through that village, in order to avoid North Dorchester. It is reported that the money has been provided for the construction of the line and that work will be commenced by the end of Sept. (July, pg. 215.)

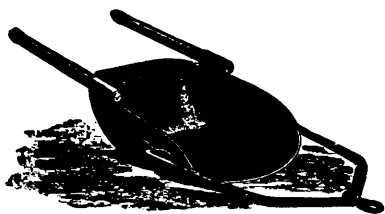
London Street Ry.—Following are traffic returns for the first nine months of the fiscal year:

	Gross.	Operating Expenses.	Net Revenue.
1900.			
Oct.	\$ 9,256 82	\$ 7,202 54	\$ 2,054 28
Nov.	10,425 38	5,106 45	5,318 93
Dec.	11,043 34	5,324 47	5,718 87
1901.			
Jan.	9,255 74	6,600 63	2,655 11
Feb.	8,145 76	5,972 06	2,172 80
Mar.	9,294 54	6,563 33	2,731 21
Apr.	9,495 68	5,998 78	3,496 90
May.	10,003 16	6,817 80	3,185 36
June.	13,917 23	7,997 44	5,919 79
	\$90,837 65	\$57,584 40	\$33,253 25

The extension to Brough's bridge on the Proof Line road has been completed.

It is proposed to lay a double track on Railway st., the board of works having approved it subject to the Co. cutting down the hill and grading, curving and gravelling it.

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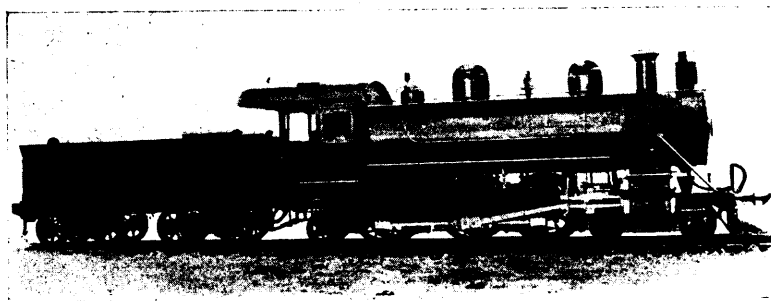
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CORRESPONDENCE INVITED

OFFICES IN CANADA:

Halifax, N.S. Hamilton, Ont. London, Ont.
Montreal, Que. Ottawa, Ont. Quebec, Que.
St. John, N.B. Toronto, Ont. Vancouver, B.C.
Victoria, B.C. Winnipeg, Man.

THOS. C. IRVING,
Gen. Man. Western Canada, Toronto.

JOHN A. FULTON,
Gen. Man. Eastern Canada, Montreal.

Metropolitan Ry.—Negotiations were resumed with the Toronto Ry. Co. and the Toronto city council by this Co. with a view to its securing an entrance into the city. While the M.R. Co. only is making an application for entrance at present, the council desires to have established a common basis for the entrance of all the suburban lines. W. Mackenzie, President of the Toronto Ry. Co., stated that all his Co. wanted was a reasonably fair agreement, and he was prepared to meet the council as far as possible in arriving at it. Several conferences have taken place, but no definite decision has been reached. The Toronto Board of Trade committee on street and radial railways has evolved a plan for the creation of a market terminal railway company comprising all companies interested. The franchises contributed would be G. T.R. giving the belt line and Esplanade connections; C.P.R. giving its western connections for belt line and Esplanade connections; Toronto Ry. Co. giving its city streets franchise in so far as Market, Front and contiguous streets are concerned; the city giving its rental value and taxes secured for belt line roadway and Don improvement conveniences, and all outside radial railways which are or may be seeking entrance to the market. These interests would be pooled and the terminal company thus created would have full charge through its management of all market railway traffic, control switches, shunt cars, take charge of loaded cars at belt line connections, and, having delivered same at market, to make prompt delivery of empties at the same point. For this there would be a fixed charge, to be reasonable, and to be fixed by consent of all parties concerned.

Another solution of the difficulty is reported to be the absorption of the Metropolitan Ry. Co. by the Toronto Ry. Co. A press item recently stated that an agreement with this object in view had been reached, but no official announcement has been made; on the other hand, it is stated by those in authority that the Metropolitan is not about to be amalgamated with the Toronto Ry. Co.

J. Fullerton, city counsel of Toronto, has drafted an agreement by which the M.Ry. will be allowed to make connection with the C.P.R. tracks for the purpose of carrying the plant and material necessary for the construction of the Schomberg & Aurora Ry. The draft is to be submitted to the city council for consideration.

Judge Morgan, of the York county court, in granting the appeal of this Co. for a reduction of its assessment in the town of Aurora from \$4,500 to \$1,500, made the point that the amendment passed by the Ontario Legislature last session, intended to do away with the scrap-iron mode of assessment, is of little effect in the case of railways operating in a number of municipalities, because railways so operating cannot be assessed in any one of them as a going concern in the same way in which the Toronto Ry. or a similar road confined in its operation to one city can be assessed.

The Co. recently appealed against the assessment of its cars in York township for \$8,900 on the ground that while rolling stock could be considered as realty, as decided by Chief Justice Armour, in the case of a judgment debt, it could only be considered personal property for taxation purposes. The county court judge agreed with this view and the amount was struck off the assessment.

Niagara, St. Catharines and Toronto Ry.—On the occasion of a special trip over the line by some 200 gentlemen from Toronto recently the trip from Port Dalhousie to Niagara Falls was made in the record time of 1 h. 6 m., the average speed being 30 miles an hour, notwithstanding the fact that in passing through St. Catharines, Merritton, Thorold, Dunnville and Niagara Falls the regulation

speed of six miles an hour was not exceeded.

See also Hamilton, Grimsby and Beamsville Electric Ry., pg. 308.

The Ottawa Electric Railway Co. is building a special car for the use of the Duke and Duchess of Cornwall. It is the same size as the present Britannia open cars, and it is to be finished in a most complete manner. On the front will be painted the name, "The Duchess of Cornwall," and on either side will be displayed the royal colors, and on the inside, besides the fancy brass work and plate mirrors, will be numbers of wicker and upholstered chairs.

Preston and Berlin Ry.—The Berlin, Ont., town council has given a by-law to subscribe \$25,000 of stock in this Co., a second reading, and the vote of the ratepayers will be taken on an early date. This is to secure the construction of the line from Preston to Berlin, and is part of the project to connect the town with Hamilton. The Co. is controlled by J. Patterson, of Hamilton.

Rat Portage to Keewatin.—The proposal to connect Rat Portage, Norman and Keewatin, Ont., by an electric railway is being revived, and as a preliminary step an effort is being made to bring about the amalgamation of Rat Portage, which includes Norman, with Keewatin, so as to have the line constructed as a municipal undertaking. The distance between the centre of Rat Portage and Keewatin is about 5 miles, and it is proposed to make the fare 5c.

The Sandwich, Windsor, and Amherstburg Electric Ry., owning the Windsor, Ont., Street Railway, 15 miles, and having power to build an extension to Amherstburg, has been acquired by the Everett-Moore Syndicate, which controls all the electric lines on the south of Lake Erie to Niagara. It is also stated that the syndicate has also acquired the charters of all lines projected on the Canadian side of the Detroit river, and will utilize them in constructing lines to connect the Windsor line with the London Street Ry., now controlled by the Everett-Moore Syndicate. The companies having charters which might have been acquired for this combination, include the Essex and Kent Radial Ry. Co., the South Essex Electrical Ry. Co., and the Windsor, Essex and Lake Shore Rapid Ry. Co., which were incorporated at the last session of the Ontario Legislature (May, pg. 159, 160). It is stated to be the intention to operate the Windsor line as a part of the Detroit United Ry., and to furnish power from the Detroit side of the river.

Sarnia Electric Ry.—At the recent annual meeting the following officers were elected:—President, J. D. Beatty; Vice-President, J. Flintoft; other directors: F. Smith, W. B. Collins, T. H. Smallman, R. Mackenzie, and R. Kenny; Manager and Secretary-Treas., H. W. Mills.

St. Thomas Electric Ry.—Negotiations are in progress for the formation of a new company to take over the franchise of the St. Thomas St. Ry. Co., to carry out the proposed extension to Port Stanley, and to construct a general radial system, taking in Fingal and a number of other places within a considerable radius. Toronto and New York people are interested in the proposed new company, but the negotiations had not, on Sept. 7, reached a final stage. E. Meek, solicitor, Toronto, is representing the prospective buyers. (July, pg. 215.)

The South Essex Ry. Co. has been granted franchises through Leamington and Sandwich, Ont., for its projected electric line from Amherstburg to Windsor. J. A. Auld, M.L.A., of Windsor, is one of the promoters.

Stratford to Goderich.—G. G. Macpherson, K.C., of Stratford, Ont., is interested in a scheme to construct an electrical railway

from Stratford to Goderich, via Mitchell, and from Stratford to Woodstock, via Tavistock and Strathallan, a total of about 70 miles. Light freight would be carried as well as passengers. J. A. Foster, formerly of Stratford, and now of Cleveland, Ohio, is projecting a line from St. Marys to Mitchell, via Stratford, about 22 miles. Both projects are yet only on paper.

Toronto and Hamilton.—The Nelson township council has granted a franchise for the construction of an electric railway along the shore road and along the plains road, to E. J. Tisdale, who states that he is acting on behalf of Detroit and Chicago people, proposing to construct a line between Toronto and Hamilton. No charter is in existence for the construction of such a line as this, the only one aiming at connecting the two cities being held by the Toronto Suburban Ry. Co., which is empowered to build from its present terminal at Lambton Mills, to Hamilton, and to make connection there with the Hamilton, Grimsby and Beamsville Electric Ry. The Hamilton Radial Railway is already building an extension of its line from Burlington to Oakville, which will pass through Nelson township, under its act.

Toronto Ry. Co.—Gross earnings:

Date.	Amount.	Increase.
Jan.....	\$121,657.20	\$ 7,953.24
Feb.....	109,512.51	5,558.32
Mar.....	124,498.99	6,867.78
Apr.....	123,006.00	15,807.37
May.....	127,950.94	9,520.90
June.....	138,154.59	15,466.38
July.....	154,222.42	21,686.69
Aug.....	134,720.53	15,131.59
	\$1,033,723.18	\$97,992.27

The Judicial Committee of the Imperial Privy Council has delivered judgment in the appeal of this Co. against the assessment by the city for mileage on curves, turnouts and switches. The action has been in progress since 1896, when the city sued for \$16,000. The judgment gives the city the right to collect mileage on tracks laid on pavement which is not of a permanent character, unless there is an agreement between the city and the Co. expressly exempting the Co. from the payment of mileage on that particular piece of track. The Railway Co. set up the claim that the sale of the franchise included the paving material between the car tracks, which the city had since used for their own purposes. The value of such material was probably about \$300,000. The city will thus be able to collect about \$3,000 a year for the full term of the Co.'s charter, 30 years. The amount now said to be due from the Co. and collectable under the decision is about \$25,000.

An additional two-storey car shed is to be built on King St., near River St. It is to be of brick and to cost \$10,000.

Trenton to Ottawa.—It is alleged that the capital has been secured for the construction of an electric railway from Trenton to Cornwall, and thence to Ottawa, and that a charter will be applied for next session from the Ontario Legislature. (July, pg. 215.)

The Woodstock, Ingersoll & Thames Valley Electric Ry. is one of the lines promoted by the Von Echa Construction Co., a combination of Harrisburg, Pa., men headed by Messrs. Ickes and Armstrong. This line extends from Woodstock to Ingersoll, 10 miles, and several propositions for extensions are now under consideration. One is for the construction of a branch line from Beachville, about midway between Woodstock and Ingersoll, to Youngsville, about 10 miles. The people of West Zorra township and of Embro village were asked to take stock in the Co. to aid this extension to the extent of \$47,000 and \$3,000 respectively. The Embro taxpayers voted in favor of the by-law to borrow money for this purpose, but the West Zorra people defeated the proposal by a majority of 86.

It is also proposed to extend the line from

Woodstock to Paris and Brantford and thence to Galt via St. George. The Co. has secured rights of way for a considerable portion of the route, the last voted being in the township of South Durham, including the village of St. George. In Brantford two routes have been selected and Dr. Ickes recently met the members of the board of works and went over them with the result that it was decided to recommend for adoption a route commencing at the intersection of Charlotte and Colborne streets, thence north along Charlotte to Chatham St., thence east along Chatham St., to Clarence St., thence north along Clarence under G.T.R. to Durham St., thence west along Durham St. to George St., thence north along George St. to West St., thence north along West St. to Terrace Hill St., thence west along Terrace Hill St. to Sydenham St., thence north along Sydenham St. to St. George St., thence west along St. George St. to St. Paul's Avenue, thence north along St. Paul's Avenue to city limits; also commencing at corner of Charlotte and Darling streets, thence east along Darling St. to city limits. In recommending this route to the council the board suggested the Brantford Street Ry. Co. should be given an option on the streets for one month, and in the event of its not taking advantage of it, the Von Echa Co. be given the franchise. The report was adopted, but in the course of the discussion it appeared that the Von Echa Co. would be satisfied if it got an entrance into the city. The Street Ry. Co. had offered to handle the traffic within the limits of the city at 4c. a head, but the Von Echa Co. offers 3c. a head, which has not been accepted or declined. Dr. Ickes is also negotiating with the Paris and Galt councils for franchises. (July, pg. 215.)

Electric Lines in Western Canada.

British Columbia Electric Ry. earnings and expenses for July :

GROSS EARNINGS.	1900.	1901.	Increase or Decrease.
Railway—Vancouver division	\$12,944	\$13,526	\$582+
Victoria	9,015	9,131	116+
Westminster	8,283	9,398	1,115+
Lighting—Vancouver	7,606	7,621	15+
Victoria	3,129	3,916	787+
Total gross earnings.....	40,977	43,592	2,615+
Working expenses.....	23,088	25,308	2,220+
Net earnings.....	17,889	18,284	395+

Aggregate gross earnings, from April 1 to July 31.....\$146,903 \$157,914 \$11,011+

Aggregate net earnings from April 1 to July 31.....\$55,668 \$56,340 \$672+ + Increase. — Decrease.

At Vancouver the Co. has raised and strengthened the Granville St. bridge, and re-laid the track from the bridge along Ninth avenue to its junction with Westminster avenue. Extensions are proposed to Cedar cove, and to the city limits in Mount Pleasant at a cost of about \$25,000.

J. Buntzen, General Manager, says the Co. is considering the desirability of putting in a plant for the construction of its own cars at Vancouver. The improvements being carried out at Victoria, he said, will cost about \$100,000.

In Victoria it is proposed to relay the track, which was taken up some time ago, to the Willows on Cadboro bay road, Victoria, a distance of about half a mile. This work will follow on the completion of the double tracking of Birdcage walk and Superior st. It is not proposed to construct the projected line to the Gorge until the new Point Ellice bridge is

constructed. The Co. has secured 15 acres of land, which it is proposed to lay out as a pleasure resort in connection with the new line to the Gorge.

A contract has been let to J. Coughlan for the erection of car sheds for the Co. on Shore st., at a cost of about \$20,000.

The offices of the Co. in London, Eng., have been removed to 28-31 Bishopsgate st. within, E.C.

A new car, constructed at the Co.'s shops at Victoria, has been placed on the Vancouver division. Additional cars are being constructed for the line and will be brought over from Victoria as they are ready.

See also report of annual meeting on page 311.

The Nelson Electrical Tramway Co. recently reduced its fares and the result has brought about a considerable increase in the number of passengers carried. For the 28 days from July 15 to Aug. 12 in round numbers, 20,000 passengers were carried against 13,500 in the same period last year.

Dawson, Yukon.—The Alaska Exploration Co. has a charter for the construction of a street railway in Dawson, and, it is reported, will begin construction this season.

Winnipeg Electric St. Ry.—A contract for the erection of new car sheds near Main st. bridge has been let to Ald. Wood and G. E. Mitchell. The new building will cover the old site and extend to Main St., a distance of 2,901 ft. It will be 134 ft. wide, and 20 ft. high, and will accommodate 100 cars.

It is reported that an application will be made to the Legislature next session for an act giving power to submit a by-law to the citizens of Winnipeg to authorize the Co. to run its cars on Sundays.

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 :

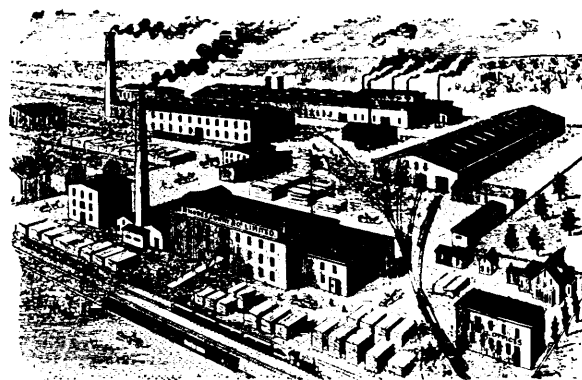
- 160 acres at \$1.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.
- 160 acres at \$1.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.
- 160 acres at \$2.00 per acre, 1st instalment \$95.85, and nine equal instalments of \$80.
- 160 acres at \$2.50 per acre, 1st instalment \$107.85, and nine equal instalments of \$90.
- 160 acres at \$3.00 per acre, 1st instalment \$119.85, and nine equal instalments of \$100.
- 160 acres at \$3.50 per acre, 1st instalment \$131.80, and nine equal instalments of \$110.
- 160 acres at \$4.00 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.



Rhodes, Curry & Co.,

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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.

Burlington Elevator, St. Louis, Mo.....	Capacity.....	1,300,000 Bushels
Grand Trunk Elevator, Portland, Me.....	.....	1,000,000 "
Export Elevator, Buffalo, N.Y.....	.....	1,000,000 "
J. R. Booth Elevator, Depot Harbor, Ontario.....	.....	1,000,000 "
Cleveland Elevator Company's Elevator, Cleveland, O.....	.....	500,000 "
Eric 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 speciality of furnishing **PLANS AND SPECIFICATIONS.**

British Columbia Electric Ry. Co.

The annual meeting was held in London, Eng., on Aug. 12. Following are extracts from the directors' report for the year ended Mar. 31, 1901:—

The Co. has had another year's successful trading, and the prospects for the future are satisfactory. The expenditure during the year on capital account was \$186,789.74. In order to keep pace with the continuous increase of the Co.'s business in all departments, it will be necessary to acquire further rolling stock, electrical machinery and motive plant, and to double-track portions of the line. For the purpose of raising funds to meet liabilities already incurred, and to provide for further extensions and improvements, the balance of the unissued preference share capital of the Co., viz., 6,400 preference shares of £10 each, was recently offered for subscription. The shares were all applied for, and were allotted on May 3, since which they have been fully paid up.

The gross receipts for the year were \$496,796, an increase over the preceding year of \$46,174; the working expenses were \$297,565, an increase of \$43,445, the net earnings being \$199,231, or \$2,729 in excess of last year. The directors regard as satisfactory the increase in business, but regret that owing to certain exceptional expenses the full benefit of the increase has not been obtained. Difficulty has been experienced in obtaining prompt delivery of new machinery, and for considerable periods, in consequence of the additional loads thrown on the plant by the increased business, the old steam plants, both in Victoria and Westminster, which have been held in reserve, have had to be operated, thus causing an increase in the cost of working. When the further boilers in Vancouver, and the new electrical unit in Victoria, now being installed, are in working order, it is intended to shut down the old plants and thus reduce the cost of working.

	£	s.	d.
The net profit for the year, after deducting London office expenditure, amounts to.	37,420	14	7
Add balance brought forward from last year	132	9	11
	37,553	4	6
Deduct debenture interest to			
Mar. 31st, 1901.....	£11,250	0	0
Interim dividend on preference shares for 6 months to Sept. 30th, 1900.....	3,200	0	0
Interim dividend on ordinary shares, paid in Jan., 1901.....	4,000	0	0
	18,450	0	0
Leaving available for distribution and reserves.....	19,103	4	6
From this the directors have decided—			
To write off preliminary expenses.....	£1,218	9	8
To provide for the balance of the year's dividend on the preference shares (paid May 1, 1901).....	3,400	0	0
To recommend the payment of a final dividend on the ordinary shares of 2%, making 4% for the year, which, including income tax, will absorb.....	4,421	1	0
To transfer to capital amortization account.....	5,000	0	0
To transfer to reserve for depreciation.....	5,000	0	0
	19,039	10	8
And to carry forward to next account a balance of	£64	13	10

EARNINGS.

	1900-1901.	1899-1900.
Railway—Vancouver.....	\$110,040	\$ 95,115
Westminster.....	89,481	88,798
Victoria.....	97,973	90,185
Electric light—Vancouver.....	131,359	114,730
Victoria.....	67,943	61,794
Total earnings.....	496,796	450,622
" expenses.....	297,565	254,120
Net earnings.....	\$199,231	\$196,502
Percentage of expenses to gross earnings:		
1900-1901.....	59.89	
1899-1900.....	56.39	
1898-1899.....	60.57	

The department for the supply of electrical power for commercial purposes is being worked well and profitably. The Manager in B.C. reports that the rolling stock has been maintained in excellent condition.

The directors regret that they have lost the services of C. A. Verner, who, owing to pressure of other business, found himself compelled to resign his seat on the board. The directors do not propose to fill up the vacancy. The directors retiring by rotation are R. M. Horne-Payne and F. S. Barnard, who offer themselves for re-election.

The directors are: R. M. Horne-Payne, Chairman; F. S. Barnard, J. Horne-Payne, K.C., A. C. Mitchell-Innes, G. P. Norton, R. K. Sperling, all of whom reside in England, except F. S. Barnard, of Vancouver, B.C.

The chief officers in B.C. are: J. Buntzen, General Manager, Vancouver; R. H. Sperling, Chief Engineer and General Superintendent, Victoria; W. Dunn, Assistant Engineer and Superintendent, Vancouver; W. F. Gitchell, Comptroller, Vancouver; A. T. Goward, Local Manager, Victoria; H. Gibson, Superintendent of Traffic, Victoria; D. A. Shiles, Superintendent of Traffic, Vancouver.

The Everett-Moore syndicate, owning the London Street Ry., controls some 1,300 miles of electric railways in the U.S. and is arranging for a general consolidation of its interests there. The syndicate controls 19 systems radiating from Cleveland, Toledo and Detroit, representing a capitalization of \$100,000,000.

Between New London and Norwich, Conn., 12 miles, the Central Vermont Ry. and an electric road parallel each other, and it is a curious circumstance, says an officer of the C.V.R., that nine-tenths of the local traffic done between the two points is done by the electric road, though the railway is much faster.

A committee was appointed at the recent meeting of the American Street Ry. Association, held in Niagara Falls, N.Y., to arrange for standardizing the materials and equipment of street railways. Various sub-committees have been appointed and assignments made to members to investigate and report on the most important materials and devices which enter into street railway operation.

U. S. papers have been publishing despatches from Paris claiming D. McDonald, manager of the street railways there, as a native of Buffalo and crediting him with introducing "Americans" and "Yankee" methods in the operations of the line. Mr. McDonald is a native of Prince Edward Island, and was Superintendent of the Montreal Street Ry., while the "Americans" he has introduced to Paris are all Canadians.

The Ontario Court of Appeal in the case of the Bank of Montreal v. Kirkpatrick, recently heard, has sustained the decision of Chief Justice Armour, that the rolling stock of an electric railway is real property. The Court held that the rolling stock really constituted part of one great machine, confined to a particular locality for which it was specially constructed and fitted. The rails and powerhouse were unquestionably realty, and the rolling stock formed part of it in a much more intimate and connected manner than did the rolling stock of a steam railway.

It is claimed that the one rail electric railway, a mile and a-half of which was built some years ago between Ridgeway and Crystal Beach, Ont., but which was not a success, it being regarded as a toy railway, and an experiment at that, is to be adopted in New York city, and that a speed of 200 miles an hour can be attained at a cost of half the present method. The cars are cigar-shaped

and run upon a central rail on an elevated structure. The electricity is carried in outer rails on the under side of the structure, and these connect with the car by clamp wheel, and also bind to the track in such a manner that accidents, it is asserted, are impossible.

Montreal Harbor Elevators, Etc.

The Montreal Harbor Commissioners have accepted the tender of J. A. Jamieson, of Montreal, for the construction of an elevator of 1,000,000 bush. capacity, at a point in the center of the harbor. The contract price is \$642,000, and payment for it will be made out of the \$1,000,000 which the Dominion Government has agreed to lend the Commissioners for the general improvement of the harbor terminals. The elevator is to be of steel, of the highest class in every detail, and in conformity with the general plan and suggestions made by Harbor Engineer Kennedy in his report published in our Aug. issue (pg. 246). The elevator will be built, as far as practicable, of Canadian material, and is to be completed by Aug. 1, 1902. The specifications call for a pile foundation, with a superstructure of fire-proof and non-perishable materials. The storage bins are to be of 12,000 bush. capacity each, with no waste space between them; the total capacity of the elevator to be 1,000,000 bush, as spouted in and not as levelled, and the shipping bins, garners, weighing hoppers, etc., are not to be counted in. The elevator is to be so constructed that it can take in grain from vessels lying opposite by means of marine legs, and from cars on two lines of tracks, and at the same time to deliver grain to as many as seven vessels, as well as to railway cars. Provision will also be made for changing the grain from bin to bin, and for mixing, as may be required. The conveyers, aggregating 6,700 ft., will lead to the four sides of the two upper piers, and along the shore line, and there will be in addition marine towers and legs. A deposit of \$25,000 is to be made for the due performance of the work, and 5% of the price is to be retained until the full completion of the contract.

The proposals made by Capt. Wolvin, of Detroit, and his associates, with a view to taking up part of the plans of the Conners Syndicate, have been under consideration, but the Minister of Public Works, whose approval was necessary, vetoed the proposition, for reasons set forth in a speech recently made in Toronto, on the occasion of the launching of the dredge J. Israel Tarte (see pg. 312). The proposal made by Capt. Wolvin hinged upon the improvement of the facilities at Port Colborne, where it was proposed to tranship grain from the big lake steamers to specially constructed boats, built in the U.S., of 70,000 bush. capacity each. There were to be ten of these steamers, and each would make 21 trips to Montreal in the season. The Dominion Government was asked to improve the facilities at Port Colborne, to admit the vessels free of duty, and give them the use of the canals without payment of tolls, while the Harbor Commissioners were asked to provide an elevator at Windmill Point, at a cost of about \$400,000.

Mr. Kennedy has submitted a plan for the general improvement of the harbor, which has been forwarded to the Minister of Public Works. It is on the lines of that proposed two years ago, with extensions to Hochelaga and Windmill point, consisting of a system of four tracks extending the whole length of the main shore wharves with branch tracks to the piers and a single track across the Lachine Canal for reaching wharves at Windmill point. It is intended that the two middle tracks of the four shall be running tracks for the general moving of cars. The two outer tracks are to be used partly for running and shunting

tracks, and partly for loading tracks where carts and cars may come together for the exchange of goods. Branch tracks on the piers are to be arranged so that the ships and cars may be near enough for the easy transfer of freight. The report shows that between sections 27 and 30 are shallow water wharves with a depth of barely 10 ft. These are too narrow to afford proper space for cargoes, roadways and railway tracks. Then again, the deep water wharves from sections 33 to 38, are too narrow for the purposes required. Therefore, in order to provide both wharfage area and depth of water, it would be necessary to widen all wharves between sections 27 and 38, a distance of $1\frac{1}{4}$ miles, to a breadth of about 200 ft., together with a ship channel depth of water. In conclusion, the report states it would be prudent to widen the wharves as suggested, or at least those used for ocean shipping should be made high level, so as to avoid the cost in spring of clearing off river ice from wharves not protected by the guard pier. This scheme would also do away with the serious delay caused by ice covering the cargo space which is wanted for the first spring ships.

A further letter has been received from G. B. Reeve, second Vice-President and General Manager of the G.T.R., in which he says the Co. will be willing to raise its tracks if necessary to comply with the elevation of the wharf, which has been suggested. The letter continues:—"But in reviewing the matter fully, the amount of grain that comes in by rail is so limited as compared with that which comes in by water, that the suggestion arises in my mind whether it would not be better for the Harbor Commissioners to undertake the erection of an elevator and to operate same, making such charges for elevator and storage as they might decide was right from time to time, and the G.T.R. would make an agreement with the commissioners to do all the switching on grain and package freight coming in by rail other than on their own line at so much per car, which, in connection with the C.P.R., would be from Jacques Cartier Jct., but in connection with the Canada Atlantic Ry. it would be an extra charge for switching over and above our proportion of

rate from Coteau Jct. In connection with the Intercolonial Ry. it would only be switching charge from Point St. Charles' yard to the elevator. These switching charges could be well defined in a regular schedule and made part of a long agreement in connection with the Harbor Commissioners' elevator, of course subject to revision if circumstances were so changed that it would warrant a revision."

Further consideration is to be given to this letter when the Commissioners meet Mr. Tarte to discuss the general plan for the port terminals.

SHIPPING MATTERS.

Launch of the J. Israel Tarte.

The hull of the large hydraulic dredge, which is being built by the Polson Iron Works, Toronto, for the Dominion Government, was launched Sep. 2, and christened the J. Israel Tarte by Mrs. Polson, in the presence of the Minister of Public Works and a large party of invited guests. After the launching a number of the guests boarded the yacht Cruiser, where they were entertained by F. B. Polson and J. B. Miller, the owners of the works.

In proposing "Success to the hydraulic dredge J. Israel Tarte and the Minister of Public Works," Mr. Polson said the dredge was the largest of its kind in the world, and in giving the order for it Mr. Tarte made the stipulation that everything that could be manufactured in Canada should be made right here. They had experienced considerable difficulty in manufacturing some parts of the dredge here, but they had succeeded, and he would be happy to show those present the machinery, now ready in the workshops.

Mr. Tarte spoke at length in reply, the following being extracts from his speech:—"In giving the order to build this dredge here I feel that I have only done my duty. It is the most thorough piece of machinery of the kind that has ever been erected in Canada. I would, perhaps, be saying much, but I do so without fear, when I say that it is the most modern dredge that has been built in the world. It is destined to work on the improvement of the

St. Lawrence river. By improving that great national waterway, we are preparing cheap transportation; cheap transportation means better prices for the products of our farms; it means better prices for the products of our industries. It means better prices for everything that we can sell. This dredge has been built in Toronto. Is not that the best evidence that there is no reason under the sun why we should not build everything that we need here? Speaking for myself, as much as my limited influence can go, I will endeavor in future, perhaps with more earnestness even than I have done in the past, to arrange matters in such a way, to influence matters in in such a way, that we will be able here in Canada to build our locomotives, our cars, our ships, and everything that we can build here.

"My own ambition since I have been in office, and even before I was in office, has been to improve our waterways; has been to work in such a direction that Canadian trade should flow through Canadian channels. I have stood by that idea in the past, and I shall try to stand by it in the future as much as I can. I was animated by that line of thought when a few days ago I declined to advise my colleagues to adopt what is known as the Wolvin proposal in connection with the Montreal harbor. I take this, the first opportunity, of saying a word on that point. What were these gentlemen asking? First, for a site at Port Colborne, for the use of a pier at Port Colborne, that would cost \$500,000; they were asking the privilege of erecting an elevator on that pier, but at the same time they were asking that the Government would bind itself to buy back the pier in certain events; in other words, they were not taking any risks. They told us they would build 10 ships for the Welland and other Canadian canals. A week or two ago I asked them whether they meant to build these ships in Canada. Mr. Brown, who was there in the name of the great shipbuilding firm of Cleveland, told me they decidedly would not do so. In other words, they were asking the Canadian Government to allow them to bring in free of duty 10 boats built in the U.S. I could not stand that, and I declined to advise my colleagues to stand by such a proposal. They were ask

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.

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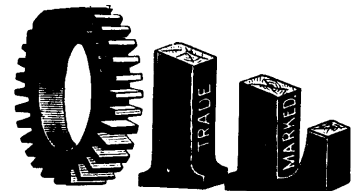
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ing more than that. During the last session of Parliament both political parties had enough confidence in me to entrust me with the expenditure of \$1,000,000 for the equipment of the port of Montreal, and I take this opportunity of thanking the Conservative members for the action they took then. It was not a party question. Both political parties entrusted me with the control of the expenditure of that money. Very well, Mr. Wolvin and his friends were asking us the use of the two sides of the Windmill Basin free, without any rental, for 25 years, with the option of renewal for another 25 years. They were asking us to give them at least \$400,000, and perhaps \$500,000, to build an elevator on the north side. They undertook to pay 5% interest on the money that we were to lend them. They were asking at the same time that, on the completion of the south wall, we would undertake to lend them the money necessary to build another elevator and freight sheds, they again paying 5% interest. In other words, these American gentlemen were simply asking us to loan them money at 5% to build elevators and to build warehouses in the port of Montreal, and to give them the use of a basin, a magnificent basin, that will cost \$1,000,000 when it is completed. They were asking us to loan them money at 5% interest, and to give them that lease besides. I could not stand that. I made up my mind that there is enough enterprise, that there is enough money in Canada to allow us to keep cool and wait until the Canadian money and enterprise would do for us what these Americans were offering to do. In exchange they did not offer us anything else than the promise to use 10 American boats in our waters. If they succeeded, very well. If they did not, I do not know what would have happened. We had no guarantee at all. I declined to entertain that offer, for the reason that I have the utmost confidence in the future of this country, in the spirit of enterprise of Canadian capitalists, of Canadian business men. I must congratulate Mr. Polson and his associates on the result of the work they have undertaken. I did not know much of Mr. Polson, but on looking at his bright eye I felt sure that he was the right man in the right place on this occasion. He has carried out successfully one of the greatest mechanical works that has ever been constructed here. We all congratulate him upon his success. We will test this dredge in the harbor of Toronto. I hope that my friends from the City of Toronto will take good lessons of progress out of what we are doing, and that we will all work together in improving this grand harbor. I want the harbor to be worthy of the population of Toronto. The population is a clean population, and should have a clean harbor."

Mr. Tarte in flattering terms proposed the toast of Mr. Polson and his associates. He said he believed they had well earned the money which was being paid for the dredge, and that they had carried out successfully a very difficult work. Such a dredge had never been built in Canada before, and its construction had proved that in Canada we have the skilled labor and the ability of a high order. He wished that Toronto was a little more kind to the Government politically, but could not refrain from saying that it is a city of great enterprise and public spirit, and he congratulated himself and the Government on having chosen the City of Toronto to build two dredges, that now launched and another for British Columbia, now building in the same shops. He hoped the shops would not stand idle when the dredges were completed, but that there would be enough spirit and enterprise to build ships here for our own Canadian canals. He had declined to entertain the idea of allowing U.S. boats to come into our waters for our trade, but we must have boats, and in the City of Toronto—he spoke in the presence of capitalists—it seemed to him

they should have enough of the spirit of enterprise—they had enough money he knew—to start building boats for Canadian trade. The Government might perhaps help; they had helped the iron and lead industries; he did not know whether the country would ask or insist upon the Government helping the shipbuilding industry; that was a question to be discussed, and he for one invited discussion upon that point. All he said was that we must have boats; all the money spent upon the canals would have been paid out in vain if there were not boats to carry our trade through them.

Mr. Polson thanked the Minister of Public Works and the other friends of the firm for their presence. Referring to the dredge, he admitted that when he took the contract he felt it was a pretty big job, and experience had justified his impressions. The pump for the J. Israel Tarte is practically the largest of its kind in the world, and they had experienced some difficulty in getting it cast in Canada in accordance with Mr. Tarte's stipulation, but they had succeeded in doing so. As far as boats for canal work are concerned, he was prepared to build and equip first-class canal steamers just as well as any firm in the U.S. could do. He pointed out that the chief difficulty in the way heretofore had been the intermittent nature of employment for the skilled hands, which caused them some inconvenience. His firm now had work on hand which will engage the shipbuilding staff for six weeks or two months, but there are no orders on hand for a longer term. He hoped in six or eight weeks to be able to invite his guests to witness the official test of the dredge in active operation in Toronto harbor.

J. B. Miller also responded, after which the guests were taken for a trip round the island on the Cruiser.

The dimensions of the J. Israel Tarte are: length, 160 ft.; breadth, 42 ft. 6 in.; depth, 12 ft. 6 in. The hull is of steel, divided into 4 watertight compartments, and with all the equipments the dredge is constructed to 10% in excess of the requirements of Lloyd's highest class. On the deck there will be provided accommodation for the crew, and for a workshop, and there will be capacity in the bunkers for 150 tons of coal. The dredging equipment will be capable of working to a depth of 70 ft. if necessary, but this will be required on very rare occasions. The suction pipe is 80 ft. in length, with a diameter of 36 in., and will be fed from the cutter head, which weighs 8 tons. There is a well in the center of the dredge through which the suction pipe will be operated by means of a centrifugal pump. It will be capable of discharging 2,000 cubic yards of material an hour, which will be conveyed, by means of piping pontoons of 100 ft. length each, to a considerable distance. The main driving engine will be of the triple expansion type, having cylinders of 20 in., 31 in. and 50 in. diameter respectively, and a piston stroke of 25 in.; and there will be an additional compound engine with cylinders of 12 in. and 20 in. diameter respectively, and a piston stroke of 14 in. Steam will be supplied by four locomotive boilers, 6 ft. in diameter and 20 ft. in length, having a working pressure of 160 lbs. to the square inch. The dredge was designed by W. Redway, naval architect, Toronto, and A. W. Robinson, M.E., of Montreal, was consulting architect

Yukon River Customs Regulations.

In our last issue, pg. 281, we gave the amendment to the coasting regulations recently passed. The same Order-in-Council contains the following provisions respecting unregistered vessels, boats and scows carrying bonded goods under special customs manifests on the Yukon river:—

Each such vessel, boat or scow, shall be licensed, numbered and have official papers

from the Collector of Customs at White Horse or Dawson, and the numbers (corresponding with the police record numbers) shall be painted in legible figures on the bow. The applicant for a license shall fill up a form, in duplicate, with true statements in their proper places, of the length, breadth, depth and approximate tonnage of the vessel, boat or scow, the names of the owners thereof, and if the property of the ship is in shares, the number of shares held by each owner, and shall subscribe the same and deliver them to the Collector, who shall record the particulars in a license book, to be kept by him for the purpose, and shall endorse on one of the applications the word "licensed" and official number, adding thereto the name of the port, and he shall sign, date and hand same to the applicant as the license and official paper of the vessel, boat or scow; and the name of the master or person in charge shall be recorded on the official paper. The form of application for license is then given.

Before being permitted to manifest goods in bond on any such licensed vessel, boat or scow, a bond shall be given to the satisfaction of the Collector, in a form approved by the Minister of Customs, for the due and faithful production at the respective ports of destination in Canada or outside of Canada of all goods for transportation under such manifests and for the general compliance with the customs laws and regulations governing such traffic.

Goods carried in bond by water from one customs port to another in the Yukon Territory shall be forwarded under special manifests.

Goods exported in bond by water from a customs port in the Yukon shall be entered in transitu for exportation in triplicate in the prescribed form, one copy to remain on file at the sending port, one copy to be forwarded to the Department through the Collector, and one copy to be attached to the clearance referred to therein. Such intransitu entries shall serve as special customs manifests, and shall be recorded in a separate series with consecutive numbers. One copy of the intransitu entry shall be returned to the sending port in Canada within 90 days from the date of the entry, with the certificate of an officer of U.S. Customs thereon that the goods described therein have been landed in the United States and duly reported at U.S. Customs.

All goods carried in bond by water shall be reported outwards at the customs port of lading, and export entries, in duplicate, shall also be delivered to the collector at the said port in respect of all unregistered vessels, boats and scows, departing for a foreign port and not intended to return to Canada.

Wines and spirituous liquors shall not be transported on the Yukon river in bond under these regulations, on unregistered vessels, boats or scows, without special permission under further regulations of the Customs department.

Notices to Mariners.

The Department of Marine has issued the following notices:—

No. 58. Aug. 8—British Columbia—Tozier rock, Saanich inlet.

No. 59. Aug. 12—Ontario—South-east shoal lightship burned.

No. 60. Aug. 15—British Columbia -1. Admiralty chart, No. 569. In some copies the western leading mark for entering Esperanza inlet is given as Black rock in line with Double island, N. 12° E. The bearing should be N. 20° E. (N. by E. ¾ E.), as marked on Admiralty chart No. 589. 2. White Island beacon. 3. Horda rock can buoy, Ganges harbor.

No. 61. Aug. 15—Quebec—St. Antoine upper light raised.

No. 62. Aug. 15—New Brunswick—Miscu Gully light. Prince Edward Island—Sandy Island front range light, description of building.

No. 63. Aug. 16—Ontario—1. Increase in power of Wiarton light. 2. Goderich harbor dredged channel, erratum. 3. Thornbury range lights. 4. Rondeau front range light house.

No. 64. Aug. 19—Quebec—1. Change in position of Lower Traverse lightship. 2. Discontinuance of buoy off St. Roch point. 3. Change in character of buoy on middle ground, South Traverse. 4. Buoyage of North Channel, at Island of Orleans.

No. 65. Aug. 22—Nova Scotia—1. Buoyage of Lunenburg bay. 2. Hydrographic notes—Lunenburg bay, Yarmouth harbor and town of Digby anchorage.

No. 66. Aug. 23—Quebec—Light on Ste. Irene wharf.

No. 67. Aug. 24—Quebec—Ship channel in Lake St. Peter.

The U.S. Hydrographic Office has issued the following notices for the Great Lakes:—

No. 32. Aug. 10—Lake Superior—Devil's island light replaced by a new light. St. Mary's River—Sunken wreck, position marked by buoy. Lake Erie—Bar point obstruction; Gull island shoal gas buoy relighted; Pelee passage, additional information re South-east shoal light vessel.

No. 33. Aug. 17—Lake Michigan—Rock island passage, reported obstruction. Lake Huron—Wreck of the Baltimore off Tawas, marked by buoy. Detroit river—Water signals at Limekiln crossing. Lake Erie—Sunken wrecks in Maumee straight channel, Toledo harbor approach, removed; South-east shoal light vessel, Pelee passage destroyed by fire. St. Lawrence river—Cape Vincent breakwater, beacon light established.

No. 34. Aug. 24—Lake Superior—1. North shore, Victoria island, position of lighthouse. 2. South shore, amended information as to current, notice to mariners, No. 29, of 1901, cancelled. Lake Huron—Goderich harbor, magnetic variation. Lake Erie—Cleveland harbor, water works crib no. 2 partly destroyed by fire.

Maritime Provinces and Newfoundland.

A new ferry line is being established in Sydney harbor to give regular service between North Sydney, Point Edward and Westmount.

The new steel car ferry for use by the Intercolonial Ry. in the Strait of Canso, sailed from Newcastle-on-Tyne, England, for Canada, Aug. 21.

The Addino Paddock, the new steamer for the Gondola Point ferry, New Brunswick, built for Capt. W. Pitts, has been given a trial trip at Indiantown, N.B.

It has been found desirable to alter the cable equipment of the new steamer being built in Scotland for the coast lighting and cable-repair service, from a 30-ton gear to a 10-ton one.

It is reported that an additional steamer will be put on the route from North Sydney to Port au Basque, Nfld., next year, and that in connection therewith express trains will be put on the Newfoundland Ry.

The Marie Louise is a 200-ton schooner recently built at Pugwash, N.S., and owned by Capt. W. H. Barnard, of Summerside, P.E.I. She cost \$11,000 ready for sea, and will be engaged in the coasting and West Indian trade.

The Plant line str. Halifax now in Simpson's dock, Boston, has been found on survey to have had 30 plates broken as the result of her recent grounding off Minot's Light, near Boston. It is reported that it will cost about \$30,000 to make the repairs.

The Liverpool Marine Ry. Co. (Ltd.) was authorized at the last session of the Nova Legislature to borrow on 6% debentures \$6,000, secured on the property of the Co. for the purpose of paying certain outstanding debts and other purposes. A deed of trust is to be executed and a sinking fund created for the redemption of the debentures.

The Newfoundland and Boston Steamship Co. has been organized in St. John's, Nfld., and under the laws of the State of Maine, with a capital of \$1,000,000, to trade between St. John's, Newfoundland, Halifax, N.S., Boston, Mass., and to the West Indian islands. M. L. Daggett, of Boston, is President.

The Collins Bay Rafting Co.'s tug Petrel, after having been wrecked on the coast of Newfoundland and repaired, has had all her masts and smoke stacks carried away by the parting of the stays of a large pump which was being shifted for use on a wreck. The Petrel is undergoing repairs at North Sydney, Cape Breton.

Col. Anderson, Chief Engineer of the Department of Marine, who is superintending the installation of a new light and siren at Belle Isle, will make an inspection of the lights and signals at Cape Race and Cape Ray with a view of having everything done to make the route as safe as it can possibly be made for navigation.

Negotiations are in progress with Toronto ship-builders for a first-class ferry steamer to run between Indiantown and Gagetown or Washademoak, on the St. John river N.B. She is to be a sidewheeler 140 ft. long, 25 ft. broad, with a draught of 5 ft., fitted with feathering paddlewheels of the latest type, and driven by triple expansion engines of 1,000 horse power and capable of giving a speed of 18 miles an hour. She will cost about \$45,000.

Ship-building in Nova Scotia has been very brisk all the summer. Ten vessels have been launched at Shelburne, and two steamers and three schooners are now on the stocks. At Parrsboro there is being built an 800 ton schooner for Capt. S. D. Howard; a barquentine for Capt. W. H. Baxter, of Canning; a schooner for Capt. J. E. Pellis, of Port Freeville, and a 500 ton schooner for Charlottetown, P.E.I. At D. A. Huntley's yard orders have been received for a tug and a schooner.

In consequence of the passage through the British Parliament of a bill—for which the House of Lords, prior to adjourning, suspended all its standing orders, a most unusual proceeding—providing for the construction

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of a new harbor at Beerhaven, Co. Cork, Ireland, press reports state that a new steamship line is projected to cross the Atlantic in 4½ days from Beerhaven to Sydney or Halifax and New York. Liverpool will be the home port of the liners until the new Admiralty works at Dover are completed, when that port will be the final landing place in Great Britain. Six vessels, it is said, will be built for the service, four for the New York line and two for the Canadian line. The vessels will be the fastest afloat, and will use Texas oil as fuel. U.S. capital is at the back of the enterprise. This is a revival, in a somewhat changed form, of a project that for 20 years or more has absorbed hundreds of thousands of pounds in unremunerative railway and harbor construction, and the operation of transatlantic steamers. Sligo, Galway and Rosslare (Wexford), in Ireland; Milford Haven and Fishgard, in Wales, have unused, unproductive harbor works and connecting railways as memorials of efforts to make their terminals of portions of the great transatlantic liners; while Uphill, in Somersetshire, perhaps the most convenient harbor of all, is still only an ocean port on paper.

In connection with the proposal to establish a steel ship-building plant in Nova Scotia, the Government has announced that it is prepared to appropriate \$100,000, payable to the first company establishing a yard capable of building five steamers of a capacity of 5,000 tons each, the terms upon which the bonus will be paid to be settled by an agreement with any company furnishing evidence of its bona fides and financial ability to carry out the plan contemplated. At the last session of the Legislature an act was passed providing that all ships or shares in ships of iron or steel built and registered in N.S. shall be exempt from all taxation for 20 years, such exemption to come in force upon proclamation by Order-in-Council on the petition of the municipality desiring to grant the exemption. It is also provided that upon five-eighths majority of votes polled, any incorporated town or city may grant a bonus of \$100,000 in aid of the establishment within its limits of a ship-building yard.

The city of Halifax has power under a local act to grant \$200,000 towards the equipment of a ship-yard and engine shops within its boundaries, one half of which is to be paid in cash, and the balance by way of bonus on the tonnage built. The Dartmouth Council purposes to vote \$100,000 for a plant there, while Sydney is contemplating granting a bonus of \$250,000, and Louisburg people are putting the claims of their town forward. In Halifax a commission has been appointed representing the City Council and the Board of Trade, to treat with any firm or company desiring to establish a yard, and to circulate statements showing the advantages of Halifax as a location for a ship-building yard. It is reported that a firm has bonded a site at Dartmouth, but this is not confirmed. H. M. Whitney states that a yard should be located near to the place where steel plates are produced, and says that the Dominion Steel Co. at Sydney will be producing them in a couple of years.

It is reported from London, Eng., that the Armstrong, Whitworth Co. (Ltd.), of Newcastle-on-Tyne, is considering the establishing of a yard in Nova Scotia, but the London office of the firm will not say anything about it. There has been in Halifax E. B. Swan, a nephew of the manager of the Armstrong-Whitworth Co., and connected with the firm of Swan & Hunter, builders of a number of the Elder-Dempster boats, looking over the ground. Mr. Swan says that the firm he represents is negotiating for the establishment of a yard in the Province. What the result of his investigations has been is not known.

Province of Quebec Shipping.

It is reported that the ice crusher Algoma, used last year in Green Bay, Mich., has been sold to F. H. Clergue, of Sault Ste. Marie, Ont., and will be used this winter in endeavoring to keep a channel open between Montreal and the Gulf of St. Lawrence.

The ship channel between Montreal and Sorel has been completed for night navigation and the Montreal Harbor Commissioners have been asked to see to its being properly lighted. The Commissioners thought this duty fell to the Department of Marine, and it has been decided to ask that Department to complete the work which has been begun by the Department of Public Works.

The Great Northern Ry. Co. has arranged with the Leyland line to keep its steamers running to Liverpool from Quebec until Jan., with the object of showing that the lower St. Lawrence can be navigated six weeks longer than has been the practice, if not throughout the winter. There is said to be plenty of cargo to keep the vessels fully employed.

The British str. Monmouthshire, trading between Pacific coast ports and China and Japan, has been sold to the Quebec Steamship Co., and will be used on the Windward Island route by her new owners. The Monmouthshire is a steel screw steamer built at Glasgow, Scotland, 1886, for the Jenkins' Shire line of London. Her dimensions are: length 344 ft.; breadth 40 ft. 4 in.; depth 26 ft. 5 in.; gross tonnage 2,874.

The steamer Majestic, leased to Capt. B. V. Naylor, of Noyan, Que., has recently been detained at Burlington, Vt., for an alleged violation of the U.S. coasting laws. The violation consisted in taking passengers from more than one U.S. port on a trip, which has lately been made an offence, and the penalty for any violation of the laws has been increased to \$200. The Dominion Government has been asked to intervene in the matter.

The future of the port of Quebec is dealt with in a circular letter sent out by W. Macpherson, a member of the Harbor Commission. He points out that the employment of the largest steamers to make transportation cheap is the only way by which the lake and river route can be made a success. Quebec, he claims, is the natural port for transshipment for the largest craft that pass through the canals, as it affords an anchorage for the largest vessels afloat. Vessels of the class of the Celtic, Oceanic, Ivernia and others, the biggest in the world, can find plenty of room in Quebec harbor, and vessels of this class will in future be employed in the St. Lawrence trade. The development of the river and canal trade should, according to Mr. Macpherson's views, be along the line of getting the largest possible vessels for lake and canal work, and making Quebec the ocean port.

The Minister of Public Works states that his attention has been called by the management of the G.T.R. and the C.P.R. to the fact that space had been refused by steamship companies leaving Montreal for consignments of flour and meal, and desires to find out why this freight is being refused. In a letter to the steamship owners Mr. Tarte says: "Both the C.P.R. and G.T.R. are obliged at this very moment, I understand, to ship through U.S. ports a large quantity of traffic, not only of flour and meal, but traffic of all kinds, because the rates are lower, also because there are not enough ships coming to the port of Montreal. You will agree with me that this is a very serious state of affairs. Have the insurance rates much to do with the large difference in the freight rates that exist between American ports and Canadian, let us say Boston and Montreal, or is the St. Law-

rence route considered so unsafe that the navigation companies feel obliged to make and exact the high rates that make it imperative for railway companies to ship part of their traffic through U.S. ports? If it is not inconvenient to answer these questions, I will be very thankful to you for an expression of your views on that important question."

Ontario and the Great Lakes.

The Toronto Navigation Co's second boat, the Niagara, has been given a license to carry 300 passengers.

A life-saving station is being established by the Dominion Government at Long Point, near Port Rowan, on Lake Erie.

Application has been made by the Midland Navigation Co. to have the str. Midland Queen licensed to carry passengers on the great lakes.

The steamer Richelieu, which was on the Toronto-Oakville run up to Aug. 30, is now engaged in the freight trade between Picton and Kingston.

Vessels to move 1,000,000 bush. of wheat, between Oct. 15 and Nov. 20, from Fort William to Buffalo, were chartered at Cleveland, Ohio, Aug. 20, at 3½ cents.

The old schooner Smith & Post, which was placed by the Lake Carriers' Association, on Southeast shoal, Pelee passage, Lake Erie, was burned and sunk Aug. 7.

The lighthouse and buoy service at Midland, on Georgian Bay, are to be improved, plans and estimates for which are being prepared by the Department of Marine.

The ferry steamer Staubler was cut in two and sunk, Aug. 21, by a whaleback, while on her regular run between Port Edward, Ont., and Port Huron, Mich. No lives were lost.

The Toronto Ferry Co. has bought from Captain Joseph Goodwin the ferry Ada Alice, which has been operated independently from Church St. dock to Ward's and Island Park.

It is reported that a mud bank near Wolfe Island, in the Canadian channel of the St. Lawrence, prevents vessels drawing 14 ft. to pass. The Canadian str. Saturn went aground there recently.

The North-Western steamship Co., of Chicago, has decided to abandon Atlantic trips. The Co.'s boats will engage in the lake trade as long as possible, and will then go to the Atlantic and will trade coastwise until spring.

Complaints having been made that yachts and other small boats in Toronto harbor did not carry lights at night, notice has been given that the law requires such lights to be shown after sunset under a penalty of not less than \$20.

A barge, the Minnedosa, of 2,200 tons burden, owned by the Montreal Transportation Co., 245 ft. long and 37 ft. beam, has been towed through to Montreal. This is the largest barge that has ever been taken through the canals.

The Calvin Co., Garden Island, Ont., is building a tug to be called the Frontenac. A boiler was built for the firm last winter by the Polson Iron Works, Toronto, and delivered to Kingston. This boiler has now been taken over to Garden Island and placed on board.

An action for damages, which have been laid at \$3,500, has been commenced by the Georgian Bay Navigation Co., owners of the str. Carmona, against the owners of the barge Crete, which, it is alleged, while in tow of the Shenandoah, collided with the Carmona near Sarnia, in June, 1899.

The National Transportation Co. is being organized under the laws of New Jersey, with a capital of \$2,500,000, for freight carrying on the great lakes. It is reported that con-

tracts for the building of vessels, aggregating 27,000 tons, have already been placed and that they will be ready for delivery in Mar., 1902.

A receiver has been appointed for the estate of W. Brown, owner of the str. Cambria, to satisfy a judgment obtained, in Wayne Co., Mich., for \$2,000 by Miss C. McIntosh, of Kincardine, Ont., for slander spoken by Brown, when Miss McIntosh was a passenger on the Cambria between Windsor and Goderich.

A tug for the Firstbrook Box Co., of Toronto, has been launched at Owen Sound. The machinery is being transferred from a steam yacht, owned by Mr. Gooderham, and includes a powerful duplex pump, which will provide fire protection for the Co.'s mills at Penetanguishene, where the tug's headquarters will be.

Owing to the increasing traffic on the Muskoka lakes, the Muskoka Navigation Co. is desirous of placing larger boats on the service. Provincial Engineer McCallum has been inspecting the lock at Port Carling with a view to its enlargement. The lock will now only pass a steamer 130 ft. long, and an extension of 40 ft. is asked for.

An elevator of 700,000 bush. capacity has been erected at Meaford, Georgian Bay, by a company headed by H. Botsford, of Port Huron, Mich., and a channel 20 ft. deep has been dredged to the elevator dock by the Dominion Government. A steamer has been chartered to carry wheat from Chicago to Meaford for the rest of the season of navigation.

The Northwest Transportation Co.'s str. Huronic, described and illustrated in our Sept. issue (pgs. 283, 284), was launched at Collingwood Sept. 12. On the same day there was laid at Collingwood the keel of a 6,000 ton barge for one of the Clergue companies. A special slipway had to be prepared for this purpose. The bed of the new slip is 390 ft. long by 64 ft. wide.

There is a large increase in the number of motor launches of all kinds, not only in the Thousand Island district, but also throughout the lake regions, and as these are very often run by inexperienced, and always by unlicensed hands, owners and captains of vessels are favoring the Government stepping in and enforcing some regulations by which navigation may be safeguarded.

The Midland Queen, the Midland Navigation Co.'s new boat, arrived in Montreal from Manchester, Eng., Aug. 16, and after unloading 800 tons of salt, proceeded to Chicago with the rest of her cargo. She will carry grain from Chicago to Midland until the close of navigation. She is the second British-built vessel to engage in the carrying trade on the great lakes for Canadian owners this year, the first being the Donnacona, now carrying iron ore to Hamilton.

An Ottawa despatch says arrangements for the commencement of work on the Georgian Bay Canal are progressing. The Dominion Government requires a statement from a competent man as to the estimated cost, and this it is understood, is being prepared. A bill guaranteeing interest at the rate of 3% per annum will probably be submitted to the House early next session, and the same session the first estimates for the canalizing of the French river will be introduced.

The ferry steamer Algoma, built by the Polson Iron Works, Toronto, for the Sault Ste. Marie Ferry Co., has reached her destination, and has been placed on the route between the Canadian and the U.S. sides of the St. Mary's River at Sault Ste. Marie, Ont., and Mich. The Algoma, which was described in our Aug. issue (pg. 253), was given a trial trip at Toronto, Aug. 13, when she developed a speed of 10 miles an hour.

Capt. Playter, of Collingwood, had charge of her on her trip up the lakes.

H. D. Goulder, of Cleveland, Ohio, says that the freight and passenger business of the great lakes is still in its infancy. "The Algoma mines," says Mr. Goulder, "are just beginning to be opened up, and their products will become greater from year to year. The Canadian territory of Lake Superior is yet unworked, and in a few seasons that side will yield probably as much grain and ore as the American interests are now putting forth. The prospect for the passenger business on the northern lakes is also a very bright one, and many more vessels will be constructed for that traffic before many seasons. There is a great and growing demand for passenger steamboats from border cities on the lakes, and the tourist trade is steadily increasing."

Press despatches recently stated that Capt. Donnelly, of Kingston, Engineering Inspector for Lloyd's, had been appointed Inspector of Hulls at Toronto by the Dominion Government, a position vacant since the death of T. Riseley, about three years ago. Capt. Donnelly has not received any appointment from the Dominion Government, and if he did it would not be that of Inspector of Hulls, as Capt. Donnelly is an engineer, and not a surveyor of hulls. The office of Inspector of Hulls at Toronto has been filled for some years by W. Evans, and S. McKim is Inspector of Machinery. The appointment which Capt. Donnelly has received is that of Inspector to the Western Assurance Co., which was given a charter at the last session of the Dominion Parliament to transact a wrecking business in connection with its marine insurance business in Canada.

Pacific Coast Shipping.

The Canadian Pacific Navigation Co. is said to be contemplating important improvements in its fleet.

The steamer Mananense, the last vessel to clear for Dawson, by the St. Michael route, left Vancouver, B.C., Aug. 23. She carried 1,200 tons of cargo.

The Gulf Steamship and Trading Co., (Ltd.) has been incorporated under the British Columbia Companies' act with a capital of \$50,000, to carry on business in the province as shipbuilders and shipowners.

The str. Cutch, reported sold by the Union Steamship Co., in Aug., is to be towed to Portland, Ore., where she will be repaired, and put in service on the Columbia, between Portland and Astoria. Mr. Clinton is the

THE GRAND TRUNK RAILWAY COMPANY OF CANADA

NOTICE is hereby given that the Ordinary General Half-Yearly Meeting of the Grand Trunk Railway Company of Canada will be held at the City Terminus Hotel, Cannon Street, London, E.C., on Tuesday, the 8th day of October, 1901, at Two o'clock, p.m., precisely, for the purpose of receiving a Report from the Directors and for the transaction of such business of the Company as may be brought before them in the ordinary course.

Notice is also given that the Transfer Books of the Company will be closed from Tuesday, the 10th day of September, to the day of the Meeting, both days inclusive.

By order,

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

Dashwood House,
9 New Broad St., London, E.C.,
28th August, 1901.

The Canadian Pacific Railway Company.

NOTICE TO SHAREHOLDERS.

The Twentieth Annual Meeting of the shareholders of this Company for the election of directors and the transaction of business generally, will be held on Wednesday, the 2nd day of October next, at the principal office of the Company at Montreal at twelve o'clock, noon.

The meeting will be made special for the purpose of considering, and, if deemed advisable, of adopting a resolution authorizing the issue of bonds of the Company under the authority of the Dominion Act, 52 Victoria, Chapter 73, to an amount not exceeding four hundred and eighty thousand pounds sterling, to aid in the acquisition of steam vessels and their equipment, and for securing such issue according to the provisions of the said Act.

The Common Stock Transfer Books will close in London at 3 p.m. on Friday, 23rd August, and in Montreal and New York on Friday, 6th September.

The Preference Stock books will close at 3 p.m. on Monday, 2nd September. All books will be reopened on Thursday, 3rd October.

By order of the Board,

CHAS. DRINKWATER, Sec.

Montreal, 12th August, 1901.

The Canadian Pacific Railway Company.

Dividends for the half year ended 30th June, 1901, have been declared as follows:

On the Preference Stock two per cent.

On the Common Stock two and a half per cent.

Warrants for the Common Stock dividend will be mailed on or about 1st October to Shareholders of record at the closing of the books in Montreal, New York and London respectively.

The Preference Stock dividend will be paid on Tuesday, 1st October, to Shareholders of record at the closing of the books at the Company's London Office, 1 Queen Victoria Street, London, E.C.

The Common Stock Transfer books will close in London at 3 p.m. on Friday, 23rd August, and in Montreal and New York on Friday, 6th of September. The Preference Stock books will close at 3 p.m. on Monday, 2nd September.

All books will be re-opened on Thursday, 3rd October.

By order of the Board,

CHARLES DRINKWATER,

Montreal, 12th August, 1901.

Secretary.

PAN-AMERICAN EXPOSITION.

A Select Private House

MRS. A. R. McDONALD,

290 Lafayette Ave., * Cor. Tryon Place,
BUFFALO, N. Y.

SIX Comfortably Furnished Rooms in delightful residential district, within 15 minutes' walk of the Pan-American grounds, and on direct car line to principal entrance. Lodging and Breakfast \$1.50 per day.

When writing state exact dates required. From Railway Station take Baynes and Hoyt Trolley (green cars) to Lafayette Ave.

[The Publisher of THE RAILWAY AND SHIPPING WORLD vouches for the accommodation above advertised.]

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.

new owner of the Cutch, and the purchase price is reported as \$6,500.

The Utopia, owned by the Union Transit Co., and operated for sometime between Seattle, Wash., and Victoria, B.C., by the Dodwell Co., has been sold to the La Conner Trading and Transportation Co., for \$30,000. The Utopia's new owner will place her on the Seattle-Whatcom-Blaine run.

The hulls of the once well-known Stikine river steamers McConnell, Ogilvie and Dawson, now lying in Skagway, are reported to have been sold to J. and T. Adair, who propose to turn them into scows. They will take them to Vancouver for freight and then tow them to Dawson, via St. Michael.

The British Yukon Navigation Co. has established a weekly steamer service between White Horse and Mason's Landing, at the head of navigation of the Hootalinqua river, 18 miles from the recently opened Big Salmon gold fields. The steamer Bailey has been placed on the route.

The New Zealand Government is desirous of having re-established the service between Vancouver, B.C., and Auckland, which was abandoned owing to its withdrawing the subsidy. The Canadian-Australian R. M. S. line, whose steamers called at Auckland under the old contract, is not inclined to alter its arrangements again to suit New Zealand, whose people are looking forward to the establishment of a direct service.

The hull of the str. Revelstoke, which is being built at Nakusp, B.C., for the Revelstoke Navigation Co., is nearly ready for launching. The machinery has arrived from the Polson Iron Works, Toronto, and consists of a pair of stern wheel engine 12x26, to which steam is supplied by a locomotive boiler 60 in. by 21½ ft., tested to 200 lbs. pressure. When completed the Revelstoke will run between Revelstoke and the Big Bend district.

The annual meeting of the C.P.R. Co., to be held in Montreal Oct. 2, will be made special to authorize the issue of £480,000 of bonds to aid in the acquisition of steam vessels and their equipment. President Shaughnessy recently stated in connection with reports that the Co. was going to build very much larger and faster boats than the three Empresses now in service, that the management was considering the question of adding another steamship to the Empress fleet. See annual report of C.P.R. Co. on another page of this issue.

The C.P.R. Co.'s steamers Tartar and Athenian, which have been running between Vancouver and China and Japan, for some time past, will, it is said, be given scheduled sailing dates. They are equal in speed and accommodation to the lines sailing from U.S. Pacific ports to the Orient, and will increase the regular sailings from Vancouver, reducing the service to a 10 or 12 day one in the summer, and a three weeks' one in the winter. The Tartar and Athenian have large cargo capacity and excellent passenger accommodations and promenade decks.

Press despatches stating that the Canadian Pacific Navigation Co. had placed an order in Toronto for a 20 knot steamer for the Vancouver-Victoria run are premature, says the manager, Capt. Troup. A boat is being built for the Co., the frame and machinery for which have been ordered in Toronto, and will be put together at Vancouver. Toronto firms are figuring on a boat for the Co. to have a speed of about 20 miles an hour, but no order has yet been placed. The approximate dimensions of this vessel are: length, 280 ft.; breadth, 20 ft.; draught, 9 ft.

Dodwell & Co. have chartered the new screw steamer Majestic, which they purpose placing in the Seattle-Victoria service, in opposition to the Alaska Steamship Co.'s Rosa-

lie, in place of the str. Northern Pacific. The Majestic's dimensions are: length, 170 ft. over all; breadth, 30 ft.; depth of hold, moulded, 14 ft. 6 in. She is fitted with triple expansion engines, with cylinders 18 in.; 30½ in. and 51 in. diameter, with a piston stroke of 2 ft. 4 in. Steam is supplied by 3 Scotch boilers, each 10 ft. 6 in. diameter, by 11 ft. long, tested to 180 lbs. pressure a square inch. The engines develop at their full capacity 1,500 h.p. She is fitted with electric light throughout, and is reported to have cost \$150,000. The Majestic has recently been running to Whatcom. It has not yet been reported what route the Northern Pacific will be transferred to. The rate war which has been going on for some time between Dodwell & Co. and the Alaska Steamship Co. has been settled, and a general agreement as to fares and the time of running boats has been signed between the two companies.

The following is extracted from an article, "Dawson As It Is," in the current Canadian Magazine:—"The aggregate amount of goods landed at the extensive system of well built wharves fronting the city, runs up close to \$10,000,000 a year, of which half comes from Canadian cities, the remainder from across the line. Some 12,000 tons came by way of Behring Sea and up the Yukon. The same quantity comes over the Pass and down the river by steamer. Scows bring about 5,000 tons more. The total tonnage landed in Dawson last year was 30,000 tons. To handle this bulk of goods some 20 small, medium and large stern wheel steamers connect at Whitehorse with the White Pass and Yukon Ry., running inland from the Lynn canal 110 miles, and run to Dawson, 450 miles, by the Upper Yukon and Lake Laberge. Passengers and tourists get first-class accommodation. The travel for various reasons is large during the summer; the first and last boats are always crowded. On the Lower Yukon run, another 20 steamers of the largest class, some of them rivalling the big Mississippi ones, ply between St. Michael, at the mouth of the river, and Dawson. They have to bring their load over 1,200 miles against a stiff current, in a shallow and shifting channel or channels."

The steamship Islander, of the Canadian Pacific Navigation Co.'s fleet, collided with an iceberg off Douglas Island, Lynn Canal, Alaska, on the night of Aug. 14, and sank within 15 minutes, Capt. Foote and over 30 of the passengers and crew being drowned. The Islander was built at Yoker, on the Clyde, Scotland, in 1888, for the C. P. N. Co., at a cost of over \$20,000, and was navigated from Glasgow to Vancouver by Capt. Walbran, now in command of the Dominion cruiser Quadra. Her dimensions were: length, 240 ft.; breadth, 42 ft.; depth, 14 ft.; tonnage, gross, 1,495; register, 478. She was built of steel, propelled by twin screws, driven by triple expansion engines, with cylinders 20 in., 30 in., and 52 in., having a 36 in. stroke. Besides having superior accommodation for over 100 passengers, the Islander had a large freight capacity. She was an expensive boat to run, being a heavy coal burner, and this fact militated against her success when on the run between Vancouver and Victoria. When the C.P.R. obtained control of the C.P.N. Co., the Islander, which had been laid up for some time, was overhauled and placed on the Skagway run, and it was while completing her seventh round trip for the season that she was lost. The C.P.N. Co. has asked for an investigation into the loss of the vessel, and the Minister of Marine has directed the holding of one.

The Imperial authorities have renewed for 10 years the agreement by which the consular mails to and from China and Japan have been carried via Canada. If faster vessels are not

put on the service, the mails will, it is understood, at the expiry of the new arrangement be sent via the Suez canal. An offer from the Imperial Government of a subsidy for a fast Atlantic service in return for the carriage of the British mails and the right to make use of the steamers as fast cruisers should necessity arise is expected to be made.

F. H. Clergue, Sault Ste. Marie, Ont.; Hon. R. Mackay, Hon. A. Thibaudeau, G. E. Drummond, W. E. Blumhart, H. Miles, and L. E. Geoffrion, Montreal; Hon. L. M. Jones, Toronto; J. R. Booth, Ottawa; and E. V. Douglas, Philadelphia, Pa., have been incorporated as the Franco-Canadian Steamship Co. of Canada, Ltd., under the Dominion Companies' Act, with a capital of \$1,000,000. The head offices are in Montreal, and two steamers—the Garth Castle and the Wessau—are being operated under a Dominion subsidy between Montreal and Havre, France.

Among the Express Companies.

The Canadian Ex. Co.'s London, Eng., office has been removed from 22 to 34 Leadenhall St., E.C.

The Canadian Ex. Co. has extended its service over the Lake Erie and Detroit River Ry.'s extension from Dutton to St. Thomas, Ont.

The classification and tables of graduated charges as adopted by all express companies in the U.S. on and from Aug. 1, is applicable on business between all offices of the Canadian, Dominion and Maritime Express Companies, with some slight exceptions and changes.

A Long Island N.Y. magistrate has decided that to send a worthless package by express to a person, requiring the recipient to pay charges, comes under the head of petty larceny, and is punishable as such. In the case referred to one man had sent by express a worthless package to another as a joke. The express charge was 35 cts. The man who got the package couldn't see anything funny in the business and complained to the magistrate, who entered a charge of petty larceny and extortion, and fined the joker \$5 and costs.

Telegraph and Cable Matters.

The Dominion Government telegraph lines in operation at the end of 1900 comprised 3,666½ miles of land lines and 240 miles of cables with 185 offices. The yearly average number of messages sent over the lines is 76,400. The expenditure in 1900 was \$76,965, and receipts \$44,529.

The U.S. Government telegraph line from Valdez, Alaska, to Eagle City, on the Yukon, has been completed to Copper Center, where an office has been established. It is expected that the line will be completed to Eagle city before the winter. The cable between Skagway and Juneau has been laid and is in operation.

The Dominion Government will shortly be asked to install a wireless telegraph station near Victoria, B.C., for the purpose of signalling incoming steamers. It is said the C. P. R. has made an offer to install the Marconi system on each of its three Empress steamers if the Government will erect a shore station for communication.

A system of wireless telegraphy is to be operated by the Pere Marquette Rd. on its cross lake boats, and afterwards on all its other boat lines. The system, says W. L. Mercereau, superintendent of the Co.'s steamship line, will shortly be operated between Ludington, Mich., and Manitowoc, Wis., over 56 miles of open water.

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	59,074 67	81,384 41	10 44	5.78
1888	11,800	89,018 16	117,821 96	9 98	6.43
1889	17,349	116,787 82	188,130 36	10 84	5.85
1890	24,604	181,846 79	283,967 20	11 54	5.18
1891	32,303	261,436 21	408,798 20	12 65	6.40
1892	43,024	344,748 82	580,597 85	13 49	6.25
1893	54,484	392,185 93	858,857 89	15 76	5.47
1894	70,055	511,162 30	1,187,225 11	16 94	5.47
1895	86,521	685,000 18	1,560,733 46	18 03	5.67
1896	102,838	820,941 91	2,015,484 38	19 60	5.50
1897	124,685	992,225 60	2,558,832 78	20 52	5.56
1898	144,000	1,176,125 14	3,186,370 36	22 12	5.67
1899	163,610	1,430,200 33	3,778,543 58	23 09	6.30
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.

The Toronto City Court of Revision recently reduced the G.N.W.T. Co.'s assessment from \$25,000 to \$8,391 on the strength of an itemized statement of cost submitted by the Co. showing that it has in the city 909 poles, ranging from \$1 to \$10 in value, according as they vary from 30 to 65 ft. in height; 214 miles of wire at \$12 a mile, and 30 miles on buildings at the same price; one mile of copper wire at \$30 a mile. The cost of planting poles the Co. placed at \$1.

Following are statistics of the three principal telegraph systems in the Dominion—the Great Northwest Telegraph Co., the C.P.R. Co.'s Telegraph, and the Western Union Telegraph Co.—for 1900:

	Miles of line.	Miles of wire.	No. of Messages.	No. of Offices.
G.N.W.T.	18,290	34,810	2,623,257	1,466
C.P.R.	9,505	37,112	1,900,000*	996
W.U.T.	2,922	8,682	437,157	218
Total	30,717	80,604	4,960,414	2,680

* Not including press messages.

The Government telegraph line from Murray Bay, Que., along the north shore of the river and gulf of St. Lawrence, has been completed as far as Chateau bay, Labrador, and additional stations have been established at Ponte du Maurier, Harrington, Mutton bay, St. Augustin, Bon Esperance, Blanc Sablon, Red bay and Chateau bay. The str. Tyrian, which was recently engaged in repairing the cable between Meat Cove, Cape Breton, and St. Paul's island, is engaged laying a cable between Chateau bay and Belle isle. It is not yet known whether it will be possible to maintain a cable across the strait owing to icebergs, but the attempt will be made. The Tyrian is fitted with the Marconi wireless telegraph system, and another set is to be fixed on Belle isle for experimental purposes, and as a means of communication should the cable be carried away. D. H. Keely, Superintendent of Government telegraphs, is in charge of the work.

The C.P.R. Co.'s Telegraph.

The headquarters building recently erected at the corner of St. Francois Xavier and Hospital Streets, Montreal, was occupied by the C.P.R. Co.'s Telegraph on Sept. 2. Many of the offices which are rented were occupied earlier. In transferring the offices from the temporary quarters across St. Francois Xavier St. to the new building, it was only necessary to disconnect the wires leading to the old instruments and connect them with the new. The latest improvements in dynamos and switchboards have been utilized.

The new building is eight stories in height, with a deep cellar. In this cellar are placed the lineman's room, the big electric fan, which conveys cool and moderately hot air throughout the building; the dynamos which run the elevator, the store room and wine room of the City club, and the cable room, as well as lavatories for the messengers. The boilers for the heating apparatus are also placed in this portion of the building. The system for cooling the building is a modern one. The immense electric fan or blower is run by a dynamo. A large air shaft extends from the cellar to the roof with branch ducts connecting with every room in the building. If the day is very hot, it is possible to place a box of ice at the opening of the huge fan, which would make the air still cooler as it is sent through the building. On the other hand, the lower portion of the fan is provided with hot air pipes, and when a moderate heat is required throughout the building, these are heated and the fan carries the heated air to every room. For cold weather the regular system of live steam heating is provided. This is sent to the top of the building by means of a main conduit, and it is thence dis-

tributed to the radiators on different floors, and the condensed steam is forced back to the boiler by means of a small steam pump.

All the cables enter the building by means of underground conduits. The telegraph, telephone and lighting wires are all kept underground, and the most elaborate precautions are taken throughout the building to prevent a wire from being exposed at any point except, of course, in the switches, which are provided for that purpose. The telephone cable comes direct from the Bell Telephone Co.'s exchange through an underground conduit. The telegraph wires come in in six cables. One of these comes underground from near Place Viger station, and the other goes underground near the Windsor St. station. The other three cables are for local exchanges.

There are three entrances to the ground floor. The main entrance on Hospital St. is most imposing. Two columns of New Brunswick sandstone are at either side of the entrance. The wainscoting in the halls is of Sicilian marble polished to a high degree, and most artistically marked. The ceiling is finished in imitation ivory, beautifully carved. The entrance at the corner of St. Francois Xavier St. leads to the receiving room. This is a most imposing room, with ceilings 18 ft. high, and richly carved columns. The floor in front of the counters is tiled, and the counters are of marble. The local manager's office and the cashier's office are cut off from this room, while there is a smaller room at the side intended for reporters who use the C.P.R. wires. The receiving room is equipped with pneumatic tubes for conveying messages to the operating room, while an indicator is provided with connection to every office in the building. Any of the Co.'s tenants who wish to send a message have simply to press a button and a messenger will be sent. In rear of the receiving room, and reached by a door opening on St. Francois Xavier St., is the messengers' room, a cheerful apartment where the boys spend their time while waiting for messages. Above them, and reached from the receiving room by a short stairs is a cloak-room for the office staff, and a store-room for the keeping of six months' business. The lavatories for the office staff are also on this floor. On the fifth floor are the executive offices, C. R. Hosmer, formerly Manager of the Co.'s telegraph, and now a director of the Co., J. Kent, Manager, W. J. Camp, Superintendent of the Eastern Division, the Superintendent of Construction, and other officials being located there.

The operating room takes up the whole of the top flat. The ceilings are 18 ft. high, and as the building towers above all the surrounding structures, the telegraphers will enjoy good light and a splendid view of everything that goes on in the harbor. The power for operating the wires is furnished through 13 dynamos of the Lundell pattern. They connect with a slate switch-board, which distributes the current throughout the building. All the cables come from the basement through a shaft, and are distributed on a system of fuses and lightning arresters, mounted on porcelain blocks, and thence conducted by short cables to the switch. In rear of the switch is the distributing board, through which pass all leads between the switch and the table connections mounted on slate slips placed on an iron frame. Everything about the apparatus in this portion of the work is designed to make it absolutely fireproof. The main switch in the operating room is of the very latest design. It is equipped for 100 wires, and can be increased to receive 150. The key controlling each circuit marks the number of volts necessary, and contains a list of calls to the offices reached by the circuit. The operating room contains 3 sets of quadruplex instruments whereby 4 operators can work simultaneously on the one wire,

5 sets of duplex, 8 sets of automatic repeaters, and 34 sets of single working instruments. Every table is provided with seats for 4 operators, and all have slides for the use of the typewriter, as it is the intention to have all messages typewritten. Two cloak rooms are provided with lockers for the male and female operators. The heating apparatus in the operating room is arranged so that one-half the radiator may be closed off while the other heats. In this way it will be possible to control absolutely the heat of the room in which a large number of people will be engaged all day long.

General Telephone Matters.

The Bell Telephone Co. is laying another cable across the Detroit River, between Windsor, Ont., and Detroit, Mich.

The Dawson, Yukon, telephone service consists of 140 instruments in the town, and 26 scattered along the creeks, and orders are in for many more. Capt. Oleson is manager.

The extension of the New Brunswick Telephone Co.'s line to St. Andrews and St. Stephen is being pushed forward. J. Barnes, M.L.A., has the contract for erecting the poles.

The Valley Telephone Co., which was incorporated by the Nova Scotia Legislature in 1892, had its charter amended last session, by reducing its authorized capital from \$40,000 to \$30,000.

The Bell Telephone Co. of Canada is inviting tenders for the purchase of \$200,000 of its 5% debentures, redeemable on April 1, 1925. The debentures will be issued on Oct. 1, and the interest will be payable in April and Oct.

The cables connecting the Uptown, Montreal, and Westmount exchanges of the Bell Telephone Co. are being placed underground. When this work is complete over a mile of cable will have been laid. The Co. has now about 14 miles of conduits in the principal streets of Montreal, in which some 15,000 miles of wire are laid.

An exchange is responsible for the following:—"What is probably the only telephone system operated entirely by the Indians is being installed in the village of Kish-Pie-Axe, in northern British Columbia. The system is to be connected by a 20-mile telephone wire from the telegraph office at Hazelton, half way between Ashcroft and Atlin."

The following statistics for 1900 of telephone companies in the Dominion are given in the Statistical Year Book:—

No. of companies	58
from which returns were received	38
offices	1,580
sets of instruments	52,417
miles of poles	13,764
wire	129,111
messages sent (approximate)	156,217,627

Mr. Wayling, member of a syndicate asking for a telephone franchise in Toronto, says negotiations will be resumed after the holidays. This syndicate offers to put in a system at a cost of \$1,200,000, the yearly rates to be \$36 for a business telephone, or \$50 for a business and private telephone on one circuit; and two house subscribers on one line \$18 or \$20 each. Each instrument would be on a metallic circuit, and would be connected with one central switchboard. A guarantee of \$50,000 would be put up by the syndicate on entering into a contract.

The Northern Pacific Ry. is making tests of a system for the simultaneous transmission of telephonic and telegraphic messages over the same line, recently invented by C. H. Gaunt, one of its staff. The experiments are being made between St. Paul and White Bear, Minn. It has been found possible to send telegraphic messages, with the use of

the usual code, at the same time that two persons were conversing over the wire, and there was absolutely no confusion of the two systems. After the system has been more extensively tested, it may, if it proves as successful as is now hoped, be adopted in connection with the transcontinental telephone system, which the Co. is gradually installing. A line from Tacoma to Seattle has just been completed. The N.P.R. now has about 175 miles of telephone wires in use.

The lines owned by the Columbia Telephone and Telegraph Co., and its subsidiary company, the Northwest Telephone Co., have been leased to R. K. Houlgate, Manager in Canada of the British Columbia Telephones (Ltd.) The Columbia Co.'s lines extend from Rossland to Camp McKinney, Cascade, Grand Forks, Phoenix, Greenwood and Midway, B.C. Mr. Houlgate says the U.S. connection will be the Pacific States Telephone Co. and its leased lines, and there will be a harmonious working with the Vernon and Nelson Telephone Co., which operates a line in practically the same territory as the Columbia Co. It is proposed to extend the lines through the Okanagan and Similkameen districts, and on to the coast, where connection will be made with the B.C. Telephones' subsidiary, the New Westminster and Burrard Inlet Telephone Co., which owns the exchanges at New Westminster and Vancouver, with connections also to Puget Sound points. A submarine telephone cable will be laid to Victoria, immediately. The mileage controlled by the British Columbia Telephones (Ltd.) is 500 miles.

The Eastern Telephone Co. (Ltd.), which was incorporated by the Nova Scotia Legislature in 1890, was given power by an amending act passed last session, to sell all or any part of its undertaking to any person, firm or corporation, subject to the approval of a two-thirds majority of its shareholders present at a general or special meeting called for that purpose. The annual meeting of the Co. was held Aug. 22, when the following directors were re-elected:—R. A. H. McKeen, President; Judge Dodd, vice-president; J. E. Burchell, B. Archibald, and J. R. Hackett. There were also added to the board: Capt. J. Lorway, W. Crowe, B. W. Chipman, and R. Uniacke, of Halifax, representing the Nova Scotia Telephone Co., which has acquired a considerable proportion of the \$100,000 of new capital created by a special resolution passed at the meeting. The total capital of the Co. is now \$150,000, the additional amount authorized being required for the purpose of improving the local service, and providing for an extension of the Co.'s lines throughout Cape Breton to the Strait of Canso, where they will meet those of the Nova Scotia Telephone Co., thus making through connection with Halifax. The new issue of stock consists of 10,000 shares of \$10 each, and is reported to have all been subscribed. Some changes were made in the by-laws, and an agreement was signed with the Nova Scotia Telephone Co. dealing with the building of the long distance line.

A new cable has been laid between Pelee Island, Lake Erie, and the mainland, for the Dominion Government, under the supervision of J. F. Richardson, chief electrician of the C.P.R. Co.'s Telegraph. There had been in operation a cable previously laid from the Island to Point Pelee on the mainland, but owing to the rocky condition of the shore, it seldom stood the ice during one winter. This cable was taken up, and the bad portion taken out, nine miles of deep sea cable spliced on the good portion, and the renewed cable relaid more to the westward, where a sandy or clay bottom extends between the island and the mainland. The new cable and its shore connection to Leamington is 16¾ miles in length, a somewhat longer mileage

than by the old cable. There is 13½ miles of line on the island. The maintenance of communication between the island and the mainland is of great importance during the winter-time owing to the dangerous crossing for the mail. The cable and its land connection on Pelee island are worked as a telephone circuit. Pelee island is counted as one office, although there are four telephone stations on the island,

viz., at Pelee island light, north dock, west dock and south end. Business is interchanged with the C.P.R. Co.'s telegraph, the G.N.W. Telegraph and the Bell Telephone Co., the rate being 25c from Leamington. The line is in charge of J. McC. R. Selkirk, District Superintendent of Government Telegraphs at Leamington, who is also agent for the Bell Telephone Co.

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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**.

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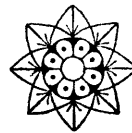
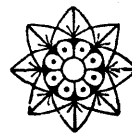
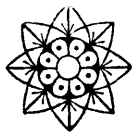
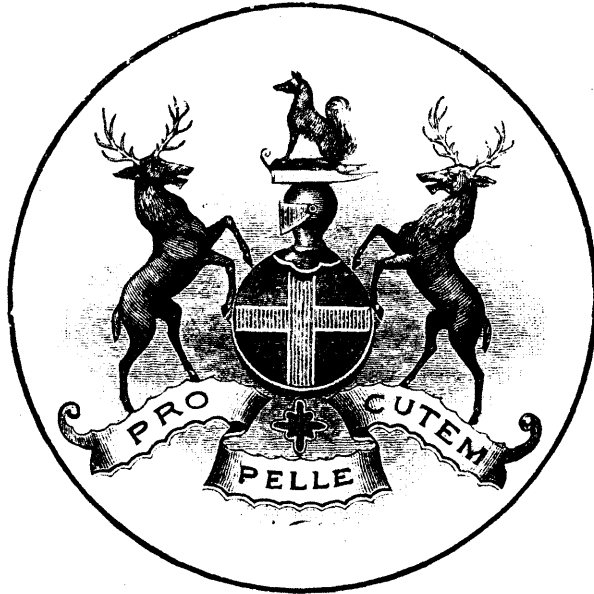
The Purchasing Agents' Guide

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