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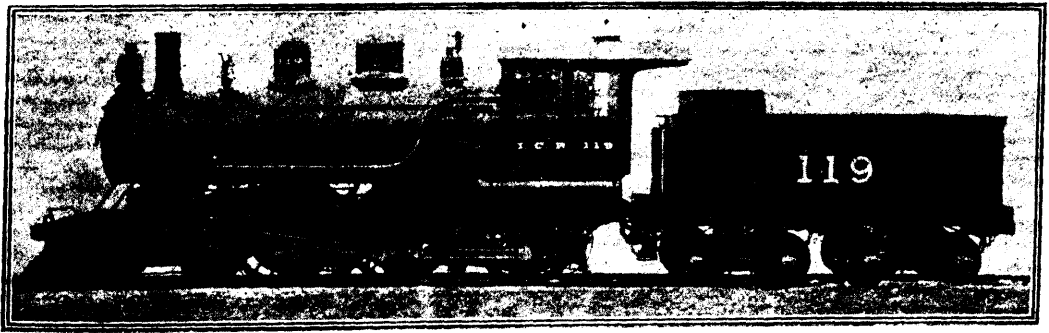
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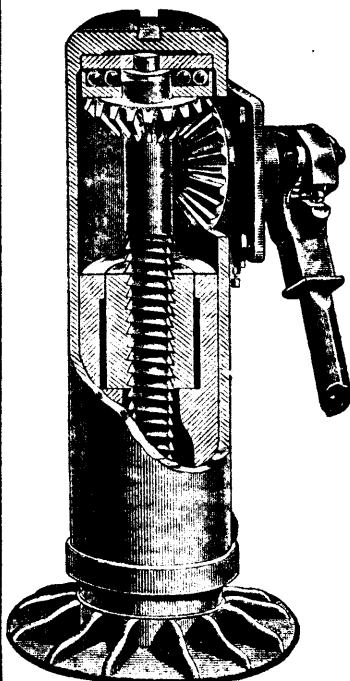
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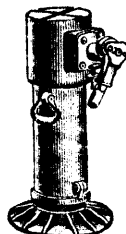
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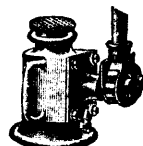
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G.T.R. Locomotive History.

In its 50 years' existence, the G.T.R. has, in common with its contemporary lines, seen many changes in ideals and methods, but in none more than its locomotives. The original prospectus of the G.T.R. was issued in 1853. Its object was the construction or formation of "a Main Trunk Line of Railway throughout the province," of 5½ ft. gauge, and embracing the lines then completed, or under construction, which included "the G.T. Ry. Co., of Canada East; the Quebec and Richmond Ry. Co., the St. Lawrence and Atlantic Ry. Co., the Grand Junction Ry. Co., and the Toronto and Guelph Ry. Co.," and leasing in perpetuity the Atlantic and St. Lawrence Co. from its junction, near the U.S. boundary line, to Portland, Maine, a total distance of 1,112 miles, of which 250 miles were at that time open for traffic.

In 1860, when the opening of the Victoria Bridge completed the undertaking, the locomotive stock numbered 206, of which 165 were at work in Canada. These were constructed as follows: In the U.S. 72, in Canada 43, in England 50. The earliest of these was built by the Portland Co. in 1848, and weighed 52,640 lbs. Fifty locomotives sent from England were constructed on the lines of those in use upon the London and Northwestern Ry., by Peto, Brassey, Betts and Jackson, the contractors for the undertaking, at the Canada Works, Birkenhead, and delivery was made during 1854 to 1858 inclusive. Passengers by the Ottawa River Navigation Co.'s line in summer may see a unique specimen of these so-called "Birkenheads" (the last of its line), hauling the train which makes the connection between Carillon and Grenville, in good repair, and equal to years of more work at the age of half a century. The old characteristics of the engine still remain, and the railway has the original G.T. gauge of 5½ ft.

The first locomotive built in the G.T.R. shops was no. 209, designed by F. H. Trevithick, the first locomotive superintendent of the company, and nephew of the talented engineer whose name he bears. This locomotive was completed May, 1859, and was used for the transportation of freight between Montreal and Toronto. Mr. Trevithick, who, the writer believes, still resides in Cornwall, near the scenes of his great ancestor's original labours, relinquished office in 1859, in favor of his assistant, W. S. Mackenzie, who was, three years later, succeeded by the late Richard Eaton, who came from the Great Western Ry. of Canada with the late C. J. Brydges, in 1863. Mr. Eaton assumed the title of Mechanical Superintendent, and built his first G.T.R. locomotive at the Montreal shops, March, 1865. He had, however, previously constructed others at the Great Western works, Hamilton, and was the first to use steel in the construction of locomotive boilers, one of which, made of this material throughout, he built as far back as 1861.

Mr. Eaton's successor was Herbert Wallis, who took charge of the mechanical department Jan. 1, 1873. During his continuance in office up to May 1, 1896, the gauge of the G.T.R. was changed from 5½ ft. to the standard 4 ft. 8½ inch., mainly during the autumns of 1873 and 1874. During this change, urgency demanded the importation of some 160 locomotives from the U.S., of which the Manchester works contributed 61, the Baldwins 45, the Schenectady 20, the Rhode Island 15, and the Portland Co. some 20, while in Canada the Kingston works and those of the G.T.R. added their quota of new ones. These locomotives weighed 70,000 lbs. in working order, and hauled in average



MORLEY DONALDSON, M. CAN. SOC. C.E.
General Superintendent Canada Atlantic Ry.

weather, at a rate of speed, without allowance of time at stations, of perhaps 10 miles an hour, between Brockville and Montreal, freight trains of 500 tons, at an average expenditure in coal of about 1½ oz. per ton per mile.

It was during 1873 that coal began to be extensively used as locomotive fuel, no wood-burning engines having been constructed for use on the G.T.R. subsequent to 1872. In the effort to produce results, the eight-wheeled road engines were notoriously over-cylindered for the weight upon the driving wheels, which was greatly restricted by the light nature of the track and bridges. In this category it was impossible, for obvious reasons, to keep pace with the growing requirements of the

traffic, which were constantly asserting themselves in calls for heavier trains and higher speed, and to obtain which, side-tracks were lengthened, until nothing but the doubling of the main lines and the strengthening of the road and bridges gave the necessary relief.

The introduction of the Mogul type of locomotive, of which 10 were imported in 1874, permitted the utilization of a larger proportion of the total weight for adhesive purposes, and thus reduced the wear and tear of track. The driving weight was distributed over three, instead of two pairs of wheels, and thus it was possible, by the use of larger cylinders and higher steam pressure, to increase the capacity of the machines. Between 1874 and 1896, more than 170 of these locomotives were added to the G.T.R. stock, or replaced others of less capacity, and of those some 150 were constructed at the work shops at Montreal. Engine 572, built 1891, was of this type, the advantage of which lay in the fact that at little greater expenditure of fuel per ton-mile unit, trains were increased in weight to the extent of 130%.

In 1895, the G.T.R. built its first compound locomotive, which was adapted to the Mogul type. The high pressure cylinder measured 19 in., and the low, or second expansion, 29 in. in the bore. The stroke of the piston was 26 in., the initial steam pressure was 190 lbs. a square inch, and the total weight of the engine loaded was 118,412 lbs. In very carefully conducted trials between Montreal and Brockville, as between this and the then most recent example of simple Mogul type, the compound engine used 35% less coal per ton-mile unit, and its boiler evaporated 20% more water for each pound of coal consumed. The average train load (eastward and westward combined), and exclusive of the engine and tender, was equal to 1,109 tons, and this work was performed at an average speed of 21 miles an hour, with a consumption of coal at the rate of little over 1 oz. per ton per mile.

In the early days of the locomotive the train loads were under 100 tons, and the fuel consumption per ton-mile unit was about two pounds. Wood, in his treatise on railways, 1832, gives an average of 1.6 lbs. as the best English practice, after many experiments. There seems little doubt, however, that trains hauled in loads of 1,000 tons, by compound engines, can be conveyed to-day, per ton, at one-twentieth of the expenditure in coal that was common in the days of Stephenson's famous Rocket, and this, notwithstanding the additional calls upon the boiler for brake-power, increased speed, car-warming service, and the many little contrivances for the relief of the engine men and firemen.

The high and low pressure cylinders on the G.T.R. locomotives of to-day have respective diameters of 22½ and 35 ins. The stroke of the piston and diameter of the driving wheels are the same, but the steam pressure has been increased to 200 lbs. a square inch, and the total weight of locomotives in working order

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G.T.R. Locomotive History.

(Continued from page 293.)

has risen to 163,704 lbs. The haulage capacity of these locomotives between Montreal and Brockville is a train of 1,500 tons going westward, and of 2,000 tons going eastward.

The Morse passenger locomotive remains of the single expansion design, but, as in the case of the freight, it is of greatly increased capacity, and an additional pair of driving wheels has been introduced, constituting it a "ten-wheeler." The essential differences may be seen from the tabulated statement, from which it may be calculated that the increase in power amounts to something over 50% in the case of the G.T.R. passenger locomotives of to-day, and, what is of very great importance, the steaming power of the boilers has been more than proportionately improved by a very liberal increase of heating surface and grate area.

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No. 93. No. 989-1881. 1902.

Diameter of cylinders, ins.....	18	20
Length of stroke, ins.....	26	26
Number of wheels.....	8	10
Number of driving wheels.....	4	6
Diameter of driving wheels, ft.....	6½	6
Total weight of engine, lbs.....	96,000	177,772
Initial steam pressure, lbs. a sq. in.....	160	200
Fire grate area, sq. ft.....	17¾	33½
Total heating surface, sq. ft.....	1,304	2,460

Twenty-five years ago the G.T.R. Co. of Canada owned 444 locomotives, of which 67 were passenger, 359 freight, and 8 shunting. Of these the largest has 18 by 26 inch cylinders, and weighed 160,000 lbs. Now the G.T.R. System (which comprises the G.T.R. of Canada, G. T. Western, Detroit, Grand Haven and Milwaukee, Cincinnati, Saginaw and Mackinaw, St. Clair Tunnel, Toledo, Saginaw and Muskegon), possesses 983 locomotives, 243 passenger, 652 freight, and 88 switching, the heaviest locomotive and tender being a 20 by 26 in. ten-wheeler, weighing 308,628 lbs. These engines are fitted with all modern appliances, such as high speed air brake, air signalling, steam heat, and carry a pressure of 200 lbs. a square inch.—Montreal Star.

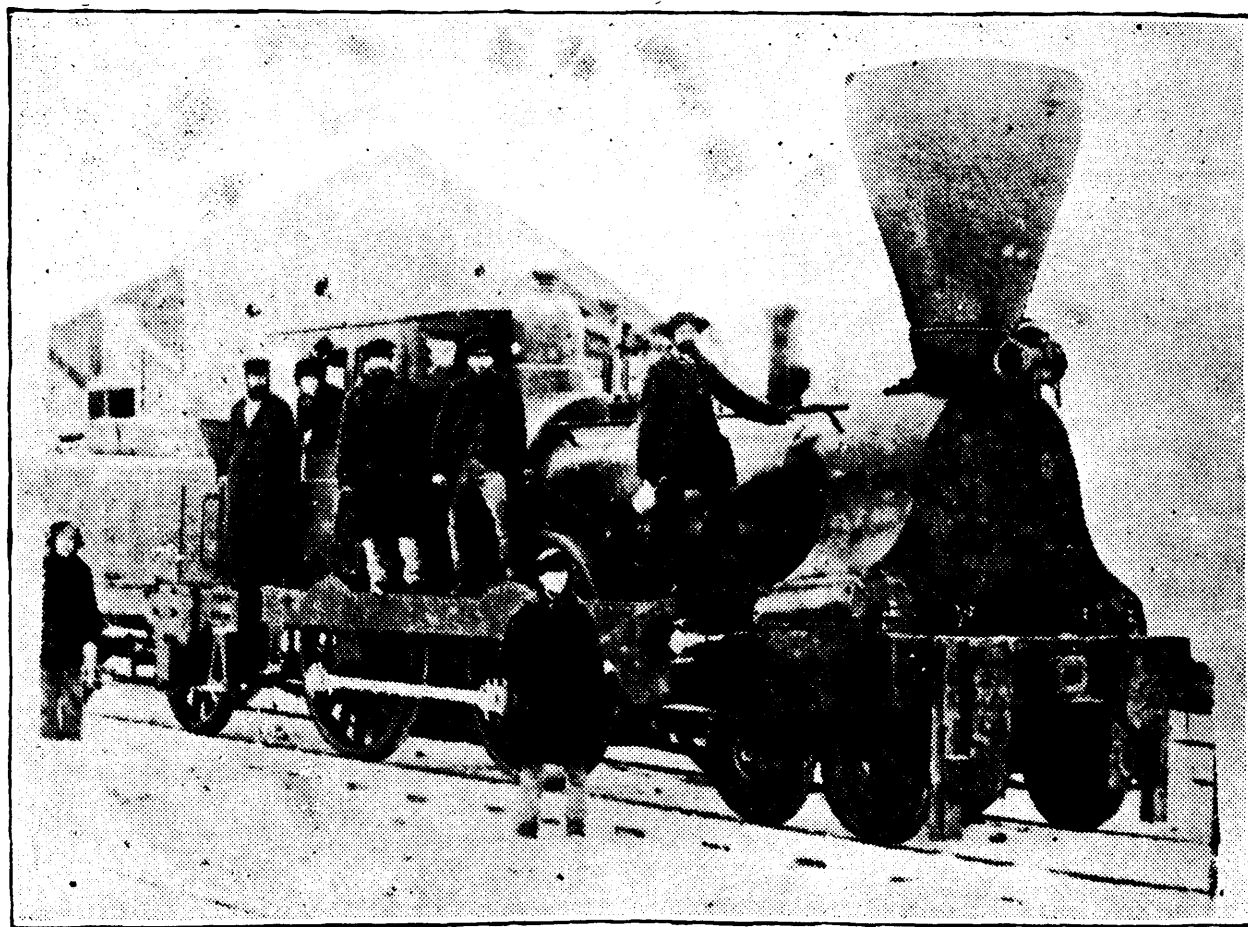
The C.P.R. Land Grant.

The Ottawa correspondent of the Globe states that an agreement has been reached between the C.P.R. management and the Dominion Government respecting the land grant of the company.

Under the contract of 1880 the land grant awarded to the C.P.R. amounted to 25,000,000 acres. The grant was to be made in alternate sections of 640 acres, extending back 24 miles on each side of the line from Winnipeg to the summit of the mountains. The odd-numbered sections were the ones set apart for the company. In order to make good the deficiencies in the 48-mile belt, tracts of land elsewhere were also reserved. In 1886 the company's land grant was reduced by 6,793,014 acres in consideration of the extinguishment of the balance of a loan made

being the Dauphin reserve in 1895, and all the odd-numbered sections at the disposal of the Government at the date of the reservation in these several tracts have been set apart down to the present time for the purpose of providing for the company's land grants. In 1889 the company undertook the construction of what was known as the Souris branch, and were authorized by Parliament to receive a land subsidy of 6,400 acres per mile for the same. This line runs from Brandon southwesterly to Estevan, with branches easterly to Glenboro and Deloraine. By the construction of this line and the branches mentioned, the company earned a total land subsidy of 1,408,704 acres. The same terms applied to this grant as to the grant for the main line, viz., that it was to be fairly fit for settlement. Land for the purpose of meeting this grant was reserved in the vicinity of Battleford,

resection to Glenboro and Carman, and from Manitou to Deloraine. The section connecting Carman and Manitou was never built. For the construction of this line 1,396,800 acres, fairly fit for settlement, was earned. In satisfaction of this grant three reservations were made. The first was known as the international boundary reserve. It comprises about 160 townships, and extends along the international boundary, partly in Manitoba and partly in eastern Assiniboia. A second reserve, comprising about 50 townships, was made near Lethbridge, and a third reserve north of Battleford and adjoining the Souris branch reserve already spoken of. Some years ago the C.P.R. acquired the Manitoba Northwestern Ry., extending from Portage la Prairie northwesterly to Yorkton, with a branch line to Russell, but not the land grant, and also the Saskatchewan and Western Ry.,



AN EARLY TYPE OF GRAND TRUNK RAILWAY LOCOMOTIVE.

by the Government to the company, the settlement being upon the basis of \$1.50 per acre. After this reduction the net amount to which the company were entitled under the contract was 18,206,986 acres. The other reserves made, out of which the company were to choose the land grant, consisted of the odd sections in the track south of the 48-mile belt in Manitoba and Assiniboia, as far west as the Coteau de Missonir. Then there was what is known as the first and second northern blocks. The first of these extended from about 70 miles north of Calgary to about 30 miles north of Edmonton, having a width of 250 miles east and west. The second northern block was situated north of the first, and had a width of about 70 by 160 miles. There was also a reserve of about 50 miles square in the Lake Dauphin district. The reservation of these lands was made from time to time by the Government, the last one

being two strips of 12 miles wide, each running parallel to the Saskatchewan and northwesterly from near Saskatoon to the 4th meridian. Reservation was also made of a triangular block adjoining the strip, in all about 2,000,000 acres. The company were further empowered to receive 6,400 acres per mile of lands fairly fit for settlement, for the construction of what has been styled "the Pipestone extension of the Souris branch," running from Monteith Junction westerly for a distance of about 30 miles. The area earned by the building of this line was 200,328 acres. To satisfy this grant a reserve about 30 miles north of Battleford was created, comprising the odd sections in a block of 21 townships. When the C.P.R. acquired the Manitoba and Southwestern Ry. many years ago, they also became possessed of the land grant which had been voted to the latter company. The line extends from Winnipeg in a southwesterly di-

a part of the same system, connecting Minnedosa and Rapid City, a distance of about 15 miles. This latter line earned a land grant of 98,880 acres by its construction, which likewise fell into the possession of the C.P.R. The company have, therefore, earned for the main line and Pipestone and Souris branches a total of 19,816,010 acres, and for the Manitoba Southwestern Ry., and the Saskatchewan and Western Ry., 1,495,680 acres, a grand total of 21,311,690 acres.

The C.P.R. has frequently urged that there was not sufficient land of a quality fairly fit for settlement in the reserves that have been enumerated above to allow of the selection therein of the total to which it was entitled. A great many propositions and counter propositions have been made, extending over a period of twelve or fourteen years, but nothing came of them. Within the last year, as the result of elaborate surveys made by the Gov-

Galena-Signal Oil Company,

Franklin, Pa., and Toronto, Ont.

**Successor to Galena Oil Company and
Signal Oil Company, sole Manufacturer
of the celebrated Galena Coach, Engine
and Car Oils, and Sibley's Perfection
Valve and Signal Oils.**

CHARLES MILLER,
PRESIDENT.

ernment for the purpose of acquiring information as to irrigation, and in consequence of a report by Mr. Anderson, a United States expert, regarding the feasibility of irrigation, the C.P.R. has revived a former scheme of carrying out irrigation works on a large scale, and the present arrangement with the Government for obtaining over 3,000,000 acres of semi-arid lands is the result. The arrangement, says the Globe correspondent, will place at the disposal of the Government for other purposes over 10,000,000 acres of land which had been held in reserve. The land chosen by the C.P.R. under the agreement is situated in what is known as the semi-arid belt, lying alongside of the main line of the C.P.R., and consists of about 2,950,000 acres. The company also propose to take on account of their land grants another tract of about 100,000 acres of semi-arid lands adjoining the irrigation tract of the Alberta Ry. & Coal Co. The tract along the main line of the company, as now decided upon, is about 150 miles long by 50 miles in width, extending eastwardly from Calgary to Langevin station, and being bounded on the north and south by the Red Deer and Bow Rivers respectively. The residue of land still remaining to the company consists of about 500,000 acres, which, it is said, they are prepared to select from a reserve lying along the proposed line of the Manitoba & Northwestern Ry. from the vicinity of Yorkton to Prince Albert. This reservation was made to satisfy the land grant of the company just referred to, but the grant was not earned further than to the extent of the construction of a line to Yorkton within the time limit set by Parliament. The balance, therefore, remains at the disposal of the Government, and it is a striking proof of the rise of land values in the Northwest that the C.P.R. is willing to take their balance of 500,000 acres from the reserve that was gone over by the Manitoba & Northwestern Ry. Co.

The G.T.R. in Toronto

In connection with the present extensive additions to the G.T.R. yard facilities in Toronto the following extract from the Globe of June 30, 1853, will be of interest: "We are informed that the Grand Trunk Railway people have bought some eighteen acres of land in the eastern part of the city for the establishment of their terminus. The ground lies a little below Gooderham & Worts' mill, and has been in part occupied as a brick field by Mr. Barnes. It lies very low, being sometimes covered with water. The price is £1,800, which has been paid to several different owners. The land has been bought with a view to the road running along the Esplanade, which is to be built in front of the city. The company's agents wish the corporation to give them forty feet wide along the front without payment, insinuating that if their claim is refused they will make a route through the city, entering near St. James' Cemetery. The city authorities acknowledge the advantage of the railways passing along the Esplanade; but they think that the company should pay as much to them for the right of way as they would pay for another track—a just and proper stipulation, to which we are sure the company will assent. In that case there will probably be machine shops and other works on the land just bought at the east, a passenger terminus near the centre, and the freight depot at the Queen's Wharf."

Actions are threatened by Boston owners of timber limits in the State of Maine, against the G.T.R. for damages caused to the limits by reason of bush fires. It is alleged that the fires were caused by sparks from the company's locomotives. The damages are put at \$250,000.

A Telegraph-Telephone System.

The G.T.R. has installed a system of telegraphing and telephoning over the same wire at Brockville, Ont., and connections are being made so that the system can be utilized as far as Montreal. The system has been installed under the superintendence of W. W. Ashald, who has charge of the telegraph service on the system. The new departure is the outcome of a desire for more direct communication between division officers and yard officers. It moreover enables the superintendents, train masters, and chief dispatchers to communicate quickly in cases of emergency with the officers on the line. The yard officers have to deal with the direct movement and make-up of trains. A system of this kind expedites the general work, but it is not used for the actual working of the trains except in cases of emergency. The system is described as a composite circuit, which means that the telephone is installed on a telegraph wire through a method of bridging the telegraph in such a way that the telephone does not interfere with the telegraph nor the telegraph with the telephone. Those familiar with the working of electrical instruments will not require to be told that the telephone circuit requires but a low voltage as compared with the telegraph, and that when an operator opens the key to transmit a message he does so by breaking the circuit. The telephone message is transmitted on the telegraph wire without breaking the telegraph circuit at all. It is, in fact, a phantom circuit operated entirely independent of the telegraph circuit, although over the same wire. It is one more exemplification of the wonderful uses to which the mysterious power of electricity can be put. Mr. Ashald said that at present the company had installed an instrument in the dispatching office at Montreal, one at Vaudreuil, one at Cornwall and one at Brockville. There is practically no limit to the number of instruments that can be set up as occasion requires. At present the installation is merely experimental, the idea being later on to extend the application of the principle over the whole system, so far at least as the local districts are concerned. It is not intended that it shall take the place of the long distance telephone as a means of communication between the officers over the entire system.

Cartage Rates on Freight.

As the result of a conference between the freight traffic managers of the C.P.R., the G.T.R. and the Canada Atlantic Ry., the following resolution has been passed:—"That the cartage arrangement as in effect at cartage points on lines east of Fort William, which provides at present for the collection on inward and outward cartage freight of a rate in addition to the freight charges when cartage is performed of 1½ cents per 100 pounds on freight classifying first to fourth, one cent. on fifth class, minimum charge ten cents, in addition to the railway companies' rates, be increased to 1½ cents per 100 pounds, on classes first to fifth, inclusive, minimum 15 cents, and that the additional charge of two cents per 100 pounds now charged on freight classifying sixth to tenth, inclusive, when the cartage is undertaken or performed by the railway companies' charge agents, be increased to 2½ cents per 100 pounds."

The Niagara Navigation Co. was presented with a flag by Sir Thos. Lipton on the occasion of his recent trip to Niagara-on-the-Lake. The flag consists of a shamrock on an orange field, with a green border.

The Kingston, Portsmouth and Catarauqui Ry. Co. has decided to operate its cars on Kingston on Sundays.

Railway Freight Classification.

The acting Minister of Railways, Hon. W. S. Fielding, has decided that the changes made by railways in classifying freight rates since May 1, not having been approved by the Governor-in-Council, are inoperative. This action was taken on the complaint of the Canadian Manufacturers' Association, and was argued before the acting Minister July 29, when the points raised on behalf of the manufacturers and the railway companies were given due consideration. The manufacturers assert that they are entitled to a refund of the charges paid under the classification objected to, and press reports state they will claim the excess over the charges under the old classification from the railway companies.

Consolidated Lake Superior Co.

Notices have been sent to the shareholders inviting them to take up \$12,500,000 of new 30-year 4% collateral trust bonds. These are offered to subscribers at 60, and subscriptions will be received at the rate of \$1,000 of bonds for each eighty shares of common and preferred stock. The proceeds will be used in connection with the payment of a loan of \$5,050,000 negotiated with Speyer & Co., and \$2,450,000 for the discharge of current indebtedness, chiefly on construction accounts and for working capital. The circular to the stockholders reads in part as follows: "These bonds will be secured by the stocks of all subsidiary companies of the Consolidated Lake Superior Co. and by mortgage bonds of these subsidiary companies. The property thus pledged as collateral represents a cash investment of more than \$25,000,000 in completing undertakings that are now either operating profitably or are ready for operation. Stockholders will have the right to subscribe for these bonds in the proportion of \$1,000 of bonds for each eighty shares of either common or preferred stock, payment for the bonds to be made at the rate of \$600 for each bond of \$1,000. Negotiable warrants specifying the amount of bonds to which each stockholder will be entitled to subscribe will be mailed to stockholders of record at the close of business on July 20, 1903. Warrants for less than eighty shares may be combined to make the amounts required for subscription to even amount of bonds. Subscription for bonds will be received on behalf of the company from July 21 until and including August 10, 1903, by the Commercial Trust Co., Philadelphia; Morton Trust Co., New York city; National Trust Co., Ltd., Toronto. Terms of payment for the bonds will be as follows: Twenty-five per cent. upon subscription, 25 per cent. on Sept. 1, 1903, and 50 per cent. on Sept. 15, 1903. Negotiable receipts will be issued for payments pending the delivery of the bonds. Such bonds as shall not have been subscribed for by stockholders on August 10, 1903, will be disposed of otherwise by the board of directors; but not at a price lower than that at which they are offered to the stockholders. The proceeds of the sale of the present issue of \$12,500,000 of bonds will be used as follows: For repayment of temporary loans, \$5,050,000; for the discharge of current indebtedness, chiefly on construction accounts, and for working capital, \$2,450,000; total, \$7,500,000. The estimated net earnings of the company for the year beginning July 1, 1903, figured upon a most conservative basis, will amount to more than \$900,000, while the interest on the present issue of bonds will be only \$500,000."

A further circular has been issued stating that while a considerable portion of the issue has been subscribed, it is essential that the whole issue be taken up, or the company must pass into the hands of the creditors. Phila-

delphia financial institutions which are participants in the \$5,050,000 overdue syndicate loan to the company have generally agreed to a proposition made by President Shields with regard to the new bond issue. The pro-

position is for the several institutions, firms and individuals who made the loan to take new bonds at 60 to an amount equal to the loan, with the proviso that the company shall bind itself to take back the bonds after two

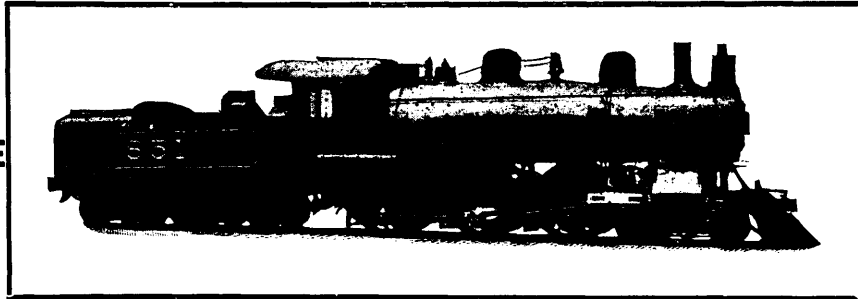
years should the holders so elect. That would be equivalent to an extension of the loan for two years on security for the bonds.

The time for receiving subscriptions was

American Locomotive Company

BUILDERS OF LOCOMOTIVES FOR ALL CLASSES OF SERVICE.

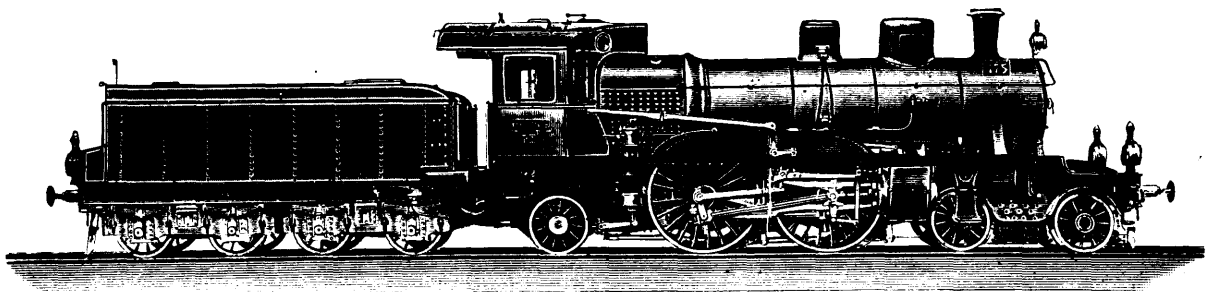
President, S. R. CALLAWAY. Secretary, LEIGH BEST. Treasurer, C. B. DENNY.
Vice-President, A. J. PITKIN. Second Vice-President, R. J. GROSS. Mech. Engr., J. E. SAGUE.



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

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

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

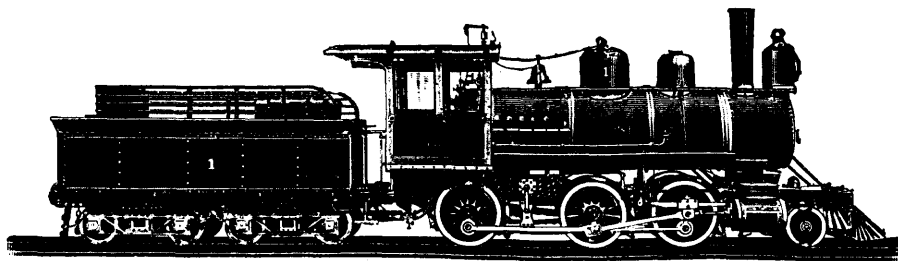


The Saxon Engine Works, late Rich. Hartmann, Limited

CHEMNITZ (Germany),

Carry on the construction of **LOCOMOTIVES** of every description.

Number
of
Workmen,
5,200.



Capital,
\$3,000,000.

extended to Aug. 25, and press reports were current during the earlier portion of the month to the effect that a Philadelphia syndicate had been organized to take up the bonds, but C. Shields, President, denied this, stating that the shareholders must come forward and protect their property. The company's employes are reported to have subscribed for a considerable sum, and to have expressed a desire to accept part of their salaries in bonds. A circular issued gives the following particulars respecting the number of men employed and the operation of the several subsidiary companies:

The Algoma Central Ry., in full operation for over 60 miles.

The Algoma Central Steamship lines are in full operation.

The two street railway lines, the International Transit Co. and the Trans-St. Mary's Ry. Co., and ferry boats are each carrying between 2,500 and 3,500 people daily.

The Algoma Central Ry. car shops are turning out eight cars per day for the Canadian Pacific Railway.

The rail mill, Bessemer converters and blast furnaces are in readiness to make iron and roll rails as soon as iron ore and coke are received.

The ground wood pulp mill is turning out 70 tons of pulp per day, while the sulphite mill is turning out 40 tons per day.

The Algoma iron works and machine shop employ 185 men per day.

The Canadian Electro Chemical Works are producing 3 tons caustic soda and 7 tons bleaching powder daily.

The Sault sawmill is turning out 105,000 ft. of lumber and 25,000 laths daily.

The veneer mill is turning out 30,000 sq. ft. of veneer per day.

The Goulais sawmill is manufacturing 70,000 shingles and 20,000 laths per day.

The brick plant is turning out 16,000 pressed brick daily.

The company has 2,000 men in the woods cutting veneer, logs, pulp, charcoal, wood and sawlogs.

Fourteen hundred tons of iron ore are being taken from the Helen mine each day.

Fifty-eight men are employed at the Grace gold mine, and sixty men at the Gertrude nickel mine.

One hundred and twenty-five men are employed daily on the fore bay of the power canal of the Michigan Lake Superior Power Co., which will be completed not later than Aug. 15.

The Tagona Water & Light Co. is in full operation, supplying water and light in the Canadian Sault, constantly employing fifty men, laying water mains, etc.

The retort plant manufactures 6,000 bu. of charcoal, 10 tons of acetate of lime, 1,500 gallons of wood alcohol per day, and employs eighty men.

Construction on the copper-nickel converter plant, intended to smelt 300 tons of nickel-copper ore per day, it being pushed by a gang of thirty men, and the plant is expected to be ready for operation by Sept. 5.

The Wire and Cable Co. is erecting additional buildings upon its property on St. James, Lusignan and Guy streets, Montreal. The new buildings will occupy an area of 30,000 square ft., so that the company's buildings will cover in all 70,000 square ft. The two largest buildings that will be erected on the property just secured will be the cable works, which will be situated at the corner of Guy and St. James streets, and which will be four storey buildings. The wire works, which will be situated at the corner of Lusignan and St. James streets, will be a two storey building and will have a capacity of 25,000 pounds a day. The new buildings will be completed by the end of the year.

RAILWAY FINANCE, MEETINGS, ETC.

Atlantic and Lake Superior Ry.—The Supreme Court at Ottawa has reserved judgment in the case of the A. and L. S. Ry. Co. against Veilleux. Respondent, plaintiff, sued for the price of a quantity of piles delivered to the company at Levis, Que., and recovered \$26,521.48 with interest in the trial court at Quebec. The appeal is from the King's Bench judgment affirming this judgment to the extent of \$26,221.48. The company claims that the contract was not fulfilled by delivery of piles suitable for the construction of the Paspébiac wharf, that the piles sent by plaintiff were refused, the contract repudiated, and a new contract made with other contractors for a supply of proper piles. The questions raised on the present appeal involve also objections to the regularity and fairness of the procedure of the trial. (June, pg. 189.)

Bangor and Aroostook Ry.—The Maine Railroad Commission has approved of the proposed increase of \$500,000 in the capital stock of the company. The increase is for the purpose of purchasing the 50 mile line from Ashland to Fort Kent, Me., now leased. Fort Kent is on the St. John river opposite Clairs, N.B., on the St. Francis branch of the Temiscouata Ry.

Berlin and Waterloo Street Ry. Co.—The head office of this company has been changed by resolution from Waterloo to Berlin, Ont.

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

	GROSS EARNINGS.	1902.	1903.	Increase or Decrease.
Railway—Vancouver division	\$12,432	\$16,742	\$4,310+	
Victoria	9,396	10,476	1,080+	
Westminster	8,362	10,862	2,500+	
Lighting—Vancouver division	9,801	13,647	3,846+	
Victoria	4,621	5,710	1,089+	
		44,612	57,437	12,825+
Less working expenses		27,676	31,922	4,246+
		16,936	25,515	8,579+
Renewal funds		3,458	4,222	764+
Net income		13,478	21,293	7,815+
Aggregate gross earnings, July 1, 1902, to June 30, 1903		\$577,165	673,882	95,717+
Aggregate net earnings, July 1, 1902, to June 30, 1903		\$185,175	\$224,347	\$39,172+

Calgary and Edmonton Ry.—Net earnings for June \$17,583.24, against \$18,426.43 for June, 1902, making for six months ended June 30 \$146,424.78, against \$150,222.93 for same period 1902.

A special meeting of the shareholders was held in Toronto, Aug. 4, sanctioning the issue of debenture stock to the amount of \$1,121,700, to be issued to the bondholders in Great Britain, in pursuance of the agreement made. In connection with this agreement H. Moody, deputy Secretary and Registrar of transfers, C.P.R., London, Eng., recently issued the following circular to the bondholders of the C. and E. Ry. in Great Britain: "As I hope to receive at the end of this month (July) the first instalment of certificates of the 4 per cent. debenture stock of the above railway, and shall in that case commence the issue of them soon after that date, I am prepared now to receive at this office certificates of the Bondholders' Committee, interim certificates, and unpaid interest scrip, which will in due course be exchanged for definite debenture stock certificates in the order in which those documents have severally been deposited with me. Forms for listing such certificates and for specifying names and addresses into which the new stock is to be registered can be obtained at this office. Claims for the July in-

terest, where such has not been already claimed, can be lodged at the same time."

The Judicial Committee of the Privy Council, at a recent sitting in London, Eng., granted the C. and E. Ry. Co. and the C. and E. Land Co. leave to appeal from a judgment of the Supreme Court of Canada, in an action by these two companies against the Crown. The circumstances attending the bringing of the action show that the C. and E. Ry. Co. was incorporated by an act passed in April, 1890, for the purpose of laying out, constructing, and operating a railway from a point on the C.P.R. at Calgary, Alta., to a point at or near Edmonton, with power to extend southerly to the International Boundary between Canada and the United States, and northerly to the Peace river. The Calgary and Edmonton Land Company, Limited, is a company incorporated under the English Joint Stock Companies' Act for the purpose, amongst others, of buying, selling, and dealing in lands in Canada, and has an interest in the lands referred to in this case. By an Act 53 Vict., c. 4, and certain Orders-in-Council the Crown agreed to make a free grant of Dominion lands to the C. and E. Ry. Co. at the rate of 6,400 acres per mile of the line from Calgary to certain points upon conditions, and, with the exception of these conditions, the grants were to be free grants. The C. and E. Ry. Co. requested the Government to issue a patent in respect to part of the lands without any reservation of minerals. The Government declined to issue the patent except with that reservation. The ground for the Government's declining to issue the patent except with that reservation was that regulations passed under section 47 of the Dominion Lands Act, 49 Vict., c. 54, R.S.C., 1886, as amended by 55-56 Vict., c. 15, section 5, reserving all minerals to the Crown, governed the patents to be issued for the railway company's land grant. The petitioners presented a petition of right asking that the patent and all future patents for land earned by the company should be free from any reservation of mines or minerals in the lands therein contained. The petition of right was heard before the Exchequer Court of Canada, which decided that the petitioners were not entitled to the relief sought by the petition of right. From that decision the petitioners appealed to the Supreme Court of Canada, which dismissed the appeal, with costs, the judges being equally divided. The petitioners contended that the conditions and reservations contained in the general Orders-in-Council made with respect to Dominion lands generally prior to the act which empowered the grant of 6,400 acres of land per mile to be made to the railway company had no application to the lands to which the petitioners were entitled, and that they were entitled to have a patent issued for the land free from any reservations of mines or minerals. The petitioners also contended that they were entitled to a declaration that in all future patents for lands earned by the railway company the patents should be free from that reservation, and that any patents already issued should be rectified by striking out that reservation.

Canada Southern Ry.—Notice is given that the C.S. Ry. Co. and the Michigan Central Rd. Co. will apply to the Minister of Railways and Canals at Ottawa, Oct. 5, for the sanction of the Governor-in-Council to the agreement, sanctioned by the shareholders of both companies, leasing the line of the C.S. Ry. Co. to the M.C. Rd. Co.

Canadian Northern Ry.—Approximate earnings for July, \$254,800, against \$132,300 for July, 1902. Mileage in operation, 1,277, an increase of 32 miles compared with July, 1902.

Canadian Pacific Ry.—At the regular meeting of the directors held Aug. 10, it was decided to declare a dividend for the half-year ended June 30, at the rate of 3%. Hith-

erto the dividend has been at the rate of 2½ per cent. each half-year, or 5% a year. The results for the fiscal year to June 30, were:—Gross earnings, \$43,957,373; working expenses, \$28,120,527; net earnings, \$15,836,845; income from other sources, \$1,286,812; total net income, \$17,123,658; less fixed charges, \$7,052,197; less amount applied against ocean steamships, \$150,000; net revenue available for dividends, \$9,921,460. After payment of all dividends declared, the surplus for the year carried forward is \$3,973,960. The following additional directors were elected: Hon. R. Mackay, Hon. G. A. Drummond, R. G. Reid, D. McNicoll, of Montreal; and C. W. Mackay, of New York. Of the new directors D. McNicoll is 2nd Vice-President and General Manager of the Co.; R. G. Reid is President of the Reid Newfoundland Co., and C. W. Mackay is son of the late J. W. Mackay, of New York, who was a director of the Company. These increase the number of directors to 14, the maximum number authorized by the company's acts, and of these a certain proportion are to retire annually, but are eligible for re-election. C. R. Hosmer was the only new director added to the

board from the date of the death of Sir John Abbott until the present election.

It is reported that a new issue of bonds will be made in connection with the final absorption of the Kingston and Pembroke Ry., and the Ottawa, Northern and Western Ry. At present these lines are operated as separate companies under C.P.R. control. The understanding is that as soon as the expenditure on improvements is completed the bonded indebtedness will be rearranged and replaced with C.P.R. bonds, the several companies losing their identity.

Grand Trunk Ry.—A special meeting of the shareholders was called to be held in London, Eng., Aug. 24, for the purpose of assenting to the G.T. Ry. Act of 1903, as required by the sixth section of the act. This act authorizes the issue of additional 4% guaranteed stock to such an amount as will, with similar stock already issued, make a total not exceeding £10,000,000. The shareholders will also be asked to authorize the issue of the additional guaranteed stock authorized.

Grand Valley Ry.—The annual meeting of the shareholders will be held in Brant-

ford, Ont., Sept. 2. A section of the company's line from Brantford to Paris, has been in operation during a portion of the year.

Great Northern Ry. of Canada.—The differences between the G.N. Ry. and the Quebec city council as to the payment of taxes on the elevator and the company's offices have been arranged. The city claimed \$13,097, but the company contended that the elevator was exempt from all but school taxes and water charges. The company has paid the latter taxes, and the question of charging general taxes on the elevator is held in abeyance.

Great Northwest Central Ry.—In connection with the claims which J. A. Codd is making in the English courts against the G.N.C. Ry. Co., whose line in Manitoba forms part of the C.P.R., the Ontario courts have, at the instance of J. P. Thomas, of Belleville, appointed a Receiver. Mr. Thomas has a claim against Mr. Codd, and is taking this method of securing himself in the event of the claim in English court being successful.

Track Tools.		Contractors' Supplies.
<p>The Atlas Car Mover utilizes the moving force to roll the Car forward, instead of wasting it in an effort to raise it from the track. Carried in stock.</p>		
		
Wheel and Drag Scrapers.	<p>A complete range of supplies always in stock for immediate shipment.</p> <p>W. H. C. MUSSEN & CO.</p> <p>MONTREAL, QUE.</p>	Wheel Barrows.

Pintsch System Car and Buoy Lighting.

This Company controls in the United States and Canada the celebrated Pintsch System of Car and Buoy Lighting. It is economical, safe, efficient, and approved by the railway managers and Lighthouse Board of the United States, and has received the highest awards for excellence at the World's Expositions at Moscow, Vienna, St. Petersburg, London, Berlin, Paris, Chicago, Atlanta and Buffalo. 120,000 cars, 5,000 Locomotives and 1,700 Buoys are equipped with this light. 170 Railroads in the United States, Canada and Mexico have adopted this system of lighting, applied on over 20,000 cars.

Car Heating.

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

Automatic Steam Couplers. Straight Port Type.

THE SAFETY CAR HEATING and LIGHTING CO.,

General Offices: 160 Broadway, New York.

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

Halifax Electric Tramway Co.—Gross receipts from railway:

	1903.	1902.	Increase or Decrease.
Jan.	\$10,867.33	\$10,764.58	\$ 102.75+
Feb.	9,341.75	8,498.39	843.36+
Mar.	10,195.12	9,761.57	433.55+
April.	10,532.55	10,025.66	506.89+
May.	10,768.11	11,126.66	358.55-
June.	11,841.82	11,528.19	313.63+
July.	15,942.37	14,834.69	1,107.68+
	\$79,471.05	\$76,539.74	\$2,931.31+

Hull Electric Ry.—Negotiations are reported to be in progress between the C.P.R. and the Ottawa Electric Ry. Co. for the sale to the latter of the Hull Electric Ry. This line was part of the lines acquired when the C.P.R. purchased the Ottawa, Northern and Western Ry., the Pontiac and Pacific Jct. Ry. and the Interprovincial Bridge.

Intercolonial Ry.—Gross earnings for the year ending June 30, amounted to \$6,324,327, and the working expenses to \$6,196,150, or a surplus of \$128,177. In 1896 the receipts amounted to \$2,994,202.93. During 1902 the gross receipts were \$5,671,385, and working expenses \$5,574,563, leaving a surplus of \$96,822.

Kingston and Pembroke Ry.—At the half-yearly meeting of directors held Aug. 12, W. D. Matthews, of Toronto, was elected President, succeeding H. Folger, resigned.

Kingston, Portsmouth and Cataract Electric Ry. Co.—Notice was recently given that the company deposited in the office of the Provincial Secretary, Toronto, Jan. 18, 1897, a mortgage dated Sept. 5, 1895, from the company to Robert Vashon Rogers, Trustee, to secure its bonds and debentures.

Lake Erie and Detroit River Ry.—The shareholders have approved of the additional mortgage deed to the National Trust Co. (Ltd.), Toronto, to secure an authorized issue of \$5,000,000 of bonds. The deed is in addition to, and in amendment and modification of, a mortgage given Aug. 1, 1902. (Aug., pg. 263.)

Montreal Street Ry.—It is reported that the company will shortly issue an additional \$1,000,000 of new stock, for the purpose of constructing additional lines and making further improvements. The company is authorized to issue \$10,000,000 of capital stock, of which \$6,000,000 has already been issued and is fully paid up. F. L. Wanklyn, General Manager, says the report is not official, as he knows nothing about it.

Earnings and expenses for July:

	1903.	1902.	Increase or Decrease.
Passenger earnings. \$	212,337.07	\$194,194.35	\$18,142.72+
Miscellaneous earnings.	3,899.75	4,461.97	562.22-
Total earnings.	216,236.82	198,656.32	17,580.50+
Operating expenses.	116,157.47	91,966.90	24,190.57+
Net earnings.	100,079.35	104,689.42	4,610.07-
Fixed charges.	24,696.19	19,929.76	4,766.43+
Surplus.	75,383.16	84,759.66	9,376.50-
Expenses % of car earnings.	54.70	48.39	

From Oct. 1, 1902, to July 31, 1903:

	1902-3.	1901-2.	Increase or Decrease.
Passenger earnings.	\$1,758,862.42	\$1,618,377.01	\$140,485.41+
Miscellaneous earnings.	29,315.71	25,459.54	3,856.17+
Total earnings.	1,788,178.13	1,643,836.55	144,341.58+
Operating expenses.	1,109,809.66	940,859.81	68,949.85+
Net earnings.	678,368.47	702,976.74	24,608.27-
Fixed charges.	189,363.30	164,228.46	25,134.84+
Surplus.	489,005.17	538,748.28	49,743.11-
Expenses % of car earnings.	63.10	58.14	
Interest on M. P. & I. Ry. Co.'s bonds owned by the Co. not included.			

New Brunswick Ry.—The annual meeting was held in St. John, N.B., Aug. 6, when the following were elected: President, R. Meighan, Montreal; Vice-President, H. H.

McLean, St. John; other directors, Lord Strathcona, J. Turnbull, J. Hardisty, Montreal; J. McMillan, S. Thorne, J. S. Kennedy, New York; D. W. James, E. R. Burpee, Bangor, Me., and J. McMillan, Land Agent, W. T. Whitehead; Secretary, A. Seely.

New Brunswick and Prince Edward Island Ry. Co.—The only persons present at the annual meeting, called for Aug. 4, were Hon. J. Wood, and F. Harris, the superintendent of the line. The negotiations for the sale of the line to B. F. Pearson, of Halifax, and his associates, in the interests of the Prince Edward Island Ferry Co., are reported to have been reopened. (Aug., pg. 263.)

Northern Securities Co.—The N. S. Co. has won a victory in the United States Circuit Court at St. Paul, in the action brought by the State of Minnesota. The company was formed by J. J. Hill and other leading owners of Great Northern and Northern Pacific stock, to buy the stock of these roads and thus merge them under a single management. A federal suit was entered, with the result that the company was declared to be in violation of the Federal anti-trust law. From this decision an appeal by the company to the Supreme Court is now pending. In the meantime a suit was entered against the company by the State of Minnesota, on the ground that its course was a violation of a State law against the combining of parallel railways. The present decision is against the contention of the State, and will be appealed. It does not affect the judgment and pending appeal under the Federal anti-trust law.—Globe.

Pere Marquette Rd.—At a meeting of the stockholders in Detroit, Mich., recently held, it was decided to ratify the action of the directors and executive committee in authorizing the purchase of \$3,000,000 5% first mortgage bonds of Lake Erie and Detroit River Ry., and in authorizing the issue of \$3,000,000 4½% Pere Marquette bonds to pay for the same. The stockholders also voted to decrease the interest rate on the bonds of Detroit and Lake Erie Ry., and to approve the sale of these bonds to Robert Winthrop & Co., N. W. Harris & Co. and a syndicate with which directors of Pere Marquette Rd. are identified.

Qu'Appelle, Long Lake and Saskatchewan Ry.—Net loss for June, \$4,028.35, against net earnings of \$2,909.33 for June, 1902, making for seven months ended June 30, net earnings of \$17,269.19, against \$51,121.38 for same period 1901-02.

A report from London, Eng., recently stated: "The bondholders of the Qu'Appelle, Long Lake and Saskatchewan Ry. and Steamboat Co. are complaining that in spite of the enormous expansion in the Northwest, the company's earnings have decreased. The explanation is that the gross earnings have greatly increased, some \$33,800 in April alone; but increased wages, the improvements to the water supply and other betterments have more than consumed the earnings. The bondholders are assured that although there is no increase in interest the property is steadily being improved."

Quebec Bridge Co.—Press reports state that the Dominion Government has decided to guarantee the principle and interest of bonds to the extent of \$4,000,000 towards the completion of the bridge.

Quebec Central Ry.—Gross earnings for June, \$69,580.87; working expenses, \$47,458.58; net earnings, \$22,122.29, against \$62,143.25 gross, and \$18,883.71 net for June, 1902. Gross earnings for six months ended June 30, \$315,221.88; net earnings, \$84,160.53, against \$291,585.33 gross, and \$80,571.46 net for same period, 1902.

St. John Ry.—At a special meeting of shareholders, held in St. John, N.B., recently,

it was decided to increase the capital to \$800,000 by the issue of \$300,000 of new stock.

St. Thomas Street Ry.—The receipts from July 1 to 30, inclusive, were reported to the city council to have been \$1,903.23.

South Shore Ry. Co.—A writ of seizure after judgment has been issued at the instance of Hon. R. Prefontaine against the S. S. Ry. Co., in respect of a claim of \$22,055.55. The claim of \$22,055.55 is for the balance of the price of sale of a portion of the S. S. Ry. Co.'s property. When the Great Eastern Ry. from Sorel to Yamaska, Que., was sold some years ago, Mr. Prefontaine bought it in and afterwards sold it to the S. S. Ry. Co. The seizure is made in the hands of the National Trust Co., of Toronto, which is said to hold the debentures of the company.

Toronto, Hamilton and Buffalo Ry.—Gross earnings for July, \$48,354.54, against \$33,704.02 for July, 1902. Gross earnings for two months ended July 31, \$95,902.47, against \$69,084.93 for same period, 1902.

An act has been passed at the current session of the Dominion Parliament, authorizing the company to issue bonds or debentures to the extent of \$1,000,000 in addition to the indebtedness already authorized, and to secure the same in such manner as may be determined by the directors.

Toronto Railway Co.—Car earnings:

	1903.	1902.	Increase or Decrease.
Jan.	\$161,038.22	\$137,135.21	\$24,803.01+
Feb.	146,539.17	127,981.01	18,558.16+
Mar.	159,913.85	141,681.22	18,232.63+
April.	162,276.36	132,546.56	29,729.80+
May.	174,519.58	145,195.54	29,324.04+
June.	177,893.21	131,865.85	45,727.36+
July.	192,629.06	162,072.02	30,556.94+
	\$1,175,409.45	\$978,477.51	\$196,931.94+

The percentage paid to the city for July was \$23,522.59, against \$17,615.60 for July, 1902.

The City Treasurer recently presented a report to the city council on the finances for 1902, in which was the following reference to the street railway: "The revenue from the street railway amounted last year to \$235,447.21, an increase of \$22,238 over the previous year. The number of passengers carried was 44,437,678, on which the railway bases its gross earnings, amounting to \$1,834,908.37, a sum rather less than that on which the city is paid its percentage, the latter being based not on the gross earnings, but on the gross receipts for railway fares only. In 1892 the number of passengers carried by the street railway was 19,122,022. The number of transfers of passengers increased from 5,592,708 in 1892, to 15,974,220 last year. The mileage run during 1902 was 10,517,433."

Victoria Terminal Ry. Co.—F. J. Wheeler, formerly general agent of the Great Northern Ry., U.S., in Victoria, will, press reports state, bring suit against the V. T. Ry. Co. for the repayment of \$27,000 with interest, being money which he and A. E. Henry, of Milwaukee, are alleged to have put into the company in its initial stages. He will also ask, it is said, for \$50,000 promoter's fees, for his services in connection with the inauguration of the business of the new company.

White Pass and Yukon Ry.—Gross earnings for July, \$216,000.

The London, Eng., Stock Exchange Committee have granted an official quotation to £255,555 6% debentures of £100 each, Nos. 1 to 2,555, and No. 2,556 of £55, of the White Pass and Yukon Railway Co., Limited.

The St. John, N.B., Ry. Co. has abandoned the use of fare registers in its street cars, and is using the fare box exclusively. Hitherto both systems have been in use.

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C.P.R. Earnings, Expenses, Etc.

Gross earnings, working expenses, net profits, increases or decreases over 1901-02, from July 1, 1902:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July	\$3,246,620.51	\$2,070,900.25	\$1,175,711.25	\$79,844.32+
Aug.	3,554,184.56	2,191,283.11	1,362,901.46	57,269.36+
Sept.	3,651,481.42	2,240,726.92	1,410,754.50	58,022.78—
Oct.	4,127,402.07	2,511,267.44	1,616,134.63	149,095.41—
Nov.	3,976,068.87	2,417,828.63	1,558,240.24	117,362.10—
Dec.	3,959,146.15	2,286,704.31	1,672,441.84	103,750.33+
Jan.	3,148,455.27	2,231,684.50	916,770.77	96,309.97+
Feb.	2,827,294.65	2,084,553.96	742,740.69	68,380.01+
Mar.	3,615,752.57	2,357,188.11	1,258,564.46	203,649.50+
Apr.	3,795,394.50	2,302,221.19	1,493,173.31	201,466.68+
May	3,902,962.05	2,519,604.78	1,383,357.27	216,464.89+
June	4,152,610.42	2,906,555.06	1,246,055.36	399,318.02+

\$43,957,373.04 \$28,120,527.26 \$15,836,845.78 \$1,750,933.37+

Approximate earnings for July, \$3,914,000, against \$3,164,000 for July, 1902.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for June, \$273,093.57; net earnings, \$113,009.05, against \$253,425.02 gross and \$106,457.63 net for June, 1902. Net earnings for twelve months ended June 30, \$1,014,044.93, against \$1,001,750.98 for same period, 1901-02. Approximate earnings for July, \$257,410, against \$267,217 for July, 1902.

MINERAL RANGE RY.—Approximate earnings for July, \$48,727, against \$46,463 for July, 1902.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for June, \$628,815.57; net earnings, \$286,617.50, against \$538,749.72 gross and \$257,204.34 net for June, 1902. Net earnings for twelve months ended June 30, \$3,517,341.65, against \$3,280,760.15 for same period 1901-2. Approximate earnings for July, \$560,472, against \$529,236 for July, 1902.

Grand Trunk Ry. Earnings, Expenses, &c

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

	1903.	1902.	Increase.	Decrease
July.....	\$3,192,608	\$2,580,422	\$603,186

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

Subject to audit, the accounts for the half-year to June 30, 1903, show the following results:

Gross receipts.....	£2,778,000
Working expenses, including special appropriation of £15,000 to Bridge Renewal Account.....	1,995,000
Net receipts.....	783,000
Net revenue charges for the half year, less credits.....	514,000
Balance.....	269,000
Deduct Detroit, Grand Haven and Milwaukee Ry. deficiency for the half-year.....	14,400
Surplus.....	£254,600

This surplus of £254,600 added to the balance of £4,000 from Dec., 1902, makes a total amount of £258,600 available for dividend, which will admit of the payment of the dividends for the half-year on the 4% Guaranteed Stock and First and Second Preference Stocks, leaving a balance of about £5,600 to be carried forward.

The accounts of the Grand Trunk Western Company for the year ended June 30, 1903, show a surplus sufficient to provide for the interest on the First Mortgage Bonds and leave a balance of about £3,700.

Aggregate from July 1 to July 30:

	1903.	1902.	Increase.	Decrease.
Grand Trunk....	£544,068	£437,654	£106,414
G. T. Western..	91,711	74,761	16,950
D. G. H. & M..	20,237	19,658	579
Total.....	£656,016	£532,073	£123,943

Montreal Street Ry. Pension Fund.

Early in June the directors of the Montreal Street Ry. Co. laid before its employes a proposal for the establishment of a benefit association similar to that already in force on the C.P.R. and the G.T.R. Representatives of the directors and the different sections of the employes met recently and discussed the proposal. As a result by-laws for the government of the association were adopted, and the necessary steps were taken with a view of applying for an act of incorporation at the next session of the Quebec Legislature.

The by-laws set out that the object of the association shall be: To provide allowances, medical attendance and medicine to members when incapable of following their usual or any other suitable employment in the company's service, by reason of illness or bodily injury. To provide allowances in case of death to the representatives of deceased members. To provide a pension for old and disabled members.

The funds of the association shall be derived from joint contributions of the company and the employes duly admitted as members of the association. The committee of management of the association shall take charge of the contributions and funds.

All permanent employes of the company and the Montreal Park and Island Ry. Co. up to Jan. 1, 1904, shall have the privilege of becoming members of the association, irrespective of age, on passing a satisfactory medical examination, and after Jan. 1, 1904, all new employes who shall be engaged as permanent employes on the Montreal Street Ry. or Montreal Park and Island Ry. systems and who are under 40 years of age, and have passed satisfactory examinations by the association's medical officer, shall be entitled to become members of this association, and no employe shall be admitted as a member of the association until after at least three months' probation in the company's service.

The affairs of the association shall be managed by a committee composed of five members, to be elected annually by the members of the association, and an equal number to be nominated by the board of directors of the company, and in addition the General Manager of the company shall be president and ex-officio member and chairman of the said committee. Five members of the committee of management to form a quorum.

The M.S. Ry. Co. shall contribute to the funds of the association a sum annually not less than 50%, or such larger amount not exceeding 100% of the annual contributions of the members, as the directors of the company may from time to time elect.

The company will also, as an additional contribution, furnish necessary office accommodation, and defray all other expenses of management of the association.

Each member shall contribute 50c. per month, to be deducted from his wages. In addition, all applicants for membership shall, as an admission fee, on acceptance, pay the sum of \$1, to be deducted from the first wages accruing after date of admission to the association; the admission fee to include all expenses of medical examination.

Every member leaving the company's service after the age of 65 years, and having been in the said service for a period of 25 years, shall become entitled to a pension of 50c. per diem during the remainder of his life, provided that if the employe temporarily at any time thereafter shall return to or engage in any other work at a rate of daily wages exceeding 50c. as aforesaid, the payment of the pension shall be suspended during the continuance of such re-employment.

On the death of a member from whatever cause, except as provided for in clause 7, the sum of \$500 shall be paid to his widow, or

failing the widow, then to his child, or children in equal shares, or if unmarried, then to his legal heirs, and \$50 towards his funeral expenses, provided that any member may, if he so desires, assign his assurance in any other manner by the registration of such assignment with the secretary-treasurer of the association, and may cancel and change such assignment at any time thereafter at will, providing all such assignments or re-assignments are properly dated and signed before at least two subscribing witnesses, one of which must be an officer of the association, and duly registered in the office of the secretary-treasurer of the association.

Canadian Ticket Agents' Association.

E. De La Hooke, Secretary-Treasurer, issued a circular to members, Aug. 19, from which the following extracts are made: The several railway companies having again consented to grant the privileges of their lines to members and their wives on their way to and from the place of meeting, members will have the choice of any of the direct lines to Montreal, and on their making known, in manner appointed, the transportation required, it will be supplied. The Richelieu and Ontario Navigation Co. also extend the courtesies of the steamers of their several lines, a charge being made for meals and berths only. It will be arranged that the same sleeping-cars will go the round trip, and that the one payment to cover the whole journey for accommodation occupied will be collected at start. It is computed that the cost will be as follows: berth, \$5; section, \$10; drawing room, \$15. Meals will be served in dining-cars at a uniform rate of 50c. To the Secretary has again been assigned the duty of allotting space in the sleepers. He will, as on the last occasion, do his best to please as many as possible, preference being given to married couples and early applicants. The Messrs. Allan, of the Allan Steamship line, through their passenger agent, Mr. Hannah, have extended an invitation to members and their wives to partake of luncheon on board the Tunisian at Montreal, at 1 o'clock on Thursday, Oct. 8. Those who had the pleasure of being present at a similar function on the same steamer two years ago will, I am quite sure, be only too happy to repeat the experience. It is hoped that many will answer in the affirmative question No. 7 in the form of application. To make satisfactory provision for the transportation and commissariat of a large party, it is very necessary that the individual attempting such duties should have, as early as possible, an approximate idea of the number for which he has to cater. I hope, therefore, that every member who contemplates the trip will return without delay the accompanying form of application, properly setting forth his requirements. Late applications cause unnecessary trouble to the Company's Officers from whom transportation has to be obtained. Members in arrears must clear same to participate in outing. Agents not members can become such by remitting \$3 to the Secretary-Treasurer. A second circular, giving more definite particulars and corrected itinerary, will be issued and sent to those interested, together with banquet tickets and passes as requested. At the Executive meeting aforesaid, it was decided that Article 3, commencing "Any ticket agent in charge of a coupon ticket office in Canada, &c.," should be understood to include lake and river steamboat ticket agents in charge of coupon ticket offices; all such, therefore, are now eligible for membership on the usual terms.

F. W. Churchill, C.P.R. town agent at Collingwood, and a past President of this Association, was unanimously appointed to represent us at the 48th Annual Convention of

the American Association of General Passenger and Ticket Agents, to be held at New Orleans on Oct. 13, 1903. It is more than probable that Mr. Churchill will be called upon to address the meeting as to the objects of our Association and the work accomplished. If, therefore, any member has any suggestions to make as to what he thinks might with advantage be embodied in such address, he is requested to communicate with Mr. Churchill. Too much praise cannot be given to the railway officials, whose territory we are about to visit, for their untiring efforts in bringing about and perfecting the satisfactory arrangements now submitted. The good seed sown, the hospitable soil and the patient tilling and pruning should yield a bountiful harvest of success, and all that is necessary to assure it is the presence of all the members who so strongly approved of Sydney as the meeting place for 1903.

Itinerary: Thursday, Oct. 8, 8.00 p.m. Leave Montreal in special palace sleeping-car train, by the Intercolonial Railway from Bonaventure Station. Friday, Oct. 9. It is hoped that Halifax will be reached not later than 10 p.m. The "Halifax" and "Queen's" hotels have submitted the following tariff: "The Halifax," \$2.50 per cap. per day, with \$1.00 additional for rooms with bathroom attachments. "The Queen's," for married couple, or two in a room, \$3.50 per day; one person in a room, \$2.00 per day. Saturday, Oct. 10. At Halifax, N.S. At 9.00 p.m., leave Halifax for Sydney, N.S. Sunday, Oct. 11. Arrive at Sydney about 9 a.m. Headquarters will be established at the Sydney Hotel. Rates, \$2.25 per day for one in a room; \$2.00 each for married couples or two in a room. Monday, Oct. 12, 10 a.m.—Annual Meeting. 2.00 p.m.—Visit to the Dominion Iron & Steel Company's Works. 9.00 p.m.—C.T.A.A. annual dinner, at Sydney Hotel. Tuesday, Oct. 13. At Sydney, 7.00 p.m.—Leave Sydney by Intercolonial Special. Wednesday Oct. 14. It is expected to reach St. John, N.B., about 11.30 a.m. The following are the hotels at St. John and terms arranged: "The Royal," \$2.25 per cap. per day; rooms with bathroom, 75c. extra. "The Dufferin," \$2.25 per cap. per day, one in room; \$2.00 married couple or two in room. "The Victoria," \$2.25 per cap. per day, one in room; \$2.00 married couple or two in room. An invitation to take a trip round the harbor, and visit other places of interest, has been accepted. Thursday, Oct. 15, 8.30 a.m.—All aboard the steamer Victoria for Fredericton, on the St. John River, the Rhine of America. 3.00 p.m.—Arrive at Fredericton, where a reception in the New Brunswick Legislative Buildings will be one of the main features of the visit. 10.00 p.m.—Leave for Montreal by special train over the C.P.R. short line. Friday, Oct. 16. Montreal is expected to be reached about noon. Disperse.

R. Reford, who has been appointed a member of the Transportation Commission, is a native of the North of Ireland, and came to Canada in 1845, and after a short stay in Montreal, removed to Toronto, returning to Montreal in 1865, and interested himself in shipping matters, becoming agent for the Donaldson and Thomson lines. Mr. Reford has done much towards establishing a Canadian cattle trade with Great Britain, and was the first to bring steamers direct with Mediterranean fruit. Mr. Reford has been a member of the Board of Trade for 35 years, and sat on its council in 1890-91. He has represented the shipping interests on the Harbour Board for some years.

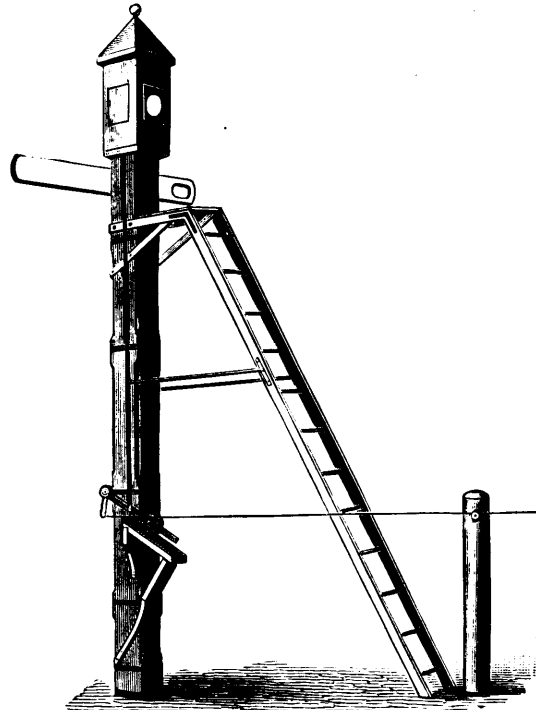
It has been officially announced that the Montreal Street Ry. Co. will increase its capital by \$1,000,000.

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Algonquin Lumber and Power Co.—C. A. Barclay, S. H. Stevenson, of Brougham, Ont.; L. T. Barclay, of Whitby, Ont.; J. R. Booth, of Ottawa; J. Carnegie, of Port Perry, Ont.; A. G. Henderson, E. F. Burton, of Toronto; M. Carr, of Powassan, Ont., were incorporated at the current session of the Dominion Parliament with this title, for the purpose of, among other things, constructing railway sidings, tramways and spur lines, not exceeding in any one case 10 miles in length, and to connect the same with any line of railway. The capital of the Company is \$1,000,000, and the head offices will be in Toronto. (June, pg. 213.)

Argenteuil County.—An endeavor is being made to arrange for a railway through Argenteuil, Two Mountains and Laval counties, to serve St. Andre, St. Placide, St. Benoit, Oka, St. Joseph, St. Eustache, Ste. Dorothée and St. Martin.

Berlin, Waterloo, Wellesley and Lake Huron Ry.—An act incorporating a company with this title was passed at the current session of the Dominion Parliament. (July, pg. 233.)

Brandon and Southwestern Ry.—An act has been passed at the current session of the Dominion Parliament authorizing the construction of a railway from Gladstone or Brandon, in extension of its line, to a point on Lake Winnipegosis, and thence northerly to a point on the Saskatchewan river. The company is authorized to enter into an agreement with the C.P.R. or any other company for the lease or sale of its line, subject to the approval of the Governor-in-Council. (Jan., pg. 19.)

Brandon, Saskatchewan and Hudson's Bay Ry.—On being reconsidered by the Railway Committee, by order of the House of Commons, the act incorporating the B.S. and H.B. Ry. was passed. It subsequently was passed by the House of Commons and the Senate, and is now law. (July, pg. 233.)

Bruce Mines and Algoma Ry.—The application for an act, at the current session of the Dominion Parliament, authorizing the extension of the line from its present terminus to a point on Hudson's Bay, has been withdrawn. (July, pg. 233.)

Canada Atlantic Ry.—Arrangements are being made for the starting of surveys early in the fall for the projected extension of the line from near Whitney, Ont., to Sault Ste. Marie, Ont. G. A. Mountain, Chief Engineer of the C.A. Ry., will have charge of the work. (Aug., pg. 267.)

Canadian Yukon Western Ry. (Electric).—R. A. Turenne, J. Barette, F. H. Fairbanks, of Dawson, Yukon Territory; L. A. Herdt, C. Archer, of Montreal, and J. H. Lamont, of Prince Albert, Sask., have been incorporated at the current session of the Dominion Parliament with this title, to construct a railway or tramway from near Dawson city, through Forty Mile Creek to the International Boundary. The offices of the company are to be at Dawson, and the capital is fixed at \$500,000, and it may issue bonds to the extent of \$40,000 a mile. The line has to be commenced within two years. (June, pg. 213.)

Cape Breton Coal, Iron and Railway Co.—Surveys are being made for a short line of railway to connect the company's collieries, now being developed, with the Sydney and Louisburg Ry. It is proposed to establish a shipping pier at Louisburg, N.S., towards which the town has voted a subsidy of \$30,000 and exemption from taxes for five years.

Chateauguay and Northern Ry.—The interlocutory injunction issued on petition of the

Chateauguay & Northern Ry. Co. to prevent the Montreal Park & Island Ry. Co. from going on with the construction of a line from the terminus of the Montreal Street Ry. in Maisonneuve, through the parish of Longue Pointe, has been maintained and made perpetual. The court ordered the M.P. & I. Ry. Co. to demolish and remove the work constructed since January within fifteen days, otherwise the C. & N. Ry. Co. will be authorized to demolish and remove the works at the cost and expense of the defendant company. Furthermore, the M.P. & I. Ry. Co. is condemned to pay the C. & N. Ry. Co. \$500 damages, with the cost of the proceedings. The court ruled that the contract entered into Feb. 6, 1899, between the companies whereby one agreed not to construct any lines within the other's territory was perfectly legal, and this prevented the M.P. & I. Ry. Co. from building its line within the limits of Longue Pointe, Pointe aux Trembles and Riviere des Prairies. A railway company, the court ruled, was not bound to construct the lines provided for in its charter; it simply obtained the authority to do so, and the failure to do so entailed only the loss of the powers of the company to do so. Moreover, the court held that, as the undertaking of the defendant company has been declared to be within the authority of the Parliament of Canada, the Railway Act of Canada applied, and that under section 89 of that act the authority of the defendant company to construct its line had long ago expired. Besides, the company had not complied with the sections of the Railway Act which provided that plans of the lines to be built and notice that the company desired to proceed to build such lines must be deposited in the office of the Clerk of the Peace for the district, and in the Department of Railways and Canals, at Ottawa, and that the permission of the Railway Committee of the Privy Council must be obtained. The judgment, moreover, stated that the plaintiff had the power and authority to construct a line on the Island of Montreal, and also circuit lines in the towns and parishes along the main line, and branches outside the limits of the old parish of Montreal, and that the time for such construction had not expired. The plaintiff was, therefore, interested in opposing the construction by the defendant of a railway in the parish of Longue Pointe. (Aug., pg. 267.)

Chatham, Wallaceburg and Lake Erie Ry.—Geo. Stephens, N. H. Stevens, W. E. McKeough, W. Ball, of Chatham, Ont.; D. A. Gordon, of Wallaceburg, Ont.; W. N. Warburton, of St. Catharines, Ont.; J. N. McKendry, F. Broderick, and H. L. Dunn, of Toronto, were incorporated at the current session of the Dominion Parliament with this title to construct a railway from Chatham to Wallaceburg, and Petrolia, Ont.; from Chatham to Rondeau, Ont., with branches to Dresden and Blenheim. The company may operate its line by electricity. It may lease or sell its lines to the G.T.R., the C.P.R., the Canada Southern Ry., or the Lake Erie and Detroit River Ry. The head office is to be at Chatham, and the capital of the company is fixed at \$1,000,000. Preferred stock may be issued, and bonds to the extent of \$30,000 a mile may be issued. Construction has to be commenced within two years and completed within five years. (June, pg. 213.)

Cuba Co.—P. A. Peterson, formerly Chief Engineer, C.P.R., recently returned from Cuba, where he had been for the purpose of inspecting the Company's railway. He says the country through which the railway runs has a very rich soil. The line now runs from Santa Clara to San Luis, a distance of about 350 miles. There are two branches, one from San Luis to the north shore, a distance of about thirty miles, and the other an extension of about nine miles, to Santeo Espiritus, near

the centre of the island, giving two lines at right angles to the main road. Both these will be completed in about three months, and will be running.

Embro Radial Ry. (Electric).—The promoters express confidence that they will be able to begin construction on the lines from Embro to Woodstock, and from Embro to St. Mary's, Ont., in the spring. (July, pg. 235.)

Frank and Grassy Mountain Ry.—Some difficulties have arisen between the owners and the contractors for the construction of this line from Frank, Alta., to the coal mines, over money matters. The contractors, Poupore & McVeigh, entered suit for \$21,000 against the company, and have secured an injunction preventing the operation of the line. The contractors have now torn up a portion of the line and established a camp in the gap to prevent the Company seizing the line. (Feb., pg. 39.)

Fraser River Bridge.—Work was commenced July 30 in placing the first steel girders of the superstructure over the Fraser river bridge at New Westminster, B.C. The work of completing the stone piers on the New Westminster end has been resumed, having been delayed by the freshet. In the meantime the south side railway approach has been completed, and false work erected between the finished stone piers to facilitate the placing in position of the steel girders, etc. An immense travelling crane has been erected, and now towers above the water to a great height. The approach crosses 22 feet above the Great Northern Railway track, the connection being made by a curved trestle with a one per cent. grade compensated. (July, pg. 235.)

Great Northern Ry. (U.S.)—Press reports state that the Pelican Rapids branch will be extended through the White Earth Reservation, Minn. This new line will parallel the projected line of the Minneapolis, St. Paul and Sault Ste. Marie Ry. from Glenwood to St. Vincent. A. H. Hogeland, St. Paul, Minn., is the engineer in charge of the work.

Guelph and Georgian Bay Ry.—The Dominion Parliament at its current session passed an act incorporating the applicants named with this title. The capital is fixed at \$600,000, and bonds to the extent of \$20,000 a mile may be issued. The company may use electricity as a motive power, and is given power to lease its lines to, or amalgamate with, the G.T.R., the C.P.R., or the Guelph Ry. Co. The line is to be commenced within two years and completed within five years. The head office is to be at Guelph, Ont. (June, pg. 214.)

Halifax and Southwestern Ry.—Some cargoes of steel rails have been landed at Bridgewater, N.S., for use on the H. and S. Ry., and the New Caledonia branch of the Nova Scotia Central Ry., under construction for the Nova Scotia Southern Ry. (Aug., pg. 267.)

Hamilton, Caledonia and Lake Erie Ry. (Electric)—The question of the route of this projected railway through Hamilton, Ont., has not been settled. Alternative routes have been considered, but nothing has been finally approved of. (July, pg. 235.)

Hamilton, Grimsby and Beamsville Electric Ry.—The extension to Vineland, Ont., is being proceeded with, and the grade was expected to be ready for tracklaying by the end of August. (July, pg. 235.)

Hamilton Radial Ry. (Electric)—An agreement has been arrived at between the H.R. Ry. Co. and the Hamilton city council by which the company will construct an additional track alongside its present railway track from the corner of Birch avenue and Barton st. northerly and easterly to a station on the concession road east of Sherman av-

enue near the works of the International Harvester Co. and the Hamilton Steel and Iron Co., now called Irondale station, and to permit the Hamilton Street Railway Company to run its cars over said line between certain hours without charge by the H.R. Ry. Co. to the H.S.R. Co., beyond the share that may be mutually agreed on between the companies, and of the fares charged by the H. S. Ry. to the passengers so carried. (Jan., pg. 23.)

Hamilton Street Ry.—See Hamilton Radial Ry. (May, pg. 147.)

Hudson's Bay to Buenos Ayres.—A press despatch from Guthrie, Ok., dated Aug. 24, states that articles of incorporation of the Pan-American Rd. Co. have been filed there. The capital stock is fixed at \$250,000,000, and the Company proposes to construct a trunk line from Port Nelson, on Hudson's Bay, southerly, crossing the line of the C.P.R. near Winnipeg, Man., thence through North and South Dakota, Nebraska, Kansas, Oklahoma and Indian Territory to Galveston, through Mexico to the Isthmus of Panama, through Colombia to Ecuador, and finally through Peru to Buenos Ayres, the capital of the Argentine Republic. The company also proposes to acquire or construct a number of branch lines in Canada, the United States and other countries through which the line will run.

A charter was issued to the American Town Site Co., an adjunct of the railway corporation, with a capital stock fixed at \$10,000,000.

Huron and Ontario Ry. (Electric)—McK. Cameron, secretary, recently stated that the company expected to have 30 miles of track laid this fall, a contract for the construction of a section of the line being about to be signed. (July, pg. 235.)

Intercolonial Ry.—Tenders are under consideration for the construction of a new engine house at Riviere du Loup, Que.

The Dominion Parliament has voted the following sums for betterments, etc., during the current session, chargeable to capital:

To increase accommodation at Sydney.....	\$19,400 00
Original construction.....	400 00
To strengthen bridges.....	33,020 00
To increase accommodation at Levis.....	14,400 00
Increased accommodation at Stellarton.....	6,400 00
New superstructure for Restigouche Bridge.....	24,600 00
New superstructure for Northwest Miramichi Bridge.....	18,000 00
Improvements at Point Tupper.....	5,000 00
Yard for freight business at Riviere du Loup.....	2,000 00
To extend freight car repair shop at Moncton.....	5,500 00
Engine house, machine shop, car shop, stores, office at Riviere du Loup.....	10,000 00
Engine house, etc., at Chaudiere Junction.....	10,000 00
Increased accommodation at St. John.....	21,200 00
To increase accommodation at Halifax.....	20,900 00
To increase accommodation at Pictou.....	7,300 00
Improvements at North Sydney.....	2,600 00
Building a spur line of railway from I.C.R. Station at Riviere Ouelle to the wharf on the St. Lawrence.....	5,400 00
To increase accommodation at Moncton.....	17,800 00
Dwelling for agent at Bel River.....	360 00
Increased accommodation at Amqui.....	1,000 00
Increased accommodation at Ste. Flavie.....	19,000 00
Towards improving ferry service at Strait of Canso.....	2,200 00
Improvements at Nicolet.....	400 00
Increased accommodation at Truro.....	15,000 00
Improvements at Little Metis Station and diverting public road.....	800 00
To purchase power saw for sawing rails, etc.....	230 00
To increase water supply.....	800 00
To increase accommodation at Levis.....	34,000 00
Towards improving ferry service at Strait of Canso.....	20,000 00
Improvement at Nicolet Station.....	600 00
Towards building branch from Riviere Ouelle Station.....	23,000 00
Eastern Extension Railway of N.B.—balance of interest on Award of Arbitrators, viz., interest on \$148,968.75 from July 1, 1901, to date of payment, August 22, 1901, at 5 per cent. and interest on \$5,000 retained from August 23, 1901, to March 28, 1902, at 5 per cent.....	\$ 1,230 87
One-half arbitrator's and stenographer's fees, Eastern Extension Railway, Nova Scotia—revote of lapsed amount.....	3,952 62
	5,183 49

(Aug. pg. 268.)

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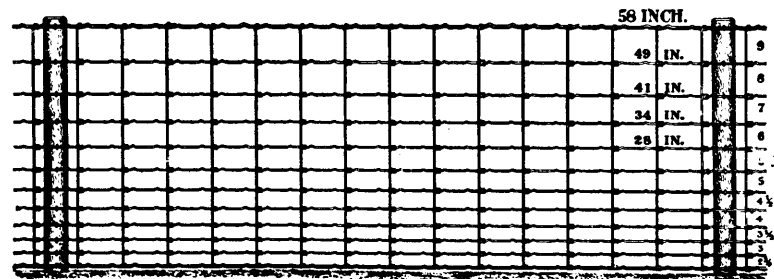
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Kettle River Valley Ry.—An act was passed at the current session of the Dominion Parliament authorizing the company to lease its lines to or amalgamate with the C.P.R., or any other company whose lines intersect. (Feb., pg. 41.)

Lake Erie and Detroit River Ry.—A second coal hoist is under construction at Rondeau, Ont. It will be larger than the one erected in 1892, having a total length of 267 ft., against 192, and its capacity will be double, being 5 tons a lift. (Aug., pg. 268.)

Levis County Ry. Co. (Electric)—A gang of men was recently put to work on this line between Bienville and the I.C.R. iron bridge at St. Joseph de Levis, Que., and it was expected that the cars will be running to that point by the end of August. (April, pg. 119.)

Mantoulin and North Shore Ry.—An act has been passed at the current session of the Dominion Parliament extending the time for the commencement and completion of the authorized railway, and giving power to construct the following lines: from near Elsie mine, northeasterly 50 miles to Lake Timagami, Ont., from a point in Drury tp. to Sault Ste. Marie, and thence to a point on Lake Superior between Michipicoten and Batchawana bay; from a point in Bowell tp. to a point in MacLennan tp. The line formerly authorized from near Sudbury to Batchawana bay has been abandoned. (Aug., pg. 269.)

Medicine Hat and Northern Alberta Ry.—An act has been passed at the current session of the Dominion Parliament authorizing an extension of time for the commencement and completion of the lines projected, and giving power for the construction of branch lines from near Medicine Hat, Alta., to the International Boundary line near Milk river; from a point near tp. 31, range 17, west of the 4th meridian, northwesterly to near Ponoka, on the Calgary and Edmonton Ry., and thence to Rocky Rapids on the North Saskatchewan river; from a point near Battle river to Hudson's Hope on the Peace river; from a point on Athabasca river to Lesser Slave lake; from Strathcona to Athabasca Landing, and from Battle river to Water Hen lake. (Feb., pg. 43.)

Metropolitan Ry. (Electric)—Surveys are being made for the extension of the line from Newmarket, Ont., northerly to Lake Simcoe.

Michigan Central Ry.—The application of the St. Thomas, Ont., city council for permission to construct a subway for its street railway under the M.C. Ry. tracks at Ross st., and for level crossings on Elgin and William streets, is under consideration by the Railway Committee of the Privy Council. (July, pg. 237.)

Middletown and Victoria Beach Ry.—Press reports continue to state that this line, under construction from Middletown to Victoria Beach, N.S., has been sold, one account stating that the purchasers are Mackenzie, Mann & Co., and another that it has been acquired by the Midland Ry. Co. All these reports lack confirmation. (Aug., pg. 269.)

Midland Ry.—A large shipping wharf for lumber, to be shipped coastwise, has been completed by the company at Dimock station, N.S.

Midway and Vernon Ry.—An act has been passed at the current session of the Dominion Parliament declaring that the lines authorized to be constructed under the B.C. act of incorporation, are for the general advantage of Canada. (Feb., pg. 43.)

Moncton and Buctouche Ry.—A new bridge has been built at Little River, N.B. J. Lockhart, of Salisbury, N.B., was the contractor.

Montreal-Longueuil Bridge.—The act incorporating U. H. Dandurand and others with this title, has been passed at the current

session of the Dominion Parliament. The company has been given power, in addition to constructing the bridge, to construct railways to connect it with existing and future railways on either or both sides of the St. Lawrence river, and to lease or sell the bridge, etc., to any other company. The tolls to be charged for the use of the bridge are to be subject to the approval of the Governor-in-Council. The capital of the company is fixed at \$3,000,000, and bonds to the amount of \$3,000,000 may be issued. The offices of the company are to be in Montreal, and construction is to be commenced within two years and completed within five years. (June, pg. 217.)

Niagara, Queenston and St. Catharines Ry. (Electric)—The Dominion Parliament has passed the act incorporating a company with this title to construct an electric railway from St. Catharines to Queenston, returning to the starting point via Niagara-on-the-Lake, Ont. (July, pg. 239.)

Nicola, Kamloops and Similkameen Ry.—An act has been passed at the current session of the Dominion Parliament, declaring the lines authorized to be constructed under the British Columbia act of incorporation to be for the general advantage of Canada. (Feb., pg. 44.)

Nipissing and Ottawa Ry.—The application for an act incorporating a company to construct a railway through the Nipissing district to Ottawa, was withdrawn at the current session of the Dominion Parliament. (April, pg. 121.)

New Brunswick Coal and Ry. Co.—Ballasting is nearly completed on the 15 miles of line from Chipman to the Newcastle, N.B., coal fields, and the line is expected to be open for traffic early in Sept. Five miles of sidings have been laid. (June, pg. 217.)

Prince Edward Island Ry.—Among the sums voted at the current session of the Dominion Parliament for betterments, etc., on the P.E.I. Ry. were the following:

To widen wharf and provide coal shed at Summerside.....	\$ 400 00
Murray Harbor Branch and Hillsboro' Bridge.....	450,000 00
To increase accommodation at Kensington.....	200 00
To increase accommodation at Hunter River.....	200 00
To straighten lines at Curtes' Creek.....	3,000 00
To provide baggage room at Souris.....	80 00
To improve the water service.....	4,800 00
To provide additional accommodation at Kin-kour.....	160 00
To provide new station at Northam and Richmond.....	200 00
Addition to freight house, Mount Stewart.....	300 00
To provide and lay steel rails.....	13,400 00

Quebec and Lake St. John Ry.—J. G. Scott, General Manager, has issued a statement regarding the company's line, in which he says: The entire roadbed of the railway between Quebec, Roberval and Chicoutimi has been ballasted and widened, heavy grades have been cut down, curves taken out, wooden bridges replaced with steel structures capable of carrying the heaviest rolling stock now used, and a large portion of the track relaid with heavy steel rails weighing seventy pounds to the yard. On the Chicoutimi branch of the road all the wooden trestles, some of which were of very great height, have been filled in with earth, the water-courses being provided for by the erection of masonry arch culverts sufficiently high for a man to walk through. At the Jacques Cartier river the line has been entirely changed, some four miles of new straight road being built, doing away with a number of curves, and saving a mile and a quarter in distance. This has necessitated a new steel bridge over the Jacques Cartier, which has been built of the heaviest specification known. (Feb., pg. 45.)

Quebec, New Brunswick and Nova Scotia Ry.—The act incorporating a company with this title has been passed by the Senate and is now law. (Aug., pg. 269.)

Red Deer Valley Ry. and Coal Co.—An act has been passed at the current session of the Dominion Parliament reviving the charter of incorporation of this Company. (July, pg. 240.)

Sarnia, Petrolia and St. Thomas Ry.—Having obtained the charter for the construction of a line from Sarnia to St. Thomas, Ont., some of the local provisional directors have retired, and their places are taken by F. H. Prince, President, Pere Marquette Rd., and M. J. Carpenter, 2nd Vice-President and General Manager, Pere Marquette Rd. (July, pg. 241.)

Stratford Radial Ry. (Electric)—Negotiations are in progress with the Stratford, Ont., city council for a franchise. It is proposed to construct a line in the city, and a line from Stratford to Mitchell, 12 miles. (July, pg. 241.)

Temiskaming and Northern Ontario Ry.—The difficulty with the tracklaying gang was only temporary and work is going on. A ballasting train has been put on.

The line will be constructed to New Liskeard next year, and it is expected that it will be carried to a junction with the Dominion Government line from Moncton to Winnipeg, which it is expected will run about 70 miles north of New Liskeard. It is understood that a preliminary survey for this extension will be undertaken during the winter. (Aug., pg. 269.)

Tillsonburg, Lake Erie and Pacific Ry.—An officer of the railway is quoted as recently saying that "The road will certainly be extended through Stratford, provided that reasonable inducements are offered. The work of making the necessary surveys is being delayed only by the work necessary in establishing coal docks, etc., at Port Burwell, Ont. (July, pg. 241.)

Toronto, Hamilton and Buffalo Ry.—Press reports state that the T.H. and B. Ry. proposes to extend its line from Brantford northerly to Woodstock or Drumbo, Ont. (July, pg. 241.)

Trans-Canada Ry.—G. Tanguay, M.P.P., chairman of the board of directors Trans-Canada Ry. Co., recently stated that the Government would likely take over the charter of the line and the surveys, recouping the company for the outlay made. The Premier in the House of Commons stated in reply to a question that the Government had not made any arrangement for the transfer of the charter to the Grand Trunk Pacific Ry. (April, pg. 123.)

Vancouver, Westminster, Northern and Yukon Ry.—The Railway Committee of the Privy Council has refused the application of the C.P.R. to restrain the V., W., N. and Y. Ry. from constructing a crossing at Sapperton, B.C., pending an appeal to the Governor-General. The Committee gave the Company the right to construct the crossing, and the C.P.R. desired to have the question reopened. The line is graded right up to the C.P.R. right-of-way on the east, and the Company will immediately proceed with the grading across and down to connect with the work that has been done at the approach of the bridge. A contract for the erection of a bridge over False Creek has been let to Ironsides, Rennie & Campbell. (Aug., pg. 269.)

Western Alberta Ry. Co.—An act has been passed at the current session of the Dominion Parliament granting an extension of time for the commencement and completion of the company's projected lines of railway. (Feb., pg. 49.)

Winnipeg Electric Street Ry.—The St. Boniface, Man., city council asked the W.E.S. Ry. Co. to consider the question of constructing a line in that city. The plan submitted is

for the line to cross the Norwood bridge to Mason Avenue, along that street to Tache, and through Provencher Avenue to the College. As a result an agreement has been entered into between the company and the city council for the construction of $1\frac{3}{4}$ miles of track. The work will be gone on with at once and the line is expected to be in operation early in Oct. (July, pg. 241.)

Canadian Northern Ry. Construction.

General.—The Globe publishes the following interview with W. Mackenzie, President of the Canadian Northern Ry., as a telegram from its Ottawa correspondent, under date Aug. 27:—"It is hardly correct to say that we have abandoned our proposed transcontinental line, but it does look as though we would have to postpone the construction of a through line from the Atlantic to the Pacific." This was the response made to your correspondent to-night by Mr. Mackenzie when shown the telegram crediting his partner with having stated that the Mackenzie & Mann transcontinental line would be abandoned. "Substantially," Mr. Mackenzie went on to say, "the statement is correct, but I doubt very much if Mr. Mann used the word 'abandonment.' We have not given up the idea of striving and working as best we may towards the desired goal. The transcontinental line does not depend so much upon us, however, as upon the Government and the country. It is just a question whether the country would aid a third transcontinental line."

"What about your south shore line from Halifax to Yarmouth?"

"We expect to have it completed at an early date. We have a very large amount of work already performed on it."

"What progress is being made with your western extension?"

"We have the biggest force of men at work on railways in the west that has been seen there since the original construction of the C.P.R. I refer particularly to the extension of our main line from Grand View to Edmonton, and the branch to Prince Albert. We expect to have 300 miles of the line to Edmonton railed by the end of the season. We shall most likely carry out to Lake Superior more grain than last year, when we transported 13,000,000 bushels. At Port Arthur our elevator accommodation is being doubled, which will enable us to care for 7,000,000 bushels."

Eastern Construction.—Referring, on his recent return from England, to the Grand Trunk Pacific Ry. project and its probable effect on C.N. Ry. plans, President Mackenzie said it was not possible to say anything definite. The C.N. Ry. had done no construction work so far, east of Port Arthur, Ont., although surveying parties were working. The proposal of the Government to give the G.T. Pacific an exclusive lease of the line from Moncton to Winnipeg, with the proviso that other companies should have the right to run trains over it, would not suit the C.N. Ry. His company had been going ahead with its work and would continue to do so. The C.P.R. are now able to handle ten times the business they have now. "We are uncertain what the route of the two lines will be, but we cannot run over the G.T.R., under their lease from the Government."

Branch from Warroad.—Press reports state that Foley Bros., of St. Paul, Minn., have secured a contract to build 35 miles of line from Warroad into the Badger district of Minnesota. (Aug., pg. 270.)

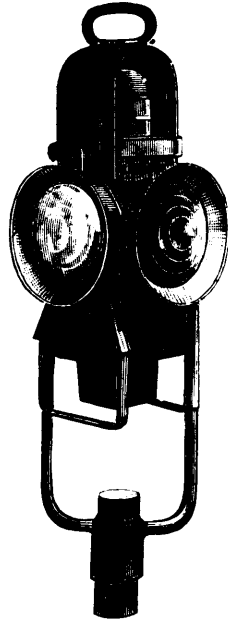
Winnipeg Hotel.—D. D. Mann recently stated that a beginning would be made with the construction of the Company's hotel on the Fort Garry park property in the spring. The agreement with the city council respect-

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ing the closing of a street, and approving of the plans of the hotel, new station, etc., has not been finally approved. (July, pg. 243.)

Rosburn Branch.—About 20 miles of grading on this branch was reported completed early in Aug. The grade has been finished to the Saskatchewan river, and some work has been done forward from the eastern bank of the river. (Aug., pg. 271.)

Grand View-Edmonton Extension.—Rapid progress is reported on the grade from Grand View westerly by the different contractors.

The British colonists at Lloydminster are reported to have 125 teams at work grading easterly towards the Saskatchewan river, and expect to have 25 miles ready for track-laying early in Nov. The colonists will start grading westerly from Lloydminster in the spring. (Aug., pg. 271.)

Prince Albert Extension.—R. Stanley, of Stanley & Girond, contractors, recently stated in Prince Albert that the grading to Melfort was well forward, and that track would be laid to Melfort this season. His firm has commenced grading from Melfort easterly, to meet the gangs working west. The contract for the station and yard accommodation at Melfort has been let to Stanley & Girond. (Aug., pg. 271.)

Hudson's Bay Line.—No official information can be gathered with respect to the plans for the construction of a line to Hudson's Bay. Local press reports, however, state that the line will start from a point about 150 miles east of Prince Albert, Sask., and that Fort Churchill will be the terminal point. This will give a line about 500 miles in length. A survey party is in the field, and a report states that construction will be commenced in the spring. (Aug., pg. 271.)

Edmonton.—With one or two slight exceptions the grading of the right-of-way to the new station and yards at the Hudson's Bay reserve has been completed ready for track-laying. There are some slight disputes with regard to the property at the uncompleted portions of the right-of-way which are in course of adjustment. (Aug., pg. 271.)

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

Halifax.—Local press reports state that the C.P.R. is investigating the water front at Halifax, N.S., with a view of having wharf accommodation there for some of its trans-Atlantic steamers.

London Belt Line.—Land is being acquired for the construction of the projected line to connect all the railway lines in London, Ont., with a view to the inter-switching of cars.

North Bay Roundhouse and Shops.—The mason work at the new roundhouse has been completed, and the walls of the new shops are well advanced. The walls are of Arnprior limestone, with base and window-sills of dark sandstone. The roundhouse, for the present, will form but a half circle, permitting the completion of the other half when needed. The turn-table will be of sufficient dimensions to accommodate the largest engine or longest coach. The new car scales are being placed next to the lake. They also will be erected upon a stone foundation ten feet deep, the work of which is in keeping with that of the other structures. Munro & Co. are the general contractors, and they have sublet the contract of roofing the shops to J. B. Brennen, of Montreal. (Nov., 1902, pg. 379.)

Scoville Lake Bridge.—The bridge at Scoville lake, which gave way early in May, has been repaired, and it is proposed to construct a new bridge on another site. Surveys have

shown that 200 feet south of the present bridge the lake has a secure bottom, and it is understood that this position will be adopted. A steel bridge is proposed.

Western Lines.—W. Whyte, Assistant to the President, recently stated in Montreal, that from a C.P.R. standpoint, the Co. was not greatly interested in the proposed extension of the Minneapolis, St. Paul and Sault Ste. Marie Ry., notwithstanding the fact that the C.P.R. had the controlling interest in that line. The C.P.R. was not looking for a through line from Fort William, Ont., to St. Paul, Minn. What the C.P.R. was aiming at most especially was to make the line throughout the West an all-Canadian one.

Main Line Survey.—A party of surveyors are making a resurvey of the main line from Ignace, Ont., to Medicine Hat, Assa. New mile-posts are being put up and the bridges are being renumbered. The work is rendered necessary by the many alterations that have been made in the line since it was constructed. The party has reached Winnipeg, and will be out until fall.

Winnipeg Subway, etc.—The agreement between the C.P.R. and the city council respecting the construction of the subway, the new station and the hotel, it is understood, has been approved of by both parties, and it was expected to be formally signed by the city council by the end of August. The chief difficulty to the settlement of the matter was the claims of some property owners, which have now been satisfactorily disposed of. (Aug., pg. 271.)

Winnipeg Yards.—The contract for the construction of the new shops has been let to the Manitoba Construction Co., and work has been commenced on the foundations. (Aug., pg. 271.)

Winnipeg Shops.—The freight car repair shops at Winnipeg were burned Aug. 15. Twenty-five cars and a snow plough were also consumed. The damage is \$20,000, fully covered by insurance.

Pipestone Branch.—The grading on the extension of this branch from Arcola into Regina, Assa., is being pushed ahead rapidly. The work at Regina, where a junction will be effected with the transcontinental line, has been completed, and the additional buildings necessary are in course of erection. A Winnipeg paper reports W. F. Tye, Assistant Chief Engineer, as having stated that track would be laid on the extension into Regina, Assa., this year. It is intended to construct a line southerly from a point in tp. 8 north, 8 west, southerly to Estevan, so as to give connection with the Souris coal fields. This branch, it is expected, will be constructed next year. (June, pg. 205.)

Pheasant Hills Branch.—Grading on this branch from Kirkella, on which 40 miles of track was laid in 1902, was recently reported to have reached Jumping Deer, 150 miles from Kirkella. (June, pg. 205.)

Manitoba and Northwestern Ry.—Speaking of the work on the extension of the line from Yorkton, Assa., W. F. Tye, Assistant Chief Engineer, recently stated in Winnipeg that track had been laid on 45 miles, and that the grading of an additional 30 miles had been completed. The 45 miles was graded in 1902 and 30 miles of track laid thereon. (July, pg. 245.)

Carberry to Neepawa.—A survey is being made for a line to connect Carberry and Neepawa, Man., via Wellwood, about 25 miles. The survey party has also been locating a site for a new station at Neepawa. The grades between Franklin and Neepawa, on the Manitoba and Northwestern line, will be reduced in connection with the construction of the new line.

Calgary and Edmonton Ry.—J. W. Leonard, Assistant General Manager, Winnipeg, recently inspected the line between Macleod and Edmonton, Alta., with a view of reporting on the improvements necessary to bring the road into line with other C.P.R. branches. Surveys are being made for the extension of the line into Edmonton from Strathcona by a new high level bridge. (June, pg. 205.)

North Bend Roundhouse.—Tenders have been received for the construction of an eight-stall roundhouse at North Bend, B.C.

Kootenay and Arrowhead Ry.—A side track and a station are to be erected at Poplar Creek, B.C., at which point a large trade has grown up. (Nov., 1902, pg. 379.)

Vancouver Station.—During a fire in the Harrison River Mills Co.'s lumber yard the station and sheds of the C.P.R. caught fire and were burned. Six loaded and two empty freight cars were burned.

Tourist Hotel at Victoria.—Some small matters in connection with the street plan surrounding the proposed hotel site have to be adjusted before the agreement is finally signed. It is stated that the hotel will contain 300 rooms, and will cost \$1,000,000. (July, pg. 245.)

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Work is being pushed on the branch from Glenwood, Minn., to the White Earth Indian Reservation, 125 miles, and it is reported that the line will be completed late this fall. It was expected to begin tracklaying at Glenwood early in August. (June, pg. 205.)

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

Island Pond Improvements.—Considerable improvements are being made at Island Pond, Vt. A new roundhouse and machine shop are to be erected, also new station, viaduct and footbridge, and the old freight sheds are to be removed. The new roundhouse will contain twenty stalls, each seventy feet in length, with the latest model ashpit equipment, and a new seventy-foot turn-table is to be put in just outside the building, the latter being half circle in shape.

Beaconsfield Station.—A new station is under construction at Beaconsfield, Que., on the western side of the track.

St. Lambert-St. John's Double Track.—The grading for the second track between St. Lambert and St. John's, Que., 21 miles, is already finished between St. Lambert and Brosseau, a distance of seven miles, and track has been laid about half this distance. The contractors expect to complete the grading of the second seven-mile section from L'Acadie to St. John's early in Sept. The new road is being laid with 80-lb. rails, and the roadbed will be a superior one. The road from the south shore to St. John's is the oldest piece of railway line in Canada, the terminus being at Laprairie before the construction of the Victoria bridge, the connection being made by the steamer Iron Duke, with a point near Customs House Square.

Toronto-Montreal Double Track.—Progress has been delayed on the uncompleted portion of the double tracking at Whitby, Ont., owing to the inability of the bridge contractors to obtain delivery of material.

Improvements at Lindsay.—Additional land has been purchased at Lindsay, Ont., adjoining the roundhouse, and a double track, 300 yards long, laid on it. The new property will be utilized as a coal storage yard.

Lindsay-Midland Double Track.—Surveys have been made with a view of double-tracking the line between Lindsay and Midland, Ont. The survey for the new work follows a route which will do away with the

curves and heavy grades of the existing line and give an easy road for the haul. This projected line is being objected to on account of the way in which it will cut up farms.

Toronto Yards.—A commencement has been made at the old Parliament buildings on Front St., Toronto, preparing for the laying out of the new yards. The agreement between the city council and the Company has been completed, and the fact that one prop-

erty owner would not agree to terms, kept the Railway Committee of the Privy Council from granting the order for the crossing of John and Front streets, to connect the new yards with the main line. The city council has approved of the plans for the offices and freight sheds. (Aug., pg. 271.)

Brantford Deviation.—A train service over the Brantford deviation, via Lynden, Ont., was inaugurated Aug. 10. The line, how-

ever, is not being used for through traffic to Chicago, as the bridges are only temporary structures. These will be replaced by permanent steel structures as soon as the material can be delivered. (July, pg. 243.)

London Switching Agreement.—Land is being acquired by the different railway companies with a view to the construction of the connecting lines to carry out the inter-switching agreement. (Aug., pg. 271.)

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Grand Trunk Pacific Ry.

The division on the debate in the House of Commons upon the introduction of the bill for "the construction of a National Transcontinental railway," was expected to be taken on Sept. 1. In addition to the bill there is before the House a resolution approving of the agreement with the incorporators of the Grand Trunk Pacific Ry. Co. respecting the construction of the line, which agreement forms the schedule attached to the act. The bill ratifies the agreement, and makes provision for the proper carrying out of its terms by the parties thereto. The G.T.R. is given power to "acquire, hold, guarantee, pledge or dispose of stocks, bonds, debentures or other securities of the G.T. Pacific Ry. Co., subject to the consent of the shareholders." The eastern division is to be constructed by the Government, and leased to the G.T. Pacific Ry. Co., and until its being so leased it shall be under the charge and control of three commissioners, who shall hold office at will, to be styled "The Commissioners of the Transcontinental Ry." The Governor-in-Council will appoint a Secretary and Chief Engineer, the commissioners being authorized to appoint such other officers as may be necessary. The commissioners are empowered to expropriate lands, and the Governor-in-Council is authorized to set apart from the public lands so much as is shown by the Chief Engineer to be necessary for the roadbed; and the commissioners are generally given all the powers conferred on railway companies under the Railway Act. The commissioners shall advertise for tenders for the construction of the railway, the lowest tender to be accepted, provided the commissioners are satisfied that he or the firm is "possessed of sufficient skill, experience and resources to carry on the work or such portion as he has tendered for." The Governor-in-Council may direct the suspension of work on the eastern division at any time until the next session of Parliament. The Minister of Finance is authorized to make advances to the commissioners on account of construction, etc., as may be from time to time required, and loans may be raised to meet the cost of the line. The commissioners shall issue 50 year 3% debentures for the money required, such debentures to be deposited with the Minister of Finance, and to be a first charge on the line. The regular books are to be kept, and monthly accounts are to be furnished to the Minister of Railways by the commissioners, and an annual report is to be furnished to the Governor-in-Council. The accounts of the commissioners are declared to be subject to audit by the Auditor-General in the same manner as is provided by the Consolidated Revenue and Audit Act, with respect to the accounts mentioned in sec. 50 of that act.

The discussion on the bill, agreement and resolution has been a very full one, the chief interest, after the speech of the Premier in introducing the measure, being in those of the ex-Minister of Railways, Hon. A. G. Blair, and R. L. Borden, the leader of the Opposition. Mr. Blair, in the course of his speech, criticized the Government for acting in undue haste in regard to the matter, and expressed a fear that without proper investigation and due deliberation the country was being committed to a great enterprise that might prove a disastrous blunder, owing to lack of information as to the character of the country through which this road is to be built. The building of the road to Moncton, he declared to be a waste of public money, which would have the effect of injuring the Intercolonial Railway. There was no demand for the building of the road from any of the Provinces, and the only pressure that had been brought to bear for its construction had been exerted by the promoters of the railway. Mr.

Blair calculated that the construction of the road would involve the country in responsibilities aggregating \$129,000,000. "My own view," said Mr. Blair, "would be that if we wanted to pass railway legislation, if we wanted to do something of advantage for the transportation of the country, if we wanted to secure to our Canadian seaports the transportation of western products, we would have extended the Intercolonial Ry. to Georgian Bay by acquiring the Canada Atlantic Ry. Of course that involves a continuation of the principle of Government ownership, a principle to which I know a great many people are hostile. It would involve the Government doing something to which many people are not well disposed. When the Intercolonial Ry. was extended to Montreal, I felt that that would be the next move that we would take. I felt that it would be a proper move to take. I have been four or five years struggling valiantly in order to achieve immediate success in that direction. The move will be taken though. Other views which are more potent and other men will prevail upon Governments, and they will adopt that policy because it has virtue in it, it has profit in it, and it has hope in it, and it must be the means of realizing the national idea of using our own ports, winter and summer, for the carriage of the products of our own country. My proposition is this: We ought to have come before Parliament as a Government, and we ought to have said to Parliament and to the country, we are favorably impressed with the importance of the early construction of another transcontinental railway, but as business men, as prudent and cautious men, we think that the proper course for us to take is to get an appropriation from Parliament in order that this whole country, which it is proposed the railway shall traverse, in so far as it has not been officially explored, and in so far as we have not been made familiar with its conditions, shall be ascertained and made known to the people of Canada, in reports laid before Parliament at a later day, and then if these reports are favorable, it is our fixed purpose to ask Parliament to justify us and authorize us to go along with railway construction in that territory. My idea would be that we should go as far as we could reasonably and as the necessities would justify, and when we got through that we should then call a halt until the necessity arose for further extension through the western country. We would have our officials on the alert, and they would see when the growing needs and prospects of the country would justify a further extension, and when that time came, then if nobody else entertained it, and even if they did, my idea would be that we should continue our road along; go right along through, go along just as we require to do in the true interest of the country. Such a railway as I would favor could be used for colonization purposes, of course, and for whatever other western traffic would be attracted over that road—whatever other western traffic would find its way there in preference to seeking an outlet from the head of the lakes. If all that our friends confidently expect and believe with regard to the future prospect of the advantages which would come to the West from that railway is fully realized, so much the better, and we will all be able to appreciate such good results. But we do not know that there is any possibility of such beneficial results; we have no information that would lead us to form an opinion on the matter, and, therefore, I say that the Government may fairly consider whether they ought not to pause in the project which they are asking us to approve.

The points which Mr. Blair said ought to be inquired into are: Is there a feasible, practicable route north of the height of land between Quebec and the prairies? What are

the prospects of settlement, the resources of the territories? Is there good reason to believe there will be local traffic to sustain the road? These and cognate questions should be first asked and inquired into before Parliament is asked to commit itself to a work of this magnitude.

Speaking on Aug. 18, Mr. Borden said he would support the construction of the line as a portion of the Intercolonial Railway; he did not believe in constructing a better line and handing it over to the Grand Trunk Pacific or to any other railway company. They should build a railway that would give the provinces of New Brunswick and Nova Scotia a better fighting chance for getting the trade of the West, but when it was built it should be kept for the people's railway, and operated as a part of that system. Mr. Borden held that the two railways now built between Port Arthur and Winnipeg were capable of handling all the traffic likely to arise for some time to come, while the new road would militate against the Intercolonial. Having expended \$65,000,000 on the Intercolonial Ry. and \$15,000,000 more to secure for it a part of the trade of the West, the Government were about to spend another \$100,000,000 to take all of that trade away from the I.C.R. To extend the Intercolonial Ry. to the shores of the Georgian bay, either by the acquisition of the Canada Atlantic Railway or some other method, was the logical outcome of the extension of the I.C.R. to Montreal. His next proposal was that, in order to connect the two great groups of railway systems in Canada, the eastern and the western, which are joined by the great lakes in summer, but separated by them in winter, the C.P.R. line from Fort William to North Bay should be acquired by the Government, and improved in respect to gradients and curves. This line was capable of carrying five times the traffic it now secured, and he thought it would be a wise and proper thing for the Government to make it a national highway, giving running rights over it to the G.T.P., Canadian Northern, Intercolonial and C.P.R. He said this because it seemed to him that to build two or three railways where one railway, with running powers over it granted to other lines would suffice, was economic waste. This would put the Grand Trunk Railway in direct touch with the commercial life and development of the West within six months. This plan, he was assured by eminent railway men, was entirely practicable as a connecting link between the I.C.R., as he proposed to extend it, and the line to the north of Lake Superior. Mr. Borden suggested that a line might be built from Coteau Junction to Sudbury. Mr. Borden also advocated the improving of the grades of one or both the lines from Fort William to Winnipeg, on condition of complete control of rates, and that the Grand Trunk and I.C.R. should have running powers over that section. He would also assist the G.T.P. on reasonable terms if they guaranteed to build a road north of the C.N.R. and as far west as Edmonton. In conclusion, Mr. Borden said: My proposal, as contrasted with that of the Government; (1) Combines prompt action with deliberation and caution. (2) It develops and does not flatten the Intercolonial. (3) It takes account of the expenditure upon the Intercolonial, and upon the inland waterways, and brings those great national highways in harmony with our project. The lake route, the St. Lawrence and our canals are joined by the policy I propose in one harmonious whole, whereas the policy of the Government cuts off the waterways, cuts off the lake communication, cuts off the very Intercolonial Railway, on which this country has spent \$70,000,000, and on which they have spent \$15,000,000 for the purpose of doing the very thing which I am advocating in this House. (4) It develops

transportation along the lines of least resistance, that is to say, by water and by water and rail. (5) While connecting at the same time all the great railway systems in Canada, it controls in the only effective way the carriage of Canadian products through Canadian channels, by enabling the people's railway to compete for this traffic. (6) It affords immediately relief to the congestion of the West by bringing the G.T.R. into Winnipeg without delay. (7) It insists that further railway development in the West shall not only give railway competition in settled districts, but shall open and develop new country.

A division on the resolution confirming the agreement with the Grand Trunk Pacific Ry. Co., as set forth in the schedule to the bill, was carried in the House of Commons, Sept. 1, by a majority of 51 votes.

European Passengers via New York.

The New York Central announce that they have perfected arrangements for the checking of baggage for Europe in bond from Toronto and Hamilton to any steamship dock in New York city, and no Customs examination is at all necessary; the baggage being sent direct to steamer. A nominal charge is made for transfer in New York.

Passengers arriving from Europe may check and bond their baggage from steamship dock in New York to any point in Canada, and thus save the annoyance of Customs examinations in New York, and experienced baggagemen have been placed on the piers in New York for the purpose of checking baggage to destination.

This will doubtless prove a source of great satisfaction to patrons of this popular line. Steamship Agents, or L. Drago, Canadian Passenger Agent, will be pleased to give further information.

The Canadian Pacific Railway Company.

NOTICE TO SHAREHOLDERS.

The Twenty-second 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 Seventh day of October next, at the principal office of the Company at Montreal, at twelve o'clock noon.

The Common Stock Transfer Books will close in Montreal, New York and London at 3 p.m. on Tuesday, 1st September. The Preference Stock Books will also close at 3 p.m. on Tuesday, 1st September.

All books will be re-opened on Thursday, 8th October.

By order of the Board,

CHAS. DRINKWATER,

Secretary.

Montreal, 10th August, 1903.

The Canadian Pacific Railway Company.

Dividends for the half year ended 30th June, 1903, have been declared as follows:

On the Preference Stock two per cent.

On the Common Stock three 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 Thursday, 1st October, to Shareholders of record at the closing of the books at the Company's London office, No. 1 Queen Victoria Street, London, E.C.

The Common Stock Transfer Books will close in Montreal, New York and London, at 3 p.m., on Tuesday, 1st September. The Preference Stock Books will also close at 3 p.m. on Tuesday, 1st September. All books will be re-opened on Thursday, 8th October.

By order of the Board,

CHARLES DRINKWATER,

Montreal, 10th August, 1903.

Secretary.

A meeting of the Canadian Railway Club will be held in Toronto, Monday, Sept. 7, when a paper on "Apprenticeship" will be read by R. Patterson, master mechanic, G.T.R., Stratford, Ont.

The locomotive and car shops of the Great Northern Ry. of Canada at Quebec were burned down recently, the damage being placed at \$75,000. It has been decided by the management to reconstruct the shops at once.

— THE —

Canadian Railway Instruction Institute,

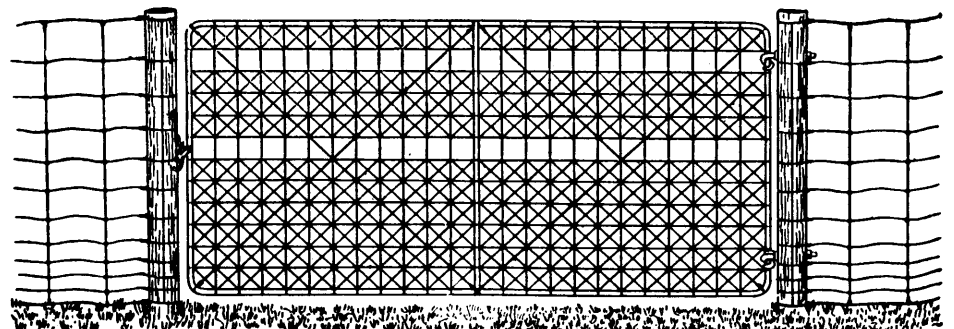
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An Institute established for the purpose of teaching Practical Railway Station Work. A thorough course is given in

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enabling all pupils to become practical railway men and capable of taking a position immediately upon graduating. All pupils thoroughly drilled in Copying Telegraphy by Typewriter, thereby fitting them for any position in Railway or Commercial Telegraph Work. Our telegraph equipment comprises keys, relays, sounders, cut-outs, main and local batteries, exactly the same as in use in all telegraph offices in the country. A complete set of station accounts, books, etc., in use by us. This is the only Institute of its kind in Canada, and **is endorsed by the leading railways.** Take a course at once and prepare for a position, as the demand for men will be great in connection with the railway development in and to the Northwest. **All graduates guaranteed positions immediately upon graduating.** Call or write for particulars.

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THE RAILWAY ACT, 1903.

The Railway Act which was introduced in the early part of the session in the House of Commons by Hon. A. G. Blair, then Minister of Railways, was amended in a number of its details in passing through the House, and is undergoing further amendment in the Senate. It is, however, understood that the Act will pass into law before the close of the session. The amendments, under discussion in the Senate, which will have to be considered by the House of Commons, affect the details rather than the general principles of the bill. The act under which the railways of the Dominion are at present administered was passed in 1888, and has been amended in a good many of its details by subsequent acts. The number of these amendments, the increasing number of railways, the great growth of trade, and the changing conditions of railway practice, forced a reconsideration of the whole question of general railway legislation and the act now under consideration is the result.

The new act, on becoming law, will supersede the acts now existing, and will come into force on a day to be named by the Governor-General. With the exception of the Government railways, it will apply to all railway corporations in Canada, and is to be read in with the special act of incorporation of each company. Under existing acts the Governmental supervision of railways is vested in the Railway Committee of the Privy Council, or in other words a committee of the ministry of the day, and when any question arises touching the relations of railways to one another or to the public, or which calls for the interference of the State, the Railway Committee, acting under the authority of Parliament, hears the argument and passes judgment on the merits. The Minister of Railways is the chairman of this Committee. His colleagues, who have probably snatched a few hours from departmental duties to complete the quorum, are not railway experts and are probably not conversant with the history of the particular question in dispute. They are guided, therefore, in most cases by the views of the Minister of Railways. The committee has no regular meeting time. It waits until a good docket of cases has accumulated, and then it announces a meeting. From Vancouver to Halifax, suitors who have alleged grievances against railways must present themselves at Ottawa on the appointed day. The first thing to be done is to refer the question to a departmental officer to report upon. This, of course, means an adjournment for weeks, perhaps months, while the official makes enquiries on the spot and presents a report to his chief. The committee has by the practice of years evolved a set of unwritten rules which guides it in deciding many points. As a result of this there is a good deal of delay, and inconvenience to the representatives of local municipal authorities, etc. Under the new act the Railway Committee of the Privy Council is abolished, and in its place there is to be established a Board of Railway Commissioners, consisting of three members to be appointed by the Governor-in-Council, at any time after the passing of the act, and from time to time as vacancies occur. Such commission shall be a Court of Record, and have an official seal, which shall be judicially noticed. Each commissioner shall hold office during good behavior for a period of ten years from the date of his appointment, but may be removed at any time by the Governor-in-Council for cause; and shall cease to hold office upon reaching the age of 75 years. Each commissioner on the expiration of his term of office shall be eligible for re-appointment. One of such commissioners shall be appointed, by the Governor-in-Council, Chief Commissioner of the board, and shall be entitled to hold the office of Chief

Commissioner so long as he continues a member of the board; and another of the commissioners shall be appointed by the Governor-in-Council, Deputy Chief Commissioner of the board. In the absence of the Chief Commissioner the Deputy Commissioner shall exercise all the powers of the Chief Commissioner; not less than two shall attend at the hearing of any case; the opinion of the Chief Commissioner is to prevail on questions of law; one commissioner may act in unopposed cases. To ensure the independence of the commissioners from railway influence they must hold no railway stocks, or interest in any device required in the equipment of railways. The commissioners must devote their whole time to the duties of their office, and cannot engage in any other employment. Another feature of the measure which is an innovation is the permission to hold sessions of the board in any part of Canada, as experience or the cases to come before it may suggest. Instead of requiring suitors to come to it the board will be able to go to the suitors. It will probably hold sittings at convenient intervals in the leading cities of the different provinces, and thus facilitate the adjudication of disputes so far as the public is concerned.

An important official of the commissioners is the Secretary, whose duty it shall be "to attend all sessions of the board, to keep a record of all proceedings conducted before the board or any commissioner, to have the custody and care of all records and documents belonging or appertaining thereto, or filed in his office, and to obey all rules and directions which may be made or given by the board touching his duties or the governance of his office; to have every regulation and order made, drawn pursuant to the direction of the board, signed by the Chief Commissioner, sealed with the official seal, and filed in the office of the Secretary. He shall keep in his office suitable books of record, in which he shall enter a copy of every such regulation and order, and every other document which the board may require, and such entry shall constitute and be, and in all courts be deemed and taken to be, the original record of any such regulation or order. Upon application of any person, and on payment of such fees as the board may prescribe, the Secretary shall deliver to such applicant a certified copy of any such regulation or order."

The board shall have power to inquire into, hear and determine any application by any person interested, making complaint that a railway company has failed to do anything it is required to do by the Railway Act, or its special act of incorporation; or requesting the board to make orders upon any matter within its jurisdiction. In respect to all of such matters the board has all the powers of a Superior Court; and may inflict penalties in the shape of fines for the non-compliance with its orders. Among the matters which the commissions are specifically authorized to decide are the speed of trains within the limits of a municipality, the use of whistles, the shelter of employes, coupling of cars, passing from car to car, devices on engines to avoid fire, for protection generally, and with respect to "any matter, act or thing which by this or the special act is sanctioned, required to be done or prohibited." It will thus be seen that the board is given very wide powers, and, inasmuch as it may on its own motion inquire into any of these matters, and may make orders in respect thereto, the board and its officials will be enabled to exercise a very thorough supervision over the railways.

The decisions of the board on matters of fact are to be final (Sec. 44), saving the right of review by the Governor-in-Council; but in matters of jurisdiction and of law appeals may be carried to the Supreme Court. Section 44, sub-sec. 2, provides that "the Governor-in-

Council may at any time, in his discretion, either upon petition of any party, person or company interested, or of his own motion and without any petition or application therefor, vary, change, or rescind any order, decision, rule, or regulation of the Board, whether such order or decision be made inter partes or otherwise, and whether such regulation be general or limited in its scope and application, and any order which the Governor-in-Council may make with respect thereto shall be binding on the Board and all parties." The members of the Board are not liable for costs, on account of any appeal, and the costs of all proceedings before the Board may be fixed at a stated sum, or taxed, and an order made by whom and to whom they are to be paid.

The act lays down a regular code of procedure for the Board, giving it power to review decisions and orders of the Railway Committee of the Privy Council, and to incorporate any or all of the same in its orders, or to repeal them, but all the orders of the Railway Committee of the Privy Council are to be considered to be in force until repealed.

The sixth division of the act deals with the incorporation and organization of railway companies, and covers points common to all railway undertakings. In the various clauses of this division of the act elaborate rules are made for the government of the railways. These rules touch upon the expropriation of property for railway building; the drainage of railway and farm lands, the building of bridges, tunnels, etc., the providing of efficient cattle-guards and crossings, and, in fact, a great variety of conditions that arise in connection with railway construction and operation. Many of these are adaptations of the existing law. The section as to charges provides that no tolls can be charged until after the approval of a by-law by the Board, and that such tolls may be either for the whole or any particular portions of the railway, but shall be chargeable equally to all persons, and at the same rate, for substantially the same service. Tolls must be made proportionately less for shorter hauls. No toll will be permitted that "unjustly discriminates" between different localities. Pooling of earnings is prohibited. All companies are required to afford reasonable facilities for forwarding and delivering traffic without unreasonable delay. The board will endeavor to make all classifications of freight similar in Canada.

The railway companies have made representations to the Senate Committee in regard to a number of the provisions of the bill, and these are under consideration.

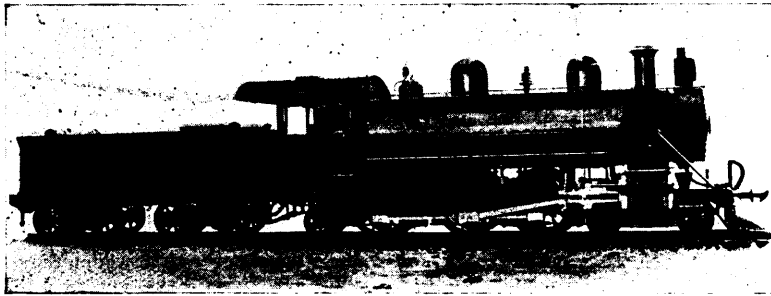
Dividend Declared on "Soo" Line.

The Board of Directors of the Minneapolis, St. Paul and Sault Ste. Marie Ry., a subsidiary of the C. P. R., met in Minneapolis Aug. 21, and declared a dividend on stock for the calendar year 1902. The dividend on preferred is 7% and on common 2%. This is the first time in the history of the road that a dividend has been declared on common stock.

The statement submitted to the New York stock exchange read: "Beginning with surplus of \$660,880 on hand June 30, 1900, we have earned, including surplus up to June 30, 1903, \$4,239,752. From this we have deducted \$289,022 for improvements to constructed lines, leaving net surplus of \$3,950,730. We have advanced for construction of new lines and for new equipment (pending issue of bonds) \$1,923,027. We had on hand June 30, 1903, after payment of fixed charges, cash assets \$1,893,625, and in other current assets over current liabilities, \$530,708.

BALDWIN LOCOMOTIVE WORKS.

SINGLE EXPANSION AND COMPOUND LOCOMOTIVES.



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

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

Electric Locomotives and Electric Car Trucks with Westinghouse Motors.

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

JOHN S. METCALF CO., Engineers, Grain Elevator Builders, 802 THE TEMPLE, CHICAGO, ILL.

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

	Capacity	
Burlington Elevator, St. Louis, Mo.....	1,300,000	Bushels
Grand Trunk Elevators, No. 2 and No. 3, Portland, Me.....	2,500,000	"
Export Elevator, Buffalo, N. Y.....	1,000,000	"
J. R. Booth Elevator, Depot Harbor, Ontario.....	1,000,000	"
Southern Pacific Terminal Co.'s Elevator, Galveston, Texas.....	1,000,000	"
Erie R. R. Transfer & Clipping House, Chicago, Ill.....	100 cars in 10 hrs.	"
Manchester Ship Canal Co.'s Elevator, Manchester, Eng.....	1,500,000	"
Burlington Elevator Co., Peoria, Ill.....	500,000	"
Canada Atlantic Railway Elevator, Coteau Landing, Que.....	500,000	"
Northern Grain Co., Manitowoc, Wis.....	1,350,000	"
Union Elevator, East St. Louis, Ill.....	1,100,000	"
Montreal Warehousing Co.'s Belt Conveyor System.....		

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The POLSON IRON WORKS TORONTO, CANADA.

Engineers, Boilermakers and Steel Shipbuilders.

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AND SIDE BLOCKS,
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THE HUNTER, ROSE CO. Limited
TEMPLE BUILDING—TORONTO

C.P.R. LANDS.

THE CANADIAN PACIFIC RAILWAY COMPANY have 14,000,000 acres of choice farming lands for sale in Manitoba, Assiniboia, Saskatchewan and Alberta. Manitoba lands and Assiniboia lands east of third meridian, \$4.00 to \$10.00 per acre. Lands west of third meridian, \$3.00 to \$6.00 per acre. Maps showing the lands in detail will be sent free on application.

TERMS OF PAYMENT.

An actual settler may purchase 640 acres, or less, on the 10 payment plan, by which the aggregate amount of principal and interest is divided into a cash instalment to be paid at the time of purchase and nine equal deferred instalments annually thereafter, as follows:

- 160 acres at \$4.00 per acre, 1st instalment \$95.85, and 9 equal instalments of \$80.
- 160 acres at \$4.50 per acre, 1st instalment \$107.85, and 9 equal instalments of \$90.
- 160 acres at \$5.00 per acre, 1st instalment \$119.85, and 9 equal instalments of \$100.
- 160 acres at \$5.50 per acre, 1st instalment \$131.80, and 9 equal instalments of \$110.
- 160 acres at \$6.00 per acre, 1st instalment \$143.80, and 9 equal instalments of \$120.00.

Purchasers who do not undertake to go into residence on the land are required to pay one-sixth of the purchase money down, balance in five equal annual instalments with interest at the rate of 6 per cent. per annum.

DISCOUNT FOR CASH.

If land is paid for in full at time of purchase, a reduction from price will be allowed equal to ten per cent. on five-sixths of the purchase money.

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

F. T. GRIFFIN,
Land Commissioner C.P.R. Co.,
Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company have 1,000,000 acres of selected lands in Manitoba and Assiniboia which offer excellent opportunities to settlers and investors who desire to secure good lands in well settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

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Golden Key Brand **AERATED WATERS.**

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DESIGNERS, ENGRAVERS,
ELECTROTYPERS.
92 BAY ST.

New Montreal Locomotive Works.

The shops of the Locomotive and Machine Co., of Montreal (Ltd.), were expected to be completed by Sept 1. The shops are located about two miles east of Montreal, on a strip of land between the St. Lawrence river and the Montreal Terminal Ry. A large wharf and pier is to be built along the river so as to increase the shipping facilities. This will give a through water route to Europe as well as connection with the Great Lakes system of this continent.

The ultimate capacity of the works will be about 300 locomotives a year. The company will also do a general business in machine and structural work, steel buildings, bridges, roof trusses, etc.

All the steel work has been manufactured on the ground, and the design and erection has been under the direct supervision of M. J. Butler, Chief Engineer. A temporary shop containing the machinery for handling the structural material has been built. Most of the building material was bought in Europe. The duty rates were largely responsible for this, although the fact that material could be obtained quickly was also a determining factor. The duty between the United States and Canada on steel shapes weighing less than 35 lbs. per yard is 35 cents per 100 lbs., and on shapes weighing 35 lbs. per yard or over, the duty is 10% of the value of the material. Between England and Canada there is a preferential duty one-third less than that above noted. It is also interesting to know that the duty between Canada and the United States is 60 cents per 100 lbs. on all sizes. These rates make it advantageous for Canadians to purchase raw material in England, and it also gives Canadian builders a chance to compete with builders in other parts of the British Empire.

The plant consists of a machine shop about 420 ft. x 132 ft., a foundry 220 ft. x 65 ft. 5 in., a boiler shop 380 ft. x 67 ft., an erecting shop 340 ft. x 66 ft., a smith and forge shop 340 ft. x 66 ft., a two-story pattern shop 109 ft. x 63 ft., a pattern store house 109 ft. x 63 ft., and a power house 105 ft. x 71 ft. A structural shop about 310 ft. x 198 ft. is also to be built. It is also intended, at some future date, to build a steel castings shop. The general store house and offices are at the southern end of the grounds.

The machine shop, boiler shop, foundry, erecting shop and smith shop are arranged in a group—the machine shop extending north and south, and the other shops connecting with it to the west. The machine shop is arranged so that the several departments are close to the shops from which the material is sent. For instance, the frame department is at the south end of the machine shop, close to the smith shop, and the cylinder department is at the north end of the shop close to the foundry. The power house has a central location.

A large reservoir is at the north end of the property, and the drainage from the roofs of all the buildings flows into it. A 1,000 gal. pump is in the engine house and furnishes the water supply to the several buildings—the suction pipe coming from the above-mentioned reservoir. A rotary pump having a capacity of 700 gallons a minute is placed near the St. Lawrence river, and is run by a motor. In dry weather this pump draws water from the river and delivers it to the reservoir. Drinking water is obtained from an artesian well.

The area (in square feet) of the several principal buildings, is given by the following table:

Machine shop.....	55,440
Erecting shop.....	22,440
Foundry.....	14,388
Boiler shop.....	25,460
Smith shop.....	22,440
Total.....	140,168

The machine shop is by far the largest department, while the boiler shop is next in size. It will also be noted that the area of the erecting shop is relatively small. This large surplus of machine shop area was purposely provided, the feeling being that delays can usually be traced to the machine shop. A surplus of erecting pits is a useless expense unless the machine shop and other departments are able to furnish material as quickly as it can be assembled.

POWER HOUSE.—The power house is divided into two parts by a 2 ft. partition wall. The boiler room is 50 ft. x 74½ ft. inside, and the engine room is 49 ft. x 67 ft. The boiler room contains four 250 h.p. boilers, set in two batteries of two each. The boilers are fitted with underfeed stokers, and an induced draft system is used. The boilers were made in Glasgow, Scotland. They are designed to operate at 200 lbs. pressure, and are provided with superheaters which deliver steam at a temperature of about 450 deg. F.

The engine room contains one 18 in. and 34 in. x 42 in. compound condensing engine. It is belted to a 400 k.w. direct current generator. The three-wire system is used, giving two voltages of 110 and 220 respectively. Surplus power is supplied by the Montreal Light, Heat & Power Co., and a motor generator set has been installed in the engine room for transforming and stepping down the high potential a.c. current from the power company's line. Two air compressors will be installed. They will have capacities of 2,000 ft. and 1,250 ft. a minute respectively.

MACHINE SHOP.—The machine shop is 420 ft. long, and is divided longitudinally into two bays, each 66 ft. wide. The clear height under the roof trusses is about 29 ft. The trusses are 8 ft. 4¾ in. deep at the centre. The roof of each bay is surmounted by a monitor running the length of the shop. Additional overhead lighting is obtained from skylights placed at intervals in the roof. Each bay is traversed by a 10-ton electric travelling crane, having a span of 62 ft. 8½ in. The crane runways are supported on brackets riveted to the supporting columns. The general design of the steel work for all the buildings is practically the same. In addition to the travelling crane, there are about 26 jib cranes, with air hoists distributed throughout the shop. The capacity of these hoists range from 1,500 lbs. to 8,000 lbs.

FOUNDRY.—The foundry is 220 ft. x 65 ft. 5 in. A 15-ton crane having a span of 40 ft. serves the molding floor. The inside runway of this crane is supported on steel columns. Air blast is supplied from a structural steel pressure blower running at a maximum speed of 1,990 r.p.m. The blower is driven by a 60 h.p. motor, running at 675 r.p.m. The brass foundry is at the east end of the building on the second floor.

BOILER SHOP.—The boiler shop is 380 ft. x 66 ft. 10¼ in., and is served by a 20-ton electric travelling crane having a five-ton auxiliary hoist. The span of the crane is 63 ft. 5¾ in. The riveting tower is at the east end of the shop. The rails rest on 10 in. x 10 in. timber sleepers. Standard gauge tracks run along each side of the erecting pit. The paint shop is on an elevated floor at the east end of the building. The shop is served by two 60-ton electric travelling cranes having each a span of 65 ft. 6¾ in. The general details of the steel work are the same as those of the other shops, except that the clear height under the trusses is 42 ft. 9 in.

SMITH AND FORGE SHOP.—This shop is 340 ft. x 66 ft. 4½ in. The shop is not provided with a travelling crane, but has a liberal supply of air hoist jib cranes, which cover practically the entire floor area.

There are altogether about 100 Westinghouse motors throughout the shops, ranging from 5 to 60 h.p. All lathes and small tools are arranged in groups approximating 20 h.p.

each. All large and isolated tools have an individual motor drive.

There are a number of interesting tools being furnished these shops. The 84 in. x 84 in. x 36 in. planer is arranged to have a 32 h.p. motor mounted on top of the housing.

The 24 in. crank-pin lathe weighs about 7,250 lbs. Both the back gear and triple gear are at the front of the lathe, thus bringing all stresses on the bottom of the bearings. The ratio of back gearing is 8.52, and the ratio of the triple gearing to the face plate is 31.8. The carriage is 34 in. long and has two plain block rests, with clamping bolts for the tools. Each rest has a separate cross feed, operated either by hand or power, thus enabling the operator to cut both from the back and front of the work, each cut supporting the other.

Another interesting machine is the large vertical miller. It is claimed to be the largest vertical milling machine ever built for locomotive work, and is intended mainly for the guide yoke work. A stack of guide yokes can be clamped on this table and finished without resetting. The crane, which is provided, swings on the centre of the spindle. The carriage of the machine is 60 in. in diameter over tee slots. The machine will admit work 24 in. high, and the carriages have a cross feed of 65 in., and an in-an-out feed of 50 in. The spindle is counter-weighted and can be quickly adjusted. The shipping weight of the machine is about 60,000 lbs.

The fans for the heating apparatus are in a wing to the machine shop. The air is delivered to underground ducts, and the discharge pipes have three openings, discharging upward and along the sides of the walls respectively.

The company is capitalized at \$1,000,000, and has the following officers: M. J. Haney, President; J. T. Davis, Vice-President and General Manager; R. T. Shea, General Superintendent; M. J. Butler, Chief Engineer, and D. Shirrell, Mechanical Engineer.

We are indebted to R. T. Shea, General Superintendent, for the details of the above description.—Railroad Gazette.

Grain Shipments from Montreal.—The lake shipments of corn for the port of Montreal have increased considerably in the past few weeks. For a longer period—during the first seven months of the present year—over 9,000,000 bushels of wheat and almost 4,000,000 bushels of corn have passed through the port of Montreal, as against a trifle over 1,000,000 bushels of wheat and 4,000,000 bushels of corn through the port of Boston. This gain at this Canadian exporting port is due almost entirely to the action of the Dominion Government in making the Canadian canals free. Grain can now be shipped from Chicago to Montreal for export to Liverpool 3 cents a bushel cheaper than it can be routed by part-rail part-lake through Boston. When it is known that a fraction of a cent a bushel will divert all the grain that can possibly go through a port, the advantage that Montreal has over American ports will be readily seen.

The Toronto Ry. Co. has installed magnetic switches at several of the junction points, which are reported to be operating successfully. These switches will obviate the necessity of employing men at the junctions to shift the points.

A new steamboat line is to be established between Ottawa and Rockland, Ont., by Alphonse Prevost, of the latter place, who has purchased a passenger-freight steamer for \$4,000.

Mackenzie, Mann & Co. are reported to be negotiating for the purchase of the Cape Breton Ry., which has been completed for 30 miles from Point Tupper to St. Peters, N.S.

The Hamilton, Ont., city council has signed the new agreement with the Bell Telephone Co.

MAINLY ABOUT PEOPLE.

E. O'Neill, C.P.R. freight agent at Brockville, Ont., died there Aug. 1, after a lengthened illness.

W. H. D'Arcy, C.P.R. claims agent, lines west of Lake Superior, is absent in England on a holiday.

J. O. Stackhouse, for many years a prominent shipbuilder at Carleton, N.B., died there Aug. 19, aged 75.

T. Heasman, formerly foreman at the C.P.R. coach yard at Winnipeg, died at Fort William, Ont., Aug. 16.

A. Piers, General Superintendent C.P.R. steamships, has returned to Montreal from a business trip to England.

W. Mackenzie, President of the Canadian Northern Ry., has returned to Toronto from a business trip to England.

J. S. Vindin, for eleven years construction engineer of the Montreal Street Ry., died at Montreal Aug. 19, aged 45.

C. J. Parker, Chief Engineer Rutland Rd., has resigned his position and has joined the staff of the New York Central Rd.

Capt. C. Garvin, of the Dominion Government str. Alert, died suddenly on board the steamer at Cornwall, Ont., Aug. 17.

T. McHattie, Master Mechanic eastern division G.T.R., Montreal, has returned from Scotland, where he has been on a holiday.

L. R. Johnson, Assistant Superintendent of Rolling Stock, C.P.R., accompanied by Mrs. Johnson, are spending a holiday in England.

J. W. McCarthy, Roadmaster G.T.R. Battle Creek, Mich., was killed in a rear-end collision on the G.T.R. at Durand, Mich., Aug. 7.

P. A. Peterson, formerly Chief Engineer C.P.R., has returned to Montreal after an extended visit to Cuba, where he inspected the Cuba Rd.

Miss Pettypiece, daughter of H. J. Pettypiece, President Canadian Press Association, and C.P.R. Ticket Agent, Forest, Ont., died there recently.

J. W. Noble, cashier Canadian Express Co., Hamilton, Ont., has been sent for trial on a charge of stealing \$2,000 while in transit to San Francisco, Cal.

W. J. Singleton, Superintendent C.P.R. Terminals, Montreal, who was absent from his post for some time on account of ill health, has resumed duties.

Thomas Coyle, of Winnipeg, who died recently, was father of E. J. Coyle, Assistant

General Passenger Agent C.P.R., Pacific Division, at Vancouver, B.C.

W. F. Egg, C.P.R. city ticket agent, Montreal, is recovering slowly from his recent attack of illness. During his absence P. J. Cullen is acting city ticket agent.

S. Behan, recently locomotive foreman at the C.P.R. shops, Toronto Junction, Ont., was recently entertained at dinner by his friends on giving up that position.

E. E. Fisher, Superintendent, Toronto, Hamilton and Buffalo Ry., has purchased the house at 275 James st. South, Hamilton, recently occupied by Lieut.-Col. McLaren.

C. C. Brown, formerly a train dispatcher for the C.P.R. at North Bay, Ont., has been appointed to a position on the dispatching staff of the Missouri Pacific railway system.

C. M. Hays, 2nd Vice-President and General Manager G.T.R., will, it is understood, be elected President of the Grand Trunk Pacific Ry. Co. as soon as the organization is effected.

D. B. Hanna, Third Vice-President Canadian Northern Ry., visited Winnipeg, recently, and on returning to Toronto was accompanied by Mrs. Hanna and family, where they will now reside.

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THE CHEAPEST AND BEST for Floors, Roofs and Walls in Offices, Shops, Round-Houses and Freight Sheds is the Expanded Metal System of reinforcing Cinder Concrete and Cementine Mortar.

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MONTREAL and NEW YORK.

JAMES PLAYFAIR, Pres. & Gen'l Mgr.

D. L. WHITE, Vice-President.

J. W. BENSON, Sec'y-Treas.

MIDLAND TOWING & WRECKING CO., LTD., MIDLAND, ONT., CANADA.

First-Class Tugs for Wrecking, Raft Towing, Etc. Steam Pumps, Divers, Jacks, Hawsers and Lighters,

G. Yallop, for 20 years C.P.R. yardmaster at Toronto Junction, Ont., was entertained at dinner and presented with a purse by C.P.R. employes Aug. 19, on the occasion of his removal to Winnipeg.

Alex. Johnston, who retired from the C.P.R. service in Montreal to take a position on Sir Wm. Van Horne's Cuban railway, recently sailed for England, on leave of absence on account of ill health.

R. Kerr, Passenger Traffic Manager C.P.R., is on a trip to Great Britain in connection with the rearrangement of the company's agencies there, consequent on the taking over of the Atlantic steamers.

H. R. Charlton, Advertising Agent G.T.R., was presented with a cabinet of silver cutlery by the members of the Western Press Association, at the termination of a recently personally conducted tour over G.T.R. territory.

J. E. Dawson, agent of the Great Northern Ry. at Butte, Mont., who died at Butte recently, was about 1874 Superintendent of the Air Line at St. Thomas, Ont., and later on was Assistant Superintendent G.T.R., in London, Ont.

The name of Wm. Whyte, assistant to the President C.P.R., Winnipeg, is mentioned in connection with the position of chairman of the Railway Commission to be appointed by the Government. The position will be worth \$10,000 a year.

T. Williams, Chief Accountant and Treasurer Intercolonial Ry. at Moncton, N.B., has completed 30 years of service on the Canadian Government railways. The first 6½ years of his service was put in on the Prince Edward Island Ry.

T. A. Summerskill, Superintendent of Motive Power Central Vermont Ry., St. Albans, Vt., has fully recovered from the effects of the shots he accidentally received from a neighbor who came in to assist in the capture of a burglar at his residence.

Alex. McFee, ex-President of the Montreal Board of Trade, Montreal, has been elected a member of the Montreal Harbor Commission to represent the Corn Exchange Association, in succession to J. Torrance, Manager of the Dominion Line, whose term has expired.

D. McDonald, who has been appointed assistant General Manager of the Montreal Street Ry., and the Montreal Park and Island Ry., was formerly in the company's service, but for the past three years has been connected with the electric railway system in Paris, France.

The International Longshoremen, Marine and Transport Workers' Association has elected officers, the Canadian representatives among the Vice-Presidents being: J. McLaughlin, Sarnia, Ont., and L. Montmarquette, Montreal. There are nine Vice-Presidents, the Canadians being respectively fourth and fifth.

Sir Daniel Dixon, Lord Mayor of Belfast, Ireland, who was created a baronet during the late visit of the King to Ireland, was created a Knight Bachelor in 1892, being the first Lord Mayor of the city. He is principal owner of the Lord Line of steamers trading between Cardiff and other British ports and Montreal, and owns several sailing vessels trading between Belfast and New Brunswick ports, in which province his firm have large lumber interests.

Morley Donaldson, whose portrait appears on the first page of this issue, was born near Edinburgh, Scotland, May 1, 1851, and entered railway service 1881, as chief draftsman Canada Atlantic Ry., since which he has been consecutively superintendent traffic, superintendent mechanical department, Superintendent, and since April 11, 1898, General Superintendent, entire service with the

Canada Atlantic Ry. He is a member of the Canadian Society of Civil Engineers.

S. B. Kramer, who has been appointed Master of Transportation G.T.R., was born in Maryland Sept. 25, 1865, and entered railroad service 1880, since which his record has been: 1880 to 1886 as messenger boy and operator on the Vandalia Line, in Indiana; 1886 to 1893, train dispatcher Union Pacific Rd.; 1893 to 1899, Chief Train Dispatcher Wabash Rd. at Decatur, Ill.; 1899 to May, 1902, Chief Train Dispatcher Central Vermont Ry.; May, 1902, to Aug., 1903, Chief Train Dispatcher G.T.R. at Montreal.

The New York Times recently printed the following: Sir William Van Horne, chairman of the Canadian Pacific Railroad, was interviewed in New York not long ago by a young gentleman who insisted on treating him like a foreigner. The Montreal capitalist took it as a matter of course until the interviewer asked innocently: "Did you ever have anything to do with our American railroads, Sir William?" The good knight's eyes sparkled as he answered: "Oh, yes. I served on both Alton and Illinois Central." "In what office?" asked the scribe, with pencil ready. "I sold books on Alton and oranges on Illinois Central," said the chairman of the Canadian Pacific quietly; "but that was some little time ago."

David Brown, who has been appointed Manager of the Milwaukee and Michigan Line and the Grand Trunk Despatch at Detroit, Mich., was born at Glasgow, Scotland, Dec. 21, 1843, and entered railway service with the Caledonian Ry. in Scotland, Jan. 1, 1855, serving in various positions to Feb. 28, 1866; since which his record has been: 1866 to 1872, chief clerk general freight department G.T.R. at Montreal; 1872 to July, 1874, General Freight and Passenger Agent, Illinois Midland Rd.; Aug., 1874, to Mar., 1880, Division Freight Agent, Central Vermont Rd.; Mar., 1880, to Dec., 1891, assistant General Freight Agent Chicago and Grand Trunk Ry.; Jan., 1892, to Nov., 1900, General Freight Agent Chicago and Grand Trunk Ry., Cincinnati, Saginaw and Mackinaw Rd., Michigan Air Line, and Detroit division G.T.R.; Dec., 1900, to July 31, 1903, first assistant General Freight Agent, G.T.R., the Chicago and Grand Trunk having been reorganized under the name of the G.T. Western Ry., and is now operated as a part of the G.T.R. system.

Dominion Express Co.

A special circular was issued Aug. 29, from the office of W. F. Stout, Vice-President and General Manager, Toronto, notifying the rearrangement of the territory within which the Company operates into divisions, with superintendents in charge. The following is the new arrangement of territory:—

EASTERN DIVISION.—J. A. Boswell, Superintendent, headquarters at Montreal, Que.; Route Agents—G. E. Whitney, G. W. Liddle and J. R. Haycock. Effective Sept. 1, 1903. The territory comprises all offices on lines of C.P.R. between Ottawa, Ont., and Sault Ste. Marie, Mich., inclusive; between Montreal, Que., and Smith's Falls, Ont., inclusive; between Renfrew, Ont., and Eganville, Ont., inclusive; between Vaudreuil, Que., and Ottawa, Ont., inclusive; between Ottawa, Ont., and Prescott, Ont., inclusive; between Carleton Jct., Ont., and Brockville, Ont., inclusive. Brockville, Westport and Sault Ste. Marie Ry., between Brockville, Ont., and Westport, Ont., inclusive. Green Valley and Alexandria Wagon Route; Vankleek Hill and Hawkesbury Wagon Route; all offices in Provinces of Quebec, New Brunswick, Nova Scotia and the States of Maine and Vermont,

ONTARIO DIVISION.—Employes in this division will report direct to W. S. Stout, Vice-President and General Manager, Toronto. Route Agents—C. A. Dobson, F. G. McKay and D. J. McFeggan. Effective Sept. 1, 1903. Will comprise all offices of this company on lines of C.P.R. west of, but not including Smith's Falls, Ont., to and including Detroit, Mich. All offices on Kingston and Pembroke Ry., not including Renfrew, Ont.; Bay of Quinte Ry.; Central Ontario Ry.; Deseronto Navigation Co., between Deseronto and Picton, Ont.; Ivanhoe and Madoc Wagon Route; Ivanhoe and Foxboro Wagon Route; Norwood, Hastings and Warkworth Wagon Route; Picton and Milford Wagon Route; Myrtle, Brooklin, Whitby and Oshawa Wagon route; Havelock and Campbellford Wagon Route. All offices on railway, steamer or wagon routes, south or west of Toronto, including Niagara District, Owen Sound, Teeswater, Wingham, and Elora sections.

WESTERN DIVISION.—G. Ford, Superintendent, headquarters at Winnipeg, Man. Route Agent, John Knox. Effective Sept. 1, 1903. Will comprise all offices of this company on main line of C.P.R., west of, but not including Sudbury Jct., Ont., and east of, but not including Pasqua, Assa. All offices of this company in Province of Manitoba. Offices on C.P.R. in Assiniboia, between Gainsboro and Estevan, inclusive; between Antler and Arcola, inclusive; between Langenburg and Yorkton, inclusive. All offices on Regina and Prince Albert section. All offices in Rainy River District.

PACIFIC DIVISION.—S. T. Stewart, Superintendent, headquarters at Vancouver, B.C. Route Agents—R. E. Helme and A. W. Lee. Effective Sept. 15, 1903. G. Ford, Superintendent, will continue in charge in the meantime. Will comprise all offices on C.P.R. between Moose Jaw and North Portal, Assa., (not including Estevan, Assa.,) and all offices on all railway, steamer or wagon routes west of Moose Jaw, Assa.

The Pan-American Trunk Line.

Further details respecting the projected line from Hudson's Bay to Buenos Ayres are published. The Railway World, of New York, says: "Another great railroad scheme, proposed as a trunk line to connect Hudson's Bay with British Columbia, Buenos Ayres, South America, and having a network of branches, was launched the past week when articles of incorporation of the Pan-American Railroad Company, with a capital stock placed at \$250,000,000, were filed at Guthrie, Oklahoma, with the Secretary of that Territory. The purpose of the corporation, it is said, is to build a line of railway extending from Port Nelson, Hudson's Bay, in a southerly direction, crossing the line of the Canadian Pacific, near Winnipeg, Manitoba, through North Dakota, South Dakota, Nebraska, Kansas, Oklahoma and Indian Territory to Galveston, Texas; from Galveston through the Republic of Mexico to the boundary line of Central America, through the isthmus of Panama, thence through the United States of Columbia to Ecuador, and finally through the Republic of Peru to Buenos Ayres on the Atlantic ocean. Also a branch line beginning in the Republic of Peru and extending in a southeasterly direction through Brazil to Rio de Janeiro; also a branch line beginning in the Republic of Peru and extending in a southerly direction through Chili to Valparaiso, on the South Pacific ocean.

"The estimated cost of the Pan-American Railway is \$250,000,000 and the estimated length 10,000 miles. The incorporators are: W. H. Dodge, Stephen A. Sheldon, W. J.

Pendleton, Eldredge G. Phelps, of Shawnee, Oklahoma, and C. E. Wells, of Lincoln, Neb. It is not known what outside interests, if any, these men represent. The principal offices of the company are stated to be at Guthrie and Shawnee, Oklahoma. Within the corporation of the Pan-American Railway Company will, it is said, be several construction companies. The largest of these will be the Canadian-American Construction Company, among whose directors are said to be Charles F. Beach, Jr., London, England; M. L. Muhleman, New York; Charles L. Rawlins, New York, and Charles B. Williams, City of Mexico. These directors will, it is stated, hold in a general way for the other companies. A charter was also taken out for the American Town Site Company, an adjunct of the railway corporation, with a capital stock fixed at \$10,000,000 and with business offices at Shawnee and Guthrie, Oklahoma; New York City; Superior, Neb.; Hutchinson, Kan.; Dallas and Galveston, Texas; Winnipeg, and City of Mexico."

Detroit and Toledo Shore Line Rd.—The organization of this railway, which has recently been acquired by the G.T.R. and the Toledo, St. Louis and Western Rd., has been completed. The directors and officers are: President, C. M. Hays, Montreal; Vice-President, B. Norton, Toledo, Ohio; other directors: C. D. Whitney, Toledo, Ohio; Jas. L. Frazier, Frankfort, Ind.; F. W. Morse

Montreal; A. B. Atwater, Detroit, Mich; Executive Committee: F. W. Morse, B. Norton; Secretary and Treasurer, J. H. Muir, Detroit, Mich.; Superintendent, S. W. Knapp, Detroit, Mich. The Superintendent will report to the Executive.

Reports are current that the G.N.W. Telegraph Co. is about to be absorbed by the Western Union Telegraph Co., but H. P. Dwight, President, says this is not the case, and that the G.N.W. will remain a Canadian company.

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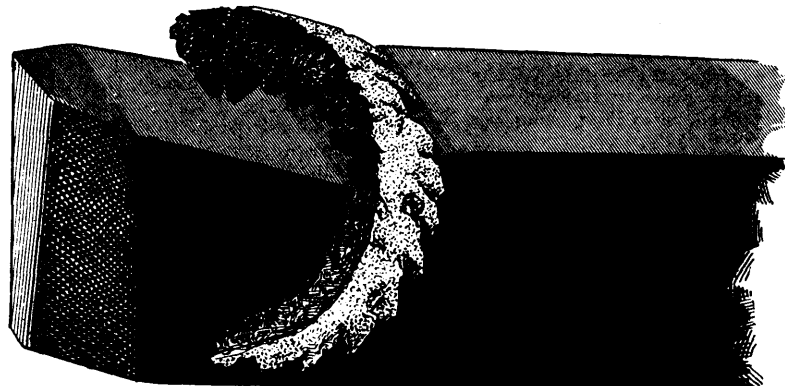
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G.T. Ry. Co. Guaranteed Stock.

By the terms of the act passed at the current session of the Dominion Parliament authorizing the increase of the 4% guaranteed stock to £10,000,000, a special meeting of the shareholders was held in London, Eng., Aug. 24. The President, Sir C. Rivers Wilson, outlined the reasons for the act, which provides for an increase of the 4% guaranteed stock from the present authorized amount, £5,200,000, to £10,000,000. The directors recommended the acceptance of the proposal, to enable the capital expenditure of the company to be provided as was found necessary, without having recourse to the issue of perpetual 4% debenture stock, as heretofore, thereby obviating additions to the fixed interest charges of the company. The directors felt that it was not desirable to create more fixed charges, and the new issue would strengthen the junior securities.

The resolution was adopted with but one dissentient voice.

There was no mention of the Grand Trunk Pacific project at the meeting.

Another report states that after the meeting the President denied specifically that the money would be employed in the work of extending the road to the Pacific. The shareholders expect that steps will be taken to acquire a Canadian port as an Atlantic terminal, instead of Portland, Me.

The Railway Commission.—In connection with the appointment of the permanent Railway Commission to be established under the Railway Act, 1903, a resolution has been proposed fixing the salaries of such commissioners. The Chief Commissioner will be paid \$10,000 a year, and the other two Commissioners \$8,000 a year each, while the Secretary will receive \$4,000 a year. Power is given to the Governor-in-Council to fix the salaries of such other officers as may be necessary to the carrying out of the provision of the act. The commissioners have power to hold sittings at such points as may be convenient for the discharge of the business to come before them.

R. Reford, of Robert Reford & Co. (Ltd.), steamship agents, Montreal, has been nominated, and is reported to have accepted the position of chairman of the Government commission on transportation. The other members of the commission are J. Bertram, of Toronto, shipbuilder and engineer; and R. B. Fry, of Quebec, a shipper.

The Acting Minister of Railways stated in the House of Commons that in 1896 the Government owned four private cars. This number has since increased to six. One of these new cars is for the general traffic manager of the I.C.R. The other is the car built for the Duke and Duchess of York.

H. G. Johnston, a former clerk in the C.P.R. audit office at Montreal, and P. Carlin, the ex-conductor, who were sentenced to terms of imprisonment for conspiracy by giving out private information as to when audits would be made on passenger trains, have been released on ticket-of-leave.

The Canadian Northern Ry. has issued a folder of information for tourists, "East and West, via the Great Lakes." It is well illustrated and gives information respecting a number of round trips through Western Ontario, and the prairie country opened up by the company's lines.

The Manual of Statistics is issuing a monthly supplement in which the reports of railway and industrial securities issued during the preceding month are dealt with. By this means subscribers to the annual issue will be able to keep their information up to date.

Recent Dominion Legislation.

A further instalment of legislation has received the assent of the Governor-General at the current session of the Dominion Parliament. Among the acts assented to Aug. 13 were the following affecting transportation interests:

Incorporating the Guelph and Georgian Bay Ry. Co.

Respecting the Kettle River Valley Ry. Co.

Respecting the Kingston and Pembroke Ry. Co.

Incorporating the Marconi Wireless Telegraph Co. of Canada.

Incorporating the Algonquin Lumber and Power Co.

Respecting the Manitoulin and North Shore Ry. Co.

Respecting the Western Alberta Ry. Co.

Respecting the Midway and Vernon Ry. Co.

Incorporating the Columbia River Improvement Co.

Respecting the Toronto, Hamilton and Buffalo Ry. Co.

Incorporating the Canada Yukon Western Ry. Co.

Respecting the Brandon and Southeastern Ry. Co.

Amending the act respecting the safety of ships.

Amending the act respecting the city of Ottawa.

Amending the Steamboat Inspection act.

Respecting the Rathbun Co.

Incorporating the Montreal - Longueuil Bridge Co.

Incorporating the Niagara, Queenston and St. Catharines Ry. Co.

Incorporating the Berlin, Waterloo, Wellesley and Lake Huron Ry. Co.

Respecting the Medicine Hat and Northern Alberta Ry. Co.

Respecting the Red Deer Valley Ry. and Coal Co.

Respecting the encouragement of the construction of dry docks.

September Birthdays.

Many happy returns of the day to

W. D. Barclay, ex-Manager, Alberta Ry. & Coal Co. and Great Falls and Canada Ry., now a contractor at St. Paul, Minn., born at Campbellton, N.B., Sept. 23, 1852.

G. T. Bell, General Passenger and Ticket Agent, G.T.R. at Montreal, born there Sept. 7, 1861.

W. H. Biggar, K. C., Assistant General Counsel G.T.R. at Montreal, born at the Carrying Place near Trenton, Ont., Sept. 19, 1852.

E. R. Bremner, Assistant General Freight Agent, Canada Atlantic Ry., Ottawa, born in Toronto, Sept. 9, 1875.

F. R. F. Brown, ex-Mechanical Superintendent, Intercolonial Ry., now at Montreal, born at Helensburgh, Dumbartonshire, Scotland, Sept. 29, 1845.

M. H. Brown, General Freight Agent, C.P.R., at Toronto, born at Victoria Square, Ont., Sept. 2, 1866.

W. G. Brownlee, Superintendent, G.T.R., Western Division, at Detroit, Mich., born at Lawrenceville, Ill., Sept. 9, 1858.

J. R. Bruce, Traffic Auditor, Intercolonial Ry., at Moncton, N.B., born at Portsoy, Banffshire, Scotland, Sept. 23, 1848.

W. B. Bulling, Assistant General Freight Manager, Eastern Lines C.P.R., at Toronto, born in Montreal, Sept. 16, 1858.

R. L. Burnap Commercial Agent, Central Vermont Ry., and Agent, National Despatch Fast Freight Line at New York, N.Y., born Sept. 20, 1872.

G. B. Colpas, Auditor, New York & Ottawa Rd., and Ottawa & New York Ry. at Ottawa, Ont., born Sept. 28, 1858.

W. F. Egg, City Passenger Agent, C.P.R., at Montreal, born at Plymouth, Eng., Sept. 7, 1859.

A. W. Ecclestone, Southern Passenger Agent, Central Vermont Ry., at New York, born at Hamilton, Ont., Sept. 25, 1858.

F. A. Folger, Jr., General Superintendent, Kingston & Pembroke Ry., at Kingston, Ont., born Sept. 17, 1865.

C. B. Foster, District Passenger Agent, C.P.R., at St. John, N.B., born at Kingston, N.B., Sept. 30, 1874.

L. A. Hamilton, ex-Land Commissioner, C.P.R., born at Penetanguishene, Ont., Sept. 30, 1852.

L. B. Howland, President and General Manager, Irondale, Bancroft & Ottawa Ry., at Irondale, Ont., born at Lambton Mills, Ont., Sept. 2, 1869.

G. R. Huntingdon, General Superintendent, Minneapolis, St. Paul & Sault Ste. Marie Ry., at Minneapolis, Minn., born Sept., 1867.

W. H. Kelson, General Storekeeper, C.P.R., born at Bath, Eng., Sept. 5, 1850.

R. E. Larmour, Freight Claims Agent, Pacific Division, C.P.R., at Vancouver, B.C., born at Brantford, Ont., Sept. 26th, 1868.

H. D. Lumsden, C.E., engineering department, C.P.R., born at Belhaire, Scotland, Sept. 7, 1844.

J. McNaught, Second Vice-President, Great Northern Ry. of Canada, New York, born at Lexington, Ill., Sept. 9, 1842.

G. S. MacKinnon, Division Master Mechanic, C.P.R., at Winnipeg, Man., born at Melbourne, Que., Sept. 16, 1854.

H. L. Maltby, Secretary and Treasurer, Ottawa, Northern and Western Ry., at Ottawa, born at Derby, Eng., Sept. 8, 1852.

G. A. Mountain, Chief Engineer, Canada Atlantic Ry., at Ottawa, Ont., born at Quebec, Sept. 28, 1860.

E. D. Nash, Assistant Superintendent, Central Vermont Ry., at New London, Conn., born at Shelburne Falls, Mass., Sept. 24, 1852.

J. Osborne, General Superintendent, Eastern Division, C.P.R., at Montreal, born there Sept. 19, 1861.

E. D. Parker, Assistant General Freight Agent, Minneapolis, St. Paul & Sault Ste. Marie Ry., at St. Paul, Minn., born at Granville, Ohio, Sept. 20, 1839.

W. D. Robb, Superintendent of Motive Power, G.T.R., at Montreal, born at Longueuil, Que., Sept. 21, 1857.

W. H. Rosevear, General Car Accountant, G.T.R., at Montreal, born at Wadebridge, Cornwall, Eng., Sept. 26, 1837.

D. Sutherland, General Freight Agent, Newfoundland Ry., at St. John's, Nfld., born at Niagara Falls, Ont., Sept. 21, 1873.

W. R. Tiffin, Superintendent, Northern Division, G.T.R., at Allandale, Ont., born at Hamilton, Ont., Sept., 1844.

W. Whyte, Assistant to the President, C.P.R., at Winnipeg, Man., born at Charleston, Scotland, Sept. 15, 1843.

TRANSPORTATION APPOINTMENTS.

Canadian Northern Ry.—W. Pratt, jr., has been appointed Superintendent of Sleeping and Dining Cars and News Department. Office at Winnipeg, Man.

Canadian Pacific Ry.—J. Madill, heretofore in the city ticket agent's office, Toronto, has been appointed city ticket agent, and agent Dominion Ex. Co. at Windsor, Ont.

N. E. Brooks is appointed Superintendent of Maintenance of Way and Structures, Calgary and Edmonton lines, effective Aug. 1. Roadmasters and Bridge Building Master will report to him. Office at Calgary, Alta.

F. S. Bremer is appointed Trainmaster of the First District, vice J. R. Dalton, transferred. Office Moose Jaw, Alta. Effective Aug. 1.

Grand Trunk Ry.—S. B. Kramer, hereto-

fore Chief Train Dispatcher, has been appointed Master of Transportation, in charge of distribution of passenger and freight equipment, subject to instructions of the Car Service Agent. He will also have supervision

over train movement and perform such other duties as may be assigned him by the Superintendent. Office at Montreal.

A. J. Nixon is appointed Acting Chief Train Dispatcher, vice S. B. Kramer, promoted.

E. J. Hillard, heretofore chief clerk to F. J. Watson, Division Freight Agent, Montreal, has been appointed Travelling Freight Agent at Moncton, N.B. The position is a new one, and has some special importance, as Mon-

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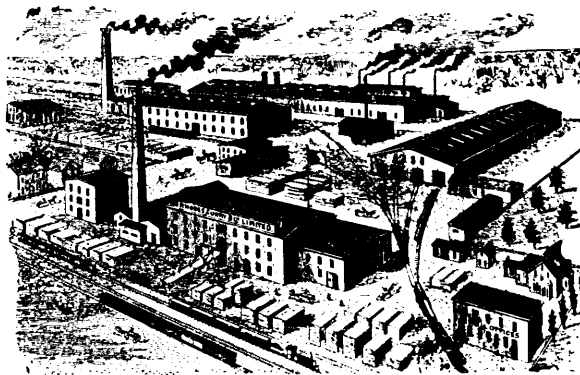
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ton will be the eastern terminal of the projected G.T. Pacific Ry.

R. C. Manson, heretofore Travelling Freight Agent Eastern division at Montreal, has been appointed chief clerk to F. J. Watson, Division Freight Agent, Montreal.

J. Edward, heretofore Contracting Freight Agent for the National Despatch Great Eastern line at Montreal, has been appointed Travelling Freight Agent Eastern division, succeeding R. C. Manson, promoted.

V. G. Snell has been appointed Contracting Freight Agent Eastern division at Montreal, succeeding J. Edward.

D. Morice, heretofore Terminal Superintendent at Toronto, has been appointed General Agent at Suspension Bridge, Ont., succeeding J. Beck, transferred to Black Rock.

Walter White, heretofore chief clerk to the Superintendent Middle division, has been appointed Terminal Superintendent at Toronto, vice D. Morice, assigned to other duties.

Ira W. Gantt, Division Freight Agent, Detroit, has been moved to Toledo, Ohio. Office Little Spitzer Building, Toledo, Ohio.

Milwaukee and Michigan Line and G. T. Despatch.—David Brown, heretofore first assistant General Traffic Agent G.T.R. at Chicago, has been appointed Manager Milwaukee and Michigan line and G. T. Despatch, succeeding C. Clarke and I. W. Gantt, resigned. Office Brush st. station, Detroit, Mich. The appointment is made jointly by the New York Central and Hudson River Rd., the West Shore Rd., and the G.T.R.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—J. R. Michaels has been appointed assistant Superintendent Minnesota division, main line. Office at Glenwood, Minn.

Montreal Street Ry.—D. McDonald has been appointed assistant General Manager of the M.S. Ry. and the Montreal Park and Island Ry., and will report direct to the Vice-President and General Manager.

Railway Equipment Notes.

The Mabou and Gulf Ry. has added a new locomotive and 11 hopper coal cars to its equipment.

The G.T.R. has added four locomotives to its equipment. These were built at its Point St. Charles shops.

The Intercolonial Ry. has placed orders for six second-class, vestibule sleeping cars, to be built in Canada.

The C.P.R., between July 16 and Aug. 11, ordered 10 first-class passenger coaches, to be built at its Hochelaga shops.

The Elgin and Havelock Ry. has added two locomotives to its equipment, and has had rebuilt two passenger cars and ten freight cars.

The Hiram L. Piper Co. (Ltd.), of Montreal, has issued its catalogue, no. 30, giving particulars of the different lines of railway, marine and electric supplies handled by it.

The Locomotive and Machine Co., of Montreal, has commenced building locomotives at its shops at Longue Point. The first locomotive is for British Columbia, and will be delivered in Nov.

The C.P.R. private car, Cornwall, part of the royal train, has been returned to Montreal, having been recently sent to Vancouver to bring the Crown Prince and Princess of Bavaria east.

The G.T.R. was reported to have placed orders for the construction of 19 new shunting engines of a specially powerful type at its Point St. Charles shops in U.S. papers, but we are officially informed that no orders have been placed.

The Intercolonial Ry. has received 135 box cars, 80,000 lbs. capacity, from Rhodes,

Curry & Co., Amherst, N.S.; and one conductor's van and 50 platform cars from its Moncton, N.B., shops; and 19 box cars, 60,000 lbs. capacity.

Rhodes, Curry & Co., Amherst, N.S., have received an order for the construction of 10 first-class vestibule passenger coaches for the Intercolonial Ry., and 100 flat cars for the Temiskaming and Northern Ontario Ry. Commission.

The B.C. Electric Ry. Co. has completed two cars for interurban service at its new shops at Vancouver, B.C. It is rebuilding one car, has two cars for its Vancouver line under construction, and proposes building six more cars for its city line. It has also completed a 40-ft. freight car with a 200 h.p. equipment.

The Stone and Webster Co., of Boston, Mass., has placed orders for large numbers of cars for its various lines, including three 20-ft. car bodies for the Cape Breton Electric Co., Ltd., of Sydney, N.S., and two 20-ft. car bodies for the Sydney and Glace Bay Ry. Company, Ltd., of Sydney, N.S. These orders have been placed in Canada.

In reference to the purchase of locomotives in Germany, Scotland and elsewhere, Sir Thos. Shaughnessy recently stated that the management of the C.P.R. are influenced by price, quality of workmanship and expedition in construction—especially at such a time as the present, when the traffic is expanding so rapidly, and it is difficult to find locomotive firms in a condition to complete large orders in conformity with type, which is a most essential matter, but that when the conditions were about equal, preference would undoubtedly be given to British builders.

The two simple consolidation locomotives being built at the Cooke Works of the American Locomotive Co., for the Sydney and Louisburg Ry., Sydney, N.S., for Oct. delivery, will weigh 184,000 lbs. each in working order, with 164,000 lbs. on the drivers, which are to be 50 ins. in diameter; cylinders 21 by 26 ins. The boiler will be straight, 72 ins. in diameter at the smallest ring, with firebox 96 ins. long, and 72 ins. wide. There will be 368 tubes, 2 ins. in diameter and 13 ft. 11 ins. long, to stand a working pressure of 200 lbs.; total heating surface in tubes and firebox, 2,849.36 sq. ft. The tender will be of the sloping back type, with a capacity for 4,000 gals. of water and 8 tons of coal.

The C.P.R. received the following equipment between July 16 and Aug. 11: 4 passenger locomotives from Scotland; 26 freight locomotives from the American Locomotive Co.'s Schenectady works; 3 switching locomotives from the company's Montreal shops; 2 dining cars from the United States; 2 first-class passenger cars and 24 refrigerator cars for service on passenger trains from Rhodes, Curry & Co., Amherst, N.S.; 84 box cars, 60,000 lbs. capacity, 23 refrigerator cars for freight train service, and 6 stock cars from the company's shops at Perth, Ont.; 90 flat cars, 60,000 lbs. capacity, from the Algoma Central and Hudson's Bay Ry. Co.'s shops at Sault Ste. Marie, Ont.; 14 flat cars, 60,000 lbs. capacity, built in Canada, and 12 vans from the company's shops at Farnham, Que.

Grain Elevator Notes.

The additional accommodation at the C.P.R. elevators at Fort William, Ont., will be completed in time for the handling of this season's crops.

The Prince Albert, Sask., Elevator Co. decided at its annual meeting recently held to sell its elevator by tender, to wind up its affairs, and dissolve the company.

The Canadian Elevator Co. has passed by-laws increasing the number of its directors

from five to six, and changing its chief place of business from Toronto to Winnipeg.

The Prescott, Ont., elevator was recently sold for \$28,000 to the Merchants Bank, which has a claim against the Elevator Co. The elevator and equipment originally cost \$150,000. The company is in process of liquidation.

The contract for the erection of the new conveyors at the C.P.R. elevators at St. John, N.B., to replace those burned at the fire, has been let to D. C. Clark, of St. John. The new conveyors will be constructed 12 ft. higher than the old ones, and the belts will be located 7 ft. further back from the face of the wharf than was the case before the fire.

The Hazledean Farmers' Elevator Co. has been incorporated under the Manitoba Companies' Act. It will carry on business at Hazledean siding, Man., with a capital of \$10,000. The incorporators are: J. McGill, J. E. Tampman, W. J. Renton, A. McGregor, C. H. Robinson, A. Craig, J. W. Disher, R. A. E. Gage and J. Renton, of Deloraine, Man.

The Montreal Harbor Commissioners are considering the advisability of collecting the penalty of \$100 a day from the contractors for the construction of the new elevator. The contract called for the completion of the work by Aug. 1, but a report presented to the Commissioners Aug. 10, shows that the work will not be completed for six or eight months. The contractors state that the Commissioners are responsible for the delay.

SHIPPING MATTERS.

List of Canadian Shipping.

The Department of Marine has just issued the list of vessels on the registry books of the Dominion corrected up to Dec. 31, 1902. Hitherto this list has only been published every three years, and consequently has not proved of that value to the shipping interest as it should have done. The annual issue of the blue book will be welcomed by shipping men all over the Dominion. There are some improvements that could be effected with advantage, notably the inclusion of particulars regarding the engines and boilers of steamers. This could be added without materially increasing the bulk of the volume. The total number of vessels on the books at that date, including old and new vessels, sailing vessels, steamers and barges, was 6,836 measuring 652,613 tons register tonnage, an increase of 44 vessels and a decrease of 11,870 tons register over 1901. The number of steamers on the books on the same date was 2,289, with a gross tonnage of 303,353 tons. Assuming the average value to be \$30 a ton, the value of the registered tonnage in Canada on Dec. 31 last, would be \$19,578,390. Following is a summary showing the number of vessels and number of tons on the books on Dec. 31, 1902:

	Sailing ships and steamers.	Steamers.	Gross tonnage steamers.	Net tonnage of sailing ships and steamers.
New Brunswick..	917	129	9,991	64,605
Nova Scotia	2,037	172	20,530	212,967
Quebec	1,288	363	77,860	1,36,660
Ontario	1,699	1,138	125,610	1,56,449
P. E. Island	156	16	3,272	13,464
British Columbia	584	359	55,050	58,292
Manitoba	139	97	7,030	7,536
Yukon district ..	16	15	4,010	2,640
Total	6,836	2,289	303,353	652,613

There are 75 ports of registry in the Dominion: 7 in New Brunswick, 21 in Nova Sco-

tia, 5 in Quebec, 36 in Ontario, 1 in Prince Edward Island, 3 in British Columbia, 1 in Manitoba, and 1 in the Yukon Territory. Quebec city has the largest number of vessels on its register, 654, of which 500 are sailing vessels; while Montreal has the largest tonnage, 91,347; and Toronto has the largest number of steamers registered, 240, an increase of 20 over the figures for 1901. Thirteen ports show no steamers on the registers.

The number of new vessels built and registered in the Dominion during last year was 316, measuring 30,216 tons register tonnage. Estimating the value of the new tonnage at \$45 a ton, it gives a total value of \$1,359,720 for new vessels. The new vessels were built and registered as follows:

	Vessels.	Tons.
New Brunswick	23	1,955
Nova Scotia	140	14,827
Quebec	36	1,990
Ontario	60	8,791
Prince Edward Island	8	530
British Columbia	39	2,550
Manitoba	10	137
Yukon district	3	330
	316	30,216

In point of ownership of net tonnage Canada stands eighth among the nations, those having over 100,000 tons being as follows:

British, including Canada and the colonies ..	10,475,229
United States	2,460,282
German	2,179,816
Norwegian	1,354,380
French	1,039,401
Italian	988,215
Russian	897,314
Canadian	652,613

Swedish	666,788
Spanish	585,449
Japanese	518,508
Dutch	482,138
Danish	460,911
Austrian	361,300
Grecian	360,592
Turkish	241,507
Brazilian	163,337
Belgian	118,015

Montreal Harbor Improvements.

An inspection was recently made by members of the Montreal Harbor Commission, a number of members of Parliament and others interested of the harbor improvement works now nearing completion at Montreal. The memorandum of information in regard to the works, prepared by the commissioners, shows that in 1888 a plan of the proposed works was made and approved. The works proposed included four piers opposite to the central part of the city and extension of wharves at Windmill point. The construction of the most easterly of the Hochelaga piers was practically finished by the fall of 1891. The easterly pier at Hochelaga has an extreme length of 641 ft., a breadth of 180 ft., and wharf frontage of 1,550 ft., including two short pieces of adjoining shore wharf. The construction of the most westerly of the piers was commenced in 1894, and was finished by midsummer 1895. It is 850 ft. long by 180 ft. wide, and has a frontage of 1,713 ft. The basins of both have a depth of 17½ ft. at low water. In 1900 the Dominion Government determined to build a high level pier at Hochelaga, between the two constructed by the Commissioners, and a by-law was passed giving permission for the building of the pier, the commissioners being in turn relieved from the construction of the two central piers.

When completed this pier will be 1,000 ft. long and 478 ft. wide. The contract was let to Poupore & Malone in 1900, and the work now is nearly completed.

In 1894 an extension of the Windmill Point Basin and wharf to its intended termination at the upper end was undertaken by the commissioners, and the work was carried on until it was brought to its present state in 1897. The improvement works in the centre part of the harbor, now near completion, were commenced on July 21, 1891, the dredging of the island shoals, and the formation of the embankment of the guard (now the Mackay) pier being the first work undertaken. By the fall of 1898 the Mackay pier had been extended to the Victoria Bridge, but not to its full height. In 1899 the raising of the embank-

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BOSTON TO LIVERPOOL Via Queenstown
BOSTON TO MEDITERRANEAN PORTS

MONTREAL TO LIVERPOOL

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

BOSTON TO LIVERPOOL

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

BOSTON TO MEDITERRANEAN

Vancouver	June 6th	July 18th	August 20th
Cambroan	" 20th	Aug. 8th	Sept. 10th

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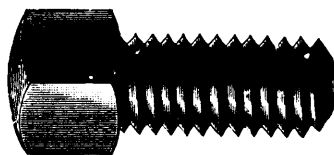
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ment was continued, and by the close of navigation of that year the whole pier had been finished, except a small part at the lower end, which has still to be slightly raised and levelled off. The total expenditure to that date on the Mackay pier was \$355,500, exclusive of the cost of the railway tracks now being laid upon the pier, of which the city has paid \$80,598.

On July 12, 1898, the sanction of the Minister of Public Works was given to the carrying out of the plan known as 12A 2, which provided for the demolition of the old wharves between the entrance to the Lachine canal and the Victoria pier, and the construction in their place of three high level piers of 300 ft. in width by 825 ft. to 1,014 ft. in length, with shore wharves of 210 ft. to 240 ft. in breadth. The plan also provided for the widening of Common and Commissioners streets to widths of from 80 ft. to 100 ft., and the placing of a wall between the street and the wharves for the protection of the city from floods, and for making the new wharves of such height as to join the streets directly without ramps.

The work of constructing the Jacques Cartier pier was commenced in 1898, and at the end of August, 1899, one ship's berth had been finished and put into use, and by the close of navigation the whole pier had been finished and put into regular service. In 1900 the shore wharf between Victoria pier and Jacques Cartier pier was built up to high water mark, and was finished and put into use early in the summer of 1901. In September, 1899, the construction of the Alexandra pier and the shore wharf between the pier and the canal was begun, and in October, 1900, a ship's berth of the new pier was ready for use. By the close of navigation in the same year the remainder of the pier had been completed, with the exception of levelling off part of the earthwork, which was done in the spring of 1901, and the whole pier was made ready for use by July 6.

The building of the King Edward pier and the shore wharf between that pier and the Alexandra pier, was commenced at the opening of navigation in 1901, and by its close more than half a mile of cribwork had been sunk. In the spring of 1902 work was resumed, and by May 15 500 ft. of one side of the pier was ready for use, and before the close of navigation all the pier, excepting about 500 ft. of the down-stream side had been put into use. Part of the concrete wall between the King Edward and Alexandra piers was built upon the cribwork in 1902, and the earth fillings behind the walls is now nearly completed. During 1902 cribs were also sunk and a concrete front wall built thereon above water for forming the shore wharf between the Jacques Cartier and King Edward piers, and a considerable quantity of earth filling was made behind the wall by derricks. Work was resumed upon this and the unfinished 500 feet of the King Edward pier early in the spring of the present year, and on June 15 the whole was ready to berth ships.

In 1902 an embankment of about 40 feet top width was made up to high level alongside the flood protection wall, and the two main railway tracks were taken from the low level and laid upon it. The widening of the railway bank and the general filling of the shore wharf was resumed in the spring of the present year, and practically the whole has now been raised to high level grade. The works under these plans are expected to be completed, except in some minor details, this year.

The Dominion Parliament has passed, at the current session, an act respecting the safety of ships, by which the deck loading in winter is prohibited. The act does not make any change in the law, but by certain alterations brings the Canadian act into textual agreement with the British act concerning deck loading.

Notices to Mariners.

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

No. 63. July 18.—Prince Edward Island—159. South coast, Crapaud road, buoyage.

No. 64. July 28.—Nova Scotia—160. South coast, Halifax harbor and approach, particulars of buoyage. 161. South coast, Sambro channel, particulars of buoyage.

No. 65. July 28.—British Columbia—166. Georgia strait, uncharted rocks off Sisters lighthouse. 167. Fisher channel, depth on Walbran rock.

No. 66. July 29.—Ontario—168. Lake Huron, Jennie Graham shoal, bell buoy established. 169. Lake Huron, Great Duck island, wharf on east side. 170. Lake Huron, north channel, Cockburn island, Tolmsville, light established.

No. 67. July 30.—Nova Scotia—173. South coast, Halifax harbor, Mauger beach, change in characteristic of fog signal. New Brunswick—174. Gulf of St. Lawrence, Miscou island, fog alarm again in operation.

No. 68. July 31.—Quebec—Gulf of St. Lawrence, Seven islands, Carousel island, light station, fog alarm established.

No. 69. Aug. 6.—Ontario—176. Lake Ontario, Toronto harbor approval, buoyage, general information. 177. Lake Ontario, Toronto harbor approach, off Lighthouse points, bellbuoy discontinued.

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

No. 31. Aug. 1.—St. Mary's river—1578. Middle Neebish cut clear of obstructions. Lake Ontario—1580. Olcott depths in channel and on bar.

No. 33. Aug. 15.—Lake Ontario—1680. New York, Oswego harbor, depth in outer harbor. St. Lawrence river—1681. Ogdensburg harbor, dredged channel.

The act respecting the encouragement of dry docks in Canada, by which the Government bonus has been increased to 3% for 20 years, to an amount not exceeding \$30,000 in any one year, has been passed by the Dominion Parliament.

Maritime Provinces and Newfoundland.

Capt. P. McKay, for many years trading between Maritime province ports and the West Indian islands, died at Sussex, N.B., recently.

The Springfield Steamship Co. has been authorized, under the New Brunswick Companies' Act, to increase its capital from \$12,000 to \$45,000.

The contract for the building of the warehouses on no. 4 wharf at Sand Point, has been let by the St. John, N.B., city council to G. S. Mayes, who is erecting the sheds on no. 3 wharf.

The Charlottetown, P.E.I., Board of Trade is negotiating with the Dominion Government with a view of securing a steamship service which will give two trips a day between Prince Edward Island and the mainland.

The str. Eldorado has reached Quebec from England, to take the place of the Norwegian str. Stord, which went ashore at Pointe des Montes, Que. The Eldorado will be used as a trading ship along the Labrador coast.

It is reported that Mackenzie, Mann & Co., of Toronto, will establish a steamship service on the Bay of Fundy and adjacent waters, on the completion of the Middleton and Victoria Beach Ry., which they have recently acquired.

The Dominion Government expedition to Hudson's Bay consists of 40 persons, including a scientific party of twelve under A. P. Low, of the Geological department. The

steamer Neptune sailed from Halifax, N.S., with the party, Aug. 15.

A company is being organized at Sydney, N.S., with a capital of \$1,250,000, with a view of constructing a graving dock there. The Boston Engineering Works is interested in the project, and proposes to establish a ship yard in connection with the dock.

The str. Queen, which was purchased at Montreal in 1902 and taken to St. John, N.B., this spring for the river trade, was burned at her wharf, Indiantown, N.B., July 28. She was valued at \$15,000, and was insured for \$4,500. The steamer will not be rebuilt.

Recent launches at Nova Scotia ship yards include a 200 ton schooner at Parrsboro, of which Rhodes, Curry & Co. (Ltd.), of Amherst, N.S., are part owners; a 270 ton schooner at Port Grenville, N.S., for Capt. Wasson, of Parrsboro; and a 536 ton barge, for the Cumberland Ry. and Coal Co.

The Department of Marine is considering tenders for the purchase of the str. Acadia. The Acadia was built in Pennsylvania, U.S., 1880, and has the following dimensions: length, 182.5 ft.; breadth, 23.6 ft.; depth, 18.7 ft.; tonnage: gross, 520 tons register, 354 tons. She was engaged in the lighthouse supply service.

D. McNicoll, Vice-President C.P.R., denies the press reports that the company is going to run a line of steamers between Halifax, N.S., and Great Britain. C. E. E. Usher, General Passenger Agent, and W. R. McInnes, Freight Traffic Manager, of the company, recently visited Halifax, and were making some investigations there.

The Hudson's Bay Company's str. Inenew, built at the Polson Ironworks, Toronto, in 1892, has met with several accidents since she left Toronto. Two occurred last year, repairs being at two points, and the Inenew wintered in St. John's, Nfld. This year a new captain and crew took charge, but the steamer met with another accident and is now back at St. John's.

The J. F. Bridges Tug Boat Co. (Ltd.) has been incorporated under the New Brunswick Companies' Act, with a capital of \$20,000, to carry on a towing and general navigation business upon the St. John river. The officers are to be at Gagetown, N.B., and the first directors are: J. F. Bridges, A. W. Ebbett, J. Chapman, J. F. McAllister, B. M. Dykeman, and H. B. Bridges.

It is expected that the str. Senlac will be launched at St. John, N.B., early in September. Her dimensions are: length, 187 ft., over all; breadth, 32 ft. 6 in.; depth of hold, 16 ft. 6 in.; and she will be fitted with fore and aft surface condensing engines, cylinders 20 in. and 40 in. diameter, by 30 in. stroke, to which steam will be supplied by two Scotch boilers, 10 ft. 6 in. diameter, by 12 ft. 6 in. long. The Senlac will trade from St. John to Yarmouth, N.S., and south shore ports.

Province of Quebec Shipping.

The Manchester Trader ran ashore on the southern shore of Anticosti island, but is reported uninjured.

The Quebec Harbor Commission is seeking Dominion aid in connection with the project for harbor development there.

The C.P.R. Atlantic steamship Manitoba went aground near Longueuil, Aug. 3, and was got off apparently undamaged.

The traffic passing through the Soulanges canal during May and June amounted to 83,927 tons, against 90,090 for the same period of 1902.

The Governor-in-Council has approved of the by-law of the Quebec Harbor Commission

prohibiting whistling by steamers while passing Quebec, except such whistles as are absolutely necessary for signalling, etc.

The floating elevator belonging to the Great Lakes and St. Lawrence Navigation Co. at Quebec, was burned out Aug. 6. The elevator cost \$22,000, and was repaired and improved at a cost of \$3,000 in the spring.

The Canadian Transit Co., which was incorporated under the Ontario Companies' Act, has been given a Dominion charter, the head office being fixed at Montreal. (Aug., pg. 289.)

The engineer to the Montreal Harbor Com-

mission has been instructed to revise the plans he had prepared for the construction of additional sheds on the wharves there. Mr. Kennedy desired to erect two storey sheds, but a number of the Commissioners object to anything except ordinary one storey buildings.

The number of ocean-going vessels arriving in Montreal for the season of navigation to July 31, was 388, having a tonnage of 922,911 tons, against 367 vessels of 726,868 tons in 1902. Of inland vessels there arrived within the same period 4,822 vessels, having a tonnage of 1,053,499 tons, against 4,122 vessels having a tonnage of 852,761 tons.

Ontario and the Great Lakes.

Capt. Wm. Boyd, late of the steamer White Star, and for 40 years a mariner on the Great Lakes, died in Toronto recently, aged 63.

Mrs. J. B. Symes, wife of Capt. J. B. Symes, of Sarnia, and sister of Capt. P. M. Campbell, of Collingwood, died at Sarnia, Aug. 6.

The G.T.R., it is reported, is investigating the possibility of establishing a line of steamers on the Upper Lakes with Goderich as the terminal port.

The Port Stanley Navigation Co.'s str. Winona will probably be placed on a run



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TORONTO and QUEBEC.

MANITOBA

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

CROPS.

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

STOCK.

Number of stock in the Province, July 1, 1902:

Horses 146,591	Sheep 20,518
Cattle 282,343	Pigs 95,598

Value of Dairy Products \$926,314

15,000 FARM LABORERS

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


MANITOBA FARMERS ARE PROSPEROUS.

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

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

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

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Or J. J. GOLDEN, Manitoba Emigration Agt., 617 Main St., Winnipeg, Man.



FARMING IN THE SOUTH.

The Passenger Department of the Illinois Central Railroad Company is issuing monthly circulars concerning fruit growing, vegetable gardening, stock raising, dairying, etc., in the States of Kentucky, West Tennessee, Mississippi, and Louisiana. Every Farmer or Homeseeker, who will forward his name and address to the undersigned will be mailed free, Circulars as they are published from month to month.

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

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"Niagara to the Sea."

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HAMILTON LINE

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

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

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

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

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

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from Wallaceburg to Sarnia, Windsor and Detroit twice a week.

It is reported that the Oakville Navigation Co. will cease operating after the close of the present season, and will hand over its wharf rights, etc., to the Lake Ontario Navigation Co.

W. Carmichael and F. A. Bassett, of Collingwood, Ont., are engaged in endeavoring to form a company to operate an additional line of freight and passenger steamers on Georgian Bay.

The traffic through the Cornwall canal on the St. Lawrence route for May and June is reported by the Department of Railways and Canals to have been 90,072 tons, against 23,599 in the same months of 1902.

The Huronic, Monarch and Empire will call regularly at the New Ontario dock, Sault Ste. Marie, Ont., instead of at the Union dock on the Michigan side of the river, and the Majestic will call at both docks.

The application to the Dominion Parliament for an act incorporating the St. Joseph Transportation Co., to construct a canal from St. Joseph on Lake Huron to Lake Erie, near Pelee Passage, has been withdrawn.

The Montreal Witness states that within two years the Canadian tonnage on the Great Lakes and rivers has increased over 100%. At the present time it is reported that there is great difficulty in securing trade for the steamers, particularly from the head of the lakes.

The Algoma Navigation Co. is negotiating for the construction of a new steel steamer for service between Owen Sound and Sault Ste. Marie, Ont. The plans show a steamer 190 ft. long, 34 ft. beam, with 50 state-rooms, giving accommodation for 110 passengers and 700 tons gross.

The Canada Atlantic Transit Co. has chartered the Chili for the season, thus making five steamers to carry wheat from U.S. upper lake ports to Depot Harbor, Ont. The Chili has a capacity of 150,000 bush., bringing up the carrying capacity of the company's fleet to 1,000,000 bush. every round trip, about ten days.

Replying to a question in the House of Commons the Acting Minister of Railways and Canals stated that \$3,907,577 had been expended upon the Trent Valley canal, and that he was not at liberty to say what work would be done in the future. The lift lock at Peterboro is expected to be ready early in Sept.

The Midland King, a new steamer for the Midland Navigation Co., was launched at Collingwood, Aug. 19. The new steamer is a sister ship to the Midland Queen, built in Dundee, Scotland, in 1901. Her dimensions are: length 375 ft., over all, breadth 48 ft., depth of hold 28 ft. She will have a capacity of 200,000 bush.

Jas. Reid, of Sarnia, Ont., has been fined \$376 by the U.S. Custom authorities for a breach of the law. During a fire at Port Huron one of the Reid tugs towed a lumber-laden scow from a burning saw mill at Port Huron, Mich., and towed it back again after the fire was out. The offence lay in not reporting arrival and clearance.

The Richelieu and Ontario Navigation Co.'s str. Hamilton struck a rock while running the Long Sault rapids near Cornwall, Ont., Aug. 12, and was beached to prevent sinking. The damage done was subsequently found to be very slight, and the Hamilton resumed her place in the service between Hamilton and Montreal a few days after the accident.

The project to operate one or more turbine steamers on Lake Ontario between Hamilton and Toronto appears to have taken shape, and application is reported to have been made

for the incorporation of a company. John Moodie is President, C. Birge Vice-President, and G. Hope, Treasurer of the provisional directorate, which is composed entirely of Hamilton men.

The str. Enterprise, owned by the Huntsville, Lake of Bays and Lake Simcoe Navigation Co., sank at her dock after landing an excursion at Barrie, Aug. 5. The Enterprise was built as a lumber carrier in 1869, and was some years later rebuilt as a passenger steamer. She was chartered for the season by R. A. Harris, of Atherley, Ont. The steamer will be raised and repaired.

The judicial committee of the Privy Council, in London, Eng., has confirmed the decision of the Supreme Court of Canada, holding that the \$3,500 collected from the Algoma Central Ry. Co. as duty on U.S. built str. Minnie M., on her being brought into Canada, was properly collected. The Exchequer Court had previously decided that the duty was not properly chargeable, as the Customs' Act did not specifically state that duty was chargeable, although the schedule fixed the amount.

The total freight passing through the Canadian and the U.S. canals at Sault Ste. Marie, in July, was 5,208,771 tons, against 4,524,578 tons in July, 1902. The figures for the Canadian canal are:

	1903.	1902.	Increase or Decrease.
April	159,763 tons	190,926 tons	31,163 tons --
May	636,747 "	314,292 "	322,455 " +
June	917,195 "	1,118,594 "	201,459 " --
July	890,338 "	523,936 "	366,402 " +
	2,603,953 tons	2,147,688 tons	456,265 tons +
	+ increase.	-- decrease.	

The International Transit Co., Sault Ste. Marie, Ont., failed in its application to secure an injunction to compel the Hiawatha Navigation Co. to permit the landing of the I. T. Co.'s str. Fortune at its dock at Kensington Point, near Desbarats, Ont. The H.N. Co. had two steamers employed to carry passengers at \$1 each from Sault Ste. Marie, to witness the Indian play Hiawatha as produced by the Indians under C.P.R. auspices, and the Fortune was put on the run to carry passengers at 50 cents a head. The H.N. Co. refused to grant dock privileges to the competing boat, hence the action.

The Neebing Navigation Co. (Ltd.) has been incorporated under the Ontario Companies' Act, with a capital of \$25,000, to carry on a general navigation business on the Great Lakes. G. T. Marks, H. A. Wiley and F. S. Wiley, of Port Arthur, Ont., are the directors of the company, which will have its head office at Port Arthur. A new steamer, the Neebing, has been launched at Newcastle-on-Tyne, Eng., for the company. She has the following dimensions: length, 256 ft.; breadth, 42 ft.; depth, 25 ft.; and will carry 3,000 tons on a draft of 18 ft. The Neebing is expected to reach Port Arthur with a cargo of steel rails early in Sept.

The new steel freight str. Tadousac for Waldie and Wright, of Toronto, was launched Aug. 12, from the yards of the Bertram Engine Works. The steamer was named by Miss M. Waldie, daughter of one of the owners. Not only is the hull of the new steamer constructed of steel, but the cabins, pilot house and other structures on the deck are constructed of the same material. Very little woodwork, indeed, has been used in the vessel. Her dimensions are: length, 260 ft.; breadth, 43 ft.; depth, 28.6 ft. She is fitted with triple expansion engines, to which steam will be supplied by two Scotch boilers, each 11 ft. 6 in. by 12 ft., at a pressure of 180 lbs. to the square inch. It is calculated that her speed will be about 15 miles an hour. On a draft of 17 ft. 10 in. she will carry a cargo of 120,000 bush. It is expected that the Tadou-

sac will be on the Montreal-Port Arthur route early in Sept.

G. McFarlane, of Brown, McFarlane & Co., Glasgow, Scotland, is negotiating with the C.P.R. with a view of fitting up the company's lake steamers with turbine engines. Mr. McFarlane said engines constructed on the turbine principle were most suitable for lake boats, the many advantages, among others, being the absence of vibration, the small space occupied by the engines, the economy in tube, the light weight in the machinery, as compared with reciprocating engines. All the above conditions go to make the highest speed. There are two boats on the Clyde—the King Edward and the Queen Alexandra—that have been running for two years, in which turbine machinery has been used. These boats have given the utmost satisfaction. It was first thought that it would be impossible to stop at so many piers, with screws instead of paddles, but in practice that theory has been quashed.

The U.S. Government held an investigation at Ogdensburg with a view of forming an opinion on the proposed construction of a dam on the St. Lawrence between Adams and Galoup islands, by the Dominion Government. Finding that strong cross currents interfered with traffic in the recently completed new channel near this point by forcing many vessels aground, the Dominion Government petitioned the U.S. government for permission to construct a dam 300 feet long at low level to obviate the difficulty. A. W. Fraser, counsel for the Canadian government, T. S. Rubidge, superintending engineer of the Canadian canals, and his assistant A. L. Kellaly, of Cornwall; J. C. Quintos, assistant engineer, of Oswego, N.Y.; Geo. R. Malby, representing the George Hall Coal Company, and the Ogdensburg Coal and Towing Company, and other representatives of U.S. forwarders appeared in favor of the plan. It was opposed by Allan Dawson, owner of Galoup Island, who claimed that the erection of the dam would raise the water level three feet, causing a strong current, and also that the water would overflow about 60 acres of the island. Mr. Dawson filed an objection to further proceeding before Major Bingham. The opposition was subsequently withdrawn, and the Secretary of War has given his approval to the construction of the dam, as he was authorized by act of congress.

Manitoba and the Northwest Territories.

A new steamer, named the Pathfinder, was launched at Prince Albert, Sask., for Capt. Deacon, Aug. 5.

The Red River Navigation Co. has been incorporated under the Manitoba Companies' Act, with headquarters at Winnipeg, and a capital of \$20,000, to carry on a general navigation business. The incorporators are: D. E. Sprague, I. M. Ross, J. McDiarmid, L. Bellefeuille and Hon. R. Rogers, all of Winnipeg.

D. D. Mann recently stated that the Canadian Northern Ry. Co. would have its railway to Chesterfield Inlet, on Hudson's Bay, in two or three years, and that it would export grain by that route, having large storage elevators there. Hudson's Bay is situated between the parallels of 51 degrees and 64 degrees north latitude, and is, therefore, well outside the Arctic zone, and lies between the meridians of 78 degrees and 95 degrees west longitude. It is about 1,000 miles in length from north to south, and is from 600 miles wide, and covers an area of nearly 600,000 square miles. It has a depth of 420 ft., there being very little variation from this depth in any part of the bay. The principal and, as far as we know at present, the only practicable approach to the Bay in a ship, is through Hudson's Strait, a deep channel about 500 miles in length,

which separates Labrador from the islands of Arctic America. The strait has an average breadth of about 100 miles, but the width in the narrowest part of the channel is not more than 45 miles. The soundings in the strait vary from 900 to 1,800 feet, and it is wonderfully free from shoals or rocks, or any other obstacles which would tend to make the navigation of a narrow channel more than ordinarily dangerous. The Hudson's Bay Company's ships have navigated the bay and straits for the last 250 years. A port on the west shore of Hudson's Bay, at the mouth of the Churchill River, would be nearer to Liverpool, the great mart of the world, than is Montreal or New York, and a railway from Winnipeg or Regina to Hudson's Bay would bring the Northwest 1,000 miles closer to Liverpool than it is at present day via the Great Lakes and Montreal. The Canadian Government is sending a new expedition to the bay for general investigation.

B.C. and Pacific Coast Shipping.

The Puget Sound str. La Conner was burned recently in Burrough's Bay. The total loss will be about \$20,000.

Capt. J. Gosse, of the C.P.R. str. Princess May, has been appointed a member of the board of Nanaimo pilots, succeeding the late Capt. Bendrostr.

Capt. Walbran, who recently retired from the command of the Dominion cruiser Quadra, was presented with a silver-mounted walking stick by the members of the crew.

The Dominion Parliament has passed an act incorporating the Columbia River Improvement Co., with power to carry out works for the improvement of navigation on the Columbia river.

The Vancouver str. Saga, built at Gothenburg, Sweden, in 1876, was recently sold by

the sheriff for \$800. The steamer has not been operated for a long time, and will now be broken up.

Vancouver merchants propose guaranteeing \$1,250 a year, for five years, for a steamer service between the city and the northern ports of Vancouver island, in opposition to the present service of the Union Steamship Co.

The North Vancouver Ferry and Power Co. has taken over the ferry service at North Vancouver. The existing steamer will be kept on the service at present, and a new one will be added in 1904. A. St. G. Hamersley is manager.

The stern wheel str. Walsh, built for the C.P.R. service on the Stikine river during the early rush to the Klondike, was burned at Sidney recently. The steamer has recently been engaged in the excursion trade from Spokane, Wash., for U.S. owners.

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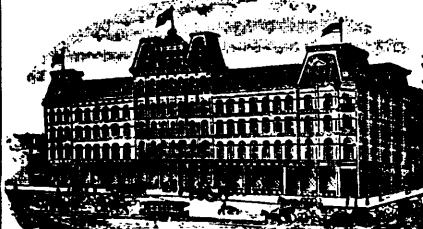
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Richard Southam
Manager

The reports of the Grand Trunk Pacific Ry. surveyors respecting the harbor at Port Simpson, to which point the new transcontinental railway will be carried, confirm all former reports as to its suitability for navigation, and as the ocean terminal of a railway. The present population is about 800, mainly Indians.

The C.P.R. and the Victoria Board of Trade have joined in advocating the dredging of the Victoria harbor to a depth of 16 ft. at low tide. At some points there is now only 11 ft. of water at low tide, and at others vessels drawing 13 ft. 6 in. find a difficulty in navigating. The attention of the Dominion authorities has been drawn to the matter.

Among the Express Companies.

The Canadian Northern Ex. Co. has extended its service from Neepawa to McCrea, Man.

The Canadian Northern Ex. Co. has opened a branch office in the Grain Exchange, Winnipeg.

The Dominion Ex. Co. has opened offices at Clandeboye and Grande Point, Man.; and Millbridge, Ont.

The Newfoundland Ex. Co. is now a party to present classification and supplement of the Canadian Ex. Co.

A daily service is now operated by the Canadian Northern Ex. Co. between Winnipeg and Port Arthur on the new train, the "Lake Superior Limited."

Until further notice agents of the Dominion Ex. Co. will not issue money orders payable at points of lines of Maritime Ex. Co. located on the Nova Scotia Central Ry.

A petition is being signed in Vancouver, B.C., asking for the pardon of W. J. Sloan, late agent of the Great Northern Ex. Co. there, now undergoing a sentence of imprisonment for embezzlement.

G. Henderson, agent of the Dominion Ex. Co. at Windsor, Ont., who succeeded B. Holman, now awaiting trial on a charge of embezzling \$800, has also got his accounts in disorder, and an auditor is straightening them out.

The British America Ex. Co. has retired from all steamship lines on the Great Lakes, and the Canadian Ex. Co. announces that all matter for points reached by that company's routes on steamships should be routed via North Bay, Ont.

Telegraph and Cable Matters.

The Canadian Northern Telegraph Co. has opened an office in Carberry, Man.

The Canadian Northern Telegraph Co. has opened an office in the Grain Exchange Building, Winnipeg.

The act incorporating the Marconi Wireless Telegraph Co. of Canada has been passed by the Dominion Parliament.

The C.P.R. Telegraph department has closed its offices at West Robson, B.C.; Stelarton, N.S.; Creighton and Corunna, Ont.

The Canadian Northern Telegraph Co. has moved into its new offices on the north-west corner of Portage Avenue and Main st., Winnipeg.

J. Kent, manager of Telegraphs, C.P.R., stated in Winnipeg that new copper wires are being strung from Winnipeg to Brandon, Nipinka and Minnedosa, Man., and from Calgary to Edmonton and Macleod, Alta.

The Dominion str. Tyrian has completed laying the cable between Eastport, Me., and Grand Manan Island, N.B. Three breaks

were found in the nine miles of old cable, which was taken up, and five miles of new cable were spliced in.

The county court judge of Grey has decided that the C.P.R. telegraph does not come within the clause exempting C.P.R. property from taxation in Owen Sound, Ont., under the local agreement, and fixed the value of the poles, wires, etc., at \$100.

C. H. Reynolds, of London, Eng., manager for the Pacific Cable Board, has completed an inspection of the British Columbia terminals of the cable, and sailed on the cable steamer Iris to inspect the Fanning Island, Suva and other stations on the Pacific ocean.

The C.P.R. telegraph department has laid about 45 miles of cable from the Bamfield creek cable station, Vancouver island, to Alberni, B.C. This cable will replace a land line used in connection with the all-British trans-Pacific cable, which caused considerable trouble during the winter.

New machinery is being installed at the Marconi wireless telegraph station at Glace Bay, N.S. The station has not been opened for the transmission of messages, the official statement made being that the recent discoveries made have simplified the method of transmission considerably.

The residents of a number of places in Newfoundland are complaining that the Government administration of the telegraph service is not equal to what it was before it was taken over. Some important lines are reported to have been interrupted for ten or twelve days without any attempt made to make repairs.

The cable companies owning the Atlantic cables charge one shilling for service indications on each message to be sent over the all-British trans-Pacific cable, in addition to the regular charge a word, while no charge is made by the Pacific Cable Board for service indications on messages transmitted over its cable for other lines.

The House of Commons has passed a resolution for the purpose of aiding the establishment of a cable news service between Great Britain and Canada. The amount voted is \$15,000 a year for two years; \$10,000 a year for the succeeding year, and \$5,000 for 1907-08. The service to be provided is to be open on equitable terms to all papers in Canada.

At the annual meeting of the stockholders of the New Brunswick Electric Telegraph Co. held Aug. 10, at the company's office, Rothesay, the accounts were submitted and found satisfactory, and a dividend of 4½% was declared for the past six months. The retiring board of directors was re-elected. The officers and directors are: President, L. J. Almon; Secretary, P. C. Dawson; other directors—J. J. Tucker, A. O. Earle, Jas. Kennedy.

The C.P.R. Telegraph department has opened the following offices: Castlegar, Field hotel and Glacier, B.C.; Altamont, Baldur, Beaver, Belmont, Elgin, Eli, Fairfax, Hilton, Letellier, Lenore, Margaret, Miami, Minto, Myrtle, Minette, Oakville, Roland, Roundthwaite, Rosebank, St. Agathe, St. Jean, Sinnot, Solsgrith, Somerset, Swan Lake, Treesbank and Underhill, Man.; Bowden, Crossfield and Thomkins, Northwest Territories; Londonderry, N.S.; Rondeau, Ont.; Angers, Que.

The following sums have been voted by the Dominion Parliament for maintenance and extensions of the Government telegraph lines during the current year: Maritime Provinces—Prince Edward Island and mainland, \$2,000; St. Peters to Louisburg, N.S., with extension to Scatari island lighthouse, St. Peters to Louisburg and Scatari island, extensions

Gabarouse to North Sydney, N.S., \$18,000; St. Peters to Canso, telegraph line and cable between Port Mulgrave and Port Hawkesbury, \$10,000; land and cable lines Gulf of St. Lawrence, etc., including maintenance of Marconi station at Belle Isle, \$80,000; compassionate allowance to Capt. T. Bouchard on account of wreck of his schooner while on service for the telegraph department, \$347.08. Quebec—Improving roadways in Quebec eastward of Godbout, along telegraph lines, \$1,000; Belle Isle, telegraph line between extreme ends of island, \$5,000; Magdalene islands, land lines, renewal of wiring, \$2,000; Byron island, Magdalene islands, and Anticosti cable connection, balance due, \$36,782; lines on north shore St. Lawrence, revote of lapsed amount, \$12,041.57; cable between Amherst and Grindstone island, Magdalene islands, \$3,789.84. Ontario—Peele island to mainland, to cover Governor-General's warrant, \$3,500. Northwest Territories—General, \$20,000; extension of St. Albert-Riviere qui Barre telephone line to Alexander Indian agency, \$500. British Columbia—General, \$15,000; Quesnel-Atlin services, Port Simpson, Hazelton, 150 Mile House, Quesnel Forks, Horsefly branches, \$20,000; Alberni-Clayoquot line, to complete payments, \$1,050. Yukon—Ashcroft-Dawson line, construction, \$121,000; working expenses, including works of reconstruction, \$123,000; to cover special warrant of Governor-General, \$52,418.

General Telephone Matters.

The Bell Telephone Co. is putting a number of its lines in Winnipeg underground.

The Bell Telephone Co. is installing a metallic circuit on its Parry Sound, Ont., line.

The Bell Telephone Co. is stringing a new line between Richmond and Kingsbury, Que.

The Ottawa city council has decided by a vote of eight to seven not to re-open negotiations with the Bell Telephone Co.

The Bell Telephone Co. is establishing a line connecting Blyth, Auburn and Belgrave, Ont., with exchanges in these villages.

The New Brunswick Telephone Co. has completed soundings in the harbor prior to laying a cable between St. John and Carleton.

The Bell Telephone Co. has constructed a small breakwater at the Richmond, Que., bridge, in order to protect its line at that point.

In connection with the extension of the Government line from Edmonton, Alta., a calculagraph has been installed to time conversations.

A company has been formed with the title of the Manitou Telephone Co., and a capital of \$25,000, to construct a telephone line from Wabigoon, Ont., into the Manitou mining country.

The Woodstock, Ont., town council has extended the franchise of the Bell Telephone Co. for five years, without rental for use of streets, the company agreeing to put its lines underground.

The proposal to improve the telephone service in Truro, N.S., and to charge increased rates has not met with approval, and the Nova Scotia Telephone Co. has informed the Truro Board of Trade that the position of affairs will remain as at present.

A. Stark, of Toronto, who is the inventor of a new telephone system, is endeavoring to secure the interest of the Hamilton and Kingston, Ont., councils, in order to have it adopted for lines in those cities.

The State Line Telephone Co. has been incorporated at Albany, N.Y., to operate a tele-

phone line connecting Albany, New York city, Syracuse, Rochester, Buffalo, and other places in the state, and in Canada. The capital is \$1,000,000.

The Canadian Telephone Co.'s application to the Dominion Parliament for an act of incorporation has been passed by the House of Commons. A clause has been added to prevent amalgamation with the Bell Telephone Co., and another permitting the company to make agreements with local companies for the interchange of business.

The Bell Telephone Co. has concluded an agreement with the Hamilton, Ont., city council for a renewal of its franchise for a further period of five years. It is given permission to erect poles, etc. with the consent and under the supervision of the city engineer, the company to pay \$1,450 on the execution of the agreement, and \$2,900 a year for five years, in quarterly payments of \$725 in advance, the first payment to be made on Sept. 1, 1903. The new terms include house telephones on party lines of four with 100 free calls a month; other clauses provide that the central energy system is to be installed within a year, when the reduction is to come into effect.

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PURCHASING AGENTS' GUIDE.

(Continued from third page of Cover.)

Station Name Signs	
Acton Burrows Co	Toronto.
Steamboats	
Polson Iron Works	Toronto.
Steamboat Signs	
Acton Burrows Co	Toronto.
Steam Couplers	
Safety Car Heating and Lighting Co.	New York.
Steam Shovels	
James Cooper	Montreal.
W. H. C. Mussen & Co.	Montreal.
Steel	
James Cooper	Montreal.
B. J. Coghlin & Co.	Montreal.
Wm. Jessop & Sons	Sheffield, Eng.
Rice Lewis & Son	Toronto.
Steel Buildings	
Dominion Bridge Co.	Montreal.
Steel for Springs	
James Hutton & Co.	Montreal.
Steel Plate	
Jas. W. Pyke & Co.	Montreal.
Steel Tyres	
B. J. Coghlin & Co.	Montreal.
James Hutton & Co.	Montreal.
Latrobe Steel Co.	Philadelphia, Pa.
Jas. W. Pyke & Co.	Montreal.
Structural Metal Work	
Dominion Bridge Co.	Montreal.
Locomotive and Machine Co. of Montreal	Montreal.
Jas. W. Pyke & Co.	Montreal.
Studs, Engine and Binder	
John Morrow Machine Screw Co. (Ltd.)	Ingersoll
Switches	
Montreal Steel Co.	Montreal.
Switch Lamps	
The Hiram L. Piper Co.	Montreal.
The N. L. Piper Railway Supply Co.	Toronto.
Switch Ropes	
The B. Greening Co.	Hamilton, Ont.
Switch Targets	
Acton Burrows Co	Toronto.
Tanks and Tank Fixtures	
Ontario Wind Engine and Pump Co.	Toronto.
Telegraph and Telephone Office Signs	
Acton Burrows Co	Toronto.
Tie Plates	
B. J. Coghlin & Co.	Montreal.
Tobacco and Cigars	
The Hudson's Bay Company.	
Tollet Paper	
The Hudson's Bay Company.	
Tools	
Rice Lewis & Son	Toronto.
Track Jacks	
James Cooper	Montreal.
W. H. C. Mussen & Co.	Montreal.
A. O. Norton	Coaticook, Que.
Track Tools	
Canada Switch and Spring Co.	Montreal.
James Cooper	Montreal.
Rice Lewis & Son	Toronto.
W. H. C. Mussen & Co.	Montreal.
Tramway Equipment	
James Cooper	Montreal.
W. H. C. Mussen & Co.	Montreal.
J. J. Gartshore.	Toronto.
Trucks (Electric Car)	
Baldwin Locomotive Works	Philadelphia, Pa.
Montreal Steel Co.	Montreal.
Trucks (Warehouse and Express)	
Rice Lewis & Son	Toronto.
Turntables	
Dominion Bridge Co.	Montreal.
Varnishes	
McCaskill, Dougall & Co	Montreal.
Vessels	
Polson Iron Works	Toronto.
Waste	
B. J. Coghlin & Co.	Montreal.
Rice Lewis & Son	Toronto.
N. L. Piper Ry. Supply Co.	Toronto.
The Queen City Oil Co	Toronto.
Wheelbarrows	
James Cooper	Montreal.
Rice Lewis & Son	Toronto.
Windmills	
Ontario Wind Engine and Pump Co.	Toronto.
Window Blinds	
The Hudson's Bay Company.	

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Wire & Wire Rope	
Dominion Wire Rope Co.	Montreal.
The B. Greening Co.	Hamilton, Ont.
Rice Lewis & Son	Toronto.
W. H. C. Mussen & Co.	Montreal.
The Wire and Cable Co.	Montreal.
Wire, Brass and Steel	
Dominion Wire Manufacturing Co.	Montreal.
Wire Cloth	
The B. Greening Co.	Hamilton, Ont.
Wire, Copper	
Dominion Wire Manufacturing Co.	Montreal.
E. F. Phillips Electrical Works, Ltd.	Montreal.
The Wire and Cable Co.	Montreal.
Wire, Electric	
Dominion Wire Manufacturing Co.	Montreal.
E. F. Phillips Electrical Works, Ltd.	Montreal.
The Wire and Cable Co.	Montreal.
Wire Goods	
Dominion Wire Manufacturing Co.	Montreal.
Wire, Insulated Copper	
E. F. Phillips Electrical Works, Ltd.	Montreal.
The Wire and Cable Co.	Montreal.
Wire, Telegraph and Telephone	
Dominion Wire Manufacturing Co.	Montreal.
E. F. Phillips Electrical Works, Ltd.	Montreal.
The Wire and Cable Co.	Montreal.
Wire, Transmission and Trolley	
Dominion Wire Manufacturing Co.	Montreal.
The Wire and Cable Co.	Montreal.
Wood Screws	
Dominion Wire Manufacturing Co.	Montreal.
Yachts	
Polson Iron Works	Toronto.

The G.T.R. and the Toronto Junction Stock Yards.—The opening of the Union Stock Yards at Toronto Junction, Ont., has led to some differences between the stock-dealers and the G.T.R. The dealers allege that the G.T.R. is discriminating against the yards at Toronto Junction and giving an undue preference to the yards in Toronto. The G.T.R. sent out the following circular: "Live stock tendered for transportation to Toronto Junction at any station must be receipted for only to Toronto, and not to any particular cattle market; on such our delivery will be to the Western Cattle Market, where shippers must have delivery. Our cars must be unloaded there, and shippers who consigned stock to the Union Stock Yards must either drive them over or reshipe them. G.T.R. cars will not under any circumstances be furnished for reshipping to Junction Stock Yards. If shippers insist on originally consigning stock to the Junction yards, it must be explained to them that there are no unloading facilities there." Writs have been issued by a number of the dealers asking damages for "wrongfully, wilfully and maliciously detaining cattle delivered by them to the company as common carriers."

Intercolonial Ry. Statistics.—A return presented to the House of Commons recently showed the number of I.C.R. freight cars in use on March 1, 1902, to be 1,012, and the number of days in use 13,100. On the same day in 1903 the number was 1,522, and the days in use 14,942. Of cars of other roads in use on the I.C.R. for the two years the numbers respectively were 548 and 771. The number of ties actually used on the I.C.R. between June 30, 1902, and April 1, 1903, charged to ordinary maintenance, was 543,721. The number purchased in the same period was 175,438, at prices ranging from 15 to 24 cents for hemlock, 18 to 20 cents for spruce, 25 to 28 cents for tamarac, 17 to 25½ cents for cedar, 20 cents for ash; and 20 to 27 cents for pine.

The hackmen of Montreal having failed in their endeavor to compel the Montreal Street Ry. Co. to cease running observation cars for tourists and other sightseers, propose bringing individual actions for damages for loss of trade.

The Purchasing Agents' Guide

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

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

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Hudson's Bay Company

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