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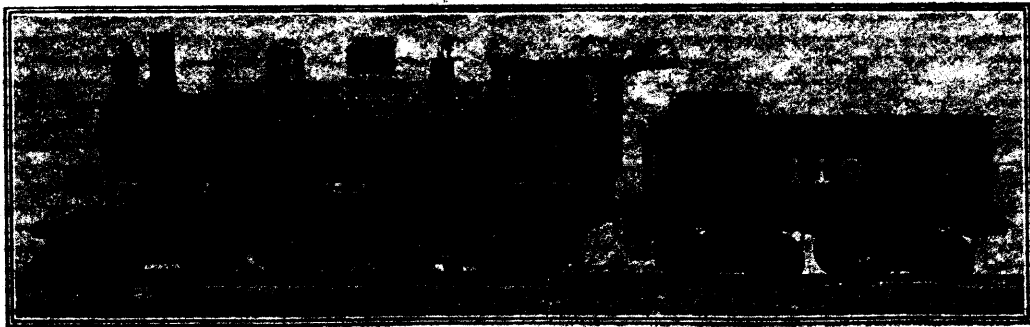
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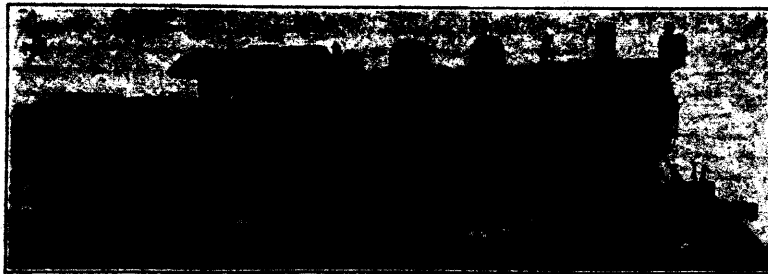
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## RAILWAY DEVELOPMENT.

### Projected Lines, Surveys, Construction, Betterments, Etc.

**Alaska.**—G. W. Dickenson is reported to have secured the capital to construct the Alaska Central Rd., from Resurrection bay to Atwood, on the Tanana river, 415 miles. It is said that it is expected to complete 115 miles this year. G. W. Dickenson is President and General Manager, and C. H. Anderson, Chief Engineer, Seattle, Wash. (Nov., 1902, pg. 380.)

**Algoma Central and Hudson's Bay Ry.**—C. Shields, the newly appointed President of the Consolidated Lake Superior Co., has had a conference with T. Foley, of Foley Bros., Porter & Whalen, the St. Paul, Minn., contractors, who objected to the payment of subsidies by the Dominion Government to the A.C. and H.B. Ry., until their claims for work done on 100 miles of grade had been settled. The matters in dispute were talked over, and press reports state that the objections have been withdrawn. (Feb., pg. 37.)

The Railway Committee of the Privy Council has granted permission to the Company to cross several highways in Sault Ste. Marie, and the townships of Korah and Tarentorus. No definite announcement has been made with reference to the work for the ensuing season, but it is expected that track will be laid on the grade completed to Pangissin, and that the bridges and other work on the grade to the junction with the line from Michipicoten will be completed and track laid. (Mar., pg. 93.)

**Atlantic, Quebec and Western Ry.**—The Quebec Legislature has passed an act giving an extension of two years for the commencement of the projected line from Gaspé Basin, via the York river valley to the Intercolonial Ry., near Causapsal, Que. Some objection was made to the passing of the act, on the ground that the promoters only desired to construct a short line to some oil wells in which they are interested, and only proposed the larger scheme in order to obtain Government subsidies. The proposed junction with the I.C.R. has not been decided on, but we are informed that it will probably be at Amqui, 14 miles easterly from Causapsal, and the line will be constructed in nearly a straight line to Gaspé Basin, about 120 miles. (Mar., pg. 93.)

**The Avondale-Brandon Central Ry. Co.** is the title under which the applicants for an act to incorporate the Manitoba Central Ry. Co. were authorized to do business at the last

session of the Manitoba Legislature. (April, pg. 119.)

**Bay of Quinte Ry.**—The Railway Committee of the Privy Council has decided that the short line from Napanee to Deseronto shall be taken under the G.T.R. in Napanee by a subway, and will consider the question of the apportionment of the cost of the same. The B. of Q. Ry. estimates the cost at \$68,000; but the G.T.R. officials say they will construct a subway to the satisfaction of the Gov-

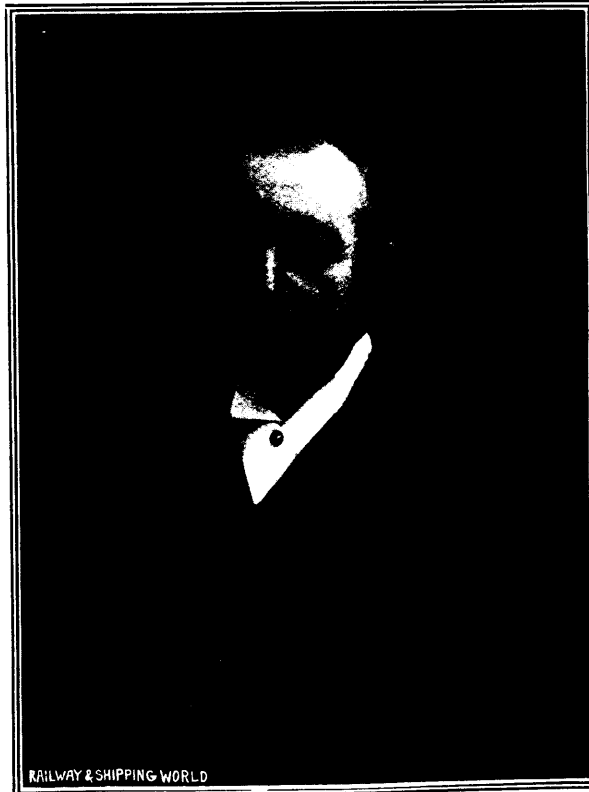
ter of Railways \$50,000, to be divided pro rata among the unsecured creditors of the line. Power is also asked to construct a bridge over the St. Lawrence at Brockville, so soon as the necessary powers to do so are obtained in the United States. Mr. Cooper is one of the largest of the judgment creditors of the B.W. and S.S. M. Ry. Co., and is interested in the action now before the courts asking that the recent sale of the line to the reorganization syndicate in New York be set aside. (Feb., pg. 37.) See also Brockville, Westport and Sault Ste. Marie Ry., Mar., pg. 93, and April, pg. 140.

**Canada Atlantic Ry.**—The Ottawa city council has passed the necessary by-law diverting certain streets prior to the construction of the subway on Elgin st. The cost of the subway will be about \$51,000, and will be borne by the C.A. Ry., the C.P.R. and the Ottawa Electric Ry. in equal proportions. (Feb., pg. 37.)

**Cape Breton Ry.**—Tracklaying will be resumed on an early date on the six miles of grade from Sporting Mountain to St. Peters, N.S., which will complete the line from Point Tupper to St. Peters, 31 miles. Press reports say it is expected that construction will be commenced this year on the extension of the line from St. Peters to Louisburg. (Feb., pg., 38.)

The Provincial Engineer of Nova Scotia, Dr. Murphy, in his report for the year ended Sept. 30, 1902, states that up to that date 25 miles of main track and 4 miles of sidings had been laid. There are eight steel bridges on the line between Point Tupper Jct., and St. Peters, viz.: 1 four span deck plate girders, 85 ft., over the River Inhabitants; one span half-through plate girder bridge, 54 ft., at River Inhabitants; one span, deck plate girder bridge, 33 ft., at Shoal lake; one span similar style and size at Bear Creek, and one span similar style, 73 ft., at River Tillard. These bridges are erected on concrete abutments and piers. There are also 26 concrete arch culverts and 55 cedar box culverts. The table of gradients

shows: 3.62 miles level, under 10 ft. a mile, 0.88 miles ascending from I.C.R., 2.64 miles descending; under 20 ft., 2.12 miles ascending, 1.80 miles descending; under 30 ft. a mile, 1.42 miles ascending, 2.82 miles descending; under 40 ft. a mile, 2.20 miles ascending, 0.66 miles descending; under 50 ft. a mile, 2.58 miles ascending, 0.19 miles descending; under 55 ft. a mile, 3.31 miles ascending, 3.56 descending; under 60 ft. a mile, 0.13 miles ascending, 0.29 miles descending; under 70 ft. a mile, 0.34 miles ascending, 0.19 miles descending; under 80 ft.



CHARLES FULLER GILDERSLEEVE,  
President Dominion Marine Association, and General Manager Richelieu  
and Ontario Navigation Co.

ernment surveyors for \$27,000. (Mar., pg. 93.)

**Brockville and Western Ry. Co.**—J. Cooper, F. W. Fairmain, A. E. Hanna, J. J. Rosevear, A. C. Bourne, of Montreal, and W. J. Webster are applying at the current session of the Dominion Parliament for incorporation under this title, to enable them to acquire the Brockville, Westport and Sault Ste. Marie Ry., or any of the bonds or other securities thereof, and to complete the line. The applicants propose, in the event of their purchasing the railway, to pay to the Minis-

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Niagara Frontier Summer Rate Committee.

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Railway Development.

(Continued from page 145.)

a mile, 0.55 miles ascending, 1.45 miles descending. The table of alignment shows 18 miles on 61 tangents, and 12.75 miles on 64 curves. The greatest curvature is 8.30°, of which there is 0.66 miles, and is situated in the terminal station ground at Point Tupper. During the year \$45,000 was paid on account of the subsidy of \$99,200.

Carbonear to Heart's Content, Nfld.—The Newfoundland Government is considering the advisability of extending the railway from Carbonear to Heart's Content, about 15 miles. An act authorizing this extension has been passed.

Central Ontario Ry.—Press reports state that work will be commenced this spring on an extension of the line from Bancroft to Whitney, Ont., 40 miles. We are officially advised that it is not known when work will be started on the extension. (Aug., 1902, pg. 263.)

Chateauguay and Northern Ry.—The Quebec Legislature has passed an act amending the act of incorporation and extending the time limit for the construction of the line from Montreal to Joliette, 36 miles.

Alphabetical List of Advertisers.

Table listing various companies and their page numbers, including Algoma Steel Co., American Locomotive Co., Baldwin Locomotive Works, Bell Telephone Co., Bonzano Rail Joint Co., Bradstreet Company, The Acton Burrows Co., Canada Switch & Spring Co., Canadian Locomotive Co., Canadian Northern Railway, Canadian Pacific Railway Land Department, Canadian Railway Accident Insurance Co., Canadian Steel and Wire Co., B. J. Coghlin & Co., James Cooper, Dominion Bridge Co., Dominion Wire Rope Co., E. L. Drewry, Expanded Metal and Fireproofing Co., Firstbrook Box Co., Galena Signal Oil Co., J. J. Gartshore, Government of Manitoba, The B. Greening Wire Co., Holt, Renfrew & Co., Hudson's Bay Company, Hunter, Rose Co., James Hutton & Co., Illinois Central Railroad, Imperial Bank of Canada, Intercolonial Railway, International Mercantile Marine Co., Wm. Jessop & Sons (Ltd.), Lehigh Valley Railroad, Rice Lewis & Son, Latrobe Steel and Coupler Co., Locomotive and Machine Co., Mail Job Printing Co., McCaskill, Dougall & Co., John S. Metcalf Co., Mica Boiler Covering Co., Midland Towing and Wrecking Co., T. A. Morrison & Co., W. H. C. Mussen & Co., New York Central Railroad, Northern Electric and Manufacturing Co., A. O. Norton, Coaticook, Que., Ogilvie Flour Mills Co., Ontario Wind Engine and Pump Co., Page Wire Fence Co., Walkerville, Ont., Eugene F. Phillips Electrical Works, The Hiram L. Piper Co., N. L. Piper Railway Supply Co., Place Viger Hotel, Polson Iron Works, J. W. Pyke & Co., Queen City Oil Co., Railway and Shipping World, Reid Newfoundland Co., Rhodes, Curry & Co., Richelieu and Ontario Navigation Co., Russell House, Ottawa, St. Thomas Brass Co., Safety Car Heating & Lighting Co., Simplex Railway Appliance Co., Toronto Engraving Co., Travelers' Insurance Co., Westinghouse Manufacturing Co., Wire & Cable Co.

Contracts have been let for all ties and fencing required, and 70-lb. steel rails have been ordered for the line. The piling for the bridge at Bout de l'Isle has been completed, and work on the piers is in progress. Grading operations are also being proceeded with. It is expected that the line will be completed by Nov. C. E. Loss, of New York, was given the contract, but sublet it to W. J. Poupore. F. A. Hibbard is Chief Engineer in charge of construction.

The bridge is being constructed over the Ottawa river, near its confluence with the St. Lawrence, at Bout de l'Isle. At this point the river is separated into two channels by Isle Bourdon. The bridge over the west channel is composed of 11 spans, representing 1,414 ft. of bridge work, and consists of a steel superstructure designed for the heaviest rolling load prescribed by the Dominion Government. It consists of a central through span of 200 ft., 8 through spans of 140 ft. each, and 2 shore spans of 47 ft. each, with a 10 ft. roadway on either side throughout. The sub-structure consists of first-class masonry piers upon concrete footings, resting on pile foundations. The bridge over the east channel is of a similar class of bridge work throughout, 1,074 ft. in length, and is composed of 9 spans, 7 of 140 ft. each, and 2 shore spans of 47 ft. each. (Feb., pg. 39.)

**Coast Yukon Ry.**—The applicants, at the current session of the Dominion Parliament, for the incorporation of this Company are R. Kelly, F. Burnett, and J. Webster, of Vancouver, B.C. (Jan., pg. 20.)

**Detroit River Bridge.**—W. Livingstone, President of the Lake Carriers' Association, recently stated that the proposed bridge should not be less than 130 ft. above high water; there were some vessels on the lakes with spars 160 ft. high, but it would be no great hardship for such vessels to strike their topmasts when passing under the bridge. G. S. Morrison, the special engineer appointed to locate a suitable site, was reported to have commenced work early in April. (April, pg. 95.)

**Duluth, Virginia and Rainy Lake Ry.**—Grading is reported to be completed on 30 miles from Virginia, Minn., and track laid on over 20 miles. The grade has reached Flint creek, and is being continued this year towards Koochiching, Minn., on Rainy river, opposite Fort Frances, Ont. M. S. Cook, Duluth, Minn., is the engineer in charge of construction. (June, 1902, pg. 190.)

**Edmonton and Peace River Ry.**—The Dominion Parliament is being asked at the current session by C. F. Law, W. H. Armstrong, of Vancouver, B.C.; W. H. Cross, of Winnipeg; O. A. Robertson and F. B. Lynch, of St. Paul, Minn., to incorporate a company with this title. (Feb., pg. 21.)

**Edmonton Street Ry.**—Application will be made this session of the Northwest Legislative Assembly for an ordinance to provide for aiding the construction of the proposed lines (Jan., pg. 21.)

**Egerton Tramway Co. (Ltd.)**—Plans have been prepared for the projected lines to connect New Glasgow, Stellarton, Pictou and Westville, N.S. The work includes the construction of a steel bridge over the river at New Glasgow. C. A. Flaherty, of Boston, Mass., is the representative of the promoters. (Jan., pg. 21.)

**The Frank and Grassy Mountain Ry.** proposes erecting a station at Frank, Alta., and will also build an office building adjoining for the use of the collieries. (Feb., pg. 39.)

**Fraser River Bridge.**—We were recently advised that all the pile piers, nos. 6, 7, 8, 9, 10 and 11, have been completed up to the copings, and that the deep pier, no. 5, which is the pivot pier for the draw span, has been successfully landed at a depth of 125 ft. below the surface of the water. The foundations for the New Westminster approach are about completed. The Dominion Bridge Co., contractor for the superstructure, has the five through fixed spans of 159 ft. each, ready for erection. Practically the whole of the material for the remaining spans has been delivered at the shops. (Feb., pg. 39.)

The Railway Committee of the Privy Council has given permission for the erection of the bridge and approaches, subject to the payment of compensation to the C.P.R. for any damage that may be occasioned by the approaches crossing its right-of-way.

**Grand Trunk Pacific Ry.**—Hon. G. A. Cox, E. R. Wood, Lieut.-Col. H. M. Pellatt, of Toronto; Hon. W. Gibson, Beamsville, Ont.; J. R. Booth, Ottawa; C. M. Hays, F. W. Morse, W. Wainwright, of the G.T.R.; Hon. H. B. Rainville, Montreal, and J. Bell, of Belleville, Ont., are the applicants at the current session of the Dominion Parliament for an act incorporating the G.T.P. Ry. Co. The capital stock is fixed at \$75,000,000, and may be issued in sterling, at £20 per \$100. Power is asked to construct a line from Quebec to Gravenhurst or North Bay, thence northwesterly, north of Lake Nepigon, to, in or near Winnipeg, thence westerly and northwesterly via Battleford, Edmonton and Dun-

vegan, and to Port Simpson, either by the Peace or Pine river pass to Port Simpson or Bute inlet on the Pacific coast, with power to construct branch lines to Port Arthur, Ont., Brandon, Man.; Regina, Assa.; Calgary, Alta.; and Dawson, Yukon. The construction may be divided into sections: the Quebec section from Quebec to Gravenhurst or North Bay, on which bonds may be issued to the extent of \$30,000 a mile; the Woodland section, from the Quebec section to Winnipeg, on which \$30,000 of bonds a mile may be issued; the Prairie section, from Winnipeg to the eastern limit of the Rocky Mountains, on which \$20,000 of bonds a mile may be issued; and the Mountain section, from the mountains to the coast, on which \$50,000 of bonds a mile may be issued. (April, pg. 119.)

**Great Northern Ry., U.S.A.**—Contracts are reported let for the construction of a cut-off from Columbia Falls to Jennings, Mont., about 50 miles, the present line being 95 miles in length between these points; and for a line from Jennings to connect with the Northern Pacific Ry. at Jocko, Mont. Jennings is the point at which the coal from the Crow's Nest district reaches the U.S. lines, over the Crow's Nest Southern Ry. and the Montana and Great Northern Ry. (Feb., pg. 39.)

(See also Vancouver, Victoria and Eastern Ry. and Navigation Co., Victoria Terminal Ry. and Ferry Co.)

**Guelph Junction Ry.**—The directors of the G. J. Ry. Co. are asking the C.P.R. to extend the line to Goderich. (March, 1900, pg. 77.)

**Halifax and South Western Ry.**—Dr. Martin Murphy, Provincial Engineer of Nova Scotia, in his annual report to Sept. 30, 1902, reports the progress made with surveys on the line. The contract was entered in on Aug. 20, 1901, and immediately thereafter preliminary surveys were made under the direction of H. K. Wicksteed, C.E.; and location surveys were commenced in April, 1902, after the contract had been ratified by the Legislature. On Aug. 7 plans were filed for a section of the line, and some correspondence took place in regard thereto, the plan and profile being approved from mileage 27 to mileage 40. The excess of curvature and unreasonable trestle structures were the objectionable features on the plans for the sections between station O, and mileage 27, and mileage 40 and 48½, and modifications of the same were being arranged with T. H. White, Chief Engineer in charge of construction. Special surveys were made by W. A. Hendry, on behalf of the Government, with a view of securing a suitable crossing of the La Have river, and several lines were recommended. "The delay in commencing construction throughout," the report states, "is fully justified in selecting the best course to adopt through rolling, tortuous, hilly ridges. The southwest coast of Nova Scotia is closely serrated by bays, bights and creeks that branch far inland, with bold, rocky headlands intervening, the peaks of which seldom exceed a height of 200 ft. The line has to keep as near as possible its course, keep clear of these tidal indents and find a favorable location across or between these ridges. One can easily get a location, many have been made, but to find the best and most advantageous one to adopt in the interests of construction and operation is the problem. Too many mistakes of injudicious alignment have been made in the past for lines in operation to repeat them here."

The completed plans have been submitted to the Government, and the Lieut.-Governor, at the opening of the Legislature recently, stated that construction would be vigorously prosecuted during the year. Surveys have been made from Margaret's Bay, with a view of providing an entrance into Halifax independent of the I.C.R.; the surveys previously made having contemplated joining the I.C.R.

at Bedford. About 4 miles has been graded at Hubbard's Cove, and Mackenzie, Mann & Co. have been operating the outfit abandoned by J. A. Wheaton, at this point. About 80 men have been employed. (Feb., pg. 39 and pg. 55.)

**The Halifax Electric Tramway Co.** is adding to its equipment at the power house, including a new plant for generating power for the street car system. (Nov., 1902, pg. 382.)

**Halifax and Yarmouth Ry.**—Satisfactory arrangements having been made with the Government in reference to completing the 20 miles between East Pubnico and Barrington Passage, and paying amounts due contractors, etc., the Provincial Engineer recommended the payment of \$64,000, of which \$27,295 was the estimated cost of completing the line. (Aug., 1902, pg. 263.)

**Hamilton, Grimsby and Beamsville Ry.**—The installation of the new power plant at Grimsby, Ont., will give 300 h.p. additional to the 350 h.p. generated by the Co. at its Stony Creek station. (Jan., pg. 23.)

**Hamilton Street Ry.**—The International Harvester Co. desires to have a belt line from the Barton street line round its new works, and the city council is being asked not to charge mileage on such a line. (June, 1902, pg. 191.)

**Hawkesbury and Caledonia Springs.**—Application will be made at the current session of the Ontario Legislature for an act incorporating a company to construct a railway, to be operated by steam or electricity, from Hawkesbury to L'Orignal, thence to Caledonia Springs, about 10 miles. Kingsmill, Hellmuth, Saunders & Torrance, Toronto, are solicitors for the promoters.

**Intercolonial Copper Mines Ry.**—Surveys are reported to have been completed for a short line of railway to connect the copper mines of the Intercolonial Copper Co. with Dorchester, N.B., but it is not expected that any construction will be gone on with this year. A. W. Chapman is Local Manager of the Company at Dorchester.

**Intercolonial Ry.**—A contract has recently been placed with a firm in Scotland for 25,000 tons of steel rails. It is said this contract has been sublet to German makers.

Tenders were received to April 30 for the double-tracking of the line from Richmond, N.S., mileage 0.8, from Halifax to Rockingham, mileage 4.1, a distance of 3.3 miles.

Tenders are under consideration for the construction of an extension to the freight car repair shops at Moncton, N.B.; for the erection of a passenger station and residence at Brown's Point, near Pictou, N.S., and for new freight sheds at Sydney and Elmsdale, N.S.

Surveys are reported as being made for an extension of the Rimouski branch to Father Point, Que.; and for the construction of a branch from Fort Lawrence siding to the new wharf at the dock. The wharf is expected to be erected this year at a cost of \$20,000. Surveys have also been made for an extension of the line from Sydney to Sydney Mines, N.S. (Feb., pg. 40.)

**The International Transit Co.** commenced operating its car service at Sault Ste. Marie, Ont., Mar. 30. The service connects with the ferry str. Fortune, by which connection is made with the lines of the Trans-St. Mary's Traction Co., Sault Ste. Marie, Mich. The two electric systems and the connecting ferry are controlled by the Consolidated Lake Superior Co. (Mar., pg. 95.)

**Inverness Ry. and Coal Co.**—The subsidy voted by the Nova Scotia Legislature towards the construction of this line was \$226,000 for 56½ miles from Port Hastings to Broad Cove, and \$18,000 from Port Hastings to junction with the I.C.R. at Port Hawkesbury. Of

# Galena-Signal Oil Company,

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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.

this \$233,000 has been paid, leaving \$11,000 due on Sept. 30, 1902. (Feb., pg. 41.)

**James Bay Ry.**—H. K. Wicksteed, C.E., is making location surveys for the extension of the line from Parry Sound towards Sudbury. The surveys made in 1902 out of the town showed lines which would be very expensive to construct, and the principal object of the present survey is to secure a less expensive line with better grades. Practically the same staff is working on this line as was engaged during the winter on the Canadian Northern Ry. surveys east of Port Arthur, Ont. (Nov., 1902, pg. 383.)

**Joliette and Lake Manuan Colonization Ry.**—The applicants to the Dominion Parliament, at the current session, for the construction of a railway from Joliette to Lake Manuan, Que., under this title are: D. Dostaler, E. Hebert, of Juliette, Que.; A. Dugas, E. Turgeon, of St. Jean de Matha, Que., and J. A. Archambault, of St. Michel des Saints, Que. (Feb., pg. 41.)

**Keewatin and Ontario Ry.**—Application will be made at the current session of the Ontario Legislature for an act incorporating a company to construct a railway from the western boundary of the province to Rat Portage, and thence to the mouth of the Albany river, with power to construct branches northerly to the territory of Keewatin, and southerly to the C.P.R. Kerr, Davidson, Paterson and Grant, Toronto, are the solicitors.

**Kennebec Valley Rd.**—W. M. Ayer, A. R. Small, of Oakland, Me.; R. W. Dunn, W. T. Haines, of Waterville, Me., recently applied to the Maine Legislature for incorporation under this title with power to purchase the Somerset Rd., now being operated from Waterville to Bingham, and to extend it from Bingham to Moosehead lake, where connection could be made with the C.P.R. line. The Railway World says: "It is another important move to create a highway from the C.P.R. to the Maine coast and interior, and will be watched with interest by the existing steam companies in Maine."

**Kettle Valley Lines.**—The station buildings at Grand Forks, B.C., have been completed, and the head office of the Company has been moved there. (Feb., pg. 41.)

**Kingston and Gananoque Electric Ry.**—The Perth and Gananoque town councils have granted aid to Mr. Judd, of Gananoque, to enable him to secure the revival of the company's charter at the current session of the Ontario Legislature. The line is to run from Gananoque up the Rideau to the ferry, thence to Perth, and probably to the village of Lanark. (Feb., pg. 41.)

**Kingston and Pembroke Ry.**—Press reports state that ballasting on the line is expected to be resumed in the vicinity of Sharbot lake, Ont. (Feb., pg. 41.)

**Klondike Mines Ry.**—E. C. Hawkins recently returned to Vancouver, B.C., from a visit to Dawson, Yukon, where he had been making arrangements for the starting of construction on this line. (Feb., pg. 41.)

**Kootenay, Cariboo and Pacific Ry.**—The applicants, at the current session of the Dominion Parliament for an act incorporating a company with this title are: C. H. Pollen, R. L. T. Galbraith, H. Watt, J. A. Harvey, of Fort Steele, B.C. (Feb., pg. 41.)

**Liverpool and Milton Ry.**—Arguments have been heard in the Supreme Court at Ottawa and judgment reserved upon the appeal of this company against a decision of the Supreme Court of Nova Scotia, granting an injunction to restrain the company from operating its trains on the railway where it passes along a street in Liverpool, until certain regulations made by the town council have been complied with.

**Loboro Ry. Co.**—Application will be made at the current session of the Ontario Legislature for an act incorporating a company under this title to construct a railway, to be operated by steam or electricity, from the northeasterly end of Loughborough lake to some point on the Kingston and Pembroke Ry. McGivern and Haydon, Ottawa, are the solicitors.

**London, Aylmer and North Shore Electric Ry.**—It is reported that the right of way for this line from London to Port Burwell, Ont., has been secured, and that construction will be commenced on an early date. The power house, car barns, etc., will be constructed at Aylmer. (Feb., pg. 43.)

**London Street Ry.**—The litigation between this company and the London city council has gone to the Court of Appeal. The council passed a by-law authorizing the construction of certain extensions of lines, and the taking up of a line on Rectory st., but the by-law was not signed by the Mayor. The company acted on the unsigned by-law, and sought to obtain an order compelling the Mayor to sign the by-law. Since the litigation was commenced another by-law has been passed, and this the company desires to have declared void until the court of appeal has decided the case. (Nov., 1902, pg. 383.)

**Lotbiniere and Megantic Ry.**—The Quebec Legislature has passed an act authorizing an extension of the line from Kinnear's Mills to Windsor Mills and Brompton Falls, via Lime Ridge, and extending the time for the construction of the line authorized from Lyster to Thetford, Que. (Feb., pg. 43.)

**Mabou and Gulf Ry.**—Dr. Martin Murphy, Provincial Engineer of Nova Scotia, says in his annual report that the contract for the construction and equipment of this line is divided into two sections, one for the portion of the line between Mabou coal mines and the crossing of the Inverness Ry. and Coal Co.'s line, about 8 miles, the other for the 30 miles from this point to the I.C.R. at Orange-dale. "The first section of 8 miles," he says, "is unlike any other we have had to deal with in Nova Scotia, chiefly on account of the heavy gradients to be overcome, hence the necessity of treating it separately. The specification provides that the 30 miles between the Inverness Ry. and Coal Co.'s line and the I.C.R. shall not exceed anywhere our ordinary maximum standard of 79.2 ft. a mile for gradients and 955 ft. for minimum limit of radius in curvature. The gradients and curvature in the 8 miles from the mines to the Inverness Ry. and Coal Co.'s line to be such as may be allowed by the Government in order to meet the requirements of the traffic." This 8 mile section was the first proceeded with; it was partially graded before the contract was signed; there were then some objectionable trestle bridges under construction, which were altered and made stronger on request, but there are two other trestle structures which the Government engineer did not approve of. The maximum gradients on the 8 miles were 4.25% for 6,000 ft., ascending to the summit from the colliery, and 4% descending from it. "These inclinations," Mr. Murphy says, "approach closely the limit of gradients that can be practically operated by traction engines; they have been worked principally for light traffic, and where more favorable location cannot be obtained without unreasonable cost; they have been operated instead of a rack rail for coal ore, or other minerals; their adoption at all is because of necessity. A redeeming feature in the adoption of this maximum gradient for the movement of the products of the Mabou mine, is that if the output becomes greater with the development of the colliery, the present location need not be abandoned, as it may become part of a more practicable, cheaper and more rapid system of transport." Some difficulties in reference to the crossing of the Inverness Ry. and Coal

Co.'s line were discussed, and correspondence took place thereon with F. R. Page, the company's engineer, and J. L. Brass, General Manager of the I. Ry. and Coal Co., whose objections to the proposed crossing were subsequently endorsed by Angus Sinclair, the company's Chief Engineer. (Feb., pg. 43.)

**Macleod, Cardston and Montana Ry.**—Application is being made at the current session of the Dominion Parliament by D. J. Grier, R. G. Mathews, J. A. Struthers, A. F. Grady, E. P. McNeill, of Macleod, Alta.; J. W. Woolf, W. C. Simmons, of Cardston, Alta.; J. A. McDonnell, of Nelson, B.C., for the incorporation of a company with this title. (Jan., pg. 18.)

**The Manitoba Cement Co.** was authorized at the last session of the Manitoba Legislature to extend its projected line from Morden to range six, so as to enable it to reach its marl deposits. Nothing has been done in the way of construction of the line. (April, pg. 119.)

**Middlesex and Elgin Interurban Ry.** (Electric).—The Yarmouth township council has passed a by-law giving the Company a franchise for 50 years, and the Port Stanley village council has decided to grant a franchise for a similar period. (Feb., pg. 43.)

**Middleton and Victoria Beach Ry.**—An act was passed at the recent session of the Nova Scotia Legislature to enable this Company to proceed with the work of construction, which was being impeded by certain legal proceedings. The contract for the construction of the line from Middleton to Victoria Beach, about 41 miles, was entered into June 25, 1902, and construction was commenced immediately thereafter. In his report to Sept. 30, 1902, the Provincial Engineer says: "The work of grading is chiefly of a light loamy nature, through shallow cuttings that cannot be constructed in winter without undue expenditure. About seven miles of roadbed has been formed or roughly graded. So far no work in connection with bridge construction has been done, other than providing materials for erection during the ensuing working season. Material, such as ties, fencing, posts, etc., are being contracted for, for delivery in the spring." (Aug., 1902, pg. 265.)

**Midland to Penetanguishene.**—Application will be made at the current session of the Ontario Legislature for an act incorporating a company to construct a railway from Midland to Penetanguishene, and to a junction with the G.T.R. at Perkinsfield, Ont. Hamilton, Elliott & Irving, Sault Ste Marie, Ont., are the solicitors.

**Midland Ry. of Manitoba.**—We are informed by a director that no decision has been come to as to any construction being gone on with during the present season. (April, pg. 119.)

**Montreal and Northwestern Ry.**—L. H. Boyd, W. Patterson, A. Marsan, C. A. L. Fisher and J. F. Miller, of Montreal, have been incorporated by the Quebec Legislature under this title, to construct a steam or electric railway in the county of Argenteuil.

**The Montreal Park and Island Ry.** recently commenced laying track from its present line to Longue Point, and on April 1 an injunction was applied for by the Chateaugay and Northern Ry. Co., to restrain the M. P. and I. R. from further tracklaying. It is asserted that there is an agreement between the two companies, entered into in 1899, whereby each undertook not to invade the territory of the other.

**Montreal Street Ry.**—Press reports state that it is proposed to expend \$100,000 in repairs and improvements on the lines during the current year. In the relaying it is proposed to use 96 lb. rails, carried on steel ties



embedded in concrete. For the paving of the spaces between the tracks and 18 ins. outside the rails granite blocks will be used, the city providing the blocks and the company the labor. (Feb., pg. 43.)

**The Montreal Terminal Ry.** has not furnished any particulars as to its construction during 1902, but we have ascertained that it laid 8.25 miles of track in the city in 1902, from Hotel de Ville ave. to its present terminal on the city boundary near Forsyth st. The work will be completed and cars run over the line when the subway under the C.P.R. tracks at Forsyth st. has been completed. (Feb., pg. 43.)

**New Brunswick Coal and Ry. Co.**—Press reports recently stated that track had been laid to Coal Mine siding, at the entrance to the Newcastle coalfields. At Newcastle station and freight buildings and a 3-stall round-house have been erected. The bridges on the line, with one exception, are of I beam and riveted steel girder spans. The bridge over the Salmon river is about 500 ft. long, and consists of 3 Howe truss spans, 118 ft. each, and 1 draw span of 124 ft., 40 ft. openings. The work is being carried out under the direction of E. G. Evans, Chief Engineer. (Feb., pg. 44.)

**Nipissing and Pontiac Ry.**—The applicants to the Dominion Parliament at the current session for the incorporation of a company with this title are: J. Armstrong, New Liskeard, Ont.; A. C. Rorabeck, E. S. Senkler, North Bay, Ont.; E. C. Cattenach, Toronto; R. Lemieux, Montreal. (April, pg. 121.)

**North Bay Southerly to C.P.R., at Myrtle, and near Toronto.**—Application will be made at the current session of the Dominion Parliament for an act incorporating a company to construct a railway or tramway from South Bay on Lake Nipissing, via Callender, to

North Bay; from South Bay to the Georgian bay, thence to Lake Simcoe, and thence to the C.P.R., in either Dufferin, Peel or York, and from Georgian bay to the C.P.R. between Myrtle and Peterborough, Ont. L. T. Barclay, of Whitby, Ont., is solicitor for the applicants, who also seek power to carry on a lumber business and to develop electrical power.

**Northwest Coal and Coke Ry. Co.**—E. J. Stamford, F. Seaman, J. H. Seaman, F. C. Elliott, B. B. Mighton, Nelson, B.C., and C. E. D. Wood, Macleod, Alta., are applying at the current session of the Dominion Parliament for an act incorporating a company with this title to construct a railway from Bull Point to Cowley, Alta. (Jan., pg. 19.)

**Nova Scotia Eastern Ry.**—The contract between the Company and the Government was entered into Feb. 4, 1903, and provides for the construction of a railway from the I.C.R. at Dartmouth, easterly through the Musquodoboit valley to Melrose, thence by Cross Roads Country Harbor to Guysboro, and on to the Strait of Canso; with branches from near Melrose to the I.C.R. near New Glasgow, and from Cross Roads Country Harbor, to deep water. The subsidy of \$5,000 a mile is \$1,800 a mile in excess of that previously voted, and at the last session of the Nova Scotia Legislature the new contract was ratified. An act was also passed extending the time for the commencement and completion of the lines, and authorizing the construction of a line in Antigonish, in addition to Guysborough and Pictou counties. (April, pg. 121.)

**Ontario Electric Ry.**—Press reports state that the right-of-way is being secured for the projected electric railway from Cornwall to Toronto; that construction will be begun this spring, and that the line between Toronto and Kingston will be completed by the end of the

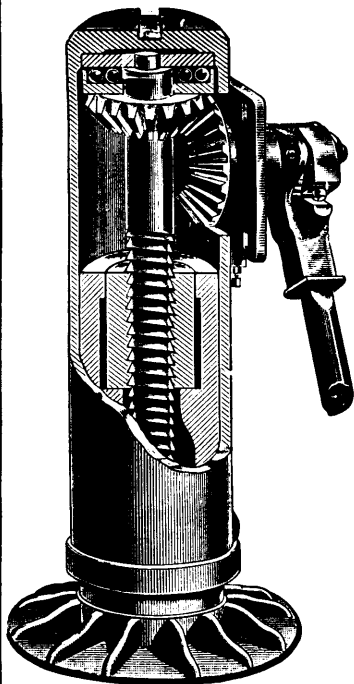
year. R. J. Carson, of Kingston, Ont., one of the provisional directors, recently stated in an interview that power would be acquired from the Trent river, and that the power-house would be located at Trenton; the repair shops would be at Kingston; the track would be a single one for the present; the cars would be 56 ft. long and the service would be an hourly one. Boston people are said to be interested in the proposal, and E. J. B. Pense, M.L.A., in a speech recently stated that they had bought some of the water privileges on the Trent river. (April, pg. 121.)

**Ottawa, Northern and Western Ry.**—The grading on the extension from Gracefield to Maniwaki has been completed for 14 miles, to Blue Sea Lake, and track laying was expected to be commenced in April, 60 lb. steel rails being used. During the winter some rock work was done beyond Blue Sea lake, and the right-of-way cleared to Maniwaki. Ties, posts and other timber have also been got out. It is expected that the remaining 15 miles from Blue Sea lake will be graded and the whole of the track laid by the end of the year. (Feb., pg. 45.)

**Petrolia Rapid Ry. (Electric).**—Application will be made at the current session of the Ontario Legislature for an act confirming by-laws passed by Enniskillen and Moore townships relating to the railway; increasing the capital of the company to \$500,000, authorizing the extension of the line through Sarnia and Point Edward to Wees Beach, and giving power to enter into agreements with other electric railway companies, and with the Michigan Central Rd. for connection and running arrangements. (Feb., 1902, pg. 60.)

**Point Ann Ry.**—The line being constructed from the G.T.R. near Belleville, Ont., to the works of the Belleville Portland Cement Co., is 3¼ miles in length. It is being constructed by the company, C. B. English being

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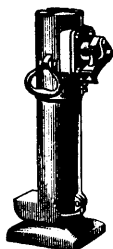
reduce the friction and increase the power of the Jack.

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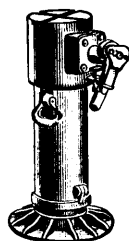
are cut from solid steel forgings, thereby giving highest efficiency and greatest durability.

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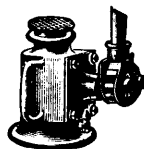
runs in a Phosphor Bronze Nut and is covered by a sliding sleeve which takes all the side strain, prevents the Screw from bending, and protects the working parts from Grit and Rust.



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W. H. C. MUSSEN & CO., Montreal.

Chief Engineer, and B. Gibson, engineer in charge of construction. (April, pg. 121.)

**Portage la Prairie.**—Press reports state that a Toronto company has under contemplation the construction of a street car system in Portage la Prairie, Man.

**Preston and Berlin Ry.**—We are advised that the line will be extended from Berlin to the beet sugar factory, but it will be some little time before work is commenced. (April, pg. 121.)

**Prince Edward Island Ry.**—Active work on the construction of the Hillsboro' river bridge is expected to be resumed early in May, the preparatory work having been gone on with during April. W. B. Mackenzie, Chief Engineer, recently stated that pneumatic work on the three remaining piers would be commenced in June, and these, with the remaining abutment, would probably be completed in Aug., in which case the bridge would be finished in the fall. Part of the superstructure would arrive from the Miramichi river on an early date, and the draw span later in the season. Rails had been laid at Murray Harbor, and a locomotive was on the ground, so that tracklaying and ballasting could be carried on with dispatch.

Petitions have been sent to the Government at Ottawa asking for the construction of a branch, for which a survey was made in 1882, from near Elmira to East Point, and for a line from some point to Cape Wolfe.

A suggestion has been made that the surveys, which were commenced some years ago by Sir Douglass Fox, of London, Eng., for a tunnel between Prince Edward Island and the mainland, be resumed. (April, pg. 121.)

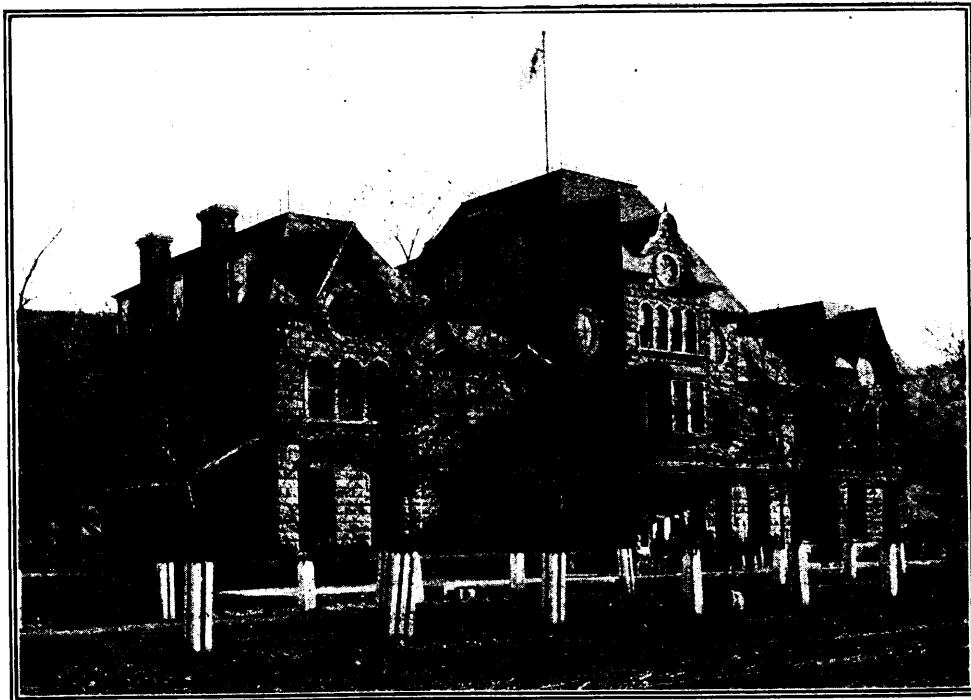
**Quebec and Lake Huron Ry.**—A contract is reported to have been signed in New York for the construction of this line from Quebec city to the mouth of the French river, on Georgian bay, Ont., and press reports state that work will be commenced in Quebec during May. (Feb., pg. 45.)

**Quebec and Lake St. John Ry.**—Application will be made at the current session of the Dominion Parliament for an act authorizing the extension of the line from its present terminal at Chicoutimi, Que., easterly or northeasterly to Hamilton inlet, or Rigolet bay, or to the Gulf of St. Lawrence on the Atlantic coast. Rigolet bay and the outlet of Hamilton inlet to the Atlantic ocean are in Labrador, and under the jurisdiction of the Legislature of Newfoundland, but there is navigable waters for large steamships on that portion of Hamilton inlet which extends into Canada, dividing Quebec, from the territory of Ungava. (Feb., pg. 45.)

**The Quebec Central Ry.** has placed an order for 10 miles of 70-lb. steel rails, with fastenings, to be made in England. (April, pg. 121.)

**Quebec, New Brunswick and Nova Scotia Ry. Co.**—The names attached to the petition to the Dominion Parliament asking for the incorporation of a company with this title, at the current session, are D. D. Mann, Z. A. Lash, Toronto; J. Bureau, Three Rivers, Que.; P. McSweeney, Moncton, N.B.; C. Fergie, Westville, N.S., and G. Fraser, Sydney Mines, N.S. (April, pg. 121.)

**Quebec Oriental Ry.**—Joaquin and Juan Patro de Gallandez, of London, Eng., and Hon. Mr. Baby, of Montreal, applied for an act incorporating the Q.O. Ry. Co., at the current session of the Quebec Legislature, with power to construct a railway from Riviere du Loup to Metapedia, Que. The



THE REID NEWFOUNDLAND CO.'S RAILWAY STATION AND OFFICES, ST. JOHN'S, NFLD.

company also asked for very extensive powers as a development company.

**Quebec, Saguenay and Gulf of St. Lawrence Ry.**—J. Clarke, G. Clarke, of New York, and T. Meaney, of Quebec, are applying for incorporation under this title at the current session of the Dominion Parliament to construct a railway from the Bay of Seven Islands to Quebec. Power is asked to enter into an arrangement for the sale or lease of the projected line to the C.P.R., the G.T.R. or the Grand Trunk Pacific Ry. The applicants for the charter are directors of the North Shore Power, Ry. and Navigation Co., which was incorporated by the Dominion Parliament in 1902, and which constructed about 9 miles of railway from the Bay of Seven Islands to the falls of St. Marguerite river, where a power house is being built. (Feb., pg. 47, and North Shore Power, Ry. and Navigation Co., Feb., pg. 45.)

**Regina and Hudson's Bay Ry.**—J. M. Young, R. S. Barrow, J. W. Smith, G. Michealis, J. K. McInnis, W. J. Cummings, Regina, Assa., and C. Michealis, Goerlitz, Germany, are applying at the current session of the Dominion Parliament for an act incorporating a company with this title to construct a railway from the International boundary, between the 2nd and 3rd meridians, to Regina and Fort Churchill, on Hudson's bay, with a number of branches. (Feb., pg. 47.)

**Reid Newfoundland Co.**—It is reported that a branch line is to be constructed from a point near Holyrood to some large talc deposits that are being developed some miles distant. Capt. A. McGray, of Yarmouth, N.S., is interested in the matter.

The new station and office buildings in St. John's, to which the company's offices were recently removed, is a granite building, 125 ft. by 50 ft. The interior finish is of pine and oak; it is heated throughout by steam, has excellent waiting rooms and all the other conveniences of a first-class modern station. It is intended that all trains, which in the past have been running into the east end of St. John's, will arrive and depart at the new station. The steamship and all other parts of the Reid system will be operated within easy communication, and in the immediate vicinity

of the new building at the west end of St. John's. The offices in the new building have been allotted as follows: General Manager, W. D. Reid; Assistant General Manager, H. D. Reid; Superintendent, R. G. Reid, jr.; Chief Engineer, G. H. Massey; General Passenger Agent, H. A. Morine; General Freight Agent, D. Sutherland; Treasurer, H. S. Cormack; Auditor, H. M. McNeil; Paymaster, E. B. Bartlett; Assistant Superintendent, F. Rioux; Dispatching department; Superintendent of Shipping, Capt. S. Blandford; Purchasing Agent, H. Crawford; Superintendent Express department, H. B. Curtis; Solicitor, A. B. Morine; railway medical man, Dr. L. Paterson. An illustration of the building is given on this page. (Feb., pg. 46.)

**The Riverside Park Ry. Co.** was incorporated at the last session of the Manitoba Legislature to construct a steam or electric railway from Winnipeg to St. Norbert. (April, pg. 121.)

**Sandwich, Windsor and Amherstburg Ry.**—The Railway Committee of the Privy Council has authorized the company to cross the Canada Southern Rd. near Amherstburg and at Sandwich st., Amherstburg, subject to agreement, and to cross tracks at Sandwich st., Windsor, at its own cost. The line to Amherstburg is practically completed, and is expected to be placed in operation about the middle of May. No further extensions are contemplated to be made this year. (April, pg. 121.)

**Shawinigan Falls Terminal Ry. Co.**—The Quebec Legislature at the current session passed an act extending the line for the commencement and completion of the authorized lines. (April, 1902, pg. 145.)

**The St. Chrysostome Ry. Co.** will apply at the current session of the Dominion Parliament for incorporation. The company was incorporated some years ago by the Quebec Legislature, and the date for commencing work has been extended from time to time, the last occasion being at the current session. J. P. Brown, of St. Chrysostome, Que., is President of the Co. (April, pg. 121.)

**The Suburban Rapid Transit Co.** applied at the last session of the Manitoba Legisla-

ture for power to operate its projected line from Winnipeg to Headingly, by steam or electricity, and to enter into an agreement with the Winnipeg city council for an entrance into the city. The bill, however, was withdrawn by the promoters. (Feb., pg. 47.)

**Temiskaming and Northern Ontario Ry.**—The Ontario Commissioner of Public Works recently drove over 50 miles of the route from North Bay. It was reported to him that 22½ miles of grade had been completed, and grading was in progress to Boyce Lake, 50 miles from North Bay. The gradients, he said in an interview, are easy, the maximum being 1% going north and 1¼% going south; the maximum curve is 6°, but there are not many so sharp as this, most of them being 1° or 2°; there are no reverse curves, and the ends of all curves are eased. The contractor contemplates starting grading at New Liskeard during the summer and working southerly. The Commissioner added that 40 miles of grade would be ready for tracklaying by June, the rails would be laid at the rate of 25 miles a month, and that it was expected to reach Lake Temagami this fall.

The Commissioners have arranged with the

C.P.R. to use that company's terminal facilities at North Bay and have secured running rights over the C.P.R. track from North Bay to Nipissing Jct., which would give the T. & N.O.R. connection with the G.T.R., in case the latter should lose the right to run over the C.P.R. between the points mentioned. (Mar., pg. 97.)

**The Valleyfield Electric Ry. Co.** has been incorporated at the current session of the Quebec Legislature. (Feb., pg. 45.)

**Vancouver North, B.C., Tramline.**—Two suggestions for tramlines have been projected, one for a gravity line from the highest limit to the waterfront, about half a mile, and the other for a line, about 8 miles in length, to the summit of Mount Crown. J. Balfour-Ker is interested in the first named project.

**Vancouver, Victoria and Eastern Ry. and Navigation Co.**—An official of the Great Northern Ry., U.S.A., is reported as saying that the Hope mountains will be crossed by the V.V. and E. Ry. by a gradient of a little more than 2%, and that the line will be constructed so as to go down through Sumas, with a branch line back to Chilliwack. The

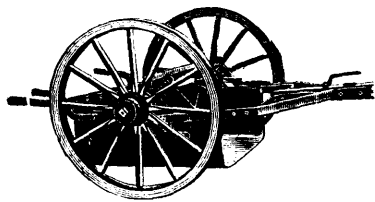
gradient, he said, would be a little too steep to enter Chilliwack direct. (Feb., pg. 49.)

**Victoria Terminal Ry. and Ferry Co.**—Press reports state that it was expected to have track laid on the line between Port Guichon and Cloverdale, B.C., about 18 miles, by the middle of April. The wharf and slip for the transfer of the cars was being proceeded with and the steamer Victorian has been completed for service as a car ferry between Port Guichon and Sidney. It is also proposed to construct a line from Port Guichon to Liverpool. The Great Northern Ry., U.S.A., now holds the charter of the V.T. Ry. and Ferry Co. (Feb., pg. 49.)

**The Western Extension Ry. Co.** was incorporated at the last session of the Manitoba Legislature to construct a number of branch lines, and a contract entered into with the Government respecting the construction of several of the lines mentioned was ratified. The incorporators of the Co. are officials of the Canadian Northern Ry. (April, pg. 123; also under Canadian Northern Ry., April, pg. 129.)

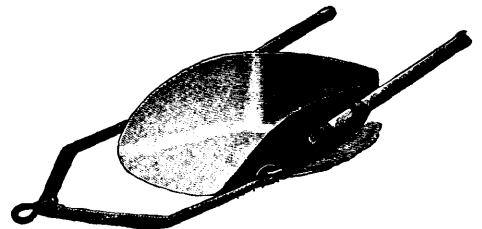
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**Windsor, Essex and Lake Shore Rapid Electric Ry.**—Press reports state that work will be commenced at an early date on this projected line from Windsor to Wheatley, Ont., about 43 miles. A. J. Nelles, formerly of the Hamilton, Grimsby and Beamsville Electric Ry., is interested. (Nov., 1902, PG. 387.)

**The Winnipeg and Fort Alexander Ry.** Co. was given an act last session of the Manitoba Legislature extending the time for the commencement of its railway from Winnipeg to Fort Alexander, until 1906, and for its completion to 1913. (April, pg. 123.)

**The Winnipeg Electric Street Ry.** proposes to extend its line on Portage ave. this year, and press reports state that extensions to East and West Kildonan, are also projected. Additional boiler power has been added at the power house.

**The Woodstock, Thames Valley and Ingersoll Electric Ry.** was authorized by the Railway Committee of the Privy Council recently to cross the G.T.R. on Dundas st., Woodstock, but will have to put in a derauling device. (June, 1902, pg. 198.)

**RAILWAY FINANCE, MEETINGS, ETC.**

**Bale des Chaleurs Ry.**—A call of 10% upon the unpaid shares has been made, and payment was to have been made at the company's offices, in Montreal April 30. The B. des C. Ry. Co's line of railway was purchased by the Atlantic and Lake Superior Ry. Co., which, however, did not take over the franchises or obligations of the company. The B. des C. Ry. Co., therefore, continues in existence, and is winding up its affairs. (April, pg. 141.)

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

	1902.	1903.	Increase or Decrease.
<b>GROSS EARNINGS.</b>			
Railway—Vancouver division	\$8,701	\$10,619	\$1,918+
Victoria	7,755	7,800	45+
Westminster	6,338	8,060	1,722+
Lighting—Vancouver division	14,666	17,336	2,730+
Victoria	7,766	8,376	610+
	45,166	52,191	7,025+
Less working expenses	30,944	33,488	2,544+
	14,222	18,703	4,481+
Renewal funds	3,458	4,222	764+
Net income	10,764	14,481	3,717+
Gross earnings, July 1, 1902, to Feb. 28, 1903	399,969	455,428	55,459+
Net earnings, July 1 to Feb. 28, 1903	\$137,337	\$155,544	\$18,207+

The company recently offered for subscription in London, Eng., £175,000 of 4½% power debentures of £1,000 each, part of an issue of £220,000 for the erection of the new water-power being developed by the Vancouver Power Co. The B.C.E. Ry. Co. will have the controlling interest in the power company. (April, pg. 141.)

**Brockville, Westport and Sault Ste. Marie Ry.**—The reorganization syndicate having completed its payment of the purchase money on Mar. 20, took possession of the line on April 1. W. H. Comstock, J. Cumming, W. S. Buell, D. Derbyshire, R. Bowie, and W. C. Fredenberg, are reported to have been elected provisional directors, pending the obtaining of the proposed new act of incorporation.

See also Brockville and Western Ry., under Construction, Betterments, etc., pg. 145.

**Calgary and Edmonton Ry.**—Net earnings for Feb., \$10,927.45, against \$30,294.34 for Feb., 1902; making for two months ended

Feb. 28, \$31,605.96, against \$60,662.68 for same period 1902.

**Canada Coals and Ry. Co.**—The report to Sept. 30, 1902, as published by the Provincial Engineer of Nova Scotia, shows an income from the railway of \$28,254.07, made up as follows: Passengers, \$3,178.51; freight, \$23,962.07; parcels, \$497.08; mails, \$301.44; mileage, \$314.97. The expenditure was \$13,653.62, and included \$5,190.60 for maintenance of way; \$4,790.14 for locomotive power; \$986.03, car repairs, and \$2,686.85 traffic expenses. The net earnings were \$14,600.45.

**Canadian Northern Ry.**—Gross earnings:

	1902-03.	1901-02.	Increase.
July	\$132,300	\$7,200	\$45,100
Aug.	130,900	97,000	33,900
Sept.	209,300	103,300	106,000
Oct.	190,200	120,610	69,590
Nov.	259,800	119,142	140,658
Dec.	202,300	129,918	72,382
Jan.	154,700	102,067	52,633
Feb.	147,825	109,524	38,301
	\$1,427,325	\$868,761	\$558,564

Working expenses for Feb., \$97,650; net earnings, \$50,175, against \$40,416 for Feb., 1902; net earnings for eight months to Feb. 28, \$500,541, against \$351,543 for same period 1901-02.

**Canadian Pacific Ry.**—Application is being made at the current session of the Dominion Parliament for an act authorizing the issue of consolidated debenture stock in lieu of bonds; such stock not to bear a higher rate of interest than the bonds to be retired, and to be issued in Canadian currency or sterling. The proceeds from the sale of the stock are to be applied for such purposes as the Company has power to issue bonds, and the holders of the new stock will rank pari passu with holders of consolidated debenture stock issued under any previous acts.

The Secretary, C. Drinkwater, is reported to have recently stated that the bill for the conversion of the bonds of the branch lines into consolidated 4% debenture stock will enable the company to place all these securities which are now locked up in its own safes, on the market. The consolidated 4% debenture stock is a favorite investment with the public, who are not disposed to purchase bonds. In one sense it is a domestic rearrangement of the company's financial house, but it is nevertheless of much public interest. The recent extensive purchases of property in the east end of Montreal, and the acquisition of the Elder-Dempster fleet, represent activities which demand large capitalization. The placing of the bonds in the market in the form of debenture stock will enable the company to make further expansions as they are deemed needful. The only bonds which the company has ever offered to the public are the first mortgage bonds on the main line, which represent \$35,000,000.

In the course of his recent budget speech in the House of Commons, the Minister of Finance explained the provisions of the C.P.R. mortgages by which the Government for some years to come will receive considerable sums of money as trustees for the bondholders from the sale of C.P.R. lands. The Government will have the use of this money on payment of 3½% to the bondholders. Probably \$2,000,000 would not be an excessive estimate of the amount to be received each year from this source for some years to come, and having the use of this money until the time when they will have to pay the bondholders will save the Government from the need of borrowing.

**Central Ontario Ry.**—Judgment was recently given by Chancellor Boyd in the actions of Ritchie v. Blackstock and Toronto General Trusts Corporation v. C.O. Ry. Co. These proceedings arose out of an attempt to sell the railway in Oct., 1902. In the first

action the allegations of fraud made were dismissed with costs, and in the second the company, on paying the costs incurred in connection with the abortive sale, was given leave to amend its defence. A reference was made to the Master to enquire as to debenture holders, to take an account due to each, to name a day for redemption, and in default of redemption to arrange for a sale of the railway.

T. G. Blackstock, on behalf of himself and other bondholders, is making application at the current session of the Dominion Parliament for an act giving bondholders the same right as shareholders, and declaring that one bond of \$1,000 shall be equivalent to 10 shares of common stock. (April, 141.)

**Central Ry. of Nova Scotia.**—By the passing of an act at the current session of the Nova Scotia Legislature, this line has passed under the control of Mackenzie, Mann and Co., and will be amalgamated with the Halifax and South Western Ry., now under construction. The arrangements for the sale were made early in 1902, the terms being subject to legislative ratification. The railway was the property of the Halifax Banking Co., recently amalgamated with the Canadian Bank of Commerce. The purchase price was \$525,000. The Government of Nova Scotia will issue \$425,000 of provincial debentures, to be secured by first mortgage, the balance of \$100,000 being provided by Mackenzie, Mann and Co., who are secured by a second mortgage. The Co. has a land grant of 150,000 acres along its line which is also acquired by Mackenzie, Mann and Co.

The financial statement for the year ended Sept. 30, 1902, as published in the report of the Provincial Engineer of Nova Scotia, shows: receipts, \$61,806.81, made up of \$30,021.70 from passengers, \$26,430.74 from freight, \$2,059.96 from parcels, \$1,841.88 from mails, and \$1,452.53 from rents. The expenditures were \$19,162.82 on account of maintenance of way, \$12,848.44 for locomotive power, \$2,550.17 for car repairs, \$7,753.01 for traffic expenses, \$3,146.44 for general charges, and \$137.07 miscellaneous, total \$45,597.95. The net revenue was \$16,208.86.

**Dominion Atlantic Ry.**—Gross earnings for Feb. \$45,300, against \$48,128 for Feb., 1902, making for two months ended Feb. 28 \$93,800, against \$109,179 for same period 1902.

**Grand Trunk Ry.**—Application is being made at the current session of the Dominion Parliament for an act authorizing the issue of additional 4% guaranteed stock, to rank pari passu with that issued under the act of 1884, the total amount of old and new stock combined not to exceed \$10,000,000. C. Bartholomew, Toronto, who says he is holder of debenture stock, recently addressed a letter to the Speaker alleging that the shareholders of the company had not authorized the affixing of the official seal to such a petition.

**Great Northern Ry., U.S.A.**—The land grant of the Nelson and Fort Sheppard Ry. in British Columbia has been taken over by the G.N.R., and is being administered from the Co.'s land office in St. Paul, Minn. (April, pg. 141.)

**Halifax and Yarmouth Ry.**—The report of the Provincial Engineer of Nova Scotia for the year ended Sept. 30, 1902, contains the accounts of this line to that date. The receipts were: Passengers, \$15,529.24; mails, \$1,988.67; freight, \$7,635.98; miscellaneous, \$751.42; total, \$25,905.31. The expenditures were maintenance of way, etc., \$4,764.71; locomotive power, \$7,829.57; car repairs, \$326.25; traffic expenses, \$5,475.23; general charges, \$578.70; total, \$18,974.46. The net earnings were \$6,930.85, and the surplus \$20,357.92. The company has \$450,000 of

mortgage bonds outstanding, and has issued \$500,000 of common stock.

**Intercolonial Ry.**—The following comparative statement of the revenue and expenditure of the I.C.R. for 1890, 1895, 1900, 1901 and 1902, was given by the Finance Minister in his recent budget speech in the House of Commons:

Year.	Earnings.	Expenses.	Deficit or Surplus.
1890.....	\$2,928,080 92	\$3,481,472 97	\$553,392 05 -
1895.....	2,940,717 95	2,950,300 91	9,582 96 -
1900.....	4,552,071 86	4,431,404 69	120,667 02 +
1901.....	4,972,235 87	5,460,422 64	488,186 77 -
1902.....	5,671,381 91	5,574,563 30	96,820 61 +
	- Deficit.	+ Surplus.	

**London and Port Stanley Ry.**—The preamble of the bill now before the Dominion Parliament sets forth that the city of London, Ont., holds \$159,945 of 1st mortgage bonds, \$164,400 of 2nd mortgage bonds, and \$149,966 of 3rd mortgage bonds, being the whole bonded indebtedness of the company; is a creditor for upwards of \$540,000 for arrears of interest, and also owns 1,828 shares out of 4,415 of the common stock. It is declared that the value of the railway is less than the total of the mortgage bonds and interest due, and that it has been agreed to call in the exist-

ing mortgage bonds and to replace them by others. The new issue of bonds to the city is to be \$1,329,735 at 5%, the principal to be paid in 10 years from Aug. 31, 1902, such bonds to be a first charge on the line; the company being barred from borrowing further, or issuing additional common stock, until the present indebtedness is cleared off. The bondholders are given power to exercise the same rights as the holders of common stock. The contract with the Lake Erie and Detroit River Ry. Co. for the operation of the line, dated Dec. 1, 1893, is not to be interfered with by the passing of the act. (Mar., pg. 106.)

**Midland Ry. of Nova Scotia.**—The following officers and directors were elected at the annual meeting: President, W. Strachan; Vice-President, A. Putnam; Treasurer, J. Beatty; Secretary, A. Hovenden; other directors: P. Lyall, B. T. Pearson, G. G. Faulkner, F. J. McMullen, J. Mackay and Hon. S. H. Holmes.

The report for the year ended Sept. 30, 1902, is published by the Provincial Engineer of Nova Scotia. The receipts were: passenger, \$19,457.50; freight, \$20,919.32; parcels, \$129.61; total, \$40,506.43. The expenditure

was: maintenance of way, \$12,113.14; locomotive power, \$8,994.65; car repairs, \$1,640.11; traffic expenses, \$7,339.30; general charges, \$3,017.00; total, \$33,104.20. The net revenue was \$7,402.23. The company had outstanding \$1,200,000 of temporary 4½% debenture bonds and \$104,300 of common stock. It also received \$356,264 by way of subsidies, and the total amount expended on its line and equipment was \$1,650,720. (Mar., pg. 107.)

**Montreal Street Ry.**—Press reports state that negotiations are in progress for the amalgamation of the M.S. Ry. with the Montreal Light, Heat and Power Co., with a total capitalization of \$50,000,000.

Earnings and expenses for Mar :

	1903.	1902.	Increase or Decrease.
Passenger earnings.....	\$168,987.48	\$154,894.78	\$14,092.70 +
Miscellaneous earnings.....	2,914.98	1,981.61	933.37 +
Total earnings.....	171,902.46	156,876.39	15,026.07 +
Operating expenses.....	118,677.11	103,846.20	14,830.91 +
Net earnings.....	53,225.35	53,030.19	195.16 +
Fixed charges.....	18,432.41	16,175.78	2,256.63 +
Surplus.....	34,792.94	36,854.41	2,061.47 -
Expenses % of car earnings.....	70.23	67.04	

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From Oct. 1, 1902, to Mar. 31 :

	1902-3.	1901-2.	Increase. or Decrease.
Passenger earnings	\$1,000,243.96	\$914,881.24	\$85,362.72+
Miscellaneous earnings	17,247.31	9,838.78	7,408.53+
Total earnings	1,017,491.27	924,720.02	92,771.25+
Operating expenses	652,055.96	595,607.43	56,448.53+
Net earnings	365,435.31	329,112.59	36,322.72+
Fixed charges	100,138.59	90,386.66	9,751.93+
Surplus	265,296.72	238,725.93	26,570.79+
Expenses % of car earnings	65.19	65.10	

Interest on M.P. & I. Ry. Co.'s bonds owned by the Co. not included.

**The Nova Scotia Steel and Coal Co.'s** railway earned for the year ended Sept. 30, 1902, according to figures published in the report of the Provincial Engineer of Nova Scotia, \$15,511.56, and expended \$17,938.78, the operations showing a net loss of \$2,427.22.

**The Pere Marquette Rd.** has, according to press reports, purchased three small lines—the South Haven Eastern, from Lawton to South Haven, 36 miles; the Milwaukee, Benton Harbor and Columbus, from Benton Harbor to Buchanan, 27 miles; and the Benton Harbor and Paw Paw Lake Ry., to be used in shortening the line between Chicago and Detroit.

**Qu'Appelle, Long Lake and Saskatchewan Ry.**—Net earnings for Feb. \$1,234.11, against \$6,689.72 for Feb., 1902; making for three months ended Feb. 28, \$4,066.36, against \$18,040.82, for same period, 1901-02.

**Quebec Central Ry.**—The directors have declared payment of interest for the year 1902 at the rate of 2¼% on the income bonds of the Co.

Grossearnings for Mar. \$53,629.74; working expenses \$34,998.42; net earnings \$18,631.32, against \$16,875.61 net for Mar., 1902. Net earnings for three months to Mar. 31, \$25,213.51, against \$30,337.07 for same period, 1902.

**Quebec and Lake St. John Ry.**—Gross earnings for Jan. \$22,797, against \$22,464 for Jan., 1902.

**Quebec Southern Ry.** after having been closed from Jan. 20, on account of the employees having refused to work until they were paid wages due, was re-opened for traffic Mar. 27. The application to the courts for the appointment of a receiver is understood to be held in abeyance for the present. The non-operation of the line was made the subject of a question in the Dominion Parliament, the question being raised as whether the Government ought not to take power to see that subsidized railways were regularly operated. Hon. J. I. Tarte, in the course of the discussion, said he had been informed that a portion of the Eastern Valley Ry., one of the lines forming part of the Q.S.R., had been amalgamated with the Rutland Rd., and formed a valuable section of it, and its earnings were sent to the United States. The Minister of Railways expressed his willingness to have improvements made in the law respecting insolvent railways, and the Premier said the law should be amended in such a way that when subsidies were granted assurances should be provided that not only would the railway be constructed, but that it would be operated. (April, pg. 143.)

**Sydney and Louisburg Ry.**—The annual report, as published by the Provincial Engineer of Nova Scotia, for the year ended Sept. 30, 1902, shows receipts of \$767,969.34, made up as follows: passengers, \$60,697.06; freight, \$622,173.78; mails, \$600; miscellaneous, \$84,498.50. The expenditure was: maintenance of way, \$47,473.84; locomotive power, \$100,587.26; car repairs, \$51,789.62; traffic expenses, \$71,935.89; general charges, \$27,990. The net earnings amounted to \$468,192.73.

**Shuswap and Okanagan Ry.**—Net earnings for 12 months ended Dec. 31, 1902, \$17,214, against \$14,666 for same period 1901.

**Toronto, Hamilton and Buffalo Ry.**—Earnings for Mar., \$47,246.60, against \$41,116.93 for Mar., 1902, making for 10 months ended Mar. 31, \$393,041.53, against \$386,286.48 for same period 1901-02.

**White Pass and Yukon Ry.**—Gross earnings from July 1, 1902, to Mar. 21, 1903, \$1,214,717.

### Mainly About People.

Sir Thos. G. Shaughnessy returned to Montreal April 5 from England.

R. Farrell, formerly Travelling Passenger Agent C.P.R., has entered the business field at Winnipeg.

C. W. Milestone, formerly Superintendent C.P.R. at Moose Jaw, Assa., has opened a lumber yard there.

Mrs. Fleming, wife of H. B. Fleming, Chief Train Dispatcher, I.C.R. at St. John, N.B., died there recently.

A. N. Bedard, of the Ottawa Transportation Co., has returned to Montreal from a trip through Egypt.

J. W. Nutt, C.P.R. Travelling Passenger Agent, Winnipeg, has resumed duty after a serious attack of pneumonia.

Mrs. C. E. Stephens, wife of the Treasurer of the Northern Navigation Co. of Ontario, died at Collingwood recently.

Sir Wm. and Lady Van Horne, with Miss Van Horne and Miss A. Van Horne, arrived in Montreal April 18 from Cuba.

W. Mackenzie, President Canadian Northern Ry., has been elected a director of the Shawinigan Water and Power Co.

W. Stevens, I.C.R. station master at Dartmouth, N.S., has been arrested on a charge of embezzlement, the alleged shortage being \$5,000.

C. S. Hyman, M.P., London, Ont., has been re-elected chairman of the Railway Committee of the House of Commons for the current session.

Harry A. Norton, of Coaticook, Que., left April 7 for Russia, where the Norton ball-bearing jacks are now being extensively introduced.

Sir C. Rivers-Wilson, President G.T.R., arrived in Montreal, April 25, for the purpose of making a trip over the line and conferring with the officials.

H. L. Piper, of the Hiram L. Piper Co., has removed his family to Montreal, where he has been living for the past year, since establishing business there.

Capt. W. Street, of the Canadian Pacific Navigation Co.'s service, was married recently at New Westminster, B.C., to Miss L. Woodward, of Lulu Island.

F. L. Wanklyn, General Manager of the Montreal Street Ry., accompanied by Mrs. Wanklyn and daughter, sailed for England April 10, for a six weeks' trip.

T. Merry, who has resigned from the Toronto Ry. Co.'s service, was recently presented with a gold chain and locket by the employes of the power house.

T. Pumphrey, chief draughtsman in the engineering office of the International Rd. of Buffalo, N.Y., was married April 8 to Miss S. E. Bartlett, of Hamilton, Ont.

E. Tiffin, General Traffic Manager of the Intercolonial Ry., left Moncton during the third week in April for California, where his daughter has been staying for some time.

M. J. Kennedy was recently presented with a gold watch and address by the conductors

and motormen of the Montreal Street Ry. on his resigning his position as Superintendent.

J. Dunlop, a well-known New Brunswick shipbuilder, died at St. John, N.B., April 4. He built a number of ships for a firm in Liverpool, Eng., and latterly for Wm. Thomson & Co. of St. John, N.B.

G. O. Somers, who has been appointed Assistant to the Fourth Vice-President of the Great Northern Ry., U.S.A., is a native of Barrie, Ont., and was the first station agent at Parkdale, Toronto.

F. P. Blackman, who was the principal promoter of the British Pacific Ry. project, is making application at Chicago, Ill., under the Bankrupts' Act, to be relieved of all debts provable against his estate.

D. G. Ross, who resigned his position as Superintendent C.P.R. at Fort William, Ont., some months ago, on account of ill-health, arrived in Winnipeg April 13, after spending the winter in California.

J. W. Tyrrell, who has had charge of the surveys for the Hamilton and Caledonia Ry., will be absent from Hamilton, Ont., during the summer on a surveying expedition for the Dominion Government in Saskatchewan.

W. Woollatt, General Superintendent Lake Erie and Detroit River division, Pere Marquette Rd., is a provisional director of the Drake Ranching Co. (Ltd.), recently incorporated under the Ontario Companies' Act.

A. M. Stark, local superintendent of the Bell Telephone Co., Toronto, has resigned in order to perfect an invention he has patented for the sending of telephone messages as well as supplying power and light over the same wire.

G. B. Williams, recently appointed chief clerk in the office of the Master Mechanic, C.P.R., Winnipeg, was entertained at dinner by the members of the C.P.R. Club, Toronto Junction, Ont., prior to his departure for Winnipeg.

A. H. Lindsay, who has recently been appointed to the advertising department of the I.C.R., was entertained by the newspaper men of St. John, N.B., on leaving for Moncton, N.B., to take up the duties of his new office.

A. W. Trenholm, who has been appointed General Manager of the Chicago, St. Paul, Minneapolis and Omaha Rd., at St. Paul Minn., is spoken of by Nova Scotia papers as being well known in Truro and Amherst, N.S., and Moncton, N.B.

Dr. G. Smith, Government physician on the construction of the Temiskaming and Northern Ontario Ry., was seriously injured by a fall from his horse recently in North Bay, Ont. He received a severe kick on the head, in addition to a broken arm.

B. C. Gesner, who has resigned his position as air-brake inspector on the I.C.R., to enter the employ of the Galena-Signal Oil Co., Franklin, Pa., was entertained at dinner April 20, by the employes of the locomotive department at Moncton, N.B.

W. J. Singleton, Superintendent of District 6, C.P.R., has been since Mar. 22 in the Homeopathic Hospital, Montreal, where he underwent an operation. On April 16 we were advised that he was recovering rapidly, and that he hoped to return to duty in May.

J. Crawford, who died at Verdun House, Montreal, April 5, aged 80, was one of the promoters of the first street railway in Montreal in 1861, and was its President from 1877 to 1884. He was a familiar figure at annual meetings of the C.P.R. and other companies.

The engagement of Miss Eva Woollatt, daughter of W. Woollatt, General Superintendent Lake Erie and Detroit River division Pere Marquette Rd., Walkerville, Ont., to O. U. MacMicking, of Calgary, Alta., is an-

nounced; the wedding will take place in June.

S. Geo. Tate, formerly Travelling Freight Agent of the Michigan Central Rd. at Buffalo, N.Y., who resigned some time since to enter the service of the American Express Co., is now in the office of the manager of the foreign department at 65 Broadway, New York.

P. Carlin, the C.P.R. conductor charged with conspiracy to defraud the company in connection with a clerk in the audit department, by obtaining information when secret audits of trains were to be made, has been sentenced to two years' imprisonment at Montreal.

G. Swain, who has been C.P.R. station agent at Winnipeg since 1881, celebrated his 76th birthday April 28. He has been in railway service continuously since 1844, in England and Scotland until 1853, and with the G.T.R. from 1853 to 1879, when he joined the C.P.R. at Winnipeg.

A. U. Bain, chief clerk to the General Superintendent C.P.R. at Toronto, was married there April 11 to Miss H. A. Leslie, daughter of the late R. A. Leslie, of Napanee, Ont.

The officials of the company at Toronto presented him with a case of dessert knives and forks and a set of carvers in connection with the event.

Arthur White, formerly Division Freight Agent, G.T.R. at Toronto, was presented with an address by the chief officers of the freight department G.T.R., April 9, at general offices in Montreal; and on the same day with an album containing photographs of all the members, by the Canadian Freight Association.

Wallace C. Orchard, who has been appointed in charge of the newly organized freight tariff bureau of the C.P.R. at Montreal, was born in London, Eng., Mar. 16, 1865, and entered railway service 1889, his record being June, 1889, to Mar., 1893, audit department C.P.R.; Mar., 1893, to Mar. 30, 1903, tariff clerk General Freight Agents' office C.P.R.

J. Woodman, who recently resigned his position as Division Engineer of the Western division of the C.P.R., is going to Salt Lake City, Utah, on a vacation and to look after some private interests. Prior to the change which went into effect on April 1, by which the Western division was divided into two

new divisions, the Central and the Western, Mr. Woodman had charge of 3,967.6 miles of line.

W. Coyne was recently presented with an address and a silver service, and entertained at dinner by the employes of the traffic and transportation departments of the Dominion Iron and Steel Co. and the Dominion Coal Co. at Glace Bay, N.S., on leaving the service of those companies, to take up his residence in Sault Ste. Marie, Ont., as Assistant to the President Consolidated Lake Superior Co.

T. Monroe, who died recently at Coteau Landing, Que., was engaged as engineer during the construction of the Montreal and Kingston section G.T.R., the Hamilton and Port Dover Ry., and for a number of years was in the Dominion Government service, and had charge of the construction of the Soulanges canal from 1892. He was President of the Canadian Society of Civil Engineers in 1895.

T. Foley and M. Foley, railway contractors, St. Paul, Minn., who have extensive contracts with the C.P.R. in Ontario and the Northwest Territories, have been incorporat-

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# The BEST in the WORLD.

ed with T. H. Lock, A. S. Lock, of Winnipeg, wholesale grocers and merchants, and others, under the Manitoba Companies' Act, as Foley, Lock and Larson, with a capital of \$300,000, to carry on a general wholesale and commission business.

C. Halifax Hall, formerly of Nelson, B.C., whose address we enquired for in our March issue, advises us that he has been for some months at Wilmer, B.C. The Nelson post office was instructed to forward his mail to Wilmer, but a letter from our office addressed to him at Nelson was by mistake re-addressed at the Nelson post office to Cranbrook, B.C., and returned to us marked "not called for," which explains the reason for our enquiry.

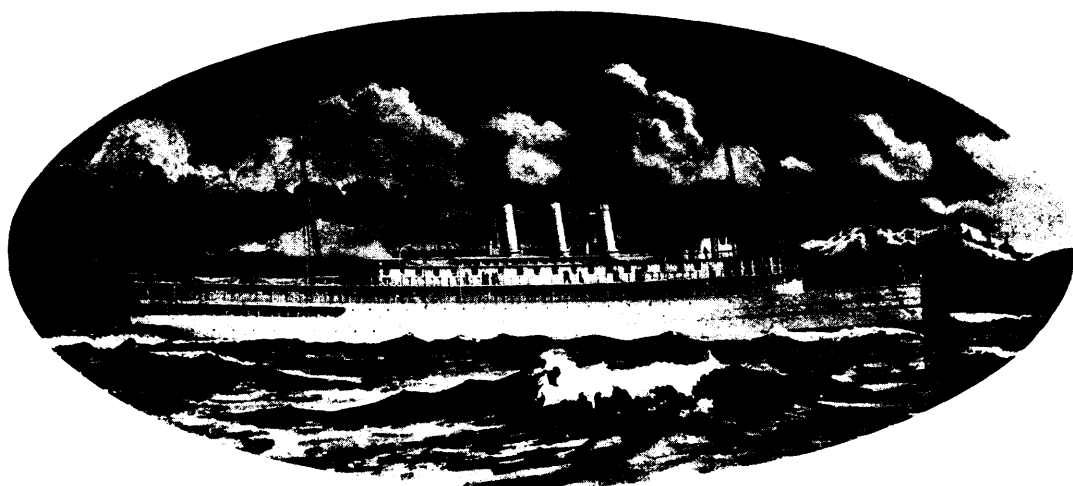
Thos. Tait, formerly Manager of Transportation C.P.R., who has been appointed Chairman of the Board of Railway Commissioners for Victoria at Melbourne, was entertained at dinner April 14, at St. James' Club, Montreal, by officers of the C.P.R. He left Montreal April 17, and after spending a few days in Toronto with his father-in-law, G. R. R. Cockburn, went to Vancouver, B.C., sailing thence for Australia May 1, accompanied by Mrs. and Miss Tait.

David Edward Blair, who has been appointed Assistant Superintendent of the Montreal Street Ry., was born at St. Thomas, Montmagny, Que., July 25, 1877, and graduated B.Sc. at McGill University, 1897, entering the employ of the Quebec Ry. Light and Power Co. immediately thereafter. He worked his way up from the position of Assistant Electrician to that of Chief Electrician and Mechanical Superintendent, which position he occupied until Mar. 15, when he removed to Montreal.

B. C. Gesner, who has been appointed travelling expert for the Galena-Signal Oil Co., for the Maritime Provinces and Newfoundland, with headquarters at Moncton, N.B., was born at Cornwallis, N.S., April 23, 1859. He entered railway service as messenger in the mechanical department of the I.C.R., Jan. 23, 1877, since which his record has been: fireman, Mar., 1878, to Oct., 1882; locomotive driver, Oct. 1882, to Sept., 1898; general air brake inspector, Sept., 1898, to October, 1903; Oct., 1901, to Dec., 1902, master mechanic, at Stellarton, N.S.; Dec., 1902, to April, 1903, air brake inspector; entire service with the I.C.R.

D'Alton Corry Coleman, who has been appointed General Superintendent's Accountant, C.P.R., at North Bay, Ont., was born at Carleton Place, Ont., July 9, 1879, and entered railway service Nov., 1899, since which his record has been: Nov. 1899, to Jan., 1900, clerk, Assistant Engineer's office, Fort William, Ont.; Jan., 1900, to July, 1900, clerk Superintendent's office, Fort William; July, 1900, to Sept., 1900, secretary to General Superintendent, Winnipeg; Sept., 1900, to Feb., 1901, clerk Superintendent's office, Fort William, Ont.; Feb., 1901, to May, 1902, chief clerk Superintendent's office, Cranbrook, B.C.; June, 1902, to April, 1903, chief clerk, General Superintendent's office, North Bay; entire service with C.P.R.

E. T. Hopkins, who died in Brooklyn, N.Y., April 4, was well known in Canada. An old friend writes to us of him as follows: "He had been long connected with the Canadian export business. He began railway work on



CANADIAN PACIFIC NAVIGATION CO.'S STEAMSHIP VICTORIA.

Recently built at Newcastle-on-Tyne, Eng., to run between Vancouver and Victoria, B.C.

the New York Central, in New York, in its early days. He entered the service of the Erie Rd. as Foreign Freight Agent in 1872, and remained in that position for many years. When the West Shore Rd. was completed to Buffalo in 1884, he accepted a similar position on that road, which he held until four years ago, when the foreign freight departments of the West Shore and New York Central were merged, Mr. Hopkins becoming Assistant Foreign Freight Agent. His health had been failing for some years, and finally his strength was not great enough to withstand an attack of typhoid followed by pneumonia. His ripe experience made him thoroughly competent. He was always courteous, strictly honorable, and with a rare keenness of humor it is no wonder he was a great favorite with all who knew him. With him passes away one of the most familiar faces 'on 'change' in New York."

Jas. W. Leonard, who has been appointed Assistant General Manager of the C.P.R. lines west of Lake Superior, with office at Winnipeg, was born at Epsom, Ont., 1858. He entered railway service in 1872, since which his record has been:—Aug., 1872, to 1877, telegraph operator and agent Midland Ry. of Canada; Aug., 1877, to Dec., 1878, agent Victoria Ry.; Dec., 1878, to Mar., 1880, Assistant Manager same road; Mar. to June, 1880, Assistant to General Superintendent Credit Valley Ry.; June, 1880, to Nov., 1883, General Passenger Agent, same road; Nov., 1883, to May, 1884, Master of Transportation Ontario and Quebec Ry.; May, 1884, to Mar., 1887, Superintendent C.P.R. at Toronto; Mar., 1887, to Mar., 1890, Superintendent at Kamloops; Mar., 1890, to Mar., 1893, Superintendent of lines east of Montreal, same road; Mar., 1893, to April, 1901, General Superintendent Ontario and Quebec division, same road; April, 1901, to Mar., 1903, General Superintendent, Western Division, same road, at Winnipeg; Mar. to April, 1903, General Superintendent Central Division, same road, at Winnipeg.

Cornelius Shields, who has been appointed President of the Consolidated Lake Superior Co., was born at Albany, N.Y., Jan. 1, 1856. He entered railway service May, 1871, since which he has been consecutively to Mar. 9, 1882, on the Southern Minnesota Rd. and its successor the Chicago, Milwaukee & St. Paul Ry., to Oct., 1871, waterbody tracklaying train; Oct., 1871, to Sept., 1873, section hand; Sept., 1873, to Oct., 1874, telegraph operator; Oct., 1874, to Feb., 1881, station agent; Feb. to July, 1881, train dispatcher, July, 1881, to March, 1882, Chief Train Dis-

patcher; March, 1882, to May, 1883, Chief Train Dispatcher, C.P.R., western division; May, 1883, to Feb., 1887, Assistant Superintendent, same division, same road; March, 1887, to March, 1888, Superintendent, Montana division, St. Paul, Minneapolis & Manitoba Rd.; Mar., 1888, to Mar., 1889, Assistant General Superintendent, Chicago, St Paul & Kansas City Ry.; Mar., 1889, to April, 1892, General Superintendent, same road; May, 1892, to Sept., 1893, General Superintendent, western division, Great Northern Ry.; Sept., 1893, to April, 1898, General Superintendent, Chicago, Great Western Ry.; July, 1898, to Dec., 1899, Vice-President, Spokane Falls & Northern, Nelson & Fort Sheppard, and Columbia & Red Mountain Rys., and President, Red Mountain Ry.; Dec., 1898, to Dec., 1899, also Assistant General Superintendent, western division Great Northern Ry.; Dec., 1899, to April, 1901, Vice-President and General Manager, Virginia Southwestern Ry. and Virginia Iron, Coal and Coke Co.; April, 1901, to April, 1903, Second Vice-President and General Manager Dominion Coal Co., including the Sydney and Louisburg Ry., and the Black Diamond Steamship Line. About a year ago he was also appointed 2nd Vice-President and General Manager of the Dominion Iron and Steel Co.

#### Grain Elevator Notes.

The Northern Elevator Co. (Ltd.), Winnipeg, is making application for additional powers, including authority to acquire the stock of other companies.

The Andrews-Gage Grain Co. has been incorporated under the Dominion Companies' Act to carry on a grain buying business in Manitoba, with offices in Winnipeg, and to construct elevators. J. E., J. C. and H. G. Gage, of Winnipeg; A. C. Andrews, F. A. Chamberlain, of Minneapolis, Minn., are the provisional directors.

The elevator under construction at Point Edward, Ont., for the Point Edward Elevator Co., is expected to be ready for operation by Aug. 1. It is located on the St. Clair river, and in connection with the G.T.R. system. The building is of wood, ironclad, with a capacity of 500,000 bush., and will be equipped with a marine leg of from 12,000 to 15,000 bush. an hour, 3 lofting legs, and belt conveyors for carrying the grain to and from storage; large weighing scales, and everything necessary to make a first-class rapid handling elevator.



**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	\$2,070,909.25	\$1,175,711.25	\$79,844.32+
Aug.	3,554,484.56	2,101,283.11	1,352,901.46	57,269.36+
Sept.	3,051,481.42	2,240,726.92	1,410,754.50	38,022.78+
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	117,302.10+
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+

\$8,490,653.50 \$18,034,958.38 \$10,455,695.38 \$730,034.28+  
Approximate earnings for Mar. \$3,573,000, against \$2,934,000 for Mar., 1902.

**DULUTH, SOUTH SHORE AND ATLANTIC RY.**—Gross earnings for Feb., \$184,989.89; net earnings, \$55,599.20, against \$195,175.03 gross and \$70,558.71 net for Feb., 1902. Net earnings for eight months ended Feb. 28, 1903, \$654,568.74, against \$640,392.07 for same period, 1901-02. Approximate earnings for Feb. \$226,352, against \$201,021 for Feb., 1902.

**MINERAL RANGE RY.**—Approximate earnings for Feb., \$49,602, against \$45,911 for Feb., 1902.

**MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.**—Gross earnings for Feb., \$438,137.31; net earnings, \$167,492.79, against \$376,949.57 gross and \$172,895.42 net for Feb., 1902. Net earnings for eight months ended Feb. 28, 1903, \$2,454,764.37, against \$2,303,352.90 for same period 1901-2. Approximate earnings for Mar., \$544,590, against \$414,328 for Mar., 1902.

**Canadian Pacific Railway Land Sales.**

	Acres.		Amount.	
	1902-03	1901-02	1902-03	1901-02
July	155,344.93	49,089.96	\$562,876.50	\$154,646.84
Aug.	130,723.83	50,747.82	473,064.85	165,871.16
Sept.	145,535.83	60,060.46	542,811.11	197,057.61
Oct.	270,616.23	150,572.96	952,645.35	465,655.62
Nov.	146,687.83	151,922.89	598,788.99	512,862.94
Dec.	577,382.61	132,151.16	1,683,289.45	403,261.78
Jan.	102,581.20	109,846.99	428,611.21	347,761.91
Feb.	183,554.82	78,039.43	749,235.13	255,156.70
Mar.	184,139.22	101,029.22	782,968.76	333,852.22
	1,906,566.59	883,460.89	\$6,769,739.35	\$2,837,126.78

**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
Jan.	\$2,634,200	\$2,278,978	\$355,222	.....
Feb.	2,432,661	2,018,926	413,735	.....
Mar.	2,967,408	2,537,873	429,535	.....
	\$8,034,269	\$6,853,777	\$1,198,492	.....

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

**GRAND TRUNK RY. CO.**

Revenue for Feb.:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£409,200	£330,100	£79,100	.....
Working expenses	316,500	246,600	69,900	.....
Net profit	£92,700	£82,500	£200	.....

Aggregate from Jan. 1 to Feb. 28:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£837,500	£703,100	£134,400	.....
Working expenses	636,000	500,000	136,000	.....
Net profit	£201,500	£203,100	.....	£1,600

**GRAND TRUNK WESTERN RY.**

Revenue for Feb.:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£70,800	£62,400	£8,400	.....
Working expenses	70,600	59,300	11,300	.....

Net profit..... £200 £3,100 ..... £2,900

Aggregate from Jan. 1 to Feb. 28:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£164,200	£143,400	£20,800	.....
Working expenses	153,100	125,100	28,000	.....

Net profit... £11,100 £18,300 ..... £7,200

**DETROIT, GRAND HAVEN AND MILWAUKEE RY.**

Revenue for Feb.:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£19,700	£13,200	£6,500	.....
Working expenses	14,700	12,100	2,600	.....

Net profit..... £5,000 £1,100 £3,900 ..... £3,900

Aggregate from Jan. 1 to Feb. 28:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£39,200	£36,300	£2,900	.....
Working expenses	29,400	25,300	4,100	.....

Net profit.... £9,800 £11,000 ..... £1,200

**TRAFFIC RECEIPTS OF THE SYSTEM.**

Aggregate from Jan. 1, to Mar. 31, 1903:

	1903.	1902.	Increase.	Decrease.
Grand Trunk	£1,327,811	£1,128,289	£199,522	.....
G. T. Western	262,318	222,089	40,229	.....
D. G. H. & M.	60,747	54,233	6,514	.....
Total	£1,650,876	£1,404,611	£246,265	.....

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**Recent Nova Scotia Legislation.**

The Nova Scotia Legislature at its recent session passed the following acts relating to transportation and the allied interests:

Confirming the contract between the Government and N.S. Eastern Ry. Co.

Relating to the Central Ry. Co.

Amending the act incorporating the N.S. Eastern Ry. and the act amending the same. (Two acts, one public and one private.)

Respecting unpaid railway claims in N.S.

Relating to telephone tolls.

A number of acts enabling municipalities to borrow money in order to aid by the purchase of right-of-way or otherwise, the Halifax and Southwestern Ry., the Mabou and Gulf Ry., the Midland Ry., the Middleton and Victoria Beach Ry., and the Inverness Ry. and Coal Co.'s line.

To enable the town of Sydney to borrow \$250,000 for the purpose of encouraging a shipbuilding plant.

Amending the act incorporating the Midland Ry.

Amending the act incorporating the Granville and Victoria Beach Ry. and Development Co. (Ltd.)

Incorporating the Port Hood-Richmond Ry. Coal Co. (Ltd.)

Incorporating the Standard Coal and Ry. Co. (Ltd.)

Incorporating the Minudie Coal and Ry. Co. (Ltd.)

Amending the act incorporating the Eger-ton Tramway Co.

Incorporating the Yarmouth Marine Ry. Co. (Ltd.)

Amending the act incorporating the Inter-colonial Coal Mining Co.

Confirming lease of Dominion Coal Co. to the Dominion Iron and Steel Co.

Amending act incorporating the Cape Breton Coal, Iron and Ry. Co. (Ltd.)

Consolidating and amending the acts relating to the Bedford Electric Co., and changing its name.

Amending the act incorporating the Yarmouth and Digby Electric Ry.

Amending the act incorporating the Eastern Telephone Co.

Incorporating the Cumberland Telephone Co.

Amending the act incorporating Rhodes, Curry and Co. (Ltd.)

**Canadian Ticket Agents' Association.**

A meeting of the executive committee held in Toronto April 23, was attended by M. McNamara, Walkerton, Ont., President; C. E. Morgan, Hamilton, Ont., 2nd Vice-President; W. H. Harper, Chatham, Ont., 3rd Vice-President; W. Bunton, Peterboro, Ont., Chairman; W. Jackson, Clinton, Ont.; J. I. Robinson, Sydney, N.S.; J. W. Ryder, Toronto; C. C. Young, London, Ont.; E. De la Hooke, London, Ont., Sec.-Treas. There were also present by invitation H. A. Price, Assistant General Passenger Agent, I.C.R., Montreal; J. B. Lambkin, Assistant General Passenger Agent I.C.R., Halifax, N.S.; A. H. Notman, Assistant General Passenger Agent C.P.R., Toronto; C. B. Foster, District Passenger Agent C.P.R., St. John, N.B.; H. Foster Chaffee, Western Passenger Agent R. & O. N. Co., Toronto, and the Editor and Publisher of THE RAILWAY AND SHIPPING WORLD.

The representatives of the I.C.R. stated that that line would convey the members from Montreal to Halifax, thence to Sydney, N.S., and then to St. John, N.B., by special train. The C.P.R. representatives stated that the Star Line Steamship Co. would give a trip up the St. John River from St. John to Fredericton, N.B., and that the C.P.R. would run a special train from there to Montreal.

It was decided to hold the annual meeting

at Sydney, N.S., on Oct. 12. The party will rendezvous at Montreal on Thursday, Oct. 8, leaving there that evening by I.C.R. direct for Halifax, which will be reached on the evening of Friday, Oct. 9. Halifax will be left late on Saturday, Oct. 10, and Sydney Sunday morning, Oct. 11. The annual meeting will be held there on Monday, Oct. 12; in the afternoon the Dominion Iron and Steel Co.'s plant will probably be visited, and the annual dinner will be held in the evening. Tuesday, Oct. 13, will probably be spent visiting the Dominion Coal Co.'s collieries at Glace Bay, the historic ruins at Louisburg, where a clam bake may be indulged in, and Sydney will be left at night, St. John being reached on Wednesday, Oct. 14, about noon. The party will leave St. John Thursday, Oct. 15, early by boat for Fredericton, which will be reached in the afternoon and left in the evening so as to reach Montreal Friday morning, Oct. 16, when the party will disperse. The I.C.R. and C.P.R. officials will prepare an itinerary based on this programme. W. H. C. Mackay, 1st Vice-President of the Association at St. John, and J. I. Robinson, of Sydney, will arrange for hotel accommodation, etc., assisted by J. B. Lambkin of the I.C.R., and C. B. Foster of the C.P.R.

F. W. Churchill, C.P.R. town ticket agent, Collingwood, Ont., was appointed to represent the Association at the meeting of the American Association of General Passenger and Ticket Agents in New Orleans, La., commencing Oct. 13 next, the latter association having extended an invitation.

It was decided that lake and river steamboat coupon ticket agents in charge of coupon ticket offices be eligible for membership under clause 3 of the constitution.

The members of the committee appointed at the Washington meeting to consider the establishment of a co-operative insurance plan—F. W. Churchill, W. Bunton, W. H. McFarlane, W. McIlroy, and S. B. Morris—also met to prepare a report for submission at the next annual meeting.

**Canadian Railway Club.**

At the regular monthly meeting in Montreal April 7 Vice-President T. McHattie occupied the chair.

Most of the time of the meeting was occupied in discussing a paper contributed by A. B. Brown, of the Westinghouse Manufacturing Co., on "What shall be done to prevent moisture and other foreign matter from passing into the train line of the air brake system, so that freezing and other difficulties can be avoided."

A question sent in to the question box, "Is the operation of the per diem plan of settlement for service of foreign cars, in line with the spirit of the present M.C.B. rules, which is to the effect that foreign cars should receive the same attention when on other lines as when on home line?" elicited an interesting discussion, including a paper by J. T. Chamberlain, Master Car Builder of the Boston and Maine Rd.

Owing to want of time the discussion on L. R. Johnson's paper on "Labor organizations and their effect on shop practice" and the reading of J. O. Brumbaugh's paper on "Steam-heating passenger cars" were deferred till the June meeting.

Several members were elected.

The Baldwin Locomotive Works Record of Recent Construction, no. 41, gives illustrations of some notable trains engined by its works. Among the trains illustrated are the fast ones on the C.P.R. and the Canada Atlantic between Montreal and Ottawa.

**TRANSPORTATION APPOINTMENTS.**

**Algoma Central and Hudson's Bay Ry.**—B. J. Clergue, Manager, has resigned. It is said this position is not likely to be filled in the near future.

W. Apps, Master Car Builder, tendered his resignation in Feb., and though asked by the management to withdraw it, has decided to leave for personal reasons. E. Hacking has been appointed to succeed him.

W. Z. Earle, Chief Engineer, has resigned. The position will not be filled for the present.

J. W. Dawsey, Superintendent, Sault Ste. Marie, Ont., has resigned.

See also under Consolidated Lake Superior Co., which owns the A.C. and H.B.R.

**Brockville, Westport and Sault Ste. Marie Ry.**—Consequent on this line having been taken over by the re-organization syndicate, E. R. Dick, Philadelphia, Pa., President, and S. Hunt, Cincinnati, Ohio, General Manager, have retired. W. H. Cole, Receiver for the old company, has made his final report to the Court, and will retire as soon as the Local Master reports on his accounts. He is Registrar for the counties of Leeds and Grenville. E. A. Geiger remains as General Superintendent at Brockville, Ont.

**Canadian Northern Ry.**—W. Shanks, Roadmaster at Winnipeg, having resigned to go into farming, his duties are being performed by General Roadmaster Riordan.

W. Pratt, Jr., formerly Assistant Superintendent C.P.R. Sleeping, Dining and Parlor Cars and Hotels at Winnipeg, has not been appointed to a position in the C.N.R. service, as recently stated in a Winnipeg paper.

R. P. Lewis, of the General Superintendent's staff, is acting as Superintendent at Port Arthur, the Superintendent, A. J. Gorrie, having been appointed General Superintendent of the Great Northern Ry. of Canada.

**Canadian Pacific Ry.**—C. W. Spencer, heretofore General Superintendent of the Eastern Division, has been appointed General Superintendent of Transportation over all lines east of Port Arthur. Office at Montreal.

A freight tariff bureau has been organized in Montreal from which all freight tariffs of the company's eastern lines will be issued. W. C. Orchard has been given charge of the bureau, and A. R. Evans, heretofore General Passenger and Freight Agent of the Midland Ry. of Nova Scotia, has re-entered the C.P.R. service in connection with the work of the bureau. Freight tariffs of connecting lines will be concurred in by W. R. MacInnes, Freight Traffic Manager. Supplies of such tariffs and circulars, which connecting lines now send to the General Freight Agents at St. John, N.B., Montreal and Toronto, should be addressed to his office, except that W. A. Kittermaster, General Agent Freight Department, Chicago, and W. R. Haldane, District Freight Agent, Detroit, Mich., will continue to receive supplies of freight tariffs, in which the company is interested, issued by connecting lines in their respective territories. Tariffs of the company's western lines will be issued by F. W. Peters, Assistant Freight Traffic Manager, Winnipeg.

G. H. Webster, heretofore General Tie Agent, has been appointed Right-of-Way Agent, with office at Montreal.

R. J. E. Scott, Chief Inspector of Time Service, has resigned to take the management of the watch departments of H. Birks & Sons in Montreal, Ottawa and Winnipeg, with headquarters in Montreal.

A change has been made in the system of accounting, which has heretofore been done in the office of the General Superintendent's Accountant, on each grand division. In future the time of the locomotive and train men, and of all other employes of the operating department in the Superintendent's jurisdiction

will be kept by an accountant at each Superintendent's headquarters, and the pay rolls will be prepared there and forwarded to the General Superintendent's Accountants, by whom they will be consolidated and forwarded to Montreal. The following Superintendents' Accountants have been appointed:—Districts 3 and 4, T. A. Moodie, Farnham, Que.; districts 5 and 6, A. E. Crilly, Montreal; districts 8 and 9, E. Pattison, Toronto; districts 10 and 11, R. J. How, Toronto; districts 12 and 13, A. H. Hackett, Montreal; districts 7 and 14, D. Mitchell, Ottawa; district 16, E. N. Favreau, North Bay, Ont.; district 17, J. McEniry; district 18, W. T. Haynes.

James Osborne, heretofore General Superintendent of the Atlantic Division, has been appointed General Superintendent of the Eastern Division, vice C. W. Spencer, promoted. Office at Montreal.

G. A. Ringland, heretofore General Passenger Agent of Elder, Dempster & Co., in Montreal, has been appointed General Passenger Agent of the C.P.R.'s Atlantic steamship service.

W. S. Marlow, formerly in the company's freight office at Toronto, and latterly in its steamship freight office at Hong-Kong, has been appointed chief clerk in the foreign freight office at Montreal.

D. C. Coleman has been appointed General Superintendent's Accountant at North Bay, Ont., vice E. M. Favreau, assigned to other duties.

J. W. Leonard, heretofore General Superintendent of the Central Division, has been appointed Assistant General Manager of all the company's line west of Lake Superior. Office at Winnipeg.

G. S. McKinnon, heretofore Master Mechanic of the old Western Division at Winnipeg, has been appointed Master Mechanic of the Central Division at Winnipeg.

The headquarters of district 23 have been transferred from Moose Jaw to Regina, Assa., necessitating the removal of F. Dillinger, Superintendent; F. J. Reynolds, Chief Train Dispatcher; three dispatchers and two operators.

S. McDonald has been appointed Locomotive Foreman at Saskatoon, Sask.

Geo. Glasford has been appointed Locomotive Foreman at Moose Jaw, Assa., vice J. Brownlee promoted.

W. Hewitt, Trainmaster, has had his jurisdiction extended over district 24. His district now extends over the main line between Moose Jaw, Assa., and Laggan, Alta., and branches, exclusive of the Crow's Nest Pass line. Office at Medicine Hat.

R. D. Smith has been appointed Road Foreman of Engines, district 24, Western division.

D. MacLean has been appointed Road Foreman of Engines, districts 25 and 26, Western division.

W. C. Bowles, heretofore chief clerk in the Assistant General Freight Agent's office at Winnipeg, has been appointed Assistant General Freight Agent, Western division. Office at Calgary. He will have charge of the main line and branches between Portal, Laggan and Crow's Nest. Agents in that territory will report to him direct.

S. J. Hungerford, heretofore acting Master Mechanic at Calgary, Alta., has been appointed Master Mechanic of the Western division. Office at Calgary.

W. A. MacPherson has been appointed Storekeeper of the Western division. Office at Calgary, Alta.

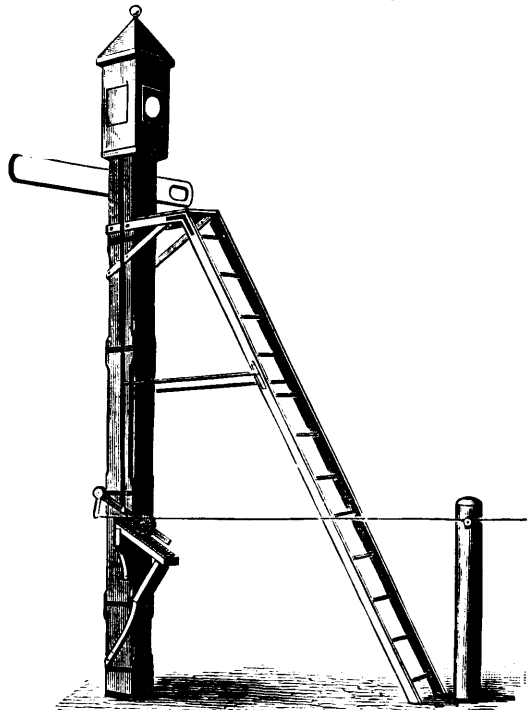
The newly established Western division has the following staff at headquarters, Calgary, Alta.:—General Superintendent, R. R. Jamieson; Division Engineer, A. S. Dawson; Master Mechanic, S. J. Hungerford; Assistant General Freight Agent, W. C. Bowles; Car Distributor, W. B. Harris; chief clerk to General Superintendent, F. M. Wilkes; Storekeeper, W. A. MacPherson.

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Street  
and  
Railway  
Lamps,  
Etc.



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Fusees,  
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VIA THE GREAT LAKES AND

## THE GREAT NORTHWEST

Reaches over its own rails, Winnipeg, Brandon, Portage la Prairie, Neepawa, Dauphin, in fact, all of the best towns in the Province of Manitoba.

EXCHANGES TRAFFIC AT PORT ARTHUR WITH ALL BOAT LINES.

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Daily fast freight trains between Port Arthur and Winnipeg.

### PASSENGER SERVICE.

On or about the 1st of June the Company will establish a through Passenger Service between **Port Arthur and Winnipeg**. The equipment will be brand new, and the service will be such as to commend itself to the travelling public.

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G.E.A., 52 King St. East,  
TORONTO.

**R. H. BELL,**  
T.F. and P.A., Board of Trade Bldg.,  
MONTREAL.

**GEO. H. SHAW,**  
Traffic Manager,  
WINNIPEG.

**Central Vermont Ry.**—S. W. Cummings, General Passenger Agent, has resigned after 35 years' service with the company and its predecessors. He will retire to private life. He is succeeded by J. E. Bentley, heretofore Travelling Passenger Agent.

**Consolidated Lake Superior Co.**—Cornelius Shields has been elected President of this company and all its subsidiary companies, taking the place on the Consolidated Co.'s board of directors vacated by E. V. Douglas. Office, Sault Ste. Marie, Ont.

F. H. Clergue has retired from the general management of the C.L.S. Co. and of its subsidiary companies, from the Vice-Presidency of the C.L.S. Co. and the Presidency of all the subsidiary companies, but remains a director of the C.L.S. Co.

T. C. Search has resigned the Vice-Presidency of the C.L.S. Co., but remains a director. He is succeeded in the Vice-Presidency by E. H. Sanborn, heretofore Assistant Secretary.

W. P. Douglas, Secretary and Assistant-Treasurer of the C.L.S. Co., has resigned.

J. P. Hood has been appointed Secretary of the C.L.S. Co.

W. Coyne, heretofore Traffic Manager of the Dominion Coal Co., has been appointed Assistant to the President. His jurisdiction extends to all branches of the company's business. Office, Sault Ste. Marie, Ont.

We are advised that there is no truth in the report that the general offices of the C.L.S. Co. are to be removed from Philadelphia to New York. The accounting and financial departments are being removed from Philadelphia to Sault Ste. Marie, Ont., the company retaining only a small office in Philadelphia.

See also under Algoma Central & Hudson's Bay Ry.

**Dominion Coal Co.**—C. Shields, 2nd Vice-President and General Manager, has resigned to become President of the Consolidated Lake Superior Co.

Pending a permanent appointment, G. H. Duggan, C.E., heretofore Assistant to the President, is taking Mr. Shield's place.

W. Coyne, Traffic Manager of the Black Diamond Steamship Line and of the Sydney & Louisburg Ry., has resigned to enter the service of the Consolidated Lake Superior Co.

**Grand Trunk Ry.**—E. Parker, heretofore locomotive foreman at Brockville, Ont., has been appointed running shop foreman at Point St. Charles, Montreal, vice J. Kirkpatrick, resigned.

J. C. Price has been appointed foreman of the wheel and tender shops at Point St. Charles, Montreal, vice A. B. Dutton, resigned.

W. H. Sleep has been appointed foreman of the smiths' shop at Point St. Charles, Montreal, vice A. Patterson, resigned.

J. Rugg has been appointed locomotive foreman at Brockville, Ont., vice E. Parker, transferred.

G. A. Mitchell, heretofore Master of Bridges and Buildings Western division, at Durand, Mich., has been appointed Master of Bridges and Buildings Middle division. Office, Toronto.

P. Brass, hitherto acting Master of Bridges and Buildings, Middle division, has been appointed general foreman bridges and buildings, Middle division. Office, Toronto.

C. A. Hayes, heretofore Manager of the National Dispatch-Great Eastern Line at Buffalo, N.Y., has been appointed Assistant General Freight Agent, Chicago, Ill., vice D. Brown, 1st Assistant General Freight Agent, resigned. Mr. Hayes will have charge of freight traffic in the territory west of the Michigan-Indiana state line; also Milwaukee across lake.

C. Clarke, Division Freight Agent, Detroit, will have charge of freight traffic of all the lines of the system in Michigan.

I. W. Gantt, Division Freight Agent, Detroit, will have charge of eastbound freight traffic received from connecting railways at Detroit, and westbound freight traffic from the Niagara frontier and points east thereof (excepting the territory assigned to the General Agent, New York) destined to west of Detroit and St. Clair rivers.

G. J. Bishop, for many years with the Chicago, Rock Island and Pacific Ry., has been appointed Master of Bridges and Buildings G.T.R. Western division, vice G. A. Mitchell, transferred. Office, Durand, Mich.

The following agents have been installed: Pownal, Me., A. O. Paré; Empire Road, Me., H. E. Davis; Doucet's Landing, Que., J. A. Poitras; Lacadie, Que., J. E. Delisle; Brockville (Psgr.), Ont., A. A. Cadwallader; Anson Jct., Ont.; O. R. Burns; Bradford, Ont., W. Hirlahay; Thornton, Ont., G. Simpson; Lisle, Ont., W. J. Coulter; Middlemiss, Ont., H. Dewar; Allenford, Ont., J. L. Taylor; Muskegon, Mich., O. A. Shaner; Lakeland, Mich., J. W. McNamee.

**Great Northern Ry. of Canada.**—A. J. Mitchell, of Mackenzie, Mann & Co.'s Toronto staff, has retired from the directorate, and E. E. Ling, heretofore Treasurer and Assistant General Manager, has been elected in his place. The board is now constituted as follows:—President, Hon. P. Garneau, Que.; 1st Vice-President, Col. J. McNaught, New York; 2nd Vice-President, H. H. Melville, Boston, Mass.; 3rd Vice-President, V. Chateaufort, Quebec; other directors: J. T. Ross, Montreal; J. G. Scott, E. E. Ling, Quebec; Z. A. Lash, D. B. Hanna, W. H. Moore, F. C. Annesley, Toronto; ex-officio: S. N. Parent, Quebec.

J. G. Scott, heretofore General Manager, has resigned. He is also General Manager of the Quebec and Lake St John Ry.

E. E. Ling, heretofore Treasurer and Assistant General Manager, has been appointed Treasurer.

A. J. Gorrie, heretofore Superintendent of the Canadian Northern Ry. at Port Arthur, Ont., has been appointed General Superintendent of the G.N.R., vice R. N. Russell, resigned.

The following officials are retained in their positions by the new management:—Secretary, L. G. Scott; Chief Engineer, A. E. Doucet; General Freight and Passenger Agent, G. Tombs; Auditor, W. A. Kingsland.

The reorganization of the staff has been effected by D. B. Hanna, 3rd Vice-President of the Canadian Northern Ry., on behalf of Mackenzie, Mann & Co., who have secured a large interest in the G.N.R., and who have an option on a further block of stock, which would, it is said, give them absolute control. It is also said that they have the voting power on this stock during the term of the option.

**Great Northern Ry., U.S.A.**—G. O. Somers, heretofore General Freight Agent, has been appointed Assistant to the 4th Vice-President.

J. C. Patterson has been appointed Principal Assistant Engineer, with headquarters at St. Paul. W. P. Whitten succeeds him as Resident Engineer at St. Paul.

E. L. Brown, General Superintendent of the Montana Central Rd., has been appointed Assistant General Superintendent of the G.N.R., with office at St. Paul, vice J. M. Gruber, resigned. F. S. Forest, heretofore Superintendent of the Spokane Falls and Northern Rd., succeeds Mr. Brown as General Superintendent of the Montana Central Rd. at Great Falls, Mont.

R. G. Morgan has been appointed Superintendent of the Spokane Falls and Northern Ry., the Columbia and Red Mountain, the Nelson and Fort Sheppard, the Red Mountain, the Washington and Great Northern Railways, and the Vancouver, Victoria and Eastern Railway and Navigation Co. Office, Spokane, Wash.

**Halifax and South Western Ry.**—Following is a list of Mackenzie, Mann & Co.'s construction staff:—Chief engineer, T. H. White; Superintendent of Grade, W. H. Grant; Accountant, J. D. Morton; Draughtsman, H. T. Crosbie; Stenographer and Clerk, A. M. Yuill; Division Engineer, L. H. Wheaton; Resident Engineers, C. P. McLaren, H. N. Putnam, A. MacGillivray, C. C. Henry; Assistant Engineers, S. H. Sykes, H. Longley, M. Murphy, Jr., C. O. Foss; Engineer in charge of location, A. Mitchell.

**Intercolonial Ry.**—B. C. Gesner, Air-Brake Inspector, has resigned to enter the service of the Galena-Signal Oil Co. On April 29 we were advised that his successor had not been appointed.

W. A. Fitch, of the dispatching office at Truro, is reported to have been appointed Chief Dispatcher at Sydney, N.S.

W. Robinson, General Travelling Agent at Toronto, retired from the service April 15, and the position has been abolished.

N. Weatherston, heretofore travelling agent, with headquarters at Toronto, has been appointed agent there. S. G. Tiffin, travelling agent, retains his position, and it is said another travelling agent will be appointed.

**Midland Ry., N.S.**—A. R. Evans, having resigned to re-enter the C.P.R. service, the office of General Passenger and Freight Agent has been abolished. The affairs of the traffic department will hereafter be conducted by H. V. Harris, General Manager.

**Minneapolis, St. Paul and Sault Ste. Marie Ry.**—E. T. Stone, hitherto Freight Claim Agent, has been appointed Purchasing Agent, succeeding H. C. Pearce, resigned.

A. E. Hodson has been appointed Freight Claim Agent, succeeding E. T. Stone.

P. Swenson has been appointed Superintendent of Bridges and Buildings, succeeding A. Amos. Office, Shoreham, Minn.

**National Despatch—Great Eastern Line.**—D. T. Lawrence, heretofore New England agent at Boston, Mass., has been appointed Manager at Buffalo, N.Y., vice C. A. Hayes, appointed Assistant General Freight Agent G.T.R., at Chicago.

**Pere Marquette Rd.**—W. D. Trump has been appointed Assistant General Superintendent at Detroit, Mich. P. M. Place, heretofore General Trainmaster, succeeds Mr. Trump as Superintendent at Saginaw.

B. Haskell, Superintendent of Motive Power at Saginaw, Mich., has resigned and the position has been abolished.

P. Birrel has been appointed Travelling Freight Agent; headquarters, Buffalo, N.Y.

**Quebec Ry. Light and Power Co.**—D. E. Blair, who has been for the past five years in charge of the electrical and mechanical work of the Co.'s street railway system, has been appointed Assistant Superintendent of the Montreal Street Ry.

W. Langford, heretofore Mechanical Superintendent of the Montmorency division, has been appointed Mechanical Superintendent for all the divisions. T. Hogan has been appointed Assistant Mechanical Superintendent.

**Sydney & Louisburg Ry.**—See Dominion Coal Co.

**Toronto Railway.**—W. H. Moore, Assistant Solicitor Canadian Northern Ry., has been appointed Assistant to the President of the Toronto Ry. Office, Toronto.

**Vancouver, Victoria and Eastern Ry. and Navigation Co.**—See Great Northern Ry., U.S.A.

Mrs. Brignell, wife of J. Brignell, General Manager of the Nova Scotia Central Ry., died at Bridgewater, N.S., April 1.

**Canadian Lake and Ocean Navigation Co.**

The three new steamers which will be added to this company's fleet this year are being completed, two at Newcastle-on-Tyne, England, and one at Port Glasgow, Scotland. They are named respectively J. H. Plummer, A. E. Ames, and H. M. Pellatt, after three of the Toronto directors of the company. All are of the same general dimensions, viz.: length, 245 ft. between perpendiculars; breadth, 37 ft.; depth 24 ft. The steamers have been constructed to carry a large cargo of grain below deck, with general merchandise tween decks, and have five large athwartship hatches so arranged as to give every facility for loading and unloading. At the launching of the A. E. Ames, which was named by Miss Brenda Petersen, daughter of W. Petersen, one of the Vice-Presidents and General Manager of the Co., Mr. Petersen, in the course of a short speech, said these vessels were the pioneers of a scheme to carry on trade between the Great Lakes of North America and Europe. It was a too common mistake in Great Britain to regard these lakes as merely big pools of water; there was an immense volume of trade on the lakes, and it was growing very fast. The proposition was to take freight from any port in Europe to the head of Lake Superior, and from any of the Canadian or U.S. ports to Great Britain. There were 1,150 miles of navigation on the Great Lakes, upon which a ton of freight could be carried for .05 cents a mile, against .25 cents a ton a mile on the railways. Water transportation could, therefore, hold its own in competition with the railways.

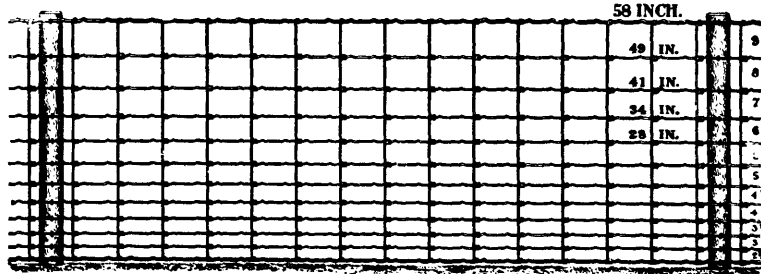
The three steamers named will be operated on the Great Lakes and the St. Lawrence river, in connection with the four vessels of the turret type, which were put on the run between Port Arthur and Georgian Bay points in 1902. The European connection will be kept up from Montreal by the steamers Toronto and Aboukir, giving a service twice a month to Rotterdam. The Toronto is a steel twin-screw steamer built at Hull, Eng., in 1900, and formerly owned by the Wilsons, of Hull. Her dimensions are: length, 460 ft.; breadth, 52 ft.; depth, 34 ft.; tonnage: gross, 6,035 tons; register, 3,949. She is fitted with water ballast tanks, has four decks and a shelter deck, triple expansion engines, 22 in., 37 in. and 64 in. diameter by 42 in. stroke, to which steam is supplied by 3 cylindrical boilers. The Aboukir is somewhat similar in point of size. These steamers will bring out steel rails for the Canadian Northern Ry.

**Recent Quebec Legislation.**

The following acts relating to transportation and allied interests were passed at the recent session of the Quebec Legislature:

- Incorporating the Montreal Steel Works,
- Incorporating the St. George Electric Co.
- Incorporating the Valleyfield Electric Tramway Co.
- Incorporating the Red Falls Electric Co.
- Respecting the Atlantic, Quebec and Western Ry. Co.
- Amending the act incorporating the Shawinigan Falls Terminal Ry. Co.
- Incorporating the Quebec Oriental Ry. Co.
- Amending the charter of the Levis County Ry. Co.
- Incorporating the Montreal Northern Ry. Co.
- Amending the charter of the Chateauguay and Northern Ry. Co.
- Incorporating the Montreal and James Bay Ry. Co.
- Respecting Telephone Companies.
- Giving effect to the transfer of the subsidy granted to the Baie des Chaleurs Ry. Co., now the Atlantic and Lake Superior Ry. Co.

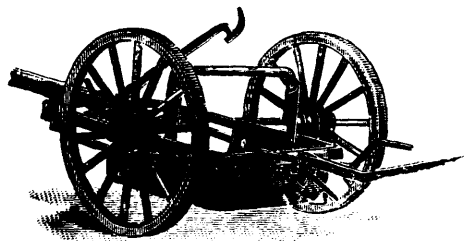
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RAILS. SHOVELS. CARS.**

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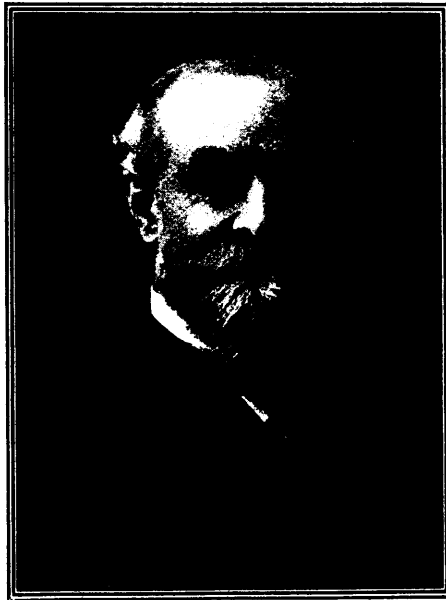
### DOMINION MARINE ASSOCIATION.

The most important event in marine circles during the past month has been the establishment of the Dominion Marine Association. The movement which culminated in the very successful meeting held in Ottawa on April 7 was started in Kingston, Ont., by H. H. Gildersleeve, who enlisted the co-operation of the Kingston Board of Trade, the Secretary of which, F. King, performed the secretarial duties in a very thorough manner. The necessity for the formation of a marine association has long been felt, and its value has already been established by the results of its representations to the Dominion Government. The Minister of Finance announced in his budget speech that the canal tolls would be suspended for two years, and it has since been announced that the order-in-council imposing tonnage dues and inspection fees on vessels entering Canadian ports will be revoked. It now remains for the Association to press the other representations made to the Government, viz., for relief from the payment of overtime fees to customs officials, for the change in the "rules of the road" to harmonize them with those in use in U.S. waters, and for changes in the rules for examinations of engineers. It must be borne in mind that the canal tolls have not been abolished, they are merely suspended, and the Association will do well to collect evidence showing the favorable results of the suspension as they will undoubtedly occur, so as to present the facts to the Government and secure permanent abolition.

There are many other matters in the marine interests in regard to which the Association will undoubtedly be able to perform important work.

On the invitation of the Kingston, Ont., Board of Trade, a meeting of representatives of the Canadian merchant marine interests was held in the City Council Chamber, at Ottawa, on April 7, at 10 a.m. Among those present were: C. F. Gildersleeve, Managing Director, Richelieu and Ontario Navigation Co., Montreal; E. W. Rathbun, President, Deseronto Navigation Co., Deseronto; J. Caruthers, President Corn Exchange, Montreal; De W. Carter, Board of Trade, Port Colborne; F. H. Annes, Secretary Board of Trade, Whitby; Col. Farewell, Vice-President Board of Trade, Whitby; J. McLellan, Bowmanville; T. J. Jones, Selkirk, Man., representing the Dominion Fish Co., the Imperial Fish Co., the Northern Fish Co., Ewing & Fryer Fish Co. and the Northwest Navigation Co.; T. Stewart, Lindsay, Trent Valley Navigation Co.; G. Taylor, M.P., Gananoque; L. Henderson, Montreal Transportation Co., Kingston; T. Conlon, Thorold; R. T. Holcomb, Ottawa Forwarding Co., Ottawa; Jas. H. Hall, Ottawa Forwarding Co., Ottawa; R. C. Carter, General Manager Deseronto Navigation Co., Deseronto; D. Noonan, General Manager Rideau Lakes Navigation Co., Kingston; R. W. Shepard, Managing Director Ottawa River Navigation Co., Montreal; B. W. Folger, Manager Niagara Navigation Co., Toronto; J. Playfair, Midland Navigation Co., Midland; J. A. Cuttle, General Manager Montreal Transportation Co., Montreal; H. W. Richardson, Kingston; A. Chadwick, Kingston; A. C. Bell, M.P., New Glasgow, N.S.; T. Birkett, Ottawa; R. O. Mackay, Hamilton; J. B. Fairgrieve, Hamilton; J. Redden, Kingston; Capt. C. McInnes, Orillia; J. H. G. Hagarty, Managing Director St. Lawrence and Chicago Steam Navigation Co., Toronto; W. Leslie, Collins Bay Rafting and Forwarding Co., Kingston; G. Somerville, Manager Wentworth Navigation Co., Toronto; G. T. Howard, Manager and Treasurer C. P. C and P.

Transfer Co., Prescott; J. J. Long, President Northern Navigation Co., Collingwood; H. S. Folger, General Manager St. Lawrence River Steamboat Co., Kingston; D. Murphy, M.P.P., Ottawa; E. J. B. Pense, M.P.P., Kingston; F. Plummer, Can. Lake and Ocean Navigation Co., Toronto; T. Harling, Montreal; P. Ransfield, Ottawa; Senator Bernier, Manitoba; Senator Baker, Sweetsburg, P.Q., Capt. J. E. Bernier, Quebec; A. A. Wright, the Victoria Harbor Lumber Co. and the French River Boom Co., Toronto; H. W. Wilson, Rideau Lake Navigation Co., Kingston; W. E. Bishop, Manager Hamilton Steamboat Co., Hamilton; J. McKelvey, Kingston; W. Magee, Hamilton; F. A. Magee, Hamilton; A. Hicks, capt. str. Varuna; J. E. Healy, Picton, Ont.; A. W. Hepburn, Manager Lake Ontario Navigation Co., Picton, Ont.; A. H. Baker, Picton, Ont.; A. B. Colville, Algoma Central Steamship Line, Sault Ste. Marie; G. F. Marsh, Huntsville and Lake of Bays Navigation Co., Huntsville; Capt. J. Gaskin, President Board of Trade, Kingston; F. King, Secretary Board of Trade, Kingston; John McLeod, Kingston; J. McD. Mowat, Kingston; A. K. Kirkpatrick, Kingston; C. A.



EDWARD WILKES RATHBUN,  
Vice-President Dominion Marine Association.

Jacques, Montreal; P. E. Campbell, President Montreal and Cornwall Navigation Co., Cornwall; J. B. Canton, Montreal; H. H. Gildersleeve, General Manager, Lake Ontario and Bay of Quinte Steamboat Co., Kingston; Thos. Donnelly, Donnelly Salvage and Wrecking Co., Kingston; M. A. Jesmer; S. G. Lindsay, Ottawa; A. P. Cockburn, Secretary-Treasurer, Muskoka Lakes Navigation and Hotel Co., Gravenhurst; T. E. Brigham, Ottawa; and the Editor and Publisher of THE RAILWAY AND SHIPPING WORLD, and others who failed to register.

Capt. Gaskin, President of the Kingston Board of Trade, being absent at the opening of the meeting, E. J. B. Pense, M.P.P., took the chair and introduced the Mayor of Ottawa, F. Cook, who welcomed the delegates to the city.

J. J. Long, of Collingwood, Ont., having been elected presiding officer for the meeting, invited Hon. J. I. Tarte, Lt.-Col. Gourdeau, Deputy Minister of Marine, the Presidents of the Boards of Trade of Ottawa and Kingston and the President of the Montreal Corn Exchange to seats on the platform.

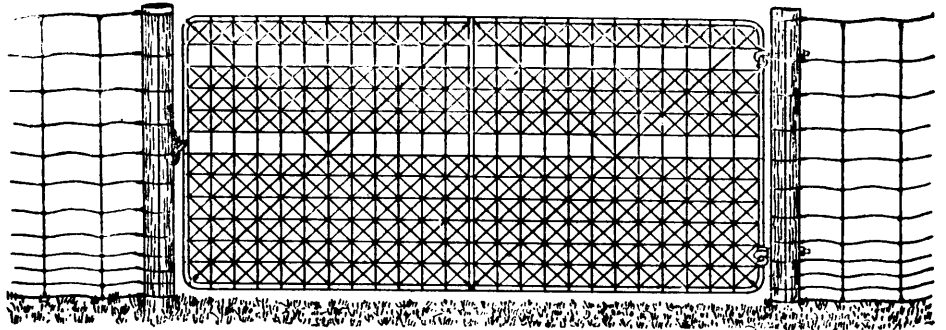
### TONNAGE DUES AND INSPECTION FEES.

C. F. Gildersleeve moved that the tonnage dues and inspection fees required to be paid by the owners of Canadian steamers should be abrogated, and that the salaries and other expenses of the steamboat inspection service, to provide for which these dues are imposed and collected, should be borne and paid by the general public revenue, for the following among other reasons: That the steamboat inspection service was established simply and solely for the safety of the public, and that the taxing of steamboat owners to provide for an expenditure entirely in the interests of the general public is unfair to those who are thus forced to pay more than their share of the public expense. That in other services established for the public benefit such as the administration of justice, the customs, the militia, or the police, the public revenues bear the necessary expense. That no such fees are imposed upon steamboat owners in the U.S., the cost of the service there being defrayed from the public funds. That nevertheless, because the Canadian Government has imposed fees upon all U.S. steamers trading to any part of Canada except Ontario, the U.S. Government has in retaliation imposed on our steamers trading to their ports the same fees which we have imposed on theirs. That all Canadian steamers are thus obliged to pay double fees, namely, their own and those imposed in the U.S. as well; while, on the other hand, U.S. steamers trading to Dominion ports outside of Ontario pay only one fee, that of Canada, and those trading to ports in Ontario pay none. That Canadian owners thus suffer the double injustice of being unfairly taxed a second time by another country for the single reason that they have been unfairly taxed once already at home. That Canadian steamers thus compete for trade with U.S. steamers under a most serious disadvantage, and that this state of facts is not only prejudicial to the interests of the Canadian merchant marine, but also retards the growth and damages the prospects of the whole trade and commerce of the country. That further, freight steamers built and registered in Great Britain and doing business between Canadian ports are not subject to Canadian inspection, nor do they pay any tonnage dues. They have only to submit to inspection once every three years under the rules of English Lloyds. So that, in effect, the Canadian Government puts a premium upon ships built and registered outside the Dominion. That the principles usually governing the imposition of license fees do not apply. The Canadian merchant marine does not constitute an industry of such a nature as to require restriction; rather it is one deserving of the greatest encouragement, and no reason whatever appears for levying upon it an expenditure which ought rightly to be made from the public purse, and that this meeting is of the opinion that the laws should be amended so as to provide for abrogation of inspection fees and tonnage dues in Canada, which will relieve Canadian owners from payment both in Canada and in the U.S., and reciprocity of inspection with the U.S. by which the Canadian inspection certificate will be held to be sufficient in U.S. ports, and vice versa, so that the need for double inspection will be obviated.

In supporting the resolution, Mr. Gildersleeve said:—"It is admitted that a strong commercial marine is one of the most desirable things for any country to possess, and in Canada, with its splendid inland waters, this is equally true in regard to inland as well as ocean marine; but in Canada, from the severity of the winter and other causes, the operation of inland vessels is restricted to eight months out of the year at the longest, and in the case of some passenger steamers to only

two months. To a very considerable extent the crews which operate these vessels must be paid a rate of wages sufficient for their support for the entire year. The wear and tear of the vessels is also greater in proportion than the time of their actual employment. A large proportion of the vessels also have to compete in a greater or less degree with railways bonused and aided in different ways by public monies, while their own construction and operation is defrayed entirely by private effort. It is evident, therefore, that inland vessels in Canada are operated under great disadvantage, and are entitled to the fullest consideration in all matters connected with taxation; and if their operation is subjected to anything in the shape of questionable taxation it should be removed without the slightest hesitation. For the greater safety of passengers travelling by steamers a steamboat inspection service has been established in Canada as well as in other countries, and in order to defray the cost a tax has been placed on the steamers, in the shape of inspection fees and tonnage dues. It has never been contended that this inspection was established at the request of or for the benefit of the owners of steamers. The owners have to employ competent men to construct and operate their steamers for their own protection, and this Government inspection is entirely for the benefit of the public; and the public, that is the general revenue, should pay for it the same as it pays for the services of others employed to protect the public interests. In the U.S. a similar tax was formerly in force, but was abolished in 1886 when its unfairness was complained of by the owners of vessels. In cases, therefore, where the vessels of the two countries come

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### THE CANADA SOUTHERN RAILWAY COMPANY.

**NOTICE.**—The Annual General Meeting of the Canada Southern Railway Company for the election of directors and other general purposes, will be held on Wednesday, the third day of June, 1903, at the hour of eleven o'clock in the forenoon, at the Company's head offices in the City of St. Thomas.

Notice is also given that as the present agreement between the Canada Southern Railway Company and the Michigan Central Railroad Company will determine and expire on the 31st day of December, 1903, a special meeting of the shareholders of the Canada Southern Railway Company, will, after the Annual General Meeting, be held on the said Wednesday, the third day of June, 1903, at the hour of twelve o'clock, noon, at the said head offices of the Company in the City of St. Thomas, for the following purposes, viz. :—

(1). Sanctioning, if considered desirable, a new agreement under and by virtue of the provisions of 57-58 Victoria, chapter 66, section 3, to be proposed and submitted to the Michigan Central Railroad Company.

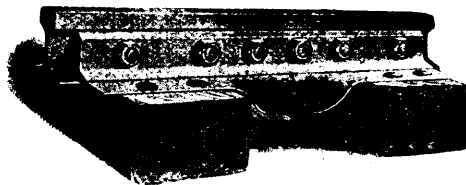
(2). Empowering the directors to create and issue bonds and debentures for the purpose of retiring existing bonds of the Company, to provide for future betterments and additions to its property, and for such other purposes of the Company, and to such an amount as the directors may consider necessary.

(3). And to give power to the directors, to do such other business as may be required by, and consequent upon, the making of the said agreement.

NICOL KINGSMILL,  
Secretary, C. S. Ry. Co.

Dated at St. Thomas, 23rd day of April, 1903.

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in competition those of the U.S. have now the advantage to the extent of the tax. Within the last few years the Canadian Government in addition to taxing Canadian steamers imposed the same tax on U.S. steamers trading to Canadian ports, but the U.S. Government immediately retaliated by putting the same tax on Canadian steamers trading to U.S. ports as Canada had placed on theirs, and the consequence is that Canadian steamers calling at U.S. ports have to pay a double tax; and all because they are unfairly taxed in their own country. It is high time that there should be no tax for steamboat inspection in Canada, as there is none in the U.S., and also that there should be reciprocity in steamboat inspection between the two countries, to save double inspection of the steamers of each." B. W. Folger seconded the motion, which was unanimously adopted after Mr. Gildersleeve had stated that the cost of the inspection was about 8 cents a gross ton. It cost the R. & O. N. Co. about \$2,800 a year. Up to the time the Government started to tax U.S. vessels the fees did not pay, but since then the fees have about paid the expense of the service.

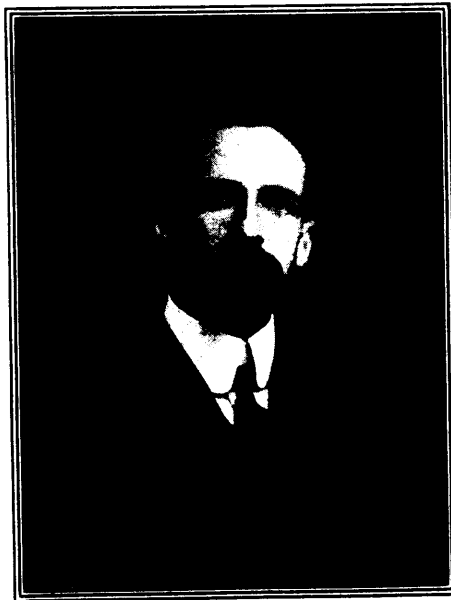
#### CUSTOMS OFFICERS' FEES.

E. W. Rathbun moved that the assessment of steamship, railway and ferry companies, and other public carriers, for the overtime fees of the officials of the Customs Department of the Dominion, is wrong and unjust in principle, unfair to the carriers, and cannot be justified by any method of argument, and that the services of these officials ought to be provided at the public expense, at all hours of both day and night, as well as upon all holidays, for the following among other reasons: That if it is right and proper for the public to bear the expense of these officials from 8 a. m. to 6 p. m. on all juridical days, the assessment of transportation companies instead of the public, for services performed by the officials outside these hours, can lead to no other conclusion than that the public interest would be just as well served if all traffic at ports should cease at 6 p. m. every day, and remain tied up until 8 a. m. on the day following, as well as upon all legal holidays; a conclusion which is manifestly absurd, as the public interests demand free and uninterrupted traffic at all times. That by requiring transportation companies to pay the officials under obligations to those over whom they are expected to exercise surveillance—a state of affairs which cannot be too strongly condemned. That because the Government of the U.S. has taken a fair and proper view of the matter, Customs officers are provided at all U.S. ports at all times without any charge being made, and that, because of this, Canadian interests suffer a serious handicap in having to pay fees which do not fall upon competitors trading to ports in the U.S. That it is for the public benefit that the service should be maintained in an efficient state at all hours and traffic facilitated in every possible way, and that, therefore, the expense should be borne by the public rather than by any individual, company or class. That in these days of keen competition, and while the U.S. is developing such tremendous marine interests upon the Great Lakes, Canadian industries which feel the burden of these fees should be relieved, and protected and encouraged by the adoption of the legitimate principle that the public should pay for all that is for the public benefit.

In supporting the resolution Mr. Rathbun said: "I think every one interested in lake or ocean tonnage understands how these little charges and annoyances aggregate to a considerable amount every year. These charges are one of those which tend to handicap the marine interests of the part of the country

from which I come. For many years I have been persuaded that this and every charge and tax of the same kind, such as the tonnage tax referred to by Mr. Gildersleeve, should all be removed, as well as those referred to in the resolutions which are to follow. I am sure we cannot do better than take a leaf from our U.S. cousins, who are making wonderful strides in the growth of their tonnage, if we give the Government the support they are entitled to in their efforts to improve our water highways and make it attractive for the people.

In supporting the resolution, Capt. Gaskin said that prior to 1893 there was a Canadian Marine Association, which, as the result of interviews with the Government yearly for a period of nine or ten years, obtained reductions in the canal tolls from 20c. a ton to 2c. In looking over the history of the matter he found that from 1860 to 1862 there were no tolls on the canals. Subsequently the Government went back to the old system, the tolls on the Welland canal being 20c. a ton, and this went on until 1884. In 1882 the U.S. Government threw off the tolls on the Erie canal, with the result that the Canadian trade



FRANCIS KING, M.A.,

Secretary Treasurer Dominion Marine Association.

was diverted to the U.S. canals and railways. As a result of an interview, the Government reduced the toll to 10c. a ton in 1884, and to 2c. a ton in the following year. From 1885 to 1892 the marine men waited on the Government with the result that each year the toll was fixed at 2c. a ton. In 1893 an order-in-council was passed making the toll 10c. a ton, at which rate it had since remained. In 1893 a Hamiltonian was elected President, but he had never called a meeting of the Association, and for this reason there had never been any reduction of the tolls. He had looked into the matter thoroughly, and had ascertained that with all the development that had taken place in the Northwest there was less grain going through Montreal than there was ten years ago. He had received a report from the Port Arthur Board of Trade, showing that in 1902 there were shipped from Fort William and Port Arthur 35,000,000 bush. of grain, of which 12,000,000 bush. went to Buffalo. Mr. Richardson, who was present, could tell them that in 1902 he shipped 800,000 bush. of wheat by Buffalo from Fort William, because it was 1-16 of a cent a bush. cheaper than by the Canadian route. The prosperity of the country depends largely upon its ship-

ping. England would not be worth a cent without its mercantile marine. Across the line is a country building up a vast merchant service; on the Great Lakes they are building 62 steamers for that trade, at a cost of \$13,500,000. They are doing all they can for the benefit of their mercantile marine; they are bringing their stuff to Buffalo and our stuff as well, so that we are losing trade. We have spent \$80,000,000 or \$100,000,000 on canals. You can go through the Welland canal, at times, from Port Colborne to Port Dalhousie, without meeting a boat, because we are so handicapped by the extra expense. About tonnage dues:—A man has a boat of 2,000 tons, and has to pay \$160 and the inspection fee besides. On the other side it is all free. There are only four steamers at present building in Canada, two at Collingwood and two in Toronto. The trade in Canada is carried in two ways, by rail and boat. It is unfair to the shipping interests to give their money to kill themselves and aid the railways. He sold out his shipping interests a year ago, after 44 years' experience, because he could invest his money to better advantage, but was ready to re-invest as soon as the Canadian Government dealt with the shipowners in the same way as the U.S. Government treated the ship-owners there.

The resolution passed by the Kingston Board of Trade was to the effect that the tolls on the St. Lawrence canals and the Welland canal be abolished, but the meeting desired to have the tolls on all of the canals abolished, and D. Murphy, M.L.A., moved, "that the resolution be amended so as to cover all Canadian canal tolls." He said the amount collected by way of tolls was not large, about \$236,000, while the expenditure amounted to \$647,000, so that the canals did not pay for their maintenance. The tolls collected on the different canals were: Welland canal, \$95,000; St. Lawrence canals, \$83,000; Chambly, \$23,000; Ottawa canals, including St. Anne's, \$24,000; Rideau canal, \$4,000; St. Peter's, \$3,000; Murray canal, \$1,000, and Trent Valley canal, \$1,000. The tolls could be abolished without any trouble to the Government. The company he represented paid over \$20,000 in tolls, nearly 10% of the whole tolls collected in the Dominion. Capt. Noonan seconded the motion.

De W. Carter, Port Colborne, asked if the abolition of tolls on the canals would include the charges made on the Lachine and Welland canals for vessels wintering there. The wintering of boats in the canals meant revenue to the ports in connection with the repairs, and the spending of money among the people of the neighborhood. He desired to see an amendment so as to include the abolition of charges, as provided by section 32 of the Canals Act.

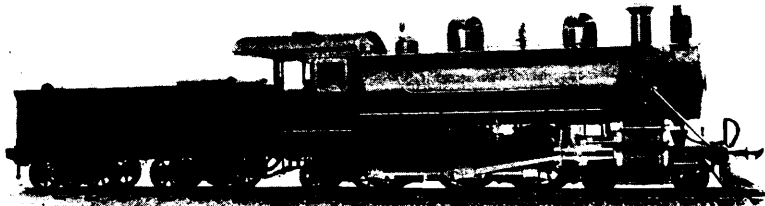
The proposition to make all the canals free of toll was accepted, and Capt. Carter's suggestion was also adopted as applying to all canals.

Thos. Harling, Montreal, said: This is the first chance I have had of meeting the inland marine men of Canada. My business has been more associated with the ocean end of the business, and I may look at it from a broader standpoint than most men here on account of my business in the shipping trade in England. While Great Britain is more desirous to-day of obtaining her supplies from the colonies than ever before, it is for the colonies, especially for Canada, to endeavor to remove as far as possible any restriction to trade which may exist; so that a large transportation business could be developed to the great extent which we hope it will, and which we expect it to during the next ten years. I have been in Canada eight years and during that time the extent of transportation has increased materially. In the port of Montreal up to 1895 the size of the vessels



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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.

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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.

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F. T. GRIFFIN,  
Land Commissioner C.P.R. Co.,  
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trading on the Atlantic was limited to 3,000 or 4,000 tons of wheat cargo. To-day we have in the port of Montreal vessels of 10,000 tons. The U.S. has developed its business enormously, and we need every possible assistance and encouragement given to the ships trading in the St. Lawrence so that they can get a fair share of the freight. We are at a great disadvantage with the U.S. ports, being open a little over six months in the year, while they are open all the year round. In those months we have to work our utmost night and day to get along, and I feel that the charges made by customs officers is an injustice. With regard to the canal toll we have seen within the last few years a change in the transportation business because of that. Previously a good portion came through our canals, but within the last three or four years the Canada Atlantic Railway, the C.P.R. and the G.T.R. have developed their business from the west, especially from Depot Harbor and Midland, and a great deal of the grain business goes that way. No business man in Montreal or in any other part is going to do business for sentiment; he is going to do it where it is cheapest and best. If the canals have not been holding their proportion of the trade, it is because they are not the cheapest route, and if by the reduction, or the abolition of these tolls, an impetus will be given to the business by all means they should be abolished. The steamship men of Montreal are with you. They believe these tolls should be abolished and they have representatives here to-day confirming that resolution. There is another disadvantage in the business, viz, marine insurance. It is not necessary for me to say that the earnings of a vessel require to come up to the costs of running the vessel, and something more besides. A steamer going into the St. Lawrence has the disadvantage of the extra insurance imposed. A reduction had been made on the C.P.R. fleet, but when you have an insurance of £8 8s against vessels trading in the St. Lawrence as against 4½% on those trading to the Atlantic ports you will see what the disadvantage is. The question is a matter of 4% on the value of the vessels in the trade. Marine men are interested with us in saying that the port of Montreal should be relieved from this burden and be placed upon an improved status. It is only by an improvement of the St. Lawrence river and by a relief from these restrictions that we will be enabled to carry the grain and other produce from the west at a cheaper rate than that carried by our neighbors to the south. Instead of having 20,000,000 bush. of grain through the port of Montreal we ought to do 50,000,000 bush., and I am sure when we have terminal facilities in Montreal there is no reason why we should not do 100,000,000. We must carry the grain as cheap as it can be carried to New York and exported. I was very glad to hear Mr. Murphy speak for the Ottawa canal, because there the Ottawa people are especially interested in the lumber business. That business used to go by the Ottawa route. Mr. Murphy's business was built up by transportation between Ottawa and Montreal, and he tells us to-day that that business is now going to Boston by rail and carried cheaper than we can carry it to Montreal. I think, too, we should reduce our ocean rates to keep that business. Last year 30,000,000 ft. of lumber were shipped through Boston which should have gone through Canadian ports.

Hon. J. I. Tarte said trade flowed through the channels of least resistance. It was beyond doubt that Canada had the shortest route between the west and the east, and both the waterways and the railways should be developed as allies on Canadian lines. It was a surprise to him that the canals had kept their ground at all, they had not terminal facilities at either end. Port Colborne was being

equipped slowly, and it was largely the fault of the marine men, who had not educated the public as to what was required in the way of well equipped lake ports. A few years ago Montreal was in a lamentable condition as regards equipment, and was not properly equipped at present. It was within his personal knowledge that the railway companies would not bring freight to Montreal because there were not sufficient facilities to handle it. Quebec, St. John and Halifax were neither of them equipped as they should be. What was the use of spending millions of dollars upon railways in the west if that part of the Dominion becomes American for all commercial purposes? If the lines authorized to be built at the last session of the Manitoba Legislature were all constructed, it would mean that U.S. lines would divert the trade that should come through eastern Canada. They should develop a strong Canadian policy with regard to the railways and waterways, and see to it that they remained Canadian for commercial and political purposes. Having referred to the work of the Lake Carriers' Association of the U.S., Mr. Tarte said Canada must have more ships if she expected to secure increasing trade; the St. Lawrence river works, with which so much progress had been made during the last two years, would have to be completed, and the lighting of the channels finished. Within the last two years great improvements had been made in this respect, and as a result the C.P.R. had been able to obtain a reduction in the rate for insuring its steamers. As a member of parliament his voice and work would be at the disposal of the Association.

Senator Bernier, as a western representative, said if proper outlets, both rail and water, were provided, the western trade would come east through Canadian channels, but at present they had to take the cheapest route, and also the one by which there was an outlet.

#### CHARGES AT GOVERNMENT DOCKS.

Jas. Carruthers, Montreal, in moving that the landing charges levied against steamers calling at government docks be abolished, because it is burdensome, and owners of such steamers in some instances are compelled to pay more in these charges than their revenue from freight at that point would amount to, said the Montreal Board of Trade and Corn Exchange, of which he was a representative, was heartily in sympathy with all the resolutions brought before the meeting. There were two points which should be emphatically brought forward. As a grain shipper he felt sure that the canal tolls of from ¼ to ⅓ of a cent a bush. mean that if they were abolished millions of bushels would come by Canadian routes instead of the U.S. In fact, 1-16 of a cent would at times change shipments of grain from one channel to another. Canadian sentiment was good, but it disappeared when it becomes a question of an ⅓ of a cent a bushel. The Canadian marine should have a little protection, it should be built up and encouraged. They were not asking for very much; but the petty charges and exactions should be abolished.

The Chairman said he knew something of the hardships occasioned to steamship owners through the present system of charging at government docks. The Government had on Georgian bay several small docks, and steamers are charged \$1.50 each time they call at the dock. No private dock makes any charge for steamers calling, as the proprietors are glad to have them call on account of the business brought, upon which wharfage could be collected. Shipowners considered that charging the steamers for calling at these Government docks was equal to a fine, for if the steamers did not call there would be no use for the dock. If it were necessary to make a charge for the steamer calling at the wharf,

it should not be charged to the steamer direct, but should be added to the wharfage charged on the business handled. The steamer had no way of recouping itself for such a charge, not being able to place it as a back charge against any freight landed, and not being able to impose it on any business received from the dock. The charge, therefore, was a direct loss to the owners of the steamer. In many cases the charges to the steamer for going to the dock amounted to more than the total revenue accruing from the business done at the dock on that particular trip. For these reasons the steamship owners considered that such charges should be abolished.

H. W. Richardson, Kingston, said unless Canadian tonnage was enabled to go through the Welland canal free, it would all be tied up. If we want to handle our own grain we must take all restrictions off the trade as far as possible and deal with the Welland canal until it can compete with other ports. This must be done to hold the trade. We must not let the U.S. take this trade from us. We must make our canals free, and if this is done the grain will come by the St. Lawrence route. There will be under proper treatment, at least, 2½c. a bushel in favor of Canadian routes, and the increase of trade will much more than pay for the cost of development.

#### RULES OF THE ROAD.

A. A. Wright, Toronto, said there was a very important matter he wished to bring before the meeting, viz., the Canadian pilot rules, commonly known as rules of the road. In 1895 the U.S. Government amended their rules to suit conditions existing on the lakes, with a view to lessening the numerous accidents in the crowded waterways. At present the Canadian rules come in conflict in fog signals, the giving of vessel descending stream the right of way, and making no provision for lights on tugs and rafts, nor for distinct fog signals for a tug when in tow of a raft or booms. The Canadian fog signal for a steamer running light is one blast of the whistle, which is often confused with a port whistle, as the U.S. signal is three short blasts. Again, in rivers and narrow waters the Canadian rule says that where safe and practicable each vessel shall pass to the right hand or starboard side of mid-channel, which has really meant in the past that the most determined captain with the strongest vessel enforces his claim to the right of way. The Canadian rules do not forbid cross signals, and this should be done to prevent captains answering one whistle with two until the vessels come so close that collision is almost inevitable. Again, the U.S. rules specify cross lights on a tug towing a raft, instead of vertical lights, thus warning approaching vessels of the presence of a raft. The Canadian rules make no provision for this, nor do the Canadian rules make any provision for lights on a raft further than the old rule in force on timber rafts, which calls for a bright fire to be kept burning from sunset to sunrise, which is physically impossible on the lake. The condition of the rules puts vessel owners in Canada in a very dangerous position in case of accident, as owing to the limited number of Canadian vessels on the lakes, captains are compelled, for the safety of their vessels, to adopt U.S. rules even when in Canadian waters. For doing this they are subject to a fine of not less than \$20 or more than \$200 for each offence. He moved that the meeting request the Department of Marine and Fisheries to bring the Canadian rules in harmony with those of the U.S. This was carried.

#### EXAMINATIONS FOR MARINE ENGINEERS.

A. P. Cockburn invited attention to the injustice practised upon engineers engaged on vessels navigating the minor inland waters, who were barred from examination for the position of engineers on the ground that they

had not served upon a larger class of vessels than traded on these minor waters. A third-class engineer could not be promoted on these waters, and the provision requiring a fireman to serve 48 months before presenting himself for examination as an engineer was entirely unjust. The effect of these regulations was to create a dearth of engineers upon these northern waters. There were, to his knowledge, on the minor lakes many eligible and likely young men who could qualify upon their merits as engineers, and would serve the purpose of the vessel owners better than strangers, but, owing to the regulations, they could not present themselves for examination, and were compelled to enter other employments or leave home. He and others had endeavored to have this injustice to the inland lakes remedied and was able to secure some concessions, but still more were required.

Capt. Fairgrieve, R. C. Carter and Capt. Gaskin, having made some remarks about the old association, on motion of Acton Burrows and E. W. Rathbun it was resolved that a permanent organization be formed in the interest of the Canadian marine, and that another meeting be held in the afternoon to take the necessary steps towards the formation of such an association. This was adopted.

The meeting was continued in the afternoon, when on motion of T. Donnelly, Kings-

ton, it was decided to organize under the name of the Dominion Marine Association. The following officers were elected: President, C. F. Gildersleeve, Montreal; Vice-Presidents, J. J. Long, Collingwood; E. W. Rathbun, Deseronto; other members of executive committee: Capt. Crangle, Toronto; R. O. McKay, Hamilton; T. Harling, Montreal; J. A. Cuttle, Montreal; R. C. Carter, Deseronto; Capt. T. Donnelly, Kingston; Capt. J. Gaskin, Kingston; A. A. Wright, Toronto. The selection of a Secretary-Treasurer was left in the hands of the executive committee, F. King consenting to act till some one else was selected, in case he could not accept the position, which the meeting desired him to do, his work in the preliminary organization having been so satisfactory.

DEPUTATION TO GOVERNMENT.

On the following day, the members of the Association waited on the Government to present their views on the matters that had been under discussion. The ministers present were: the Premier, the Postmaster-General, the Minister of Railways and Canals, the Minister of Public Works and the Minister of Customs. Hon. J. I. Tarte, ex-Minister of Public Works, was also present, and the deputation was introduced by W. Harty, M.P. for Kingston.

The memorial, which was addressed to the Premier, the Minister of Marine, the Minister of Customs and the Minister of Railways and Canals, asked for the abrogation of: (1) Tonnage dues and inspection fees imposed on steam vessels in Canada; (2) Fees payable to Customs officers for service after hours and on holidays; (3) Tolls imposed on vessels using the Dominion canals. The memorial also recommended the substance of the additional resolutions passed by the convention in favor of steps being taken to harmonize the Canadian and the U.S. Rules of the Road from the head of the Great Lakes to Montreal; and also in favor of the abolition of landing charges at government wharves. An additional memorial of the steamboat owners upon the minor inland waters, addressed to the Minister of Marine, was also read, asking that the regulations respecting the examination of engineers be amended to allow firemen who have served two seasons, or twelve months, as firemen on minor inland waters, to stand examination for 4th-class papers on their merits; that 4th-class engineers be allowed to stand examination for 3rd-class certificate on two seasons, or 12 months' service as engineers; and that 3rd-class engineers be allowed to run an engine of any size found necessary to put in boats on minor inland waters, at the discretion of the Inspector.

<p><b>Ballast Ropes.</b> <b>Switch Ropes.</b></p>	<p><b>Wire Rope</b></p> <p>For All Purposes Carried in Stock. Cut to any Length.</p> <p>MANUFACTURED BY <b>DOMINION WIRE ROPE CO., LIMITED,</b> MONTREAL.</p>	<p>FOR <b>Hoisting, Haulage, Towing, Elevators, Derricks, Semaphores, Etc., Etc.</b></p>
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Engine Truck Wheels—Diameter.....	30 in.
Journals.....	5 1/2 in. x 20 in.
Wheel Base—Driving.....	14 ft. 0 in.
Rigid.....	14 ft. 0 in.
Total engine.....	22 ft. 2 in.
Total engine and tender.....	50 ft. 0 in.
Weight—On driving wheels.....	120,010 lbs.
On truck.....	25,220 lbs.
Total engine.....	145,230 lbs.
Total engine and tender, about.....	245,000 lbs.
Tender—Diameter of wheels.....	33 in.
Journals.....	4 1/2 in. x 8 in.
Tank capacity, U.S. gal.....	5,000
Imperial gal.....	4,170

The Saxon Engine Works at Chemnitz, Germany, where the C.P.R. is having 20 compound freight locomotives built, were founded by Richard Hartmann, in 1845. Hartmann had for nine years previously carried on the business of building engines and boilers, and the repair and manufacture of machinery for cotton mills. The first locomotive was completed in 1848, T. Steinmetz being the engineer in charge of the works. From that date until 1900, up to which time 2,500 locomotives had been completed. In 1870 the works were transferred to a joint stock company, and in 1897 the capital had been increased to the equivalent of \$3,000,000. The works in 1902 employed over 5,000 persons, up to which date 2,800 locomotives had been delivered. The locomotives turned out included 2,238 single expansion type, 481 2-cylinder compound type and 81 4-cylinder compound type; of which 2,007 were standard gauge and 793 were built to different gauges; while 1,813 were built for German owners and 987 were

shipped to owners in 14 different countries. In addition to locomotives of any construction and gauge, there are made at the works steam engines for all purposes, including electric power stations, machine tools for locomotive shops and railway works, and ship-yards, appliances for the transmission of power and control weighing apparatus for ascertaining

and regulating axle pressure for locomotives and railway carriages. At the Paris Exposition of 1900, a Grand Prize for three locomotives was awarded to the Saxon Engine Works. The catalogue from which these particulars are extracted contains illustrations of over 50 engines of different types turned out by the works.

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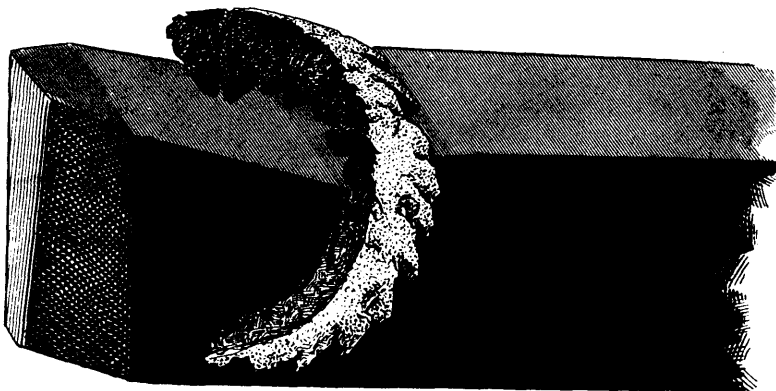
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**G.T.R. SEMI-ANNUAL MEETING.**

At the semi-annual meeting in London, Eng., April 16, the following report was presented for the half-year ended Dec. 31, 1902. The following summary shows a comparison of the half-year's revenue account with that of the corresponding half-year, ended Dec. 31, 1901:—

Dec. 31, 1901.	Dec. 31, 1902.
£2,569,805	£2,811,878
1,757,155	1,974,821
Gross receipts.....	10 10
Working expenses of 70.23% compared with 68.38% in 1901.....	7 6
Net traffic receipts.....	837,057 3 4
Received from International Bridge Co.....	12,930 12 9
Interest on Toledo, Saginaw, Muskegon bonds.....	371 7 4
Interest on Central Vermont Ry. bonds.....	6,506 14 3
Interest on securities of controlled lines and on St. Clair tunnel bonds acquired by issue of G.T.R. 4% debenture stock.....	61,865 10 6
Balance of general interest account.....	17,752 2 4
<b>£908,846</b>	<b>£936,483</b>
Net revenue receipts..	10 6

Following are the net revenue charges for the half-year, compared with the corresponding period:

Dec. 31, 1901.	Dec. 31, 1902.
£77,603	£77,603
466,109	478,720
Rents (leased lines).....	0 9
Interest on debenture stocks and bonds of the Company.....	19 11
Interest on debenture stock and bonds of lines consolidated with the G.T. Co....	52,032 16 4
Interest on total issue of Michigan air line bonds..	..
618,634	608,356
1,930	..
Detroit, Grand Haven and Milwaukee Surplus.....	..
Advanced to Detroit, Grand Haven, and Milwaukee Co., towards payment of interest on its bonds, under agreements, half-year to Dec. 31, 1902....	2,022 0 7
616,704	610,378
292,142	326,104
Leaving a surplus of.....	12 11
<b>£908,846</b>	<b>£936,483</b>
	10 6

Adding £2,609 3s. 1d. at the credit of net revenue account on June 30, 1902, to the above surplus for the past half-year, the total amount available for dividend is £328,713 16s. 0d., from which the directors recommend the declaration of the following dividends:

Half-year's dividend on 4% guaranteed stock.....	£104,395 17 6
Half-year's dividend on first preference stock.....	85,420 15 0
Half-year's dividend on second preference stock.....	63,210 0 4
Dividend of 1% on third preference stock.....	71,646 7 2
	<b>£324,673 0 0</b>

leaving £4,040 16s. 0d. to be carried forward to next half-year's accounts.

Following is a comparison of the receipts for the half-years ended Dec. 31, 1902 and 1901:

Description.	1902.	1901.	Incr'se	Decr'se.
Passengers.....	£	£	£	£
Mails and express.....	844,717	834,662	10,055	..
Freight and live stock.....	141,736	125,072	16,664	..
Miscellaneous.....	1,755,488	1,539,457	216,031	..
	69,937	70,614	..	677
	<b>2,811,878</b>	<b>2,569,805</b>	<b>242,073</b>	..

**TRAFFIC STATISTICS.**

	1901.	1902.	Increase.	Decrease.
Passengers carried.....	4,446,614	4,687,651	241,037	..
Average fare per passenger.....	3s. 9d.	3s. 7½d.	..	1½d.
Tons of freight and live stock.....	5,466,424	6,148,530	682,106	..
Average rate per ton.....	5s. 7½d.	5s. 8½d.	rd.	..
Tons carried one mile.....	1,170,037,355	1,336,690,504	166,653,149	..
Earnings per train-mile.....	70.93d.	72.11d.	1.18d.	..

The average rate per ton per mile on the entire freight business was 0.64 of a cent, as in the corresponding half-year.

The working expenses, excluding taxes, were £1,937,527, or 68.91% of the gross receipts, compared with £1,723,278, or 67.06% in the corresponding half-year; an increase of £214,249, or 1.85%.

Following is a comparison of the revenue expenditure, including taxes, for the half-years ended Dec. 31, 1902 and 1901:—

Description.	1902.	1901.	Incr'se.	Decr'se.
	£	£	£	£
Maintenance of way, and structures.....	558,502	496,987	61,515	..
Maintenance of equipment.....	310,420	317,935	..	7,515
Conducting transportation.....	1,005,716	847,985	157,731	..
General expenses.....	62,880	60,371	2,509	..
Taxes.....	37,294	33,877	3,417	..
Total.....	1,974,821	1,757,155	217,666	..
Percentage of gross receipts.....	70.23	68.38	1.85	..
Expenditure per train-mile.....	50 64d.	48 50d.	2 14d.	..

The exceptional increase of the ratio of working expenses is mainly attributable to the abnormal price of fuel, resulting from the great and prolonged coal strike in the U.S., from which the G.T.R. draws the greater proportion of its supply. The increase in the half-year under this head was £92,000, of which £41,000 was in Dec.

The train mileage of the half-year compares with that for the half-year ended Dec. 31, 1901, as follows:—

Description.	1902.	1901.	Incr'se.	Decr'se.
Passenger.....	3,759,666	3,673,824	85,782	..
Freight.....	5,151,052	4,478,410	672,642	..
Mixed trains.....	448,258	542,759	..	94,501
Total.....	9,358,916	8,694,993	663,923	..

The G.T.R. gross receipts for the half-year show an increase of £242,073, or 9.42%; the working expenses, including taxes, an increase of £217,666, or 12.39%. The train mileage shows an increase of 663,923, or 7.63%.

There has been a decrease of 3 miles in the length of lines worked by the company, caused by the taking up of the remaining portion of the rails on the Chemong branch.

The outlay on capital account for the half-year was £135,783 11s. 6d., the principal items being £112,303 6s. 9d., for double-tracking the line between Hamilton and Niagara Falls,

and Whitby and Port Hope, and £16,552 19s. 10d. for additional land at Toronto, Hamilton, Midland, etc., for the improvement of terminal and traffic facilities. There has been credited to this account £5,200 12s. 1d. principally in respect of premium received on the sale of 4% debenture stock, reducing the total charges to capital account for the past half-year to £130,582 19s. 5d. Four per cent. debenture stock for £85,997 was issued during the year to complete the amount necessary to provide for the repayment of £522,200 Northern Ry. 5% 1st mortgage bonds, which matured on July 1, 1902.

No additions to the rolling stock at the expense of capital were made during the half-year. Thirty-three freight engines, 25 passenger cars, 1,000 box cars, and 687 platform cars have been built in the company's shops, and 355 box cars purchased during the half-year on revenue account, and on Dec. 31 there remained £87,815 at the credit of the engine and car renewal funds, applicable to future renewals.

The doubling of the line between Hamilton and Niagara Falls has been completed, and is in operation with the exception of a short distance between St. Catharines and the Welland canal, which will be shortly completed. The completion of the doubling of the track between Montreal and Toronto (Whitby to Port Hope) has been delayed owing to the scarcity of labor and the difficulty in obtaining materials; but about 9 miles east of Whitby has been completed, and it is anticipated that the remaining 24 miles will be finished during the ensuing season.

The renewal of bridges between Montreal and Hamilton, Toronto and Sarnia, and on the Southern division, has been somewhat delayed by the same causes as the doubling of the track referred to above, but it is hoped that more rapid progress will be made during the current year. In addition to the half-yearly proportion of the cost of the renewal of these bridges, £30,000 has been specially charged against revenue, and credited to the renewal of bridges account in the accounts of the past half-year.

A bill has been introduced into the Dominion Parliament, and is now under consideration, authorizing the company to increase the 4% guaranteed stock from £5,220,000 to not exceeding £10,000,000.

A bill has also been introduced under the auspices of the G.T.R. Co. for the incorporation of a company with powers to construct a railway through the Northwest Provinces of Canada to the Pacific, which it is proposed to work in connection and under traffic arrangements with the G.T.R. Co.

The gross receipts of the G.T. Western Ry. Co. for the half-year were £496,642, an increase of £54,139, and the working expenses were £426,743, an increase of £54,841, leaving a net profit of £69,899, against £70,601, a decrease of £702, compared with the corresponding period of 1901. The net revenue charges for the half-year were £69,281, against £60,010, so that there was, on Dec. 31, a net revenue credit of £618, which is carried forward, as compared with £10,591 for the corresponding half-year of 1901. The number of passengers carried during the half-year was 766,250, an increase of 55,037, or 7.74%; and the passenger train receipts, including mails and express receipts, were £168,384, an increase of £18,786, or 12.56%. The freight moved during the half-year was 1,309,181 tons, an increase of 150,809, or 13.02%, and the receipts from this traffic were £328,039, an increase of £35,337, or 12.07%.

The gross receipts of the Detroit, Grand Haven and Milwaukee Ry. for the half-year were £128,575, an increase of £4,396; the working expenses were £93,551, an increase of £8,482; leaving a balance of £35,024, against £39,110, and showing a decrease in net revenue of £4,086, compared with the corresponding half-year of 1901. The net

revenue charges for the half-year were £37,046, against £37,180 in 1901, so that there was a net revenue deficiency of £2,022, as compared with a surplus of £1,030 for the corresponding period of 1901. The number of passengers carried during the half-year was 394,614, a decrease of 34,699, or 8.08%, and the passenger receipts, including mails and express receipts, were £57,162, an increase of £130, or 0.23%. The quantity of freight moved was 363,597 tons, a decrease of 6,851, or 1.85%; and the receipts from freight traffic were £70,158, an increase of £5,361, or 8.27%.

The retiring directors are G. von Chauvin, Col. F. Firebrace, A. W. Smithers, and Sir W. L. Young, who offer themselves for re-election. The directors report the death of G. B. Newton, one of the auditors in London, whose term of office would have expired at the forthcoming meeting. H. C. Newton has been appointed to fill the vacancy, and has audited the accounts for the past half-year. He offers himself for election by the proprietors. W. M. Ramsay, one of the auditors in Canada, retires by rotation and offers himself for re-election.

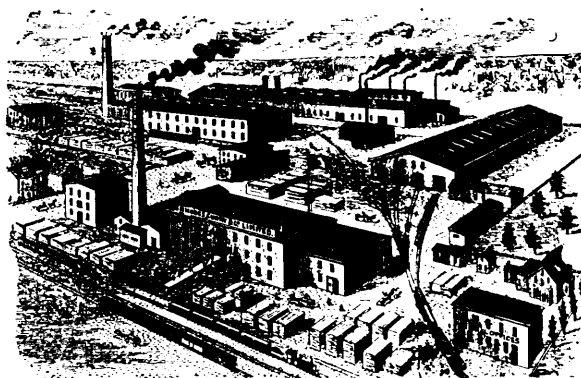
The following are extracts from appended

REPORTS OF OFFICIALS.

The Chief Engineer reports that the charges for maintenance and renewals east of the Detroit and St. Clair rivers, and on the Detroit and Michigan Air Line, and Cincinnati, Saginaw and Mackinaw divisions, in Michigan, for the year 1902, were \$390,005.58 in excess of those for the preceding year. Grouping the charges for repairs of roadway, ballast and ballasting, clearing snow, renewals of rails and ties, and adding to these their proportion of the cost of superintendence, the aggregate charges for maintenance of way were \$2,077,982.67 in 1902, against \$2,077,529.72 in 1901, the rates

per mile being, respectively, \$584.03 and \$583.90. Apart from repairs and renewals of buildings and fixtures, for which there was an increase in 1902, compared with that of 1901, of \$401,475.41, the charges for 1902 show a decrease of \$11,469.83. For the purpose of

obtaining a very much better alignment and easier gradients than those on that part of the existing railway between Port Hope and Darlington, Ont., a section of double-track 19.61 miles is under construction. Between Jordan and Niagara Falls all that is required for the



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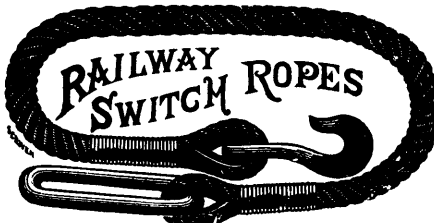
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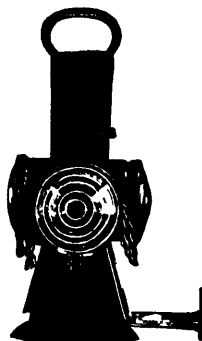
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completion of the second track is a small amount of bridge work, which is in progress. The earthwork of the Brantford and Lynden connection is almost completed. Very little work remains to be done upon the opening in spring. The replacement of old iron bridges, including three draw-bridges, by heavy steel structures is still in progress. These renewals are between Belleville and Toronto; between Toronto and Niagara Falls; and between Buffalo and Glencoe. New stations have been built at Portland, South Durham, Montarville, Warwick, Ste. Therese, Uptergrove, Stayner, Foxboro, Grimsby, Petrolia, Goderich, Vosburg, Glencoe, and Welland. The materials used for renewals and repairs of main tracks and sidings were:—

New steel rails in main tracks, 28,381 tons; re-rolled steel rails in main tracks, 1,140 tons; partially worn steel rails laid in branch lines and sidings, 19,433 tons; new ties in track, 1,189,587 tons; ballast, 143,919 cubic yds.

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

Half-year ended.	Expenditure.	Train Mileage.	Rate of Expenses per Mile.		
			Train	Engine	Car
Dec., 1902...	Dollars. 3,238,129	9,358,916	Cts. 34.60	Cts. 27.21	Cts. 2.01
" 1901...	2,671,012	8,694,993	30.72	24.75	1.79

An increase of \$567,117, or 21.23%, compared with an increase in train miles of 663,923, or 7.64%.

The average number of cars moved per train was...	Passenger Trains. Freight Trains. Mixed Trains.		
	Passenger Trains.	Freight Trains.	Mixed Trains.
And for the corresponding period.....	4.5	27.2	9.5
.....	4.6	28.2	10.4

During the half-year 25 engines were scrapped or sold; 33 mogul compound freight engines were turned out new at the company's works, Point St. Charles. The actual stock at Dec. 31, 1902, was 798 engines, against the official figure of 803.

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

Repairs and renewals of Locomotives.	All repairing charges, including shop machinery, tools, and marine equipment, etc.			
	1902.	1901.	1902.	1901.
Train ..	Cents. 6.32	7.03	8.23	8.63
Engine.	4.97	5.66	6.47	6.95
Car ...	0.37	0.41	0.48	0.50

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

Half-year ended	Cost of repairs and renewals.	Total Miles run by Cars.			Cost per Mile.
		Passenger.	Freight.	Total.	
Dec., 1902	Dollars. 740,363	17,894,799	143,464,365	161,359,164	Cts. 7.91
" 1901	797,292	18,350,246	130,634,938	148,985,184	9.17

A decrease in expenditure of \$56,929, or 7.14%, with an increase in car miles of 12,373,980, or 8.31%.

At cost of revenue 1,000 box, 587 flat, 100 Gondola, 5 first class, 10 second class, and 10 baggage cars were built new, and 4 caboose, 2 flat and 1 cinder car were rebuilt at the company's shops; 355 box cars were purchased during the half year.

The revenue account for the half-year was as follows:—

	RECEIPTS.					
	£	s.	d.	£	s.	d.
Passengers...				849,630	5	3
Less—						
International						
Bridge tolls.	1,264	17	0			
St. Clair tunnel tolls....	3,647	17	7			
				4,912	14	7
Mails and express.....						844,717 10 8
Freight and live stock...						141,735 14 8
Less—						
Cartage, etc.	49,386	18	1			
International bridge tolls..	8,529	4	11			
St. Clair tunnel tolls....	16,623	15	4			
				74,539	18	4
Miscellaneous receipts, rents, tolls, etc.....						1,755,488 6 4
						69,936 19 2
						£2,811,878 10 10

	EXPENDITURE.	
	£	s. d.
Maintenance of way and structures.....	558,501	12 7
Maintenance of equipment.....	310,419	12 1
Conducting transportation.....	1,005,716	7 9
General expenses.....	62,889	1 11
Total working expenses.....	68.91%	1,937,526 14 4
Taxes.....	1.32%	37,294 13 2
		70.23%
		1,974,821 7 6
Balance to net revenue account.....		837,057 3 4
		£2,811,878 10 10

Dec. 31, 1901.	Statement of Train Mileage.	Dec. 31, 1902.
3,673,824	Passenger trains.....	3,759,606
4,478,410	Freight trains.....	5,151,052
542,759	Mixed trains.....	448,258
		8,694,993
		9,358,916

A London cablegram says the meeting was a crowded one. Sir C. Rivers Wilson, in moving the adoption of the report, referred to the heavy increase in the coal bills. The company bought 50,000 tons of coal in England in Jan., and even now was carrying on from hand to mouth, but relief was expected by the end of April. The general prosperity of Canada also entailed heavy expenses on account of materials, pay roll, labor, enlarged yard accommodation and increased rolling stock. A large expenditure was to be made at Bonaventure station, Montreal, in roofing all the platforms, and provision was being made for the cost of this work from the revenue. In regard to the proposed new issue of guaranteed stock he explained that it was for capital purposes as required from time to time instead of issuing 4% preference stock. He added it should have a good effect upon the credit of the company. There had been some misapprehension, but as to the large amount issued there need be no cause for alarm. The directors have no intention of issuing all at once, but from time to time. As in the case of the 4% preference, the directors asked a large amount in order to obviate necessity of going so frequently to the Canadian Parliament. It was better to have a large reserve. Regarding the G. T. Pacific Ry., he said the G.T.R. in self-protection

must share the new traffic in the Northwest. He hoped Sir Wilfrid Laurier would recommend a liberal treatment of the scheme by Parliament. If the terms were arranged satisfactorily he would submit the scheme to the shareholders. Referring to the prospectus of the G.T.R. issued in 1853, he said the resources of Canada were so great that it was not at all impossible to dream that a 11½% dividend on each share of the capital stock would be realized in future.

The report and statements of account were adopted, and the directors whose term of office had expired were re-elected.

### Dominion Atlantic Ry. Company.

The seventh annual meeting was held in London, Eng., recently. C. F. Kemp, the Chairman, in moving the adoption of the report, said that underlying the figures were some facts to which the shareholders should attach due importance. The company has suffered in the past year from two causes—the serious falling off in the tourist traffic, owing to the unfavorable weather, which also practically destroyed about two-thirds of the apple crop, on which the line depended very largely during the autumn months and the early part of the year. Nevertheless, the result of the year's operations had been on the whole satisfactory. Passenger business, in spite of what was regarded as an unsatisfactory tourist experience, had gone up £2,636, while, notwithstanding the great and serious absence of fruit traffic, merchandise receipts have decreased by £4,136. There was thus on the year a comparative decrease of £1,500 only. The directors thought they might well claim this to represent a satisfactory sign of fair development in general trade. He never liked to prophesy, but he thought they might look forward to more satisfactory results during the current year, especially if the weather conditions proved normal. The recent decreases in the current year has been due to the absence of lake fruit shipments. There had been a considerable saving in expenditure. On maintenance of way the outlay had been £1,000 less, and there had been a decrease of £1,700 in the locomotive power expenses, principally attributable to the saving in coal and in working the engines. The Manager in Canada made some very advantageous forward contracts for coal. From the working of the railway and the much better position in which the property now was as compared with a short time ago, the directors were satisfied that the policy followed by them had been a wise one, and that it would ultimately result in considerable benefit to the proprietors. The railway had been efficiently maintained. It was in thoroughly sound and good working order. The financial position of the company was also satisfactory. As directors they could not have received more cordial support than they had continuously experienced at the hands of their stockholders.

Answering questions, the Chairman stated that £21,000 was already in reserve on account of the depreciation on steamers, and it was proposed to add £7,000 to this.

The report was adopted, and a dividend of 2% on the preference stock was declared.

P. Giffkins, General Manager, who was present, from Kentville, N.S., said the report gave unmistakable evidence, in his opinion, that the trade and prosperity of their territory were steadily advancing. They had been compelled to place orders for new rolling stock. The country which they served had everything to attract and retain business—a fine fertile soil, splendid mineral resources, educational facilities second to none, and, above all, a race of sturdy stock and independent character.



**Canadian Northern Ry. Construction.**

**Port Arthur Easterly.**—The survey parties working during the winter had in view the eastern extension of the line, and during their operations covered about 200 miles of country. The parties consisted of: No. 1, F. A. Creighton, J. M. Campbell, J. Congdon and V. S. L. Davis. No. 2, J. P. Chalmers, J. R. Mackenzie, G. W. McMillan, — Gayfer and — Whitney. The office in Port Arthur was in charge of G. B. Hughes. (April, pg. 129.)

**Port Arthur Elevators.**—The C.N.R. elevators at Port Arthur comprise the wooden elevator built in 1901 and completed early in 1902, having a capacity of 1,500,000 bush., and the new tile tank storage elevator recently completed, with a capacity of 2,200,000 bush., giving a total capacity of 3,700,000. The wooden building is constructed on piles and concrete piers, is 239 ft. long and 157 ft. 6 in. high from foundation to gables. The foundations were built on 4,000 piles, and the structure contains 2,349,000 ft. of lumber. The grain is stored in tanks, having a capacity of 10,000 bush. each, being conveyed from the cars in 10 lofters or legs, each having a capacity of 10,000 bush. an hour, and there are also 10 shipping spouts with an equal capacity. The scales have a capacity of 85,000 lbs. The tile tank storage elevator is adjoining and consists of 80 circular tanks, 21 ft. in diameter and 85 ft. deep, the spaces between the rows of bins, 63 in number, being fitted up as bins. These bins are also erected on pile and concrete foundations. Both structures are worked from the one power house, in which is a 750 h.p. engine. The buildings are supplied with a complete installation of electric light and fire extinguishing apparatus. The tile tank storage elevator is the first of its kind erected in Canada. An illustration of these elevators appeared on pg. 129 of our April issue.

**Winnipeg Terminals.**—Until arrangements have been completed with the city council in regard to the projected closing of Broadway, between Main st. and the Red river, nothing

definite is likely to be arranged for the construction of the proposed new station and hotel. Plans have been prepared for both station and hotel, to be erected on the southeast corner of Broadway and Main st., in Fort Garry park, recently purchased from the Hudson's Bay Co. (April, pg. 129.)

**Construction in 1903.**—W. Mackenzie, President, recently stated that 40,000 tons of rails had been contracted for, for delivery this season, and that this quantity was sufficient to lay 400 miles of track. It is estimated that between 600 and 700 miles of line will be constructed during the year. The principal mileage will be the extension of the main line from Grand View, Man., Battleford, Sask., being the point it is expected to reach. It is also intended to complete 70 miles of the extension from Erwood to Melfort, Sask., and possibly further on towards Prince Albert, Sask., and construct a considerable proportion of the mileage which the Western Extension Co. has agreed with the Manitoba Government to construct this year. By arrangement with the Government the company may be granted an extension of time to complete these lines.

**Emerson Branch.**—Construction is expected to be proceeded with on this branch this year. The company is under agreement with the Manitoba Government to extend it to 20 miles east of Emerson this season, and

it is intended ultimately to carry it to a junction with the main line near Vassar or Sprague. (April, pg. 129.)

**Greenway Southwesterly.**—This branch, 40 miles southwesterly from Greenway, on the Morris-Brandon branch, is expected to be proceeded with, and will probably be completed this year. (April, pg. 129.)

**Hartney to Virden.**—Construction on the continuation of the Hartney extension of the Morris-Brandon branch, is expected to be proceeded with this season. (April, pg. 129.)

**Portage la Prairie Southwesterly.**—The construction of this branch, for which the Manitoba Legislature has guaranteed bonds to the extent of \$10,000 a mile for 40 miles, is expected to be gone on with this year. (April, pg. 131.)

**Carberry to Neepawa.**—It is expected that this 20 mile branch, connecting the Neepawa branch with Carberry, will be constructed this year. (April, pg. 131.)

**Rosburn Branch.**—The 65 miles necessary to complete the 80 miles from Rosburn Jct. to the western boundary of the province, is expected to be completed this year. (April, pg. 131.)

**McCreary Branch.**—Grading is expected to be completed on this branch to McCreary station on the line to Erwood, and track to be laid at an early date. (April, pg. 131.)

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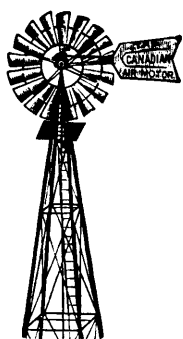


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Plant, etc.

**DAND.**

IF HENRY GRAINGE DAND, son of the late James Dand, of Morwick, in the County of Northumberland, England, and who was last heard of as Engineer on board the ship "China," about the year 1872, will communicate with us, he will hear of something to his advantage.

DICKSON, ARCHER & THORPE,  
Solicitors, Narrowgate House, Alnwick, England.

**Grand View Extension.**—It is expected that construction will be pushed through to Battleford, Sask., about 300 miles from Grand View, Man. During 1902 grading was completed on 38 miles from Grand View and in places beyond, towards the Manitoba boundary. All the contracts for this construction were expected to be placed by the end of April. Plans have been completed for the two bridges to be constructed across the Saskatchewan river, and have been submitted to the Minister of Railways for approval. Mackenzie, Mann & Co. have ordered 10,000 barrels of cement, to be used in the sub-structures, and contracts have been let for the superstructures. The bridge to cross the south branch of the river will be constructed in the vicinity of Osler, and the crossing of the north branch will be at the Elbow. (April, pg. 131.)

**Erwood Westerly.**—The extension of the line westerly from Erwood is expected to be carried as far as Melfort, about 50 miles from the point to where grading ceased in 1902, and possibly to Prince Albert, about 180 miles from Erwood. This line is expected ultimately to be extended from Prince Albert to a junction with the main line, now under con-

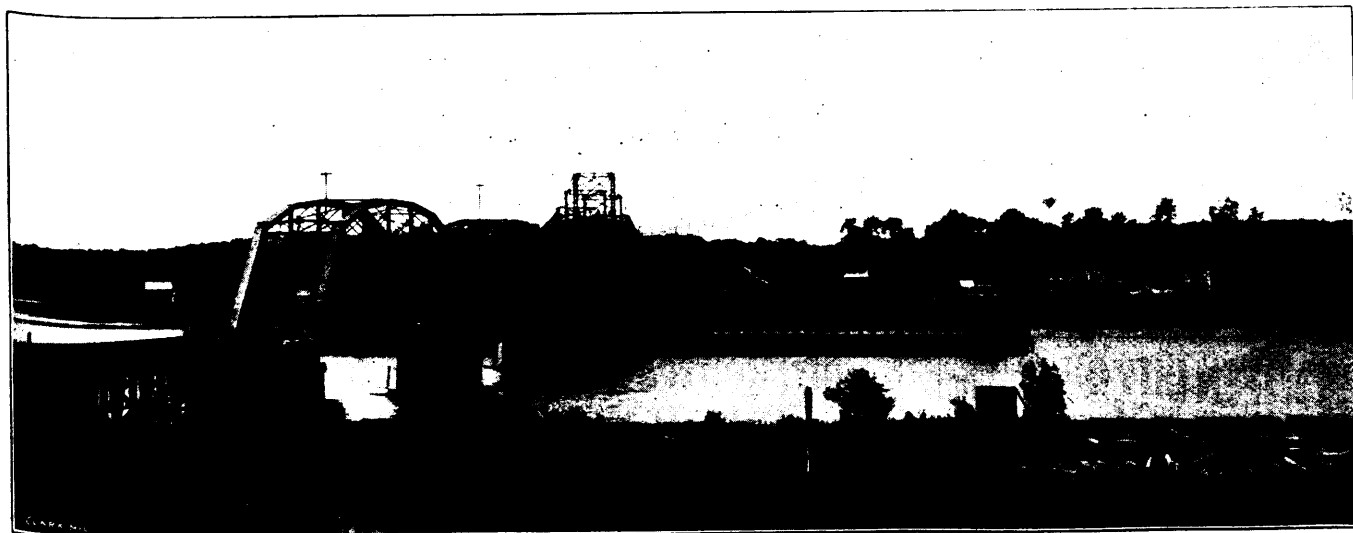
### RAILWAY FENCING.

By R. W. Leonard, M. Can. Soc. C.E.

The subject of railway fencing, especially of determining the most economical and efficient type, does not appear to have received the consideration that the first cost and cost of maintenance would seem to justify. The many different kinds of fencing that one sees in common use in farming and woodland districts in Canada, where cattle are allowed to roam at large, may be estimated to cost all the way from \$300 to \$1,500 or more per mile, and the most expensive is not always the most efficient, durable or economical to maintain. The continued decrease in the supply of suitable timber, and the consequent increase in cost, should make this subject of keen interest to railway companies and to farm land owners. In Canada the fencing of a railway in country districts is necessary for the purpose of protecting the trains from danger arising from running down trespassing cattle or other domestic animals, or of protecting the company from damage suits arising from resulting injury to such animals, and for the protection of the railway from the accumulation

Where a fence 8 ft. high is insufficient to store the snow, it is generally better to use a temporary board hurdle fence placed back 50 or 100 ft. in the field than to increase the height. Fences built with horizontal boards so spaced do not interrupt the view greatly, and do not cause that unpleasant dazzling effect on the eyes of travellers. Where the ground rises or falls, the fence should maintain its height by adding a board to or dropping one off the top, giving the appearance of steps. A vertical batten on the boards at each post greatly strengthens the fence and hides joints. There are various forms of portable board hurdles for snow protection; probably the best is in the form of an inverted Y with widely spaced horizontal boards fastened to vertical frames, which will fold flat for transportation and summer storage. In prairie sections snow is stored clear of the rails by low embankments or hedges taking the place of the fences, or the snow is prevented from accumulating on the track by flattening the slopes of the cuttings.

Barbed wire has been very extensively used, but is justly condemned, as being destructive to stock and inefficient unless used in combination with boards or rails, which



CANADIAN NORTHERN RV. INTERNATIONAL BRIDGE OVER THE RAINY RIVER, BETWEEN RAINY RIVER, ONT., AND BEAUDETTE, MINN.

struction from Grand View, via Battleford. (April, pg. 131.)

**Battleford to Edmonton.**—Arrangements have been made with Rev. S. C. Barr, under whose direction about 2,000 British immigrants have recently gone into the country, for the grading of 100 miles near the lands set apart for the colony.

Survey parties under A. G. McFarlane and J. Armstrong, the latter of whom is principal engineer in charge of surveys, are working at different points between Edmonton and White Whale Lake, 38 miles.

**Edmonton.**—The bylaw to raise \$15,000 towards the purchase of 68 acres for a site for station, yards and workshops from the Hudson's Bay Co., has been passed by the taxpayers. (April, pg. 131.)

The Bell Telephone Co.'s calendar for 1903 gives a plan showing the long distance lines comprised in the Ontario department, which extends from Kingston to Buffalo, N.Y., and Detroit, Mich., and covers the Province from the lake boundaries to Bracebridge. The lines of the North American Telegraph Co., which serve a section of the country northward from the lake shore between Kingston and Cobourg, are shown in red.

of snow. With the modern heavy locomotive and rolling stock, there is little danger to trains to be apprehended from striking the smaller domestic animals, except perhaps pigs, which are generally kept by the owners within a limited space securely fenced, largely because they are difficult to keep within fences which will hold securely other domestic animals. The cost to the railway companies for injuring sheep or pigs is probably so small that it can fairly be considered not economical to try to fence against them in most localities.

It is perhaps unnecessary to consider rail fences, which are probably not now being built by railway companies, owing to their cost and liability to destruction by fire, and tendency to carry fire through the woods. Board fences with posts spaced about 8 ft. apart will perhaps be continued in special locations, such as through towns and close to farmers' buildings, where they are necessary to protect their smaller animals. Post and board fences will also continue to be used as a protection from snowdrifts. For such purpose it is often desirable to build them much higher than for cattle protection. I prefer to use cedar posts, spaced eight feet c. to c., with the boards nailed on horizontally, breaking joints and spacing about 3 ins. apart, selecting the widest boards for the bottom,

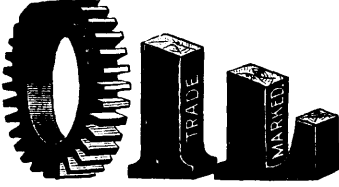
necessitate close spacing of posts, and consequent expensive construction and maintenance. Diamond-shaped woven wire fences and woven lath and wire fences with vertical laths are open to the same objections regarding cost and efficiency. There are a number of different patterns of woven wire fence with horizontal wires connected by vertical wires, woven either in the factory or in the field, which possess varying degrees of excellence, and are rapidly taking the place of the other forms above mentioned. In considering the value of each fencing, the following qualities are important:—(a) Efficiency in stopping horses and cattle without injury to stock or fence; (b) capability of adjusting itself to changes of temperature without unduly straining posts or wires in cold weather; (c) capability of yielding to weight of snow settling during a thaw, fallen trees, or persons climbing over it, without permanent injury; (d) liability of accommodating itself to inequalities of the ground surface; (e) low first cost; (f) low cost of maintenance. If the horizontal wires are plain straight wires, it is necessary, in order to satisfy b, c, and d, that springs be introduced at frequent intervals, also that vertical wires be not so stiff as to remain kinked or distorted. As the cost of cedar posts and labor is continually increasing and the cost of wire generally de-

creasing, the fence should be of such design as to admit of wide spacing between posts, in order to satisfy e and f. I have for some years used largely a fence woven in the factory, in which the horizontal steel wires are like an elongated cork screw, with light vertical wires, and began some eight or nine years ago to space the posts 25 ft. c. to c. This distance was selected so that intermediate posts might be interpolated if demanded by the Government to comply with subsidy contracts. Such intermediate posts were, however, found unnecessary, and the fences—where posts were properly set—have been eminently satisfactory, and experience has

indicated that on level ground this spacing—with strong posts—could safely and economically be extended to even 50 ft. Spans should, however, be modified to suit local irregularities in the ground surface. I am also of opinion that true economy would be gained on a large percentage of railway fencing by limiting the number of horizontal wires to what is necessary to effectively stop cattle and horses (perhaps seven wires). In considering the effect of such long spans between posts, it must be remembered that the longer the span between fixed points the more nearly do we comply with requirements c, e, and f.

Gates should be strong and light, capable

of being locked when desired, and cheap. These conditions appear to be fairly well satisfied by a frame gate, in which the top and bottom rails are 3 in. x 3 in., end posts 3 in. x 4 in., centre posts and braces 2 in. x 3 in., pine or spruce, fastened together with wire nails, and strongly bound by woven wire fencing tightly stretched and securely stapled to all the members. Hook and eye hinges should be used to allow the gate to be lifted off in times of deep snow, and the gate should be fastened with a strong light wire chain (with hook) long enough to encircle the post even when it has drawn away a few inches on account of the strain of the wire fencing.



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**MANITOBA**

The Government Crop Bulletin issued Dec. 12th, 1901, gives the following statistics for the year:

CROPS.		
ACRES.	AVERAGE YIELD.	TOTAL.
Wheat.....2,011,835	25.1 bus.	50,502,085 bus.
Oats.....689,951	40.3 "	27,796,588 "
Barley....191,009	34.2 "	6,536,155 "
Potatoes..84,429	196. "	4,797,433 "

**STOCK.**

Number of stock in the Province, July 1, 1901:

Horses.....142,080	Sheep.....22,960
Cattle.....263,168	Pigs.....94,680
Value of Dairy Products.....\$926,314	

**18,375 FARM LABORERS**

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


**MANITOBA FARMERS ARE PROSPEROUS.**

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

**MANITOBA LANDS**—For sale by the Provincial Government. Over 1,600,000 acres of choice land in all parts of the Province are now offered at from \$2.50 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.

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Or **JAMES HARTNEY**, Manitoba Emigration Agt., 77 York Street, Toronto, Ont.



**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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General Passenger Agent, Grand Central Station,  
NEW YORK.  
**H. PARRY,**  
General Agent, BUFFALO, N.Y.

The discussion of the subject of railway fencing is not complete without considering cattle guards. The danger of wrecking a train in which a pair of wheels may be derailed has led to the abolition on all good roads of the open pit cattle guards, in which the rails are laid on the stringers. The danger of such guards to trains is not much reduced by placing ties and guard rails on the stringers, as cattle and horses are frequently caught in them by the legs, and in such positions are a very serious menace to the heaviest locomotives. I know of no surface guards that will actually stop horses or cattle when seeking food, when driven by men or dogs, or when frightened by a train. There are a number of excellent surface cattle guards (both metal and wood) in the market, and I favor the wooden ones with inverted wedge-shaped longitudinal-slats, painted white for the purpose of exaggerating in appearance the depth between the slats. These, with white painted board wing fences and return fences to the right-of-way fences proper, form a very efficient cattle protection. In the case of oblique public road crossings, I have been in the habit of locating the cattle guards and wing fences just clear of the public road boundary, and carrying the return fences back from the middle of the cattle guards to the right-of-way side fence by the shortest straight line. This excludes from the fenced-in-right-of-way two small triangles, but gives a space for frightened animals to turn in and clear the track, if caught approaching the track in the face of a train. It is probable, in my opinion, that the lengthened spans which will probably be used in fencing, and which demand heavier posts, may ultimately lead to the use of some form of iron post set in concrete base or some design of hollow concrete steel post when the cedar available becomes more expensive. Under present conditions, it is highly desirable to set the tension posts (at gates and corners) in a pyramidal concrete base, as the cost is low compared with the advantages gained in increased strength and durability, and in preventing heaving from frost. There is such a diversity of opinion evidenced by the large number of different styles of fencing, gates, and cattle guards in common use in the country, that I hope to elicit a discussion on this paper that will prove of value.

The foregoing paper was read at a recent meeting of the Canadian Society of Civil Engineers.

**Marconi System for Steamships.**—The American Line, which has had the Marconi Wireless Telegraph system in operation for some time on the S.S. Philadelphia, has issued an illustrated circular, with cuts of the Marconi station and of the St. Louis at sea, announcing its intention to equip the St. Louis, the St. Paul and the New York at once with the system. In addition to the facilities offered to passengers in the way of sending or receiving telegrams while at sea, arrangements have been made with news companies for supplying current news, which will be sent by wireless telegraphy to east-bound steamers from the Poldhu station on the coast of England, and to west-bound steamers from the Siasconset station, Nantucket. The steamers of the lines when fitted with the wireless telegraph apparatus will be practically in continuous communication with either shore stations or with passing steamers.

The C.P.R. Club at Toronto Jct., Ont., is progressing very satisfactorily. Mr. Brumbaugh, Inspector of Steam Heating, C.P.R., Montreal, recently read a paper before the club on the heating and lighting of cars, and L. R. Johnson, Assistant Superintendent of Rolling Stock, C.P.R., Montreal, lectured on a trip in China, illustrated with views.

**Dominion Subsidies to Railways.**

The following subsidies were paid during the year ended June 30, 1902:

Atlantic and Lake Superior Ry.....	\$ 14,800 00
Canadian Northern Ry.....	939,891 00
Thousand Islands Ry.....	5,440 00
Ottawa Northern and Western Ry.....	8,192 00
C.P.R. Crow's Nest pass.....	22,946 00
C.P.R. Pipestone branch.....	67,200 00
Inverness and Richmond Ry.....	86,800 00
Quebec bridge.....	167,430 00
Montreal and Province Line Ry.....	58,560 00
York and Carleton Ry., N.B.....	18,336 00
Algoma Central and Hudson Bay Ry.....	380,624 00
Lake Erie and Detroit River Ry.....	137,120 00
Atlantic and Northwestern Ry.....	186,600 00
Total.....	\$2,093,939 00

The following additional subsidies were paid from July 1 to Dec. 31, 1902:

Great Northern Ry.....	\$ 37,777 20
C.P.R. Crow's Nest pass.....	50,000 00
C.P.R. West Selkirk branch.....	81,650 00
C.P.R. Dymont branch.....	22,336 00
Inverness and Richmond Ry.....	55,000 00
Quebec bridge.....	108,840 00
Atlantic and Lake Superior Ry.....	46,500 00
Algoma Central and Hudson Bay Ry.....	202,912 00
Cape Breton Ry.....	65,280 00
Total.....	\$ 680,295 20

Following is a statement of the subsidies paid since July 1, 1883:

Year ended June 30, 1884.....	\$ 208,000 00
1885.....	403,245 00
1886.....	2,171,249 00
1887.....	1,406,533 00
1888.....	1,027,041 92
1889.....	846,721 83
1890.....	1,678,195 72*
1891.....	1,265,705 87*
1892.....	1,248,215 93*
1893.....	811,394 07*
1894.....	1,229,885 10*
1895.....	1,310,549 10*
1896.....	834,745 49*
1897.....	416,955 30*
1898.....	1,414,934 78*
1899.....	3,201,220 05*
1900.....	725,720 35*
1901.....	2,512,328 86*
1902.....	2,093,939 00*
Total.....	\$24,806,580 37

\*In these amounts the subsidy of \$186,600 a year payable to the Atlantic and North-west Ry. Co. for 20 years from July 1, 1889, is included.

To the above there have to be added the following exceptional subsidies:

Canada Central Ry., paid between 1878-83.....	\$ 1,525,250 00
C.P.R. extension from St. Martin's Junction to Quebec, paid in 1885.....	1,500,000 00

Total subsidies paid from Consolidated Fund to June 30, 1902.....	\$27,831,830 37
The main line subsidy to the C.P.R. was paid from capital, amounting to.....	25,000,000 00

Total paid as subsidies.....\$52,831,830 37

The above does not include \$2,394,000, due to the Province of Quebec for the railway between Ottawa and Quebec, which has been transferred to the public debt, and on which interest at 5% is paid, amounting to \$119,700 a year.

The total cost of the Intercolonial Ry. up to June 30, 1902, was \$68,645,852.58. The additions made during the year included: for increased accommodation at Halifax, \$71,928; at St. John, \$111,209; at Sydney, \$77,609; at Stellarton, \$20,488; at Pictou, \$42,661; and at Lewis, \$75,341; for increased sidings, \$157,998; for strengthening bridges, \$93,431; for engine houses, \$135,049; for additional rolling stock, including 32 locomotives and 1,302 box freight cars, \$2,066,879; for applying air-brakes to freight cars, \$23,688; for steel rails and fastenings, \$188,190; Strait of Canso ferry, \$293,000; arbitrators' awards, Eastern Extension Ry. in N.S., \$671,836, and in N.B., \$280,692.

The total cost of the Prince Edward Island Ry. up to June 30, 1902, was \$4,599,825.12, there being an addition during the year of \$475,997.94; the principal items being \$272,404.47, on the branch to Murray harbor, and \$177,595.53 for a combined railway and carriage bridge over the Hillsborough river at Charlottetown.

**Grand Trunk Ry. Betterments, Etc.**

**Kingston Subway.**—The Railway Committee of the Privy Council has refused to open the matter in reference to the order to construct a subway under the tracks at the Montreal st. crossing, just outside Kingston, Ont., and directed the Kingston city council to pay the costs of the day. (Mar., pg. 89.)

**Dumfries Siding.**—The application to construct a siding from near Dumfries station through the property of the Ontario Portland Cement Co., at South Dumfries, has been granted by the Railway Committee of the Privy Council.

**Yonge St. Crossing, Toronto.**—The matter of the construction of a bridge over the tracks at the foot of Yonge st. has been before the Railway Committee of the Privy Council on several occasions recently. C. Schreiber, Deputy Minister of Railways, visited Toronto, and in company with G.T.R. and C.P.R. officials, as well as the Mayor and city officials, looked over the site and inspected the plans. The matter is still under consideration.

**Toronto Freight Yards.**—It is said nothing will be done in the way of laying out the new freight yards between Simcoe and John streets, Toronto, until after June, and it is expected the new buildings will be completed in the fall. (Mar., pg. 89.)

**Brantford Deviation.**—Grading has been resumed on the deviation of the main line from Lynden to Brantford, and it is expected that it will be ready for operation this year. The portions of the old line between Harrisburg and Paris, via Brantford, which will be used as the new main line, have been relaid with 80-lb. rails. (Mar., pg. 89.)

**Stratford.**—The Company is reported to have secured options on property adjoining the shops and station at Stratford, and it is locally reported that a new station building is to be constructed on a new site, while other portions of the land will be utilized for the extension of the shops. (Mar., pg. 89.)

**Paris to Sarnia Double Track.**—It is expected that the double tracking of the line between Paris and London, and Komoka and Sarnia, will be gone on with this year. The section between London and Komoka, which is heavier work, will probably be left till next year.

**Hamilton—Niagara Falls Double Tracking.**—The swing bridge over the Welland canal has been completed, and the bridge over Ten-mile creek was expected to be completed at the end of April. The whole of the double tracking is expected to be in operation early in May. (Mar., pg. 89.)

**May Birthdays.**

Many happy returns of the day to Garret Vliet, Assistant Master Mechanic, G.T.R., at Portland, Me., born at Milwaukee, Wis., May 5, 1854.

W. R. Baker, Assistant to 2nd Vice-President, C.P.R., at Montreal, born at York, Eng., May 25, 1852.

S. Barker, M.P., President Muskoka Lakes Navigation and Hotel Co., Hamilton, Ont., born at Kingston, Ont., May 25, 1839.

F. T. Byrne, Commercial Agent, G.T.R., at St. Louis, Mo., born at Albany, N.Y., May 3, 1859.

G. S. Cantlie, Superintendent Car Service, C.P.R. at Montreal, born there May 2, 1867.

C. L. Coon, City Passenger and Ticket Agent, G.T.R., at Buffalo, N.Y., born at Watertown, N.Y., May 20, 1868.

G. H. Dodge, Assistant Treasurer and Superintendent, Levis County Ry., Levis, Que., born at Billerica, Mass., May 14, 1875.

M. Donaldson, General Superintendent, Canada Atlantic Ry., at Ottawa, Ont., born near Edinburgh, Scotland, May 1, 1851.

G. C. Dunn, ex-Chief Engineer, Ottawa, Northern and Western Ry., Pontiac Pacific Jct. Ry., Hull Electric Ry., and Interprovincial Bridge, at Ottawa, born at Quebec, May 13, 1862.

Hon. W. C. Edwards, Timiskaming Steamboat Co., Rockland, Ont., born at Clarence, Ont., May 7, 1844.

J. D. Evans, Engineer Central Ontario Ry., at Trenton, Ont., born at Goderich, Ont., May 27, 1843.

E. T. Galt, President Alberta Ry. and Coal Co., at Lethbridge, Alta., born at Sherbrooke, Que., May 24, 1850.

A. Hardy, General Freight and Passenger Agent, Quebec and Lake St. John Ry., at Quebec, born there May 12, 1855.

W. T. Huggan, Treasurer and Auditor Prince Edward Island Ry., at Charlottetown, P.E.I., born at Halifax, N.S., May 24, 1851.

J. Hunter, Vice-President, Chief Engineer and General Superintendent Esquimalt and

Nanaimo Ry., at Victoria, B.C., born at Aberdeen, Scotland, May 7, 1839.

W. S. Kinnear, Chief Engineer, Michigan Central Rd., at Detroit, Mich., born at Circleville, Ohio, May 25, 1864.

G. A. Parker, Auditor Dominion Atlantic Ry., at Kentville, N.S., born at Walton, N.S., May 1, 1855.

N. J. Power, Auditor of Disbursements, G.T.R., at Montreal, born at Rochester, N.Y., May 19, 1843.

H. B. Sherwood, Superintendent Bay of Quinte Ry., at Napanee, Ont., born at Auburn, N.Y., May 25, 1847.

E. Tiffin, General Traffic Manager, I.C.R., at Moncton, N.B., born at Hamilton, Ont., May 5, 1849.

J. H. Walsh, General Freight and Passenger Agent, Quebec Central Ry., at Sherbrooke, Que., born at Quebec May 12, 1860.

H. K. Wicksteed, Engineer in Charge of

Surveys, Canadian Northern Ry., east of Port Arthur, born at Quebec May 25, 1855.

James Yeo, ex-Roadmaster Intercolonial Ry., Riviere du Loup, Que., born at Bideford, Devonshire, Eng., May 1, 1830.

**Railway Track Laid in 1902.**—The Montreal Terminal Ry. Co. laid 8.25 miles of track in the city of Montreal, which brings up the total mileage of electric railway track laid in 1902 to 85,291 miles.

The Engineers' Club of Toronto held two meetings in April at which papers were read on "Recent Developments in Acetylene Lighting," by S. H. Chewett, and on "The Waterways of Canada," by R. B. Rogers, of Peterboro', who dealt especially with the Trent canal.

Sir Wm. Van Horne has purchased a 7,000 acre ranch near Tumas, Cuba His son is at present in charge of the property.

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HEAD OFFICE, TORONTO.

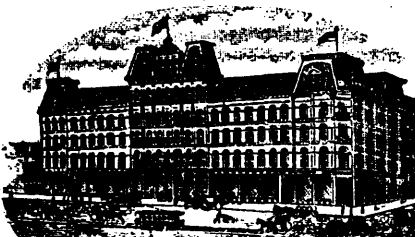
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E. HAY - - - Asst. General Manager.  
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**C.P.R. Betterments, Construction, Etc.**

**Bridge Contracts.**—Contracts have been placed for the steel superstructures for 242 bridges to replace bridges on different divisions of the line. The Dominion Bridge Co., Montreal, will supply more than half the number, the other orders being divided up among different companies.

**Nova Scotia.**—Sir Thos. Shaughnessy, on his recent return from England, stated in an interview that no such thing as an extension of the C.P.R. to Halifax had been contemplated. There was a possibility, however, that the C.P.R. would ask the I.C.R. to enlarge the traffic agreement between the two lines. (April, pg. 131.)

**St. John Wharves, etc.**—An extensive fire occurred at the wharves at West St. John, N.B., April 17, doing damage to the extent of about \$500,000. The damage to the C.P.R. property is estimated at \$35,000, of which \$20,000 is accounted for by the loss of about 2,000 ft. of grain conveyers, about \$10,000 for trestle-work, trippers, etc., and \$5,000 for empty cars. The elevator and stockyard belonging to the company were not damaged, owing largely to the wind carrying the flames in a direction away from them. It is probable that the question of increased wharf accommodation, etc., will be considered in connection with the replacing of the burned equipment. Press reports, a few days previous to the fire, stated that the appropriations for the year did not provide for any further extensive works at St. John, and that nothing more would be done until the wharf accommodation generally was increased.

**Place Viger Yards, Montreal.**—In connection with the recent purchases of land in the vicinity of Place Viger station, the C.P.R. has asked the Montreal city council to cede to the company all the streets between Notre Dame st. and the river from Place Viger to the jail, as it is intended to appropriate the land, power for which purpose has been obtained from the Railway Committee of the Privy Council. The property owners in the vicinity have asked the council to secure the construction of a bridge over Beaudry st., as a concession for the closing of the five streets asked for by the company. Representatives of the company have been in conference with the Roads Committee of the city council in regard to the matter. (Feb., pg. 52.)

**Ontario Division.**—Increased siding accommodation is to be provided during the year at a number of points to facilitate the movement of trains, and it is likely that the track accommodation in the London yard will be largely increased. Considerable ballasting will be done on the Toronto and Havelock sections. It is intended to lay about 40 miles of 80-lb. steel rails on the line between Montreal and Toronto, principally on the Toronto and Havelock sections. It is also intended to lay 80-lb. rails on about 20 miles between Embro and London. Several water tanks on the division will also be renewed.

**Toronto Jet. Station.**—The press reports that a new station is to be erected on the corner of Weston road and Dundas st., this spring, are, we are informed, without foundation.

**Drumbo.**—A new station is to be erected at Drumbo, Ont., this year.

**North Bay Freight Sheds.**—The new freight shed, which is nearly completed, is arranged on the four track system, and has accommodation for 50 cars. The extensions to the yard will be completed during the year, and other improvements, including the erection of a new station, an 18 stall roundhouse, a large erecting shop, and a coal handling plant, will be effected. (Feb., pg. 53.)

**Massey Copper Mine Spur.**—D. M. Brodie, of Massey, Ont., recently stated that a spur

line,  $3\frac{3}{4}$  miles in length, would be constructed during the summer from Massey station, on the Sault Ste. Marie branch, to the copper mines. We are informed that this spur will not be built by the C.P.R., but that the International Nickel Co. is likely to build it.

**Transcontinental Line Gradients.**—In addition to the reduction of gradients on the line between Fort William, Ont., and Winnipeg, it is also intended to reduce gradients on the Cartier section of the Lake Superior division; the Broadview and Swift Current sections of the Central division, and the Shuswap section of the Pacific division. (April, pg. 131.)

**Fort William.**—A contract is reported to have been let for the construction of a steel coal-handling plant at Fort William, Ont.

**Rat Portage Bridge.**—The new bridge over the Winnipeg river at Rat Portage is practically completed.

**Winnipeg Station and Subway, etc.**—Some discussion has taken place between the city council and W. Whyte, Assistant to the President, in respect to resuming negotiations for the erection of a new station, hotel, subway, etc., since the Legislature declined to approve of the last agreement. Nothing, however, has been accomplished. Mr. Whyte is reported as stating that negotiations are off, and a member of the council is reported as saying that he saw no prospect of negotiations being successfully resumed in the near future.

**Darlingford, Southwesterly.**—We are advised by a Manitoba Government official that the 10 miles of line from Darlingford, on the Pembina branch, southwesterly, which the Manitoba Commissioner of Railways has power to build, will be constructed under an arrangement to be entered into with the C.P.R. Nothing has been announced as to the date when construction is likely to be commenced.

**Side Tracks for Elevators.**—The grain men at Winnipeg have been notified that the company will construct side tracks on which elevator sites will be located at a number of points, between stations, in Manitoba and Assiniboia.

**Manitoba and Northwestern Ry.**—We are officially informed that it is intended to extend this line 30 miles this year.

**Brandon.**—We are advised that it is not the Co.'s intention to erect a grain elevator at Brandon, Manitoba, this year, as recently stated in press reports. (April, pg. 131.)

**Pipestone Branch.**—We are officially informed that this branch will be extended from Arcola to Regina, Assa., 113 miles, this year. Press reports state that Foley Bros. & Larson, of St. Paul, Minn., have been given the contract for the grading, and will commence work immediately. (April, pg. 131.)

**Pheasant Hills Branch.**—Construction will be resumed on this branch, and will be continued to mileage 105 from Kirkella, at Newdorf or Pheasant Hills, Assa., this season. Track was laid on 40 miles in 1902, leaving 65 miles to be built this year. A contract is reported to have been let to Foley Bros. & Larson, St. Paul, Minn., who are sub-letting the grading in two and five mile sections. A survey party under A. L. Buck, is reported to have reached Saskatoon, having completed a survey of the projected extension of the line to that point, and a branch south of Last Mountain reserve through the Strassburg settlement. (April, pg. 131.)

**Saskatoon.**—C.P.R. officials on the Central division are not aware of any intention to construct a round-house at Saskatoon, as recently stated in press reports. (April, pg. 131.)

**False Creek, Vancouver.**—Surveys have been made with a view of locating a spur line between the Lulu Island bridge and the Cam-

bie st. bridge, to accommodate the industries of the district.

**Minneapolis, St. Paul and Sault Ste. Marie Ry.**—Press reports state that an extension is projected from Glenwood, to Foston, Minn., about 120 miles, with the ultimate idea of reaching Winnipeg. Another report states that the line will be extended to Grenna, Man., at which point the C.P.R. has connection with the Great Northern Ry., U.S.A. Sir Thos. Shaughnessy is credited with stating that the "Soo" line officers have for some time been considering building so as to secure a direct connection with Winnipeg.

**Canadian Freight Association.**

At the 20th annual general meeting in Montreal, April 9, the following officers were elected:—President, W. P. Hinton, General Freight and Passenger Agent, Canada Atlantic Ry., Ottawa; First Vice-President, C. Howe, Assistant General Freight Agent, Michigan Central Rd., Buffalo, N.Y.; Second Vice-President, W. R. MacInnes, Freight Traffic Manager, C.P.R., Montreal; Secretary-Treasurer, Chairman of Committees and Manager of Car service department, J. Earls, Toronto. The following committees were appointed:—

**EXECUTIVE COMMITTEE:** W. B. Bulling, J. Pullen, W. P. Hinton.

**CLASSIFICATION COMMITTEE:** W. B. Bulling, S. P. Howard, F. J. Watson, J. H. Hanna, J. Hardwell, W. P. Hinton, T. Marshall, C. Howe, C. A. Jacques, W. Phillips.

**FREIGHT INSPECTION COMMITTEE:** G. Collins, F. Conway, F. F. Backus, J. Hardwell, C. E. Dewey, M. H. Brown, W. M. Warburton, T. Henry, J. J. Mossman.

**CAR SERVICE COMMITTEE:** J. B. Morford, M. C. Sturtevant, G. S. Cantlie, W. Woollatt, E. Fisher, J. F. Chapman, J. E. Duval, T. E. Henderson, E. F. Seixas, G. Tombs.

The annual summer meeting will be held at the Manoir Richelieu, Murray Bay, Que., early in July.

**The G.N.W. Telegraph Co.** last year reconstructed 307 miles of line, and strung 90 miles of new lines. There were used 2,438 miles of iron wire, of which 1,238 miles were strung on the G.N.W. lines, and 1,200 miles on the lines of the G.T.R.; and 742 miles of copper wire. In addition to this the following extensions were made to the company's lines in the Muskoka district of Ontario:—A cable 3-5 miles in length from near Windermere to the Royal Muskoka hotel, and the lines were extended from Port Carling to Bala, thus completing the company's connection to every important summer resort in Muskoka. Extensive improvements are being made in the operating department at Toronto, including a new switch board, with the latest modern devices, new instruments, tables, etc.

The Northern Navigation Co. of Ontario has issued a circular to tourist and city ticket agents stating that 5% commission will be paid this year on its proportion of tickets, but not on amounts accruing to any connecting railway or steamship line. The commission will be paid by Dec. 20 next, if vouchers are sent in by Dec. 10.

The Hampton & St. Martin's Ry. in New Brunswick, according to press reports, is not likely to be operated this year. The Dominion Government is to be memorialized in regard to the matter by the people interested.

The Muskoka Lakes Navigation and Hotel Co., Ltd., has given a chattel mortgage for \$85,000, covering its entire property, to the Canada Permanent and Western Canada Mortgage Corporation.



# The Purchasing Agents' Guide

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