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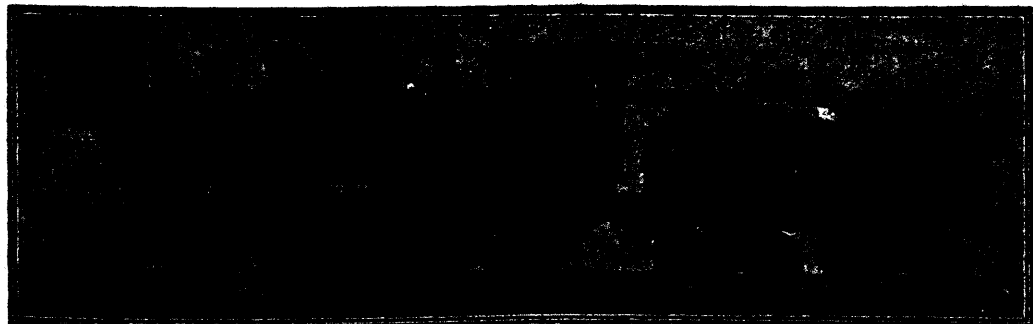
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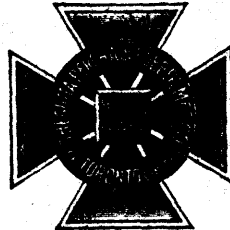
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## RAILWAY DEVELOPMENT.

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

**Alaska.**—A contract for the construction of the Valdez, Copper River and Yukon Ry. from Valdez to Eagle, Alaska, and thence to Dawson, about 500 miles, is reported to have been let to J. B. McDonald, of New York. It is said that the line is to be completed in three years, and the first section from Valdez to Copper Center next fall. (Nov., 1902, pg. 380.)

**Alberta Central Ry.**—Application will be made next session of the Dominion Parliament for an act extending the time for the commencement and completion of the line authorized in 1901, from tp. 38, range 23, west of the 4th meridian, westerly via Red Deer to tp. 37, range 7, west of the 5th meridian, and to authorize the construction of an extension from tp. 38, range 23, west of the 4th meridian easterly to tp. 39, range 11 west of the 4th meridian. Greene & Payne, Red Deer, Alta., are the solicitors. (May, 1901, pg. 153.)

**Alberta Ry. and Coal Co.**—We are informed that the widening of the gauge from the International boundary to Lethbridge, 66 miles, has been completed, and that standard trains have been in operation since Jan. 4. The line from the International boundary to Great Falls, Mont., is being operated by the Great Northern Ry., U.S.A., under the name of the Montana and Great Northern Ry., instead of the Great Falls and Canada Ry. as formerly. (Aug., 1902, pg. 262.)

**Algoma Central and Hudson Bay Ry.**—In connection with the recent financial difficulties of the Consolidated Lake Superior Co., there has been a good deal of criticism of F. H. Clergue and his projects. A special correspondent of the Toronto Globe, writing from Sault Ste. Marie, says: "There seems to be ground for some of the criticism in such a case, for instance, as the construction of the Algoma Central Ry. too rapidly on the heels of the locating engineers, resulting in a change of route and the waste of many thousands of dollars."

Some differences have arisen between the A. C. and H. B. Ry. and Foley Bros., Porter and Whalen, of St. Paul, Minn., who had a sub-contract for grading 100 miles of the line. T. Foley, one of the firm, applied to the Minister of Railways to prevent the payment to the Co. of \$341,000 of subsidies, until their claim of \$452,000 was paid. The Minister declined to interfere, the questions involved being entirely of a legal character. Mr. Foley says his firm has been unable to complete the bridge construction on the contract, owing to the failure of the Co. to lay the rails;

all the grading was done and the bridges would have been constructed if they had been able to get the timber out. F. H. Clergue states that the Co. has no contract relations with Foley & Co., who are sub-contractors to James Conmee & Co., who have the contract for the construction of the whole line. Every dollar of the estimates had been paid month by month to the contractors, the amount paid being over \$2,000,000. A percentage of the total was kept back until the completion of the contract. The profitable portions of the work had been completed, and

**Atlantic and Lake Superior Ry.**—Application will be made next session of the Dominion Parliament for an act fixing the time for the completion of the line, authorizing the construction of branches, and for authority to lease the line to or to amalgamate with other companies. The A. and L.S.R. Co. has 100 miles of line constructed from Metapedia to 2 miles beyond New Carlisle, Que., and has authority to construct a line along the shore to Gaspé, Que. The extension to the 100th mile was completed early in Dec. In the event of subsidies being voted, it is intended to extend the line to Port Daniel during the year. (Nov., 1902, pg. 380.)

**Atlantic, Quebec and Western Ry.**—Application will be made next session of the Dominion Parliament for an act incorporating the A. Q. and W. Ry. Co., now incorporated by the Quebec Legislature, as a Dominion company with additional powers; to extend the projected line from the proposed terminus at Causapsal, on the I.C.R., south-westerly to Edmundston, N.B., where the C.P.R. and the Temiscouata Ry. now effect a junction, and to construct a line from Gaspé Basin to join the Atlantic and Lake Superior Ry. at Paspebiac, Que., along the shore line. (Jan., pg. 18.)

**The Bangor and Aroostook Ry.** has in contemplation the extension of its recently completed line from Ashland to Fort Kent, Me., along the St. John River to St. Francis, Me. St. Francis, on the New Brunswick side of the river, is the terminus of a branch of the Temiscouata Ry. (Jan., pg. 19.)

**Brockville and Western Ry.**—Application will be made next session of the Dominion Parliament for an act to incorporate a company with this title to acquire and complete the Brockville Westport and Sault Ste. Marie Ry., and to construct a railway bridge across the St. Lawrence, opposite Brockville in connection with the railway. E. N. Armstrong, Montreal, is attorney for applicants. (Nov., 1902, pg. 380.)

**Canada Atlantic Ry.**—Application will be made next session of the Dominion Parliament for an act authorizing the construction of a line from west of Whitney to Sault Ste. Marie, Ont., to acquire hotels and pleasure resorts, etc., and extending the time for the completion of lines already authorized, but uncompleted.

An arrangement is about to be concluded with the C.P.R. in respect of the use of the Central station at Ottawa by that Co., and the consideration of the question by the Railway Committee of the Privy Council has been postponed. (Jan., pg. 19.)

We were informed Jan. 17 that the proposal to construct a spur line 4 miles in length from Caldwell to the Radnor iron mines is not yet



A. BUTZE,

General Purchasing Agent, Grand Trunk Railway.

the sub-contractors, says Mr. Clergue, desire to be released from their obligation to do the unprofitable portions. Conmee & Co. wrote under date of Dec. 1, that Foley & Co. had been promptly paid all that was due them on their contract, and that on Dec. 1 there was nothing whatever due them under the terms of their contract which call for the retention of 15% until the whole work is finally completed. It is stated that Foley & Co. put up \$300,000 as a guarantee for the due performance of the work. This \$300,000 and the 15% retention money represents the sum which Foley & Co. desire to have paid them. (Jan., pg. 18.)

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### RAILWAY DEVELOPMENT.

(Continued from page 1.)

in a sufficiently definite shape to make any  
statement regarding it. The matter is in the  
hands of Drummond, McCall & Co., Mon-  
tréal.

**Canada National Ry. and Transport Co.**  
—Application will be made next session of  
the Dominion Parliament for an act reviving  
the charter of this Co., authorizing the con-  
struction of a railway from Toronto to Col-  
lingwood. (June, 1902, pg. 189.)

**Cape Breton Ry.**—Track had been laid  
from Point Tupper to Sporting Mountain, 25  
miles, by Dec. 31, and the remaining six

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Wire & Cable Co., Montreal	Cover 2

miles to St. Peters, N.S., was expected to be  
completed early in the year. Ballasting,  
fencing and station building is progressing,  
and is expected to be completed early in the  
spring. The extensions projected are from  
St. Peters to Louisburg, 60 miles, and from  
Marian Bridge to Sydney, 13 miles.

On Dec. 30 the temporary construction  
bridge over the River Inhabitants collapsed,  
and an engine, with several cars of material,  
went through, the driver being killed. (Jan.,  
pg. 19.)

**Causapsal to Gaspé.**—Application will be  
made next session of the Dominion Parliament  
for the incorporation of a company to con-  
struct a standard or narrow gauge railway,  
to be operated by any kind of power, from  
the I.C.R., between Causapsal and Little  
Metis, and Gaspé Basin, Que. The promo-  
ters ask for very wide general powers.  
D'Arcy Scott, Ottawa, is solicitor. In 1902  
application was made for the incorporation of  
a company to construct a railway between  
the same two points, but the bill was with-  
drawn from the consideration of the Railway  
Committee of the House of Commons. (See  
Atlantic, Quebec and Western Ry., pg. 38  
and Jan., pg. 19.)

**Central Ontario Ry.**—Press reports re-  
cently stated that an extension of 40 miles  
from Bancroft, the present terminus, to Whit-  
ney, on the Canada Atlantic Ry., was con-

templated. We are officially informed that nothing whatever has been done in reference to the matter, and there is no prospect whatever of getting on with the work at present. (June, 1902, pg. 189.)

**The Central Ry. of New Brunswick** resumed a through passenger service on Dec. 20, the line having been put in thorough repair after the fall of the bridge at Washade-moak in July. (Aug., 1902, pg. 263.)

**The Cuba Co.**, having opened its line, is proceeding to ballast and improve it to meet the traffic requirements as they grow. In developing the country opened up by the line Sir Wm. Van Horne is following, in a general way, the policy which he applied to the C.P.R. in colonizing Northwestern Canada. Sugar and fruits are his chief hope, though he expects to develop the capacities of Cuban farming in a dozen different directions. Much of the territory opened up has never been scratched even by the wooden plough. (Jan., pg. 20.)

**Cumberland Ry. and Coal Co.**—The relaying of 20 of the 32 miles of the Co.'s line, with 80-lb. rails, replacing 56-lb rails, has been completed. (Nov., 1902, pg. 381.)

**Chateauguay and Northern Ry.**—A contract has been let to C. E. Loss, of New York, for the grading, bridging, etc., of 38 miles from Montreal to Joliette, Que., on the Great Northern Ry. A sub-contract for the substructure of the bridge at Bout de l'Isle has been let by C. E. Loss to Shearer & Co. The material for the superstructure is being constructed by the Dominion Bridge Co., Montreal. The whole work is required to be completed by Oct. 1. L. R. Ord is Chief Engineer in charge of construction. (Jan., pg. 20.)

**Digby and Sydney Ry.**—A. J. S. Copp, M.P., Digby, N.S., is one of the promoters of this projected line. The object in view, he says, is to bring Sydney as near as possible to New York, and the proposal is to construct a line from Digby to Windsor Jct., and thence to Mulgrave and to run a line of fast steamers, in connection with the train service, from Digby to Eastport, or to Portland, Me. Efforts are being made to secure the necessary steamer facilities at Digby, and plans for the wharf extension necessary are being prepared by C. E. W. Dodwell, Dominion engineer, Halifax. The cost of this work is estimated at \$50,000. (Jan., pg. 21.)

**Drummond Colliery Ry.**—Track was laid to Dec. 31, on 1½ miles of the extension under construction from Granton to Skinner's point, N.S., 2.3 miles. J. W. McDonald, Stellarton, N.S., is the contractor. (Nov., 1902, pg. 381.)

**Elgin and Havelock Ry.**—P. S. Archibald, C.E., has been making an inspection of this line for the new owners with a view of its being put in proper order.

**Edmonton, Yukon and Pacific Ry.**—Three trains each way are being operated between Strathcona and Edmonton, daily except Sunday, the trip being made in 15 minutes. Application will be made at the next session of the Dominion Parliament for an extension of time for the construction of the authorized lines. (Jan., pg. 21.) See also Canadian Northern Ry.

**The Frank and Grassy Mountain Ry.** has been constructed under the act passed by the Dominion Parliament in session of 1902, incorporating the United Gold Fields Co. (Ltd.), a British company, to construct a railway from Frank to Grassy Mountain, Alta., with branches to connect with any navigable water not more than 8 miles distant from the line. The line is in operation from Frank, on the Crow's Nest Pass line of the C.P.R., 197 miles west of Dunmore Jct., and 2 miles east of Blairmore, northerly to the foot of Grassy Mountain, about 6 miles. The line is carried

along the banks of the creek, and touches the Gold creek collieries, and is being utilized to ship the product of the mine. The railway is a mountain line in every particular, and in its construction presented a considerable number of engineering difficulties. The Co. supplied the rails, spikes, etc., which were imported from France. H. Darras, of Frank, Alta., was the general contractor, and sub-contracts were let to Messrs. Poupore, McVeigh and Tierney, of Nelson, B.C. J. E. Woods, C.E., Frank, Alta., had general charge of construction. (Nov., 1902, pg. 387.)

**Fraser River Bridge.**—We were advised, Jan. 8, that pile piers 6 to 11 inclusive had been completed up above high water mark. The caissons for pier 5, which is the pivot pier for the drawspan, has been placed in position and sunk several feet. The abutments and pedestals for the north approach on the New Westminster side of the river are about all in place. Good progress is being made by the Dominion Bridge Co., of Montreal, in the manufacture of the superstructure. The greater portion of the metal required for the entire superstructure has been delivered at the shops. Waddell and Hedrick, the engineers, expect that the structure will be completed within the original contract time. (Jan., pg. 21.)

**Gaspé and Western Ry.**—Application will be made next session of the Dominion Parliament for an act incorporating the Gaspé and Western Ry. Co. to construct a railway or tramway from Fraserville, on the I.C.R., to Gaspé Basin, Que., as near as practicable to the coast, with power to connect with other lines, and to take over the Atlantic and Lake Superior Ry. E. Lapointe, Fraserville, Que., is solicitor for applicants. See Atlantic and Lake Superior Ry., Atlantic, Quebec and Western Ry., and Causapschal to Gaspé.

**Grand Valley (Electric).**—The length of track laid on the first section of the line from Brantford to Paris is 6 miles, and the projected extension from Paris to Galt is 20 miles in length. (Jan., pg. 21.)

**The Great Northern Ry. of Canada** has under survey the following branches: from St. Jerome to St. Sauveur, Que., on the Montford and Gatineau Ry., recently acquired by the G.N.Ry., 13 miles; from St. Catherines to Garneau Jct., Que., 58 miles; from Hawkesbury to South Indian, Ont., 38 miles. (Jan., pg. 21.)

**Great Northern Ry., U.S.A.**—J. F. Stevens, Chief Engineer, is reported to have said in a recent interview: "No, I do not know that it is Mr. Hill's intention just at present either to invade the Northwest wheat belt or the Province of British Columbia either."

The Great Falls and Canada Ry., from Great Falls, Mont., to Sweet Grass on the International boundary, was taken over by the G.N.Ry. Jan. 1, the gauge having been standardized, and is being operated as a part of the Kalispell division. (Jan., pg. 21.)

See also Vancouver, Victoria and Eastern Ry. and Navigation Co.

**Greenway to Turtle Mountain.**—Application will be made next session of the Manitoba Legislature for an act incorporating a company to construct a line from Greenway, on the Canadian Northern Ry., south and southwesterly through the municipalities of Argyle, Roblin and Turtle Mountain to tp. 1, range 19, west of the principal meridian. R. B. Graham is acting for the promoters.

**Guelph Ry. (Electric)**—J. S. Clark has asked the Guelph city council to take \$25,000 of preference stock or make a cash bonus of \$15,000 towards the construction of the projected extension to Puslinch lake and Hespeler, Ont.

**Halifax and Southwestern Ry.**—Some excitement has been occasioned at Hubbard's Cove on account of a difference between J. A.

Wheaton, of St. John, N.B., contractor, and his Italian employes. Mr. Wheaton was behind in his payments to the men, but his other accounts were paid up, and the men demanded that they should also be paid. A settlement was reached when the representatives of Mackenzie, Mann & Co. provided the money, \$4,000, to pay the men. Mr. Wheaton claims that the work he has done is being unfairly classified by the Co.'s Chief Engineer of Construction, T. H. White, and not in accordance with the verbal understanding with T. H. Holt, the former Manager of Construction, and H. K. Wicksteed, C.E., under whom he was set to work at Hubbard's Cove, the plans for the section he had contracted for not having been approved of. He says Mr. White was unaware of the understanding and acted on the letter of the agreement. (Jan., pg. 21.)

**Huron and Ontario Ry.**—Application will be made at the ensuing session of the Dominion Parliament for an act extending the time for the commencement and completion of the line authorized, and if necessary, to revive the act of incorporation. M. McNamara, Walkerton, Ont., is President, and A. McK. Cameron, Meaford, Ont., is Secretary of the Co., which was incorporated in 1892 to construct a railway from Port Perry to Kincardine, Ont., via Uxbridge, Mount Albert, Newmarket, Bradford, Beeton, Shelburne, Flesherton, Priceville, Durham and Walkerton; from Priceville, through Meaford, Owen Sound, Southampton, Port Elgin and Tiverton to Kincardine, and from Walkerton to Goderich.

**Huron, Grey and Bruce Electric Ry.**—The surveys for this line were made by N. H. Green, of Montreal, who reports that the engineering difficulties are comparatively insignificant, the route being fairly level; some hills in the northern part of the district to be served will require to be cut down and improved, but all is provided for in the estimated cost. The highway bridges are generally strong, but, in some cases, will require strengthening, and in some cases, where old, new ones will be required within a short time. The estimated cost of the line is \$11,000 a mile. It is proposed to develop power on the Maitland and Saugeen rivers, with substations for converters at Goderich, Holmesville, Brucefield, Dungannon, Manchester, Walton and Morrisbank. The first section proposed to be constructed is from Goderich to Dungannon, 13 miles, the estimated cost being—construction of track, \$68,000; electrical construction, \$25,200; equipment, \$14,000; power house, \$20,000; contingencies, \$15,800; total, \$143,000. (Jan., pg. 23.)

**The Imperial Coal Co.**, operating coal mines near Coal Branch, N.B., is considering the construction of 8 miles of line from its mine to Coal Branch, on the I.C.R., and a similar length of line from the mine to Kingston, where it is proposed to establish a shipping port. G. G. Polleys, Moncton, is interested in the company, which proposes to apply for a charter authorizing the construction of the lines at the ensuing session of the New Brunswick Legislature.

**Intercolonial Ry.**—The Minister of Railways, speaking recently at Campbellton, N.B., referred to his desire to have the I.C.R. extended to Georgian bay, to Toronto, to various parts of Ontario, and later, if the ground was not then altogether occupied, across the continent to the Pacific coast. The Montreal Board of Trade has passed a resolution asking for the construction of a short line from near Chaudiere Jct., Que., direct to St. John, N.B., and for an extension west from Montreal to Toronto and a point on Georgian Bay. The Minister of Marine on his return to Montreal, after a conference with the Premier, stated in an interview that one of the subjects which would be consider-

# **Galena-Signal Oil Company,**

**Franklin, Pa., and Toronto, Ont.**

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

**CHARLES MILLER,**  
**PRESIDENT.**

ed by the Ministers prior to the meeting of Parliament in March would be a proposed extension of the I.C.R.

The Minister of Railways recently stated to a Toronto Globe representative that the surplus earnings of the I.C.R. would be devoted to improving the railway still further. A large sum had already been spent out of revenue for this purpose, but it was desired to straighten out the line in many places and to add to the rolling stock. All the large improvements contemplated had been carried out, except it be to erect hotels wherever needed, and that, the Minister added, he thought was not a matter for the Government to undertake.

Tenders are under consideration for 25,000 tons of 80 lb. steel rails, and for ties and switch-ties.

Tenders have been received for the following works: new station, moving and remodeling existing station, and moving freight house and section foreman's dwelling at Metapedia, Que.; abutments for two railway bridges with full foundations at Pomquet, N.S.; baggage building at Sydney, N.S.; station building and freight house at Milford, N.S.; coal handling plant at Moncton, N.B.; engine house at St. John, N.B. A contract for this last mentioned work was previously reported let to Rhodes, Curry & Co., Amherst, N.S., but it appears that the contract was not completed; it is now reported that the contract has been awarded to Flood & Bates, St. John, for \$72,000.

It is proposed to double track the line from Halifax to Windsor Jct., 13 miles, in the spring.

Plans are reported to have been prepared for the installation of an electric light plant at Halifax station, of sufficient power to light the whole of the terminals.

Reid & Archibald, of Halifax, N.S., have been engaged in altering and repairing the piers of the bridge over the Grand Narrows of the Bras d'Or lakes, N.S., in regard to which there were some complaints of interfering with navigation.

The rest house for employes at Truro station, N.S., has been fitted up, and was opened early in Dec. There is a reading room, a smoking room, a bath room, and a dormitory containing six beds. Rest houses are being fitted up at other stations on the system.

The work at the yard at Gilbert island, St. John, N.B., laid out for the season, was completed early in Dec. Six miles of additional track were laid, which gives accommodation for 480 cars, bringing the capacity of the yard up to 1,300 cars. It is proposed to further add to the accommodation this year, so as to give a capacity for 2,000 cars. The breakwater on the Courtenay bay section of the line at St. John is to be repaired and strengthened, and some portions will be rebuilt.

A contract has been let to J. Goselin, of Levis, Que., for the erection of an 18-stall brick roundhouse at Chaudiere Jct., Que., at a cost of \$44,200. (Nov., 1902, pg. 383.)

Tenders are under consideration for a one story, monitor-top extension to the existing car shop at Moncton. The extension will be 200 ft. long, 75 ft. wide, and 24½ ft. high. It will cover three tracks and will be built of brick with foundations of stone or concrete. The roof will be supported by steel trusses spaced about 16½ ft. centres, giving a clear floor space the full width of the building. The roof is designed to carry three travellers, one over each track, running through the building; these travellers will have a capacity of 3 tons each. Light will be supplied through large windows in the side walls and monitor top. The building will be equipped with all facilities necessary for the building and re-

pairing of freight cars. The contract has not yet been awarded, but will be in a short time, and the work will be pushed forward to completion with as little delay as possible.

**The International Bridge and Terminal Co.** has filed articles of incorporation in Minnesota, its object being to construct a railway in Itasca county, Minn., and a bridge across Rainy river, to connect with Canada. W. Gray, A. A. Avery, E. L. Hollingsworth, W. C. Meader and C. H. Miller, of Minneapolis, Minn., are the incorporators of the Co., which has a capital of \$50,000. No reference is made as to the point on Rainy river aimed at, but it is probable that it is Koochiching, opposite Fort Frances on the Canadian Northern Ry.

**International Transit Co.**—The Co.'s tracks on 4½ miles of streets in Sault Ste. Marie, Ont., have been completed. (Nov., 1902, pg. 383.)

**Inverness Ry. and Coal Co.**—W. MacKenzie recently paid a visit of inspection over the Co.'s railway from Point Tupper to Broad Cove, N.S. It is proposed to erect a station at the junction of the line with the I.C.R. at Point Tupper, and to commence early in the season relaying the line with heavier rails. During last year a good deal of ballasting was done all along the line, to meet Government requirements and to strengthen the track for the increasing traffic. The projected extension from Broad Cove to Cheticamp was under consideration, but nothing definite has been announced in regard to it. The Co.'s shipping pier at Port Hastings is completed. It is 600 ft. long, and is carried to a height of 65 ft. above low water-mark. It is provided with coal pockets capable of holding 4,000 tons of coal, with an extensive and modern plant for handling coal from the cars, and for loading vessels alongside the pier. (Nov., 1902, pg. 383.)

**James Bay Ry.**—The station in Parry Sound has been completed and the track laid into it and into the yard adjoining. The survey parties that were in the field during the past fall between Parry Sound and French river have completed their work and are preparing plans, upon which definite location surveys will be made. Two routes were surveyed between Canal rapids and French River. The distance between Parry Sound and French River is 60 miles. Application will be made at the next session of the Dominion Parliament for an extension of time for the completion of this line. (Nov., 1902, pg. 383.)

**Joliette to Lake Manuan.**—Application will be made next session of the Dominion Parliament for an act incorporating a company to construct a railway from Joliette northerly to Sainte Emilie de l'Energie, thence northwesterly to Saint Michel des Saints, and thence to Lake Manuan, Que. D. J. McDougal, Ottawa, is solicitor.

**Kent Northern Ry.**—Since the new owners came into possession it is reported that a good deal of work has been done to put the line in thorough repair. The track between Kingston and Richibucto, N.B., has been repaired; new ties have been put in on several sections and a lot of gravel ballast has been spread. The new engine-house has been completed, and other work has been done at Richibucto.

Application will be made next session of the New Brunswick Legislature for an act authorizing the extension of the line from Kent Jct., on the I.C.R., through the counties of Kent and Queens, to Chipman, where a junction will be effected with the Central Ry. of N.B.

**Kettle Valley Lines.**—W. A. Stratton, who is in charge of the operations of these lines, states that over \$100,000 has been expended in improving the Co.'s lines during the past few months, and that the road is now all that

can be desired and as good as any in the West. A passenger and freight station will shortly be erected at Republic, Wash. (Nov., 1902, pg. 383.)

**Kingston and Gananoque Electric Ry. Co.**—Application will be made next session of the Ontario Legislature for an act re-incorporating this company, which was first incorporated in 1895, and extending the time for the commencement and completion of its line.

**The Kingston and Pembroke Ry.** will apply at the ensuing session of the Dominion Parliament for an extension of time for the commencement and completion of the various lines authorized by its acts. The uncompleted lines are branch lines east and west from the main line. The K. and P. R. is owned by the C.P.R. Co. (Nov., 1902, pg. 383.)

**The Kingston, Portsmouth and Cataract Electric Ry.** has extended its line to the Queen's athletic grounds, Kingston, Ont.

**Klondike Mines Ry.**—C. E. Taylor, of the White Pass and Yukon Ry., on reaching Vancouver, B.C., from the north, at the close of navigation, stated that two miles of track had been laid on the K. M. Ry. from Dawson and that a locomotive had been placed in service. The work of construction has been abandoned until the spring, when the rest of the material, rolling stock, etc., will be taken in by boat from Whitehorse. (Nov., 1902, pg. 383.)

**Kootenay, Cariboo and Pacific Ry.**—Application will be made at next session of the B.C. Legislature for an act incorporating a company with this title to construct a railway from Golden, on the C.P.R., northwesterly to Tête Jaune Cache, thence to Port Simpson, with authority to construct branches to Barkerville and other points. Harvey & McCarter, solicitors, Fort Steele, B.C., who are acting for the promoters, have also given notice that application will be made to the B.C. Legislature at the ensuing session for the provincial incorporation of the company.

**Kootenay Pass and Fort Churchill.**—Application will be made next session of the Dominion Parliament for an act incorporating a company to construct a railway from the eastern boundary of British Columbia, at South Kootenay pass, to Fort Churchill, on Hudson's bay, via Cardston, Battleford and Prince Albert. Power is also asked to connect with the railway system of the U.S. McGovern and Haydon, Ottawa, are the solicitors.

**L'Amable to Mayo Township.** (Electric).—The Mineral Range Iron Mining Co., of Mayo Township, Hastings Co., Ont., proposes to construct an electric railway from L'Amable station, on the Central Ontario Ry., to its mines, about 10 miles.

**Lac Seul, Rat Portage and Keewatin Electric Ry.**—C. W. Chadwick, Rat Portage, gives notice that application will be made next session of the Ontario Legislature for an act incorporating a company to construct an electric railway from Lac Seul southerly through Rat Portage, and the township of Keewatin to Shoal Lake. The Co. also proposes to develop and sell electric power. It is reported that survey parties are in the field prospecting a route from Rat Portage to the narrows of Black Sturgeon lake. A by-law has been approved of by the Rat Portage Council granting a franchise within the town; the Co. to construct its own roadbed south of the Government road round the north end of the bay.

**Lake Erie and Detroit River Ry.**—Three survey parties are in the field running preliminary lines for the extension of the line from St. Thomas to Fort Erie, Ont. One party under W. W. Meadows, Assistant Engineer, is surveying from St. Thomas to Simcoe, a point which the line has to touch to meet the



requirements of its act; a second party, under J. Simpson, is working between Simcoe and Dunville on the G.T.R., and the third party, under W. Osborne, is running a line straight through from Simcoe to the Niagara frontier. We were advised Dec. 12 that the running of these preliminary lines was practically completed. Nothing definite will be decided as to the route until the reports of the engineers on their surveys are completed. Construction will be pushed forward as soon as the route is definitely settled, and the necessary right-of-way acquired, which will probably be some time in the spring. The surveys, etc., are being carried out under the charge of Owen McKay, Chief Engineer.

Changes in the line at Dresden, Wallaceburg and Sombra have been completed. There have been some slight deviations from the old line in order to do away with bad curves. In all about  $2\frac{1}{2}$  miles of new track was laid, and the station buildings moved; Dresden and Sombra short distances, and Wallaceburg a considerable distance.

The St. Thomas City Council has granted permission for the extension of the Co.'s tracks across Palm st., to a connection with the Michigan Central Ry. The new owners of the line have entered into an agreement with the M.C.R. by which the L.E. & D.R. Ry. will transfer the Pere Marquette traffic at St. Thomas.

A switch has been put in at Sheddon connecting with the Michigan Central Rd.'s tracks, to facilitate the interchange of traffic from the west.

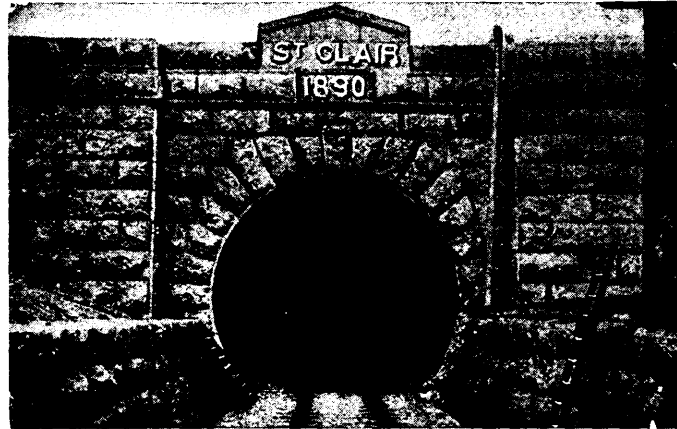
The sidings at the different stations along the line from Sarnia to St. Thomas are being lengthened, and an additional mile has been added to the sidings at Chatham. (June, 1902, pg. 103.)

**Lake Timiskaming to Mechiskan River.**—Application will be made next session of the Dominion Parliament for an act incorporating a company to construct a dam across the southern outlet of Lake Timiskaming, near the C.P.R., and a railway from the north end of the lake northerly to the Mechiskan river, at the 49th parallel of north latitude, with power to construct branch lines, 30 miles in length. Caron & Sinclair are the solicitors.

**Levis County Ry. (Electric).**—Work has been suspended on grading and tracklaying for the season, three miles of track having been laid in the town of Levis, on which cars are running. The Co. has under construction a line from Levis to St. Joseph, and another from Levis to St. Romuald, together 8 miles, and has in contemplation further extensions of 4 miles. An elevator from the foot of Labadie Hill to Wolfe st., was expected to be completed early in Jan. (Nov., 1902, pg. 383.)

**London, Aylmer and North Shore Electric Ry.**—A company with this title was recently incorporated at Albany, N.Y., with a capital of \$500,000, to construct an electric railway from London to Port Burwell, Ont., and was subsequently licensed in Ontario as an extra provincial company, W. E. Stevens, Aylmer, Ont., being named its attorney. The line which the company proposed to construct was authorized by an act of the Ontario Legislature passed in 1901, the officers of the company being: President, R. M. Luton, Grand Rapids, Mich.; Vice-President and Treasurer, M. E. Lyon, Aylmer, Ont.; Secretary, C. R. Lubon, Grand Rapids, Mich.; Assistant Secretary, E. E. Stevens, Aylmer, Ont. To these under the Albany incorporation have been added as directors: C. Sinclair, Aylmer, Ont.; W. A. Dowland, Grand Rapids, Mich.; J. H. Hitchcock, J. E. Howard, New York city; F. Hitchcock, F. Hassler, Detroit, Mich. A construction company has been formed in Detroit, Mich., with F. Hassler as chairman; M. E. Lyon, Treasurer; C. R. Luton, Secretary; F. M. Hitchcock, Assistant

## THOROLD CEMENT



ST. CLAIR TUNNEL.

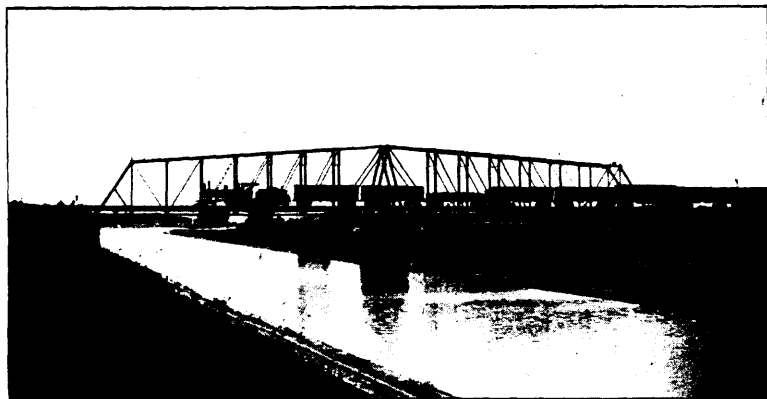
Length of tunnel, including approaches, 11,553 feet. 10,000 barrels THOROLD CEMENT used in construction.

Designed by and built under supervision of Joseph Hobson, Esq., Chief Engineer Grand Trunk Railway. William Gibson, Esq., M.P., Contractor.

From Joseph Hobson, Esq., Chief Engineer G. W. Div.  
Grand Trunk Railway.

Oct. 17, 1893.

As to the Cement manufactured at the John Battle Works, Thorold, Ontario, we have been using it on this division of the Grand Trunk Railway for many years, and have found it to be of good quality.



NIAGARA CENTRAL RAILWAY BRIDGE CROSSING NEW WELLAND CANAL AT THOROLD.

Built in 1886-7. Piers and abutments built with THOROLD CEMENT.

FOR STONE MASONRY WORK, as shown in the above views, our THOROLD CEMENT is specially adapted, and in price is about one-half the cost of high-grade PORTLAND CEMENTS.

ESTATE OF JOHN BATTLE,  
(Successors to late John Battle)

THOROLD AND PORTLAND CEMENTS,  
THOROLD, ONT.

WRITE US FOR PRICES AND FULL PARTICULARS.

Secretary and Purchasing Agent, and P. J. Davis, attorney. Surveys have been made for the line, which will be about 45 miles in length, by Field & Hinchman, Detroit, and plans have been prepared. E. Arizipe was in charge of the surveying party. It is expected that construction will be commenced on an early date. (Oct., 1901, pg. 308.)

**London St. Ry.**—An agreement has been reached between the L. S. Ry. and the Southwestern Traction Co., by which the latter obtains an entrance into the city. The L. S. Ry. will construct about 3,500 ft. of track to connect with the two lines. (Nov., 1902, pg. 383.)

**Lotbiniere and Megantic Ry.**—Application will be made next session of the Quebec Legislature for an act extending the time for the completion of this Co.'s lines, and to authorize the construction of a branch from this extension from Kinnear's Mills or St. Ferdinand d'Halifax to Lime Ridge and to Windsor Mills, Que. The uncompleted portion of the Co.'s line is from Lyster to Thetford. (Nov., 1902, pg. 383.)

**Mabou and Gulf Ry.**—We were advised, Jan. 3, that the 4½ miles from the Mabou coal mines to the shipping pier at Mabou Harbor, N.S., had been completed, and that the coal pockets and trestle, 654 ft. long, were nearly complete. The line is being extended from the shipping pier to a junction with the Inverness Ry. and Coal Co.'s line, about 3½ miles. Surveys have been completed for the extension of the line from the I. Ry. and C. Co.'s line to the I.C.R. at Orangedale, about 34 miles, and construction will be started early in the spring. The Co. has entered into the usual construction contract with the Provincial Department of Public Works. Location surveys have been completed for a line, about 5 miles in length, from the junction of the I.C.R. and the I. Ry. and C. Co.'s line, on the Strait of Canso, to Port Malcolm, and construction was expected to be started at once. At Port Malcolm a shipping pier, 800 feet in length, fitted with coal pockets, etc., is to be erected. Port Malcolm is a good harbor, never frozen over, and can be utilized as a shipping port every day in the year. The Co. expects to commence shipping coal early in the spring. It has three seams, 7, 8 and 15 ft. thick respectively, and the slopes are down 450 ft. All the work is being done by the Co. under the supervision of its Chief Engineer, F. R. Page. The Co. has erected an office building, 80 by 58 ft. at Northwest Mabou. (Nov., 1902, pg. 383.)

**The Manitoba Cement Co.** will construct a railway from Morden southerly, about 12 miles, to the marl deposits on the Pembina river, near the International boundary. The Co. was incorporated by the Manitoba Legislature in 1900, and includes among its directors G. M. Bosworth, 4th Vice-President, C. P. R.; W. Whyte, Assistant to the President, C. P. R. It is reported that surveys will be made on an early date, and that construction will be commenced immediately the surveys are completed.

**Manitoba Central Ry.**—C. E. Hamilton, of St. Paul, Minn., at one time Attorney-General of Manitoba, has given notice that application will be made next session of the Manitoba Legislature for an act incorporating a company to construct the following lines of railway: from Winnipeg to Emerson; from Winnipeg to Beausejour, and to Fort Alexander at the mouth of Winnipeg river; from Winnipeg to the western boundary of tp. 9, range 15, thence via Brandon and Souris to the westerly boundary of the Province; from Emerson to Lake Winnipegosis, via Carman and Portage la Prairie; from Emerson to the westerly boundary of the Province, via Crystal City and Lauder, with branches to the southern boundary of the Province; from Morden

southerly to the International boundary, and northwesterly to Carberry, thence via Neepawa to the northern boundary of the Province, and via Rapid City to the western boundary of the Province, and from Brandon to the International boundary. In an interview Mr. Hamilton said these several lines would be constructed by a company to be known as the Manitoba Central Ry. Co., and that it would be an independent company.

**Manitoulin and North Shore Ry.**—F. H. Clergue stated a short time since that the surveys for this line had been completed, that construction would be commenced on an early date, and that the contracts would provide for the completion of the work in two years. There would be three divisions, viz., from Meaford to Tobermory; from Fitzwilliam, on Manitoulin island to Sudbury, and from Sudbury to Sault Ste. Marie, Ont. The 15-mile link between Tobermory and Fitzwilliam will be operated by a car ferry. The Gore Bay (Manitoulin island) Conservator recently stated that no survey had been made across Manitoulin island. Another statement is to the effect that location surveys for the line to the shore of Georgian Bay have been completed and that the survey parties have returned to Sault Ste. Marie. The line as projected will cross the C. P. R. Sudbury branch at Stanley river, and from the shore of Georgian bay, will be carried over some small islands into Little Current, on Manitoulin island, the distance from Sudbury to Little Current being 66 miles, of which about 16 miles has already been constructed. The surveys, which are reported to have been completed from Sudbury to Sault Ste. Marie, show a line from near the falls of the Spanish river, in as near a straight line as possible at a distance of from 6 to 12 miles north of the C. P. R. tracks to the boundary between Aberdeen and Galbraith townships where alternative routes have been surveyed, about six miles apart, joining about three miles east of Garden river station on the C. P. R. and paralleling that line into Sault Ste. Marie.

Tenders for the construction of the following sections of the line were recently asked: Meaford to Tobermory, about 70 miles; Fitzwilliam island to Gertrude mines, about 70 miles; Sudbury to Sault Ste. Marie, about 180 miles. Contracts had not been reported let to Jan. 20, but it was stated that financial arrangements made by the Consolidated Lake Superior Co. were such as would permit of the early commencement of the work. (Nov., 1902, pg. 383.)

**The Medicine Hat and Northern Alberta Ry. Co.** gives notice of application at next session of the Dominion Parliament for an act extending the time for the construction of the Co.'s line from Medicine Hat to Victoria on the North Saskatchewan river, and authorizing the construction of the following additional lines: from Medicine Hat to the International boundary, near Milk river; from the main line to Ponoka station, on the Calgary and Edmonton Ry., thence to Rocky rapids, on the North Saskatchewan river; from Battle river to Hudson's Hope, on the Peace river; from the Athabasca river to Lesser Slave lake, at the mouth of Drift Pile river; from Strathcona, via Edmonton, to Athabasca landing, and from Battle river to Water Hen lake. (June, 1902, pg. 194.)

**Metropolitan Ry.**—Negotiations are still pending with the Toronto city council with a view of securing an entrance into the city. (Nov., 1902, pg. 383.) See also Toronto Radial Railways.

**Michigan Central Rd.**—The double track between Bismarck and Ridgetown has been completed. There are now only 30 miles of single track at the west end, and 40 miles at the east end of the main line of the Canadian division.

A site has been selected for a new station

at Dutton, and construction will be commenced in the spring.

Press reports state that about 60 acres along the right of way will be planted with catalpa trees, for use in the future as ties. (Nov., 1902, pg. 383.)

**Middlesex and Elgin Interurban Ry. (Electric)**—Press reports state that it is intended to proceed, at an early date, with the construction of a line from St. Thomas to Port Stanley, Ont. (Nov., 1902, pg. 384.)

**Middleton and Victoria Beach Ry.**—We were recently informed that 8 miles of the line had been graded, and that the grade to Bridgeton, 14 miles, would be completed when operations ceased for the winter, ready for tracklaying and ballasting in the spring. (Aug., 1902, pg. 265.)

**Midland Ry. of Nova Scotia.**—The matters of the extension of the line from Truro to Brule or Tatamagouche, and from Windsor to Middleton, are still under consideration. An extension from Truro to New Glasgow is also under discussion in a general way, but no definite plans have been considered. (Nov., 1902, pg. 384.) See also North Colchester Ry.

**Midway and Vernon Ry.**—Victoria, B. C., press reports state that it is the intention of this company, now incorporated by the B. C. Legislature, to apply for a Dominion charter next session of Parliament. The necessary notices had not been published up to Jan. 24. (Nov., 1902, pg. 383.)

**Minnedosa Electric Railways.**—Application will be made next session of the Manitoba Legislature for an act incorporating a company to construct electric railways within a radius of 50 miles of Minnedosa, and to develop electrical power for the same and for general purposes on the Little Saskatchewan river in tp. 15, range 18 west of the principal meridian. H. F. Maulson, Minnedosa, is the solicitor.

**Montreal Street Ry.**—The tracks have been extended on Frontenac st. to the eastern abattoir. Proceedings have been taken by the city council to compel the Co. to construct a number of additional lines. The Co. says it will build a line on Charlevoix ave., but considers the others not only unnecessary but impracticable. (Nov., 1902, pg. 384.)

**Montreal Subway Co.**—Plans have been filed with the Dominion Department of Railways for a tunnel under the St. Lawrence river to connect Montreal and Longueuil. The plans provide for a double track tunnel from the south shore into the heart of Montreal, where a central station will be located. The width will be 27 ft., and the height 21 ft. Its gradients will be 1½ to 2%, and its greatest depth will be 15 ft. below the mean level of the river bed. The structure will be of concrete and stone masonry with a lining of enamel brick. The tunnel will pass through St. Helen's island, where there will be a sub-station with stairs to the surface. A point for entering the city has been selected; a route under the streets has been surveyed, and a locality for the central station is in view, but these conditions are subject to approval and are withheld at the present stage. H. A. Hodge, President of the Quebec Southern Ry., and also of the Subway Co., says the tunnel will be open to any railway desiring to secure an entrance into Montreal. (Nov., 1902, pg. 384.)

**Montreal Terminal Ry. (Electric)**—The Railway Committee of the Privy Council recently had before it the question of the opening of Forsyth st. and the construction of a tunnel under the C. P. R. tracks at that point, and made certain recommendations in connection with it. An agreement dividing the cost of the work between the Co. and the city council has been arrived at, the council paying two-thirds of the cost, which is estimated at about \$30,000. This agreement has been

ratified by the Railway Committee of the Privy Council. The subway will provide room for a single track only. The subway will be constructed at once, and the Co. expects to have its lines fully in operation in April. (Nov., 1902, pg. 384.)

**The Nelson Electric Ry.** ceased operations some time ago. H. E. Croasdaile, Managing Director, stated that a 40-minute service would be given on operations being resumed. The city council, however, are considering the question of whether or not the Co.'s franchise has been forfeited.

**The Nepigon Ry.** has invited tenders for the supply of 30,000 ties and 1,000,000 ft. of logs to be delivered on the right of way in the spring. The Co. was incorporated by the Ontario Legislature in 1899 to construct a railway from Nepigon station, on the C.P.R. transcontinental line, 928.3 miles from Montreal, northerly to Lake Nepigon, about 40 miles, and in 1902 it was given power to extend its line to the Albany river. A subsidy of \$3,000 a mile for the first 14 miles from Nepigon was voted by the Ontario Legislature in 1902. Dominion incorporation was also obtained in 1902. The incorporators of the company are interested in a proposal to erect pulp and paper mills on the Nepigon river. (June, 1902, pg. 195.) See also Canada Fish Co., Jan., pg. 19.

**New Brunswick Coal and Ry. Co.**—Several miles of track have been laid on the 15 miles of grade completed from Chipman to the Newcastle coalfields. The rails being used have been obtained from the I.C.R., which has been replacing light rails with 80-lb. steel. At the coalfield a new town has sprung up, which has been called Minto. (Nov., 1902, pg. 384.)

**The New Brunswick Southern Ry.** is the title under which the Shore Line Ry. of New Brunswick is now being operated. The N.B.

S.Ry. Co. was incorporated by an act passed at the last session of the N.B. Legislature. The line is in operation between St. John and St. Stephen, 82 miles. Considerable repairs have been made on the roadbed, four new bridges have been built, the abutments of others strengthened, and it is reported that the other bridges will be rebuilt this year. (Nov., 1902, pg. 386.)

**Newfoundland.**—Press reports state that it is proposed to construct a railway along the beach from Sandy Point, Bay St. George, Nfld., to the mainland.

**New Westminster to Ladner or Port Guichon.**—Application will be made at the ensuing session of the B.C. Legislature for an act incorporating a company to construct a railway from New Westminster, southwesterly across the Fraser river, through the municipalities of Surrey and Delta to Ladner or Port Guichon, and a ferry service in connection therewith. Corbould and Grant, New Westminster, B.C., are the solicitors.

**Niagara-Grand Island Bridge Co.**—Application will be made next session of the Dominion Parliament for an act extending the time within which the Co. may commence and complete its undertaking. The Co. was incorporated in 1873 to construct a bridge from Black Creek, Ont., across the Niagara river, and the time for construction has been extended at various times to keep the charter alive. Some work was reported to have been done at the end of 1901. (Dec., 1901, pg. 357.)

**Niagara, Queenston and St. Catharines Electric Ry. Co.**—Application will be made next session of the Ontario Legislature for an act incorporating a company with this title to construct an electric railway from Niagara-on-the-Lake, along the Niagara river road to Queenston, thence along the Queenston and Grimsby stone road to St. Catharines; from

Homer to Niagara, and along such streets in St. Catharines as may be necessary; also confirming by-laws of the county of Lincoln, the town of Niagara, and the townships of Niagara and Grantham giving franchises to the company, and authorizing St. Catharines to grant a franchise. Denton, Dunn and Boulton, Toronto, are the solicitors.

**Niagara, St. Catharines and Toronto Ry.**—An application of the Co. for permission to connect its tracks with the section of the Southern division of the G.T.R. leased to the Wabash Rd., was made at the last sitting of the Railway Committee of the Privy Council. The G.T.R. opposed the application and the committee reserved judgment. (Aug., 1902, pg. 266.)

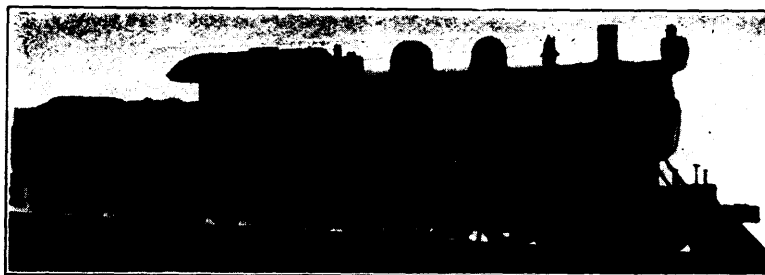
**Niagara Transfer Co.**—Articles of incorporation have been filed at Buffalo, N.Y., for a company with this title to construct a steam railway from Buffalo to Tonawanda, N.Y. The incorporators are J. C. Conway, W. H. Alport, T. C. Becker, A. L. Becker, L. A. Groat, G. W. Hickok, L. F. Nassen, J. E. Selkirk and H. Roscheam, of Buffalo. Press reports state that the projected line will form a connection with a Canadian line over a bridge to be constructed over the Niagara river.

**Niagara-Welland Power Co.**—Application will be made at the ensuing session of the Dominion Parliament for an act changing the name of this Co., increasing its capital stock, limiting the application of the Railway Act thereto, and for other purposes.

**Nicola, Kamloops and Similkameen Coal and Ry. Co.**—Application will be made next session of the Dominion Parliament for the incorporation of a company with this title, recognizing the B.C. incorporation and authorizing the construction of a railway along the Nicola valley to the C.P.R., thence to Hope

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and to Chilliwack with power to erect a bridge over the Fraser river.

**Nipissing and James Bay Ry.**—Application will be made next session of the Dominion Parliament for an extension of time for the construction and completion of the authorized lines. (Aug., 1902, pg. 266.)

**North Colchester Ry.**—Surveys have been completed for a railway from Truro, N.S., where connection would be made with the Midland Ry. to Tatamagouche, across the Cobequid mountains, about 35 miles. Some years ago surveys were made for a line from Truro to Brule, over very much the same country, and it is understood that in the construction of the line the first 18 miles of this old survey will be followed. This would carry the line to Earltown, from which point P. S. Archibald, C.E., recently made a survey via Waugh's river, a little to the west of the survey to Brule, and crossing the Oxford branch of the I.C.R. about a mile above the railway bridge at Tatamagouche. No decision has been reached as to which route will be adopted, but we understand that application will be made for subsidies at the next sessions of the Provincial Legislature and the Dominion Parliament. The Midland Ry. of Nova Scotia controls the charter for the line. (April, 1902, pg. 143.)

**North Shore, Power, Ry. and Navigation Co. (Ltd.)**—Construction of the 9 miles of line from Seven Islands bay to the falls of the Ste. Marguerite river, Que., has been completed. The line has been constructed throughout up to the highest standard and is laid with 56-lb. rails. At the falls the work of installing a power plant for the Co.'s mills will be finished in the spring, and the principal work of the railway will be the taking in of supplies, material and plant. At Clarke City, on the bay, a large pier is to be erected for shipping purposes. The district which will be opened up by the operations of the Co. is a very rich one, and will necessitate considerable railway construction. The line was constructed by the Co. under the charge of H. Holgate, C.E., of Ross & Holgate, civil engineers, Montreal. (Aug., 1902, pg. 267.)

The Bay of Seven Sisters Islands was named as the Quebec terminus of the Winnipeg and Atlantic Ry., which was incorporated by the Dominion Parliament in 1892. This railway was to start from Winnipeg and was to follow the 50th parallel of latitude, as nearly as possible, except around the head of Lake Nepigon to the Bay of Seven Sisters Islands.

**Nova Scotia Eastern Ry.**—Negotiations were in progress most of last year between the promoters of this Co., which acquired the charter of the Musquidoboit Ry. Co., and the Government of Nova Scotia, in reference to the construction of the lines authorized. It was understood that an agreement has been reached subject to the approval of the Legislature next session, to subsidise the line to the extent of \$5,000 a mile, instead of \$3,200, provided by Legislative enactment. The lines projected extend from Halifax to the Strait of Canso, via Guysboro', with branches in the Musquidoboit valley, about 190 miles altogether. It is expected that construction will be gone on with this year. (Nov., 1902, pg. 384.)

**Nova Scotia Southern Ry.**—Among the charters acquired by Mackenzie, Mann & Co., is that of the N. S. Southern Ry., which has power to construct a line from New Germany, on the Nova Scotia Central Ry. to Shelburne. Under this charter grading from New Germany to Caledonia, 22 miles, was practically completed, and the substructure of several bridges put in; and some clearing and grading was done on other parts of the projected line. Last summer Mackenzie,

Mann & Co. put a force at work on the grade between New Germany and Caledonia, clearing it up and finishing the work. Track will not be laid until the spring. (April, 1900, pg. 115.)

**Ontario Electric Ry.**—Press reports state that surveyors have been three times over the proposed route of an electric railway between Cornwall and Toronto, and that construction will be commenced as soon as the right of way has been obtained from the different municipalities. (April, 1902, pg. 195.)

**Orford Mountain Ry.**—Early in December a number of men were set to work at Kingsbury, Que., the present end of the line, grading and erecting a lengthy trestle, including a bridge over the Salmon river, on an extension to Windsor Mills. We were informed Jan. 13th that two miles had been graded, and that track had been laid over one mile. The route for the remainder of the extension, 7½ miles, to Windsor Mills, has not been located. Surveys will be completed on an early date and the work will be gone on with as early as practicable. The O. M. Ry. is operated from Eastman, on the C. P. R. line to Kingsbury, 26.50 miles; and when extended to Windsor Mills, will effect a junction with the G. T. R. Last session of the Dominion Parliament the Co. was given an extension of time to complete its line, and the Quebec Legislature, in 1902, extended the time for the completion of the line to Dec. 31st, 1902, subject to certain conditions. (June, 1902, pg. 195.)

**Ottawa, Brockville and St. Lawrence Ry.**—Surveys for this projected line were commenced at Ottawa in Dec., and had been completed for 25 miles by the end of the year. The line will be about 56 miles in length and will pass through a rich farming country; the earthwork will be light, little or no rock excavation will be encountered. There will be only one bridge of any size required, and this will be at the crossing of the Rideau river. The maximum gradient will be about ¼%, and the maximum curvature will be 2°. The survey at present under way will pass near Manotick, and through Merivale, North Gower, Burritt's Rapids, and North Augusta, but alternative routes are under consideration with a view of serving Richmond, Merrickville, or Bishop's Mills. E. J. Walsh, C.E., Ottawa, has charge of the surveys. The Co. expects to begin construction early in the summer. J. C. Kelly, President, states that the line will be constructed in the most substantial manner, and that the track will be laid with 110-lb. steel rails. The latter part of this statement is hardly likely. (Nov., 1902, pg. 384.)

**Ottawa Electric Ry.**—A large building has been erected at Chaudiere, in which a storage battery plant is to be installed. The object of the installation is to provide for a sudden call for a little extra power, and to store up the excess when the whole of the power of the generating plant is not being utilized by the cars, etc. (April, 1902, pg. 195.)

**Ottawa, Northern and Western Ry.**—Application will be made next session of the Dominion Parliament for an act extending the time for the completion of the lines authorized under the various acts of the Ottawa and Gatineau Ry., and the Pontiac Pacific Jct. Ry., now amalgamated under this title. The O. & G. Ry. Co. had power to extend its line to some point on James Bay, and the P. P. Jct. Ry. was authorized to construct a line to Sault Ste. Marie, Ont., passing south of Lake Nipissing.

The grading on the extension from Gracefield to Maniwaki, in the direction of James Bay, has been completed for 14 miles. Some rock cuts will be completed during the winter

and tracklaying and ballasting will be commenced in the spring. It is expected that the whole of the 23 miles to Maniwaki will be completed by Sept. or Oct. (Nov., 1902, pg. 385.)

**Oxford Jct. to Five Islands.**—A number of meetings have been held in South Colchester county agitating for the construction of a railway from Oxford Jct. on the I. C. R., to Five Islands and thence to Truro, with a spur from Five Islands to Parrsboro', N.S. At a meeting at Collingwood, N.S., it was resolved to ask the Dominion and Provincial governments for subsidies amounting to \$10,000 a mile.

**The Pacific, Northern and Onitceca Ry.** will apply next session of the B. C. Legislature for an extension of the time fixed for the commencement and completion of its undertaking. Cornwall and Rogers, Victoria, B.C., are the solicitors. (June, 1902, pg. 195.)

**Portage la Prairie to Brandon.**—Application will be made next session of the Manitoba Legislature for an act incorporating a company to construct a railway from Portage la Prairie southwesterly to Belmont station on the Morris-Brandon branch of the Canadian Northern Ry., and from Portage la Prairie westerly to Brandon. Anderson and Ormond are the solicitors.

**Preston and Berlin Ry.**—The line between Preston and Berlin, Ont., 9 miles, has been completed and is to be operated temporarily by steam. The track is laid with 72-lb. rails, and the line will carry freight as well as passengers. During the summer the overhead work for the electrical equipment will be installed, and power will be obtained from the Hamilton Electric Light and Cataract Power Co. (Nov., 1902, pg. 385.)

**Prince Edward Island Ry.**—Tenders have been invited for the erection of a crib wharf at Murray river in connection with the branch railway now under construction from Charlottetown across the Hillsboro' river. Work on the line, as well as on the bridge over the Hillsboro' river has been closed and will not be resumed until about April. Track has been laid from Murray river to Montague Cross, 21 miles, and part of the ballasting has been completed. Nearly all the grading on the branch, which is 44 miles in length, has been completed. The country through which the branch passes is a difficult one to work in—rocky and rough. There has been a lot of blasting, but no tunnelling. Up to date some 200 ft. of iron spans with stone abutments have been erected. It is expected that the whole work will be completed by the end of the year. W. Kitchen, Fredericton, N.B., is the contractor.

The new station and freight shed at Georgetown has been completed. H. Creamer, North Tryon, was the contractor. (Nov., 1902, pg. 385.)

**Quebec and Lake Huron Ry.**—Press reports state that surveys will be commenced early in the spring on this projected line from Quebec to French River, Ont., by T. E. Wing and M. E. Evans, of New York. The projected line will be 465 miles in length, 359 miles being in Quebec and 106 in Ontario. R. J. Campbell, of New York, is the chief promoter. (Aug., 1902, pg. 267.)

**Quebec and Lake St. John Ry.**—A branch line extending from St. Audre Jct., 159 miles from Que., to Metabetchouan, Que., 11 miles, has been completed. An extension of the line has been projected from Chicoutimi to St. Alphonse, about 12 miles.

Coal pockets have been erected at St. Raymond, Que., for the locomotive department, in order to save time in coaling. (Aug., 1902, pg. 267.)

**The Quebec and New Brunswick Ry. Co.** will apply next session of the Dominion Parliament for an act extending the time for the commencement and completion of its lines,

to enable it to amalgamate with other railway companies and to empower it to construct a bridge over the St. John river either at Connors station or Winding Ledges, N.B. Belcourt and Ritchie, Ottawa, are the solicitors.

Grading operations at Connors, Que., have been abandoned for the season, about three miles being reported completed. At the recent annual meeting Hon. J. Costigan, President, stated that the right-of-way had been purchased, some grading done, and that operations would be resumed Mar. 1. He also stated that a subsidy contract had been entered into with the Dominion Government, that the New Brunswick Government had agreed to enter into a contract, and that all that was required was the assurance of a subsidy from the Quebec Government. (Nov., 1902, pg. 385.)

**Quebec Bridge.**—The substructure for the bridge over the St. Lawrence at Quebec has been completed ready for the superstructure. The steel work on the north approach is being riveted, and most of the work on the other spans is expected to be completed this year. The contract for the substructure involved the building of 80,000 cubic yards of masonry and the expenditure of \$1,000,000. Two main piers, two anchor piers and two abutments had to be erected. A description of these, showing the methods of erection, was given in our issue of July, 1902, pg. 221. The difficulty in regard to finding a suitable foundation for the south pier was overcome when a depth of 60 ft. below the bed of the river had been reached. Before it was decided not to sink further the work was inspected by C. Schrieber, Deputy Minister of Railways, Mr. Cooper, a consulting engineer from New York, and Dr. Ami, of the Geological Survey, Ottawa, and it was agreed that the bottom on which the caisson rests is a magnificent one for such a bridge. The work was carried out by M. P. Davis, contractor, under the supervision of E. A. Hoare, Chief Engineer. (Nov., 1902, pg. 385.)

**Quebec Central Ry.**—Nothing has been decided in reference to the date for the commencement of construction on the projected extension of 21 miles from Scott station to the Quebec bridge. (June, 1902, pg. 196.)

**Quebec Ry., Light and Power Co.**—The necessary majority has been obtained in favor of the Champlain st. extension, and the matter is under consideration. (Nov., 1902, pg. 385.)

**Red Deer Lake Ry. Co.**—Application will be made next session of the Dominion Parliament for an act incorporating a company with this title to construct a line from between Swan River and Erwood stations, on the Canadian Northern Ry., to Red Deer Lake, Sask.

**Red Deer Valley Ry. and Coal Co.**—Application will be made next session of the Dominion Parliament for an act extending the time for the construction of the line authorized, and giving power to extend its line to the Saskatchewan river after it has constructed its railway from Calgary to range 23, w. of 4th principal meridian. (June, 1902, pg. 196.)

**Regina and Hudson's Bay Ry.**—Application will be made next session of the Dominion Parliament for an act to incorporate a company to construct a railway from Regina northerly to Craven, thence north-easterly through the Longlaketon and Strasburg settlements, Assa., to Carrot river, thence to Fort Churchill; and a branch from Craven to Big Quill Lake; with power to construct other branch lines; running powers over the Qu'Appelle, Long Lake and Saskatchewan Ry. between Regina and Craven; and authority to amalgamate with the Canadian Northern Ry. Co.

**Reid-Newfoundland Co.**—The arbitrators in the case between the R. N. Co. and the Newfoundland Government found that certain works had to be completed by Sept. 1, 1903, and directed that \$100,000 be held as security for the performance and completion

of these works. Among the works certified as having to be done are: attention to crossings generally, and particularly of New Harbor, road for Murphy's tramway and for Fisher's tramway; the erection of a number of bridges; work at Little River and Exploits; roads destroyed by the construction of the railway to be replaced; the laying of heavier rails than 35 lbs. to the yard between St. John's and Western Jct., and from Tilton, to Harbor Grace.

A branch line has been completed to the west end, where a station has been built. The offices of the Co. have been moved to the new station, a ticket office only being maintained in the city. Some additional freight sheds have been constructed at the docks, and some rearrangement of other buildings made to facilitate the handling of traffic. (Nov., 1902, pg. 385.)

**Restigouche and Western Ry.**—Some progress is reported in the way of clearing up the grade for some distance beyond the 10 miles on which track was laid. T. Malcolm, the contractor, states that work on the first 20 miles is well under way, and that if the coming season is favorable, the line will be graded to St. Leonard, on the St. John river. The work ahead is fairly heavy. Men will be employed in getting out lumber for the bridges and ties during the winter. (Nov., 1902, pg. 385.)

**Riviere du Loup to Metapediae.**—Application will be made next session of the Quebec Legislature for an act incorporating a company to construct a railway from Riviere du Loup to Metapediae, Que. H. R. Fiset, Rimouski, Que., is acting for the promoters.

**The Riviere Ouelle Pulp and Lumber Co.** has been incorporated under the Quebec Companies' Act with a capital of \$100,000, to construct electric and steam tramways in connection with the development of its timber limits and water powers. Hon. J. Sharples, W. Power, R. H. Smith, G. Power, and P. B. Murphy, of Quebec, are the provisional di-

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rectors, and the offices of the Co. are at Pacome, Que.

**Rocky Mountain Ry. and Coal Co.**—Application will be made next session of the Dominion Parliament for an act reviving the act incorporating this Company which was incorporated in 1891 with P. McCarthy, the late J. R. Costigan, of Calgary, Alta., W. R. Baker, of Winnipeg, and I. K. Kerr, of Eau Claire, Wis., as provisional directors, to construct a railway from near Anthracite, on the C.P.R. transcontinental line, to the coal mines at Red Deer Forks, via Cascade river valley and the south fork of the Red Deer river, about 50 miles. In 1894 the act was amended by the addition of Hon. J. A. Lougheed as one of the incorporators, and the line to be constructed was altered to one from Calgary northwesterly to the Red Deer river, thence westerly to the coal-fields, or alternatively from the Calgary and Edmonton Ry. at Olds, westerly to the coal-fields. In 1894 the Dominion Parliament voted 6,400 acres a mile to the Co. for the construction of about 60 miles of line from Olds to the coal-fields. (Nov., 1902, pg. 380.)

**St. George Electric Co.**—Application will be made next session of the Quebec Legislature for an act of incorporation with power, among other things, to construct an electric railway from Lake Megantic to Levis, as far as possible along the Chaudiere river.

**The St. John Ry.** proposes to make a number of extensions in St. John, N.B., Carleton and other points, and M. Neilson recently laid the Co.'s plans before the St. John city council. These were investigated by a sub-committee and approved of by the council on condition that the lines in the west end of the city be in operation by Nov. 1, or the franchise to be forfeited. Work is to be started on the extensions early in the spring. (Aug., 1902, pg. 267.)

**St. John's (Nfld.) Street Ry.**—Service on the street railway between St. John's and Petty Harbor has been resumed. The Reid-Newfoundland Co. proposes to install a special auxiliary power transmission service between the two points so as to guard against any break-down of the power service through storm or otherwise. (Feb., 1902, pg. 61.)

**St. Lawrence Shore.**—A. J. de B. Corriveau, of Montreal, is reported to have been negotiating with Chicago capitalists with a view of financing the construction of an extensive system of electric railways along the south shore of the St. Lawrence. It is reported that Mr. Corriveau has secured a number of charters for electric lines along the south shore.

**St. Mary's River Ry.**—This narrow-gauge line extends from Stirling, on the Alberta Ry. and Coal Co.'s line, to Spring Coulee, Alta., about 30 miles. The A. Ry. and C. Co.'s line has been made standard gauge, and in order to accommodate traffic to the beet sugar factory at Raymond a third track has been laid on the St. M.R. Ry. from Stirling to Raymond, 8 miles, so as to enable the standard gauge cars to be run through. The local traffic, both passenger and freight, is carried on as hitherto on the narrow gauge tracks.

Application will be made next session of the Dominion Parliament for an act authorizing the extension of the line from Spring Coulee southwesterly to Cardston, Mountain View and any point in range 1, west of the 5th meridian; and from this extension westerly to the C.P.R. between range 2, west of the 5th, and range 24 west of the 4th meridian; and from Stirling easterly to range 4, west of the 4th meridian, between the C.P.R. and the International boundary line; and branches not exceeding 30 miles in any one case. Barwick, Aylesworth, Wright and

Moss, Toronto, are the solicitors. (June, 1902, pg. 197.)

**St. Thomas Electric Ry.**—This line has been taken over by the city council and the city engineer authorized to operate it and to make temporary repairs to the track pending a thorough overhauling. The line includes a belt line  $4\frac{1}{2}$  miles in length with two branches, one to the G.T.R., and Lake Erie and Detroit River Ry. stations, and the other to a park outside the city limits, making in all 6 miles.

**Salmon River Ry. Co.**—Application will be made next session of the New Brunswick Legislature for an act incorporating a company to construct a railway from Ortonville siding, on the Edmundston branch of the C.P.R., 10.9 miles from Aroostook Jct. to near Salmon river mills, Drummond, N.B. J. E. Stewart, Andover, N.B., is the solicitor.

**Sandwich, Windsor and Amherstburg Ry. (Electric)**—It is reported that considerable difficulty was experienced in arranging with landowners along the route of the extension from Ojibwa to Amherstburg, Ont.,  $12\frac{1}{2}$  miles, owing to the big prices asked as compensation for cutting shade trees, etc. These, however, were all satisfactorily arranged and construction pushed. We were advised, Jan. 20, that track had been laid from Ojibwa to within  $1\frac{1}{2}$  miles of Amherstburg, and it was expected to have the extension opened for traffic early in the spring. Ojibwa, which is 5 miles from Windsor, has been the terminal point of the line for four years. (Nov., 1902, pg. 385.)

**The Sarnia Street Ry.** proposes to construct a branch, 3 miles in length, to Weis beach, a summer resort on Lake Huron.

Application will be made next session of the Ontario Legislature for an act ratifying a by-law passed by the township of Sarnia in Dec., 1902, respecting the company.

**The Schomberg and Aurora Ry.** has been completed from Bond Lake, on the Metropolitan Ry., about 17 miles from Toronto, to Schomberg, 15 miles. It will be operated as a steam road, arrangements being in progress for putting on a train service in the spring. (Nov., 1902, pg. 386.)

**Seven Islands to Winnipeg.**—Application will be made next session of the Dominion Parliament for an act incorporating a company to construct a railway from Seven Islands, Saguenay county, Que., westerly to Winnipeg. McPherson, Clark, Campbell and Jarvis, Toronto, are solicitors for the applicants. See also North Shore Power Ry. and Navigation Co., and Seven Islands Bay to Quebec.

**Seven Islands Bay to Quebec.**—Application will be made next session of the Dominion Parliament for an act incorporating a company to construct a railway from the bay of Seven Islands, through the counties of Saguenay and Chicoutimi to the Saguenay river between Lake St. John and Tadousac, and thence to Quebec city, with power to construct branch lines. D. J. McDougal, Quebec, is the solicitor.

**Sherbrooke Street Ry.**—A proposal to extend the lines in East Sherbrooke is under consideration of the directors.

**Southern Central Pacific Ry.**—Application will be made next session of the Dominion Parliament for an act incorporating a company with this title to construct a railway from Victoria northerly and easterly by way of Kootenay pass to the Old Man river, Alta., thence northeasterly through Saskatchewan, to the Churchill river. Johnston and Falconbridge, Toronto, are the solicitors.

**South-Western Traction Co. (Electric)**—We were advised, Dec. 14, that more than half of the line from London to Lambeth, Ont., about 5 miles, had been graded and track laid. The line starts at the city boundary on

Cathcart st. and turns into the Caseline road of Westminster township, thence to Lambeth. The line is constructed in accordance with the regular practice of steam railways, and is laid with 60 lb. T rails, made by the Algoma Steel Co., laid on cedar ties, and 3/0 trolley wire is used for the overhead work. The work is being done by the Co. under the charge of its engineer, H. A. McLean, B.Sc. The Co. has power to extend the Lambeth line to Glencoe, and from London to Hamilton via Ingersoll, Woodstock, Paris and Brantford. Arrangements are nearly completed for an entrance into London, negotiations being in progress with the London Street Ry. and the London city council. (Nov., 1902, pg. 386.)

**Spokane and Kootenai Ry. Co.**—A company with this title has been incorporated in the State of Washington to construct about 200 miles of railway from Spokane easterly and northerly via Pend d'Orielle river and lake, and the Kootenai river to Kootenai county, Idaho, on the International boundary. From this point it is stated that a connection with the C.P.R. Crow's Nest line will be established. The incorporators are G. Turner, D. C. Corbin, of Spokane; J. Furth, J. H. McGraw, of Seattle, and C. S. Bihler, of Tacoma. G. Turner in an interview said that a reconnaissance survey had already been made and just as quick as the weather would permit surveying parties will be put in the field. He was asked if the projected line was being backed by the C.P.R., and if its construction meant terminal rates for Spokane, and he replied, "The incorporators are amply able to build the road themselves, and I see no reason for the assumption that somebody else is behind them." Sir Thomas Shaughnessy, President, C.P.R., on being asked as to the suggestion that his company was behind the project, is reported to have said: "Senator Turner is interested in some mining territory in the Kootenay, and that might be the ground for the rumor." D. C. Corbin, one of the promoters of the new line, constructed the Spokane Falls and Northern Ry., with its Canadian connections, the Red Mountain Ry., and the Nelson and Fort Shepherd Ry., now owned by the Great Northern Ry., U.S.

**Suburban Rapid Transit Co.**—Grading has been completed from Winnipeg to Sturgeon creek, about  $3\frac{1}{2}$  miles, and track will be laid in the spring, and it is expected to be open for traffic in May. The power house will be built at Sturgeon creek, and a further extension of track graded in the spring. The Co. has offered the city of Winnipeg about 23 acres of land lying between Sturgeon creek and the Assiniboine river, to be used as a public park. (Nov., 1902, pg. 386.)

**Sydney and Louisburg Ry.**—The Dominion Coal Co., owning this railway, has had additional sidings put in at the Glace Bay, N.S. shops, and has added 40 ft. to the length of the forge department. (June, 1902, pg. 197.)

**Temiscouata Ry.**—At the annual meeting, recently held, G. G. Grundy, Engineer and Superintendent, reported that during the year 17 miles of road had been ballasted. Further improvements both to the roadbed and the stations were in contemplation.

**Temiskaming and Northern Ontario Ry.**—We were informed, Jan. 9, that the location to the 70th mile has been completed, and a party was in the field revising the location from the 60th to the 70th mile. As soon as this is completed the party will start at the 70th mile and work northwards to meet another party working southwards from the 100th mile. There are at present over 1,200 men engaged on the work. Mileage 25 to 27 will be graded by A. R. Macdonnell, the general contractor, and additional sub-contracts have been let as follows: Mileage 27 to 30, J. Bark; mileage 32 to 40, Grant and Doheny. Some of the sub-contractors claim to have a griev-

ance against the general contractor, one of the grounds alleged being that the terms under which they started work are being varied, and another that they are asked to purchase all their supplies from the contractor, paying him 15% on the purchases. An appeal is reported to have been made to the Commissioner of Public Works on the subject. (Jan., pg. 23.)

**Tillsonburg, Lake Erie and Pacific Ry.**—The extension from Tillsonburg to Ingersoll, Ont., 15 miles, has been put in operation for both freight and passenger traffic. The line from Port Burwell to Ingersoll, is 35 miles in length. The Port Burwell harbor is completed. It has a depth of 18 ft., and a turning basin 2,000 ft. from the entrance, 375 ft. wide. The piers are set several feet deep in blue clay, and the work is of a most permanent character. The harbor opens out into deep water, and can be kept open for car ferry purposes throughout the winter. The T.L.E. and P.Ry. crosses the G.T.R. air line, Michigan Central, the Tillsonburg and Brantford branch of the G.T.R., and connects with the C.P.R. at Ingersoll. The projected extension of the Lake Erie and Detroit River

Ry. from St. Thomas to Buffalo will cross the T.L.E. and P. Ry. The T.L.E. and P.Ry. will have special facilities for the coal trade. Port Burwell is 51 miles from Erie, Ohio; 49 miles from Conneaut, Ohio; 57 miles from Ashtabula, Ohio, and 63 miles from Fairport, Ohio. It will furnish commercial coal to the towns upon the route, and to the other towns which may be reached by the Michigan Central, the T.H. and B., and the C.P.R. The road has a charter for an extension from Ingersoll to Collingwood, Ont., about 100 miles. The route selected will be either by Stratford or via Woodstock and Berlin, and bonuses are being asked for. Negotiations are in progress for establishing a car ferry to Port Burwell by putting on a steamer that will carry 30 loaded cars. Either this plan will be adopted or extensive coal docks and pockets will be erected at Port Burwell, and hoisting machinery for taking coal from the holds of coal vessels. (Nov., 1902, pg. 387.)

**Toronto and Mimico Ry. (Electric)**—Surveys have been made recently for the extension of this line from its present terminus, 5.25 miles from Sunnyside, Toronto, to Oakville,

and it was stated that construction will be gone on with in the spring.

**Toronto, Hamilton and Buffalo Ry.**—The bridge over the Grand river at Brantford has been raised 4 ft., and by the addition of a steel through girder span of 100 ft., making four spans in all. A new concrete pier and abutments were constructed for the additional span. The cost of the whole work was about \$18,000. An addition of 250 ft. to the freight shed at Hamilton has been completed. An addition of a similar size was built about two years ago. (Nov., 1902, pg. 387.)

**Toronto, Lindsay and Pembroke Ry.**—Plans have been filed with the Ontario Department of Public Works for a section of 20 miles of this proposed line, in continuation of the 8½ miles for which plans were filed in 1901. These plans show a line from Bird creek, to which point the Irondale, Bancroft and Ottawa Ry. has been constructed from the G.T.R. Lindsay-Haliburton branch to Palmer's Rapids. The Ontario Government voted a subsidy to the I.B. and O.Ry. for this piece of line at its last session, reserving running powers over it to the T. L. and P. Ry., and as an alternative permitted the T.L. and P.Ry. to

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construct the line; in which case the I.B. and O.Ry. was to have running powers over it. (April, 1902, pg. 147.)

**Toronto Radial Railways.**—W. T. Jennings, C.E., who has been engaged by the Toronto city council to look into the question of the entrance of the Metropolitan Ry. and other suburban lines now existing, or that may be constructed in the future, into the city, has presented a report to the Board of Control, which has not been made public. It is reported that the Metropolitan Ry., the Toronto and Mimico Ry., the Toronto Suburban Street Ry., and the Toronto and Scarborough Ry. have all prepared plans to run into St. Lawrence market, as soon as an arrangement is effected with the city permitting them to do so. The position taken by the city council is that the routes to be adopted shall be fixed by it and not by the companies interested. (Nov., 1902, pg. 387.)

**Toronto Ry.**—The Railway Committee of the Privy Council has given this Co. permission to cross the C.P.R. tracks on Avenue road. The line on Dupont st., from Avenue road to Walmer road, has been placed in operation. A preliminary agreement has been made with the Toronto city council for the construction of a line on Lake st., so as to make a new loop-line and do away with the inconvenience to passengers to and from the steamer landings during the summer by reason of the frequent standing of freight trains at the foot of Yonge st. (Nov., 1902, pg. 387.)

**Toronto Suburban Ry.**—An extension from Lambton to Cooksville, Ont., 9 miles, is projected, and work was started on the first section of 4 miles, which would carry the line to Summerhill. The grading on half a mile was completed and a little track was laid. Work will probably be resumed in the spring, although it is likely that the route will be somewhat changed. The Co. is constructing the line itself, under the supervision of Gibson and Son, Willowdale, Ont. (April, 1902, pg. 147.)

**Toronto Union Station.**—The accommodation in every department has become so cramped that officials of the G.T.R. and C.P.R. have been considering plans for relieving the congestion. Both companies want more room for office purposes, and better facilities for handling passengers are needed.

**Trans-Canada Ry.**—No work was done during 1902, in continuation of the grading started at Roberval, Que., in June, 1901. Work was then formally started in order to meet the requirements of the charter, pending the passing of an act granting an extension of time. A contract has been let to B. A. Scott for the grading of 30 miles to be completed by Nov. 1. The Co. has been engaged in perfecting its organization and working out its financial plans. A bonus of \$100,000 has been voted by the Lake St. John district, and a considerable amount of stock has been subscribed. Colonel Church, of London, Eng., who is one of the promoters of the line, is engaged in interesting British capital and in the formation of a construction company to take the contract for grading, etc., of the first section of about 400 miles to the western boundary of Quebec, near James bay. (Nov., 1902, pg. 387.)

**Valleyfield Electric Ry. Co.**—Application will be made next session of the Quebec Legislature for an act incorporating a company with this title to construct an electric railway within the counties of Beauharnois, Huntingdon and Chateauguay, centering in Valleyfield, and extending to the C.P.R. at Caughnawaga. S. A. Brodeur, D. Dion, J. M. Deschenes, M. Lefebvre, G. H. Thibault and C. A. Lavimidiere, of Valleyfield, are the applicants.

**Vancouver and Coast-Kootenay Ry.**—N. McLean, of McLean Bros., Vancouver, who

have a contract with the B.C. Government to construct a railway through the Hope mountain district to Vancouver, and a ferry connection with Victoria, reports that the financing of the line has been arranged provided an additional subsidy can be secured. If an additional subsidy cannot be obtained it is proposed to complete the line between Vancouver and the mouth of the Fraser river and to put on a ferry service to Victoria under the existing contract. (Nov., 1902, pg. 387.)

**Vancouver, Victoria and Eastern Ry. and Navigation Co.**—During the recent visit of the Minister of Railways to B.C., some conversation took place between him and J. J. Hill, President of the Great Northern Ry. (U.S.) in reference to its interests in B.C., and Mr. Blair subsequently told the Victoria Board of Trade that Mr. Hill would construct the V.V. and E.Ry. through to the coast, and he understood that no subsidies would be asked. At a meeting of the Railway Committee of the Privy Council, held on Mr. Blair's return to Ottawa, the V.V. and E.Ry. was given permission to run branch lines to Columbia and Grand Forks, B.C., to construct a spur line to the Granby smelter, and to cross the tracks of the Kettle Valley Lines. Construction into Grand Forks and across the K.V.L. has since been completed, and a station is to be constructed in Grand Forks. The spur line to the Granby smelter is expected to be completed by April 1; it is being constructed round Observation mountain, about 20 ft. above the C.P.R. tracks. The work is all in the rock, and is proceeding slowly, a good deal of extra work being occasioned by the necessity of keeping the debris from falling on the C.P.R. tracks.

A branch is to be constructed to Phoenix in the spring, and it is said the line will be extended from Curlew, via Greenwood in the direction of Midway this year. Sims and Shields are reported to have the contract for the construction of the line from Curlew to the coast, near Vancouver, the work to be completed in three years. J. Sims, one of the contractors, is a director of the G.N.Ry., U.S. (Nov., 1902, pg. 387.)

**Vancouver, Westminster, Northern and Yukon Ry.**—At a special meeting in Vancouver recently a resolution was passed transferring all the property, rights, franchises, etc., to the Vancouver, Westminster and Yukon Ry. Co. (Nov., 1902, pg. 387.)

**Victoria (Point Ellice) Bridge.**—The Victoria, B.C., city council has let a contract for the construction of a bridge over the Victoria Arm at Point Ellice. The bridge will cost \$65,000 and will carry a double track for the electric railway, in addition to sidewalks, etc.

**Victoria Lumber Co.'s Ry.**—Construction has been started on a logging railway from Ladysmith, B.C., northwesterly, for the Victoria Lumber Co., Chemamus, B.C. E. J. Palmer is the Managing Director.

**Victoria Terminal Ry. and Ferry Co.**—The new owners are negotiating with the Victoria city council with a view of obtaining an extension of time for the completion of the works agreed to be constructed in connection with the extension of the Victoria and Sidney Ry., the erection of a union station, etc. The company asks for an extension of time to Dec. 30, and promises in return to give a better ferry service to the mainland than was previously arranged. (Nov., 1902, pg. 387.)

**Western Alberta Ry.**—Application will be made next session of the Dominion Parliament for an act extending the time for the commencement and completion of the line authorized from the International boundary west of range 20 west of the 4th principal meridian in Alberta, northwesterly to the middle fork of the Oldman river, thence northerly to the Sarcee Indian reserve, thence via Can-

more and Anthracite, and the valley of the Red Deer river to the headquarters of the North Saskatchewan, and along this river to the eastern base of the Rocky mountains. It is also sought to have range 14 substituted for range 20 as the starting point of the line. (Jan., 1900, pg. 17.)

**Westminster, Vancouver and Fraser River Valley Ry.**—Application will be made next session of the B.C. Legislature for an act incorporating a company with this title to construct a railway from Vancouver to New Westminster, thence to near Chilliwack, and thence to the mouth of the Fraser river. Edmonds and Edmonds, New Westminster, B.C., are the solicitors.

**Whitney to Big Opeongo Lake.**—The line from Whitney, on the Canada Atlantic Ry., to Big Opeongolake, in Algonquin Park, Ont., about 15 miles in length, constructed for the St. Anthony Lumber Co., has been placed in operation. The line cost about \$200,000, this high cost being accounted for by the large amount of rock-cutting and trestle work to be done. There are four high trestles, each being over 400 ft. in length. (Nov., 1902, pg. 387.)

**Winnipeg and St. Andrew's Rapids Ry.**—E. F. Hutchins, of Winnipeg, is reported to have said that arrangements are being made for the construction of a railway from Winnipeg to Lorne Hill, Man. It is proposed to operate the line by steam, but to adopt electricity when the power at Lac du Bonnet or some other convenient point is developed. The W. and St. A. Ry. Co. was incorporated in 1898 by the Manitoba Legislature, E. F. Hutchins being one of the promoters, to construct a railway from Winnipeg to Lorne Hill, and thence to the Red river below St. Andrew's rapids.

**The Winnipeg Electric Street Ry.** proposes to construct a line about a mile in length from the city boundary into the municipality of Kildonan, and negotiations for the franchise are in progress. A new boiler has been installed at the power-house. At the recent city elections in Winnipeg the question of operating cars on Sundays was voted on, and the proposal was defeated by 400 votes. (Nov., 1902, pg. 387.)

**Winnipeg Quarry.**—The City Engineer has submitted an estimate to the city council for the construction of 5 miles of railway to connect Winnipeg with the city quarries. The cost of construction and equipment is estimated at \$138,425, and it is said a saving will be effected by the city owning and operating its own line instead of paying freight to the C.P.R. The proposition is to extend the Winnipeg and Stony Mountain Ry. into the city from near its present junction with the C.P.R. main line paralleling that line to the city limits, thence southerly to between Notre Dame and Logan avenues. No action had been taken in the matter to Jan. 10.

**Wolfe, Megantic and Lotbiniere Ry.**—Surveys are reported to have been completed from the International boundary near Megantic, Que., to Oquossoc, Me., about 32 miles, to connect the projected W.M. and L. Ry. with the Rumford Falls and Rangeley Lakes Ry. (Nov., 1902, pg. 387.)

**York and Carleton Ry.**—The New Brunswick Legislature will be asked next session to vote a bonus for an extension of the line from Stanley, 5 miles, along the Nashwaak river valley to the edge of the settlement. Application will also be made to the Dominion Parliament for a subsidy.

It is said Northern Securities interests are endeavoring to secure control of the Bellingham Bay and British Columbia Rd., which occupies a strong strategic position in north-western Washington.



**Canadian Northern Ry. Construction.**

**Toronto Offices.**—The Co. has acquired the premises in Toronto known as Toronto chambers, having a frontage of 163 ft. on King st. east, and 82 ft. on Toronto st. Third Vice-President Hanna has selected the top floor for his office, and will have a staff of about a

dozen clerks. The corner store, 52 King st. east, is occupied by W. Phillips, General Eastern Agent, who has hitherto had his offices in the Union station. The first and second floors will probably be occupied by other Canadian Northern officials and by Mackenzie, Mann & Co., who will move there from the Toronto Ry. Chambers.

**Port Arthur, easterly.**—Survey parties are in the field easterly from Port Arthur running lines, but no information is available as to the route which will be followed. W. Mackenzie recently drew a line from Kashabowie, 82 miles west of Port Arthur, Ont., direct to Quebec, and asked the reporter who was interviewing him about the eastern extension of

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the line, how that would do. A press report credited the survey parties with the intention of running a line to White River on the C.P.R., and there making a junction with the Algoma Central and Hudson's Bay Ry., which proposes to construct a line to that point.

**Port Arthur Elevator.**—The 2,200,000 bush addition to the elevator at Port Arthur, Ont., is completed, and began taking in wheat Jan. 19, bringing up the Co.'s accommodation at its lake terminal to 3,700,000 bush. This addition is built of tile on a pile foundation covered with concrete, and cost \$750,000. (Aug., 1902, pg. 269.)

**Port Arthur Station.**—The erection of a permanent station at Port Arthur will be undertaken at an early date, but whether it will be joint with the C.P.R., or independent, is still under consideration, although press reports state that the C.P.R. has declined to have a joint station.

**Port Arthur and Fort William Crossings.**—In July, 1902, the Railway Committee of the Privy Council made an order that the Co. put in interlocking and derailing devices at the points where its tracks cross the C.P.R. tracks in Port Arthur and Fort William, Ont. At a meeting of the Committee held on Jan. 6, the Co. applied to have the order amended. The rules of the Committee are that such appliances, where considered necessary, must be put in at the cost of the junior road. This rule, the C.N.R. Co. considers is not so good as the old rule, which simply required trains to come to a dead stop before crossing, and works harshly on the junior road, which frequently has a smaller number of trains operating over the crossing than the senior road. The Committee decided that the order must stand, and gave the Co. until June to put in the appliances.

**War Road to Rosseau.**—Surveys were made in 1901 for a branch from War Road, at the Minnesota end of the Rainy river bridge, to Rosseau, Minn., but no decision has been announced regarding construction.

**St. Boniface Crossing.**—Application was made at the Jan. sitting of the Railway Committee of the Privy Council to relieve the Co. from the necessity of putting in safety devices where its track crosses the C.P.R. tracks. It was pointed out that the C.P.R. had only two trains a week over the crossing, which was at a point where it was possible to see several miles in either direction. The matter was held over to see if an arrangement could be arrived at.

**Emerson Branch.**—Fourteen miles have been graded and track laid from Emerson easterly. It is proposed to extend the line easterly, finally to a junction with the line from Port Arthur to Winnipeg at Vassar or Sprague. A. C. Mackenzie, Winnipeg, was the contractor. (Nov., 1902, pg. 389.)

**Emerson-St. Vincent Extension.**—About 2 miles of line from Emerson, Man., to the International boundary has been constructed, and connection made with an extension of the track of the Great Northern Ry., U.S., from St. Vincent, N.D. There used to be a connection between the G.N. Ry. and the C.P.R. lines running through St. Vincent and Emerson, but when the C.P.R. built a line to Gretna, connection was made with the G.N.R. at Neche, and the connecting line at Emerson was abandoned and taken up. (Nov., 1902, pg. 389.)

**Carman Branch.**—Grading on the extension of this branch, which was completed to 11 miles west of Carman, Man., in 1901, has been continued 7.8 miles further west towards Somerset, and track laid. No decision has been announced regarding any further extension of the branch. (Nov., 1902, pg. 389.)

**Branch to Oak Point.**—The old Hudson's Bay line from Winnipeg to St. Laurent is practically being rebuilt, about 20 miles of

the grade at the north-west end having been abandoned, and a new route located. About 35 miles of the grade has been completed, but no track has been laid owing to the difficulty in obtaining steel. The line is to be extended to Oak Point, on Lake Manitoba, 53 miles from Winnipeg, where wharves and other shipping facilities are to be erected. It is said the additional 18 miles of grading will be completed early this year, and track laid over the branch. (Nov., 1902, pg. 389.)

**Oaklands to White Mud River.**—Negotiations are in progress for the construction of a branch from Oaklands, on the Portage la Prairie-Delta line, to White Mud river, about 12 miles, and it is expected that arrangements will be completed so that construction will be gone on with this year.

**Neepawa Branch.**—The total length of the branch from Neepawa Jct. (formerly Katrime) to Neepawa is 33.7 miles. The branch is being extended from Neepawa to McCreary, on the line to Erwood, 37.8 miles. Grading has been completed to within 1½ miles of McCreary. We were informed Jan. 20, that track had been laid on about 20 miles of the extension, and work was still being continued. (Nov., 1902, pg. 389.)

**Rosburn Branch.**—Grading has been completed for about 25 miles from Rosburn Jct., 5 miles north of Neepawa, on the line to McCreary, westerly towards Clanwilliam. We were informed Jan. 20, that tracklaying had been practically finished. (Nov., 1902, pg. 389.)

**Grand View Extension.**—Forty-five miles of grading has been completed from Grand View westerly. Bridging has been completed for the first 13 miles, and tracklaying will be started in the spring. G. H. Strevel, Winnipeg, is the contractor. Surveys have been completed from Grand View to within 80 miles of Battleford, Sask. Some distance east of Battleford there will be a junction, at which a line from Prince Albert, to which point the line heading from Erwood, Sask., will join. (Nov., 1902, pg. 389.)

**Virden.**—Surveys will shortly be made for a line north and south from Virden, with a view of deciding on the practicability of a route suggested by the promoters of the Virden and Northern Ry. The line projected is from the International boundary via Pipestone to Virden, and thence to the northern boundary of the Province or other convenient point. A deputation asked the C.N. Ry. to take over the charter and construct the line, with the result that President Mackenzie directed a preliminary survey to be made. (April, 1902, pg. 147.)

**Western Branches.**—Application will be made next session of the Dominion Parliament for authority to construct the following additional branch lines: from Sperling, Man., on the Carman branch, generally southerly and easterly to Morris, then to a point between St. Anne and the southern boundary of Manitoba; from Hartney, Man., northerly and westerly to Regina, Assa.; from Swan river, Man., along the Swan river valley, westerly to the Co.'s authorized line at the crossing of the Saskatchewan river; from Battleford, Sask., on the Co.'s authorized line, westerly to the Brazeau river, Alta.; from Edmonton, Alta., northerly, northeasterly or northwesterly for 100 miles; from the C.N. Ry. or the Edmonton, Yukon and Pacific Ry. west of Edmonton westerly and southerly to Rocky Mountain House, Alta. It is expected that construction will be gone on with on some, if not all, of the branches projected in Manitoba this year.

**Erwood Westerly.**—Grading has been completed beyond the 20 miles graded in 1901, for about 30 miles, and piles have been driven for the bridges on a further distance of 10 miles. We were advised Jan. 20 that track-

laying had been going on for some time, and that about 20 miles had been laid to that date. Neil Keith and D. Keith are the contractors. The route followed from Erwood is through the southern portion of tp. 45, to Melfort, thence northwesterly to the crossing of the South Saskatchewan river in tp. 46, range 25, then northwesterly to Prince Albert. It is the intention of the Co., Vice-President Mann recently stated, to extend the line from Prince Albert westerly to about midway to Battleford, where a junction will be effected with the extension of the line now being constructed from Grand View, Man. (Nov., 1902, pg. 389.)

**Edmonton.**—Survey parties are in the field working easterly to Battleford and westerly to the Rocky Mountains. The Co. has a charter giving power to build to the Pacific coast by way of the Pine river pass, and has control of the Edmonton, Yukon and Pacific Ry. Co.'s charter, which gives power to build via the Yellowhead pass. On the westerly surveys the Smoky river valley has been looked over, but the reported pass over the mountains by it has been found to be not available for railway construction. Easterly the surveyors are locating the line to Battleford, where they will meet the survey party working from Grand View, Man. President Mackenzie, in a recent interview, said Edmonton will probably be reached by the line in 1904. Referring to the extension to the Pacific coast, Premier Prior, of B.C., recently stated that his policy was first to open up the country by railways, and that the C.N. Ry. was the one scheme which he considered to be for the best interest of B.C. as a whole.

**The Contracts.**—Contracts have been placed for taking out about 1,000,000 ties during the winter in the Rainy River district and west of Erwood, the contractors being G. H. Strevel, A. C. Mackenzie, N. Keith and L. Christie. Nothing definite has been arranged in respect to taking out ties in the Battleford district.

**The Safety Car Heating and Lighting** Co.'s business in 1902 was exceedingly large. During the year 2,051 cars were equipped with the Pintsch light in Canada, the U.S., and Mexico; 75 Gas Buoys were purchased by the light house department of Canada and the U.S., and 1,811 cars were equipped with its standard steam heating systems. The Pintsch lighting system has been adopted by over 200 railways in Canada, the U.S. and Mexico, where it is applied to 20,017 cars. The Pintsch buoy system is applied to 240 buoys and beacons in the same countries. The steam heating systems of this Co. are adopted by 130 railways in the U.S., and are applied to 11,050 cars. Up to Oct. 1, 1902, the Pintsch system has been applied to 116,000 cars, 5,000 locomotives and 1,500 buoys and beacons in the world. The simplicity of operation and economy in maintenance of the Pintsch system has been so satisfactory that it has practically been adopted as the standard lighting system by the majority of the railway lines and the lighthouse boards of the world.

A fine of \$50 and costs has been imposed on the C.P.R. station agent at Sinaluta, Man., for a violation of the car distribution provisions of the Manitoba Grain Act. The prosecution was initiated by the Warehouse Commissioner, on the complaint of a member of the Territorial Grain Growers' Association, and the C.P.R. defended the action of its agent. An appeal, taking the case to the Supreme Court, has been entered.

The Sandwich, Windsor and Amherstburg Ry. (electric) made a very good showing in 1902, running 437,211 miles and carrying 1,612,555 people without injuring a single passenger.

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

**St. John, N.B., Terminals.**—The yard accommodation at St. John, N.B., notwithstanding the recent enlargement and rearrangement which provides for 1,400 cars against 800 in 1901-02, is still insufficient to meet the growing demands of the winter business at the port. The work of extending the yards will be resumed in the spring, but the 2nd Vice-President, on the occasion of a recent visit to St. John, stated that no further improvements would be made beyond those already started until the St. John people did something further in the way of increasing their harbor facilities. (Nov., 1902, pg. 377.)

**Fairville Yard.**—We are advised that there is nothing in the press reports that land has been acquired at Fairville, N.B., with a view to erecting a new station, freight shed and roundhouse.

**Vanceboro Station.**—A new station building, providing accommodation for railway purposes as well as for the Dominion and American Express Cos., the Western Union Telegraph Co., and the immigration and custom house services, has been completed at Vanceboro, Me.

**Brigham Jct.-Farnham Double-tracking.**—The double-tracking between Brigham Jct. and Farnham, Que., 6 miles, has been completed. (Nov., 1902, pg. 377.)

**St. Constant Bridge.**—The trestle bridge at St. Constant, 14 miles southeast of Montreal, was damaged by fire Jan. 26. The bridge is 145 ft. long and 15 ft. in height, and of this about 75 ft. were burned. Temporary repairs have been made pending the erection of a steel trestle.

**St. Henri Yards.**—A new freight shed is to be built in St. Henri, Montreal, the council having given permission to close Lacroix st. at its present termination. The sheds will be erected on the proposed extension of Lacroix st., and the yard will have track connection to the bank of the Lachine canal, the tracks running alongside those of the G.T.R. (June, 1902, pg. 201.)

**Place Viger Yards, Montreal.**—Several large areas of land have been acquired for the Co. in the vicinity of Place Viger station, and the old Dalhousie square station. The object is to provide additional yard space and to extend the passenger accommodation at Place Viger station. (April, 1902, pg. 139.)

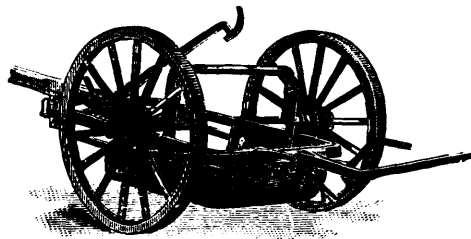
**Montreal Shops.**—A further contract has been let to Lessard and Harris, Montreal, for the construction of the blacksmith shop at the new shops' site at Hochelaga. The building will be 630 by 130 ft., and will have an annex for the forges. This is the eighth contract let for the buildings at the new shops. (Nov., 1902, pg. 377.)

**Chateau Frontenac, Quebec.**—Press reports state that it is proposed to acquire property adjoining the Chateau with the object of enlarging it either by adding to the present building or erecting an additional one.

**Northern Colonization Ry.**—About one-third of the grading has been completed and track laid from Labelle, Que., to the crossing of the Rouge river, about 3 miles. The bridge over the river is under construction and is expected to be completed by spring. (Nov., 1902, pg. 377.)

**The Toronto Short Line,** from North Toronto to Toronto Jct., is being double-tracked to facilitate the handling of through freight trains. The Railway Committee of the Privy Council recently granted permission to lay the additional track on the street crossings north of Toronto between Avenue road and Symington ave.

**Toronto-Toronto Junction Double-track.**—The Railway Committee of the Privy Council has given permission for the laying of an



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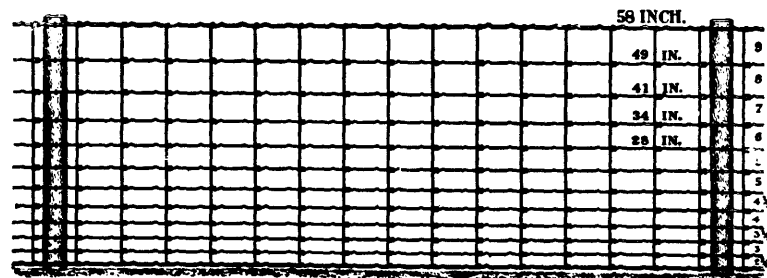
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additional track from the Parkdale yard to the Toronto Jct. yard.

**Toronto Jct. Shops.**—It is proposed to build an extension 83 by 312 ft. to the shops at Toronto Jct., thus doubling the size.

**Kleinburg-Sudbury Line.**—The plans, profiles and books of reference in respect of the location of the projected line from Kleinburg to Sudbury, Ont., were filed at Ottawa Nov. 18, 1902. Plans are also reported to have been filed at Barrie registry office. (Jan., pg. 9.)

**North Bay Freight Shed.**—New freight and flour sheds are being built at North Bay. The foundations are of concrete and stone and the superstructure of frame. The cost will be about \$25,000. J. O'Boyle, Sault Ste. Marie, Ont., is the contractor. (Nov., 1902, pg. 379.)

**Port Arthur Elevator.**—We were recently advised that no decision has been reached in reference to the construction of a cleaning elevator at either Port Arthur or Fort William, Ont. (June, 1902, pg. 201.)

**Winnipeg Subway and Station.**—The 2nd Vice-President was in Winnipeg early in Jan. in connection with the proposed new terminal buildings. The plans for the buildings, the subway and the rearrangement of the yards are being prepared, and that for the subway will be submitted to the city council shortly. The whole matter of negotiations is in the hands of W. Whyte, Assistant to the President. (Aug., 1902, pg. 271.)

**Winnipeg Hotel.**—The 2nd Vice-President stated at Winnipeg recently that the site for the proposed hotel would be in the block on the Co.'s north-end property in the city.

**Winnipeg Offices, Etc.**—The freight offices have been moved to the old Tecumseh house from the old Royal hotel, where they have been located since the fire, pending the erection of permanent premises. (June, 1902, pg. 202.)

The Co. has secured the old Svea hotel premises at Winnipeg, and is having alterations made to fit it for a stationery supply department.

**Winnipeg Spur Tracks.**—The Railway Committee of the Privy Council has granted permission for the construction of two spur tracks, one parallel and west of Princess st., and the other crossing Nena to the property of Metcalfe and Stewart, on agreements being made with the parties interested.

**Snowflake Branch.**—Tracklaying on the 10 miles from Snowflake to Mowbray, Man., has been completed and the branch handed over to the operating department. (Nov., 1902, pg. 379.)

**Waskada Branch.**—Tracklaying on the 20-mile extension, from Waskada to Lyleton, has been completed and the line handed over to the operating department. (Nov., 1902, pg. 379.)

**Portage la Prairie, Man.**—Considerable improvements have been made in the yards, a double track has been laid in front of the station and a well sunk near the tank.

**Manitoba and Northwestern Ry.**—Grading on 50 miles of the extension from Yorkton was completed last season, and track was laid for about 30 miles. (Jan., pg. 25.)

**McGregor Branch.**—Track has been laid on the 10 mile extension from Wellwood to Brookdale, Man., and the extension is being operated. (Nov., 1902, pg. 379.)

**The Great North West Central Ry. Co.** will apply next session of the Dominion Parliament for an act extending the time within which it may commence and complete its lines.

**Branch from Forrest.**—The 22 mile extension from Wheatlands to Lenore has been completed, and a train service is being operated over it. (Nov., 1902, pg. 379.)

**Brandon, Man.**—It is expected that a commencement will be made on the alteration to the yards and the erection of an overhead bridge, freight sheds and roundhouse early in the spring. The estimated cost of the improvements is \$100,000. (Aug., 1902, pg. 271.)

**Pheasant Hills Branch.**—Grading has been completed from Kirkella, northerly to Neudorf, about 105 miles, and track laid to Scissors creek, 45 miles. Ballasting has been completed on the first 20 miles. (Nov., 1902, pg. 379.)

**Qu'Appelle, Long Lake and Saskatchewan Ry.**—The C.P.R. has made considerable improvements in the roadbed, and more extensive alterations and improvements are in contemplation.

**Moose Jaw Westerly.**—During the year extensive works are to be undertaken on the main line west of Moose Jaw, having for their object the straightening of the line and the reduction of gradients. The alterations to be made are of such a character that when completed the hauling capacity of the locomotives will be increased 50%.

**Frank Yard.**—Tenders are under consideration for grading the yard at Frank, Alta. The plans call for a four-track roadbed one mile long, and about 6 miles of side tracks. The yard is being put in for the accommodation of the increasing coal and coke business at this point. A new station building, water tank and coal chutes are also to be erected. In connection with the yard a deviation of about 2 miles is to be made in order to improve the gradient.

**Morrissey Station.**—Press reports state that a station to cost \$3,000 is to be erected at Morrissey, B.C.

**The British Columbia Southern Ry. Co.** will apply at next session of the Dominion Parliament for an act extending the time for the commencement and completion of its lines, and also giving power to build from near Fort Steele, to near Golden, on the C.P.R.

**Improvements at Phoenix.**—A Y has been put in at Phoenix, B.C., which will enable the loop constructed at Hartford Jct., two miles away, in 1901, to be utilized. An additional spur 1,800 ft. long has been laid to the Snowshoe mine.

**Deviation at Field.**—An important improvement is about to be effected at Field, B.C., by the diversion of the line between Field and Hector, about 7 miles, in order to avoid the big hill there, on which the gradient is 4½%. The idea is to start at Hector and cross the Kicking Horse river, to run along the north fork, and to join the main line again at Field. This will reduce the gradient to 2½%. It has not been announced just when the improvement will be effected.

**Mountain Hotels.**—Very considerable alterations and improvements are being made at the Co.'s hotels at different points in the Rocky and Selkirk mountains to provide for the increasing demands of visitors.

At the Mount Stephen House, Field, another wing similar to the one erected in 1901 is being built. It will contain 40 bedrooms, billiard rooms, private dining-rooms, and some additions to the kitchen accommodation. An electric light system is also being installed. Dessette and Fox, Vancouver B.C., are the contractors.

The chalet at Lake Louise, Laggan, is being renovated and a fine entrance hall is being added. A new wing, similar to that at Field, containing 35 bedrooms, with billiard room, is in course of erection. J. A. Kernahan, Winnipeg, Man., is the contractor.

At the chalet erected in 1901, at Emerald Lake, the kitchens are being re-arranged and a number of other improvements are being

carried out by which 10 additional rooms will be provided. (June, 1902, pg. 203.)

The Glacier House will ultimately be rebuilt, the work in hand at present being the erection of a wing, which will form part of a new hotel, containing 60 bedrooms. An electric light system is also to be installed.

At Field a large building is being built as a laundry, with a capacity of 5,000 pieces a day, to serve the hotels at Field, Glacier, Lake Louise and Emerald Lake.

The work at the different places is to be completed by April 30. The new buildings are all of a substantial and permanent character, with concrete and stone foundations, and are fitted with steam heating and baggage lifts. The bedrooms all have bathrooms attached. The kitchens at each hotel are being re-arranged and newly equipped. New drainage systems are also being provided.

It is also proposed to increase the accommodation at the Banff hotel by 100 rooms.

These various works are being carried out under F. M. Rattenbury, architect, Victoria, B.C.

**Fraser River Bridge.**—Work has been resumed on the reconstruction of the bridge over the Fraser river at Mission, B.C. Seven spans from the draw had been previously completed, leaving the draw span and one span connecting with the south shore to be replaced. The new draw span will be of steel.

**Coal Plant at Vancouver.**—Plans have been prepared for the construction of coal bunkers on the water front near Alexander St., Vancouver, but nothing has been announced in regard to their construction.

**Vancouver Hotel.**—The wing being built at Vancouver is expected to be ready for occupation Mar. 30. It contains over 100 rooms, which will be occupied as soon as completed. The old building will then be taken down and a new central building, which will correspond in architecture to the new wing, erected. In connection with the hotel a large detached building is being built for laundry purposes and servants' quarters. F. M. Rattenbury, Victoria, is the architect.

**Duluth, South Shore and Atlantic Ry.**—An extension of 3 miles from Calumet to Laurium, Mich., has been completed.

**Minneapolis, St. Paul and Sault Ste. Marie Ry.**—It is intended to extend the line to Aberdeen, S.D., but no decision has been reached as to when construction will be commenced. New 80-lb. steel rails have been laid from Sault Ste. Marie, Mich., to Sturgeon River, 131 miles, replacing 60-lb. rails.

### Not "Off-Again, On-Again" This Time.

The following telegram, from which name, etc., are omitted, was recently received by one of the superintendents at Toronto union station from a station agent:—

"When train no. — was about to leave here, brakeman found man lying on main line with head cut off. Dr. — was called, and after examination pronounced the man dead."

**Contractors' Addresses Wanted.**—We want to ascertain the addresses of Luke Maddigan and J. A. McDonnell, railway contractors. The last address we have for them is Savanne, Ont., when they were at work on the Canadian Northern Ry. Anyone knowing the address of either or both of them will confer a favor by addressing THE RAILWAY AND SHIPPING WORLD, Toronto.

The American Locomotive Co.'s gross earnings for the six months ended Dec. 31, 1902, partly estimated, were \$15,265,352, an increase of \$3,634,387. The Co. has orders for 2,800 locomotives.

**February Birthdays.**

Many happy returns of the day to

B. H. Bennett, General Agent Chicago and North-Western Ry. at Toronto, born at Coubourg, Ont., Feb. 6, 1858.

W. H. Cole, Receiver Brockville, Westport and Sault Ste. Marie Ry. at Brockville, Ont., born there Feb. 4, 1834.

H. J. Colvin, District Passenger Agent

C.P.R. at Boston, Mass., born at Macedon, N.Y., Feb. 26, 1856.

Robert Crawford, City Freight Agent Canadian Northern Ry. at Winnipeg, Man., born at Kingston, Ont., Feb. 21, 1870.

F. P. Dwyer, Eastern Passenger Agent G.T.R. at New York, born at Chicago, Ill., Feb. 20, 1853.

E. A. Evans, General Manager and Chief Engineer Quebec Ry., Light and Power Co.

at Quebec, born at Kensington, London, Eng., Feb. 26, 1855.

A. R. Evans, General Freight and Passenger Agent Midland Ry. Co. of Nova Scotia at Windsor, N.S., born at Montreal, Feb. 1870.

E. H. Fitzhugh, Vice-President and General Manager Central Vermont Ry. at St. Albans, Vt., born in Montgomery County, Mo., Feb. 1, 1853.

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**Railway Track Laid in 1902.**

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On Dec. 30, 1902, we issued a circular to all steam and electric railways in Canada, asking particulars of track laid during that year. Below is a compilation of the figures received in reply. No official information having come to hand from the Algoma Central and Hudson's Bay Ry., and the Bay of Quinte Ry., the figures given for those lines are approximate, and subject to revision. We desire to make our returns absolutely complete, and invite information as to any track laid which may have been omitted from our tables.

The total amount of track reported laid in 1902 is steam railways 501.72 miles; electric railways, 78.589 miles; total, 580,309 miles; against steam railways, 473.99 miles; electric railways, 23.86 miles; total, 497.85 reported laid in 1901. The C.P.R. laid the largest amount of track, 183.70 miles, Mackenzie, Mann & Co.'s system, the Canadian Northern, Edmonton, Yukon and Pacific and James Bay railways coming next with 95.43 miles. Mackenzie, Mann & Co. also laid 15 miles on the Schomberg and Aurora Ry.

**STEAM RAILWAYS.**

	Miles.	Miles.
ALGOMA CENTRAL AND HUDSON'S BAY Ry.—From Ogidaki towards Pangissin Ont. (Approximate).....	16.00	
ATLANTIC AND LAKE SUPERIOR Ry.—From New Carlisle to Paspébiac, Que.....	2.00	
BAY OF QUINTE Ry.—Between Deseronto and Napanee, Ont. (Approximate).....	6.00	
BRUCE MINES AND ALGOMA Ry.—From C.P.R. track to Lake Huron via Bruce Mines Village, Ont.....	2.00	
CANADIAN NORTHERN Ry.—Emerson branch, from Emerson towards Vassar or Sprague.....	14.0	
From Emerson to international boundary Carman branch, from mileage 11 beyond Carman towards Somerset.....	7.8	
Neepawa branch, from Katrim (Neepawa Jct.) to Neepawa.....	33.7	
McCreary branch, from Neepawa towards McCreary.....	15.8	
Rosburn branch, from Rosburn Jct. towards Clanwilliam.....	13.1	
Prince Albert extension, from Erwood westerly.....	4.6	90.50
CANADIAN PACIFIC Ry.—Snowflake branch, from Snowflake to Mowbray, Man. Waskada branch, from Waskada to Lyleton, Man.....	10.	
Winnipeg Beach branch, from West Selkirk to Winnipeg Beach, Man.....	26.	
McGregor branch, from Wellwood to Brookdale, Man.....	10.	
Branch from Forrest, from Wheatlands to Lenore, Man.....	26.	
Manitoba and Northwestern Ry., from Yorkton northwesterly towards Prince Albert.....	30.	
Pheasant Hills branch, from Kirkella towards Neudorf.....	40.	
Arrowhead and Kootenay Ry., from Tenderfoot Creek to Trout Lake, B.C.....	10.	
Vancouver and Lulu Island Ry., from 1/2 mile east of Eburne to Steveston, B.C.....	8.70	
Northern Colonization Ry.—From Labelle towards Nominique, Que.....	3.00	183.70
CAPE BRETON Ry.—From Point Tupper to Sporting Mountain, N.S.....	25.00	
CROW'S NEST SOUTHERN Ry.—From International boundary to junction with Morrissey Creek branch.....	43.35	
Morrissey Creek branch.....	4.80	48.15
DRUMMOND COLLIERY Ry.—From Granton towards Skinner's Point, N.S.....	1.51	
DURHAM SWITCH LINE Ry.—From Durham to Wilder's Lake, Ont.....	4.50	
EDMONTON, YUKON AND PACIFIC Ry.—From Strathcona to Edmonton, Alta.....	4.75	
FRANK AND GRASSY MOUNTAIN Ry.—From Frank to foot of Grassy Mountain, Alta.....	6.00	
GRAND TRUNK Ry.—From Berlin to Bridgeport, Ont.....	1.25	
From Wiarion to beet sugar factory.....	1.00	
Magnetawan River Ry., from Burk's Falls Jct. to Burk's Falls Wharf, Ont.....	1.32	3.57
JAMES BAY Ry.—From Seguin River to Dufferin St., Parry Sound, Ont.....	.20	
MOUNT SICKER Ry.—From overhead crossing of Esquimalt and Nanaimo Ry. to Crofton, B.C.....	6.00	
NEW BRUNSWICK Ry. AND COAL Co.—From Chipman to Newcastle, N.B. (Approximate).....	5.20	

	Miles.	Miles.
NORTH SHORE POWER, Ry. AND NAVIGATION Co.—From Bay of Seven Islands to falls of Ste. Marguerite River, Que.....	9.00	
ORFORD MOUNTAIN Ry.—From Kingsbury towards Windsor Mills, Que.....	1.00	
PRINCE EDWARD ISLAND Ry.—From Montagu Cross to Murray River.....	21.00	
QUEBEC AND LAKE ST. JOHN Ry.—From St. Andre Jc. to Metabetchouan, Que.....	11.00	
SCHOMBERG AND AURORA Ry.—From Bond Lake to Schomberg, Ont.....	15.00	
ST. ANTHONY LUMBER Co.—From Whitney to Big Opeongo Lake, Ont.....	14.00	
SUM PORTLAND CEMENT Co.—From Shallow Lake station to McNab Lake, Ont.....	2.25	
TILLSONBURG, LAKE ERIE AND PACIFIC Ry.—From Tillsonburg to Ingersoll, Ont.....	15.25	
VANCOUVER, VICTORIA AND EASTERN Ry. AND NAVIGATION Co.—From Laurier to Danville, B.C.....	15.00	
From Grand Forks Jct. to Grand Forks, B.C.....	2.00	17.00
VICTORIA TERMINAL Ry. AND FERRY Co.—From Topaz Ave. to Cormorant St., Victoria, B.C.....	1.14	
		501.72

The Canadian Northern Ry. during 1902 graded 234.5 miles, including the 20 miles on the Prince Albert extension from Erwood westerly, graded in 1901, but on which track was not laid. On this grade track was laid on 89 miles, leaving 145.5 miles of grade ready for the spring work. This mileage is distributed as follows:

	Miles.
Oak Point branch, from Winnipeg towards Oak Point.....	35.0
McCreary branch, from track end to McCreary.....	20.2
Rosburn branch, from track end to Clanwilliam.....	6.9
Grand View extension, from Grand View northwesterly.....	38.0
Prince Albert extension, from track end westerly.....	45.4
	145.5

The C.P.R. in addition to laying 183 miles of new track, has graded and ready for tracklaying an additional 15 miles on the extension of the Manitoba and North Western Ry. from Yorkton; and 55 miles on the extension from Kirkella, beyond Scissors Creek. The Co. also constructed 6 miles of double track between Brigham Jct. and Farnham, Que., and a deviation of about 7 miles between Field and Ottertail, B.C.

The statement of new track laid does not include second track or sidings.

The Lake Erie and Detroit River Ry. built deviations from its lines at Sombra, Wallaceburg and Dresden, Ont., 2 3/16 miles in all, which has the effect of slightly reducing the mileage.

**ELECTRIC RAILWAYS.**

	Miles.	Miles.
BERLIN AND BRIDGEPORT ELECTRIC STREET Ry.—In streets of Berlin, Ont.....	.80	
From Berlin to Bridgeport, Ont.....	1.45	2.25
BRANTFORD, ONT., STREET Ry.—Extension of lines in city.....	1.00	
BRITISH COLUMBIA ELECTRIC Ry.—From 9th Avenue to 16th Avenue, Vancouver.....	.50	
From Campbell Avenue to Cedar Cove.....	1.00	1.50
CAPE BRETON ELECTRIC Co.—In town of Sydney, N.S. (Approximate).....	5.00	
From North Sydney to Sydney Mines, N.S. (Approximate).....	5.00	10.00
GRAND VALLEY Ry.—From Brantford to Paris, Ont.....	7.00	
HAMILTON, GRIMSBY AND BEAMSVILLE ELECTRIC Ry.—From Beamsville to Vine-land.....	4.50	
INTERNATIONAL TRANSIT Co.—From Upton Road to steel plant, Sault Ste. Marie, Ont.....	4.00	
LEVIS COUNTY Ry.—In town of Levis, Que.....	3.00	
MONTREAL STREET Ry.—Various extensions in city.....	3.45	
PRESTON AND BERLIN Ry.—From Preston to Berlin, Ont. This line is to be operated at first by steam, but will probably be electrified during the year.....	9.00	
SANDWICH, WINDSOR AND AMHERSTBURG STREET Ry.—From Ojibwa to Canard River.....	6.50	
SOUTHWESTERN TRACTION Co.—From London city limits to near Lambeth, Ont.....	4.00	
SYDNEY AND GLACE BAY Ry. Co.—From Sydney to Glace Bay, N.S.....	21.00	
TORONTO Ry.—Extensions in city.....	1.179	

C. W. Gardner, Auditor Minneapolis, St. Paul and Sault Ste. Marie Ry. at Minneapolis, Minn., born at Rushville, N.Y., Feb. 17, 1861.

W. C. Hall, ex-Superintendent Eastern Division C.P.R. at Quebec, born in Ireland, Feb. 18, 1831.

J. A. Johnson, Mechanical Foreman I.C.R. at Campbellton, N.B., born at St. John, N.B., Feb., 1848.

R. S. Logan, Assistant to 2nd Vice-President and General Manager G.T.R., Montreal, born at St. Louis, Mo., Feb. 13, 1864.

C. S. Maharg, Trainmaster districts 8 and 9 C.P.R. at Toronto, born in Dufferin County, Ont., Feb., 1867.

T. McNabb, Master Mechanic Alberta Ry. and Coal Co. and St. Mary's River Ry. at Lethbridge, Alta., born in Scotland, Feb. 16, 1849.

J. K. McNeillie, Car Service Agent C.P.R. at Winnipeg, Man., born at Toronto, Feb. 23, 1874.

D. MacPherson, Division Engineer C.P.R. at Montreal, born Feb. 2, 1858.

C. W. Milestone, ex-Superintendent C.P.R. at Moose Jaw, Assa., born at Medina, Ohio, Feb. 24, 1857.

C. Percy, Auditor G.T.R., Montreal, born in Kent, Eng., Feb. 12, 1845.

A. H. Robinson, Superintendent Elgin and Havelock Ry. at Petincodiac, N.B., born at Elgin, N.B., Feb. 2, 1862.

A. E. Rosevear, Freight Claim Agent G.T.R. at Montreal, born Feb. 20, 1863.

W. R. Russell, Superintendent Quebec Ry., Light and Power Co. at Quebec, born at Keene, Ont., Feb. 16, 1860.

J. G. Scott, General Manager Quebec and Lake St. John Ry. and Great Northern Ry. at Quebec, born there Feb. 13, 1847.

J. Troup, Manager Canadian Pacific Navigation Co. at Vancouver, born Feb. 5, 1855.

J. C. Ulrich, Superintendent Manitoulin and North Shore Ry. at Sudbury, Ont., born at Lebanon, Pa., Feb. 19, 1868.

Sir Wm. C. Van Horne, K.C.M.G., Chairman C.P.R. and President Cuba Co., Montreal, born in Will County, Ill., Feb., 1843.

F. Walker, Chief Train Dispatcher C.P.R. at North Bay, Ont., born at Pontiac, Ill., Feb. 8, 1867.

H. W. Walker, General Auditor G.T.R. at Montreal, born at Brantford, Ont., Feb. 12, 1839.

**The B. Greening Wire Co. (Ltd.),** Hamilton, Ont., give on their 1903 calendar illustrations of their factories, and of the handsome and commodious offices which they have just moved into. The additions to the factories recently completed include an enlargement of the weaving room, and a new paint tower. Among the special lines manufactured by the firm are wire ropes for ballast ploughs, switch ropes; derricks, coal haulage, etc., wire rope for locomotive smoke stacks, copper and brass cloth for car ventilators, etc. The firm was established in Hamilton in 1859 by B. Greening, and it was incorporated in 1889 with S. O. Greening, son of the founder, as President. The family came to Canada from Warrington, Cheshire, Eng., where Nathaniel Greening established a wire working business in 1799. Portraits of the three generations are reproduced on the calendar.

**Halifax and Southwestern Ry.**—Since pp. 39 went to press we have been informed that the contractor, J. A. Wheaton, was paid an estimate of \$4,300 by Mackenzie, Mann & Co., more than enough to pay the men's wages, which were subsequently paid by Mackenzie, Mann & Co.; that he paid his own sons and left without paying the others; and that he failed to meet the chief engineer, T. H. White, although he made several appointments to do so.

WOODSTOCK, THAMES VALLEY AND INGERSOLL ELECTRIC RY.—In city of Woodstock, Ont. ....	Miles.	
		.21
		78.589

The Trans-St. Mary's Traction Co. of Sault Ste. Marie, Mich., which laid 8 miles of track in 1902, is owned by the same interests owning the International Transit Co. of Sault Ste. Marie, Ont. A ferry is operated jointly by the two companies across the St. Mary's river.

SUMMARY BY PROVINCES.

	Steam.	Electric.
Manitoba .....	167.90	
British Columbia .....	92.99	1.50
Northwest Territories .....	85.35	
Ontario .....	78.77	39.639
Nova Scotia .....	26.51	31.00
Quebec .....	26.00	6.45
Prince Edward Island .....	21.00	
New Brunswick .....	5.20	
	501.72	78.589

Total new tracks laid, steam and electric..... 580.309.

TRANSPORTATION APPOINTMENTS.

**American Locomotive Co.**—J. McNaughton, who has been Superintendent of the Brooks works, has been appointed General Superintendent of the Schenectady and Brooks plants. W. L. Reid has been promoted from Assistant Superintendent of the Brooks works to Superintendent of the new works at Schenectady. R. H. Gilmour, formerly Mechanical Superintendent of the Canada Foundry Co., Toronto, has been appointed Superintendent of the Brooks plant.

**Canadian Express Co.**—R. G. Wilson, heretofore Agent at Toronto, has been appointed General Agent.

R. A. Mitchell, heretofore Cashier at Toronto, has been appointed Assistant to the General Agent at Toronto.

**Canadian Northern Express Co.**—Canadian Northern Telegraph Co.—Scott Griffin has been appointed Superintendent. W. C. Muir, heretofore agent of the Dominion Express Co. at Winnipeg, has been appointed Auditor. Offices at Winnipeg.

**Canadian Northern Ry.**—A. Shields, heretofore C.P.R. Locomotive Foreman at Winnipeg, has been appointed Master Mechanic, vice C. Raitt. Office at Winnipeg.

W. A. Brown, heretofore Superintendent of the C.P.R. at Moose Jaw, Assa., has been appointed Superintendent of the Winnipeg terminals and lines west of Winnipeg, vice J. T. Arundel, resigned to re-enter the C.P.R. service.

J. Phelan, heretofore with the Canadian Pacific Navigation Co. at Victoria, B.C., has been appointed agent at Port Arthur, Ont.

C. R. Stovel, formerly of Prince Albert, is looking after right-of-way matters and claims for stock killed, etc. Office at Winnipeg.

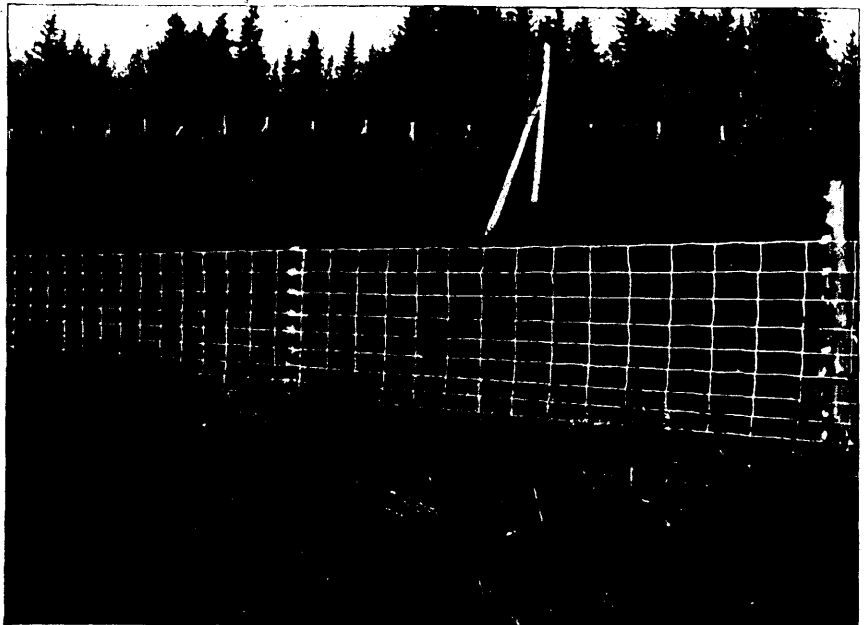
Arthur E. Cox, formerly storekeeper of the Manitoba and North Western Ry. at Portage la Prairie, Man., has been appointed storekeeper of the C.N.R. at Winnipeg.

A. W. Mackenzie, son of President W. Mackenzie, has been appointed Treasurer. Office at Toronto.

**Canadian Pacific Ry.**—R. J. E. Scott, Chief Inspector of Time Service, has also been appointed Chief Examiner for testing the color sense, sight and hearing of employes engaged in the movement and handling of engines and trains.

S. E. Taprell, Cashier in the Treasurer's office at Montreal, left the Co.'s service and also left Montreal early in Jan.

Press reports state that W. B. Brown, heretofore Chief Train Dispatcher at St. John, N.B., has been appointed Trainmaster, succeeding S. W. Powers, who has been appointed Chief Clerk to the Manager of Trans-

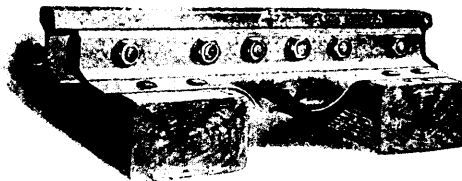


PAGE FENCE ON INTERCOLONIAL RAILWAY IN NOVA SCOTIA.

Page coiled wire Fencing is in use on practically every railroad, both great and small, in Canada, and some of the railroads have in the neighborhood of a thousand miles of it. It is found that it wears so much better than any other fence that there is no comparison. We can supply any height and weight wanted, and either galvanized or painted. We also supply metal gates that do not sag, burn or rot. Prices compare favorably with any.

**THE PAGE WIRE FENCE CO., Limited, - Walkerville, Ont., Montreal, P.Q., St. John, N.B.**

# BONZANO RAIL JOINT



Was Awarded the only Medal and Diploma for Rail Joints at the National Export Exposition Philadelphia, 1899;

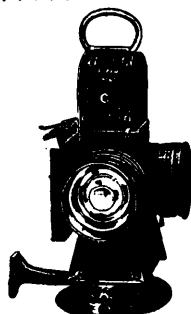
Also the Highest Medal awarded for Rail Splices at the Paris Exposition, 1900.

Nearly one million of these joints are now in use. None of the splices have broken, and no rails have broken inside the splices. Low joints are impossible, nor can spreading of tracks take place at the splice. The joint is absolutely as strong as the rail. By its use the track labor saved will alone amount to a sum that will pay the cost of renewals of rails and splices.

In use on the following railroads: The Pennsylvania, Baltimore and Ohio, Canadian Pacific, Southern Pacific, Cuba Railway, Chicago & Alton, Southern Railway, Intercolonial Railway, Grand Trunk, Wisconsin Central, Michigan Central, Choctaw, Oklahoma & Gulf.

## THE BONZANO RAIL JOINT.

A. BONZANO and THOS. C. CLARKE, Joint Owners of Canadian Patent No. 55,700, MONTREAL ROLLING MILLS CO., Montreal, Sole Manufacturers and Sales Agents for the Dominion of Canada, East of Sudbury.



Standard Classification Lamp, Registered.

## The N. L. Piper Railway Supply Co.

314 Front St. West, LIMITED - TORONTO

MANUFACTURERS OF RAILWAY LAMPS AND SIGNALS

DEALERS IN CHIMNEYS, WICK, BURNERS, ETC.

portation at Montreal; that W. F. Noble, heretofore first trick dispatcher at St. John, has been appointed Chief Train Dispatcher there; and that I. B. Merriman, hitherto trick dispatcher at Brownville Jct., Me., succeeds W. F. Noble.

Grant Hall, heretofore Master Mechanic of the Pacific Division, has been appointed Assistant Superintendent of Rolling Stock, lines east of Fort William, Ont. Office at Montreal.

James Murray, Track Inspector of the Western division at Winnipeg, has resigned, and the office has been abolished.

H. B. Bridges, heretofore Cashier at Winnipeg, has been appointed Local Treasurer there, succeeding J. A. Graham, deceased.

P. Langlois, of the general baggage department at Winnipeg, is reported to have resigned to go into real estate business.

J. T. Arundel, who recently resigned from the Co.'s service to enter that of the Canadian Northern Ry., has returned to the C.P.R. and has been appointed Superintendent of district 20. Office at Winnipeg.

F. Dillinger, heretofore acting Superintendent of district 20 at Winnipeg, has been appointed Superintendent of district 23. Office at Moose Jaw, Assa.

J. G. Taylor, heretofore acting Superintendent of district 22, has been appointed Superintendent. Office at Brandon, Man.

J. S. Dennis has been appointed Superintendent of Irrigation and B.C. Land Commissioner. Office at Calgary, Alta.

C. H. Temple has been appointed acting Master Mechanic of the Pacific division, with office at Revelstoke, B.C., succeeding Grant Hall, promoted to Montreal.

A. E. Stevens, heretofore train dispatcher at Vancouver, has been appointed Chief Train Dispatcher of district 30, at Nelson, B.C.

N. S. Fraser, who has been acting Chief Dispatcher for some months, has been appointed trick dispatcher at Nelson

at Vancouver, B.C., World says H. J. Cambie, Division Engineer there, will probably retire on July 1, under the new pension scheme.

F. Walker, Chief Train Dispatcher at North Bay, Ont., having resigned to enter the service of the Southern Pacific Co., has been succeeded by J. R. Lane, formerly train dispatcher at Farnham, Que.

J. O'Meara, hitherto Chief Train Dispatcher at Schreiber, Ont., who was given three months' leave of absence on account of ill-health, and who returned to duty recently, was, at his own request, transferred to North Bay, where he is now employed as first trick dispatcher.

H. B. Stevens, hitherto train dispatcher at Schreiber, Ont., has been appointed Chief Train Dispatcher there.

**Chicago and Northwestern Ry.**—W. P. Dempsey, heretofore clerk in the office of the General Agent at Toronto, has been appointed Travelling Agent for Canadian territory east of Manitoba and the Detroit and St. Clair rivers and west of Riviere du Loup, Que.

**Elgin and Havelock Ry.**—P. S. Archibald, of Moncton, N.B., formerly Chief Engineer I.C.R., has been appointed Manager in charge of operation of the E. and H. Ry., as well as to reconstruct a number of bridges, and make other improvements.

**Grand Trunk Ry.**—W. H. Biggar, K.C., has been appointed Assistant General Counsel, with office at Montreal. He will act for the General Counsel in his absence, and perform such other duties as may be assigned him.

Press reports state that in consequence of the recent accidents a Superintendent of Telegraphs is to be appointed, part of whose duties will be to put the operators through periodical mental, physical and practical tests, in order to make sure that their gen-

eral health is good and their mental condition sound. W. W. Ashald, Trainmaster at Montreal, is mentioned as likely to be appointed.

R. C. Manson, heretofore contracting agent at Montreal, has been appointed Travelling Freight Agent for the eastern division, succeeding F. J. Henstridge, transferred to Hamilton, Ont. Office at Montreal.

F. Adams, heretofore rate clerk in the freight claims office at Montreal, has been appointed Contracting Agent at Montreal, vice R. C. Manson, promoted.

A. G. McLellan has been appointed Locomotive Foreman at Stratford, Ont., vice B. Leckie, resigned.

W. Wensley has been appointed Locomotive Foreman at Niagara Falls, vice A. G. McLellan, transferred.

**Illinois Central Rd.**—W. J. McLean, heretofore Travelling Passenger Agent at New York, has been appointed General Eastern Passenger Agent there, succeeding A. J. McDougall, promoted to New Orleans, La. Mr. McLean's territory includes Canada, the business in which is specially looked after by G. B. Wyllie, Travelling Passenger Agent at Buffalo, N.Y.

**Intercolonial Ry.**—Duncan McLennan has been appointed Mechanical Foreman at Sydney.

M. A. McLeod has been appointed Mechanical Foreman at Point Tupper, with jurisdiction also at Mulgrave and Pirate Harbor.

Nathan Pushie has been appointed Local Superintendent at the Strait of Canso, having jurisdiction over the Mulgrave and Point Tupper terminals and the ferry; effective January 1st, 1903.

E. Tiffin, heretofore Traffic Manager, has been appointed General Traffic Manager.

**Michigan Central Rd.**—R. C. St. John has been appointed Assistant Chief Engineer. Office at Detroit, Mich.

The jurisdiction of M. J. McCarthy, Division Master Mechanic at St. Thomas, Ont., has been extended to cover the Car Department in Canada, in addition to his present duties. R. Potts, heretofore General Foreman of the Car Department at St. Thomas, has been assigned to duties which will be easier for him. He has not been pensioned, as stated in local papers.

**Niagara Navigation Co.**—The board has accepted Jno. Foy's resignation as General Manager, but has not yet appointed a successor. He remains a member of the board.

**Orford Mountain Ry.**—A. C. Lytle has returned to the service, having been appointed General Superintendent, General Freight and Passenger Agent and Accountant, with office at Eastman, Que., succeeding H. C. Cleveland.

**Pere Marquette Rd.**—The following directors have resigned: W. W. Crapo, Chairman of the Board; C. M. Heald, President; S. T. Crapo, General Manager; J. M. Graham, Vice-President, and O. W. Mink. The following, representing the syndicate which recently acquired control, were elected to fill the vacancies. T. H. West, W. K. Bixby, S. R. Shipley, N. Erb. The position of Chairman of the Board has not been filled. F. H. Prince, of Boston, Vice-President of the Mexican Central Ry., has been elected President; M. J. Carpenter, heretofore President of the Chicago and Eastern Illinois Rd., has been elected Vice-President and General Manager; N. Erb has been elected a member of the executive committee and appointed Assistant to the President; S. T. Crapo, heretofore General Manager, has been appointed General Superintendent. The office of Assistant to the General Manager has been abolished. A. Patriarche, heretofore Traffic Manager, has been appointed General Traffic Manager.

**Temiskaming and Northern Ontario Ry.**—C. R. Boucher has been appointed Division Engineer. Office at North Bay, Ont.

**Victoria Terminal Ry. and Ferry Co.**—F. Van Sant has been appointed General Manager, vice F. F. Mackenzie.

**White Pass and Yukon Route.**—I. W. Young has been appointed Purchasing Agent, vice E. B. Hussey, resigned. Office at Vancouver, B.C.

### Mainly About People.

H. D. Annable, of the C.P.R. freight department, London, Eng., is spending a holiday in Canada.

Capt. Trotter, of Amherstburg, Ont., a well-known lake captain, died suddenly in London, Ont., Jan. 2.

Warren Y. Soper, of the Ottawa Electric Ry., and Mrs. Soper are spending a couple of months in California.

J. A. Graham, Local Treasurer, C.P.R., at Winnipeg, died there Jan. 15, of diabetes after a few weeks' illness.

The engagement of Dr. G. S. MacCarthy to Miss Audrey Blair, daughter of the Minister of Railways, is announced.

Jas. Ross, Vice-President, Montreal Street Ry., purposes going on a lengthened yachting cruise in the Mediterranean.

C. M. Hays, 2nd Vice-President of the G.T.R., and Mrs. Hays, gave a dance at the Windsor hotel, Montreal, Jan. 10.

J. W. Moyes, Manager of the Metropolitan Ry., Toronto, who underwent a surgical operation Dec. 22, is convalescent.

D. McMartin, railway contractor, Sault Ste. Marie, Ont., was married there recently to Miss I. Alderson, of Gordon Lake.

John Brown, C.P.R. ticket agent, Stratford, Ont., has been elected to represent North Perth in the Ontario Legislature.

D. Linahan, formerly travelling locomotive inspector of the eastern division of the C.P.R., died recently at Richmond, Que.

G. J. R. Tierney, eldest son of J. R. Tierney, city ticket agent C.P.R. at Arnprior, Ont., died there Jan. 14, after a brief illness.

H. S. Holt, President of the Montreal Light, Heat and Power Co., left Montreal Jan. 16 for three months on account of ill health.

E. E. Ling, Assistant General Manager and Treasurer, Great Northern Ry. of Canada, left Quebec Jan. 5, for a trip to Great Britain.

W. C. Hawkins, General Manager of the Hamilton Electric Light and Cataract Power Co., has recovered from an attack of ptomaine poisoning.

H. St. Dizier, who for many years conducted a joint ticket agency in the old Balmoral hotel, Montreal, died in that city Jan. 2, aged 67.

J. B. Morford, Division Superintendent Michigan Central Rd. at St. Thomas, Ont., has gone to Cambridge Springs, Pa., owing to ill-health.

F. Walsh, Local Manager, Bell Telephone Co., Winnipeg, is spending a holiday in California, and during his absence H. J. Horn is acting Manager.

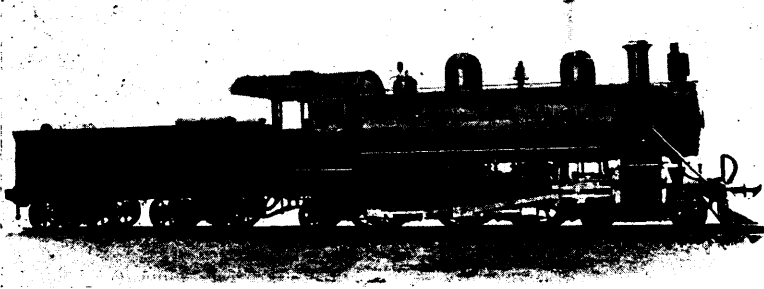
Sir C. Rivers Wilson, President G.T.R., has been appointed a trustee of the Birmingham, Eng., Tramways Co., succeeding Jas. Ross, of Montreal.

H. R. Stewart, general agent of the Lake Erie and Detroit River Ry. at Sarnia, Ont., has resigned and has entered the service of a financial institution.



## BALDWIN LOCOMOTIVE WORKS.

SINGLE EXPANSION AND COMPOUND LOCOMOTIVES.



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

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

**Electric Locomotives and Electric Car Trucks with Westinghouse Motors.**

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

### THE CANADA SWITCH AND SPRING CO. Limited

CANAL BANK, PT. ST. CHARLES, MONTREAL.

MANUFACTURERS OF

## STEEL CASTINGS

(Open Hearth System)

**Springs, Frogs Interlocking Plants Installed  
Switches Jenne Track Jacks, Etc.**

FOR STEAM AND ELECTRIC RAILWAYS.

**Eugene F. Phillips Electrical Works, Limited,**  
MONTREAL, CANADA.

**BARE AND INSULATED ELECTRIC WIRE**

Electric Light Line Wire, Incandescent and Flexible Cords,

**RAILWAY FEEDER AND TROLLEY WIRE**

Americanite, Magnet, Office and Annunciator Wires,  
Cables for Aerial and Underground Use.

## RAILWAY SUPPLIES

Marker  
or  
Tail  
Lamp

STANDARD RULE TRAIN LAMPS  
SWITCH LAMPS  
STATION LAMPS  
SHIP LAMPS  
TRAIN ORDER SIGNALS

**The Hiram L. Piper Co.**

12 St. Peter Street, MONTREAL Limited

Manufacturers and Patentees

## C. P. R. LANDS.

The Canadian Pacific Railway lands consist of the odd-numbered sections along the Main Line and Branches, and in Northern Alberta and the Lake Dauphin District. The Railway Lands are for sale at the various agencies of the company in Manitoba and the North-West Territories at the following prices:

Lands in Manitoba and Assiniboia average \$3 to \$6 an acre.

Lands in Alberta and Saskatchewan with the exception of some special locations where prices range from \$3.50 to \$5.00 per acre, generally \$3.00 per acre.

### TERMS OF PAYMENT.

In the case of an actual settler who goes into residence upon and cultivates the land, the aggregate amount of purchase money and interest is divided into ten instalments, as shown in the table below; the first to be paid at the time of purchase, the second two years from date of purchase, and the remainder annually thereafter.

160 acres at \$3.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.  
160 acres at \$3.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.  
160 acres at \$4.00 per acre, 1st instalment \$95.85, and nine equal instalments of \$80.  
160 acres at \$4.50 per acre, 1st instalment \$107.85, and nine equal instalments of \$90.  
160 acres at \$5.00 per acre, 1st instalment \$119.85, and nine equal instalments of \$100.  
160 acres at \$5.50 per acre, 1st instalment \$131.80, and nine equal instalments of \$110.  
160 acres at \$6.00 per acre, 1st instalment \$143.80, and nine equal instalments of \$120.

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

DISCOUNT FOR CASH. If land is paid for in full at time of purchase, a reduction from price will be allowed equal to ten per cent. of the amount paid in excess of the usual cash instalment.

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

Write for maps and full particulars.

F. T. GRIFFIN, - Land  
Commissioner.

WINNIPEG.

**Edward L. Drewry**

REDWOOD  
BREWERY,

Winnipeg, Manitoba

Fine

ALES, EXTRA PORTER

... AND ...

PREMIUM LAGER.

Most Extensive and Complete Brewery  
and Malshouses in Western Canada.

CHOICE MALT FOR SALE.

Manufacturer of the Celebrated

Golden Key Brand . . . **AERATED WATERS.**

**TORONTO ENGRAVING CO.**  
DESIGNERS, ENGRAVERS,  
ELECTROTYPERS.  
**92 BAY ST.**

D. B. Hanna, Third Vice-President Canadian Northern Ry., has removed from Winnipeg to Toronto. Mrs. Hanna and family will join him in the spring.

J. R. Malcolm, who has been appointed Chief Train Dispatcher of the Seaboard Air Line Ry. at Savannah, Ga., is an old I.C.R. employe at Moncton, N.B.

C. H. Buell, chief clerk in the office of the Assistant to the Second Vice-President, has also been placed in charge of the organization of the pension department.

W. Armstrong, for many years mail clerk on the G.T.R., died recently at the residence of his brother, J. Armstrong, Chief Dispatcher, C.P.R., Farnham, Que.

James Leeming, General Freight Agent of the Erie division of the Erie Rd., died at Buffalo, N.Y., recently, and was buried at Brantford, Ont., his native place.

Capt. Jas. Foote, of the C.P.R. lake fleet, was removed to his home in Owen Sound, Ont., Jan. 10, after undergoing special treatment in Toronto General Hospital.

W. R. MacInnes has been taking a short holiday in Bermuda with Mrs. MacInnes, prior to assuming his new duties as C.P.R. Freight Traffic Manager in Montreal.

Lyman Dwight, Superintendent of the G.N.W. Telegraph Co. at Winnipeg, and Mrs. Dwight are at Augusta, Georgia, and will probably remain there until spring.

E. E. Torrey, recently Superintendent of Telegraphs, Michigan Central Rd., has been appointed to a similar position on the Mobile and Ohio Rd. at Jackson, Tenn.

Lord Mount-Stephen has presented his quarter interest in the New York block, Granville st., Vancouver, valued at \$15,000, to the Vancouver General Hospital fund.

T. B. Hawson, formerly Auditor of the G.T.R., and now living in Chicago, is the subject of an appreciative sketch in a recent issue of the British-American, of that city.

D. O. Wood, who was recently appointed western representative for the Robert Reford Co., steamship agents, Montreal, has opened an office at 311 Board of Trade, Toronto.

Sir Thos. and Lady Shaughnessy have been visiting in Washington, D.C. On returning to Montreal Sir Thomas said that his trip to Washington was entirely of a social character.

C. C. Chipman, Commissioner Hudson's Bay Co., Winnipeg, and Archer Baker, European Traffic Agent C.P.R., attended the dinner of the Canadian Club in London, Eng., Dec. 4.

G. A. Fletcher, of Philadelphia, Pa., one of the promoters and builders of the Halifax and Yarmouth Ry. from Yarmouth to Barrington, N.S., died suddenly in Philadelphia recently.

J. Ratcliffe, who has had charge of the preparation and revision of the C.P.R. timetable folders, in connection with the advertising department, for many years, died recently in Montreal.

Andrew Campbell, son of Capt. P. M. Campbell, of the str. Majestic, has been awarded the medal of the Humane Society for saving the life of a boy at Sault Ste. Marie, Ont., last summer.

C. F. Hillman, who was one of the engineers in charge of construction of the old Great Western Ry. between 1854 and 1857, and has since been resident in Chile, died there recently, aged 67.

D. A. Cameron, of the C.P.R. General Passenger Agents' office at Winnipeg, Man., was presented with a purse of gold by his fellow-clerks on leaving to enter business on his own account in Japan.

W. C. Blake, of the G.T.R. audit department, Montreal, was presented with a gold

signet ring by the clerks in the department, on his removal to Winnipeg, to enter the service of the Canadian Northern Ry.

H. C. Tilley was presented with a signet-ring and an illuminated address, at a farewell dinner, by the employes of the Elgin and Havelock Ry., at Havelock, N.B., on retiring from the position of Manager of the line.

J. Dickenson, barrister, Barrie, Ont., died there Jan. 20. Prior to taking up the study of law, he was a civil engineer and was Chief Engineer of Construction of the line from Barrie to Orillia and to Penetanguishene, Ont.

J. F. Lee, who recently resigned his position as General Traffic Manager of the White Pass and Yukon Route, has been elected President and General Manager of the Pacific Coast Fixture and Electric Co., Seattle, Wash.

C. E. E. Ussher, General Passenger Agent, Eastern Lines, C.P.R., was elected a member of the executive committee of the North American Fish and Game Protection Association at the annual meeting held in Ottawa recently.

D. Campbell, who was recently appointed relieving train dispatcher, Algoma Central and Hudson Bay Ry. at Sault Ste. Marie, Ont., was married at Kingston, Ont., to Miss Swarbrick, before moving to his new place of residence.

T. H. Holt, who was appointed Manager of Construction of the Halifax and Southwestern Ry. last summer, but who was forced to retire owing to ill health, is now under treatment in Boston. His wife and family have gone to Europe.

W. I. Mackenzie, Manager of the Land Security Co., Toronto, who died Jan. 22, aged 79, was at one time a railway contractor, and did work on the Toronto, Grey and Bruce Ry., and was also associated with the Detroit and Milwaukee Ry.

Sir C. Rivers Wilson, President G.T.R., was invited by the Khedive of Egypt to attend the opening of the Nile dam at Assouan in Dec., but was unable to be present. Sir Rivers was formerly financial adviser to the Egyptian Government.

H. C. Johnston, clerk in the C.P.R. audit department at Montreal, has been sentenced to two years' imprisonment in St. Vincent de Paul Penitentiary for giving information to conductors when secret audits of their train accounts were to be made.

G. R. Joughins, formerly Mechanical Superintendent of the Intercolonial Ry., and now Mechanical Superintendent of the coast lines of the Atchison, Topeka and Santa Fe Rd., has recently had his headquarters removed from San Bernardino to Los Angeles, Cal.

J. Murray, Track Inspector of the C.P.R. at Winnipeg, has resigned his position and is taking a trip round the world. It is reported that he will engage in business with his brother, Sir John Murray, in developing some extensive guano deposits on Christmas island in the Pacific ocean.

E. A. James, General Superintendent Canadian Northern Ry. at Winnipeg, was recently presented with a gold watch and chain by the employes of the train, freight and track service departments of the C.P.R. on his resigning the position of Superintendent of Transportation of that Co.

Scott Griffin, who has been appointed Superintendent of the Canadian Northern Express Co. and the Canadian Northern Telegraph Co. at Winnipeg, Man., is a son-in-law of President W. Mackenzie, of the Canadian Northern Ry. He is a barrister, and formerly lived in Toronto.

J. M. Herbert, who was Superintendent of the Eastern division of the G.T.R. at Mont-

real to Oct., 1900, has recently been elected Vice-President and General Manager of the Colorado and Southern Ry., and Vice-President of the Fort Worth and Denver City Ry., with headquarters at Denver, Col.

Thos. Merritt, who was Managing Director of the old Welland Ry., recently celebrated his golden wedding at St. Catharines. Among the guests were Mr. and Mrs. Pay, who celebrated their diamond wedding a few months ago. Mr. Pay was Superintendent of the Welland Ry., under Mr. Merritt's management.

C. M. Hays, Second Vice-President and General Manager of the G.T.R., has purchased the residence of the late Jas. Burnett, stockbroker, on Ontario avenue, Montreal, for, it is said, \$62,500. It is a large house with ample grounds and was once owned by R. B. Angus, C.P.R. director. Mr. Hays will considerably alter and improve it.

P. M. Cotter, joint agent of the Quebec and Lake St. John and Great Northern Rys. at Quebec, was recently presented with a purse of gold by J. G. Scott, General Manager, on behalf of the employes of the two companies, on his leaving to become agent for the Quebec Central Ry. at its Dalhousie st. offices in Quebec, where he has succeeded G. Addie, who resigned owing to ill health.

Capt. F. H. Vercoe, who was engaged on railway construction work in South Africa under Col. Sir Percy Girouard, and who superintended the construction of the railway from Bloemfontein to Sanna's Post, Orange River Colony, died in Bloemfontein Dec. 27. He was born at Seaforth, Ont., and was a brother of H. L. Vercoe, of the Canadian Northern Ry. engineering staff at Winnipeg.

The New England General Baggage Agents' Association elected the following officers at its recent annual meeting:—President, R. H. Morris, C.P.R.; Vice-President, J. C. Lennox, Boston and Albany Rd.; Sec. Treas., G. E. Byram, Boston and Maine Rd.; Executive Committee: J. E. Quirk, G.T.R.; H. H. Towle, Maine Central Rd.; G. A. Norton, New York, New Haven and Hartford Rd..

In an article on "University Men as Journalists," the Monetary Times, of Toronto, in a recent issue said: "Another name we cannot forbear to mention. It is that of W. H. Moore, B.A., who for several years was assistant editor of the Monetary Times, and proved himself a painstaking and versatile writer. But the 'pent-up Utica' of Toronto journalism could not contain him. He had studied law between times, and is now the solicitor for Mackenzie & Mann, of the Canadian Northern Ry. of Ontario and the Great Northwest."

Jas. Yeo, who for 27 years was Supervisor on the Quebec Division of the Intercolonial Ry., and retired two years ago, has received his certificate from the Ontario Government of a free grant of land in New Ontario. He saw active service during the Fenian Raid of 1866, and was color-sergeant in the 10th Royal Grenadiers, Toronto. He also served on the staff of the old Northern Ry. of Canada as Roadmaster on the line between Collingwood and Toronto. He was in poor health some months ago, but has now quite recovered.—Quebec Telegraph.

A. C. Lytle, who has been appointed General Superintendent and General Freight and Passenger Agent and Accountant of the Orford Mountain Ry. at Eastman, Que., was born June 6, 1854, at Hemingford, Que., and entered railway service Sept. 2, 1872, since which he has been consecutively to Nov., 1879, station agent, G.T.R.; Nov., 1879, to June, 1893, engaged in mercantile business; June, 1893, to Jan., 1902, General Freight and Passenger Agent, Orford Mountain Ry.;

Sept., 1894, to Jan., 1902, he was in addition Superintendent same road; Jan., 1902, to Jan., 1903, in mercantile business.

D. O. Wood, who has been appointed Western Agent for the Robert Reford Co., Ltd., Montreal, was born at Kleinburg, Ont., Mar. 16, 1864, and entered railway service in May, 1883, as clerk in the freight office of the G.T.R. at Toronto. After serving in various capacities he was subsequently promoted to the Division Freight Agent's office at Toronto, and served as rate clerk, claims clerk and chief clerk, being appointed Assistant Foreign Freight Agent at Toronto, in Dec., 1897, which position he has resigned to take up his present appointment.

W. M. Kirkpatrick, who has been appointed Assistant General Freight Agent, Pacific division, C.P.R., is a son of the late Sir George A. Kirkpatrick, formerly one of the C.P.R. directors. He was born at Kingston, Ont., Oct. 8, 1874, and entered railway service Mar. 7, 1892, in the office of the Vice-President of the C.P.R., since which time he has filled various positions in the Chief Engineer's office, foreign freight office, Montreal, General Freight Agent's office, Toronto; and from July, 1899, to Dec., 1902, has been chief clerk in the office of the Fourth Vice-President.

W. H. Biggar, who has been appointed Assistant General Counsel to the G.T.R. at Montreal, was born at the Carrying Place, near Trenton, Ont., Sept. 19, 1852, and was educated at Trenton Grammar School, and Upper Canada College, and began the study of law in 1875, after engaging for a short time in mercantile pursuits. He was called to the bar in 1880, and became associated with John Bell, K.C., General Counsel to the G.T.R., in general practice in 1881. He was elected Mayor of Belleville in 1887, represented West Hastings in the Ontario Legislature from 1890 to 1897, and was made a K.C. in 1900.

C. N. Monsarrat, A.M. Can. Soc., C.E., who has been appointed Engineer of Bridges, C.P.R., at Montreal, was born there July 2, 1871, and entered railway service Nov., 1889, since which his record has been: Nov., 1889, to June, 1896, structural draughtsman in office of the Chief Engineer, Montreal; June, 1896, to April, 1897, inspector of steel bridges, having in charge their manufacture and erection; April, 1897, to Dec., 1901, engaged in designing and estimating structural work and engineer in charge of erection of many important structures in B.C. and elsewhere; Dec., 1901, to Jan., 1903, Assistant Engineer at Montreal, entire service with the C.P.R.

M. J. Carpenter, who has been appointed Vice-President and General Manager of the Pere Marquette Rd., and consequently will have charge of the Lake Erie and Detroit River Ry., was born at Caledonia, Ill., April 12, 1850, and entered railway service as operator on the Chicago, Milwaukee and St. Paul Ry. in 1869, and after filling various positions in that Co.'s service, was appointed Division Superintendent of the Chicago, St. Paul and Kansas City Ry.; and later was appointed General Manager of the Duluth and Iron Range Ry., subsequently becoming its President, and until his recent appointment was President of the Chicago and Eastern Illinois Rd.

Fred. Sleere Darling, who has been appointed Division Engineer of Construction, C.P.R., at Montreal, was born at Burlville, R.I., Oct. 8, 1863, and entered railway service in May, 1887, since which his record has been: May, 1887, to Jan., 1888, engineering office during construction of Duluth, Watertown and Pacific Ry., branch of Great Northern Ry., U.S.; Jan., 1888, to May, 1888, topographer on surveys for Yankton and Sioux Falls Ry., branch of the Great Northern Ry.; May, 1888, to

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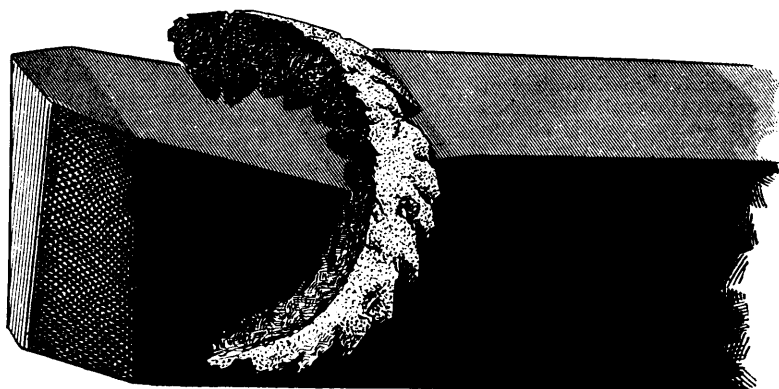
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**BOOKBINDING**

July, 1888, rodman on surveys for Eastern Ry. of Minnesota, branch of Great Northern Ry.; July, 1888, to Dec., 1902, successively leveler, Assistant Engineer and Division Engineer Northern Pacific Ry.

Grant Hall, who has been appointed Assistant Superintendent of Rolling Stock, C.P.R. lines east of Fort William, was born in Montreal in 1864. He entered the G.T.R. shops at Montreal as an apprentice in 1883. His subsequent record is as follows: May, 1888, to June, 1889, locomotive foreman, C.P.R. at Megantic, Que.; June, 1889, to April, 1890, locomotive foreman, C.P.R. at Brownville Jct., Me.; April, 1890, to Mar., 1893, locomotive foreman, C.P.R. at Windsor st., Montreal; Mar., 1893, to July 31, 1898, general locomotive foreman, I.C.R., at Moncton, N.B.; Sept., 1898, to Jan., 1899, locomotive foreman, C.P.R., Windsor st., Montreal; Jan., 1899, to Feb., 1901, general foreman, C.P.R., MacAdam Jct., N.B., Mar., 1901, to July, 1901, general foreman, C.P.R. shops, Winnipeg; July 26, 1901, to Dec., 1902, master mechanic, Pacific Division, C.P.R., at Revelstoke, B.C.

B. W. Greer, who has been appointed General Freight Agent of the C.P.R., at Vancouver, B.C., was born at Aldboro, Ont., Oct. 4, 1867, and entered railway service at St. Thomas as call boy for the C.P.R., Dec. 24, 1874, since which his record has been: June, 1875, to June, 1886, night operator at St. Thomas; transferred to Woodstock, and later appointed clerk in freight office at Galt; 1886 to 1887, station agent at Hillsburgh; 1887 to June, 1890, cashier and chief clerk; June, 1890, to Jan., 1891, soliciting freight agent, Union Pacific Rd., at Tacoma, Wash.; Jan., 1891, to May, 1893, ticket clerk, Northern Pacific Rd., at Tacoma, Wash.; May, 1893, rejoined the C.P.R. service as ticket clerk at Portland, Ore., and was appointed Freight and Passenger Agent at Tacoma for same road in 1897; Sept., 1898, to Oct., 1901, Freight and Passenger Agent, same road, at Victoria, B.C.; Oct., 1901, to Jan., 1903, Assistant General Freight Agent, Pacific division, same road, at Vancouver, B.C.

F. W. Peters, who has been appointed Assistant Freight Traffic Manager for the C.P.R. Western Lines at Winnipeg, was born at St. John, N.B., Mar. 25, 1860, and entered railway service in 1873, as telegraph operator with engineers on construction, I.C.R., and from 1873 to 1876, acted as agent at Jacquet river and other points, same road; 1876 to 1878, assistant agent, Newcastle, N.B., same road; 1878 to 1880, agent Chatham Jct., N.B., same road; 1880, to Nov., 1881, relieving agent on Chicago and Grand Trunk Ry. at Fort Gratiot, Mich., Nov., 1881, to May, 1882, billing clerk local freight office C.P.R. at Winnipeg; May, 1882, to April, 1889, agent C.P.R. at Brandon, Man.; April, 1889, to June, 1889, agent C.P.R. Fort William, Ont.; June, 1889, to Nov., 1896, local freight agent, C.P.R. at Winnipeg; Nov., 1896, to 1899, District Freight Agent, C.P.R., West Kootenay district, at Nelson, B.C.; 1899, to Dec., 1900, Assistant General Freight agent, same territory; Dec., 1900, to July, 1901, Assistant General Freight Agent, Pacific Division C.P.R., July, 1901, to Dec., 31, 1902, General Freight Agent, same division.

C. R. Boucher, who has been appointed Division Engineer of the Temiskaming and Northern Ontario Ry. at North Bay, Ont., was born at Southampton, Eng., June 4, 1849, and was a pupil of Sir Edwin Clark, C.E. Coming to Canada in 1867 he was successively Assistant Engineer to the Windsor and Annapolis Ry., (now Dominion Atlantic Ry.), and the Nova Scotia and New Brunswick Ry. (now I.C.R.), and subsequently was engaged as contractor's engineer for the late F. Shanley, C.E., on the Toronto, Grey and Bruce Ry., now part of the C.P.R. system; the

Canada Air line, and the Midland Ry., now amalgamated with the G.T.R. system. From 1874 to 1876 he was engaged on special work in Glasgow, Scotland, and Manchester, Eng.; and since his return to Canada in the latter year has been engaged on the following railways: Assistant Engineer, Detroit, Mackinac and Marquette Rd.; Resident Engineer, Northern Pacific Ry.; on construction western and Pacific divisions C.P.R.; Manitoba and North Western Ry.; Great Northwest Central Ry.; Northern Pacific and Manitoba Ry.; St. Paul, Minneapolis and Manitoba Ry.; Chief Engineer on surveys, etc., Manitoba Central Ry. project; Montreal and Western Ry.; Bangor and Argoostook Rd.; Principal Assistant Engineer, Woodstock and Centreville Ry. project; on construction Inverness and Richmond Ry.; and 1900 to 1902, on Algonoma Central and Hudson's Bay Ry.

#### Miscellaneous Notes.

The Hampton & St. Martin's Ry., N.B., has been closed for freight traffic.

The Dominion Wire Rope Co. (Ltd.), of Montreal, has increased its capital from \$50,000 to \$200,000.

The Victoria Rolling Stock Co. of Ontario has declared a dividend of 6% for the half year ended Nov. 30, 1902.

The St. John's, Nfld., street railway is to be run all winter for the first time. The Co. has procured two powerful sweepers.

The Central Ry. of New Brunswick has been temporarily closed for freight traffic, owing to blockade at Norton, N.B.

Winnipeg citizens have decided by 2,370 against 2,166 votes that the Winnipeg Street Ry. Co. shall not run cars on Sundays.

All aboard for the Arctic Ocean may become a familiar announcement at the Grand Trunk stations in the future.—Toronto Globe.

The Montreal St. Ry. will have sight-seeing cars in operation next summer under the management of the National Car and Coach Co. of Boston, Mass.

The Quebec Southern Ry. has discontinued for the winter its suburban train service from Longueuil to Montreal, the ice road across the river having been established.

The employees of the I.C.R. are considering the advisability of asking the Dominion Government to establish a pension system on somewhat similar lines to that adopted by the C.P.R.

An express passenger service will be inaugurated next summer between Riviere du Loup, Que., and St. John, N.E., over the line of the Temiscouata Ry. to Edmundston, and thence by the C.P.R.

The question of when the C.P.R. lands in the Northwest should be taxed is to be tested. A township in North Cypress, Man., is to be taxed, and the C.P.R. will submit that the 20 years for which its lands would be free from taxes has not expired.

The British Yukon Ry. Co. has passed by-laws regulating the tolls to be charged for passengers and freight on the White Pass and Yukon Ry. Copies of the by-laws with tables of the rates annexed were published in the Canada Gazette, Dec. 6th.

The collection of pictures made by the G. T.R. passenger department, and exhibited in different centers in the U.S. to advertise the tourist resorts of Canada reached by its lines, will be placed on exhibition in the Southern and Middle states during February.

The 4th annual meeting of the Engineers' Club of Toronto was held Jan. 7, when the officers for the ensuing year were elected. There are 88 resident and 24 non-resident members, against 77 resident and 24 non-resident at the annual meeting in Jan., 1902.

The C.P.R. and the G.T.R. originally intended to have ticket offices in rooms at the new King Edward hotel, King St. East, Toronto. This intention has been abandoned, and a joint ticket office will be opened in the rotunda, the companies renting the offices they had previously intended to occupy.

The Michigan Central Rd. has planted 34,000 catalpa trees on the banks, and at 14 stations along its Canadian section. In 1900 20,000 trees were planted, and in 1901 14,000 more, and the experiment has proved so successful that it is proposed to plant about 60 acres at the stations along the Joliet and Western divisions of the line.

The I.C.R. calendar for 1903 is a very striking one. It is a litho production in imitation of pyrography or burnt wood, the main feature of the design being the trade mark or coat of arms of the line. The moose head lends itself very appropriately to this branch of illustrative art, and stands out much more prominently than in ordinary black on white.

The Railway Arbitration Bill, which was submitted at the last session of the Dominion Parliament by Sir Wm. Mulock, will not be brought forward at the ensuing session. The bill was held over for discussion by the railway managers and employes, and as a result of representations made, a new bill is being prepared which is expected to embody the suggestions made.

The Canadian and New England Passenger Agents' Association held a meeting in Montreal Jan. 8, to adopt schedules for summer rates for 1903. The schedules adopted are practically the same as have been in operation for the past four years. The social features connected with the meeting were a drive round the mountain, a visit to the G.T.R.'s new offices, and a visit to the Montreal Hunt Club. C. B. Hibbard, Passenger Traffic Manager of the Rutland Rd., is President of the Association, which has not met in Canada prior to the recent meeting.

The Michigan Central Rd. has established a new fast freight line to be known as the Ontario and Michigan Central. It will run over the tracks of the Michigan Central, the Rome, Watertown and Ogdensburg division of the New York Central and the New York, Ontario and Western. Westbound, the Ontario and Michigan Central will be a differential line, but in the other direction standard rates will be observed. The officials are: General Manager, J. C. Anderson, New York; General Eastern Agent, J. R. Dunbar, New York; Agents, W. J. Moore, Detroit, Mich.; B. E. Hand, Chicago.

#### Canadian Ticket Agents' Association.

M. McNamara, President, has issued a circular to members as follows: "Taking advantage of the Secretary's annual holiday expression of good-will towards the members, in which he usually gently suggests the desirability of forwarding our fees for the coming year, I desire to express my thanks for the confidence with which you honored me by electing me to the position of President of the Association. I appreciate your good-will, and will do my best to discharge the duties of the office to your satisfaction. Our esteemed Secretary is not to be regarded as being influenced altogether by mercenary motives in urging a renewal of our annual subscription; it is a necessary business precaution, and has a material effect on the success of our Association. My own part in the management of its affairs, is largely ornamental, but within the scope of my executive powers, I am anxious that the year 1903 should be distinguished above all others for success in point of numbers, and comfort in

the arrangements of our annual excursion. An excellent committee has been formed, whose members, profiting by the experience of former years, are determined to make our next meeting the banner record of the Association. The proposed new departure of an insurance scheme requires careful attention, and I trust that all members will reflect on the matter in the interval before our general meeting. It appears to have worked well in the large organization of the Lehigh Valley Co., whose genial General Passenger Agent introduced it to our notice. I have no doubt that the gentlemen to whom it was referred, will give the subject the careful attention due to its proposed adoption by our Association. It may be said that we have pretty nearly reached the limit of our usefulness under present conditions, and that if we do not make a further advance we are in danger of stagnating. The nature of our next move is therefore a matter of importance, and with the hope of making it as effective as possible, I trust that each member will put forth every possible effort to get all eligible parties within his reach to join the Association. By increasing our strength, we may ultimately impress the managers of the big companies with the desirability of financially increasing the attractiveness of our duty. The officers of the Association will be at all times happy to second their possible aspirations in that direction."

The following extracts are taken from a circular issued at the same time, by E. De la Hooke, Secretary Treasurer: "Solomon said 'Of making many books there is no end,' and do you know that I am sometimes inclined to think that the saying would be equally applicable to circulars, for it appears to me that no sooner is one launched than it is necessary to lay the keel of another. If, however, those to whom such circulars are addressed, read them (results often warrant me in thinking otherwise), I have the satisfaction of knowing that what may be harrowing to me must mean ploughing to them.

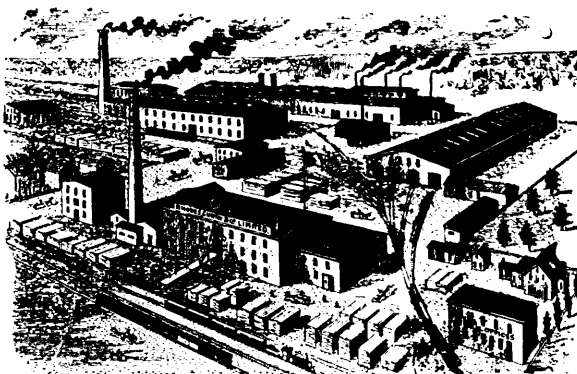
"Your having had quite recently the opportunity of reading in the columns of our official organ, THE RAILWAY AND SHIPPING WORLD, a graphic and correct account of our annual meeting recently held at Washington, and its attendant outing, renders it unnecessary for me to revert to it, its especial character and influence will be long treasured in the minds of those who journeyed in the ranks of the gratified and grateful two hundred. It can readily be believed that having been kept so constantly on the move while away that it was not until home was reached and rest obtained, that any adequate idea could be formed of all that had been seen and experienced of the beauties and marvels of nature and the won-

derful works of man. The Secretary for some days after his return was kept busy writing letters of thanks to the many who had entertained us, and had put themselves to no small inconvenience to do all that was possible to enhance the enjoyment of our trip.

"The selection of Sydney, N.S., as the next place of meeting was made unanimous, and in connection therewith visits will, in all probability, be made to St. John, N.B., Halifax, N.S., and Charlottetown and Summerside, P.E.I. But few will have forgotten the pleasure of the trip to the same territory in 1896. The Intercolonial Ry., in conjunction with the C.P.R. Company, were desirous of giving us a second taste of its quality, and we, with our ever receptive capacity and a

lively recollection of previous hospitality at the same hands, graciously accepted. A meeting of the executive will probably be held towards the end of April to arrange the leading features of the trip, which, it is to be hoped, will be of such a character as to draw the world and his wife to the Maritime Provinces early in October.

"Among other matters that will likely be considered by the executive are: The proposed mutual insurance scheme. The admission of steamboat coupon ticket agents to membership. Sending a delegate to the next annual meeting of the American Association of General Passenger and Ticket Agents to be held at New Orleans in Oct. next. The Association should feel complimented at hav-



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Burlington Elevator, St. Louis, Mo.	1,300,000	Bushels
Grand Trunk Elevators, No. 1 and No. 3, Portland, Me.	2,500,000	"
Export Elevator, Buffalo, N.Y.	1,000,000	"
J. R. Booth Elevator, Depot Harbor, Ontario	1,000,000	"
Cleveland Elevator Company's Elevator, Cleveland, O.	500,000	"
Erle R. R. Transfer & Clipping House, Chicago, Ill.	100 cars in 10 hrs.	"
Manchester Ship Canal Co.'s Elevator, Manchester, Eng.	1,500,000	"
Burlington Elevator Co., Peoria, Ill.	500,000	"
Canada Atlantic Railway Elevator, Coteau Landing, Que.	500,000	"
Northern Grain Co., Manitowoc, Wis.	1,350,000	"
Union Elevator, East St. Louis, Ill.	1,100,000	"
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ing been invited to send a representative to so important a convention, and there is no doubt that if one is sent he will prove himself a credit to his constituents, in fact, it would be a difficult matter to pick one from our number who wouldn't be.

Your subscription for 1903 will be due on Jan. 1, and prompt remittance is urged. THE RAILWAY AND SHIPPING WORLD for Jan. will be supplied to all members, but after that month, in order to protect the funds of the Association, it will be sent to only such members as have paid their fees for 1903. The Editor of our official organ has requested me to state that he will at all times be glad to insert any letters or articles sent in by members, if considered by him to be of such a character as to interest its readers.

Ticket agents eligible for membership who have neglected their opportunities are urged to do so no longer, but remit \$3 to the Secretary-Treasurer and become a useful member of a useful and profitable Association. There are many agents, but few members, hailing from the Maritime Provinces. To such unattached a special appeal is made to join the ranks, and so have reason for taking more than a latent interest in our visit in Oct."

**Grain Elevator Notes.**

It is proposed to erect a 75,000 bush. elevator at Hartney, Man., on the farmers' cooperative plan, for next season's crop. There are now six elevators at Hartney.

The Montreal Harbor Commissioners have decided to obtain the electrical power for the new grain elevator from the Montreal Light, Heat and Power Co., if the Co. will agree to fix the same price for a term of five years.

The Ogilvie Flour Mills Co. has been granted a free site at Fort William, Ont., for a 500,000 bush. elevator and a flour mill, to have a capacity of 1,500 barrels a day. Construction will be commenced early in the spring.

The receipts of wheat at Port Arthur, Ont., for the navigation season of 1902 were 3,940,316.40 bush. at the Canadian Northern elevator, and 486,254 bush. at King's elevator, and the shipments were 3,495,955.20 bush. and 519,981.50 bush. respectively.

At the end of 1902 there were in operation in Western Canada grain elevators having a total capacity of 30,045,300 bush. divided as follows: East of Winnipeg, including Winnipeg, 8,433,000; west of Winnipeg, in Manitoba, 16,027,300; Northwest Territories, 5,585,000 bush.

The Underhill Farmers' Elevator Co. (Ltd.) has been incorporated under the Manitoba Companies' Act, with a capital of \$20,000 to erect a grain elevator at Underhill, Man. The provisional directors are: J. Coxworth, H. James, W. B. Muir, J. Barber, J. Gibson, J. Reid and A. Peasley, of the municipality of Cameron, Man.

The Chief Engineer of the Montreal Harbor Commission has prepared plans for a system of conveyors, permanent sheds and tracks along the wharves in connection with the new elevator. The plans have to be approved by the Department of Public Works as well as by the Commissioners. It is expected to have these works completed by Aug.

The C.P.R. reports that from Sept. 1 to the close of the season of navigation 15,490,424 bush. of wheat were received at its elevators at Fort William, Ont., and 14,768,912 shipped out, against 12,085,735 received and 12,008,235 shipped in 1901. The total wheat marketed at C.P.R. points west of Lake Superior was 22,945,863 bush., against 18,491,003 in 1901.

J. Y. Griffin & Co. (Ltd.) have been incorporated under the Dominion Companies' Act to carry on business as dealers in agricultural produce in Canada, and in connection with their business power has been given to erect grain elevators. The incorporators are F. M. Griffin, St. Thomas, Ont.; R. Robertson, Nelson, B.C.; D. Naismith, Vancouver, B.C., and H. E. Crawford and J. Y. Griffin, Winnipeg. The capital is fixed at \$500,000, and the head offices are to be in Winnipeg.

**SHIPPING MATTERS.**

**Northern Navigation Co.'s Report.**

The annual meeting of the Northern Navigation Co. of Ontario, was held at Collingwood, Ont., Jan. 27. The report for the year ended Dec. 31, 1902, shows that the paid-up capital stock was increased during the year from \$560,000 to \$840,000, to purchase the minority stock in the Northwest Transportation Co., \$147,000, and to pay for the new steamer Huronic, which was completed last spring and placed on the Sarnia-Lake Superior run. The N.N.Co. now owns the whole of the stock of the N.W.T. Co., \$300,000. There was expended on permanent improvements and charged to current expenses \$24,849.64. The cold wet weather which prevailed up to the latter part of July greatly lessened the earnings there would have been from passenger business had weather conditions been as in previous seasons. The want of elevator facilities also seriously affected the freight earnings, but, notwithstanding these unfavorable conditions, the earnings have been satisfactory.

**ASSETS.**

Ten steamers.....	\$932,478 28
Buildings and plant.....	11,546 16
Merchandise and fuel.....	4,391 21
Insurance unexpired.....	6,277 77
Accounts receivable.....	25,799 83
Cash on hand.....	485 36
	<hr/>
	\$980,978 61

**LIABILITIES.**

Capital stock.....	\$840,000 00
Reserve account.....	90,000 00
Profit and loss.....	15,745 69
Bank of Toronto.....	29,602 39
Accounts payable.....	5,629 53
	<hr/>
	\$980,978 61

**PROFIT AND LOSS ACCOUNT.**

Balance at credit, 1901.....	\$ 12,356 11
Gross earnings of steamers.....	\$532,301 48
Total expenses.....	443,781 56
Net profit.....	88,519 92
Premium on 2,786 shares at 10%.....	27,860 00
Premium on sale of 14 shares.....	673 50
	<hr/>
	\$129,409 53

**APPROPRIATIONS.**

Half-yearly dividend paid July 1, 1902, on 5,600 shares, at 5%.....	\$ 28,000 00
Half-yearly dividend paid Jan. 2, 1903, on 8,400 shares, at 5%.....	41,773 84
Directors' compensation and expenses.....	3,910 00
Transferred to rest account.....	40,000 00
Balance at credit.....	15,725 69
	<hr/>
	\$129,409 53

The board for the current year is as follows: President, J. J. Long; Secretary, T. Long; Treasurer, C. E. Stephens; other directors: E. B. Osler, H. B. Smith, C. Cameron, F. A. Lett, W. D. Matthews, W. Hendrie, W. J. Sheppard.

**Lightships Being Built in Toronto.**

The Polson Ironworks, Toronto, is building two steel lightships for the Department of Marine, one of which is to be stationed off Anticosti island in the Gulf of St. Lawrence, and the other at a point, not finally determined on, off the coast of Nova Scotia. These two lightships form a part of the plans decided upon by Hon. Jas. Sutherland, during his tenure of office, for the improvement of the aids to navigation on the Atlantic coast and in the gulf. The two lightships are facsimiles in every respect and have the following dimensions: length, extreme, 123 ft. 6 in.; between perpendiculars, 112 ft.; breadth, 28 ft. 6 in.; depth, keel to bend amidships, 14 ft. 10 1/2 in. The construction of the vessels is very heavy, far in excess of Lloyd's requirements; the workmanship is to be of the very highest class, and everything in connection with the hulls, machinery and equipment of the most substantial character suitable for the arduous service they will be called upon to perform. The hulls will be divided by water-tight bulkheads into five water-tight compartments. They will each have three decks, the main and spar decks being continuous and the lower deck extending from the stem to the coal bunker bulkhead forward, and from the sternpost to the engine bulkhead aft. The lower deck will be of steel; the main deck of steel covered with a 3 in. wood deck, and the spar deck of wood. They will each be provided with two hollow steel masts fitted with standing and running rigging for every kind of service on station, at sea or in harbor. The lights will consist of a cluster of three on each masthead top, adapted both for electricity and oil lamps. The accommodation for officers and crew will be located on the main deck; the dynamos and engines for the electric plant will be located on the main deck within the engine casing. They will be fitted with steam windlasses with two "wild cats" for 1 1/2 in. chain and spring riding buffers. The fog signal will be a chime, operated by steam and the cut-off marked by a steam engine specially designed for this purpose. They will also be fitted with tanks having a capacity of 15,000 gallons of fresh water, as well as the necessary facilities for storing rain water. They will each be fitted with an inverted surface condensing single cylinder engine, with a stroke of 22 in., and a cylinder chamber 23 in. diameter, driving a right-handed four-bladed cast iron propeller of the solid type, 7 ft. 3 in. diameter. Steam will be furnished by two cylindrical straight tubular boilers, 9 ft. diameter by 16 ft. 7 1/2 in. long, and designed for a working pressure of 100 lbs. to the square inch. The electrical plants are to consist of four marine sets known as M.P. 4.8.650 with 4 1/2 by 4 double-cylinder marine engines to run on 80-lb. steam, non-condensing, or any other plant of equal capacity and quality. The vessels will each be wired for 80, 16 c.p. 100-volt lights and 8, 100 c.p. 100-volt lights at the masthead, four on each mast. The flashing device for the lights will have three discs revolving at the rate of two revolutions a minute. The specifications provide for the most rigid tests for materials throughout the hull, machinery and equipment of the vessels, which will cost about \$100,000 each. One vessel is to be delivered in Aug., and the other about three months later. They are being constructed under the supervision of W. E. Redway, naval architect for the Polson Iron Works.

**Government Notices to Mariners.**

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

No. 115. Dec. 9.—Nova Scotia—382. Strait of Northumberland, Wallace harbor, buoyage.

No. 116. Dec. 10.—British Columbia—383. Haro strait, Colburne passage, rocks. 384. Haro strait, north end of Sydney channel, rock.

No. 117. Dec. 11.—British Columbia—385. Trincomali channel, Victoria rock, buoy.

386. Strait of Georgia, Portier pass, Galiano island, bearing and heights of range lights. 387. Strait of Georgia, Portier pass, position of fairway buoy. 388. Strait of Georgia, approach to Baynes sound, Kelp bar, beacon destroyed, spar buoy placed.

No. 118. Dec. 11.—Quebec—389. River St. Lawrence, south shore, Matane, Bell buoy. 390. River St. Lawrence, north shore, Manicouagan shoal, whistling buoy. 391. Richelieu river, north of Halfway point, change in position and height of front range light.

No. 119. Dec. 17.—Ontario—392. Ottawa river, Lake des Chênes, Baskins wharf, improvement in range lights. 393. Georgian bay, west side, Surprise shoal, change in color of buoy.

No. 120. Dec. 19.—New Brunswick—394. Passamaquoddy bay, St. Andrews, beacon re-erected.

No. 121. Dec. 20.—Nova Scotia—395. Cape Breton, Lennox passage, Bourgeois inlet, light established.

No. 122. Dec. 20.—Ontario—396. Georgian bay, east coast, Point au Baril, new back range tower.

No. 123. Dec. 22.—New Brunswick—397. South coast, Bay of Fundy, St. John harbor, Partridge island, bell buoy damaged, bell buoy placed.

No. 124. Dec. 23.—Ontario—398. Lake Erie, between Point Pelee and Long Point, wreck of H. A. Barr no longer dangerous. 399. Georgian bay, west side, Flowerpot island, fog bell again in operation.

The U.S. hydrographic office has issued the following notices:

No. 50. Dec. 13.—Lake Superior—1958. Apostle islands, York island, corrected position of reported shoal.

No. 51. Dec. 20.—Lake Superior—2013. Portage lake ship canal, east breakwater west end beacon light, structure destroyed, light suspended.

No. 52. Dec. 27.—Lake Superior—2058. Apostle island group, shoal reported by str. Van Hise, additional information.

No. 1. Jan. 3.—Gulf of St. Lawrence—1. Gaspe Basin, harbor closed to navigation Dec. 12, 1902.

No. 2. Jan. 10.—Lake Superior—43. Keeweenaw bay, coal dock established on Duluth, South Shore and Atlantic Ry.

**St. Lawrence and Chicago Steam Navigation Co.**

The 12th annual report for 1902 states that the season of 1902 on the lakes was a fairly prosperous one. As mentioned in the previous annual report, it was decided to increase the capital stock to \$500,000, and during the year \$150,000 was issued and has been taken up by the shareholders and paid for in full. The directors having contracted for the construction of another steamer of a larger size than any previously constructed, have issued the remaining \$150,000 capital payable in full on Jan. 2, 1903. As there will be a further sum required to complete the above-mentioned steamer, it will be necessary to increase the capital stock again. Owing to the contractors for the steamer ordered a year ago, failing to deliver her until after the close of navigation, 1902, although it was agreed that she should be delivered on June 1, 1902, serious loss has been occasioned to the Co., as practically only one-half of the capital has been working during the past year. Two dividends have been paid, one in July, 1902, of 16 2/3% out of the accumulated profits of past years, and one of 10% payable Jan. 2, 1903, and a balance of \$18,913.68 has been carried forward.

**ASSETS.**

Steamer Rosedale.....	\$100,000 00
Steamer Algonquin.....	100,000 00

Steamer Tadenac (expended to date).....	132,626 98
Steamer building at Collingwood (expended to date).....	75,000 00
	<u>\$407,626 98</u>

**LIABILITIES.**

Capital.....	\$350,000 00
Balance due Dominion Bank.....	38,713 30
Balance of Profit carried forward.....	18,913 68
	<u>\$407,626 98</u>

**PROFIT AND LOSS ACCOUNT.**

Balance brought forward Jan. 1, 1902.....	\$22,753 52	
Transferred from reserve fund.....	40,000 00	
		\$62,753 52
Steamships.....	\$53,173 97	
Interest.....	2,137 95	
		<u>55,311 92</u>
	<u>\$118,065 44</u>	

Insurance.....	\$6,570 23	
Telegraphing and postage.....	257 27	
Expense.....	1,639 31	
Salaries.....	5,000 00	
Taxes.....	322 95	
Supplemental charter.....	362 00	
		<u>\$14,151 76</u>
Dividend, 16 2/3%, paid July 2, 1902.....	\$50,000 00	
Dividend 10% payable Jan. 2, 1903.....	35,000 00	
Balance carried forward.....	85,000 00	
	<u>18,913 68</u>	
	<u>\$118,065 44</u>	

The annual meeting was held in Toronto Jan. 14. Following are the officers for the current year: President, W. D. Matthews; Managing Director, J. H. G. Hagarty; Superintendent, S. Crangle; other directors, E. B. Osler, C. S. Gzowski and G. F. Hagarty.

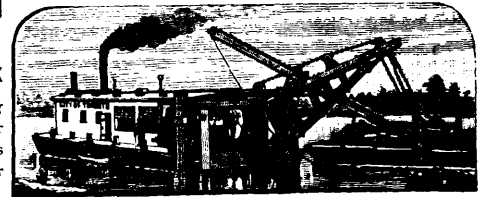
**M. BEATTY & SONS**

WELLAND, ONTARIO.

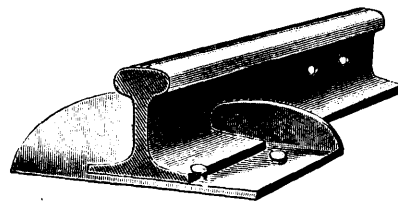
**DREDGES, DITCHERS, DERRICKS and STEAM SHOVELS**

OF VARIOUS STYLES AND SIZES TO SUIT ANY WORK

Submarine Rock Drilling Machinery, Hoisting Engines, Suspension Cableways, Horse-Power Hoisters, Gang Stone Saws, Centrifugal Pumps for Water, Sand and Gold Mining, and other Contractors' Plant.



**Combined Tie Plate, Rail Brace and Rail Support.**



PATENTED

Canada - - -	74062.	December 10th, 1901.
United States - -	690235.	December 31st, 1901.
Great Britain - -	22735.	November 11th, 1901.
Germany - - -	164694.	November 13th, 1901.
Belgium - - -	159783.	November 30th, 1901.

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### Northern Navigation Co.'s Commission.

The Northern Navigation Co., of Ontario, has issued a circular quoting the resolution adopted by the trunk lines' associations as follows: "Resolved, that it is the sense of this Association that its members should not continue ticket arrangements or representations from lake lines which persist in paying commissions to ticket agents contrary to our recognized policy." The N.N. Co. goes on to say: "You will readily see the position we are placed in, and although it is contrary to our wishes or past policy, we do not feel that we could antagonize the railways represented by the Central and Western Trunk Lines Associations. We therefore regret that it will be impossible for us to pay you the commission on your past season's sales. If we are to be in a position to act otherwise next season we will be pleased to notify you."

The circular, which was dated Dec. 15, 1902, has caused a great deal of disappointment among the agents who received it. The N.N. Co. did not give notice at the commencement of last season that it intended to cease paying commissions; in fact, in some cases agents were told by its officers that commissions would be paid, and they naturally feel that they have not been fairly dealt with after handling the season's business in the expectation that they would be treated as in previous years. There is no doubt that the N.N. Co.'s management has made a mistake in its method of dealing with this matter, and has alienated many agents who have been its good friends for years. Of course any company has a perfect right to cease paying commissions, irrespective of whether it is good business to do so or not, but notice of such intention should have been given at the commencement of the season, and not postponed until the year's business was closed, and the agents were expecting their annual cheques as usual. A notice of the cancellation of commissions made retroactive for a whole season is a decided novelty in passenger traffic matters, and indicates that the business is handled in an amateur way.

### Maritime Provinces and Newfoundland.

The Dominion line steamers running between European ports and Boston, Mass., now call at Halifax, N.S.

The Nova Scotia Steel Co. has chartered a fleet of 17 steamers for the coal and iron ore trade for the season of 1903.

The str. Nerid, of Yarmouth, has been purchased by H. E. Eldridge, to run between Sandy Cove and Weymouth, N.S.

Navigation on the Miramichi river was maintained between Chatham and Douglas-town, N.B., from Mar. 28 to Dec. 3, 1902.

The Cumberland Coal and Ry. Co. has chartered the str. Hilda, 1,600 tons, to carry coal from Parrsboro, N.S., to Portland, Me.

Recent launches in Nova Scotia include a 350 ton schooner at Maitland, and a schooner for the packet trade between Mahone Bay and Halifax.

The I.C.R. is having constructed at Carleton, N.B., a barge for transferring cattle from the ballast wharf sheds to the ocean steamers at Sand Point.

The Halifax and Yarmouth Ry. Co., is reported to be considering the advisability of putting a steamer on the route from Barrington to Halifax.

Capt. Macomber, formerly master of the Douglas H. Thomas for the Dominion Coal Co., and latterly in the service of the Department of Marine, died at Sydney, N.S., Jan. 4.

Thirteen vessels, having a tonnage of 968 tons, were added to the list of vessels regis-

tered in P.E.I. in 1902, the number on the list on Dec. 31 being 16 steamers of 1,571 tons and 143 sailing vessels of 11,893 tons.

The str. Lady Laurier, built at Paisley for the Dominion Government, sailed for Halifax Dec. 24, but had to return to Glasgow a week later, having received some damage owing to having met very severe weather.

The wrecked str. Jacques Cartier, belonging to the Inland Navigation Co. of Charlottetown, P.E.I., has been sold; the hull, engine and boilers for \$250, the condenser for \$500, the deck pump, boats, etc., bringing \$450; a total of \$1,200.

The Department of Marine has decided to place a diaphone at Cape Race, Nfld., in place of the present foghorn. The diaphone is driven by compressed air and emits a more powerful and penetrating sound than the pneumatic siren now in use.

Sixty steamers, having a tonnage of 4,439 tons, and 374 sailing vessels, having a tonnage of 15,006 tons, were on the registry books at Halifax, N.S., on Dec. 31, 1902. At Sydney, N.S., 97 vessels, having a tonnage of 6,622 tons, were on the register at the same date.

The Tidal Survey Branch of the Department of Marine has issued tide tables for Halifax, N.S., St. John, N.B., Quebec and Father Point, Que., for 1903, with tidal differences for Nova Scotia, the Bay of Fundy, the Gulf and River St. Lawrence, and information on the currents.

The new steamship service between St. John and Halifax, calling at Yarmouth and other south shore ports in Nova Scotia, for which W. Thomson & Co., St. John, N.B., have the contract, will be opened with the str. Brunswick, pending the building of a new steamer.

Press reports state that the Mabou and Gulf Ry. Co. proposes operating a line of passenger and freight steamers from Mabou to Prince Edward Island, and connecting with the N.S. mainland at Pictou; and a steamer on the Bras d'Or lakes between Sydney and Whycomagh.

The Dominion Government str. Stanley has been placed on the route between Summerside, P.E.I., and Cape Tormentine, N.B., again this winter, and is reported to be making irregular trips between the two points. The Minto is running between Georgetown, P.E.I., and Pictou, N.S.

The Star Line Steamship Co. has declared a dividend of 7% for 1902, and elected the following officers and directors for 1903: President, J. Manchester; Vice-President, T. P. Taylor; other directors, C. C. Taylor, A. H. Harrington, F. A. Baird; Manager and Secretary-Treasurer, R. S. Orchard.

There is under construction at Carleton, N.B., the hull of a steamer for the Springfield Steamship Co., and a \$7,000 steam yacht. The dimensions of the former are: length 140 ft., breadth 25 ft., and a draught of 2½ ft. She will be fitted with a stern wheel and is to be named the Beatrice E. Waring.

The Tidal Survey Branch of the Department of Marine has issued tide tables for Charlottetown, P.E.I., Pictou, and St. Paul island, N.S., for 1903, with tidal differences for Northumberland strait, and for the open Gulf shore, from Miramichi along the north coast of Prince Edward Island, and for Cabot strait.

The Queen Steamship Co. (Ltd.) has been incorporated under the New Brunswick Companies' Act with a capital of \$15,000 to purchase the str. Queen, of Montreal, and carry on a general navigation business on the St. John river. H. A. McKeown, W. G. Dunlop,

S. J. Thorne, B. Van Wart and H. G. Harrison, St. John, are the provisional directors.

The Pontiac Steamship Co. (Ltd.) has been incorporated under the Dominion Companies Act with a capital of \$120,000, to carry on a general navigation business between Canadian, British or foreign ports. The provisional directors are: J. W. Carmichael, J. C. MacGregor, J. H. Sinclair, R. Meikle, and Miss C. E. Carmichael, of New Glasgow, N.S., where the offices of the Co. will be.

One of the captains of the Elder-Dempster line recently stated that the light at Belle Isle, Nfld., was not properly sectored. Col. Anderson, Chief Engineer of the Department of Marine, says he checked it last summer and it was approximately correct. A new quick flashlight is to be placed on the north end of Belle Isle, and the present light on the south end will be changed to an occulting one.

### Province of Quebec Shipping.

The Montreal Harbor Commissioners have decided to spend \$6,000 in rebuilding their tug St. Peter.

During the season of navigation of 1902 over 17,000,000 bush. of grain passed through the Soulanges canal, in addition to 315,000 tons of general freight.

The new locks of the Lachine canal will be 270 ft. long, 45 ft. wide, and have a depth of water of 14 ft. on the sills. Coulson, Quinlan and Robertson, contractors, Montreal, have the contract.

The Ottawa Forwarding Co. has under construction at Montreal a freight steamer, to replace the Harry Bate on the Montreal-Ottawa run. She will be 100 ft. in length, 25 ft. in breadth, and have a carrying capacity of 300 tons.

J. Kennedy, Chief Engineer of the Montreal Harbor Commission, P. W. St. George, and an engineer from the Department of Public Works have been appointed to look into the question of the construction of a dry dock at Montreal, and to report.

Two range lighthouses have been erected on Ile l'Aigle, in connection with the improved ship channel in Varennes traverse; and changes in the buoyage in Ile Ste. Therese channel, and Ile aux Vaches traverse are to be made for the opening of navigation.

The Richelieu and Ontario Navigation Co. has purchased the str. Virginia, to run in conjunction with the Caroline on the Quebec-Saguenay route. The Virginia is a comparatively new vessel, and has been engaged in the service between Baltimore and Old Port Comfort, Va.

The Montreal Harbor Commissioners have been considering plans, submitted to them by the Chief Engineer, for the construction of sheds on the wharves, and other harbor improvements. The plans will be referred to the Department of Public Works before contracts are let.

Capt. S. Filgate, 82 years of age, a resident of Montreal, has been actively engaged in river navigation since 1852. He ran the ferry steamer Champlain between Lachine and Caughnawaga in 1852, and subsequently built the Aurora, Beauharnois, Star, Lotbiniere and Filgate.

Commander Spain, R.N.R., reports, as the result of his investigation, that the damage to the Iberian and other vessels in the St. Lawrence during 1902 was due to the inexperience or carelessness on the part of captains, officers or pilots. Copies of the findings and evidence in each case have been forwarded to the British Board of Trade.

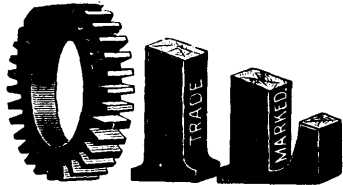
The port of Montreal's total revenue for



1902 was \$280,172 against \$234,908 for 1901. The number of vessels from inland ports arriving was 9,358 carrying 1,857,668 tons against 8,434 vessels carrying 1,680,182 tons in 1901; and of sea-going vessels there were entered 728 with a tonnage of 1,530,023 tons, against 707 vessels with a tonnage of 1,438,081 in 1901.

Following are particulars of the ten vessels being built for the Great Lakes and St. Lawrence Transportation Co., to be operated between Duluth, Minn., and Quebec; length, over all, 255 ft.; keel, 241 ft.; breadth, 41 ft.; depth 18 ft.; to carry 2,200 tons on a 14 ft. draught. Six will be fitted with triple expansion engines, 15, 25 and 42 in. diameter by

30 in. stroke, to which steam will be supplied by two Scotch boilers, 11 ft. by 11 ft., tested to a pressure of 170 lbs. to the square inch; the other four will be fitted with triple expansion engines 14, 25 and 42 in. diameter, by 30 in. stroke, to which steam will be supplied by water tube boilers at 225 lbs. a square inch. The value of each steamer is placed at \$150,000. Three of the steamers are being built at Chicago, three at Detroit, two at Superior and two at Buffalo. Delivery is to be made in the spring, when the steamers will be engaged in carrying grain to Quebec, and will have pulpwood from the Co.'s mills at Metapedia, as return cargos. — Marine Review.



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Vacuum Oils Reduce Friction, thus  
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Machinery.

VACUUM 600 W. CYLINDER  
VACUUM No. 1 MARINE EN-  
GINE (better than Lard)  
ELDORADO ENGINE  
RENOWN ENGINE  
ARCTIC CUP GREASE  
MINERAL SEAL OIL

300 Fire Test, for Illuminating Purposes

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SAML. ROGERS PRES. TORONTO



## 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!

**G. B. WYLLIE,**

Canadian Passenger Agent,

210 ELLICOTT SQUARE, BUFFALO, N.Y.

## FURS AND HATS

Our stock is now replete with the latest designs, from inexpensive productions to the most luxurious and costly.

Taste and elegance combined with a solidity of manufacture have placed our firm in the first rank in the Dominion.

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THE FOUR-TRACK TRUNK LINE.

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New York.

**H. PARRY,**  
General Agent, BUFFALO, N.Y.

### Ontario and the Great Lakes.

The Collingwood dry dock is being extended to 500 ft. in length.

The Northern Navigation Co. of Ontario declared a dividend of 5% for the half-year ended Dec. 31.

Capt. R. Cooney has been appointed to take charge of the Hamilton Steamboat Co.'s str. Macassa for the season of 1903.

It was reported from Port Arthur Jan. 1 that the harbor was free from ice, and that navigation with eastern points was quite possible.

The St. Lawrence and Chicago Transportation Co.'s str. Rosedale and Algonquin,

## MANITOBA

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

	ACRES.	CROPS.	
		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..	24,429	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.

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

For full information, maps, etc., FREE, address **HON. R. P. ROBLIN**, Minister of Agriculture and Immigration, Winnipeg, Manitoba.  
Or **JAMES HARTNEY**, Manitoba Emigration Agt., 77 York Street, Toronto, Ont.

## All C.P.R. Agents in MANITOBA, ASSINIBOIA, ALBERTA and BRITISH COLUMBIA

sell through tickets to the Old Country cheaper than if passengers bought railway tickets to New York or Montreal, and then re-booked.

They also sell prepaid tickets to passengers coming from the old country, cheaper than the rate obtainable in Europe, and on favorable terms.

Apply to any agent Port Arthur and west, or to

**W. P. F. CUMMINGS,**

C.P.R. Offices,  
WINNIPEG.

are being overhauled in their winter quarters at Owen Sound.

W. J. Stewart, hydrographic surveyor of the Department of Marine, Ottawa, is preparing a new edition of the Georgian Bay and North Channel Pilot.

The Algoma Navigation Co. is negotiating for the building of a steamer 190 ft. long and 34 ft. beam, with a carrying capacity of 700 tons, for its Georgian Bay trade.

The lighthouse supply str. Scout has been placed in the dry dock at Kingston, Ont., where she will be lengthened 25 ft., and a number of other improvements made.

The Central Canada Coal Co., of Brockville, has purchased the steam barge Samuel B. Marshall, of Buffalo, N.Y. She is classed A $\frac{1}{2}$  and has a gross tonnage of 1,350 tons.

There were on order on Dec. 31, 1902, at Toronto, 1 cargo steamer, 2,300 tons, two tow-boats and two light ships, and at Collingwood two cargo steamers of 4,900 tons each.

The Grand Trunk Car Ferry Co. is having a steel ferry boat 315 ft. long and 54 ft. in breadth, built at Toledo, Ohio. We are advised that the G.T.R. is not interested in this ferry.

Press reports have been revived to the effect that a joint stock company is in course of formation in Hamilton to establish another line of steamers between Hamilton and Toronto.

The Montreal Transportation Co. expects to have one of its additional steamers delivered at Kingston on the opening of navigation, and the second one in July. One of these is to replace the lost Bannockburn.

The Hamilton and Fort William Navigation Co. has declared a dividend of 8% for the year, and has elected directors for 1903: President, W. Southam; A. B. Mackay, A. E. Carpenter, J. Milne, C. Doolittle, G. Hope and G. S. Lynch Staunton, K.C.

The Montreal Transportation Co. has purchased the schooner Augustus from the Calvin Co., of Kingston, Ont. She was built at Garden Island, Ont., in 1893, her dimensions being: length, 177.5 ft.; breadth, 39.6 ft.; depth, 15 ft.; register tonnage, 802 tons.

It has been reported that two-thirds of the Canadian vessels passing through the canals at Sault Ste. Marie use the U.S. in preference to the Canadian canal, on the ground that the channel to the upper entrance of the Canadian lock is not so advantageous as that to the U.S. one.

The str. A. J. Tymon, of Toronto, was ordered to be sold by the Admiralty Court to satisfy claims for wages preferred by Capt. McSherry and the crew. G. Gooderham has a mortgage on the steamer, of which Capt. McSherry is part owner. The sale was announced for Jan. 28.

Capt. Donnelly, Superintendent of the Canadian Lake and Ocean Navigation Co., says as the result of his experience with the turret type of vessel last season he is satisfied that it is the very best that could be built for the trade. The captains and crews of the four steamers returned to England for the winter.

The Hamilton Steamboat Co. elected the following officers at its annual meeting: President, W. Leggat; Vice-President, G. T. Tuckett; other directors, S. Jones, J. W. Lamoreaux, F. W. Fearman, H. B. Witton and T. Ramsay; General Manager, T. H. Bishop; Secretary-Treasurer, Miss A. Abrahams.

Thirty-four vessels were lost on the Great Lakes during 1902, with 140 lives, and representing a loss of \$703,000 on hulls and \$269,000 on cargoes to the underwriters. With the exception of the Bannockburn all the vessels lost were getting old, and some of them were doubtless not well equipped to meet very heavy weather.

Two U.S. vessels collided in Sandusky harbor, Ohio, and an action was entered and the Whitney, one of the vessels, was seized in Canadian waters and held until bail was given. Judge McDougall in the Admiralty Court at Toronto has decided that the plaintiff must deposit \$800 as security for the costs of the owners of the Whitney.

The Victoria Lumber Co. is having built at Toronto a 2,300-ton steel barge, her general dimensions being: length, over all, 260 ft.; breadth, 43 ft.; depth, 25 ft. She will be fitted with triple expansion engines, 17, 28 and 46 in. cylinders, by 32 in. stroke, to which steam will be supplied, at 176 lbs. pressure, by two Scotch boilers 11 ft. 6 in. by 12 ft.

Major T. W. Symons, U.S. engineer at Buffalo, N.Y., has received instructions from the Secretary of War to make a survey for a deep ship canal from the headquarters of the Niagara river to the lower river a distance of 5 miles. If this work is carried out the lake boats will be able to get into the lower river, which they cannot now do on account of the shallows and rapids.

Arguments have been heard and judgment reserved in the action brought by R. D. Perry against the Algoma Central Ry. Co., in reference to the operation of a ferry between the Ontario and Michigan sides of the St. Mary river at Sault Ste. Marie. Mr. Perry operates his ferry under a lease from the Dominion Government granted in 1897, and the Algoma Central Ry. operates its ferry under the authority of a Provincial Act of Parliament.

The Toronto Globe of Dec. 25, 1852, had the following item relative to navigation on Lake Ontario: "We are glad to notice that the Chief Justice will make her trips backwards and forwards every day during the winter. This will be a very great convenience to our community. The City of Hamilton has been laid up, but the Queen of the West still retains her place between this city and Hamilton. The weather is mild and moist, and the ice has disappeared from the bay."

The Dominion Government proposes to construct a dam between Adams and Galops islands in the St. Lawrence, with a view of completing the channel between Prescott and the Galops rapids. As the U.S. boundary runs through the channel between the islands C. Schriber, Deputy Minister of Railways and Canals, has been to Washington and explained the project to the authorities there. A U.S. engineer will make a report, and if this is favorable the work will be commenced this year.

The str. Norseman has been purchased by N. and A. Dymont from F. D. Gilchrist, Alpena, Mich., and will be added to the lumber carrying fleet on Georgian bay. The Norseman was built in 1864 at Port Huron, Mich., and was originally known as the Enterprise, and has the following dimensions: length, 172 ft.; breadth, 32 ft.; tonnage, gross, 660 tons; net 501 tons. She is fitted with simple compound engines, 20 and 50 in. cylinders by 30 in. stroke, to which steam is supplied by two Scotch boilers 12 by 9.

Two steamers which are being built at Collingwood are expected to be completed by June. One is for J. Playfair, of Midland, Ont., and the other for the St. Lawrence and Chicago Transportation Co. Their dimensions are: length, over all, 375 ft.; breadth, 48 ft.; depth, 28 ft.; cargo capacity 4,900 tons, on an 18 ft. draught; fitted with triple expansion engines, 20, 33, and 55 in. cylinders by 40 in stroke, to which steam is supplied by two Scotch boilers 14 ft. by 12 ft., at a pressure of 180 lbs. to the square inch.

The Upper Ottawa Improvement Co. is having built at Toronto two tow-steamers

which will be taken in sections to the upper reaches of the river and put together there. They have the following dimensions: (1) length over all, 146 ft.; keel, 139 ft.; breadth, 26 ft.; depth, 8 $\frac{1}{2}$  ft.; fitted with inclined compound engines 24 and 48 in. cylinders, by 60 in. stroke, and two locomotive boilers 5 ft. 4 in. by 23 ft. 4 in.; (2) length over all, 140 ft.; keel, 133 ft.; breadth, 24 ft., depth, 8 ft.; fitted with inclined compound engines 20 and 38 in. cylinders, by 54 in. stroke, and two locomotive boilers 4 ft. 10 in. by 21 ft.

Recent press reports credited a Toronto shipbuilding and engineering company with the intention of establishing a big yard at Sandwich, Ont., at which the C.P.R. was to have built a large fleet of modern lake carriers, and where repairs for Canadian vessels could be made. A member of the Toronto firm in question declined to make any statement on the subject, but Sir Thos. Shaughnessy, President of the C.P.R., said it was a very large story built on a flimsy foundation, and an officer of the Co., connected with its shipping branch, said no order for new vessels of the kind indicated had been given.

F. H. Clergue has recently been making enquiries as to the use of acetylene gas in buoys for marine purposes, and Captain Folger, Superintendent of the New York lighthouse district, reports that so far buoys so equipped become defective after a few days or weeks of service. The Safety Car Heating and Lighting Co. says: "We recognize the value of the acetylene flame for use in reflectors or lenses, and have carried on a considerable number of experiments ourselves, and now have buoy lanterns burning at our laboratory in an effort to arrive at a suitable arrangement. The consumption of gas cannot be any less than with Pintsch light, although we believe that the light will be three or four times as effective if reliable."

The U.S. canal at Sault Ste. Marie was closed for the season Dec. 15, and the Canadian canal a week later. The traffic passing through the Canadian and the U.S. canals at Sault Ste. Marie, from the opening to the close of navigation, was 35,961,146 tons, against 28,493,065 tons in 1901. The following are the figures for the Canadian canal:

	1902.	1901.	Increase or Decrease.
April 5 to May 31.....	532,188	151,679	380,509+
June.....	1,118,564	1,235,055	116,491-
July.....	523,936	276,624	247,312+
Aug.....	639,858	295,175	344,683+
Sept.....	560,031	201,229	358,802+
Oct.....	604,713	354,383	250,330+
Nov.....	635,314	277,144	358,170+
Dec.....	113,747	29,738	84,009+
	4,728,351	2,821,027	1,907,324+

**Manitoba and Northwest Territories.**

The Manitoba Exploration Co. has been incorporated under the Manitoba Companies' Act to own steam and other ships, and carry on a general navigation business in addition to a number of other purposes. E. F. Hutchings, G. A. Glines, A. McLaren, W. G. Scott, J. Robertson, J. G. Cleghorn and J. H. Leech of Winnipeg, are the provisional directors.

Kelly Bros. are hauling large quantities of material to St. Andrew's rapids, near Winnipeg, for the construction of the lock. They expect to have 2,000 cubic yards of stone and about 6,000 cubic yards of sand on the ground ready to start building in the spring. The work has been considerably delayed during the past year or two by the large quantity of water in the river.

The Canadian Northern Ry. proposes establishing a harbor on Lake Manitoba, at Oak Point, Man., the terminal point of its branch known as the Hudson's Bay line. Large quan-

titles of stone are being taken out at Lake Frances, for use in the construction of a pier and other harbor works at Oak Point. The C.N.R. opened a line to Delta on the southern shore of the lake, but it is stated that as a port it has not been a success, and will be abandoned.

### B. C. and Pacific Coast Shipping.

The United Canneries Co. has ordered 15 fishing boats to be built in Vancouver and to be ready for the fishing season of 1903.

The Vancouver Canning and Packing Co. has had a steamer, the Surprise, built at False Creek, Vancouver. Her engines are 85 h.p. and she has a capacity of 100 tons.

The Packers Steamship Co. (Ltd.) has been incorporated under the B.C. Companies' Act with a capital of \$25,000 for the purpose of owning steam and other vessels, as well as for other purposes.

The C.P.R. steamer Athenian has recently been fitted with a new boiler, 10 ft. 6 in. in diameter by 10 ft. in length, built in Vancouver, B.C. The plates were purchased in England under Lloyd's supervision and shipped to Vancouver.

Two tugboats named Bahadda and Wyadda, have been launched at Seattle, Wash., for the Admiralty Tugboat Co., an affiliation of the Puget Sound Tugboat Co. The steamers are 90 ft. long, 19 ft. beam, 11 ft. 6 in. depth of hold, and are fitted with Scotch boilers and compound engines of 390 h.p.

The Tidal Survey Branch of the Department of Marine has issued tide tables for Victoria, B.C., and Sand Heads, Strait of Georgia, for 1903, with tidal differences for Esquimalt, Vancouver, New Westminster and Baynes Sound, and the current in first narrows, Burrard Inlet.

The Alaska Packers' Association of San Francisco has been awarded \$25,000 dam-

ages for the stranding of the ship Santa Clara, on Trail Island in Dec. 1901, due to the negligence of the crew of the tug Mystery, of Victoria, B.C. The verdict was recorded against the tug and her former owner, S. A. Spencer.

The C.P.R. str. Princess Victoria was expected to be completed in Jan. and to leave the builders' yard, Newcastle-on-Tyne, Eng., by the end of the month for Victoria, B.C. She is expected to make the trip in 60 days. Upon reaching Victoria, the upper works will be put in position, and the decorative work, both inside and out, completed.

The most recent stretch of navigation to be opened in the Yukon territory, during the season of 1902, was to lake Arkell, 95 miles up the Tahkma river, a tortuous stream running southward from the Yukon river, some distance below Whitehorse. The Joseph Clossett made two round trips before navigation closed.

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The demand for Mica Covering is rapidly increasing, and this purely Canadian product is now entering successfully the markets of the World.

It was lately awarded the only Gold Medal in its section at the Pan-American Exposition, and was a prize winner at Paris.

The Mica Covering is largely used by Railways in Canada, Great Britain and India, also by the British Admiralty.

Write for list of large users, catalogues and prices.

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**Hoisting Machinery, etc.**

Old Material Bought and Sold.

**THE PLACE VIGER  
MONTREAL.**

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

**RATES: \$3 UPWARDS.**

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

**IMPERIAL BANK OF CANADA.**

Capital authorized - - \$4,000,000  
Capital paid up - - - 2,923,866  
Reserve - - - - - 2,485,288

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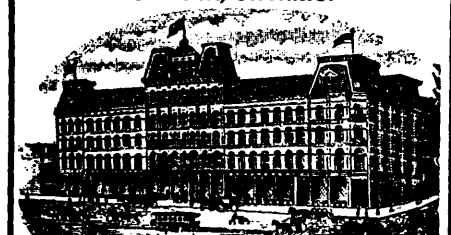
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**THE RUSSELL**  
OTTAWA, ONTARIO.



**The Leading Hotel of the  
Capital of Canada**  
F. X. ST. JACQUES - - - - Proprietor

The necessity of increased drydock accommodation on the B.C. coast is becoming apparent with the increasing number and size of vessels frequenting the ports. The Esquimalt dock is barely large enough for some of the warships on the Pacific station, and too small for some of the merchant vessels. It is reported that the Imperial Government is in favor of arranging with the Dominion Government for the enlargement of the dock, or for building another in the naval yard.

The Upper Columbia Navigation and Tramway Co. will improve its steamers North Star and Duchess during the winter. The North Star is to be remodeled after the style of the C. P. R. steamers on Kootenay lake, and provided with accommodation for 150 passengers; and the Duchess is to be rebuilt and enlarged. Capt. Armstrong, of Golden, B.C., is largely interested in the Co., which has entered into an agreement with the C.P.R. to run its steamers next season to fit in with the arrival of C.P.R. trains at Golden.

Press reports are current as to the time when the C.P.R. will start a steamship line between Canadian ports and Europe. Sir Thos. Shaughnessy says: "When any announcement is made it will come from the C.P.R. direct."

### Among the Express Companies.

The Dominion Ex. Co.'s route on the stage route between St. Basil, N.B., and St. David, Me., has been closed for the winter.

H. L. Meyer, heretofore tariff clerk of the Dominion Ex. Co., has been appointed Superintendent of Tariffs, office at Toronto.

Scott Griffin has been appointed Superintendent, and W. C. Muir, Auditor, of the Canadian Northern Express Co. Offices at Winnipeg.

The position of Superintendent of the Alaska Pacific Ex. Co. at Seattle, Wash., formerly held by D. C. Jackson, has been abolished.

The B.C. Express Co. is running an extra stage on Fridays from Ashcroft to 150-Mile House, B.C., in addition to the usual weekly stage carrying the mail.

W. Aitchison, cashier of the Dominion Ex. Co. at London, Ont., has been appointed agent at Sault Ste. Marie, Ont., being succeeded by W. A. Gurney.

J. Anderson, an employe of the Dominion Ex. Co. at Portage la Prairie, Man., left recently, and a shortage of \$700 is alleged to have subsequently been discovered in his accounts.

The Canadian Northern Ex. Co. has extended its service over the Neepawa branch of the Canadian Northern Ry., and has opened offices at Mayfield, Mekiwin, Humberston, Hallboro, Glendale and Neepawa.

Robert Hally, a Toronto bank clerk, recently obtained \$200 from the Dominion Ex. Co. by means of a cheque which he had marked accepted with the bank stamp. He was subsequently arrested and convicted.

The Great Northern Ex. Co. has extended its service over the Great Falls and Canada Ry., which has been bought by the Great Northern Ry., and has opened offices at Collins, Conrad and Sweet Grass, Mont.

The Great Northern Ex. Co. has extended its service over the section of the Vancouver, Victoria and Eastern Ry., recently opened, and has opened an office at Grand Forks, B.C., common with the Dominion Ex. Co.

The Great Northern Ex. Co. has placed its service on the Crow's Nest Southern Ry.

from Gateway, on the International boundary, to Morrissey Creek, B.C., and has opened offices at Elko, Swinton and Morrissey Jct., B.C.

Alaska Pacific Ex. Co.'s agents have been authorized to cash the money orders of the Northern Pacific, Great Northern, Wells, Fargo & Co., Pacific, Dominion, Western, American, United States, National, Adams, and Southern express companies.

### Telegraph and Cable Matters.

Scott Griffin has been appointed Superintendent, and W. C. Muir, Auditor, of the Canadian Northern Telegraph Co. Offices at Winnipeg.

The Pacific Cable Board is reported to have made an offer to purchase Fanning island, the mid-ocean landing place of the all-British trans-Pacific cable.

A. McKay, of St. John's, Nfld., who opened the first telegraph office in Liverpool, N.S., in 1851, sent New Year's greetings to the present operator in the office.

The Premier of Newfoundland has expressed a hope that when the charter of the Anglo-American Telegraph and Cable Co. expires in April, 1904, Marconi will establish a wireless station in that colony.

A London, Eng., press report states that owing to the successful establishment of wireless telegraphy between Canada and Great Britain the projected cable, under government control, will not be further considered.

The Pacific Commercial Cable Co.'s cable from San Francisco to Honolulu was opened for public service Jan. 5. The rate from Toronto to Honolulu is 62c. a word. The line is to be extended from Honolulu to Manila, and thence to Shanghai.

The Government telegraph line from Alberni to Clayoquot, on Vancouver island, has been completed. The extension of the line to Clayoquot necessitated laying a cable from the Alberni canal across Barkley sound; and across Clayoquot sound to Stubbs island. The cable was laid by the Government str. Otter.

The C.P.R. telegraph department is stringing a new copper wire between Little Current and Port Arthur, Ont., and it is reported that it will be continued across the continent to the Pacific coast. Several car loads of cross arms have been sent easterly from Vancouver to be distributed along the line to Winnipeg. J. Wilson, Superintendent C.P.R. telegraphs at Vancouver, the Vancouver World says, has confirmed this statement.

In consequence of the numerous interruptions of the telegraph line from Ashcroft, B.C., to Dawson, Yukon, it has been decided to substitute an insulated wire carried along the ground for the overhead wires in a number of places. The section of the line where this cable will be laid is between Telegraph Creek and Tagish, about 400 miles, a wild mountainous country, in which all the interruptions have taken place. An appropriation for this purpose will probably be asked next success of Parliament.

### Wireless Telegraphy in Canada.

The Marconi Wireless Telegraph Co. of Toronto (Ltd.) has been incorporated under the Ontario Companies Act, with a capital of \$5,000,000 to acquire the patent rights in the Marconi system of wireless telegraphy and any future inventions along the same lines, and to invest in the stocks and bonds of any similar corporation. The incorporators are W. Barwick, H. C. Osborne, J. Payne, of Toronto; J. N. Greenshields, of Montreal, and W. R. Green, of New York. This company

apparently does not propose to be an operating company, and J. N. Greenshields states that the charter was first obtained in Ontario because the procedure there was more expeditious. Notices have been issued that application will be made next session of the Dominion Parliament for an act incorporating the Marconi Wireless Telegraph Co. of Canada (Ltd.) to carry on a business of telegraphic communication by means of wireless or other system of telegraphy in Canada and between Canada and the U.S., Europe, or elsewhere; with power to enter into agreements with the Dominion and Provincial Governments and municipalities for the establishment of local systems. The organization of the Co. has been completed as follows: President, Col. F. C. Henshaw; Vice-President, G. Marconi; Secretary, B. Shepard, other directors: A. A. Allan, W. R. Green, of New York, and J. D. Oppe, representing the English Marconi Company. J. D. Oppe will be General Manager, with headquarters in Montreal. The Co. acquires all the rights for Canada and Newfoundland, including the station at Glace Bay and the benefit of the contract entered into with the Canadian Government. The Co. has engineers in the field locating sites for stations, and it is expected that stations will be located at Mount Royal, Montreal, and at Stony Mountain, Man. Negotiations are pending with the Canadian Government for an annual subsidy for the maintenance of a patrol system on the St. Lawrence river and gulf and the Straits of Belle Isle. A factory for the manufacture of the apparatus will probably be established at either Montreal or Toronto.

The installation of the wireless telegraph station at Glace Bay, N.S., has been completed and communication has been inaugurated with the British station at Poldhu, Cornwall, Eng. The announcement was made Dec. 21, when Signor Marconi sent congratulatory messages from the Governor-General to the King, but prior messages had been sent, among them being one from Dr. Parkin, of Toronto, to the London Times; and on Jan. 7 several messages were sent during a blizzard and a thunderstorm. At a complimentary dinner in Sydney, N.S., Dec. 30, Signor Marconi, replying to the toast of his health, expressed his gratitude to the Governments of Canada and Italy for the assistance given him in perfecting his invention. Wireless telegraphy would prove a means of reducing the cost of communication between the new and the old worlds. The Co. was now under a contract to transmit messages at the rate of 10c. a word, but he would not be surprised to see the cost brought down in time to 1c. a word. Cablegrams at first cost £4 a word, but the rate was now 25c. a word. The Marquis Solari, who it was claimed was the original inventor of the special apparatus used by Marconi, was present at Glace Bay during the tests as a representative of the Italian Government. Signor Marconi has a contract to establish a wireless station at Cape Cod, Mass., and went there to instal it Jan. 13. A station has already been established at Willflett, Mass., 600 miles further from Poldhu than Glace Bay, and messages have been successfully exchanged.

### Montreal Telegraph Co.'s Meeting.

The 56th annual meeting was held in Montreal Jan. 8. The balance sheet for the year ended Dec. 31, 1902, was as follows:

ASSETS.	
Telegraph lines in Canada and the U.S.	\$1,625,800.00
Telegraph cables in Canada and the U.S.	33,487.39
Telegraph offices and equipment of offices in Canada and the U.S.	212,500.00
Real estate in Montreal, Ottawa, Quebec and Toronto	279,946.46
	\$2,151,823.85

ASSESSMENT SYSTEM



**INDEPENDENT ORDER OF FORESTERS.**

THE BEST FRATERNAL BENEFIT SOCIETY IN EXISTENCE.

**Cost to Join the I.O.F.**

(For \$1,000 Mortuary Benefit.)

Initiation fee (minimum).....	\$1 00
Certificate fee.....	1 00
Registration fee.....	1 00
Medical Examination fee.....	1 50
<b>Total minimum cost.....</b>	<b>\$4 50</b>

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

Cost to take \$2,000 Mort. Benefit.	\$6 00
" " \$3,000 " " "	7 00
" " \$4,000 " " "	9 00
" " \$5,000 " " "	10 00
Sick benefits, when required, cost extra.	

**Benefits given by the I.O.F.**

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

**The Members, the Benefits, and the Surplus**

At 31st December Each Year.

Year.	Total Membership.	Benefits Paid.	Total Surplus.	Surplus per Capita.	Death Rate per 1,000.
1881	1,019	\$ 1,300 00	\$ 4,568 55	\$ 4 48	4.50
1882	1,134	12,058 86	2,967 93	2 61	11.00
1883	2,210	9,493 68	10,857 65	4 91	4.73
1884	2,558	13,914 31	23,081 85	9 01	4.23
1885	3,642	26,576 99	29,802 42	8 18	7.76
1886	5,804	28,499 82	53,981 28	9 30	4.85
1887	7,811	59,014 67	81,384 41	10 44	5.78
1888	11,800	89,018 16	117,821 96	9 98	6.43
1889	17,349	116,787 82	188,130 36	10 84	5.85
1890	24,604	181,846 79	283,967 20	11 54	5.18
1891	32,303	261,436 21	408,798 20	12 65	6.40
1892	43,024	344,748 82	580,597 85	13 49	6.25
1893	54,484	392,185 93	858,837 89	15 76	5.47
1894	70,055	511,162 30	1,187,225 11	16 94	5.47
1895	86,521	685,000 18	1,560,733 46	18 03	5.67
1896	102,838	820,941 91	2,015,484 38	19 60	5.50
1897	124,685	992,225 60	2,558,832 78	20 52	5.56
1898	144,000	1,176,125 14	3,186,370 36	22 12	5.67
1899	163,610	1,430,200 33	3,778,543 58	23 09	6.30
1900	180,717	1,545,145 64	4,483,364 44	24 81	6.53

For Further Information Respecting this Great Fraternal Benefit Society, Apply to

Oronhyatekha, M.D., S.C.R., Toronto, Ont.

James Marshall, 24 Charing Cross, London, Eng.

John A. McGillivray, K.C., S.S., Toronto, Ont.

A. E. Stevenson, 431 E. Sixty-Third St., Chicago, Ill.

Or Any Officer or Member of the Order.

Cash accounts receivable, bonds and other securities, and real estate (not included in loan to G.N.W.)	135,200.07
	\$2,287,023.92
<b>LIABILITIES.</b>	
Shareholders' capital	\$2,000,000.00
Excess in value of property operated by the G.N.W. T. Co., over shareholders capital	151,823.85
	\$2,151,823.85
Dividend payable Jan. 15, 1903	\$40,000.00
Unclaimed dividends, etc.	1,033.65
Contingent fund	94,166.42
	135,200.00
	\$2,287,023.92

The directors' report said: "The dividend guaranteed by the W.U. Telegraph Co. under the terms of the agreement of Aug. 17, 1881, was distributed in the usual manner and on the fixed dates, with a payment of 10c. a share to shareholders of record on March 31 last. The Co.'s property in the foregoing statement, valued at \$2,151,823.85, is operated and maintained by the G.N.W. Telegraph Co. Its operation and maintenance is also guaranteed by the W.U. Telegraph Co. of New York, under an agreement with this company for 97 years, from July 1, 1881. The Co. continues free from debt or encumbrance of any kind."

The investment of the surplus funds made by the directors during the year was approved. The directors were re-elected as follows:—President, H. A. Allan; Vice-President, A. T. Paterson; other directors, J. Joseph, W. R. Miller and W. Wainwright.

In a discussion on the probable effect of the operation of the Marconi wireless system on the future of the telegraph, the President said that he had a personal interview with Signor Marconi in Montreal. The inventor was at that time very hopeful of results, particularly as regards the transmission of signals over the ocean, but was not very hopeful of land lines by the wireless system. Mr. Allan stated that he understood that the inventor intended to experiment with a land line in Canada. Personally he could give no opinion on the subject, but could only repeat the impressions which he had gathered from Signor Marconi himself. Mr. Allan stated that he had a very high opinion of the wireless telegraph so far as regards communication on the sea. At any rate, the Montreal Telegraph Co. would not be immediately affected, as it did not operate its system itself, and its lease to the W.U. Telegraph Co. would not expire for 75 years. Jesse Joseph remarked that the W.U. Co. did not, apparently, take the possibilities of competition with the wireless system seriously. Some time ago the stock was selling at 88, and now it was 92. A. T. Paterson said he did not consider any of them qualified to pass judgment upon Signor Marconi's invention and its possibilities, as the greatest electrical experts could not themselves come to a conclusion.

J. A. Dart, who constructed the extension of the Tillsonburg, Lake Erie and Pacific Ry. from Tillsonburg to Ingersoll, Ont., is suing the Company for \$3,140 for work done and materials supplied, and for an unstated sum for damages for alleged breach of contract.

**General Telephone Matters.**

The New Brunswick Telephone Co. has declared a quarterly dividend of 1½ per cent.

The Bell Telephone Co. has declared a dividend of 2% payable Jan. 15th to shareholders of record Dec. 31.

The Bell Telephone Co. has recently completed a copper line between Montreal and Quebec, the weight of which is 260 lbs. a mile.

The New Brunswick Telephone Co. has transferred its lines in St. John, N.B., to the new exchange on Chipman's Hill. The new installations are reported to be working satisfactorily.

The Cumberland Railway and Coal Co. has installed a telephone system connecting Springhill with all the stations on the line to Parrsboro', N.S., and to the different offices about the works.

The Bell Telephone Co. has been asked to extend its long distance line now being operated between Oakland and Gladstone, Man., so as to take in Longburn, which is a little off the route of the line.

Montreal city council proposes to secure power in the new charter it is desirous of obtaining, to erect poles in the Mount Royal park which can be utilized for telephone and electric light purposes.

A. J. Richards, Manager of the Bell Telephone Co. at Walkerton, Ont., has been appointed Manager at Berlin, Ont.; and has been succeeded at Walkerton by F. W. Dewar, hitherto Inspector at Stratford, Ont.

The Eastern Telephone Co., Sydney, N.S., has declared a dividend of 3% for the half year ended Nov. 30, 1902. The gross revenue amounted to \$12,720, an increase of \$4,510 over the corresponding half year of 1901.

The Victoria and Esquimalt Telephone Co. will apply next session of the B. C. Legislature for an act authorizing it to increase its capital and borrowing powers, and to enable it to acquire the property and franchises of any similar company.

The St. George Electric Co. will apply next session of the Quebec Legislature for an act of incorporation with power, among other things, to construct telephone lines from Great Falls, on the Chaudiere river, to Ste. Mary de Beauce; and from Great Falls to St. Come, and other points.

The American Telephone and Telegraph Co., in recently applying to have its stock listed in New York, gave a list of securities owned by it, including the Bell Telephone Co., of Canada, \$2,083,220 of stock, out of a total of \$5,395,320, and \$302,500 of bonds out of a total of \$2,000,000.

The Hamilton, Ont., city council has decided to memorialize the Dominion Government with a view to getting the latter to take control, and to operate all trunk telephone lines in the Dominion and also to ask for power to establish a municipal telephone service if found practicable.

The Red Falls Electric Co. will apply for an act of incorporation next session of the Quebec Legislature, with power among other things, to construct a telephone line from Lyster to Victoriaville, from Lyster to Broughton Mines, and to any point within a distance of 20 miles from Lysander Falls, Que.

The Westport and Digby Telephone Co.'s line is reported to have been sold to S. Gidney, of Mink Cove, N.S., who will put it in thorough repair. In connection with this purchase press reports state that the Dominion Government will be asked to place new cables between Petite and Grand Passages.

The Vernon and Nelson Telephone Co. will apply next session of the B. C. Legislature for an act authorizing it to divide its capital into ordinary and preferred shares; to increase its borrowing powers; to acquire the property of any similar company, and to enable it to extend its operations to all parts of the province.

The Great Northern Railway, U.S., is installing a telephone system along its lines in Minnesota and North Dakota, in place of the telegraph, for use in operating trains. The telegraph it still retained, but the management, it is said, look forward to displacing the telegraph operators and making the agent fill his place at the telephone.

The New Westminster and Burrard Inlet Telephone Co., and its employes, who struck Dec. 3, have reached an agreement under which an advance in wages is given, and the union is to be recognized in future. The non-union hands taken on to replace the strikers have been kept on, but all future employes are to be union hands.

Application will be made next session of the B. C. Legislature for an act incorporating a company to construct and operate telephone and telegraph lines through the mainland of B. C., to purchase or lease telephone or telegraph lines already constructed, and to amalgamate with any other similar company. D. G. Macdonnell, Vancouver, B.C., is the solicitor.

The earliest telephone line was erected on the outskirts of Brantford, Ont., by Prof. A. G. Bell, the inventor; the first commercial line was established at Hamilton, Ont., in Oct., 1877, by the Direct Telephone Co., and subsequently a number of private lines were constructed in Toronto and Montreal, which were the foundations of the exchanges in the different cities.

The Carman Electric Light and Power Co. has been incorporated under the Manitoba Companies' Act to operate "telephones, telegraphs, phonographs, and all electrical apparatus now known, or that may hereafter be invented." The incorporators are H. A. Aylwin, J. E. Campbell, J. M. Toombs, H. E. Robison, of Carman and E. S. Harrison, of Winnipeg; capital, \$50,000; head office, Carman.

The Ste. Apolline and St. Paul Telephone Co. is making application for incorporation under the Quebec Companies' Act, to construct a telephone line to connect the parishes of Ste. Apolline, Notre Dame du Rosaire, St. Paul de Montminy, St. Pierre, St. Francois, Berthier, St. Thomas, Cap Saint Ignace and the town of Montmagny. The capital is to be \$2,000 and the offices are to be at St. Paul de Montminy.

The Bell Telephone Co. is installing a telephone system throughout the King Edward hotel, Toronto, similar to that recently installed in the Windsor hotel, Montreal. From 400 to 450 rooms will be equipped, the instruments being of mahogany to harmonize with the trim and furnishings of the rooms. In addition to connecting with the house exchange, guests will be able to call up central and obtain such numbers as they desire.

The Port Arthur and Fort William, Ont., municipal telephone systems have been installed. In the former town the wires are carried on the electric light poles, and in the latter on special poles, the capacity in each town being for 600 lines. There is a trunk line connecting the two towns. The construction has been done by the towns under the supervision of electric light and power commissions. The switch boards are central energy lamp signal trunking board with double supervisory clearing-out signals, pilot lamps, etc., with a capacity of 280 subscribers' lines, and so arranged that they can be made into full multiple switch boards by adding other sections. The rates are \$1 a month for residence service and \$2 a month for business service. In Port Arthur on Dec. 31st, there were 104 business and 102 domestic telephones connected with the municipal system.

**N**OTICE is hereby given that the Canadian Northern Railway Company will apply to the Parliament of Canada, at its next session, for an Act authorizing the construction of the following lines of railway, namely:

(a) Commencing on the Company's line at or near Sperling, in Manitoba, thence in a generally southerly and easterly direction to a point at or near Morris, thence to a point on the Company's line between Ste. Anne and the Southern boundary of the Province of Manitoba;

(b) Commencing at a point on the Manitoba Railway Company's line at or near Hartney in Manitoba, thence in a generally northerly and westerly direction to a point at or near Regina;

(c) Commencing at a point on the Company's line at or near Swan River in Manitoba, thence along the Swan River Valley and in a generally westerly direction to a point on the Company's authorized line at or near the crossing by that line of the Saskatchewan River;

(d) Commencing at or near Battleford at a point on the Company's authorized line west of Battleford, thence in a generally westerly direction to a point on the Brazeau River in the District of Alberta;

(e) Commencing at a point on the Company's authorized line at or near Edmonton, thence in a generally northerly or north-easterly or north-westerly direction for 100 miles;

(f) Commencing at a point on the Company's authorized line or on the authorized line of the Edmonton, Yukon and Pacific Railway, west of Edmonton, thence in a generally westerly and southerly direction to a point at or near Rocky Mountain house in the District of Alberta;

(g) Commencing at a point on the authorized line of the Morden and North Western Railway between Neepawa and the westerly boundary of Manitoba, thence in a generally north-westerly direction to a point on the Company's authorized line between Grandview and Battleford.

Also extending the times for the construction and completion of the Company's lines of railway.

Z. A. LASH,  
Solicitor for the Applicants.

Toronto, 14th January, 1903.

**N**OTICE.—The Calgary and Edmonton Railway Company will apply to the Parliament of Canada, at its next session, for an Act to authorize it to construct the following lines:—

1. A branch line from Wetaskiwin on its main line easterly a distance of 100 miles;
2. A branch line from a point between Lacombe and Red Deer on its main line easterly 100 miles;
3. A line from Strathcona, the present terminus of its railway, to the Town of Edmonton by the most feasible route;
4. A branch line from some point at or near Edmonton in a northerly or north-westerly direction for a distance of 100 miles; with power to extend along such lines its telegraph and telephone lines and operate the same, together with such other powers and privileges as are usually given to railway companies and which may not be included in its charter.

KINGSMILL, HELLMUTH,  
SAUNDERS & TORRANCE,  
Solicitors for the Company.

Dated this 18th December, 1902.

**N**OTICE.—The Manitoba and North-Western Railway Company will apply to the Parliament of Canada at its next session, for authority to build a branch line from a point on its main line between Yorkton and Prince Albert westerly and north-westerly to a point on the North Saskatchewan River in the vicinity of Battleford; thence to a point at or near Wetaskiwin on the Calgary and Edmonton Railway; and also a branch line from a point at or near Churchbridge on the said main line southerly to a junction with the Pleasant Hills Branch of the Canadian Pacific Railway at or near Esterhazy.

By order of the Board,

H. CAMPBELL OSWALD,  
Secretary.

MONTREAL, 8th December, 1902.

Established 1849

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

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Gen. Man. Western Canada, Toronto.

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## PURCHASING AGENTS' GUIDE.

(Continued from third page of Cover.)

### Steam Shovels

M. Beatty & Sons.....Welland, Ont.  
James Cooper.....Montreal.  
W. H. C. Mussen & Co.....Montreal.

### Steel

James Cooper.....Montreal.  
B. J. Coghlin & Co.....Montreal.  
Wm. Jessop & Sons.....Sheffield, Eng.  
Rice Lewis & Son.....Toronto.

### Steel Buildings

Dominion Bridge Co.....Montreal.

### Steel Plate

James W. Pyke & Co.....Montreal.

### Steel Tires

B. J. Coghlin & Co.....Montreal.  
Latrobe Steel Co.....Philadelphia, Pa.  
James W. Pyke & Co.....Montreal.

### Structural Metal Work

Dominion Bridge Co.....Montreal.  
James W. Pyke & Co.....Montreal.

### Switches

Canada Switch and Spring Co.....Montreal.

### Switch Lamps

The Hiram L. Piper Co.....Montreal.

### Switch Ropes

The B. Greening Co.....Hamilton, Ont.

### Switch Targets

Acton Burrows Co.....Toronto.

### Telegraph and Telephone Office Signs

Acton Burrows Co.....Toronto.

### Tie Plates

B. J. Coghlin & Co.....Montreal.

### Tobacco and Cigars

The Hudson's Bay Company.....

### Tollet Paper

The Hudson's Bay Company.....

### Tools

Rice Lewis & Son.....Toronto.

### Track Jacks

James Cooper.....Montreal.  
Duff Manufacturing Co.....Allegheny, Pa.  
W. H. C. Mussen & Co.....Montreal.  
A. O. Norton.....Coaticook, Que.

### Track Tools

Canada Switch and Spring Co.....Montreal.  
James Cooper.....Montreal.  
Rice Lewis & Son.....Toronto.  
W. H. C. Mussen & Co.....Montreal.

### Tramway Equipment

James Cooper.....Montreal.  
J. J. Gartshore.....Toronto.

### Trucks (Electric Car)

Baldwin Locomotive Works.....Philadelphia, Pa.  
Canada Switch and Spring Co.....Montreal.

### Trucks (Warehouse and Express)

Rice Lewis & Son.....Toronto.

### Turntables

Dominion Bridge Co.....Montreal.

### Varnishes

McCaskill, Dougall & Co.....Montreal.

### Vessels

Polson Iron Works.....Toronto.

### Waste

B. J. Coghlin & Co.....Montreal.  
Rice Lewis & Son.....Toronto.  
N. L. Piper Ry. Supply Co.....Toronto.  
The Queen City Oil Co.....Toronto.

### Wheelbarrows

James Cooper.....Montreal.  
Rice Lewis & Son.....Toronto.

### Window Blinds

The Hudson's Bay Company.....

### Wines and Liquors

The Hudson's Bay Company.....

### Wire & Wire Rope

Dominion Wire Rope Co.....Montreal.  
The B. Greening Co.....Hamilton, Ont.  
Rice Lewis & Son.....Toronto.  
W. H. C. Mussen & Co.....Montreal.  
The Wire and Cable Co.....Montreal.

### Wire Cloth

The B. Greening Co.....Hamilton, Ont.

### Wire, Copper

E. F. Phillips Electrical Works, Ltd.....Montreal.

### Wire, Electric

E. F. Phillips Electrical Works, Ltd.....Montreal.  
The Wire and Cable Co.....Montreal.

### Wire, Insulated Copper

E. F. Phillips Electrical Works, Ltd.....Montreal.

### Wire, Telegraph and Telephone

E. F. Phillips Electrical Works, Ltd.....Montreal.  
The Wire and Cable Co.....Montreal.

### Yachts

Polson Iron Works.....Toronto.

# The Purchasing Agents' Guide

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

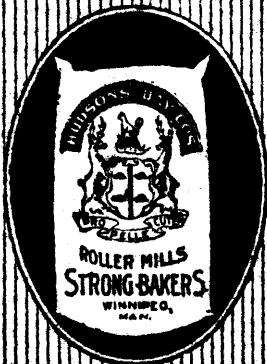
<b>Accident Insurance</b> Travelers' Insurance Co..... Montreal.	<b>Derrick Ropes</b> The B. Greening Co..... Hamilton, Ont.	<b>Locomotives (Back)</b> American Locomotive Co..... New York, N.Y. Baldwin Locomotive Works..... Philadelphia, Pa.
<b>Aerated Waters</b> E. L. Drewry..... Winnipeg.	<b>Derricks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

(Continued on preceding page.)



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