

THE  
PACIFIC GREAT EASTERN  
RAILWAY



## RAILWAY DEVELOPMENT.

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

**Canadian Western Ry.**—The Dominion Parliament will be asked next session for an act incorporating a company with this title with power to construct a railway of standard or other gauge, and to be operated by steam, electricity or any other kind of locomotive power, between the following points: From the International boundary between the east side of range 23, and the west side of range 28, west of the 4th principal meridian, to the C.P.R. Crow's Nest Pass line, between Cowley and Pincher Creek, Alta.; thence northwesterly, following the valley of the north fork of the Old Man River, to the Livingstone Mountains, near sec. 33, tp. 10, range 3, west of the 5th principal meridian; thence through the pass of the Livingstone Mountains along the river valley to High River, near tp. 17, ranges 4 and 5, west of the 5th principal meridian, and thence northeasterly to Calgary; also, a line from the Middle Branch at or near its junction with the Livingstone River, to High River, thence to the Rocky Mountains west of Gould's Dome; thence through a pass in the Rocky Mountains to the valley of the Elk River, and along the valley of the Elk River to a junction with the C.P.R. and the Great Northern Ry. (Crow's Nest Southern Ry., near Michel, B.C.). Power will also be asked to construct branch lines, telegraph and telephone lines, to generate electricity for light, heat and power, to develop water powers, to make traffic agreements with other railway companies, to acquire the franchises of, or to amalgamate with, other companies having similar powers, and to connect with any line of railway in the State of Montana. Hough, Campbell, and Ferguson, Winnipeg, are solicitors for the applicants. (See Alberta and British Columbia Ry., Aug., pg. 547).

**Duluth, Rainy Lake and Winnipeg Ry.**—A press dispatch from Duluth, Minn., says that construction will be started at an early date upon the line from Virginia, the present southerly terminus of the line, to Duluth, and that the work will be financed by the Minneapolis, St. Paul and Sault Ste. Marie Ry. Whether this be the fact or not, E. Pennington, Vice-President and General Manager of the M., St. P. and S.S. Ry., and W. F. Fitch, President Duluth, South Shore and Atlantic Ry., met representatives of the D., R.L. and W.R., and went over the line early in Oct. At present the D., R.L. and W.R. extends from Virginia, Minn., to the Rainy River, and has connection with Fort Frances, Ont., over a bridge which it owns jointly with the Canadian Northern Ry. It now secures a connection with Duluth over the Duluth, Missabe and Northern Rd. (June, pg. 403).

**Howe Sound, Pemberton and Northern Ry.**—The plans filed by the promoters of this projected railway show that the line will start from the head of Howe Sound, near the mouth of Squamish River, and follow the valley of that stream to Pemberton Meadows, where it will cross, and then proceed northwards, following easy gradients through the valleys to Anderson Lake, a distance of 92 miles. With the exception of a few heavy cuts, and a couple of large bridges, no great engineering difficulties will be encountered. The plans have been approved by the Government. The line will tap the rich agricultural areas in the Squamish, Pemberton Meadows and Lillooet districts, and open up a route for getting out the timber from extensive areas in the upper valley of the Squamish, and extending back towards the Pemberton Meadows. It is estimated that there is 170,000,000 ft. of marketable standing timber in the area in question, while there are

other large unexplored areas, which will be rendered accessible by the construction of this line. There is deep water on Howe Sound right up to the Squamish River, available all the year round, and it is proposed to develop a port there for the export of lumber. The promoters of the company have acquired an area of 71 acres at the mouth of the river, which will be used for wharves and terminal facilities. Part of this land is tide-flat water frontage and the remainder extends some distance up the valley. At Anderson Lake the line will reach a point where water transportation is available, and it is proposed to establish a line of steamers to operate on the lake and the waters tributary thereto. The right-of-way for the line is being secured and it is understood that as soon as this is done, a contract will be let for the construction of the first 15 miles into the Pemberton Meadows. It is hoped to have this portion of the line completed by the end of 1908.

J. C. Gill, ex-Reeve of North Vancouver, B.C., who is one of the provisional directors of the company, recently stated that financial arrangements had been completed, and the construction of the line would be proceeded with as soon as the right-of-way had been secured. It is considered that the present title is rather cumbersome, and it is likely that at the next session of the Provincial Legislature application will be made for an act changing it to the Howe Sound and Northern Ry. (Oct., pg. 713.)

**Hudson's Bay Pacific Ry.**—Application will be made next session of the Dominion Parliament for an act extending the time for the commencement and completion of the company's projected line of railway. R. V. Sinclair, Ottawa, is solicitor for the applicants. (Oct., pg. 713.)

**Intercolonial Ry.**—An inspection of the facilities at the Island yard, St. John, N.B., was made Oct. 1, by W. B. McKenzie, Chief Engineer; T. C. Burpee, Engineer of Maintenance of Way, and other officials. It is said that the object of the inspection was to decide on the work to be done in preparation for the winter traffic.

It is expected that the new shops at Moncton, N.B., will be ready for occupancy during Nov. The machinery, including the electric transfer table between the passenger car shops, is being installed. The lighting and heating plants have been placed in several of the buildings, and the finishing touches are being given in various directions. (Oct., pg. 713.)

**International Ry. of New Brunswick.**—The Dominion Government has entered into a contract under the terms of the act respecting the granting of aid to certain railways, with the company for the construction of a line from the western end of the 20 miles as already constructed from Campbellton, N.B., to the St. John River, between Grand Falls and Edmonton, N.B., a distance not exceeding 90 miles. Construction is being carried on upon this mileage from both ends and a considerable amount of grading has been done. The general contractor is T. Malcolm, Campbellton, N.B. (Sept., pg. 615.)

**Lake Temiskaming to Satika Lake.**—A press dispatch from Ottawa, Oct. 16, says a company has been formed at Hull, Que., with a capital of \$1,000,000, with the object of constructing about 28 miles of railway, from Lake Temiskaming to the Upper Satika Lake. The line will, it is said, be used mainly to carry ore from the silver mines of the vicinity to the C.P.R. The members of the company are reported to be F. A. Chanterton, H. Dupuis, H. A. Goyette, J. Rene, W. H. Rowley, G. H. Millen, J. N. Fortin, J. E. Gravelle, J. Caron, D. Caron. The construction work, it is said, will be carried out under the supervision of J. Le Fleme, Hull, Que.

Probably the only charter now available for the construction of such a line is that of

the Cobalt Range Ry. Co., which was incorporated by the Dominion Parliament in 1906. This act authorized the construction of a railway from Haileybury, via the townships of Bucke, Coleman and Lorraine, to a point opposite Fort Temiskaming, in Pontiac County, Que.; thence across the Ottawa River by means of a railway steam ferry to Fort Temiskaming, thence to Ville Marie, and easterly and southerly either to a point on the proposed Interprovincial and James Bay Ry., between Ville Marie and Kippewa, Que., or to the present terminus of the Lake Temiskaming Colonization Ry., at or near Kippewa Station. The provisional directors of the company are: L. H. Timmins, Mattawa, Ont.; J. McMartin, Cornwall, Ont.; J. J. Heney, C. A. McCool, and M. J. Gorman, Ottawa. (See Cobalt Range Ry., Aug., 1906, pg. 451).

**Matane and Gaspé Ry.**—The United States Consul at Rimouski, Que., in reporting to his Government upon the work in progress upon this line, says it will prove a valuable feeder for the Intercolonial Ry., which it intersects at St. Flavie. For the present the construction of the first section only is contemplated, viz.: From St. Flavie for 37 miles, but it is contemplated to carry it as expeditiously as possible to Mount Louis, 133 miles, the ultimate terminus being Gaspé, 240 miles from St. Flavie. In addition to the subsidy voted by the Dominion Parliament, and the 4,000 acres of land per mile for the 37 miles under construction, by the Quebec Provincial Legislature, the following subsidies have been voted by municipalities through which the line will pass: St. Flavie, \$5,000; Little Metis, \$500; Sandy Bay, \$4,000; Rivière Blanche, \$3,000; Matane, \$13,000.

We have been officially advised that good progress is being made upon the 35-mile section which has been put under contract. The plans for an extensive bridge over the Metis River are being completed, and it is said that work on the same will be started shortly. The construction of this bridge would enable the contractors to complete the line into Metis, which it is proposed to have done by the fall of 1909. (Oct., pg. 713.)

**Michigan Central Ry.**—The work of constructing a subway under the M.C.R. tracks at Ross St., St. Thomas, Ont., was started Oct. 14. (July, 1907, pg. 479.)

**Midway and Vernon Ry.**—A contract has been entered into between the Dominion Government and the company, under the provisions of the act respecting aid to certain railways, for the construction of a railway from Midway to Vernon, B.C., a distance not to exceed 150 miles. (Oct., 1907, pg. 743.)

**Prince Edward Island Ry.**—Tenders were received to Oct. 31, by the General Manager of Government Railways, for the construction of a branch line from Harmony to Elmira, P.E.I., a distance of about 10 miles. Harmony is a station on the Charlottetown-Souris line, 55 miles from Charlottetown, and five miles from Souris. (Sept., pg. 610.)

**Quebec Bridge and Ry. Co.**—One of the questions which will be considered by the engineers who are preparing plans for the reconstruction of the bridge across the St. Lawrence at Quebec, will be its height above water. When the bridge was originally designed the Boards of Trade and the shipping interests along the St. Lawrence river agreed that a height of 150 ft. above high water mark would be sufficient clearance for vessels passing to Montreal. Since that time the size of vessels has considerably increased, and a recent resolution passed by the Montreal Board of Trade asked the Dominion Government to fix the height of the bridge at 190 ft. above high water mark. (Oct., pg. 713.)

**Quebec Central Ry.**—Location surveys are being made for the extension of the Chaudière Valley branch from St. George, Beauce,



sion of the line from the C.P.R. to the Michigan Central Rd. tunnel, about 1.25 miles. This portion of the line will be put in running order as soon as the point of connection with the M.C.R. track has been decided on. The company has begun the construction of an interlocking plant at the crossing of the P.M.R. at Walkerville, and another near the crossing of the C.P.R. and the Windsor, Essex and Lake Shore Rapid Ry.

The Dominion Parliament has passed an act amending the company's Act in details. The capital is increased to \$400,000, the date of the annual meeting is altered to the third Tuesday in May. It is authorized to issue bonds in amount of \$40,000 a mile, and to construct a track line. A new section authorizes the company to acquire steam and motor vessels, and to operate the same, to carry on business as forwarding agents, wharfingers and warehousemen, and to employ a board of Railway Commissioners. An order authorizing the company to open for traffic the portion of its line from the junction with the G.T.R. at East tp. to its junction with the C.P.R. at Sandwich West tp. (Oct. 1909, pg. 477.)

**Gatineau and Ungava Ry.**—The Dominion Parliament has incorporated a company with this title to build a railway from the crossing of the northwest corner of the Gatineau River to Lake Umbagog, 140 miles, thence to Lake Umbagog, 60 miles, thence to Hornum Lake, 450 miles from the starting point, thence round the sources of Pig Lake, Lake Kaniapiskan and on by two routes to Leaf Lake, on the Hudson Bay, a total distance of 900 miles, with a branch from Lake Umbagog to Lake Ungava, about 200 miles. The provisional directors are—A. T. Devlin, Ottawa; R. B. Massey, Quebec; S. T. Green, Quebec; W. Rous, Montreal. (Jan. pg. 109.)

**Great Northern Mining Co.**—The Nova Scotia legislature has authorized this company to build from its mill at Chert Eastern Harbor on Cape Breton. (May pg. 351.)

**Ha Ha Bay Ry.**—The Dominion Parliament has voted a subsidy to aid in the construction of a line from Jonquiere, via La Grande Pate des Ha Ha, 24 miles. (May pg. 351.)

**Halifax and Eastern Ry.** Subsidies have been voted as follows by the Dominion Parliament.—For a line from the C.P.R. near Dartmouth to the Settlement N.S. not exceeding 12 miles; for a line from Dean's Settlement to the C.P.R. not exceeding 52 miles; for a line from New Glasgow to Mel-

ers, which will carry it to the furnaces. As soon as the ballasting on the branch from Nictaux has been completed the ballasting gang will start work on adding additional ballast to the Middleford and Victoria Beach section.

A subsidy has been voted by the Dominion Parliament in aid of the building of a branch railway from Lunenburg to Upper La Have, N.S. not to exceed 12 miles. (Oct. 1909, pg. 743.)

**Howe Sound and Northern Ry.**—A press report from Vancouver, May 10, states that it is expected to have the first section of this railway completed and ready for operation in about six weeks. The report says—With the bridging of the south fork of the Squamish river, a little more than a mile from Newport, the southern terminus of the line, and the grading of the gap between that place and the bridge the road will be practically completed. (May pg. 351.)

**Hudson Bay and Pacific Ry.**—Press reports state that L. Taylor has started work on the north side of the Saskatchewan River and is proceeding with the work of making a survey in the direction of Port Churchill, and that L. T. Grice, in charge of a second party, has left to take up the work at another point. The object of these surveys is to find a better route than the one previously surveyed by J. B. Tyrrell, which was via Pas Mission. The route to be followed by the first party will be south-east of Candle Lake, thence to Goose Lake, and will touch the survey for the Government line to Hudson Bay about 150 miles north of the Pas. The second party will work round the north east of Candle Lake, and thence by an air line to Frog Portage and on to Port Churchill. H. Speer, who is stated to be the managing director of the company is quoted as having stated in an interview at Prince Albert, May 3, that the building of the line will be started this summer and that there are no financial difficulties in the way of the work being gone on with. He also stated that the headquarters and terminus of the line would be at Prince Albert, and that it was possible the line would be operated in connection with the Government line to Hudson Bay.

We are advised from an independent source that the surveys made during last winter by Mr. May were of a preliminary character, and that the present surveys are for the location of the line northerly. The intention is to obtain a route away from the muskegs in the vicinity of Pas Mission. The company is an English one, its object being stated by a representative of the company to build the road, and that it is not seeking favors from any source. (May pg. 351.)

**Intercolonial Ry.**—We are officially advised that the contract with H. G. Kirk

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H. A. Smith. (May, pg. 349.)

**Howe Sound and Northern Ry.**—An-  
nouncement was made recently in Van-  
couver that a contract had been let for  
the completion of the line from the  
present terminus to Newport, B.C., and  
that it was expected to have the por-  
tions of the line now under construc-  
tion ready for operation at an early  
date. It is also reported that construc-  
tion is being proceeded with on the  
Marquain River branch, which is in-  
tended to open up some extensive tim-  
ber areas. Nothing, it is reported, has  
been decided as to construction between  
Pemberton Meadows and Lillooet. J.  
C. Gill, Manager, is quoted as stating  
that the company is an independent  
one, and it was proposed ultimately to  
extend its line to Fort George on the  
Grand Trunk Pacific Ry. (June, pg.  
449. See also British Columbia and  
Alaska Ry.)

**Howe Sound and Pacific Ry.**—We are

JULY  
1910



that a free right-of-way had been secured in Halifax and Pictou counties, in addition to cash bonuses of \$12,000. It was proposed to locate the company's terminals and machine shops in Dartmouth, and he read a letter from T. B. Fogg, V.P. and G.M., as to the land requirements. An area of 20 acres was required having a water frontage of from 1,200 to 1,500 ft.; and a site for a freight and passenger station situated near the ferry. Mr. Cameron said the company asked for a bonus of \$50,000 preferably to providing free sites. The company's terminals in Dartmouth would be used by the Intercolonial Ry., and it would use that line to get out of Dartmouth.

The Dominion of Canada Trust Co. of London, Eng., which has been recently formed, is interested in the placing of the company's securities on the market. C. T. Part, (press reports, say he is director of Barclay & Co., bankers, London, but his name does not appear in the published list of directors) and S. Hirsch, sailed from Rimouski, June 30, after completing their business with the Government.

The same interests have acquired the Dickie lumber areas in Nova Scotia, covering altogether 464,000 acres, for the opening up of which the railway is to be constructed. The lumbering interests will be operated by the Eastern Canada Lumber Co. (July, pg. 547).

**Howe Sound and Northern Ry.**—A meeting of shareholders was held in Vancouver July 4, to pass a resolution authorizing the directors to borrow \$4,200,000 at 4% and to issue debentures secured upon the assets, to be repaid in 30 years. The proceeds will be used for construction. (July, pg. 547).

**Hudson Bay and Pacific Ry.**—A pros-



miles. (Oct., pg. 502.)

**Pacific Great Eastern Ry.**—We have been officially advised that P. Welch has been awarded the contract for the building of this railway, and that he has started work at Lillooet, B.C. As a consequence he has resigned office as Vice President. His successor in that office has not yet been appointed. A. Kellett, the contractor's superintendent at Lillooet, is reported to be arranging for the letting of subcontracts on the line northwesterly.

The property of the Howe Sound and Northern Ry. was taken over by the P.G.E. Ry., Nov. 9. The purchase, we are officially advised, includes all the constructed line, about 12 miles, rolling stock, surveys for extensions, good will, and all assets of every description. The miscellaneous assets include 3,000 ft. of waterfront at the head of Howe sound, and the unsold portion, approximately one half of the townsite of Newport, belonging to the Howe Sound Development Co. The purchase of this line simplifies the construction of the P.G.E. Ry. between Vancouver and Lillooet. The route maps for this section of the line are being considered by the Provincial Minister of Railways. E. White has been placed in charge of the contractor's office at Vancouver, and will have charge of construction between that point and Lillooet. (Nov., pg. 558.)

The Pacific Great Eastern Development Co. has been incorporated under the British Columbia Companies' Act to develop lands and other resources along the route of the P.G.E. Ry. The capital is fixed at \$250,000, and the provisional directors are:—T. Foley, P. Welch, J. W. Stewart and D. A. Tate.

**Peace River Great Western Ry.**—Edmonton, Alta., press reports state that the charter of this company has been acquired by French financial interests, and the Provincial Secretary is reported as stating that plans have been filed and that construction will be started in the spring. The line is projected from Edmonton northwesterly to the west end of Lesser Slave Lake, on to the Peace River Crossing, thence to Dunvegan. (Feb., 1911, pg. 113.)

**Quebec Central Ry.**—We are officially advised that the 1.34 miles of line from a point 30 miles from St. George to St. Sabine, for which a contract under the Dominion act granting subsidies in aid of certain railways was recently entered into, is an extension of the Chaudiere Valley-Coburn extension. The piece of line has been built, and has been in operation since Jan. 2, 1911. (June, pg. 301.)

**Quebec Rapid Transit Ry.**—The Dominion Parliament is being asked to incorporate a

*Report*  
December  
1911



provincial Government aids in the building of these lines by guaranteeing the principal and interest of the company's bonds for \$12,000 a mile. The money raised is to be held in trust by the Government and paid out as the work on the several lines proceed upon the certificate on the order of the provincial Minister of Railways. Construction is to be gone on with this year and all the lines are to be completed by Dec. 31, 1914.

We are officially advised that the construction programme for this year covers a large mileage in Saskatchewan and Alberta. Starting from Radville, on the extension from Maryfield, a line to Moose Jaw, Sask., 35 miles was put under contract last year. This will be finished this year. About five miles of grading has to be completed at the Moose Jaw end. The Cowan Construction Co. has the contract. An agreement has been reached with the Moose Jaw city council as to the entrance into the city and at a recent meeting at which the agreement was finally settled it was stated that the extension would be in operation into the city by Aug. 1, and that the station and other buildings would be completed by July 1.

Beyond Radville the Maryfield extension is being operated to Bengough, and we are advised that it will probably be extended further west in the direction of Lethbridge this year. No contract has yet been let.

The line from Saskatoon, Sask., through the Goose Lake country, which is now operated to Alzask, will be continued westerly.

The Thunderhill branch, which is in operation from Swan River, Man., to Precorville, Sask., will be extended for 15 miles. No contract has yet been let.

The line from Prince Albert to Battleford, Sask., is being operated to Blaine Lake, 44 miles and is to be completed this year. Some work has to be finished on the mileage put under contract last year, but no contract has been let for this year's work.

The branch from Vagreville to Calgary, which is now being operated to Drumheller, will be completed by the Northern Construction Co.

It is proposed to start construction at Manson, Alta., 11 miles north of Drumheller, on a line 130 miles easterly to meet the extension of the line from Saskatoon, being built westerly through the Goose Lake country. The contract for grading this 130 miles has not yet been let.

A line is projected from Calgary to Macleod, Alta., on which it is possible some grading will be done this year, but no contract has been let. A contract was let in 1911 to the Cowan Construction Co. for grading about 35 miles southwesterly direction from Macleod, and this is to be finished up this year.

From Warden, Alta., about four miles south of Estler, on the Vagreville-Calgary line, a line is under construction to the Bratzen River coal fields, 170 miles. The Northern Construction Co. will complete the grading started last year and complete the whole line this season.

On the line to Athabasca Landing, Alta., about 10 miles of track have yet to be laid. This will be done as early as possible. The Northern Construction Co. has the contract.

On the main transcontinental line track has been laid to the Pembina

plotted to the Yellowhead Pass, about 150 miles from St. Albert, Alta., by the end of the year, and that track will also be laid. The contract for this section of the line is held by the Cowan Construction Co. and the Northern Construction Co.

The revised route map of the C.N.R.'s projected line from Edmonton to Red Deer, Alta., which has recently been approved by the Minister of Railways, starts from Strathcona, and keeping west of the C.P.R. Calgary and Edmonton Ry., finally crosses it at Lacombe, and joins up with the surveys of the Canadian Northern Western Ry. near Red Deer river. Crossing the river a few miles south the line passes through Red Deer, and keeping between the C.P.R. C. and E. Ry. and the G.T. Pacific Ry., enters Calgary from the southeast on the same right of way as a line now under construction from the east.

The House of Commons has under consideration a bill amending the act of 1910 guaranteeing Canadian Northern Alberta Ry. securities in respect of 150 miles of line westerly from St. Albert.

Canadian Northern Pacific Ry.—The Premier, in answer to questions in the British Columbia Legislature, stated recently that bonds for \$1,438,356 were issued by the company, Nov. 18, 1911, which had been guaranteed by the Government; the security deposited with the Government consisted of 5,000 fully paid up shares of the Canadian Northern Ry., of the value of \$500,000. The company had not made any application for any land grant under the schedule.

The British Columbia Legislature has passed an act providing for the extension of the C.N.P.R. lines. It is provided that the company shall build 150 miles from the 100th milepost on the Vancouver Island line authorized to be built under the agreement confirmed by chap. 2 of the statutes of 1910, to the east coast of the island, as arranged by order-in-council of Jan. 27; from Kamloops to Vernon, and Lumby, from Vernon to Kelowna via Long Lake; and from Vernon to the east arm of Okanagan Lake, opposite Okanagan Landing. These latter lines will have a total length of 145 miles, and were approved by order-in-council Jan. 26. The province agrees to guarantee the company's bonds in respect of these mileages for \$2,000,000. Construction of these lines is to be started within six months, and they are to be completed within three years of the passing of the act.

T. G. Holt, Executive Agent, and T. H. White, Chief Engineer, completed a trip of inspection over the line under construction from Fort Mann as far as Kamloops, B.C., Mar. 12, and are reported to have said that everything is well forward. Satisfactory progress is being made with the driving of the 2,030 ft. tunnel at Yale, which is expected to be completed in Sept. (Mar. p. 137.)

### Recent Quebec Legislation.

In the Quebec Legislature, Mar. 14, the following acts affecting transportation and allied interests were assented to:—

ENGINEERS' CLUB OF MONTREAL.—Amending act of incorporation.  
MONTREAL ST. RY. MUTUAL BENEFIT Association.—Amending charter.  
RAY RIVER RY.—Incorporation.  
ST. CHARLES AND HUDON RIVER RY.—

### Pacific Great Eastern Railway

The British Columbia Legislature has incorporated a company with this title to build the following railways:—From Vancouver to North Vancouver, thence along the margin of Howe Sound, and the general course of the Squamish River, and continuing northeasterly to Lillooet, on the Fraser River; along the bank of the Fraser River to a junction with the Grand Trunk Pacific Ry. at Fort George, about 450 miles; and such other lines as may be authorized to be built from time to time by order-in-council. The provisional directors are: T. Foley, St. Paul, Minn.; P. Welch, Spokane, Wash.; J. W. Stewart, D. McLeod, Vancouver; V. W. Smith, Hamilton, B.C.; D'A. Tate, Winnipeg, Man.

Another act has been passed confirming agreements made between the Government and Foley, Welch and Stewart for the building of the line, and between Foley, Welch and Stewart and the G.T. Pacific Ry. and the G.T.P. Branch Lines Co., as to the interchange of traffic and as to the terms upon which control of the line may be obtained. The province agrees to guarantee the bonds issued in respect of the construction of the line to the extent of \$35,000 a mile, at 4% for 30 years, taking a mortgage of the line, exclusive of terminals, but including buildings, equipment and rolling stock. The money raised by the sale of such securities is to be held in trust by the Government and paid out from time to time during the progress of construction, upon the certificate of an officer to be appointed. Construction is to be started within three months after the signing of the trust deed securing the mortgage, but not later than July 1, within 10 miles of Vancouver, and there has to be expended an amount equal to the cost of 75 miles within a year, an amount equal to the cost of 175 miles during the next year, and the balance during the third year, so that the whole line shall be fully completed by July 1, 1915. The contractors agree to provide adequate terminal facilities in Vancouver, and are given permission to use any bridges other than their own in crossing Burrard Inlet. The Government grants a free right of way 160 ft. wide through any crown lands, land for stations, sidings, yards, etc., from any vacant crown lands, and exempts the railway and all its property from taxation until July 1, 1925. The railway is not at any time to be declared to be a work for the general advantage of Canada.

The second agreement confirmed by the act provides for the use by the P.G.E. Ry. of the G.T. Pacific Ry. terminals at Fort George; the general interchange of traffic between the two companies; the preference of the Canadian Express Co. and the G.T. Pacific Telegraph Co. to carry on their business over the line, provided the rates are as favorable as those offered by any other company; the exclusive right to operate sleeping cars over the line, provided the P.G.E. Ry. does not operate its own cars; and a provision that the G.T.P. Ry. shall have an option for 60 days to acquire the controlling interest in the P.G.E. Ry. after having received notice that a proposition for its purchase has been received by Foley, Welch and Stewart.



with. A similar decision has been reached by the Government with regard to the projected line to Baddeck on Cape Breton Island, N.S., for the building of which tenders were asked by the late government.

The question of the building of a second track for the entire distance between Halifax, N.S., and Moncton, N.B., is being considered. Some portion of the line out of Halifax, and at the Moncton end, is already double tracked, and if the rest of the work be undertaken, there will be considerable grade reduction and curve elimination done. However, it is not proposed to make the whole section a double track line, as it is suggested that a new single track line be built around the Cobequid Mountain, from near Parrsboro, by Minas Basin to Truro. The negotiations reported to be in progress with the C.P.R. for running rights into Halifax, are said to be involved in the consideration of this second track work. (April, pg. 181.)

**Interprovincial and James Bay Ry.**—A subsidy in aid of the building of this line from the Lake Temiscamingue Colonization Ry., a C.P.R. branch terminating at Timiskaming, with a branch to Kippawa, Que., to the Des Quinze River, 26 miles, has been voted by the Dominion Parliament in lieu of that given in 1905.

The company was originally incorporated by the Dominion Parliament in 1901, and the time for construction has been extended on several occasions, the most recent being at the recent session.

The Quebec Legislature has granted 4,000 acres of land a mile for 50 miles of the line from the present terminus of the C.P.R. line at Gordon Creek, to Villie Marie. (Dec., 1911, pg. 1133.)

**Kettle Valley Lines.**—It is reported that an arrangement is being made between the company and the British Columbia Government for changing the route of the line now under construction, in order that the main line may be carried through Princeton, B.C., instead of building a branch into the town. Survey parties are in the field locating the

toba Legislature has incorporated a company with this title to build a railway, to be operated by steam, electricity or other power, from lot 3, Klondike, near Winnipeg, northerly, but west of the C.P.R. Gimli branch, to Sturgeon Bay, thence to Grand Rapids, and thence northerly and easterly to Hudson Bay. Power is also given to build branch lines. The provisional directors are—C. W. N. Kennedy, C. Vokes, Winnipeg; A. C. Clark, Parkdale, Man.; B. S. Benson, Selkirk, Man.

**Montreal Central Terminal Co.**—The Dominion Parliament has extended the time within which the bridges and tunnels at Montreal, authorized by chap. 109, statutes of 1909, may be constructed. It is provided that the company may only exercise its powers upon the authority of the Governor in Council, and that it can only have power of expropriation upon obtaining special legislation. (April, pg. 182.)

**Montreal to National Transcontinental Ry. and Hudson Bay.**—A subsidy has been voted by the Dominion Parliament in aid of the building of a line from near Montreal, to the National Transcontinental Ry., about 837 miles west of Moncton, a distance of not to exceed 300 miles. This is in lieu of a subsidy granted in 1910. A subsidy has also been voted for a line from near mileage 837 west of Moncton on the National Transcontinental Ry., to the mouth of the Nottaway River on James Bay, not to exceed 300 miles.

The Quebec Legislature has granted 4,000 acres of land a mile for the first section of the line mentioned above, and 5,000 acres a mile for the second section. (See Joliette and Lake Manouan Ry., on another page.)

**North Shore Power, Ry. and Navigation Co.**—The Quebec Legislature has granted 3,000 acres of land a mile in aid of a line from Seven Islands Bay, towards Clark City and St. Margaret River, Que.

**North Shore Ry.**—Subsidies have been voted by the Dominion Parliament in aid of the following lines:—From Adamsville to a junction with the Na-

thorized by chap. 141, statutes of 1910. The company's powers may only be exercised by authorization of the Governor-in-Council, and expropriation powers can only be obtained by a future act. (Feb., pg. 68.)

**Pacific and Atlantic Ry.**—The Dominion Parliament has extended the time within which the company may build its projected line from Ottawa to Georgian Bay, and Lake Ontario, with branch lines to Manitoulin Island and other places. The company was originally incorporated by the Ontario Legislature in 1886, J. Connors being one of the provisional directors; and in 1906, it was declared to be a work for the general advantage of Canada. (Jan., pg. 23.)

**Pacific Great Eastern Ry.**—The company has opened offices in Victoria, B.C., to conform to the charter requirements, and also in Vancouver, from which the construction operations will be directed. The formal organization has been completed, the officers and directors being:—President, J. W. Stewart; Vice President and General Manager, P. Welch; Vice President and General Counsel, D'Arcy Tate; other director, T. Foley.

In an interview April 17, Vice President D'A. Tate said engineers were at work locating the line out of North Vancouver, and out of Fort George southwesterly. It is hoped that construction will be started at an early date, and when it will be pushed through with dispatch.

J. Callaghan, heretofore Division Engineer, G.T. Pacific Ry., Fitzhugh, Alta., has been appointed chief engineer.

It is said that the company has entered into negotiations for the use of the bridge to be built across the second narrows of Burrard Inlet by the Burrard Inlet Tunnel and Bridge Co., and the Vancouver, Westminster and Yukon Ry., and press reports state that the line already built from near Vancouver in the direction of Pemberton Meadows, by the Howe Sound and Northern Ry., is to be acquired by the P.G.E. Ry. (April, pg. 179.)

**Pacific, Trans-Canada and Hudson Bay Ry.**—The Dominion Parliament



**Erie, London and Tillsonburg Ry.**—J. H. Teall, President, is quoted as stating that work on this projected railway will be started at an early date, so that application can be made to the Department of Railways for a contract under the act to aid the building of certain railways, the right to which will expire in August. The route proposed to be followed is from Port Burwell to London, via Corinth, Kingsmill and Belmont. It is expected to have the line built to Aylmer by Aug. 1.

We are officially advised that engineers are making surveys from Port Burwell, passing through Caltan, Aylmer, Kingsmill and Belmont, and terminating in London, Ont.

**Esquimaux and Nanaimo Ry.**—A contract has been let to M. E. Hord, Victoria, B.C., for the construction of a 10 mile section from Courtenay, south to Union Bay in the Comox district. Camps are being located on this mileage and every preparation made for pushing the work to a speedy completion. Tenders are reported to be under consideration for the construction of a 10 mile section northerly from McBride Jet., northerly towards Union Bay. This will leave a gap of about 25 miles, the right of way on which is being cleared, for which tenders will shortly be invited. A further section of the line north of Courtenay to Campbell River will have to be built to connect with the section northwest of Oyster River to near Hardy Bay, the route map for which was recently approved. (May, pg. 238.)

**Fredericton and Grand Lake Coal and Ry. Co.**—We are officially advised that a contract has been let to A. E. Tritter, Moncton, N.B., for the construction of the line from Gibson to a connection with the New Brunswick Coal and Ry. Co.'s line at Minto, N.B., 31 miles. The company will supply the ties and bridges, the rails and fastenings, the contractor doing all other work. The track will be laid with 72 lb. steel relaying rails supplied by the C.P.R.

The contract for the steel bridges has been let to the Dominion Bridge Co. as follows:—Nashwaak River, four 80 ft. half deck girder spans; Noonan Creek, one 40 ft. half deck girder span; Burpee Mill stream, one 80 ft. half deck girder span; Little River, two 80 ft. half deck girder spans.

Press reports state that subcontracts have been let for construction as follows:—G. McPhail, Woodstock, N.B., three miles; J. C. Kitchen, Fredericton, N.B., five miles; D. C. Burpee and Son, Gibson, N.B., concrete and mason work.

The plans and book of reference showing the lands to be taken for the construction of this railway from Gibson on the Intercolonial Ry., and a connection with the New Brunswick Coal and Ry. Co.'s line west of Minto, have been deposited with the Commissioner of Public Works at Fredericton, and with the clerks of the peace for the counties of York and Sunbury.

The New Brunswick Legislature amended the charter of the company in certain particulars, details of which have already been given. Sir Thos. Tait is President and H. W. D. Armstrong Chief Engineer. (Mar., pg. 238.)

**Gatineau and Ungava Ry.**—The Dominion Parliament has changed the name of the company to the Ottawa and Ungava Ry., and extended the time within which the lines authorized to be built by chap. 102, statutes of 1910, may be built. (Dec., 1911, pg. 1137.)

**Glengarry and Stormont Ry.**—The Ontario Legislature has incorporated a company with this title, C. L. Harvey, A. A. Mallon, Montreal, and T. Burgess, Ottawa, as provisional directors, to build a railway from the C.P.R., on the eastern boundary of the province in Lancaster tp., to the St. Lawrence River, in

Charlottenburg tp., and thence to Cornwall, and branch lines. (Mar., pg. 120.)

**Grand Lake and Bell River Ry.**—A subsidy has been voted by the Dominion Parliament in aid of the building of a railway from Bell River on the National Transcontinental Ry., along the Bell River to Twenty-one Mile Bay on Grand Lake, or to Rabbit Lake on the Ottawa River, not to exceed 45 miles.

The Quebec Legislature has voted 2,000 acres of land a mile in aid of the projected line, from the National Transcontinental Ry. to Twenty-one Mile Bay.

**Great Northern Mining and Ry. Co.**—A subsidy has been voted by the Dominion Parliament in aid of building a line from Little River, through Belle Marche, to Eastern Harbor, Cape Breton Island, N.S. (July, 1911, pg. 645.)

**The Guelph Patent Cask Co.** has been authorized by the Quebec Legislature to build and operate a railway and branches.

**Halifax and Eastern Ry.**—The Provincial Engineer of Nova Scotia in his annual report for the year ended Sept., 1911, states that early in the year the plans for a large portion of the proposed line from near Halifax to Guysboro, and Country Harbor, etc., were submitted to the company and preparations were made for early construction. The company entered into negotiations with the Dominion Government, with the result that the work was taken over by the Federal authorities, thus relieving the province of all responsibility in connection with this important work. (Jan., pg. 21.)

**Howe Sound and Northern Ry.**—Tenders are being asked for construction from the end of the present line to mileage 12, from mileage 12 to 24.1, and for a branch line from mileage 2.3 on the present line, for 2.7 miles along the Squamish River Valley. Cleveland and Cameron, Vancouver, B.C., are engineers.

The existing line starts from near Newport, on Howe Sound, B.C., and extends to the Cheakamus River, about 11 miles. The extension of the main line will carry it to near the Green Lake summit, and the work will be fairly heavy. The spur line will give access to the water front on the east side of Howe Sound. The line is used for the purpose of providing shipping facilities for logs, and has power to carry on a general business, for which special rolling stock has been added. (June, 1911, pg. 605. See also Pacific Great Eastern Ry.)

**Hudson Bay and Pacific Ry.**—An application has been made in the courts in London, Eng., for the compulsory winding up of the company. The matter was allowed to stand over, as counsel for the company stated that arrangements were being made for raising money for construction and other purposes, when the petitioners would be paid off. (May, pg. 238.)

**Intercolonial Ry.**—We are officially advised that Caykichi and Pagano have sublet the work on the line from Dartmouth to Deans Settlement as follows:—Mile 1 to 12, D. Washburn, Woodside, Dartmouth, N.S.; mile 12 to 27, G. S. Whitehead Construction Co., Lawrence-town, Halifax County, N.S.; mile 27 to 36, W. Waddell, Musquodoboit Harbor, N.S.; mile 36 to 45, Garrett and Campbell, Musquodoboit Harbor, N.S.; mile 45 to 55, McDonald and Macintosh, Little River, N.S.; mile 55 to 62, Chisholm and McGillivray, Middle Musquodoboit, N.S.; mile 62 to 68, Bellman, Gillis and Co., Deans Settlement, N.S.

Tenders are under consideration for the building of a brick and stone passenger station at Chatham, N.B., and for a standard wooden passenger station and dwelling at Nelson, N.B.

We are officially advised that the route for the proposed cut-off from the new shops at Moncton, N.B., to Sunny-brook, has not yet been finally located, nor the plans decided upon. (May, pg. 238.)

**Iron Range Ry.**—The Ontario Legislature has extended the time within which the company may build the line authorized by chap. 127, statutes 1907 (Feb., pg. 68.)

**Kettle Valley Lines.**—The route plan from Penticton to Osprey Lake summit has been approved by the Minister of Railways, while the application for the approval of the route plan from Vernon to Kelowna, B.C., was held over to enable the company and the Canadian Northern Pacific Ry. to come to terms. The Board of Railway Commissioners has approved location plans between mileage 53.92 and 65, west of Midway.

Press reports state that contracts have been let C. H. Williams and Co., six miles; Milligan, Lussault and Co., nine miles, and Porter and Connelly, two miles, west of Carmi, B.C. This mileage, it is said, will take the line to within 15 miles of the summit. Another report states that G. A. Carlson and Co., Spokane, Wash., have been given a contract for building of 35 miles from above Trout Creek, to Osprey Lake, the work to be completed during 1912. (May, pg. 238.)

**Kingston and Pembroke Ry.**—It is proposed to expend about \$250,000 upon betterments this year, the principal expenditure being for the relaying of the line from Renfrew, Ont., for 80 miles towards Kingston with new steel rails 65 lb., C.P.R. standard section. A considerable quantity of ballast will be added, and a turntable is to be put in at Kingston. (Oct., 1911, pg. 237.)

**Kootenay and Alberta Ry.**—We are officially advised that the company does not contemplate any further construction this year, beyond the completion of the line started in 1910. This line starts from the C.P.R. Crow's Nest Pass line about a mile west of Pinetree station, and extends southwesterly for about 13 miles to Beaver Creek, the site of the Western Coal and Coke Co.'s mines. (Owing to the wet season of 1910, the construction was not completed as was expected. (May, pg. 238.)

**Lac Seul, Rat Portage and Keewatin Ry.**—The Ontario Legislature has extended the time within which the company may build the lines authorized by chap. 102, statutes 1902. (Mar., pg. 121.)

**L'Avenir and Melbourne Ry.**—A subsidy has been voted by the Dominion Parliament for building a line from Melbourne to Drummondville, Que., 28 miles, in lieu of the subsidy voted in 1910. (April, 1911, pg. 321.)

**Lindsay and Minden Ry.**—The Ontario Legislature has incorporated a company with this title to build a railway from Lindsay to Mountain Lake, in Minden tp., with branch lines, and to develop and distribute electric power. The provisional directors are:—J. H. Delamere, M. Brown, J. J. Mortimer, Minden, Ont.; J. W. Wood, Lindsay, Ont.; S. F. Simson, J. M. Delamere, Toronto. (April, pg. 182.)

**Little Nation River Ry.**—A land grant of 2,000 acres a mile has been voted by the Quebec Legislature for the projected railway from between Thorne and Montebello to Lake Minnigoune, about 30 miles. (Feb., 1911, pg. 155.)

**Liverpool to Caledonia, N.S.**—The Dominion Parliament has voted a subsidy for the building of a line, not exceeding 30 miles, from Liverpool, via Milton, to Caledonia, N.S. This is a re-vote of a subsidy first granted in 1907. It is available for any company building such a line.

**London and Port Stanley Ry.**—A representative of a British firm has laid a



proposition for the lease or purchase of the line before the London city council. A proposal from the Lake Erie Coal Co. for the electrification of the line is also under consideration. Press reports state also that G.T.R. officials have been looking over the line with a view to leasing it, but this is denied by the superintendent of the division. (May, pg. 239.)

**Maine Central Rd.**—By an act passed in last session of the New Brunswick Legislature, the company was given incorporation, with an office in St. Stephen, N.B., and formally vested with the ownership of the line from St. Stephen to Sprague's Mills. This piece of line was built as the Lewy's Island Rd., under an act passed in 1855. The title of the company was changed in 1880 to that of the St. Croix and Penobscot Ry., on the sale of the line and franchises under mortgage it passed under the control of the Washington County Ry., a company organized in the State of Maine, which was subsequently purchased by the M.C.R. The line has been operated during recent years as the Washington County branch.

**Medicine Hat, Alta.**—A bylaw has been passed by the taxpayers of Medicine Hat, Alta., authorizing the construction of a line of three miles, within the city limits, to connect with a three mile line without the city limits, to the Ansley coal mine. The latter section is to be built by the colliery company, and the first section will be controlled by the city. Construction will be started immediately. It is intended to run spur tracks off the line for industrial purposes. (See Ansley Coal Co., April, pg. 181.)

**Metabetchouan Ry.**—The Quebec Legislature has granted 1,000 acres of land a mile for a line from Lac Beauport to St. Andre, on the River Metabetchouan, Que.

**Michigan Central Rd.**—The contract for the erection of the company's new station and terminals at Detroit, Mich., has been let to the George A. Fuller Co. The railway company will do the excavation, put in the foundations and other preparatory work. It is estimated that there will be 10,000 tons of steel in the new station and train shed, that the station building will cost about \$250,000, and the total outlay on the terminals will be about \$6,000,000. (April, pg. 182.)

**Midland Continental Ry.**—Press reports state that plans have been prepared for a line from Edmore, N.B., via Franklin, Nortonville and Midleton, to Jamesville thence to Pembina, at the international boundary, 230 miles. Some trading has been done, and it is reported that contracts will be let at an early date for the completion of the line. F. K. Bull, Racine, Wis., is president, and H. H. Hurnink, Edgely, N.B., is engineer. (Mar., pg. 121. See Winnipeg, same and Gulf Ry.)

**Midland Terminal Ry.**—The Ontario Legislature has extended the time for the building of the line authorized by chap. 195 of the statutes of 1903, and has authorized the building of a line from Midland Harbor southeasterly to the G.T.R., near Coldwater, Ont. (April, pg. 182.)

**Minneapolis, St. Paul and Sault Ste. Marie Ry.**—Press reports state that a line is being built from Fordville, N.D., westerly via Devil's Lake to Drake, 170 miles, the contractors being Foley, Welch and Stewart. (Mar., pg. 121.)

**Miramichi Valley Ry.**—The New Brunswick Legislature has incorporated a company with this title to build a railway from Newcastle, or from a junction with the Intercolonial Ry., near Newcastle, along the valley of the Miramichi River to Tracadie. The company is authorized to operate vessels, and to build

docks, wharves and warehouses as a part of its undertaking. The provisional directors are:—Jas. Robinson, E. A. McCurdy, D. Morrison, W. L. Allan, W. A. Park, E. H. Sinclair, Hon. A. Ritchie.

**Montreal and Lake Victoria Ry.**—The Dominion Parliament has incorporated a company with this title to build a railway from Montreal to the National Transcontinental Ry. at Grand Lake Victoria, Que., and thence to Muskegan River, and on to Hannah Bay, on James Bay, Ont. The railway committee directed that the title of the company as applied for be abandoned, and that the present one be adopted. (See Montreal Transcontinental Ry., April, pg. 182.)

**Montreal and Northern Colonization Ry.**—The Quebec Legislature has extended the time for the building of the lines mentioned in our Mar. issue. (Mar., pg. 121.)

**Montreal to National Transcontinental Railway.**—It is reported that P. H. Clergue, Sault Ste. Marie, Ont., is negotiating with the Dominion Government, with the view of obtaining a contract to build a line from Montreal to the National Transcontinental Ry., and thence to the mouth of the Nottaway River on James Bay, for which a subsidy was voted last session. A land subsidy in aid of such a railway has been voted by the Quebec Legislature.

P. H. Clergue is quoted as stating that the first vessel of the Hudson Bay Navigation Co. will sail from Montreal, July 1, for the mouth of the Nottaway River, carrying a party of engineers, explorers, etc. It is proposed to make a thorough examination of the valley of the river, and to make surveys in connection with a projected railway.

While this line is mentioned as being the one in which Mr. Clergue is interested, there is a possibility that he may be looking after the location of a terminal on Hudson Bay for the Algoma Central and Hudson Bay Ry., which has power to extend the line now building to the National Transcontinental Ry. to Hudson Bay. (May, pg. 239.)

**Montreal Tunnel Co.**—A delegation representing municipalities on the south shore of the St. Lawrence River contiguous to Montreal, waited on the Dominion Government, May 2, to ask that the company's bonds be guaranteed for \$15,000,000 at 4½% for 50 years. The company proposes to bore a tunnel from St. Lambert and Longueuil, under the St. Lawrence River to Montreal, following the line of St. Denis St. to Cote St. Michel. It is proposed to provide accommodation in the tunnel for steam railways and for high speed electric lines. Terminals are to be provided with a passenger station at the Champ de Mars. Consideration of the application was promised.

**Nasas and Skeena River Ry.**—The Dominion Parliament has voted a subsidy for a line from Nasaga Gulf, or other point on Portland Inlet or Nasas River, towards the anthracite coal deposits on the Skeena River, near Groundhog Mountain, B.C., not to exceed 100 miles. (June, 1911, pg. 1139.)

**Nerepis and Long Island Ry.**—The New Brunswick Legislature has incorporated a company with this title to build a line from Welsford on the C.P.R. to the proposed St. John River Valley Ry., between Georgetown and Hampstead, N.B., between Georgetown and Hampstead, a spur line from near Peteraville to the Clones district, and other branch lines. The provisional directors are:—H. M. Woods, J. M. Queen, J. H. M. Baxter, F. C. Taylor, A. R. Shipp. (Apr., pg. 182.)

**New Brunswick Coal and Ry. Co.**—Traffic on this line was resumed May 13, a temporary pile structure having been put in to replace the span of the Washademoak bridge which was washed out April 10. Owing to the present high water it will not be possible to put in a

permanent span until later in the year. (Sept., 1911, pg. 835.)

**Northern Vancouver Island Ry.**—Press reports state that T. A. Kelly is making a reconnaissance survey from Rupert Arm on Quatsino Bay, and that a second party is working to meet him from Fort McNeil and Hardy Bay, on Vancouver Island. The survey parties are expected to be in the field for about four months. (Apr., 1911, pg. 321.)

**North Shore Ry. and Navigation Co.**—The New Brunswick Legislature has incorporated a company with this title to build a railway from near Adamsville, on the Intercolonial Ry., to a connection with the National Transcontinental Ry. near Snowshoe Lake, and from Beersville to Richibucto Head, with a branch line from Harcourt to the Salmon River, and other branch lines. It is also authorized to acquire the North Shore Ry., originally the Beersville Coal and Ry. Co., extending from Adamsville to Beersville, with the branch from Beersville to Mount Carleton, and operate it in connection with its authorized line as one railway. The provisional directors are:—G. W. Fowler, Sussex, N.B.; M. P. Keith, Moncton, N.B.; A. B. Carson, Rexton, N.B.; H. J. Van Hazen, E. E. Smith, New York City; J. H. Wood, W. A. P. Davis, Philadelphia, Pa.; H. J. Van Hazen is one of the principal owners of the present North Shore Ry. (See North Shore Ry., April, pg. 182.)

**Northeastern Ry.**—The Quebec Legislature has extended the time within which this projected railway may be built, and authorized a change in its title to the North Ry. (Jan., pg. 22.)

**Pacific Great Eastern Ry.**—P. Walsh, Vice President, is quoted as stating that several survey parties are in the field, and that it is expected that the reports will be prepared so that construction can be started at both ends of the line at an early date. Some preliminary construction work is being done at Fort George the point of junction with the G.T. Pacific Ry. The company has power to take over the Howe Sound and Northern Ry. line, and while negotiations with that object in view have taken place, nothing definite appears to have been settled. Press reports state that there is a difference of \$10,000 between the price offered by the P.G.E. Ry. and the amount which the H.S. and N. Ry. asks. (May, pg. 239.)

**Pacific and Hudson Bay Ry.**—The Minister of Railways has approved the route plan of this projected railway from Kiasquiat to Netas Lake, B.C. (July, 1911, pg. 647.)

**Prince Edward and Hastings County Ry.**—The Dominion Parliament has incorporated a company with this title for the purpose named in our April issue. (April, pg. 182.)

**Quebec Central Ry.**—The Dominion Parliament has voted subsidies for a line from mileage 38 out of St. George to St. Sabine, and thence to Spence 12, Que., not to exceed in all 51.34 miles.

A subsidy of 2,000 acres of land a mile has been voted by the Quebec Legislature to the Q.C.R. Co. to extend the line from St. George to the boundary line between Dorchester and Bellechasse, 1.50 mile; and of 2,000 a mile to "a company" to extend the Quebec Central Ry. from the Dorchester-Bellechasse boundary, westerly for 20 miles. (Jan., pg. 23.)

**Quebec Eastern Ry.**—We are officially advised that surveys are being made for the proposed line between Sherbrooke and Quebec, and that it depends entirely upon the completion of these surveys when construction will be started. (April, pg. 182.)

**Queen's Central Ry.**—The Nova Scotia Legislature has extended the time within which the company may build the line authorized by chap. 166, statutes of



to the taxpayers providing for guaranteeing the bonds of this projected railway. (Mar., 1911, pg. 267.)

**Pacific Great Eastern Ry.**—Three parties are reported to be in the field locating the route. One party, under J. Nelson, has been operating between Port Atkinson lighthouse and Newport, B.C.; a second, under W. Oakley, has been working between Newport and Green Lake Summit, and a party in charge of J. Callaghan, Chief Engineer, is going over the route to Lillooet, 120 miles from Vancouver. Press reports state that preparations are being made for an early start at construction. (June, pg. 101.)

**Prince Edward Island Ry.**—We are officially advised that the Minister of Railways has selected the route from Cape Tormentine, N.B., to Carleton Place, P.E.I., for the Prince Edward Island car ferry service. The adoption of this route

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be put in the field, and in all some 300 men will be engaged on preliminary survey of the line from Edmonton to Hudson Bay. The report goes on to say:—"Next season grading of the road to the northeast and the laying of steel will be carried on, and in two years time, according to plans of the company, the line will be complete and in operation from Edmonton to Lake Athabasca. The company will then proceed with the construction of the line easterly to the north shore of Lake Welliston in Saskatchewan and thence to Fort Churchill or Port Nelson, named as alternative ports under a federal charter. From Edmonton a cut off is to be constructed at a later date, giving connection with Hudson Bay by a still shorter route. From Lake Athabasca the road will run westerly north of the Peace River block, from Hudson Bay terminal. The railway will run steamships to a British port." (May, pg. 239.)

**Northern New Brunswick and Seaboard Ry.**—We are officially advised that of the mileage subsidized last session of the Dominion Parliament 16.7 miles, from the Drummond mines at Austin Brook, to the Intercolonial Ry., near Bathurst, N.B., have been built, and that surveys have been completed for the remaining 9.3 miles, to deep water in Bathurst Harbor. This latter mileage, we are advised, will not be built for some time. (May, pg. 229.)

**Pacific and Hudson Bay Ry.**—We have been officially advised that the company has not yet been formally organized. It has power to build a line from the Pacific coast to Hudson Bay, about 1,500 miles, the first section being from Bella Coola, B.C., to Dunvegan, Alta. Three survey parties are in the field, and it is hoped to have the route on the first 100 miles surveyed by the end of the summer. The route map for the line from Kimisquit, near Bella Coola, to Natalukus Lake, B.C., about 110 miles, has been approved by the Minister of Railways, but application will shortly be made for the approval of a revised route. It is expected that the organization of the company will shortly be completed and arrangements made for starting construction early in 1915. H. D. Verschoyle, General Manager, Port of Bella Coola, Ltd., Vancouver, B.C., is interested. (June, pg. 301.)

**Pacific Great Eastern Ry.**—D'Arcy Tate, Vice President and General Counsel, is reported to have stated on his return to Victoria, B.C., from England, recently, that arrangements had been completed for a first issue of \$5,000,000 of the company's bonds, guaranteed by the province of British Columbia, and that it was expected construction would be started near the head of Howe Sound at an early date. P. Welch, Vice President, is quoted as stating, July 4, that it was expected to break ground at some point between North Vancouver and Howe Sound, within a month, and to crowd the work so as to have the line ready for traffic within two years. J. Callaghan, Vancouver, is Chief Engineer. (July, pg. 339.)

**Quebec and Saguenay Ry.**—It is ex-

Representatives of the European financiers associated with Sir Rodolphe Forget, in the construction of this line, were in Montreal, July 7. Sir Rodolphe advocates the extension of the line to Cape St. Charles, and the establishment there of a port for trans-Atlantic passenger steamers. (July, pg. 340.)

**Quebec Eastern Ry.**—We are officially advised that surveys for this projected line from the southern approach to the Quebec Bridge, to Sherbrooke, Que., have been completed, and that it is expected to start construction in the near future. A. H. N. Bruce, Quebec, is Chief Engineer. (June, pg. 301.)

**Reid Newfoundland Ry.**—At its recent session the Newfoundland Legislature authorized the government to raise a further amount of \$1,000,000 in order to complete the branch lines authorized to be built in 1910, for which purpose \$1,000,000 have already been expended. (May, pg. 240.)

**The Southampton Ry. Co.** has entered into a contract with the Dominion Government under the act granting aid to certain railways for the building of a line from Millville, on the C.P.R. St. John-Edmundston line, to the St. John River, near the Poklok bridge, N.B. (June, pg. 302.)

**Timiskaming and Northern Ontario Ry.**—The T. and N.O. Commission is reported to have arranged with Jas. McMillan to make a survey of the country in the vicinity of Moose River, on Hudson Bay, with a view of locating a railway terminal there, and of developing a port for deep sea traffic. (July, pg. 340.)

**White Pass and Yukon Route.**—The Board of Railway Commissioners has authorized the British Yukon Ry. to open for traffic its branch from mile post 106 to Pochia Mine, Yukon, 12 miles. (Aug., 1911, pg. 1571.)

President Dickeson is reported to have stated, prior to leaving Dawson, Yukon, July 15, that the company had an engineer locating an extension of the line from White Horse to Yuvon Crossing 120 miles. Such a line would tap the Tantalus coal fields.

**Retirement of J. J. Hill.**—In a letter addressed to the stockholders of the Great Northern Ry., (U.S.A.), July 5, J. J. Hill says: "With my resignation today of the chairmanship of the board ends my active official participation in conduct of the G.N.R. The work begun nearly 40 years ago has been substantially accomplished; though its results have been extended far beyond the foresight of anyone at that time. The property whose fortunes I have directed for so many years has become an organic growth. Its future will be shaped more by the forces that govern development of the natural resources of the country than by individual initiative. I will remain a member of the executive committee and am service if may need from me will always be at its command. But it seems wise to begin the process of ad-

August 1912



coal mine at Beaver creek, Alta., was considerably delayed in construction, owing to a variety of causes, principally wet weather and sliding ground. The track laying was, however, completed to the mine on June 25, and a train was run over it. The line is of standard construction, with light gradients and easy curvature. Three miles of sidings have been built to the colliery and storage yards. There are some large timber structures, particularly over Langs coulee, at mileage 7, which is 195.5 ft. high, and at Mill creek, mileage 10, which is 150.5 ft. high. One big cut required the excavation of 149,000 cubic feet. The directors anticipate that as the line traverses an excellent agricultural district, its revenue from the carriage of farm produce will be an important addition to those derived from the transportation of coal. L. B. Merriam is Chief Engineer. (Sept., pg. 450.)

**London and Port Stanley Ry.**—In connection with the proposal to lease this line to the Lake Erie Coal Co., the directors ask that some new freight shed and station accommodation be provided at Port Stanley, Ont. The L.E.C. Co. proposes to expend \$400,000 on electrifying the line in return for a 25 years lease. The directors have bought 22 acres of land for an extension of the freight yards at Port Stanley. It is expected that the lease will be signed at an early date. (Feb., pg. 68.)

**Medicine Hat, Alta.**—The plans of the building of the spur line from the Ansley colliery into Medicine Hat, Alta., have been completed, and application is being made to the Board of Railway Commissioners for their approval. The right of way is being acquired, and arrangements made for starting construction. Mr. Ansley states that he expects to have the line built this year. (July, pg. 339.)

**Michigan Central Rd.**—The Board of Railway Commissioners has approved of plans for the erection of a bridge across London street, Windsor, Ont. (Aug., pg. 412.)

**Minneapolis, St. Paul and Sault Ste. Marie Ry.**—Press reports state that a contract has been let for the building of a spur line of three miles to the mines on Cuyuna range, Minn. F. Baxter, Superior, Wis., is the contractor. (Sept., pg. 451.)

**Northern New Brunswick and Seaboard Ry.**—A contract has been entered into between the company and the Department of Railways, under the act granting subsidies in aid of certain railways, for the building of 26 miles of railway from the Drummond mines at Austin Brook to the Intercolonial Ry., and thence to Alston Point, N.B. The line from Austin Brook to the Intercolonial Ry. has been built and is being operated. (Aug., pg. 412.)

**Northern Pacific Ry.**—President Elliott is reported as stating, Sept. 5, that the line from Seattle, Wash., to Sumas, on the International boundary, 120 miles, will be rebuilt next year, with reduced gradients and easier curves, and that it will be relaid with heavier steel.

**Pacific Great Eastern Ry.**—A commission has been appointed to settle the question of the route of the line in West Vancouver, B.C. The company has located its line along the waterfront for 2.5 miles, and the municipality desires that it be set back for from 100 to 250 ft. Application has been made to the Provincial Minister of Railways for the approval of the route of the line from Howe sound to Pemberton Meadows, 10 miles, but objection is made by the Howe Sound and Northern Ry., which has a line between the same points. Consideration of the matter was adjourned.

The P.G.E. Ry. has power to acquire the H.S. & N. Ry., but so far they have been unable to come to terms.

Vice President D'Arcy Tate, is reported as stating, Sept. 5, that the funds necessary for construction had been provided, and that work would be gone on with as soon as the plans were approved. An additional survey party, under F. G. Ashe, has been put in the field to work from Lillooet southwesterly. (Sept., pg. 451.)

**Pacific and Hudson Bay Ry.**—The route of this projected railway for the section of the line from Bella Coola, to Natakus lake, B.C., 230 miles, has been approved by the Minister of Railways. The line starts at Bella Coola, at the head of Hurk channel, and follows the valleys of the Bella Coola and Athnarko rivers to Two Mile lake, thence crossing to the valley of the Salmon river, which is followed for some distance, thence to the valley of the Entico river to Natakus lake. C. E. Cartwright, Vancouver, is Chief Engineer. (Aug., pg. 412.)

**Quebec and Saguenay Ry.**—A contract under the act granting subsidies to certain railways has been entered into between the company and the Department of Railways for the building of 62.8 miles of line from St. Joachim, Que., northeasterly.

Practically all the work on the construction of the line is reported to have been suspended owing to financial troubles. Sir Rodolphe Forget, President, is quoted as stating, Sept. 2, that trouble had been going on between the shareholders for some time, before it was decided to suspend operations. It was reported from Quebec Sept. 3, that 44 actions had been entered by employees on construction, and on Sept. 7, an action was entered against the company by O'Brien and Doheny, the general contractors, to recover \$381,988.42 for work done and money paid.

The annual meeting was held in Quebec, Sept. 17. The following are the directors and officers for the current year:—President, O. B. Daoust; Vice President, H. G. Matthews; other directors:—Sir Rodolphe Forget, L. G. Morin, L. E. Morin.

**St. John and Quebec Ry.**—The New Brunswick Government, Sept. 10, finally approved of the plans for the building of the Gagetown-Swan creek section of the line. The Government has now approved of the plans for the whole line within the province. (Sept., pg. 451.)

**Timiskaming and Northern Ontario Ry.**—Track laying on the Elk Lake branch of 29 miles is reported to have reached the Jean Baptiste river, 12 miles west of Earlton, Ont., and ballasting is in progress. A large timber bridge is being built across the river, and it is expected that track laying will be resumed on the 10 miles between the Jean Baptiste river and the Montreal river, by Sept. 30. This river will be crossed at the Mountain chutes, by a steel bridge, for which a contract has been let. Grading has been practically completed into Elk Lake, and it is expected that the branch will be completed by Dec. 1. (Sept., pg. 451.)

**Toronto, Hamilton and Buffalo Ry.**—General Superintendent Eber is reported as stating, Sept. 10, in connection with the application being made to the Board of Railway Commissioners for an order compelling the depression of tracks in the city, "We have been trying to correct the existing conditions for some time, but it is a matter demanding careful attention and the gathering of many details from different sources. We have had engineers working for some time on the idea of depressing the tracks, but I cannot say just now what they are ready to report. They have reached no definite conclusion. It is a

vital question, both to the city and ourselves, and our aim is to satisfy everybody. In my opinion the outcome on the city's attitude." (June, pg. 38.)

**Wellington Colliery Ry.**—A meeting of shareholders was held in Victoria, Aug. 30, at which resolutions were considered authorizing the directors to debentures, subject to the approval of the Minister of Railways, and to authorize directors to purchase such other securities as might be desirable for the carrying on of the company's colliery business. 1908, pg. 551.)

### Toronto Union Station.

The question of the Toronto union station was down on the list of matters to be before the Board of Railway Commissioners in Toronto, Sept. 29, in connection with the city council's application for the approval of plans, and for the fixing of a definite date when work is to be started.

Speaking of the new union station, 5, Sir Thomas G. Shaughnessy, P.E., C.P.R., is reported to have said: "It can be started on the building income. All that the C.P.R. asks is that the building be known as the union station. On will not run into any station that has the name of another company. The company has already commenced work on grade separation which must be completed before the new building can be erected."

In the course of an interview, E. J. Chamberlain, President G.T.R., reported to have said he could not say when actual construction would begin, but would take three months for the actual preparation of the plans necessary to be prepared before it would be possible to call for tender chief engineers of the two lines were engaged on the preparation of detailed plans. The C.P.R. would occupy the new station jointly with the G.T.R.

### Railway Route Maps Approved

The Minister of Railways has approved the following route maps:—

**Canadian Northern Branch Lines** Aug. 30. From tp. 18, r.l. w.p.m., 26, r.l. w.p.m., 38 miles.

**Canadian Northern Ontario Ry.** 10. Through Montreal Island, abt. 10 miles.

**Canadian Pacific Ry.**—Sept. 16. Hawarden to Floral, Alta., 46.8 miles. Edmonton, Dunvegan and British Columbia Ry.—July 26. Revision north of Edmonton, Alta., about 45 miles.

**Erie, London and Tillsonburg Ry.** 24. From Aylmer to Port Burwell, about 12 miles.

**Interprovincial and James Bay Ry.** 30. From Kipawa branch, northwest, 54 miles.

### Canadian Pacific Railway Company

## North Toronto Grade Separation

### NOTICE TO CONTRACTORS

Sealed proposals will be received by the undersigned, up to 12 o'clock noon on day, October 2, for the construction of the structure of the AVENUE ROAD BRIDGE at North Toronto.

Plans and specifications can be seen at the office of the Engineer of Grade Separation, No. 250 Avenue Road.

The lowest or any tender not necessarily accepted.

B. RIPLEY,  
Engineer Grade Separation  
Toronto, Sept. 23, 1912.



reinforced with heavier steel.

**Pacific Great Eastern Ry.**—A commission has been appointed to settle the question of the route of the line in West Vancouver, B.C. The company has located its line along the waterfront for 2.5 miles, and the municipality desires that it be set back for from 100 to 250 ft. Application has been made to the Provincial Minister of Railways for the approval of the route of the line from Howe sound to Pemberton Meadow, 10 miles, but objection is made by the Howe Sound and Northern Ry., which has a line between the same points. Consideration of the matter was adjourned.

November  
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Vice President D'Arcy Tate, is reported as stating, Sept. 5, that the funds necessary for construction had been provided, and that work would be gone on with as soon as the plans were approved. An additional survey party, under F. G. Ashe, has been put in the field to work from Lillooet southwesterly. (Sept., pg. 451.)

**Pacific and Hudson Bay Ry.**—The route of this projected railway for the section of the line from Bella Coola, to Nataalkus lake, B.C., 230 miles, has been approved by the Minister of Railways. The line starts at Bella Coola, at the head of Burk channel, and follows the valleys of the Bella Coola

November  
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**Pacific Great Eastern Ry.**—A contract for the building of this line from Vancouver to Fort George, B.C., has been let to P. Welch, who has resigned his position as Vice President to accept it. Construction headquarters are being established at Lillooet, and work will be pushed forward in the direction of Fort George. The location surveys for this section of the line are completed.

After considerable negotiations the company has acquired the railway and all other property of the Howe Sound and Northern Ry. for \$1,000,000, payable in cash in three annual instalments. The agreement of sale, it is said, was signed in Victoria, Oct. 10. The H.S. and N. Ry. has about 10 miles of line in operation running from Newport at the head of Howe sound inward, with power to build into Vancouver on the one side, and via Lillooet to Fort George on the other. It has valuable water frontage rights on Howe sound and a considerable land property in Newport. J. C. Keith, A. McEvoy, formerly of Toronto, and J. C. Gill, Vancouver, were the principal owners of stock in the company. The purchase of this property settles the difficulties of the route as between Vancouver and Lillooet, and will enable construction to be proceeded with more speedily. (Oct., pg. 502.)

**Quebec and Saguenay Ry.**—We are ad-

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**Kettle Valley Lines.**—A contract is reported let to W. Bouthron, Grand Forks, B.C., for the erection of station and other buildings on the Pentiction section.

The line is under construction out of Pentiction through the Okanagan valley. The work in the vicinity of Naramorta is reported to be very heavy, as it includes an 1,800 ft. and a 200 ft. tunnel, a lot of rock cutting and a switchback. (Nov., pg. 558.)

The Dominion parliament is being asked to pass an act authorizing the company to enter into an agreement with the C.P.R.; extending the time for the construction of the lines authorized to be built, and giving power to build the following additional lines: From near Summer's creek to various mining camps about 15 miles southwest to Princeton, B.C.; from Vernon south through Kelowna to near Pentiction, B.C.; from the terminus of the branch authorized by sec. 2h, chap. 101 of the statutes of 1911 to the Otter summit about 30 miles south of Merritt, and from near Tulameen for about 50 miles up the Tulameen valley.

The Board of Railway Commissioners has authorized the opening for traffic of the portion of the line from Merritt, B.C., easterly for 29 miles.

The Spokane and British Columbia Ry., which is the section of these lines in the United States, proposes to build an extension to Spokane, Wash. It is reported that surveys are being made, and that construction will be started as soon as these are completed. The K.V. lines have recently come under the control of the C.P.R.

**L'Avenir and Melbourne Ry.**—Application is being made to the Quebec Legislature to amend the charter by changing its name and extending the time within which the line authorized to be built may be constructed. B. E. Reid, G. H. Bogie and J. Laferty are interested. Berque, Berque and Berque are solicitors for the company, and the additional applicants named. (June, pg. 300.)

**Little Nation Ry.**—The Quebec Legislature is being asked to extend the time within which the lines authorized to be built by the act of 1907, as amended by the act of 1910, may be constructed. (June, pg. 300.)

**Michigan Central Rd.**—Press reports state that it has been decided to proceed with the erection of a new machine shop and power house at St. Thomas, Ont., in the spring. (Oct., pg. 502.)

**Montreal Manufacturer's Terminal.**—Application is being made to the Dominion Government to incorporate a company with this title to lay out a terminal property on the St. Lawrence river, between Notre Dame street east and the river front, near Longue Pointe, Montreal. The company proposes to lay out the property on the lines of the Bush terminal at Brooklyn, N.Y.

**North Ry.**—A number of the engineers engaged on the survey of this projected railway from Montreal to the mouth of the Nottaway river on James Bay, have returned to Montreal, while F. A. Evans, M. Can. Soc. C.E., who represented the Quebec Government on the party which was surveying the bay end, returned to Quebec Oct. 25. It was expected to complete location plans for the line from the Nottaway river mouth to the crossing of the National Transcontinental Ry. at Bell river. The engineers are reported to have stated that only in a few instances will there be a maximum gradient of 0.25% eastward, and that there are no difficulties in the way of construction. It is stated that contracts will be let for the building of this division by Jan. 1, and that the specifications will call for its completion by Oct. 1, 1914. The location of the route from Montreal to Bell river presents more difficulties, and it is

not expected that the location surveys will be completed until the spring. The route from Bell river as far south as Grand Victoria has been located and it is reported that construction on this section will be started simultaneously with that north of Bell river. (Nov., pg. 558.)

**Northern Territorial Ry.**—It is reported that two engineering parties are in the field north of Edmonton, Alta., making preliminary surveys for this projected railway. H. G. N. Neville, who is Chief Engineer, is expected to return to Edmonton in the spring. (Aug., pg. 412.)

**Pacific and Hudson Bay Ry.**—Press reports state that J. M. Ralston has returned to Bella Coola, B.C., after having completed a preliminary survey of the projected line as far as Fort Dunvegan. The line decided upon is said to be from Bella Coola to Fort Fraser, where it will cross the Grand Trunk Pacific Ry., thence to Fort St. James, to Fort McLeod through the Pine river pass and down the Pine river to Fort Dunvegan. In all, the route as surveyed covers some 480 miles. (Oct., pg. 502.)

**Pacific Great Eastern Ry.**—We have been officially advised that R. Welch has been awarded the contract for the building of this railway, and that he has started work at Lillooet, B.C. As a consequence he has resigned office as Vice President. His successor in that office has not yet been appointed. A. Kellett, the contractor's superintendent at Lillooet, is reported to be arranging for the letting of subcontracts on the line northwesterly.

The property of the Howe Sound and Northern Ry. was taken over by the P.G.E. Ry., Nov. 9. The purchase, we are officially advised, includes all the constructed line, about 12 miles, rolling stock, surveys for extensions, good will, and all assets of every description. The miscellaneous assets include 3,000 ft. of waterfront at the head of Howe sound, and the unsold portion, approximately one half of the townsite of Newport, belonging to the Howe Sound Development Co. The purchase of this line simplifies the construction of the P.G.E. Ry. between Vancouver and Lillooet. The route maps for this section of the line are being considered by the Provincial Minister of Railways. E. White has been placed in charge of the contractor's office at Vancouver, and will have charge of construction between that point and Lillooet. (Nov., pg. 558.)

The Pacific Great Eastern Development Co. has been incorporated under the British Columbia Companies' Act to develop lands and other resources along the route of the P.G.E. Ry. The capital is fixed at \$250,000, and the provisional directors are:—T. Foley, P. Welch, J. W. Stewart and D. A. Tate.

**Peace River Great Western Ry.**—Edmonton, Alta., press reports state that the charter of this company has been acquired by French financial interests, and the Provincial Secretary is reported as stating that plans have been filed and that construction will be started in the spring. The line is projected from Edmonton northwesterly to the west end of Lesser Slave Lake, on to the Peace River Crossing, thence to Dunvegan. (Feb., 1911, pg. 113.)

**Quebec Central Ry.**—We are officially advised that the 134 miles of line from a point 30 miles from St. George to St. Sabine, for which a contract under the Dominion act granting subsidies in aid of certain railways was recently entered into, is an extension of the Chaudiere Valley-Coburn extension. The piece of line has been built, and has been in operation since Jan. 2, 1911. (June, pg. 301.)

**Quebec Rapid Transit Ry.**—The Dominion Parliament is being asked to incorporate a company with this title to build a railway

from Quebec easterly to St. Gregoire de Montmorency, northwesterly to Lake St. Charles; southerly to Cap Rouge, and thence easterly to Quebec, being a belt line through the county of Quebec, with branch lines, and to operate vessels in connection therewith, the line to be operated by steam, electricity or any other power. A. Tasheanu, Quebec, is solicitor for applicants.

**Quebec, Portland and International Short Line Ry.**—Application is being made to the Dominion parliament to incorporate a company with this title to build a railway from La Patrie, Que., to the International boundary line, thence along the valley of the North river to a junction with the Maine Central Rd., or the C.P.R. in Eaton township. Pringle, Thompson and Burgess, Ottawa, are solicitors for applicants.

**Roberval and Saguenay Ry.**—The Quebec legislature is being asked to pass an act changing the name to La Compagnie de Chemin de Fer Le Nord; authorizing the building of branches; authorizing the acquisition of the Ha Ha Bay Ry., charters, lines and property, together with power to extend this line from the Chicoutimi Pulp Co.'s mills to the confluence of the Riviere du Moulin with the Saguenay river; and fixing the amount of bonds to be issued. (May, pg. 240.)

**Simcoe, Grey and Bruce Ry.**—Application is being made to the Dominion parliament to extend the time within which this projected line may be built. B. Allen, Owen Sound, Ont., is Secretary. (June, pg. 302.)

**Timiskaming and Northern Ontario Ry.**—Track is reported to have been laid on the Elk lake branch to Jean Baptiste river, 12 miles. The bridge across the river has been completed and track is being laid on to the Montreal river, 10 miles. The bridge over this river is in course of erection, and it is expected to have it completed so that track can be laid into Elk Lake city by Dec. 31. (Nov., pg. 558.)

J. L. Englehart, Chairman of the Commission, is reported as stating that 20 miles of track have been laid on the Elk Lake branch, leaving 10 miles yet to be laid. The piers and cofferdams for the bridge over the Montreal river have been completed, and the steel work is being assembled.

The Ontario Government survey party returned to Cochrane, Nov. 5, after having completed the preliminary survey for the projected extension of the line to Hudson bay. The party, which was headed by W. R. Maher, has laid out a road to Moose Factory, at which point surveys have been made for a harbor by J. E. McMillan. The reports are being prepared for the government, but it is not expected that anything will be done in the way of construction for some time. (Nov., pg. 558.)

**Western Dominion Ry.**—A meeting of shareholders of the Alberta Pacific Ry. was held at Pincher Creek, Alta., Nov. 2, for the purpose of approving the sale of the company's property to the W.D. Ry. Co. The A.P. Ry. Co. was incorporated by the Alberta legislature, and the W.D. Ry. Co. has a Dominion charter and is controlled by the same interests. Recent Calgary press reports state that the W.D. Ry. Co. is a subsidiary of the Chicago, Milwaukee and St. Paul Rd. (Nov., pg. 559.)

**Wetaskiwin, Yellowhead and Revelstoke Ry.**—Application is being made to the Dominion parliament to incorporate a company with this title to build a railway from Wetaskiwin, Alta., westerly to the Saskatchewan river, thence following the Brazeau river valley to its headquarters, then along the Rocky river valley to the Yellowhead, thence westerly and southwesterly along the valleys of the Caure and Columbia rivers to Revelstoke, B.C. Loegie and Manley, Wetaskiwin, Alta., are solicitors for applicants.



Kenora district. Lewis and Smellie, Ottawa, are solicitors for applicants.

**Medicine Hat, Alta.**—Among the bylaws voted on on Dec. 27 was one authorizing the spending of \$20,000 for spur tracks to industrial sites. (Oct., 1912, pg. 502.)

**Moncton and Buctouche Ry.**—See Buctouche Ry. and Transportation Co.

**North Ry.**—It has been announced in Montreal that an arrangement has been made by which the G.T. Pacific Ry. will be given running rights over the section of the line between Montreal and Bell river, Que., the junction with the National Transcontinental Ry. It is reported that arrangements have been completed for starting construction on this section of the line during the current month. This will not consist of general construction work, but will be selected pieces of the line on which there is a lot of rock work, on which blasting is best done during the winter. (Dec., 1912, pg. 605.)

**North Shore Ry. and Navigation Co.**—We are officially advised that the following extensions of the line are under survey:—From Adamsville to Snow Shoe lake on the National Transcontinental Ry., N.B., 20 miles; and from Beersville to Richibucto Cape, N.B., 30 miles. C. Dean, Adamsville, N.B., is Superintendent. (June, 1912, pg. 301.)

**Pacific and Hudson Bay Ry.**—The Dominion Parliament is being asked to extend the time for the building of this projected railway, as set out in the statutes of 1910. Power is also sought to increase the capital to \$25,000,000, and to enter into agreements with the Pacific Great Eastern Ry., the Edmonton, Dunvegan and British Columbia Ry., and British Columbia and Dawson Ry. W. F. Brougham, Vancouver, B.C., is solicitor for applicants. (Dec., 1912, pg. 605.)

**Pacific Great Eastern Ry.**—Grading has been started on the extension of the Howe Sound and Northern Ry., which has been acquired by the P.G.E. Ry., in the direction of Lillooet, B.C. P. Welch, the general contractor, is reported to have sublet the following mileages:—Four miles to foot of Bear Mountain, P. Welch; next seven miles, McAll and Wilson; next five miles, not yet let; next five miles, McGowan and Murchison; next five miles, — McGillivray; next five miles, McAlpin and Cunningham. At the Lillooet end of the line 42 miles have been sublet in sections to the following:—D. D. McPhee & Co.; Kennedy and Welsh; Nicholson and Timlick; Burns-Jordan and Co.; Peter Salvas, J. A. Welsh. It is reported that a further 32 miles will be let as soon as the wagon roads, now under construction, are completed. (Dec., 1912, pg. 605.)

**Peace River Great Western Ry.**—The Al-

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treal. (May, pg. 220.)

**Pacific Great Eastern Ry.**—Track laying was reported to have been started, April 28, at the point where the line starts off from the Howe Sound and Northern Ry. Grading camps extend northerly for about 20 miles from Newport, B.C., and a wagon road has been cut out for 20 miles, and is being extended to the summit of the coast range. Arrangements are reported to have been completed for the building of a wagon road southerly from Pemberton Meadows to the summit of the coast range, where it will connect with the road being built northerly. Supplies are being sent into the various grading camps on the section between Newport and Lillooet. Engineering parties started out, April 30, to make the final location for the line from Lillooet to Fort George, and the general contractor, P. Welch, is preparing to sublet this portion of the work.

Negotiations are still in progress for the right of way from North Vancouver to Newport, the starting point of the Howe Sound and Northern Ry., which has been incorporated with the P.G.E. Ry. If certain lands are sold to the company for the right of way the company has offered to start construction in June and to have the line completed to Point Atkinson within six months, operating an electric service thereon. A considerable number of property owners signified their willingness at a meeting held May 6 to accept the terms offered, and it was expected that a complete agreement would be reached by May 30.

The Provincial Minister of Railways has approved the company's plans for standard bridges on the line as follows:—60 ft. deck and through truss spans; 100 ft. through and span deck truss spans; 125 ft. through spans; 150 ft. through and deck spans. (April, pg. 169.)

JULY  
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December, 1913.]

## CANADIA

with construction on the line along the Squamish Valley, beyond the point to which track was laid on the old Howe Sound and Northern Ry. It is expected that a train service will be put on this section at the beginning of 1914.

Squamish Indian Reserve at Newport, B. C., has been acquired by the P. G. E. Ry. The reserve contains 988 acres, of which 40 are reserved by the tribe and each member of the tribe is to receive a 50 ft. lot. The price paid is \$150,000 for the land and \$5,000 for the timber. The land is to be used for terminal and townsite purposes. (Oct., pg. 475.)

Pacific, Peace River and Athabasca Ry.— Application is being made to the Dominion for the incorporation of a com-

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negotiations are in progress for the Bella Coola Indian Reserve. (May, 1913, pg. 220.)

**Pacific Great Eastern Ry.**—It is expected that a train service will be put in operation between North Vancouver and West Vancouver, B. C., Jan. 1; and by June 1, as far as Horseshoe Bay, near Newport. The lines being operated from Newport for about 12 miles, and it is expected to be able to run trains as far as Lillooet by the fall, and to have the entire line to Fort George completed by the end of 1915. It is not intended to have the piece of line along Howe Sound into Newport completed until 1916, as there is a water route between Vancouver and Newport, which can take care of the existing traffic.

The company is negotiating with the Provincial Government with a view to securing a considerable area of the tide flats at Newport, reclaiming them for railway purposes. (Dec., 1913, pg. 574.)

**Prince Edward Island Ry.**—The line to be built to Carleton Point in connection with the carferry terminals under construction there, will start from the existing line about 1.5 miles from Cape Traverse. It will be about three miles long. Construction will, we are officially advised, probably be gone on with at once. (Dec., 1913, pg. 574.)

**Quinze and Blanche River Ry.**—We are officially advised that this railway was built only for a very short distance from the

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December  
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## Railway Development.

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

**Alberta and Great Waterways Ry.**—Ballasting has been completed on the first 50 miles of track laid out of Carbondale, the junction with the Edmonton, Dunvegan and British Columbia Ry., and the gangs are engaged on ballasting the remaining 85 miles on which track has been laid. It is expected to complete the ballasting and other finishing work to Lac la Biche, mileage 114, by Sept. 1. At this point the company is building a hotel for tourist traffic. Grading is in progress between the end of steel and Fort McMurray, 165 miles, which it is expected to complete this season. (June, pg. 212.)

**Athabasca and Fort Vermillion Ry.**—A. G. Mackay, Edmonton, Alberta, solicitor for the company, is reported to have given out the following statement, June 11: "We have been busy in formulating plans ever since the charter was granted by the Legislature. Through the Hudson's Bay Co. I have got into touch with C. E. Law, Canadian representative of D. A. Thomas of Cardiff, Wales, who is interested in the Pacific, Peace River and Athabasca Ry. As a result of three interviews matters have been got into working shape, and all the

Intercolonial Ry.—We are officially advised that a contract has been let to J. W. McManus and Co., Moncton, N.B., for building the industrial spur line at Bathurst, N.B., 2.3 miles.

Contracts have been let for buildings as follows: Combined station and freight shed, Trenton, N.S.; Rhodes, Curry and Co., Ltd., Amherst, N.S.; combined station and freight shed, Derby Jct., N.B.; and station building at Humphreys, N.B., McLaggan, McBean and Bell; freight shed, 400 x 40 ft., at Lewis, Que., G. B. Mitchell, Montreal.

Tenders are under consideration for building a number of small concrete culverts and arches, and the concrete substructures for steel viaducts at Ottawa Brook and Walker's Gulch, on the Sydney, N.S., Subdivision.

Press reports state that in addition to the regular season's work on the Sydney Subdivision, a number of steel bridges will be renewed and strengthened.

The general work of betterments for this year includes the relaying of about 75 miles with new 85 lb. rails. An Atlantic type shovel has been bought for ballasting, and there are now at work on the line four steam

charge of O. E. Fisher, Superintendent, with offices at Penticton. The new line starts at Midway, and runs through to Merritt, 274.3 miles, which mileage includes 1.5 miles from South Penticton to the wharf in Penticton. From Princeton, mileage 71.3, to Brookmere, mileage 109.8, the track is owned by the Vancouver, Victoria and Eastern Ry. (G.N.R.), and is operated as a joint section with the K.V. Lines. At Merritt connection is made with the Nicola branch, which connects with the main transcontinental line at Spences Bridge. The other mileage operated is from Carson to Grand Forks, 4.00 miles, and from Grand Forks to Lynch Creek, 18.5 miles. The line also extends to Republic, Wash. (June, pg. 212.)

**Pacific Great Eastern Ry.**—Announcement has been made in Vancouver that through an arrangement with the Dominion and Provincial Governments funds have been provided for the continuance of construction between Vancouver and Fort George, B.C. The line is at present in operation for some miles out of North Vancouver toward Squamish, and from Squamish to Lillooet, 120 miles. Considerable work has been done between Lillooet and Fort George, and it is expected to have the line completed for a further 100 miles by the end of the year. The objective for the year's tracklaying is the Hundred Mile House in Cariboo district (May, pg. 171.)

**Peace River Tramway and Navigation Co.**



timber bridge is being built at Grand Narrows, which will raise the track 4 ft. above the present level. The bridge is expected to be completed early in November.

The new station at Humphreys, N. B., was reported, Sept. 10, to be nearly completed, and the new freight shed at Levis, Que., replacing the one burned down, was expected to be completed Oct. 31. (Sept., pg. 341.)

The International Union Terminals Co. of Seattle, Wash., through A. F. Gillies and E. C. Matheson, laid a proposal before the Bridge and Railway Committee of the Vancouver City Council, Aug. 30. The company proposes to lay out a union terminal on Burrard Inlet, between Main St. and Heatley Ave., with tunnels to False Creek, and an electric railway from Vancouver to Seattle, Wash., at which place the company plans to lay out a similar terminal. The officers of the company, it is stated, are: President, J. C. Eden; Vice President, M. McDougall; Treasurer, J. McMasters; and Secretary, F. C. Jackson, all of Seattle. The cost of the entire Canadian end of the project is mentioned as \$50,000,000, and the first unit would involve an expenditure of \$15,000,000. An option, it was said, had been secured on the Hastings Mill site. The financial end of the project would be handled by the Stone and Webster interests of Boston, Mass., and it was sought to arrange with the Western Canada Power Co. for the necessary power.

Kettle Valley Lines.—The extension from the Coquihalla summit to Hope on the Fraser River, is expected to be completed by Nov. 30. Track is being laid, and the erection of the 7,500 lineal feet of snow sheds is well forward. Track laying is being gone on with from the Hope end, and is reported to have reached Ladner Creek, where a steel bridge is being built. The bridge across the Fraser River at Hope has been completed, and the tracks connecting with the C. P. R. have been laid. (Sept., pg. 341.)

Pacific Great Eastern Ry.—It is expected to have the track laid and the line completed from Squamish, the seacoast terminal, as far as Clinton, B. C., this autumn. It is hoped to have track laid to the Hundred Mile House by Dec. 31. From Fort George about 50 miles of grading has been completed southerly, and it was reported, Sept. 5, that work on this section was at a standstill. (Sept., pg. 341.)

Prince Edward Island Ry.—Tenders are under consideration for the erection of a station building, water tank, locomotive house, transfer platform, standpipe pit, ash-pit and turntable foundations for the car ferry terminal at Carleton Point, P. E. I. The carrying out of this work will complete the works necessary for the operation of the car ferry to the mainland at Cape Tormentine, N. B.

The car ferry terminal works at Cape Tormentine are reported to be nearly completed. The last crib of the 1,070 ft. built was put in position recently, and is practically an extension of the previously existing breakwater. In this cribwork about 3,000,000 ft. of lumber, board measure, and 120,000 tons of stone have been used. As soon as the last crib is completed the work of driving the pile fender for the ferry will be gone on with. Two dredges are at work within the enclosed area dredging the approach to the ferry landing. A breakwater nearly 600 ft. long, and containing about 140,000 tons of stone is being built. The substructure work is also in a forward condition. The work is being carried out by A. T. Markle and the O'Brien and Doherty Co., with the Lynn Brennan Co. as subcontractors. F. P. Fripp, Ottawa, is Engineer in charge, with J. McLean as Assistant Engineer on the work.



confirm so far as Dominion Parliament can do all the rights, powers and privileges granted by the Quebec Legislature; to build additional lines to Ottawa, from Montreal to Quebec; and from Montreal and Quebec to the International boundary in the states of Maine, New Hampshire and Vermont, with power to build a bridge across or a tunnel under the St. Lawrence River.

The Quebec Legislature has passed an act varying the subsidy voted last year in aid of the building of the line from Montreal to the mouth of the Nottaway River on Hudson Bay. The original grant was of 4,000 acres of land a mile for the line from Montreal to the junction with the National Transcontinental Ry. at mileage 837 west of Moncton, N.B., and 5,000 acres of land a mile for the remaining mileage, the total length of the line being 650 miles. The act recently passed doubles the land subsidy, provides that it may not be converted into money by the province, gives the company the right of the ownership of mines and minerals in one-fifth of the land, provided the selection is made within five years; gives the company power to apply to the government for the grant of any water power along the route of the line as may be necessary for its purposes, at a rental of 50 cents a year per horsepower developed, provided the application is made within 15 years. (Jan., pg. 21.)

**Pacific and Peace River Ry.**—The Dominion Parliament is being asked to extend the time within which the company may build the line authorized by chap. 127 of the statutes of 1911. J. A. Ritchie, Ottawa, is solicitor for applicants. (April, 1912, pg. 182.)

**Pacific Great Eastern Ry.**—The land near by the Howe Sound and Northern Development Co., at Newport, B.C., has been transferred to the P.G.E. Development Co. It is proposed to develop the property by the erection of docks and wharves for ocean going vessels, and extensive railway terminals. In a recent speech the Premier of British Columbia is reported to have said that the terminals of the line would be in North Vancouver, where it had been arranged to lay out \$10,000,000 in providing terminal facilities. W. A. Tate, Vice President, is reported as stating that at present it is more advantageous to spend money on construction northerly from Newport, than between North Vancouver and Newport. The entire line, however, will be built within contract time, although the North Vancouver-Newport section of 45 miles will be the last piece to be built.

The Premier of British Columbia is reported as having stated, Jan. 2, that arrangements will probably be completed during the year with the P.G.E. Ry. for the extension of the line beyond Fort George into the Peace River country, and probably on to the Alaskan boundary. (Jan., pg. 21.)

**Quebec and Northeastern Ry.**—The Quebec Legislature has incorporated a company

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**Pacific Great Eastern Ry.**—The land held by the Howe Sound and Northern Development Co., at Newport, B.C., has been transferred to the P.G.E. Development Co. It is proposed to develop the property by the erection of docks and wharves for ocean going vessels, and extensive railway terminals. In a recent speech the Premier of British Columbia is reported to have said that the terminals of the line would be in North Vancouver, where it had been arranged to lay out \$10,000,000 in providing terminal facilities. W. Arcey Tate, Vice President, is reported as stating that at present it is more advantageous to spend money on construction northerly from Newport, than between North Vancouver and Newport. The entire line, however, will be built within contract time, although the North Vancouver-Newport section of 45 miles will be the last piece to be built.

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**Quebec and Northeastern Ry.**—The Que-

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that line a direct connection with Montreal. (May, pg. 220.)

Pacific Great Eastern Ry.—Track laying was reported to have been started, April 28, at the point where the line starts off from the Howe Sound and Northern Ry. Grading camps extend northerly for about 20 miles from Newport, B.C., and a wagon road has been cut out for 20 miles, and is being extended to the summit of the coast range. Arrangements are reported to have been completed for the building of a wagon road southerly from Pemberton Meadows to the summit of the coast range, where it will connect with the road being built northerly. Supplies are being sent into the various grading camps on the section between Newport and Lillooet. Engineering parties started out, April 30, to make the final location for the line from Lillooet to Fort George, and the general contractor, P. Welch, is preparing to sublet this portion of the work.

Negotiations are still in progress for the right of way from North Vancouver to Newport, the starting point of the Howe Sound and Northern Ry., which has been incorporated with the P.G.E. Ry. If certain lands are sold to the company for the right of way the company has offered to start construction in June and to have the line completed to Point Atkinson within six months, operating an electric service thereon. A considerable number of property owners signified their willingness at a meeting held May 6 to accept the terms offered, and it was expected that a complete agreement would be reached by May 30.

The Provincial Minister of Railways has approved the company's plans for standard bridges on the line as follows:—60 ft. deck and through truss spans; 100 ft. through and span deck truss spans; 125 ft. through spans; 150 ft. through and deck spans (April, pg. 169.)

June  
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April 1913

are submitted for approval

Pacific Great Eastern Ry.—The Superintendent of Construction is reported as stating Feb. 27, that 150 men were engaged on building a wagon road, and 300 men were working on the railway right of way, between Howe Sound and Bear Mountain. From Burkenhead easterly to Lillooet, 500 men were at work on the right of way. Satisfactory progress is being made, track laying will soon be started, and it is expected to have the line from Howe Sound to Lillooet completed during this year.

The question of the route between North Vancouver and Howe Sound, is still the subject of negotiation with the municipalities and the Provincial Government. The location surveys between Lillooet and Fort George are nearly completed.

The British Columbia Legislature has amended the act of incorporation of 1912, by authorizing the company to build the line from Lillooet "in a generally northerly direction by the most feasible route," instead of "along the bank of the Fraser River north," and by making the rate of interest on the guarantee bonds  $4\frac{1}{2}$  instead of 4 per cent., and a second act has been passed amending chap. 36 of the statutes



Brantford was filed with the city authorities July 5. It shows a route from Lorne bridge to the city limits at Eagle Place.

W. P. Kellett, General Manager, is reported to have stated, July 4, that it is expected to have the line opened from Brantford to Galt, by Oct. 1, and the section from Brantford to Port Dover, by June 1914. The line is being built to steam railway standards, but the story that it is to be exclusively a steam railway has no foundation in fact, as electricity will be the motive power used ultimately, though it may be operated by steam for a time at first. (July, pg. 331.)

Medicine Hat, Alta.—R. O. Sweery, General Manager, Montreal Engineering Works, stated in Medicine Hat, Alta., that the coal carrying spur line, known as the Ansley spur line, will probably be electrified in the near future and operated in connection with the electric railway which his company is arranging to build in that city. (Jan., pg. 19.)

Minneapolis, St. Paul and Sault Ste. Marie Ry.—U.S. press reports state that the company has engineering parties west of Conrad, Mont., finishing up the uncompleted portion of Plaza extension survey. It is not expected, however, that any construction will be done this year. The reports further state that grading is being done in Sheridan County, in the northeastern part of Montana, and that tenders have been invited for the grading of a stretch of line south of the International Boundary to Barre, Valley County. It is said that this line is to be extended to a junction with the Alberta Ry. and Irrigation Co.'s line, terminating at Sweet Grass, which is now owned by the C.P.R. (April, pg. 163.)

New Brunswick Coal, Iron and Clay Co.—The New Brunswick Legislature has incorporated a company with this title, having power, among other things, to build railways or tramways to connect its properties with the C.P.R., and with shipping points on the St. John River, "but shall not be bound to operate such railways or tramways as a common carrier." The provisional directors are:—T. Bell, S. A. Payne, St. John, N. B.; H. W. Binning, Fredericton, N.B.; J. D. Mitchell, Lincoln, N.B.; J. W. Wilson, Welsford, N.B.

Northern New Brunswick and Seaboard Ry.—A contract under the act granting aid to certain railways, has been entered into by the Dominion Government with the company for the building of a line from the Drummond Mines to Austin Brook to the Intercolonial Ry. where it intersects the branch line from Bathurst station to Bathurst Harbor, N.B., 16.9 miles. This line has been operated for a couple of years, but the subsidy was only made available last session. (July, pg. 332.)

Pacific Great Eastern Ry.—A start was made with the construction of the 14 miles of line to connect North Vancouver with Howe Sound, B.C., July 1. It is expected that this will be completed and the line opened by July 1, 1914. At Howe Sound connection will be made with the Howe Sound and Northern Ry., which has been acquired by the P.G.E. Ry. From the terminus of that line construction is being pushed as far as Lillooet, and work is also in progress thence to the Fraser River. A subcontract on this latter section has been let to Rankin & Co. Orders have been placed in the U.S. for 20,000 tons of steel rails for the line, and the first shipment will be made from New York early in August. (July, pg. 332.)



will run, are expected to be ready in the summer of 1914. (July, pg. 332.)

**Pacific Great Eastern Ry.**—A. E. Kellett, Superintendent of Construction, reported to the North Vancouver Council, Sept. 6, that it was expected to have the line as far as Dundarane ready for operation by Jan. 1, 1914. This is part of the section of the line from North Vancouver to Newport, on Howe Sound.

Plans have been deposited with the Minister of Public Works at Ottawa, for a wharf and tramway, with trestle approach, at the head of Howe Sound, B.C., in front of D.L. 486, G.I., N.W.D. (Sept., pg. 432.)

**Prince Edward Island Ry.**—Work has been started on the car ferry terminals at Carleton Point, P.E.I., and at Cape Tormentine, N.B. ——— Fripp is engineer in charge for the Dominion Government. (Sept., pg. 433.)

**Quebec Rapid Transit Co.**—Unconfirmed press reports state that work will be start-

September  
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December, 1913.]

CANADIA

with construction on the line along the Squamish Valley, beyond the point to which track was laid on the old Howe Sound and Northern Ry. It is expected that a train service will be put on this section at the beginning of 1914.

Squamish Indian Reserve at Newport, B. C., has been acquired by the P. G. E. Ry. The reserve contains 988 acres, of which 40 are reserved by the tribe and each member of the tribe is to receive a 50 ft. lot. The price paid is \$150,000 for the land and \$5,000 for the timber. The land is to be used for terminal and townsite purposes. (Oct., pg. 475.)

Pacific, Peace River and Athabasca Ry.— Application is being made to the Dominion for the incorporation of a com-

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January, 1915.]

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to proceed with construction on this section of the line.

F. G. Gamble, Chief Engineer of the British Columbia Railways Department, in a report on the progress of construction, confirms the figures mentioned above, and gives the following additional details:—A temporary bridge has been erected at Anderson's Creek on the Lillooet River, which will be replaced by a steel one, when the Dominion Government has decided whether it will contain a movable or a fixed span. Between Lillooet River and Anderson Lake there will be two truss bridges, one over Oriole Creek, with a 100 ft. span, and the other over Birkenhead River, with a 125 ft. span, between trestle work. Temporary bridges are being erected. There are several small bridges to be built between Anderson Lake and the Fraser River. Between Squamish and Pemberton Meadows, 39,877 lineal feet of side tracks and sidings have been put in, and ballasting is being carried on. The track laid is in excellent shape. (Dec., 1914, pg. 544.)

**Pacific, Peace River, and Athabasca Ry.**—C. F. Law, Vancouver, B.C., who is the local representative of this British company, is reported to have stated that the location survey for the first section of this projected railway from the Pacific coast at the Maas River to the Groundhog coal district, B.C., had been completed. He went to London, Eng., early in December to report progress to the company, and possibly to make arrangements for starting construction in the spring. [See also Peace River Tramway and Navigation Co.] (Dec. 1914. pg. 544.)



[January, 1915.

without having to cross the tracks. The Minister during his inspection suggested that the subway be built at Yonge St., and that the city pay a part of the cost.

Questions concerning the reduction of gradients, and the building of second track at various points were looked into during the inspection, and the Minister stated that these matters would be fully considered before any decisions were arrived at. (Dec., 1914, pg. 531 and pg. 544.)

**Klondike Mines Ry.**—The Yukon Gold Mining Co. is applying to the Board of Railway Commissioners for an order directing the K. M. Ry to elevate its tracks over several creeks, so as to allow hydraulic mining operations to be carried on. The K. M. Ry contends that to do this would be detrimental to mining business further north, and that it might as well go out of business. The matter came before the board Dec. 1, and is under consideration. (July, 1912, pg. 339.)

**Moncton and Buctouche Ry.**—Press reports state that surveys have been made for an extension of the line from the present terminus at Buctouche to the Intercolonial Ry. at Loggieville, N.B., 65 miles. We stated in our issue of Jan., 1914, on official advice, that the preliminary surveys for this line were being made by the Moncton and Northumberland Strait Ry., which had been incorporated under a Dominion charter to build this and other lines, and to take over the M. and B. Ry. Although the same interests, to a large extent, own the two companies, we were advised in May, 1914, that the amalgamation had not taken place. E. G. Evans, Hampton, N.B., is associated with both companies. [See also Moncton and Northumberland Straits Ry.] (Dec., 1914, pg. 544.)

**Moncton and Northumberland Strait Ry.**—The Dominion Parliament is being asked to extend the time within which the projected railways from Buctouche to Richibucto Harbor, N.B., from Richibucto to Chatham or Loggieville, N.B.; from Painsec Jct. to Cape Tormentine, N.B., and from Westport to Coleman, P.E.I., may be built. The company has power to operate a car ferry from Cape Tormentine to Westport, and is authorized to amalgamate with the Moncton and Buctouche Ry. (Dec., 1914, pg. 544.)

**Pacific Great Eastern Ry.**—It was reported, Dec. 5, that a train service would be put in operation on the line from Squamish, B.C., to the head of Anderson Lake, 35 miles, Dec. 15, an extension of 27 miles beyond Pemberton, to which point a train service had previously been operated. Track is reported to have been laid to Lillooet 120 miles from Squamish, and it is expected to have this additional 35 miles ready for operation in February. Between Lillooet and Fort George, 317 miles, grading is reported to be approaching completion. Grading of one section has been completed to Horse Lake Summit, 250 miles from Squamish, and another section of 30 miles has been completed south of Fort George. On the intervening section of 167 miles, about 78% of the grading has been completed. With the exception of one section, on which there is some heavy work to be done, the grading is expected to be completed by the end of February and the last section in June.

J. W. Stewart, President, after completing a trip of inspection over the line, is reported to have said that surveys had been completed for the extension of the line from Fort George to the Peace River Valley, where connection would be made with the Edmonton, Dunvegan and British Columbia Ry. and the Canadian Northern Ry. The company, however, was not yet ready

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Geoffrion, G. N. Cusson, R. Gange, Montreal. The company has power to operate its lines by steam or electricity. (June, 1911, pg. 557.)

**Pacific Great Eastern Ry.**—J. W. Stewart, President, is reported to have stated in Vancouver, B.C., Feb. 4, that the contractors expected to have the uncompleted portions of the grade between Squamish and Fort George, linked up by Mar. 1. Track is reported to have been laid into Lillooet, mileage 120 from Squamish. Between Lillooet and Clinton, 50 miles, there is considerable bridge work. The foundations for the 2,600 foot bridge over the Fraser River are finished. It is expected to have track laid to Clinton by Aug. 1.

A regular train service is being operated from Squamish to Anderson Lake.

We are officially advised that track laying is to be started early in May from Fort George southerly, towards Clinton, and that the Squamish-Fort George section will be completed this year. This section involves the building of a high level bridge across the Cottonwood River.

Nothing has been decided as to the starting of construction from Fort George towards the British Columbia-Alberta boundary, where a junction is to be effected with the Edmonton, Dunvegan and British Columbia Ry.

The residents of the vicinity of North Vancouver decided, Feb. 3, to send a delegation to the Provincial Government asking that pressure be put on the company to push forward the construction of the section of the line from North Vancouver to Squamish. This piece of line is in operation from North Vancouver to Horse Shoe Bay, 12 miles, and the distance from the latter point to Squamish is 26 miles. (Feb., pg. 57.)

**Pacific, Peace River and Athabasca Ry.**—

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over which traffic can be carried to Spence's Bridge. This section will not be connected with the Midway-Hope line until some time in 1915. Construction on this east and west line, which is the main line, is reported to be progressing favorably. (Aug., pg. 370.)

**Lake Erie and Northern Ry.**—The question of the building of a station in Brantford, Ont., is being held up following the recent decision of the Board of Railway Commissioners not to permit the use of the park property at the foot of Scarfe Ave. and Church St.

It is said that while the line from Brantford to Galt, Ont., will be operated by steam power, as soon as the whole line is completed the passenger traffic will be operated by gasoline cars. (Aug., pg. 370.)

**Medicine Hat Southern Ry.**—The Board of Railway Commissioners has authorized the company to build its line across the C. P.R. in Medicine Hat, Alta.

The M. H. S. R. Co. was incorporated by the Alberta Legislature in 1913, to build a railway from sec. 2, tp. 11, range 6, west of the 4th meridian, northerly to sec. 2, tp. 12, range 6, and on to the limits of the city of Medicine Hat. The company may use electricity, steam or any other motive power. The provisional directors are:—L. Hunt, H. O. Knowles, S. G. Bannan, Medicine Hat.

**Pacific Great Eastern Ry.**—Press reports state that track has now been laid from Squamish to beyond Cheakamus, and that grading has been completed to Lillooet, mileage 120 from Squamish. It is expected to have the grading from Lillooet to Clinton completed in the autumn, and track laid by the end of the year. About 10% of the grading is reported to have been done between Clinton and Lac la Hache, and considerable work has been done thence to Fort George. It is reported that further subcontracts have been let at this end of the line which is being built from Fort George, as follows:—Welch and Kennedy, 4 miles; Rankin and Kellett, 20 miles; Mad den Bros., 6 miles.

A temporary bridge has been erected across the Nechaco River at Fort George to facilitate the preliminary work on the extension to the Alberta boundary. Location surveys are reported to be well advanced and it is expected that construction work will be started as soon as possible. Local reports state that it is intended to build a branch to Dawson, Yukon, and that Finlay Forks has been selected as the point from which it will start. (Aug., pg. 371.)

**Pacific, Peace River and Athabasca Ry.**—



# Canadian Railway AND Marine World

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## PRINCIPAL CONTENTS.

Appointments, Transportation . . . . .	473
Board of Railway Commissioners—	
Increases for Drawing-Room Cars . . . . .	447
Orders by, Summaries of . . . . .	460
Traffic Orders . . . . .	469
Canadian Northern Ry.—	
Break in Wharf at Port Arthur, Ont. . . . .	454
Construction, Etc. . . . .	467
Hospital Cars . . . . .	472
Standard Flanger Car . . . . .	457
Canadian Pacific Ry.—	
Construction, Etc. . . . .	464
Employees' Medical Association . . . . .	451
Locomotive Shop Addition at Montreal . . . . .	445
Military Commissary Kitchen Cars . . . . .	463
Motors on Laggan-Lake Louise Line . . . . .	468
Tunnel in Selkirk Mountains . . . . .	466
Electric Railway Department . . . . .	474 to 478
Finance, Meetings, Etc. . . . .	476
Projects, Construction, Etc. . . . .	476
Sherbrooke Ry. and Power Co. Report . . . . .	475
Three-Way Switch on a Seven-Lamp Cir- cuit . . . . .	473
Toronto Civic Railway Car Barns . . . . .	474
Express Companies, Among the . . . . .	485
Grand Trunk Pacific Ry.—	
Annual Meeting . . . . .	467
Construction . . . . .	469
Lining Tunnels . . . . .	458

## Pushing the Canadian Northern Railway Transcontinental Line to Completion.

It is gratifying to note that the war has not made any appreciable difference in regard to the construction of the C.N.R.'s main transcontinental line. The construction forces have not been reduced, except as sections have been completed, and there has been no slackening of speed in the carrying on of the work.

It will be remembered that out of the \$45,000,000 of debenture stock guaranteed by the Dominion Government at its regular session in June, \$15,000,000 was offered to the public in England in July. This issue had only been offered for about a day when war was declared and in that time 21% was subscribed for by the public, a pretty good indication that the whole of it would have been taken in the three days during which the subscription lists were announced to be open, had not war broken out. The whole issue had of course been underwritten, and the underwriters have not taken undue advantage of the British moratorium, but have already paid over practically the whole amount of the issue.

At the time of writing there is every prospect that very nearly the whole of the track will be laid on the entire main line from Montreal to New Westminster by the end of this year and that what little track-laying may then remain uncompleted will be finished very soon thereafter.

## No Stoppage of Work on the Pacific Great Eastern Railway.

A statement issued over the signature of D'Arcy Tate, Vice President of the Pacific Great Eastern Ry. says:—"Following a conference which Messrs. Stewart and Welch have had with the Premier of British Columbia, I beg to say that it has been decided to continue the construction of our railway without reducing the force on account of the outbreak of war

"The Premier was strongly of the opinion that in view of the fact that our bonds have been sold and that the proceeds are in the bank at Vancouver, it would be most in the interest of the public and of the working-man, who still requires his three meals a day, to prosecute the work as vigorously as possible. 'Full speed ahead' he urged and so it was decided."

Particulars of the progress of construction on this line, which is being built from Vancouver to Fort George, B. C., about 480 miles, will be found under "Railway Development" on another page of this issue.

## An Unfounded Report About Train Ser- vice Reduction.



ton and Fort George, about 20% of the grading is reported completed. About 60 miles of location has been completed between Fort George and the British Columbia-Alberta boundary, where a junction is to be effected with the Edmonton, Dunvegan and British Columbia Ry. (Oct., pg. 468.)

Prince Edward Island Ry.—Work is proceeding satisfactorily on the Carleton Point extension, from the Emerald-Cape Traverse Branch, which starts 8.06 miles from Emerald and 3 miles from Cape Traverse, to run to Carleton Point, where a terminal is being built for the New Brunswick-P.E. Island car ferry. The only structure of any importance is one trestle. Standard gauge ties are being laid, as it is the intention to change from 3½ ft. to standard gauge when the car ferry goes into operation. F. P. Tripp, Cape Tormentine, N.B., is in charge of this work and also of the terminals on both sides of the strait. (June., pg. 267.)

St. John and Quebec Ry.—A press report stated recently that it was expected to have the section from Gagetown to Centreville, N.B., completed and ready to be taken over for operation under the agreement with the Intercolonial Ry. by Oct. 31. The line into Fredericton is under construction. In connection with this piece of work some difficulty arose with the crossing of the C.P.R. at Aberdeen St., and an interim injunction was obtained, stopping the work. The matter came before the court for argument subsequent to Oct. 15.

U.S. press reports state that arrangements are being made for the starting of construction of the section of the line from Washburn, Me., to the Quebec boundary, early in 1915.

Temiscouata Railway.—At the annual meeting held recently, \$10,000 were appropriated for betterments. We are officially advised that it is possible that during next year the company will commence relaying the track with heavier steel.

Winnipeg.—The Commissioners of the Greater Winnipeg Water District are reported to have let a contract to the Rat Portage Lumber Co., Kenora, Ont., for the delivery of 8,000 ties at Indian Bay, Shoal Lake, Man. (Oct., pg. 468.)

### National Transcontinental Railway Construction.

The Minister of Railways returned to Ottawa, Oct. 14, after a trip of inspection over the line from Quebec to Lake Superior Jct., Ont. He is reported to have said that it would be ready for operation Nov 1. With regard to the taking over of the operation of the railway by the G.T.P.R., he said arrangements had not been finally made, and an announcement as to this would be made later.

An Ottawa press dispatch says there will be a limited train service this winter between Moncton, N.B., and Levis, Que., and probably also from Hearst, Ont., eastward. The line is already in operation, under the Intercolonial Ry. management, from Moncton to Escount, Que., 286.3 miles, so the probability is that the operation to Levis will be under the same management. No intimation has been given as to how the line will be operated eastward from Hearst, Ont., which is the junction point with the Algoma Central and Hudson Bay Ry. (Oct., pg. 469.)

### Grand Trunk Pacific Railway Construction.



Pacific Great Eastern Ry.—It was reported, Oct. 3, that track had been laid to mileage 60 from Squamish, B.C. Arrangements are being made for putting on a train service to Alta Vista, mileage 37.5 from Squamish. The grading is completed to Lillooet, mileage 133; from that point to Clinton, mileage 220, the grading is about 80% completed, and it is expected to have the remaining 20% finished by Nov. 30. Between Clin-

November 1914



couver, B.C., solicitor for applicants.

**Pacific Great Eastern Ry.**—A combination passenger and freight service has been placed in operation on the line from Squamish to the Lillooet River at Pemberton Meadows.

Plans have been deposited with the Minister of Public Works for a bridge over the Lillooet River between mileage 19 and 20, Alta. Lake Summit North, and approval has been asked for the same.

**Pacific, Peace River and Athabasca Ry.**—Application is being made to the Dominion Parliament to authorize the building of the following additional lines: From tidewater

*December 1914*







June, 1914.]

## CANADIAN

**Pacific Great Eastern Ry.**—Tracklaying is reported to have been started at Dundarave, B.C., to which point the line is at present in operation from North Vancouver, 4.5 miles, in the direction of Horseshoe Bay. The bridge gangs are working well in advance of the steel, the rails being rafted down to them. It is expected to have track laid to Horseshoe Bay early in July. Track has been laid from Squamish for 20 miles, and grading is practically completed thence to Lillooet, mileage 120 from Squamish. Between that point and Kelly Lake grading is well advanced, and the following sub-contracts are reported to have been let on the line between Fort George and Kelly Lake, in addition to those mentioned in our May issue:—Heckman and Moore, 10 miles near Clinton; Welch and Kennedy, four miles; Rankin and Kellett, 20 miles; Mad-dox Bros., six miles. The quantities on the subcontract let to A. E. Griffin & Co., Fort George, referred to in our May issue, are:—Earth excavation, 1,000,000 cubic yards; rock excavation, 500,000 cubic yards; embankment, 1,500,000 cubic yards. (May, pg. 214.)

**Pacific, Peace River and Athabasca Ry.**—C. F. Law who represents the British in-

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Port Dover work has been restarted, and considerable progress is being made. A number of C.P.R. engineers, who were engaged on the second track work between Islington and Guelph Jct., were ordered to report on the work, and a C.P.R. bridge construction gang was sent to Simcoe.

It was stated in Brantford, June 17, that any intention of utilizing the T.H. and B.R. station in the city, and the T.H. and B.R. line between Brantford and Waterford, had been abandoned. The L.E. and N. Ry. will, it is stated, build its own station in the city, and its own line to Waterford.

**Montreal Central Terminal Co.**—An issue of £1,028,000 of 5% first mortgage bonds was offered on the London, Eng., market, June 4, at 90. The prospectus states that they are to be secured on a first mortgage on the company's central station proposed to be built on Ontario St., Montreal, with yards, warehouses, etc., in connection therewith, and the railway lines to be built between the central station and the points of junction near Bordeaux, Montreal, with railways entering Montreal from the north and west. It is asserted that the proposed system of the company's railways will, when completed, be connected with at least 12 railway lines, and will exchange traffic therewith. The directors are:—C. Newhouse, Armstrong, London, Vice President; Central Ry. of Canada, President; J. E. Wilder, manufacturer, Montreal; Hon. T. Berthiaume, M.L.C., Proprietor, La Presse, Montreal; Sir Thomas H. C. Troubridge, London; A. E. Labelle, Harbor Commissioner, Montreal; F. H. Allen, New York, and F. E. Came, M. Can. Soc. C.E., Montreal; Sir Douglas Fox and Partners, London, are consulting engineers, and the City Safe Deposit and Agency Co., Ltd., London, are trustees for the bondholders.

The prospectus also states that several railways have at present only a restricted access to the centre of the city, and that there is no effectual means of traffic exchange between the several lines, and that additional traffic connection with the south of the city is required. It is expected, adds the prospectus, that the yards will be sufficiently advanced to permit of their use by July, 1915, and fully completed in Dec., 1915, from which it is estimated that there will be, after providing for bond interest, a surplus of \$347,935 from railway revenue alone. When the proposed tunnel to the south shore is completed, the revenues would be largely increased.

**Pacific, Peace River and Athabasca Ry.**—D. A. Thomas, President, Cambrian Collieries Trust Co., who is also President of the P.P.R. and A. Ry. Co., returned to London, Eng., recently from a trip to Western Canada, and is reported to have stated that adequate financial arrangements had been made for starting construction on the railway, and also for the electric lines proposed to be built under the charter of the Peace River Tramway and Navigation Co. It was not expected, however, to go on with construction on the latter lines this year.

The surveys for the Nasoga-Groundhog section of the line show a route of about 150 miles. Local press reports state that negotiations have been in progress with Sir Donald Mann with a view to the line built from Stewart, B. C., inland for 14 miles, and surveyed to the Groundhog district, under the charter of the Canadian Northern Eastern Ry. being utilized as part of the company's line. This line would be 105 miles in length to the Groundhog district, and is not at present being operated. (June, pg. 267.)

**Pacific Great Eastern Ry.**—Grading has been completed on the extension from Dundarave to Horseshoe Bay, B.C., and the

steel bridge work is in progress. It is expected to have a train service in operation from North Vancouver to Horseshoe Bay by the end of July. Work is in progress between Horseshoe Bay and Squamish, the ocean terminal. On the terminal site a large quantity of filling is being done along the foreshore. From Squamish the line is under construction practically through to the junction with the G.T. Pacific Ry. at Fort George. We are officially advised that contracts have been let for construction on this line north of Clinton, B.C., as follows:—Madden Bros., Clinton, 6 miles; Rankin and Kellett, Clinton, the next 20 miles; Welch and Kennedy, Clinton, the next 4 miles. The remaining mileage is expected to be put under contract in August.

The projected extension from Fort George to a junction at B.C.-Alberta boundary with the Edmonton, Dunvegan and British Columbia Ry. is under survey. (June, pg. 267.)

**Pere Marquette Rd.**—The company has under construction at Blenheim, Ont., a 100-ton coal chute, of reinforced concrete, with elevators. The floor level is 23-2-3 ft. below the rail level, and the coal will be elevated by hoppers 75 ft. to a chute, from which it will be dropped into the tenders. It is expected the plant will be completed by July 31. (July, 1913, pg. 332.)

**Quebec and Saguenay Ry.**—The Premier recently stated in the House of Commons that the Government was not aware that the Canadian Northern Ry. was going to buy the Q. and S. Ry., or that there was any arrangement for its purchase of the line if the C.N.R. guarantee was finally passed. The Q. and S. Ry. is a partially constructed line, upon which construction has ceased owing to financial difficulties. (June, 1913, pg. 278.)

**Reid Newfoundland Ry.**—A loan of \$2,000,000 has recently been placed in London, Eng., by the Colonial Government to complete the construction of the branch lines arranged for five years ago. The agreement provided for the building of six branches, aggregating about 400 miles. The Bonavista Bay branch, 90 miles, was completed in 1911; the Trepassey branch, 104 miles, is expected to be completed early this summer; the Carbonear-Grate's Cove branch, 45 miles, is completed. Considerable work has been done on the other branches, which will serve the Heart's Content and Fortune Bay districts, and it is expected to have them ready for the completion of tracklaying this season. (May, pg. 215.)

**St. John and Quebec Ry.**—The Dominion Parliament, at its recent session, provided for the guarantee of bonds for \$3,000,000 for building three bridges on the line, at Andover, at The Mistake on the St. John River, and over Kennebecasis River at Parry Point, N.B. It was stated in explanation that a certain amount was provided in 1912 for the erection of these bridges, but it had since been found that they could not be built for the money. As the line, when completed, is to be operated as a part of the Intercolonial Ry., the Government decided to grant the further aid required. The original subsidy was to be given by a guarantee of bonds, the Government to pay the interest for a fixed period. It has now been decided that the Government will build the bridges, with their approaches, and the railway will be granted the free use of them for 15 years, after which the gross earnings of the bridges will be receivable by the Department. The gross earnings of the bridges is to be such proportion of the gross earnings of the railway as the cost of the bridges bear to the combined cost of the bridges and the railway. It is estimated that the bridges will cost about \$3,000,000. The original agree-

ment provided for the guarantee of bonds for \$1,000,000 towards the building of these bridges. (June, pg. 267.)

**Toronto, Hamilton and Buffalo Ry.**—At a dinner in Brantford, Ont., June 4, during the excursion of the Hamilton, Ont., Board of Trade, G. C. Martin, General Freight and Passenger Agent, T.H. and B. Ry., is reported to have said that all arrangements had been completed by the company for a branch line from Smithville to Dunnville, Ont., and that construction work would be started very soon. The line is to be ready for operation by Jan. 1, 1915. (June, pg. 267.)

The Western Dominion Ry. Co. was originally incorporated by the Dominion Parliament in 1912, and Parliament has now extended the time for starting construction for one year, and authorized amalgamation with the Alberta Pacific Ry. under the title of the W.D. Ry. Co. O. E. Culbert, Calgary, Alta., is Secretary. We are advised that contracts are about to be let for the building of the first section of the line.

Press reports state that it has been arranged to start work immediately, and that instead of building about 100 miles as originally proposed, the line will be extended to the International boundary, and there make connection with a branch of the Chicago, Milwaukee and St. Paul Ry., now under construction from Gerent Falls, Mont. The financing for the construction of the section of the line from Calgary to the newly discovered oil regions, it is said, has been arranged, and it is reported that a site for yards, etc., has been secured on the Canadian Petroleum Products Co.'s townsite. The line will touch Okotoks, Pekisko, Lunch Creek (crossing the Crownest Pass line of the C.P.R.), Pincher Creek and Cardston, and run to the International boundary. W. C. Teter, New York, is President of the W.D.R. Co. M. M. Mann, Chief Counsel of the Chicago, Milwaukee and St. Paul Ry., is a director, and J. H. N. Cornell is Chief Engineer.

The Minister of Railways has approved of the route from Calgary on condition that construction is started within three months, and has granted the Calgary and Fernie Ry. running rights into Calgary from 18 miles out. If this section of the line is not started within the three months and completed within a reasonable time the C. and F. Ry. may then build on its own survey.

A press dispatch states that a contract for grading on the first 100 miles from Calgary has been let to the G. H. Webster Co., Calgary, and a contract for 4,000,000 ft. of timber trestle work, and 12,000 cubic yards of concrete culverts to the Forest City Paving Co., Calgary. (June, pg. 268.)

**Winnipeg.**—The Mayor of Winnipeg and a deputation from the City Council made a trip of inspection, on June 10, over the railway line under construction from Transcona to Shoal Lake, Man., in connection with the Greater Winnipeg Water Supply. A large amount of construction has been done and 2.5 miles of steel had been laid on the main line. (May, pg. 215.)

**Master Boiler Makers' Association.**—The eighth annual convention was held at Philadelphia, Pa., recently under the presidency of T. W. Lowe, General Boiler Inspector, C.P.R. A report was submitted by H. W. Armshaw, C.P.R., relating to experiments on the C.P.R. Western Lines in connection with water treatment.

There are said to be 35 gravity or hump yards, on 30 different railway systems. Of these, four are known to be in Canada, three on the C. P. R., and one on the Michigan Central R.



Brantford was filed with the city authorities July 5. It shows a route from Lorne bridge to the city limits at Eagle Place.

W. P. Kelliott, General Manager, is reported to have stated, July 4, that it is expected to have the line opened from Brantford to Galt, by Oct. 1, and the section from Brantford to Port Dover, by June 1914. The line is being built to steam railway standards, but the story that it is to be exclusively a steam railway has no foundation in fact, as electricity will be the motive power used ultimately, though it may be operated by steam for a time at first. (July, pg. 331.)

Medicine Hat, Alta.—R. O. Sweazy, General Manager, Montreal Engineering Works, stated in Medicine Hat, Alta., that the coal carrying spur line, known as the Ansley spur line, will probably be electrified in the near future and operated in connection with the electric railway which his company is arranging to build in that city. (Jan., pg. 19.)

Minneapolis, St. Paul and Sault Ste. Marie Ry.—U.S. press reports state that the company has engineering parties west of Conrad, Mont., finishing up the uncompleted portion of Plaza extension survey. It is not expected, however, that any construction will be done this year. The reports further state that grading is being done in Sheridan County, in the northeastern part of Montana, and that tenders have been invited for the grading of a stretch of line south of the International Boundary to Barre, Valley County. It is said that this line is to be extended to a junction with the Alberta Ry. and Irrigation Co.'s line, terminating at Sweet Grass, which is now owned by the C.P.R. (April, pg. 163.)

New Brunswick Coal, Iron and Clay Co.—The New Brunswick Legislature has incorporated a company with this title, having power, among other things, to build railways or tramways to connect its properties with the C.P.R., and with shipping points on the St. John River, "but shall not be bound to operate such railways or tramways as a common carrier." The provisional directors are:—T. Bell, S. A. Payne, St. John, N. B.; H. W. Binning, Fredericton, N.B.; J. D. Mitchell, Lincoln, N.B.; J. W. Wilson, Welsford, N.B.

Northern New Brunswick and Seaboard Ry.—A contract under the act granting aid to certain railways, has been entered into by the Dominion Government with the company for the building of a line from the Drummond Mines to Austin Brook to the Intercolonial Ry. where it intersects the branch line from Bathurst station to Bathurst Harbor, N.S., 16.3 miles. This line has been operated for a couple of years, but the subsidy was only made available last session. (July, pg. 332.)

Pacific Great Eastern Ry.—A start was made with the construction of the 14 miles of line to connect North Vancouver with Howe Sound, B.C., July 1. It is expected that this will be completed and the line opened by July 1, 1914. At Howe Sound connection will be made with the Howe Sound and Northern Ry., which has been acquired by the P.G.E. Ry. From the terminus of that line construction is being pushed as far as Lillooet, and work is also in progress thence to the Fraser River. A subcontract on this latter section has been let to Rankin & Co. Orders have been placed in the U.S. for 20,000 tons of steel rails for the line, and the first shipment will be made from New York early in August. (July, pg. 332.)



id will run, are expected to be ready in the  
d- summer of 1914. (July, pg. 332.)

7e Pacific Great Eastern Ry.—A. E. Kellett,  
o- Superintendent of Construction, reported to  
nd the North Vancouver Council, Sept. 6, that  
E. it was expected to have the line as far as  
Dundarane ready for operation by Jan. 1,  
y- 1914. This is part of the section of the  
to- line from North Vancouver to Newport, on  
nd Howe Sound.

so Plans have been deposited with the Min-  
re ister of Public Works at Ottawa, for a  
ly- wharf and tramway, with trestle approach.  
ve at the head of Howe Sound, B.C., in front of  
30. D.L. 486, G.I., N.W.D. (Sept., pg. 432.)

m- Prince Edward Island Ry.—Work has  
er, been started on the car ferry terminals at  
in- Carleton Point, P.E.I., and at Cape Tor-  
53 mentine, N.B. ——— Fripp is engineer in  
ed charge for the Dominion Government.  
es- (Sept., pg. 433.)

as Quebec Rapid Transit Co.—Unconfirmed  
he press reports state that work will be start-

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spray the Fredericton and Grand Lake Ry., and the New Brunswick Coal and Ry. Co.'s line, has a line to Norton, and this proposed line would provide it with an entrance into St. John, on the east.

Ontario Lake Front Terminal Ry.—Application is being made to the Dominion Parliament for the incorporation of a company with this title to build a line from between Havelock and Central Ontario Jct., on the C. P. R., southeasterly via Campbellford to Cobourg, and from near Campbellford to Brighton, Ont. C. Pringle, Ottawa, solicitor for applicants.

Regina to Saskatoon, Sask.—The Saskatchewan Legislature is being asked to incorporate a company to build a railway from Regina to Saskatoon. Anderson, Bagshaw and Amyott, Regina, solicitors for applicants.

P. M. Anderson, in an interview, Nov. 5, is reported to have stated that the company will be named the Central Saskatchewan Ry. Co., and that in addition to the line to Saskatoon, it is proposed to ask for power to build lines from Regina to Prince Albert, thence northeasterly to the Saskatchewan-Manitoba boundary, and from Regina easterly to the Saskatchewan-Manitoba boundary, and that the interests behind the project are prepared to spend large sums in order to develop the lines.

Ottawa and Ungava Ry.—The Dominion Parliament is being asked to extend the time within which the company may build the line authorized by Chap. 102 of the Statutes of 1909-10, and Chap. 94 of the Statutes of 1912, and for power to build a line eastward from the main line north of the 49th circle of latitude, by the most feasible route and crossing the Ashwappmuchuan, Mistassini, Peribonka, Bersimis, Ontario, Manicouagan, Pentecote, Ste. Marguerite, Moisie, Romaine, Natashkwan Rivers, to Lake Melville, or to the boundary between the province of Quebec and Labrador in the vicinity of St. Lewis Inlet or of St. Charles River, with spurs northward and southward. A. T. Genest, Ottawa, is Managing Director. The company was incorporated in 1909-10 as the Gatineau and Ungava Ry., but its name was changed as above in 1912. (June, 1912, pg. 300.)

Owen Sound to Meaford.—A deputation from Owen Sound and Meaford, Ont., waited on the Provincial Government recently to urge the granting of aid for the building of a railway to connect these two towns. Consideration was promised. There have been several attempts made within the past ten years to secure the building of this line; two or three charters have been granted, and Dominion aid has been voted but beyond surveys nothing has been done.

Prince Edward Island Ry.—Press reports state that construction of a spur line to Carleton Place, where the car ferry terminal will be situated, has been practically completed. The line is about 2.5 miles long and runs on a tangent from the Cape Trafalgar branch. The cuttings and fills have been built for standard gauge. As soon as completed the line will be used for taking in material for the construction of the terminals. Roger Miller, representing the contractors for terminals, and — Downing, engineer in charge of construction of the spur line, inspected the work, Nov. 14 (Oct., pg. 475.)

Pacific Great Eastern Ry.—D'Arcy Tate, Vice President, stated in Vancouver, Nov. 8, that grading was finished between Dundas ave and North Vancouver, and that track was being laid. It was expected that a suburban train service will be put on this section of the line early in the next year. Considerable progress has been made

Strait Ry.—sioners has a line from l., 19 miles. new title of ortion Co., touche and n called the (See Buc Co., Aug., pg.

Press reports made for a Salt Springs, mond, to St. r states that ver the route, e traffic pos- be leasing of

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where considerable alterations are required to give the line a right of way. There is a good deal of work yet to be done between Brantford and Waterford, owing to the fact that construction was held up on account of negotiations, which proved fruitless, being on for the use of the section of the Toronto, Hamilton and Buffalo Ry. between these points. The work on this section has been resumed, and rapid progress is being made with the grading and bridge work. The section between Waterford and Port Dover is nearly ready for tracklaying, but it is not expected that this will be started until the Brantford-Waterford section is completed.

U.S. press reports state that it is proposed to run a car ferry service to Port Dover in connection with the line, from Erie, Pa., and that negotiations are in progress with the Pennsylvania Rd. for water front and dock space. (July, pg. 323.)

**New Brunswick Coal and Ry. Co.**—Plans have been deposited with the Minister of Public Works showing temporary repairs and reinforcement to existing substructure at bridge 20.6, over the Washademoak River, N.B. A. Sherwood, Fredericton, N.B., is in local charge of this line, which is being operated by the C.P.R.

**Pacific Great Eastern Ry.**—J. W. Stewart, President, is reported to have stated recently that the line from North Vancouver to Port George, B.C., is entirely under contract, and that such progress is being made with the grading that it is expected to have the grading completed from Squamish to Port George and ready for tracklaying this year. It is further expected to have track laid from Squamish to Lillooet, 120 miles, this year.

The ocean terminals are to be laid out at Squamish, and the plans for the extensive works to be undertaken there are being prepared by J. Cumming. They include the changing of the courses of the various channels of the river, the filling up of a large area of low lying land, and the clearing of the Indian reserve.

A train service has been put in operation from North Vancouver to Horse Shoe Bay, 13 miles, and construction is in progress between that point and Squamish, 20 miles. It is not expected to complete this section until the end of 1915, the construction being heavy.

We are officially advised that the following sub contracts have been let on the line southerly from Fort George:—Fort George to mileage 29.5, H. E. Carleton & Co., Prince George; mileage 29.5 to Cotton wood Crossing, mileage 62, A. E. Griffin & Co., Prince George; mileage 62 to 10 miles south of Quesnel, 35 miles, Burns, Jordan & Co., Quesnel; 10 miles south of Quesnel to mile 15 south of Quesnel, 4.00 miles, H. McLeod, Quesnel; mileage 15 south of Quesnel to Four Mile Creek, 12.5 miles, Kullander & Smith, Quesnel; Four Mile Creek to mileage 40 south of Quesnel, 13.5 miles, Shoreby & Co., Soda Creek; mileage 40 south of Quesnel to Soda Creek, 8 miles, N. McLeod, Soda Creek; Soda Creek to Williams Lake, 17 miles, Stewart Bros., Soda Creek. We have already published the facts that subcontracts had been let to these firms, but the present information gives the names and addresses of all the subcontracts let south of Fort George, together with the mileages upon which each is working.

The Minister of Railways for British Columbia has approved of general location for this line now under construction from Ten Mile Lake to Soda Creek, Cariboo district, on the Vancouver-Fort George line; and from Azzuzetta Lake, Pine Pass, to the boundary between British Columbia and Alberta, on the line from Fort George,

which is to connect with the Edmonton, Dunvegan and British Columbia Ry. at the provincial boundary line. (July, pg. 324.)

**Pacific, Peace River and Athabasca Ry.**—J. Anderson, with a party of engineers, has completed a survey of the route from Stewart to the Groundhog River mining district for the British Columbia Government, with a view of constructing a Government road. The present route to the river is via Hazelton, and reaches an elevation of 5,200 ft. The surveys show that a route 40 miles shorter, and reaching an elevation of only 3,200 ft., can be obtained from Stewart. A survey for a railway through this district is being made by the P., P. R. and A. Ry. (July, pg. 324.)

**Prince Albert, Sask.**—Press reports state that the Prince Albert Board of Trade has received a prospectus of the Great North Western Ry., which proposes to build a railway from that city to Athabasca Landing, Alta., and another easterly, either to connect with the Dominion Government railway to Hudson Bay, or direct to the Bay itself. The report suggests that the Board should, if it takes any action at all, advocate the building of a line from Prince Albert to a junction with the Dominion Government railway at Pas, Man.

**Quebec Central Ry.**—Press reports state that about five miles of grading have been completed on the extension of the line from St. Sabine to English Lake (also called Lac la Frontiere), 26 miles, and that a second five miles will be completed this year. P. J. Wolfe, Sherbrooke, Que., is the contractor for the grading. J. T. Morkill, Chief Engineer. It is expected that the contract for the remaining 16 miles will be let in 1915.

A contract has been entered into with the Dominion Government, under the act granting aid for the construction of certain railways for the building of a line from St. Sabine parish, mileage 31.34 from St. George, to mileage 50, in the Devoire Tp., L'Islet County.

**St. Francis Valley Ry.**—This projected line will have a total length of 140 miles if built. It will extend from Sorel, via Drummondville, Melbourne and Magog, to the International Boundary near Stanstead, with a branch from Cherry Valley to Granby, Que. The only work yet done is the survey of a proposed route from Drummondville to Melbourne, 30 miles. The officers and directors are:—President, A. P. Frigon; Vice President, C. B. Hibbard; Treasurer, G. Gauthier; other directors: A. St. Cyr, Hon. F. L. Belque. (May, pg. 215.)

**St. John and Quebec Ry.**—Press reports state that track has been laid on 110 miles of line, and that a train service will be put in operation over a considerable mileage at once. This mileage is between Gagetown and Centreton, N.B. Other portions of the line are under construction, and a contract is reported let for the remaining mileage. The Dominion Government will build the three big bridges necessary to finally complete the line. The exact location of some small portions of the line will not be fixed until the sites for these bridges have been definitely agreed upon. (July, pg. 324.)

**Skye Mountain Ry.**—The Nova Scotia Legislature has incorporated a company with this title to build a railway in the Skye Mountain district of Inverness County. It is projected in connection with the opening up of some collieries in the vicinity of Orangedale.

**Western Dominion Ry.**—Press reports state that construction will be started early in August on this projected railway from Calgary, via the Old Man River valley, Pincher Creek and Cardston, to the International Boundary, in range 23 west of the 4th



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couver, 15 miles. According to the agree-  
ment with the Vancouver City Council, all  
the terminal work has to be completed  
within five years from the signing of the  
document, about two years ago. The com-  
pany owns about 164 acres at the upper end  
of False Creek, and is reclaiming about 60  
acres of the creek. It has erected a large  
bulkhead for 1,500 ft. easterly from the  
Morris St. bridge, then 2,000 ft. southerly,  
behind which has been pumped about 1,000,  
000 cubic yards of sand. A large culvert for  
drainage purposes has been constructed to  
deep water. This work of continuing the  
filling in was restarted Feb. 1, but nothing  
has been decided as to the actual start on  
building the permanent sea wall. The Van-  
couver City Council has passed a resolution  
urging the immediate putting in hand of  
this work.

The members of the British Columbia  
Legislature were given a special trip over  
the section of the C.N.P.R., from Port Mann  
to Cisco, 140 miles, Feb. 12. T. H. White,  
Chief Engineer; D. O. Lewis, Divisional  
Engineer on Vancouver Island; and J. M.  
Mercer, engineer for the Northern Construc-  
tion Co., accompanied them.

The British Columbia Minister of Finance,  
replying to a question in the Legislature,  
Feb. 1, said none of the Canadian Northern  
Pacific Terminal bonds guaranteed by the  
Province had been hypothecated, but bonds  
to the value of \$1,770,000 had been sold,  
realizing \$1,645,577. The prices realized  
ranged from 92 to 95%. The following  
amounts had been expended upon ter-  
minals:—Port Mann, \$337,420.88; New West-  
minster, \$1,370,642.42; Vancouver, \$148,  
045.05; Steveston, \$201,715.85; Patricia Bay,  
\$898.57; total, \$2,148,722.77. (Feb., pg. 60.)

### National Transcontinental Railway Construction.

The total track mileage of the N.T.R. is  
as follows:—Main line, Moncton, N.B., to  
Winnipeg, Man., 1,803.42 miles; second  
track and line from Quebec to site of Que-  
bec bridge, 20.79 miles; sidings and yards,  
423.26 miles; total track mileage, 2,247.47.  
The total cost of the line, to Mar. 31, 1914,  
as stated in the ninth annual report of the  
Commissioners, was \$142,967,999.02, which  
does not include interest on capital expendi-  
ture, nor any expenditure made by the Gov-  
ernment on the approaches to the Quebec  
bridge, before that work was taken over as  
a part of the N.T.R. undertaking. At that  
date the steel bridges on the line were  
97.2% completed, the Quebec bridge being

### Great Northern Railway Lines in Canada.

Vancouver, Victoria and Eastern Ry. and  
Navigation Co.—J. H. Kennedy, Chief En-  
gineer, visited St. Paul, Minn., Feb. 6, to  
consult A. H. Hogeland, Chief Engineer,  
G.N.R., in connection with the Hope Moun-  
tain and other sections of the line at present  
under construction. The first section con-  
nects up the already constructed part of the  
line with the Hope Mountain section, which  
is being built by the Kettle Valley Ry. for  
joint use. The line from Hope to a junction  
with the Canadian Northern Pacific Ry. has  
already been built, and the V. V. & E. Ry.  
operates over that line to New Westminster,  
where connection is made with its own lines  
to Vancouver, Port Guichon and the ferry to  
Vancouver Island, and the line formerly  
known as the New Westminster Southern  
Ry. to the U.S.

Vancouver Terminals.—R. Budd, Assist-  
ant to the President, G.N.R., and G. R. Mar-  
tin, Comptroller, left Vancouver, B.C., Feb.  
4, after having spent some time there in  
discussing the False Creek terminal plans.  
The agreement with the city provides for  
the erection of station buildings, the laying  
out of yards and other terminal facilities  
by the end of 1916. Up to the present time,  
several hundred acres of the False Creek  
flats have been filled in under the terms of  
the agreement, and the visit of the com-  
pany's officials had to do with the arrange-  
ments for starting building operations. The  
city council passed a resolution calling upon  
the company to proceed with the building of  
the station and the laying out of the ter-  
minal yards at once. (Feb., pg. 61.)

Canadian Shipping and the German Sub-  
marine Menace.—In common with the ship  
owners of Great Britain, those of Canada,  
while appreciating the possibility of some  
damage to their vessels, or even an occasion-  
al total loss, are not in any sense panic  
stricken, at the recent German threat to  
carry on a wholesale attack against all ves-  
sels trading to and from Great Britain and  
Ireland. The consensus of opinion amongst  
Canadian shipowners is that there is no  
more danger than there was a month ago.

The United States and the Proposed Pur-  
chase of Interned Foreign Steamships.—In  
connection with the ship purchase bill which  
Congress has passed recently, the U. S.  
Secretary of the Treasury has stated that  
in view of false rumors and statements  
he deems it advisable to say that at no time  
had a communication from, or discussion



QUEBEC  
CENTRAL  
RAILWAY



with construction on the line along the Squamish Valley, beyond the point to which track was laid on the old Howe Sound and Northern Ry. It is expected that a train service will be put on this section at the beginning of 1914.

**Squamish Indian Reserve at Newport, B. C.,** has been acquired by the P. G. E. Ry. The reserve contains 988 acres, of which 40 are reserved by the tribe and each member of the tribe is to receive a 50 ft. lot. The price paid is \$150,000 for the land and \$5,000 for the timber. The land is to be used for terminal and townsite purposes. (Oct., pg. 475.)

**Pacific, Peace River and Athabasca Ry.—**Application is being made to the Dominion Parliament for the incorporation of a company with this title to build a railway from the mouth of the Naas River on the Pacific Coast, B. C., easterly 225 miles to the height of land between the Naas and Skeena Watersheds, thence to the North Tacla Lake, through Hogan Pass to the Omineca River, and the Findlay branch of the Peace River, along the Peace River to the Athabasca River, and Fort McMurray, thence to Prince Albert, Sask., a total distance of 1,500 miles. Pringle, Thompson, Burgess and Cote, Ottawa, solicitors for applicants.

**Peace River Tramway and Navigation Co.—**Application is being made to the Dominion Parliament for the incorporation of a company with this title, to build a railway from Smith's Landing on Peace River, to Fort Smith on the northern boundary of Alberta; a line from Vermillion Rapids easterly along the northern bank of the Peace River to Vermillion Falls, with branch lines, and to operate steamships on the Peace, Slave and Mackenzie Rivers. Pringle, Thompson, Burgess and Cote, Ottawa, solicitors for applicants.

**Quebec Central Ry.—**The work of locating the route for the projected extension from St. Sabine to St. Pamphile, Que., of which F. H. Burpee, has been in charge, has been completed for the season. The final location of the 25 miles from St. Sabine to English Lake, has been completed, and grading has been done on the first ten miles. P. J. Wolfe, Sherbrooke, Que., having the contract. Track is reported to have been laid to St. Camille, five miles from St. Sabine, on the extension, and a train service is expected to be put in operation on it by the end of the year. (Dec., 1912, pg. 605.)

**Quinze and Blanche River Ry.—**Application is being made to the Dominion Parliament for an extension of time for the building of the lines authorized by Chap. 123 of

and by Chap. 127



Thompson, Burgess and  
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**Quinze and Blanche River Ry.**—Applica-

December 1913



Quebec Central Ry.—The extension along the Chaudiere River valley, we are officially advised, is being gradually pushed forward to Lac La Frontier, Montmagny county, Que. The first five mile section from St. Sabine to St. Camille was put under contract in 1913, and the work is completed. P. J. Wolfe, Sherbrooke, Que., who had the contract, was given a contract this year for the construction of a further five miles beyond St. Camille. This is now in hand, and it is expected to have it completed by Oct. 31. On this section there is one large bridge, consisting of three spans of 80 ft. each, which is being erected by the Dominion Bridge Co., and was expected to be completed by Aug. 31. As soon as this section is completed the 10 miles from St. Sabine will be put in operation. The extension from St. Camille to Lac La Frontier, 15 miles, will, it is expected, be put under contract in 1915. (Aug., pg. 371.)

St. John and Quebec Ry.—Press reports

September  
1914



Government railway at Pas, Man.

Quebec Central Ry.—Press reports state that about five miles of grading have been completed on the extension of the line from St. Sabine to English Lake (also called Lac la Frontier), 26 miles, and that a second five miles will be completed this year. P. J. Wolfe, Sherbrooke, Que., is the contractor for the grading. J. T. Morkill, Chief Engineer. It is expected that the contract for the remaining 16 miles will be let in 1915.

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THE NAVIGATION OF THE ST. LAWRENCE  
rivers. The principal break is at the Ver-  
million rapids. (Mar., pg. 122.)

Quebec Central Ry.—An extension of the  
Q.C. Ry. from St. Sabine, Dorchester County,  
to English Lake, also called Lac La Fron-  
tier, a distance of 25 miles, has been sur-  
veyed and located. Plans, profiles, etc.,  
have been deposited with the Railway De-  
partment at Quebec, and the location ap-  
proved of. Ten miles of the line from St.

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Sabine to five miles east of St. Camille is under construction, a portion of which was actually built during last year, and the balance of the 10 miles will be completed during this year. It is expected that the other 15 miles will be constructed in 1915, so that the line to English Lake will probably be in operation by the end of 1915. The work is being done under the direction of J. T. Morkill, Chief Engineer, assisted by J. M. Hibbard. The route follows the water shed of the St. John River and is close to the boundary line between the Province of Quebec and State of Maine. At English Lake the line will be within 1,000 ft. of the International Boundary line. It is through a thickly wooded country with rich clay and loamy soil, and well adapted for cultivation when the land is cleared. (Feb., pg. 70.)

Rimouski International Ry. — The Do-



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**Quinze and Blanche River Ry.**—Application is being made to the Dominion Parliament for an extension of time for the building of the lines authorized by Chap. 123 of the R.S.C. and by Chap. 127



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licitors for applicants.

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**Quinze and Blanche River Ry.**—Applica-

December 1913



railway connection with the bridge and the terminal station at Champlain Market. (July, pg. 381).

**Quebec Central Ry.**—A contract has been let to Clarke Gordon, Sherbrooke, for the grading of the first part of the Chaudiere extension, authorized to be constructed last session of the Quebec Legislature. This will extend from Beauce Jet. to St. George, about nine miles. The company will do its own tracklaying. (July, pg. 381)

**Quebec and Lake Huron Ry.**—An act was

August 1906



1905, pg. 461).

**Quebec Central Ry.**—An act was passed last session of the Quebec Legislature authorizing the construction of the Quebec Central Chaudiere Extension, by diverting and rebuilding the present line from Beauce Jct. to Beauceville, and a new line from Beauceville to the River Famine, along the valley of that river and of the St. John River to a junction with the Temiscouata Ry. at Cabano station, a total distance of 125 miles. Of this line the extension to the Famine River is to be completed within two years, and the remainder of the line in 10 years. (June, no. 327).

July 1906



Central Ry.

**Quebec Central Ry.**—Reference to the proposed extensions of the company's lines will be found in the report of the annual meeting on pg. 317. The extension from Scott's is for the purpose of securing a connection with the Quebec River Bridge, now under construction, and the extension from Beauceville to the River Famine is the first part of a project to connect the line with the Temiscouata Ry., which is controlled by the same interests as the Q.C. Ry. This projected line will follow the Quebec-New Brunswick border for the main part of the distance. The press report that the directors had ordered the immediate construction of the Scott's-Quebec Bridge line is, we were officially informed, May 16, incorrect. (Feb., pg. 65)

**Quebec River Bridge Co.**—Application is

JUNE 1906



415 miles, and has trackage rights over 53 miles additional for passenger trains only. The report shows:

	1905	1904
Freight earnings	\$1,509,282	\$1,441,601
Passenger earnings	879,201	841,003
Gross earnings	2,388,483	2,282,604
Maint. way and structures	378,887	318,288
Maint. of equipment	329,326	319,022
Conducting transportation	923,101	908,772
Operating expenses	1,715,603	1,635,319
Net earnings	846,486	801,717

After meeting first charges and an appropriation of \$100,000 for equipment bonds, there was \$190,847 available for dividends, out of which 1 1/2% absorbing \$135,864, was paid, the first payment on the capital stock since 1903, when 1% was distributed.

**Temiscouata Ry.**—Receipts for April, \$14,896.35, against \$14,034.56 for April, 1904.

**Toronto, Hamilton and Buffalo Ry.**—Earnings for April, \$63,244.31, against \$57,592.75 for April 1905.

#### Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1904-05, from July 1, 1905:

Earnings	Expenses	Net Earnings	Increase or Decrease
July, \$395,100	\$253,600	\$141,500	\$31,400+
Aug., 357,900	246,200	111,700	12,200+
Sept., 378,500	268,300	110,200	14,000+
Oct., 357,100	268,900	88,200	11,500+
Nov., 366,800	341,700	22,100	68,500+
Dec., 437,800	305,600	132,200	7,100+
Jan., 359,000	300,600	58,400	10,800+
Feb., 391,400	217,900	173,500	23,300+
Mar., 441,000	324,200	116,800	46,800+
\$3,796,100	\$2,505,000	\$1,291,100	\$347,900+

Approximate earnings for April, \$544,800, against \$482,900 for April, 1905.

#### C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1904, from July 1, 1905:

Earnings	Expenses	Net Profits	Increase or Decrease
July, \$4,609,774.95	\$2,991,397.29	\$1,618,377.66	\$188,125.34+
Aug., 4,796,735.06	3,005,088.07	1,791,646.99	\$23,715.48+
Sept., 4,974,575.38	3,086,395.35	1,888,180.03	\$97,202.49+
Oct., 5,122,797.30	3,448,596.12	1,674,201.18	\$70,957.27+
Nov., 5,741,512.12	3,360,232.13	2,381,280.00	\$61,736.25+
Dec., 5,619,182.63	3,272,599.57	2,346,583.06	\$8,914.48+
Jan., 4,422,699.96	3,158,456.94	1,264,243.02	\$44,355.53+
Feb., 4,234,457.76	3,018,797.98	1,215,659.78	\$93,572.46+
Mar., 5,093,386.24	3,348,631.74	1,744,754.50	\$61,837.46+
\$45,123,406.53	\$28,617,365.12	\$16,506,041.41	\$85,459,626.90+

Approximate earnings for April, \$546,000, against \$4,106,000 for April 1905.

**DULUTH, SOUTH SHORE AND ATLANTIC RY.**—Gross earnings for Mar., \$253,308.24; net earnings \$77,522.40, against \$298,391.63 gross and \$91,400.02 net for Mar., 1905. Net earnings for nine months ended Mar. 31, \$257,406.25 against \$266,209.41 for same period 1904-05. Approximate earnings for April, \$240,045 against \$227,940 for April, 1905.

**MINERAL RANGE RY.**—Approximate earnings for April, \$54,514, against \$44,431 for April, 1905.

**MILWAUKEE, ST. PAUL AND SABLE ST. MARIE RY.**—Gross earnings for Mar., \$503,677.25; net earnings, \$260,229.02, against \$771,515.84 gross and \$300,801.04 net for Mar., 1905. Net earnings for nine months ended Mar. 31, \$4,951,805.61, against \$5,347,637.39 for same period 1904-05. Approximate earnings for April, \$466,321 against \$266,664 for April, 1905.

#### Grand Trunk Ry. Earnings, Expenses, etc.

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

	1906	1905	Increase. Decrease.
Jan.	\$1,806,439	\$1,674,242	\$132,197
Feb.	2,604,274	2,268,252	336,022
Mar.	3,268,011	3,047,080	220,931
April	3,180,305	2,900,209	280,096
\$11,047,029	\$10,929,783	\$117,246	

The following figures relate to the individual lines, and are made out in sterling:

GRAND TRUNK RY. CO.			
Revenue for Mar.:			
	1906	1905	Increase. Decrease.
Gross receipts	£200,500	£190,500	£10,000
Working expenses	152,300	151,500	800
Net profit	£48,200	£39,000	£9,200

Aggregate from Jan. 1 to Mar. 31:

	1906	1905	Increase. Decrease.
Gross receipts	£1,371,300	£1,256,900	£114,400
Working expenses	1,044,900	945,500	99,400
Net profit	£326,400	£311,400	£15,000

#### CANADA ATLANTIC RY. CO.

Revenue for Mar.:			
	1906	1905	Increase. Decrease.
Gross receipts	£32,300	£28,000	£4,300
Working expenses	24,800	20,400	4,400
Net profit	£7,500	£7,600	£100

Aggregate from Jan. 1 to Mar. 31:

	1906	1905	Increase. Decrease.
Gross receipts	£80,800	£73,700	£7,100
Working expenses	70,400	65,300	5,100
Net profit	£10,400	£10,400	

#### GRAND TRUNK WESTERN RY. CO.

Revenue for Mar.:			
	1906	1905	Increase. Decrease.
Gross receipts	£208,000	£196,000	£12,000
Working expenses	79,700	85,000	£5,300
Net profit	£129,300	£111,000	£18,300

Aggregate from Jan. 1 to Mar. 31:

	1906	1905	Increase. Decrease.
Gross receipts	£597,100	£568,300	£28,800
Working expenses	231,900	232,800	900
Net profit	£365,200	£335,500	£29,700

#### DETROIT, GRAND HAVEN & MILWAUKEE RY. CO.

Revenue for Mar.:			
	1906	1905	Increase. Decrease.
Gross receipts	£30,700	£27,700	£3,000
Working expenses	25,200	23,000	2,200
Net profit	£5,500	£4,700	£800

Aggregate from Jan. 1 to Mar. 31:

	1906	1905	Increase. Decrease.
Gross Receipts	£281,800	£274,900	£6,900
Working Expenses	66,300	58,400	7,900
	£215,500	£216,500	£1,000

#### MEMO RE-MICHIGAN TAXATION.

The U.S. Supreme Court having upheld on appeal the validity of the Michigan State Law, increasing the taxation payable by the railways in that State, the amount of additional taxes and interest on the arrears payable by the G.T.R. lines in that state to Dec. 31, 1905, is about £108,000 which the board proposes to charge over a period of two years in equal monthly proportions. The amount affecting the G.T.R. accounts will be about £2,630 per month, and the amount affecting the G.T. Western accounts about £1,900 per month. In the March statement the amounts for Jan. and Feb. are included, in addition to the proportion for the month of March.

#### TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from Jan. 1 to April 30:			
	1906	1905	Increase. Decrease.
Grand Trunk	£1,841,768	£1,603,053	£238,715
Canada Atlantic	108,451	102,401	6,050
G. T. Western	367,786	367,388	398
D. G. H. & M.	107,066	91,274	15,792
Total	£2,424,071	£2,164,118	£259,953

#### Quebec Central Railway Meeting.

The following report for the year ended Dec. 31, 1905, was presented at the annual meeting in London, Eng., May 2:

	1904	1905
\$778,969 Gross earnings		\$789,205
540,373 Working expenses		528,380
\$238,596 Net earnings		\$260,825
336 Interest on balances		476
\$238,932 Net revenue		\$261,301

This statement shows an increase in gross earnings of \$10,236, a decrease in working expenses of \$11,983, and an increase in net earnings of \$22,229. The net revenue was \$261,301. The addition of \$10,679 brought forward from 1904 made the available balance \$271,980. After providing \$90,600 for the year's interest paid and accrued on the outstanding prior lien bonds and 4% debenture stock, \$15,000 was charged against net revenue for alterations, additions, and improvements to stations, buildings, etc. There then remained a balance of \$166,371, out of which was paid the interest on the 3% second debenture stock, amounting to \$49,348, and interest at the rate of 5 1/2%

for the year on the 7% income bonds. These two payments absorbed \$139,818, and left a surplus of \$26,553, of which \$15,000 has been appropriated for betterments to bridges, and \$11,553 carried forward. At Dec. 31, 1905, £283,137 of the 4% debenture stock had been issued. Of this £199,500 had been used in retiring a like amount of prior lien bonds, and £83,637 had been sold to provide funds for a portion of the requisite additional capital expenditure authorized by the act of 1899. There remained £150,500 prior lien bonds outstanding on Dec. 31, 1905.

The directors record with deep regret the loss of their old and valued colleague and friend, S. G. Sheppard, who died Oct. 3, 1905. It was in a great measure owing to his interest and support in the early days when the present board took office that the company is in the sound position it occupies to-day. The directors announce the retirement of F. Grundy from the position of General Manager, which took effect on Dec. 31. He was appointed on Jan. 1, 1889, and the invaluable services he has rendered to the company are a matter of common knowledge, and can be best appreciated by a comparison of the annual report for 1890 with that for the year just concluded. The directors will still have the benefit of Mr. Grundy's advice and sound judgment, as he retains the office of Vice-President and his seat on the Board. J. H. Walsh, whose name will be familiar as General Freight and Passenger Agent, which office he has so ably filled for many years, has been appointed General Manager in Mr. Grundy's stead, and E. O. Grundy has been appointed General Freight and Passenger Agent as successor to Mr. Walsh. By the constitution of the company, the entire board, other than the directors, is elected annually, and the present directors offer themselves for re-election.

The statistics showed 211.86 miles of line owned, and trackage rights on the Intercolonial Ry. between Harlaka Jet and Levis, Que., 5 miles. The rolling stock consisted of 19 locomotives, 14 passenger cars, 614 flat, box and stock cars, and 28 miscellaneous and working cars. The total train mileage was 651,320, against 668,046 in 1904; 249,898 passengers and 485,988 tons of freight were carried against 228,951 passengers and 501,280 tons in 1904.

President E. Dent, in moving the adoption of the report, referred to the death of S. G. Sheppard, and analyzed the figures contained in the report somewhat in detail. There had been a healthy increase in the passenger traffic, but only a small increase in the freight traffic, owing to the fact that 1904 was an abnormal year owing to the dry autumn of 1903, which prevented the floating down the rivers of large quantities of lumber for handling in that year. This decrease in the lumber had been partly made up by a large increase of traffic in other goods, and also the average earnings per ton had slightly increased. Of course, last year they were fortunate in having very few accidents of any kind, and only a few wash-outs, to which Canada's railways were particularly liable. It would be remembered that in 1904 the company built a new iron bridge over the River Chaudiere. Last year they completed a steel bridge at Sherbrooke, and the General Manager had now told them that all the main bridges were composed of steel. He might add that all these bridges were now paid for except \$6,000, which was carried over to the present year. He next referred to the proposed extensions, the changes in management, and concluded by stating that the gross earnings for the current year to the third week in April had amounted to \$246,750, an increase of \$47,648 over the last year. The net earn-



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**Quebec and Lake St. John Ry.**—A contract has been let to E. Conway, Quebec, for an extension of the Gosford branch towards the Riviere aux Pins, where considerable settlement has taken place. The contract covers an extension of two miles, the object of the additional construction being to accommodate the shippers of pulpwood, cordwood and square birch. The previous temporary terminus did not reach a good piling ground. The extension of the two miles is located on what will be later on the main line of the Gosford branch when it is pushed to completion. The construction is now started and the line has to be finished by July 1, 1907. The work is medium heavy, gradients 1% and curvature 5%. The La Tuque branch is practically completed, and a train service will be put on at an early date. We were advised Oct. 19, that 24 miles of track had been laid on the branch, and that it was expected to lay up to the 35th mile before winter. This will bring the end of steel to five miles from La Tuque falls, the proposed terminal. The general contractor is Jos. Paquet, and O'Brien, Fowler & Co. are the sub-contractors, working from mileage 24 to La Tuque falls, mileage 40. (May, pg. 255).

**Saskatchewan Valley and Hudson Bay Ry.**—Application will be made next session of the

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ville to St. George, Que., 10 miles, is being rapidly pushed to completion. The contractor is Clark Gordon of Sherbrooke, Que. The charter for building this extension was granted by the Quebec Legislature in March last, the contract signed in June and work was immediately commenced; from 250 to 500 men have been constantly employed. There are some very heavy rock cuts and fills, but the work is rapidly nearing completion and it is expected that the line will be in operation to St. George before the end of the year.

The Scotts branch, which will connect the main line with the new Quebec Bridge over the St. Lawrence, thereby giving the Q.C. Ry. an entrance into Quebec city, has been located, but actual construction is not likely to commence before the beginning of 1908. The Quebec Bridge is not expected to be completed before the end of 1909, the extension from Scotts to the Bridge, about 20 miles, can be completed in one season, and in ample time for the opening of the bridge.

Queen Charlotte Islands Ry.—Application



1906, pg. 713.)

**Quebec and Lake St. John Ry.**—Track has been laid on the La Tuque branch as far as the 30th mile from La Tuque Junction, Que., and work is in progress upon the remaining 10 miles of the branch, which will end at La Tuque Falls. Track was laid on 16.75 miles of the branch during 1906. J. Paquet is the contractor. The Gosford branch was extended 1.75 miles during 1906, and now ends at 5.50 miles from Valcartier station. E. Conway, Quebec, is the contractor. The branch from Roberval station to the Government wharf on Lake St. John, one mile, has been completed. (Dec., 1906, pg. 715.)

**Quebec Central Ry.**—Track has been laid on the extension from Beauceville to St. George, Que., 9 miles. It is proposed to extend this line at a future date to a junction with the Temiscouata Ry., near Cabana station, Que., about 150 miles. The other extension which the company has in contemplation is from Scotts to the southern end of Quebec Bridge, 9.23 miles. (Dec., 1906, pg. 713.)

**Quebec, Montreal and Southern Ry.**—The

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1905, pg. 461).

**Quebec Central Ry.**—An act was passed last session of the Quebec Legislature authorizing the construction of the Quebec Central Chaudiere Extension, by diverting and rebuilding the present line from Beauce Jct. to Beauceville, and a new line from Beauceville to the River Famine, along the valley of that river and of the St. John River to a junction with the Temiscouata Ry. at Cabano station, a total distance of 125 miles. Of this line the extension to the Famine River is to be completed within two years, and the remainder of the line in 10 years. (June, no. 327).

JULY 1906



railway connection with the bridge and the  
 terminal station at Champlain Market.  
 (July, pg. 381).

**Quebec Central Ry.**—A contract has been  
 let to Clarke Gordon, Sherbrooke, for the  
 grading of the first part of the Chaudiere  
 extension, authorized to be constructed last  
 session of the Quebec Legislature. This will  
 extend from Beauce Jet. to St. George, about  
 nine miles. The company will do its own  
 tracklaying. (July, pg. 381)

**Quebec and Lake Huron Ry.**—An act was

August 1906



Central Ry.

**Quebec Central Ry.**—Reference to the proposed extensions of the company's lines will be found in the report of the annual meeting on pg. 317. The extension from Scott's is for the purpose of securing a connection with the Quebec River Bridge, now under construction, and the extension from Beauceville to the River Famine is the first part of a project to connect the line with the Temiscouata Ry., which is controlled by the same interests as the Q.C. Ry. This projected line will follow the Quebec-New Brunswick border for the main part of the distance. The press report that the directors had ordered the immediate construction of the Scott's-Quebec Bridge line is, we were officially informed, May 16, incorrect. (Feb., pg. 65.)

**Quebec River Bridge Co.**—Application is



415 miles, and has trackage rights over 53 miles additional for passenger trains only. The report shows:

	1905	1904
Freight earnings	\$1,509,282	\$1,441,601
Passenger earnings	879,201	841,003
Gross earnings	2,388,483	2,282,604
Maint. way and structures	378,887	318,288
Maint. of equipment	329,326	319,022
Conducting transportation	923,101	908,772
Operating expenses	1,715,603	1,635,319
Net earnings	846,486	801,717

After meeting first charges and an appropriation of \$100,000 for equipment bonds, there was \$190,847 available for dividends, out of which 1 1/4%, absorbing \$135,864, was paid, the first payment on the capital stock since 1903, when 1% was distributed.

**Temiscouata Ry.**—Receipts for April, \$14,896.35, against \$14,034.56 for April, 1904.

**Toronto, Hamilton and Buffalo Ry.**—Earnings for April, \$63,244.31, against \$57,502.75 for April 1905.

#### Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1904, from July 1, 1905:

Earnings.	Expenses.	Net Earnings.	Increase or Decrease.
July, \$394,100	\$152,600	\$144,900	\$11,400+
Aug., 357,900	148,200	111,700	12,400+
Sept., 378,500	168,300	110,200	14,000+
Oct., 557,100	208,900	298,200	113,600+
Nov., 566,800	241,700	225,100	68,700+
Dec., 437,800	205,600	144,400	7,100+
Jan., 359,900	200,100	99,800	10,800+
Feb., 301,400	217,900	83,500	24,300+
Mar., 441,600	224,200	117,400	46,800+

\$3,796,100 \$2,506,000 \$1,290,100 \$347,900+  
Approximate earnings for April, \$344,800, against \$289,900 for April, 1905.

#### C.P.R. Earnings, Expenses, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1904, from July 1, 1905:

Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July, \$4,609,174.93	\$2,991,397.39	\$1,449,554.14	\$188,125.32+
Aug., 4,706,733.98	3,005,088.07	1,791,645.91	303,715.48+
Sept., 4,972,575.38	3,086,865.35	1,776,010.03	307,302.40+
Oct., 5,722,707.70	3,448,566.12	2,274,071.18	707,957.27+
Nov., 5,441,543.12	3,380,232.13	2,361,310.99	601,726.25+
Dec., 5,619,182.53	3,272,529.34	2,346,653.31	681,914.48+
Jan., 4,402,600.96	3,153,456.94	1,207,234.99	844,365.53+
Feb., 4,224,457.26	3,018,707.98	1,205,749.78	903,574.46+
Mar., 5,093,286.24	3,148,611.74	1,844,604.20	661,877.46+

\$45,122,406.32 \$28,617,365.12 \$16,505,041.40 \$5,452,626.96+  
Approximate earnings for April, \$3,462,000, against \$4,196,000 for April 1905.

**Duluth, South Shore and Atlantic Ry.**—Gross earnings for Mar., \$252,308.54; net earnings \$77,522.40, against \$238,391.63 gross and \$91,406.02 net for Mar., 1905. Net earnings for nine months ended Mar. 31, \$737,466.25 against \$666,300.41 for same period 1904-05. Approximate earnings for April, \$240,045 against \$227,940 for April, 1905.

**MINERAL RANGE Ry.**—Approximate earnings for April, \$34,514, against \$44,431 for April, 1905.

**MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE Ry.**—Gross earnings for Mar., \$905,677.25; net earnings, \$389,329.02, against \$771,543.54 gross and \$299,801.93 net for Mar., 1905. Net earnings for nine months ended Mar. 31, \$4,365,804.51 against \$3,341,637.39 for same period, 1904-05. Approximate earnings for April, \$496,381 against \$526,664 for April, 1905.

#### Grand Trunk Ry. Earnings, Expenses, etc.

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

	1906.	1905.	Increase. Decrease.
Jan.	\$2,396,439	\$2,674,242	\$222,197
Feb.	2,002,274	2,268,274	234,002
Mar.	2,268,011	2,047,000	220,911
April	2,180,305	2,090,209	90,096
	\$11,047,029	\$10,979,765	\$67,264

The following figures relate to the individual lines, and are made out in sterling:

GRAND TRUNK RY. CO.			
Revenue for Mar.:			
	1906.	1905.	Increase. Decrease.
Gross receipts	£290,500	£264,500	£26,000
Working expenses	367,200	324,800	42,400
Net profit	£123,300	£139,700	£16,400

Aggregate from Jan. 1 to Mar. 31:			
	1906.	1905.	Increase. Decrease.
Gross receipts	£1,371,300	£1,206,000	£165,300
Working exp's	1,044,900	945,900	99,000
Net profit	£326,400	£260,100	£66,300

CANADA ATLANTIC RY. CO.			
Revenue for Mar.:			
	1906.	1905.	Increase. Decrease.
Gross receipts	£32,300	£28,000	£4,300
Working expenses	24,800	20,400	4,400
Net profits	£7,500	£7,600	£100

Aggregate from Jan. 1 to Mar. 31:			
	1906.	1905.	Increase. Decrease.
Gross receipts	£200,800	£173,700	£27,100
Working expenses	70,400	63,300	7,100
Net profit	£130,400	£110,400	£20,000

GRAND TRUNK WESTERN RY. CO.			
Revenue for Mar.:			
	1906.	1905.	Increase. Decrease.
Gross receipts	£28,900	£106,000	£7,100
Working expenses	70,700	85,000	£14,300
Net profit	£10,200	£21,000	£10,800

Aggregate from Jan. 1 to Mar. 31:			
	1906.	1905.	Increase. Decrease.
Gross receipts	£267,100	£268,200	£1,100
Working expenses	231,900	234,800	2,900
Net profit	£35,200	£33,400	£1,800

DETROIT, GRAND HAVEN & MILWAUKEE RY. CO.			
Revenue for Mar.:			
	1906.	1905.	Increase. Decrease.
Gross receipts	£30,700	£27,700	£3,000
Working expenses	25,400	23,000	2,400
Net profit	£5,300	£4,700	£600

Aggregate from Jan. 1 to Mar. 31:			
	1906.	1905.	Increase. Decrease.
Gross Receipts	£281,800	£272,500	£9,300
Working Expenses	66,300	58,200	8,100
	£215,500	£214,300	£1,200

#### MEMO RE-MICHIGAN TAXATION.

The U.S. Supreme Court having upheld on appeal the validity of the Michigan State Law, increasing the taxation payable by the railways in that State, the amount of additional taxes and interest on the arrears payable by the G.T.R. lines in that state to Dec. 31, 1905, is about £108,000 which the board proposes to charge over a period of two years in equal monthly proportions. The amount affecting the G.T.R. accounts will be about £2,600 per month, and the amount affecting the G.T. Western accounts about £1,500 per month. In the March statement the amounts for Jan. and Feb. are included, in addition to the proportion for the month of March.

#### TRAFFIC RECEIPTS OF THE SYSTEM.

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Grand Trunk	£1,301,768	£1,602,055	£108,713
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The following report for the year ended Dec. 31, 1905, was presented at the annual meeting in London, Eng., May 2:

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The directors record with deep regret the loss of their old and valued colleague and friend, S. G. Sheppard, who died Oct. 3, 1905. It was in a great measure owing to his interest and support in the early days when the present board took office that the company is in the sound position it occupies to-day. The directors announce the retirement of F. Grundy from the position of General Manager, which took effect on Dec. 31. He was appointed on Jan. 1, 1889, and the invaluable services he has rendered to the company are a matter of common knowledge, and can be best appreciated by a comparison of the annual report for 1890 with that for the year just concluded. The directors will still have the benefit of Mr. Grundy's advice and sound judgment, as he retains the office of Vice-President and his seat on the Board. J. H. Walsh, whose name will be familiar as General Freight and Passenger Agent, which office he has so ably filled for many years, has been appointed General Manager in Mr. Grundy's stead, and E. O. Grundy has been appointed General Freight and Passenger Agent as successor to Mr. Walsh. By the constitution of the company, the entire board, other than the Provincial Government Director, has to be elected annually, and the present directors offer themselves for re-election.

The statistics showed 211.86 miles of line owned, and trackage rights on the Intercolonial Ry. between Harlaka Jet and Levis, Que., 5 miles. The rolling stock consisted of 19 locomotives, 14 passenger cars, 614 flat, box and stock cars, and 28 miscellaneous and working cars. The total train mileage was 651,320, against 688,040 in 1904; 249,898 passengers and 485,988 tons of freight were carried against 228,951 passengers and 501,280 tons in 1904.

President E. Dent, in moving the adoption of the report, referred to the death of S. G. Sheppard, and analyzed the figures contained in the report somewhat in detail. There had been a healthy increase in the passenger traffic, but only a small increase in the freight traffic, owing to the fact that 1904 was an abnormal year owing to the dry autumn of 1903, which prevented the floating down the rivers of large quantities of lumber for handling in that year. This decrease in the lumber had been partly made up by a large increase of traffic in other goods, and also the average earnings per ton had slightly increased. Of course, last year they were fortunate in having very few accidents of any kind, and only a few wash-outs, to which Canada's railways were particularly liable. It would be remembered that in 1904 the company built a new iron bridge over the River Chaudiere. Last year they completed a steel bridge at Sherbrooke, and the General Manager had now told them that all the main bridges were composed of steel. He might add that all these bridges were now paid for except \$6,000, which was carried over to the present year. He next referred to the proposed extensions, the changes in management, and concluded by stating that the gross earnings for the current year to the third week in April had amounted to \$246,750, an increase of \$47,848 over the last year. The net earn-



PACIFIC GREAT  
EASTERN  
RAILWAY DIARY

C. H. RIFF

3



# Canadian Transportation

## Pacific Great Eastern Railway

*Analysis shows that this British Columbia property is a very efficiently operated transportation undertaking, and that while traffic density has increased materially over the past decade and a half, the great need for the future, as on North American railways generally, is for greatly increased traffic volume*

IN order to have an adequate understanding of the motives and circumstances which brought about the construction of the Pacific Great Eastern Railway it is necessary to study the trend of public opinion in British Columbia during the four years preceding the outbreak of the Great War in 1914. Briefly, however, it may be stated that the prevailing reasons were:—

First. To provide Vancouver with a terminus of The Grand Trunk Pacific Railway.

Second. To obtain access to that vast interior plateau which offered additional opportunities for the settlement of agricultural and grazing lands, and the development of known mineralized and timbered areas. Furthermore the extension of this railway into the Peace River country would place Vancouver in direct contact with an agricultural area capable of supporting a large population, and the successful colonization of the prior two decades in Western Canada had developed a spirit of optimism and belief in the future.

The Pacific Great Eastern Railway was created by the Province of British Columbia, Chapter 35, Statutes of 1912 and amending acts; date of organization, February 27th, 1912. The Railway Company, by its charter, was empowered to build and operate a railway from Vancouver to North Vancouver, thence westerly to Howe Sound, thence along Howe Sound to Squamish, thence northeasterly to Lillooet on the Fraser River, thence northerly to a junction with the Grand Trunk Pacific Railway at Prince George, a total distance of approximately 480 miles, thence an extension of the railway from Prince George to a point on the easterly boundary of the Province, near the Dominion Peace River Block, a further distance of approximately 330 miles.

The Howe Sound and Northern Railway, which was incorporated on April 25th, 1907, under the name of the Howe Sound, Pemberton Valley and Northern Railway Company, and of which seven miles had been constructed north from Squamish, was acquired by purchase, and a traffic agreement having been made with the Grand Trunk Pacific Railway, the construction of the P.G.E. Ry. proceeded forthwith.

Unfortunately, war broke out in 1914,

causing conditions which brought about the collapse of the Grand Trunk Pacific, the Grand Trunk, and the Canadian Northern railways. These three railways were taken over by the Dominion Government and merged into one railway system, the Canadian National Railways. The necessity, therefore, of providing a connection with, and terminus for, the Grand Trunk Pacific Railway at Vancouver no longer existed, as the merger, the Canadian National Railways, already possessed a terminal of

the former Canadian Northern Railway at Vancouver.

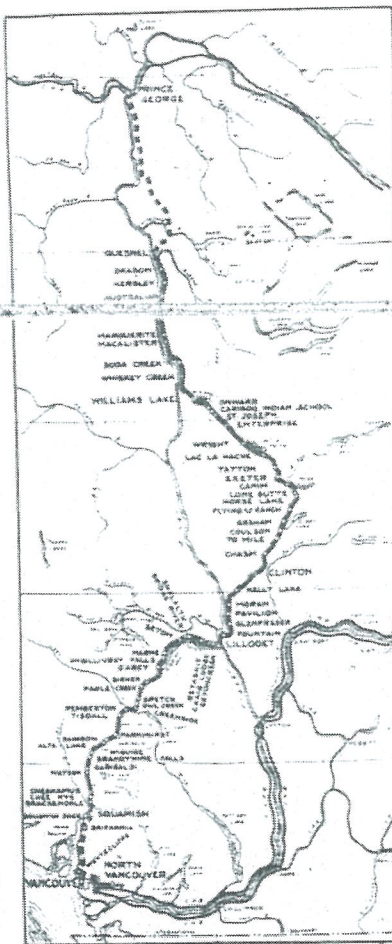
In 1918 the P.G.E. Ry. Company was unable to proceed further with its undertaking and the B. C. Provincial Government was confronted with the problem, after guaranteeing the expenditure of several millions of dollars, of either completing the construction of, and operating, the railway, or abandoning the whole project.

The abandonment of the railway programme was not an economic possibility, since capital invested in a railway is practically lost, if that enterprise is abandoned, there being no salvage other than that obtainable from the equipment and rails. A railway cannot be converted into a highway without enormous additional expense, and with no hope of future revenue to pay interest on even the additional capital required for the conversion.

In the meantime, too, settlers had moved into the territory served by the P.G.E. Ry., and whole communities and mining industries were dependent upon the railway for their connection with

In these circumstances the Provincial Government, as a matter of public policy, decided to carry on, and, on April 23rd, 1918, took formal possession of the P.G.E. Ry. undertaking. On September 28th, 1918, a contract was let to construct the extension of the railway from the then end of track at Chasm, Mile 178, to the present northern terminus of the railway, and the operating department of the P.G.E. Ry. assumed control over the entire mileage, as at present operated, to Quesnel, Mile 347, on October 22nd, 1921.

When the Provincial Government took possession of the P.G.E. Ry. in 1918, this railway was virtually a colonization road, although built to conform to the standards of the two great railway systems of Canada. As a colonization railway it has suffered more than the usual vicissitudes of railways of that character. The greatest need of this railway is tonnage, which can only be obtained by means of increasing population and business along the present line, and by reaching out and exploiting new fields for settlement and the resulting tonnage. Since the construction of the railway there has been no systematic



The Route of the Pacific Great Eastern.



settlement of the country tributary to this railway on account of the prevailing public prejudice against immigration due to the unemployment problem, and the generally unsettled conditions of the post war period.

What is generally known as the North Shore portion of the P.G.E. Ry., extending from North Vancouver to Whytecliff, a distance of 12.7 miles, was constructed in the years 1913 and 1914, and was opened for traffic on July 2nd, 1914. The service on the North Shore line was discontinued on November 28th, 1928, and the rails and fastenings from Mile 2.5 to 12.7 were subsequently removed. The portion of the line from Lonsdale

incorporates a 600 ft. continuous deck truss (a 300 ft. center span with two flanking spans of 150 ft.) with a 60 ft. deck plate girder on the south approach and two 80 ft. deck plate girders on the north approach, on concrete piers and abutments. The bridge at the Deep Creek crossing is 1,194 ft. long and 286 ft. high, and incorporates one 60 ft., three 70 ft., four 80 ft. and six 100 ft. deck plate girders on steel and concrete.

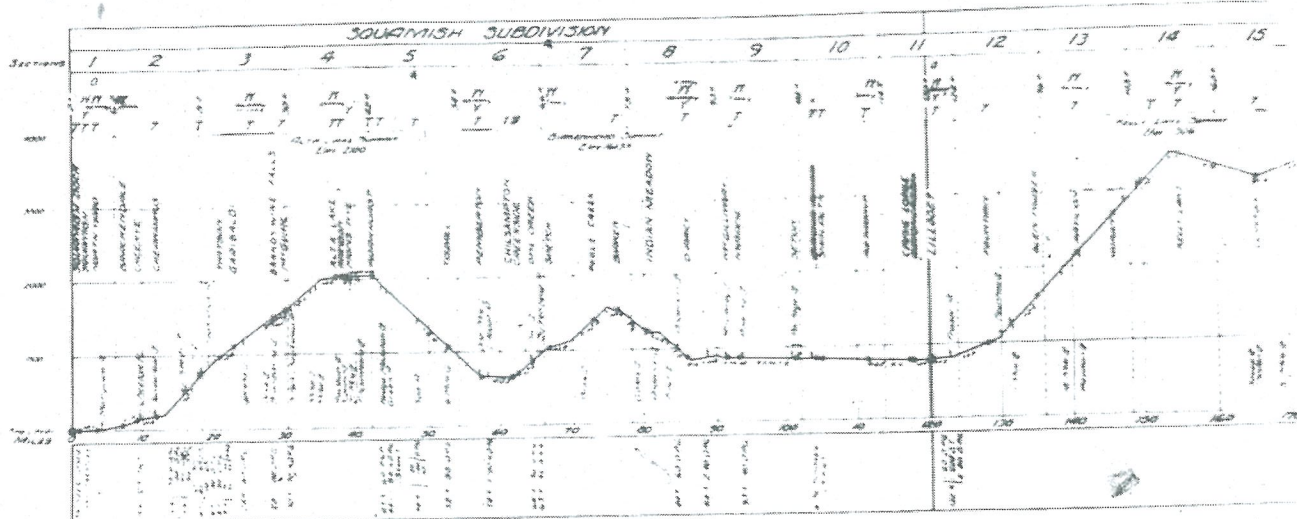
**Tunnels**—There are ten tunnels on the property.

**Other Facilities**—There are 15 water tanks of 40,000 gall. capacity, and five water tanks of similar capacity for the use of work trains. There are nine wyes

the tug boat "Point Ellice", with tonnage of 171.77 gross and 45.25 net. These craft are employed in the transport of freight cars between Vancouver and Squamish.

#### Operations

**Auxiliary Services**—In addition to the operation of the marine units specified, the company owns and operates a hydro-electric plant and waterworks system at Squamish, providing power and light for the shops and industries and also supplying the needs of the residents of the district. The company owns and operates a hydro-electric plant at Lillooet, providing power and light for the shops and station buildings, and also



Profile, Pacific Great Eastern Ry., South End.

Avenue to Capilano, 2.5 miles, and serving industries, was leased to the Vancouver Harbour Board.

#### Corporate and Administrative Offices

The corporate office of the P.G.E. Ry. is in Victoria, B.C., while the administrative office is in Vancouver.

#### Physical Characteristics

The line is built to standard gauge, viz., 4 ft. 8½ in. The rails are 70 lb. on the maximum gradients and 60 lb. on other portions of the line. The maximum gradients are 2.2 ft. per 100 ft., compensated for curvature, and the maximum curvature is 12 degrees. All curves over two degrees are spiralled.

**Bridges**—Since construction days, four new bridges have been built on line diversions; 67 have been eliminated by train filling, and 36 have been shortened. As at Dec. 31, 1939, there were 107 bridges on the line, 20 of which are steel bridges on concrete foundations. Bridges have been renewed in timber to a total of 76, some incorporating treated timber on concrete. Eleven bridges remain yet to be replaced or renewed. All of the bridges renewed or replaced to date have been built to Cooper's E. 55 loading. Two of the outstanding bridges on the property are those over the Fraser River, at mile 122.9, and the Deep Creek crossing, at mile 292.7. The Fraser River Bridge, at mile 122.9, has length of 820 ft. and height of 260 ft., and

and three turntables, and three fuel oil storage tanks.

#### Equipment

All of the 12 locomotives operated are shown as follows: one switcher (0-6-0); two Prairie type (2-6-0) locomotives; six Consolidation (2-8-0) locomotives and three Mikado (2-8-2) locomotives. The six wheel switcher, with 17 x 24 in. cylinders, develops 21,200 lb. tractive effort. The Prairie type locomotives, with 20 x 24 in. cylinders, develop 27,200 lb. tractive effort. The Consolidation locomotives are of two classes. There are two with 19 x 28 in. cylinders and 57 in. drivers, developing 30,000 lb. tractive effort, and four with 22 x 28 in. cylinders and 57 in. drivers, developing 36,300 lb. tractive effort. The Mikado locomotives, with 22 x 28 in. cylinders and 51 in. drivers, develop 43,675 lb. tractive effort.

There are 46 passenger service cars, viz., four motor rail cars, 16 first class, two diners, nine sleepers, nine baggage and express, and six other cars in passenger service.

There are 254 freight service cars, viz., 49 box, 123 flat, 45 stock, 10 coal, 10 tank, 6 refrigerator and 11 other. There are 73 company service cars, including seven cabooses.

The P.G.E. Ry. is also an operator of marine equipment, having the car ferry "P.G.E. No. 2", with tonnage of 841.09 gross and 817.74 net. Also operated is

supplying the needs of the town residents. Also, the company owns and operates a waterworks system at Williams Lake, supplying the shops and station buildings, and also looking after

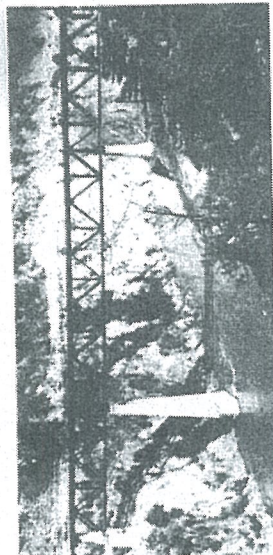
**Railway Operation**—On account of the P.G.E.R. low volume of traffic, the operating conditions are unusual, differing in marked degree from the conditions on other Canadian railways, and the traffic is difficult to handle economically.

Of the 36 railways operating in Canada in 1937, only 11 had route mileage of over 100, and only eight, including the P.G.E.R., had route mileage of over 200. None of these seven other roads are statistically compared with the P.G.E.R., on account of the sparsity of traffic and the high percentage of total mileage in maximum gradients on the P.G.E.R. On the Squamish-Lillooet engine district, of 120.4 miles, there are 38 miles of adverse 2.2% grades to northbound traffic and 27 miles of similar grades to southbound traffic, all operated as 2.2% grades. On the Lillooet-Williams Lake engine district, of 156.3 miles, there are 26 miles of adverse 2.2% grades operated as such, with additional mileage operated as 1% grade, to northbound traffic, with operation as 1% grades for southbound traffic. On the Williams Lake-Quesnel engine district, of 70.3 miles, operation is for 1% grades in both directions. The total line

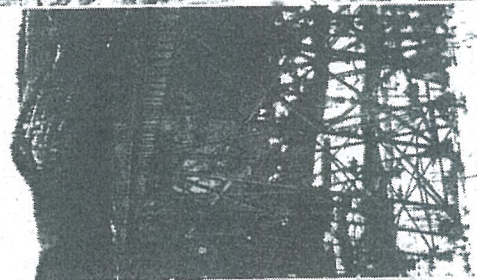








Bridges on the  
Pacific Great  
Eastern Ry.



The scene at the left shows the Deep Creek bridge, Mile 25.7. This at the right shows the bridge over the Fraser River, Mile 12.5, while that at the lower right shows the river in the background, the Fraser.

declined to \$4.66 in 1934, but showed the tremendous increases of \$9.42 and \$11.82 in 1937 and 1938 due to the ruling. Item 31, passengers per train mile, and item 32, number of cars per train mile, are also affected. Utilizing, however, the index set affected by the ruling—

Item 35, The number of passengers carried—This is an index set from 1927 to 1938. It was 100 in 1927, increased to 313.33 in 1934, but dropping to 25.011 in 1938. On account of the increase of the average distance carried (item 26) from 88 miles in 1927 to 82 miles in 1938, the passenger density (item 27) only dropped from 5,586 in 1927 to 5,409 in 1938. The peak of passenger density was reached in 1934 when the Bridge River boom was at its height. This resulted to 25,011 in 1938, but the increase in distance carried from 64 miles in 1934 to 82 miles in 1938 only lowered the density (item 27) from 7,532 to 5,409. The increase in distance carried was the result of mining activity in the Cariboo, tributary to Quesnel, the northern terminus, Mile 347.

Freight Traffic—Referring again to Exhibit "A", in freight traffic 1933 as compared with 1925, the revenue ton mileage increased 63%, the revenue train load increased 36%, with an increase in revenue freight train mileage of 20%.

In 1938 as compared with 1933 the revenue ton mileage increased 28%, the revenue train load increased 12% with an increase in revenue freight train mileage of 14%.

The revenue tonnage handled in 1933 was 27% less than the revenue tonnage of 1925, but the lesser tonnage of 1933, in account of the longer haul, produced 63% more ton mileage than in 1925. Again, the revenue tonnage of 1938 was 15% less than the revenue tonnage of 1933, but the lesser tonnage of 1938,

in 1933 was 26% less than the staff employed in 1925, and 13% less than the staff employed in 1927. The 1938 staff was the same numerically as that of 1933.

The largest item in the expenses of railway operation is the cost of fuel for locomotives. As compared with 1925, the 1933 all service locomotive mileage had, despite the increased ton mileage, increased only 4%, and as compared with 1927, the all service locomotive mileage had decreased 6.5%. 1938 as compared with 1933, the all service locomotive mileage had decreased 8.5%, due in measure to the completion of the bridge filling programme, and the decreased revenue mileage after 1937. The consumption of fuel in 1933 had increased as compared with 1925, 11%, but 1933 as compared with 1927, the increase was only 9.1%. From 1933 to 1938 inclusive, the consumption of fuel per locomotive mile has been practically the same each year as the consumption of 1933. All service mileage and fuel consumption comparisons are illustrated in Exhibit "B" attached.

Costs and Revenue—Exhibit "A" indicates that the total train mile cost in 1933 was 32.1% lower than the train mile cost of 1925, and 22.2% lower than that cost in 1927, and that the total expenses of the railway decreased 33% as compared with 1925, and 27% as compared with 1927. In the next five-year period, the train mile cost increased 11.1% between 1933 and 1938, and total expenses increased 10.1%.

In revenues, 1927 and 1933 comparisons, while the average receipts per passenger per mile decreased 2%, the revenue per passenger train mile increased 32%, indicating that while the number of passengers per train increased

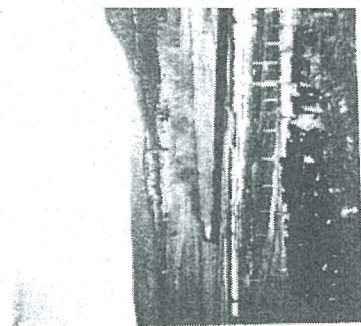
35%, resulting in increased revenues per passenger train mile of 32%. Comparisons between 1933 and 1938 are disturbed by the ruling of January 1st, 1935, before referred to.

In freight traffic, 1927 and 1933 comparisons, the average receipts per revenue ton mile increased 5.2%, the average revenue per revenue train mile increased 24.5%, while that while rates had been reduced, a change in traffic had occurred, on account of the increased tonnage loaded car of 17%, an increase in per train of 12.1%, an increase in of 6%, and the increase in per mile of 24.5%. The operating revenue in revenue per revenue freight train mile of 24.5%. The operating revenue had increased from \$474,396.98 in 1927 to \$657,980.52 in 1933, an increase of nearly 15.5%, and the operating expenses had decreased from \$664,625.77 in 1927 to \$480,986.42 in 1933, a decrease of 27.5%.

In freight traffic 1933 and 1938 comparisons, the average receipts per revenue ton mile decreased 8%, and the average revenue per revenue freight train mile increased 4%, indicating that while rates had still further been reduced, and although the tonnage per loaded car mile decreased 6%, there was an increase in number of cars per train mile of 11%, and an increase in the haul of 50%, which resulted in an increase in revenue per revenue freight train mile of 4%.

The operating revenues increased from \$557,980.52 in 1933 to \$672,152.30 in 1938, an increase of nearly 10%, and the operating expenses also increased from \$480,986.42 in 1933 to \$575,545.50, an increase of 19.5%.

In 1934 there was the lowest operating ratio, of 80.95%, and in 1936 an operating ratio of 81.39%. The sharp rise in total operating expenses in 1937 resulting in an operating ratio of 89.95% and 94.05% in 1938 was occasioned by extraordinary expenses in the increased cost of snow and ice removal, floods, track and the renewals, extra locomotive and equipment repairs, and decrease in miscellaneous and credit transportation.



Stock Yards on  
These yards are at Will



35%, resulting in increased revenues per passenger train mile of 32%. Comparisons between 1933 and 1938 are distorted by the ruling of January 1st, 1936, before referred to.

In freight traffic, 1927 and 1933 comparisons, the average receipts per revenue ton mile increased 5½%, the average revenue per revenue freight train mile increased 24½%, indicating that while rates had been reduced, a change in traffic had occurred, on account of the increased tonnage loaded car of 17%, an increase in per train of 12½%, an increase in of 6% and the increase in l.c. from carried, there had resulted an increase in revenue per revenue freight train mile of 24½%. The operating revenue had increased from \$474,395.98 in 1927 to \$557,980.52 in 1933, an increase nearly 15½%, and the operating expenses had decreased from \$664,935.77 in 1927 to \$480,998.42 in 1933, a decrease of 27½%.

In freight traffic 1933 and 1938 comparisons, the average receipts per revenue ton mile decreased 8%, and the average revenue per revenue freight train mile increased 4%, indicating that while rates had still further been reduced, and although the tonnage per loaded car mile decreased 6%, there was an increase in number of cars per train mile of 11%, and an increase in the haul of 50%, which resulted in an increase in revenue per revenue freight train mile of 4%.

The operating revenues increased from \$557,980.52 in 1933 to \$672,152.30 in 1938, an increase of nearly 19%, and the operating expenses, also, increased from \$480,998.42 in 1933 to \$575,754.50, an increase of 19½%.

In 1934 there was the lowest operating ratio, of 80.95%, and in 1936 an operating ratio of 81.39%. The sharp rise in total operating expenses in 1937 resulting in an operating ratio of 89.98% and 94.05% in 1938 was occasioned by extraordinary expenses in the increased cost of snow and ice removal, floods, track and tie renewals, extra locomotive and equipment repairs, and decrease in miscellaneous and credit transportation.

The foregoing comparisons indicate that as compared with 1925 and 1927 the years following showed a large increase in both passenger and freight traffic with no corresponding increase in train mileage, or other service performed.

1925	1927	1933	1938
42064.98	66396.40	62779.39	82335.93
111.97	118.09	126.44	146.58
495941	441623	548642	624932
825291	837375	591315	955616
345880	323354	546295	1250135
2935199	3531834	3991246	2927720
1170477	2190663	2784576	3397527
4672538	7127654	7561378	9155930
			9115790

Exhibit "C"  
Eastern Railway Company.  
1934, 1936 and 1938

Cars	Hogs	Cattle	Horses	Total
Head	Head	Head	Head	Cars
164	1	4.65	1	377
389	1	147	9	199
467	2	319	15	149
1	6	331	25	417
0	78	654	6	123

Exhibit "D"  
Eastern Railway Company.

1925	1927	1933	1937	1938
155844	192794	161699	172293	148068
2665.47	8711.23	8842.33	9189.43	7940.69
4.93	5.35	5.47	5.33	5.36

Exhibit "E"  
The density, train mileage, and operating ratios of 1933.

Route	Traffic Density	Train Mile Cost	Operating Ratio
buying, or overhauling	per cent.	per cent.	per cent.
selling passenger and ton mileage, and these statistical averages together provide the most important efficiency indices when making yearly comparisons of the operations of one railway. That is, if the class of commodities carried, the capacity of cars used, and the number, tractive power and speed of the locomotives operated, are similarly proportioned throughout the yearly aggregations from which the averages are produced, then these averages become positive indications of efficiency of operation. While these statistical averages used in the preceding comparisons clearly indicate the comparative conditions of traffic on the P.G.E.R. for the years enumerated, their use as bases of comparison in studying the operating			

efficiency of different railway systems is apt to lead to erroneous conclusions unless all the factors influencing operations on each railway are known and are given full consideration, and weighted in proportion to the movement of passengers and tonnage.

Under the heading of maintenance of way expenses, regardless of traffic, the track and structures of a railway must be kept up to a standard ensuring the safe operation of trains. The elements of nature cause ties to decay, wash-outs of embankments, cuttings, bridge foundations and culverts. Wear on account of traffic does not appreciably affect station and other buildings, and accounts only in part for the deterioration of bridge structures. Repairs and renewals of fences, road crossings, signs, cattle guards, and telegraph lines are not affected by traffic.

In like manner it may be said of maintenance of equipment expenses, that cars are worn out almost as much by carrying a half as a full load, locomotives deteriorate little more from hauling heavy loads than light loads, and both cars and locomotives are often replaced as much on account of them being obsolete as from wear and tear.

Traffic expenses are only lightly affected by changes in traffic.

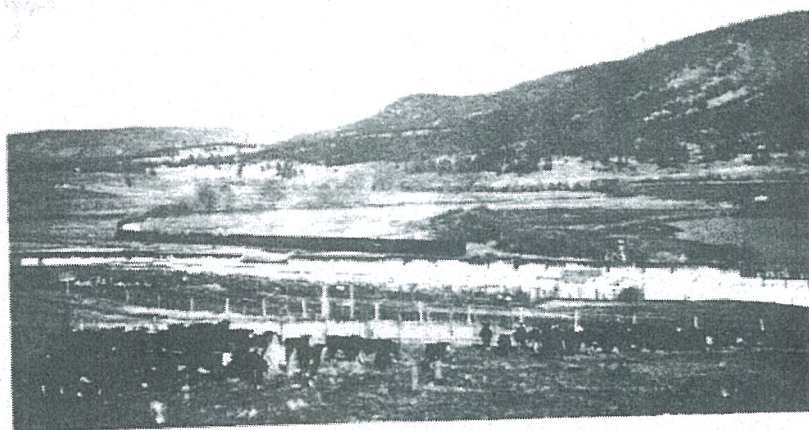
Transportation expenses for superintendence, station service and supplies, and other expenses made between different railways.

In order to compare the operations of the P.G.E.R. with those of seven other Canadian railways which, with the P.G.E.R., are the only Canadian railways having route mileages over 200 miles, exhibit "E" has been prepared to illustrate comparison on the railways noted, in route mileages, traffic densities, train mile costs and operating ratios for the year 1933. It will be noted that for 1933 the train mile cost of the P.G.E.R. was—33¼% lower than the train mile cost of the Algoma Central; 4% lower than the train mile cost of the Canadian National; 46% higher than the train mile cost of the Can. Southern; 25% higher than the train mile cost of the Northern Alberta; 9% higher than the train mile cost of the Temiskaming & N. O.; 25% higher than the train mile cost of the Wabash in Canada.

In 1934 the train mile cost of the P.G.E.R. was less than the Algoma Central, the Canadian National and the Temiskaming and N. O., and only 8% higher than the Canadian Pacific Ry.

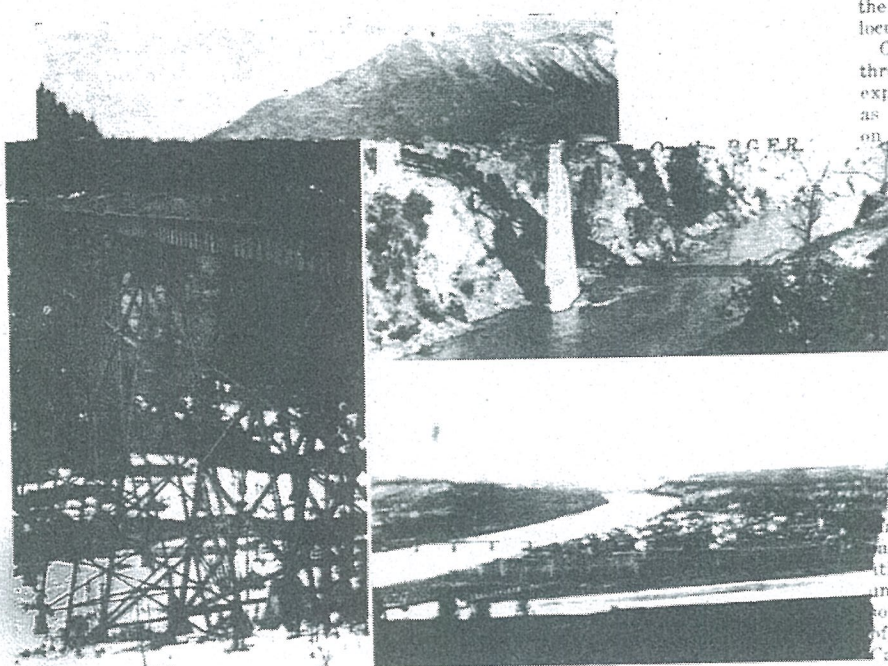
When comparisons are made with other railways, the P.G.E.R. suffers from the following handicaps:—

1. Very low traffic density.
2. High percentage of maximum gradients.
3. Sixty-five per cent. of the freight car mileage of the P.G.E.R. developed on mixed trains. On the Canadian National and Canadian Pacific this proportion was only 4½%, and the Wabash had no mixed train service.
4. High percentage of non-revenue traffic on account of low density. In 1933 the non-revenue traffic of the seven other Canadian railways noted, expressed in terms of train and car mileages, amounted to less than one per cent. of the total traffic, but the



Stock Yards on the P.G.E.R.  
These yards are at Williams Lake, Mile 275.5.





The scene at the left shows the Deep Creek bridge, Mile 292.7. That at the upper right shows the bridge at Mile 122.5, while that at the lower right shows the bridge at the left middle background, the Fraser.

declined to \$4.66 in 1934, but showed favourably with all the railways shown except the Canada Southern. The Canada Southern, however, is not statistically comparable with the P.G.E.R. on account of the disparity in traffic and the physical characteristics of the two railways. The Canada Southern is double tracked and operated through the most productive part of Canada. It is noted for its easy gradients and curvature, and its large volume of traffic, the latter being three times greater than that of the Canadian Pacific Railway. The Canada Southern is a fitting illus-

on account of the increased distance is the cost of fuel for locomotives. The tonnage of fuel consumption for individual railways is not given in "Statistics of Steam Railways of Canada", costs only are shown, and costs are useless for purposes of comparison as prices of fuel vary in different parts of Canada. The tonnage as well as costs of fuel consumption for all railways in Canada are shown in this publication. The average all service fuel consumption for all Canadian railways was 6.37 tons per 100 locomotive miles, and the all-service fuel consumption of the P.G.E.R. for

the same year was 5.47 tons per 100 locomotive miles.

On account of the sparsity of traffic three of the five subdivisions of total expenses of the P.G.E.R. are abnormal as compared with these items of cost on other Canadian railways.

Canada and the United States the operating expenses of railways are classified under five headings, and the percentages of the five subdivisions of operating costs for all Canadian railways for the fifteen years prior to and including 1933, expressed as percentages of total operating expenses are: Maintenance of Way and Structures, 20.8%; Maintenance of Equipment, 22.5%; Transportation, 49.3%, and General expenses, 3.4%. While the total operating expenses of an individual railway may vary from year to year according to fluctuations in the volume of traffic, the varying amounts of repairs and renewals, the difference in costs of material and labour, the proportion of each of these five subdivisions of operating cost to total expenses is generally uniform. Exhibit "F" gives a comparison of the percentage of each subdivision of total operating expenses of eight Canadian railways and all railways in Canada for 1933.

It will be noted that the Canadian National, Canadian Pacific, and Temiskaming subdivision percentages do not vary much from the general averages of all railways, and it may be logically assumed that when there is a large variation in these proportional sub-items of expenses, etc., it is due to some abnormal traffic condition. The P.G.E.R. maintenance of way costs are proportionally very high and those of the Canada Southern very low. These exceptional traffic conditions are illustrated in Exhibit "E", where it will be noted that the traffic density of the P.G.E.R. is only 1.2% that of the Canada Southern, 1.4% that of the Wabash, and 3.7% of the Canadian Pacific. On account also of

Exhibit "A"  
Pacific Great Eastern Railway Company

TABLE I. A comparison of passenger and freight traffic statistics, operating revenues and expenses, years 1925, 1927, 1933, 1934, 1937 and 1938.

Item No.	1925	1927	1933	1934	1937	1938
24 Average miles of road operated	348.1	348.1	347	347	347	347
25 Passenger Traffic						
25 Number of passengers carried (Revenue)	24,736	33,333	33,053	40,510	28,860	23,011
26 Number of passengers carried one mile (Revenue)	1,658,602	1,948,614	2,252,392	2,613,719	2,036,447	1,976,842
27 Number of passengers carried one mile per mile of road (Revenue)	4,765	5,598	6,491	7,532	5,869	5,409
28 Average distance carried	67	58	68	84	71	82
29 Average receipts per passenger per mile	\$0.042	\$0.04	\$0.039	\$0.039	\$0.035	\$0.032
30 Average revenue per train mile	\$3.91	\$3.96	\$3.38	\$4.56	\$3.42	\$11.82
31 Average passengers per train mile	42.0	59.19	79.83	68.06	142.13	182.69
32 Average number of cars per train mile	7.08	3.06	10.71	10.58	5.23	7.83
33 Freight Traffic						
33 Number of tons carried (Revenue Freight)	32,956	42,068	60,395	62,779	62,335	51,541
34 Number of tons carried one mile (Revenue Freight)	4,362,308	4,672,588	7,127,054	7,561,378	9,155,930	9,115,790
35 Number of tons carried (All Freight)	39,140	65,150	79,501	84,240	80,393	68,334
36 Number of tons carried one mile (All Freight)	5,318,475	6,446,239	9,207,340	10,066,988	11,221,529	10,854,427
37 Number of tons carried one mile per mile of road (Revenue Freight)	12,532	13,423	20,539	21,791	26,396	26,270
38 Number of tons carried one mile per mile of road (All Freight)	15,379	19,518	26,534	29,011	32,339	31,282
40 Average distance haul of one ton (Revenue Freight)	\$2.56	\$2.56	\$2.56	\$2.56	\$2.56	\$2.56
41 Average receipts per revenue ton mile	\$0.043	\$0.053	\$0.050	\$0.055	\$0.047	\$0.046
42 Average revenue per train mile	\$3.172	\$3.560	\$4.441	\$5.119	\$4.770	\$4.614
43 Average tons per train mile (Revenue Freight)	65.52	66.28	89.05	92.99	102.94	99.58
44 Average tons per train mile (All Freight)	80.90	91.44	115.04	123.81	125.97	118.42
45 Average tons per loaded car mile	15.03	16.05	18.82	19.50	19.55	17.71
46 Average number of cars per train mile	9.37	9.09	10.22	10.51	10.75	11.35
47 All service locomotive miles	154,554	162,794	161,699	195,720	172,292	148,966
Motor car miles	39,231	32,917	28,214	37,877	28,257	23,334
Revenue passenger train miles	66,478	70,496	80,037	81,312	89,724	91,539
Revenue freight train miles	148,434	152,156	142,170	172,871	177,746	150,619
All service train miles						
Total operating revenues	\$436,833.37	\$474,395.98	\$557,980.52	\$658,962.47	\$631,370.36	\$612,152.30
Total operating expenses	\$721,351.67	\$664,435.77	\$480,998.42	\$533,429.64	\$568,139.67	\$575,754.40
Net operating revenues	-\$284,518.30	-\$190,239.79	+\$76,982.10	+\$125,532.83	+\$64,230.69	+\$36,397.90
Operating ratio per cent.	165.13	149.10	86.10	80.95	89.98	94.05



OCTOBER, 1940

**Exhibit "B"**  
**Pacific Great Eastern Railway Company.**

A comparison of revenue tonnage and ton mileage for the years 1925, 1927, 1933, 1934, 1937 and 1938.

	1925	1927	1933	1934	1937	1938
Revenue Tonnage	4294.94	4465.04	3762.40	4550.20	4254.70	5294.16
Agricultural Products	1774.20	5629.40	5101.27	4999.47	6506.98	8131.56
Animal Products	1704.98	3112.21	2740.18	4534.94	3511.24	4253.21
Mine Products	5400.33	18323.23	2927.93	2586.45	19932.87	9536.47
Forest Products	5498.03	10548.00	15564.22	23119.33	23131.24	22314.45
Manufactures, etc., Products						
Total Tonnage	22943.48	42068.08	60296.40	82779.39	62335.93	31541.27
Average distance haul of one ton (Rev. Freight)	22.56	111.07	118.00	120.44	148.83	178.86
Ton Mileage						
Agricultural Products	316387	495941	444028	549042	624932	919720
Animal Products	211176	825291	637575	591315	945616	1435143
Mine Products	90626	345680	323354	546205	1250135	1214528
Forest Products	3364576	2035199	3531624	3091240	2927720	1846724
Manufactures, etc., Products	310943	1170477	2100663	2784576	2397527	3944821
Total Ton Mileage	4362309	4672588	7127054	7561378	9155930	9115790

**Exhibit "C"**  
**Pacific Great Eastern Railway Company.**

Stock shipments for the years 1924, 1927, 1934, 1936 and 1938.

Year	Cattle		Sheep and Lambs		Hogs		Calves		Horses		Total Cars
	Cars	Head	Cars	Head	Cars	Head	Cars	Head	Cars	Head	
1924	363	8263	915	1408	215	164	1	45	15	15	377
1927	438	10347	32	4781	5	369	1	147	9	109	485
1934	393	9515	24	3425	1	67	6	319	15	149	431
1936	416	10605	16	2557	0	8	6	331	25	417	463
1938	675	18666	14	2884	0	78	6	684	6	128	701

**Exhibit "D"**  
**Pacific Great Eastern Railway Company.**

A comparison of all service fuel consumption per 100 locomotive miles, for the years indicated.

	1925	1927	1933	1937	1938
All service locomotive miles	155644	162794	161609	172293	148064
Total fuel tonnage consumed	7865.47	8711.73	8842.33	9169.43	7940.09
Fuel tons per 100 loco. miles	4.93	5.35	5.47	5.33	5.36

**Exhibit "E"**

A comparison of route mileage, freight traffic density, train mileage, and operating ratios of P. G. E. Ry. and seven other Canadian railways, 1932.

	Route Miles	Traffic Density	Train Mile	Operating Ratio
Pacific Great Eastern Ry.	347.0	20,539	\$3.58	86 per cent.
Algoma Central Ry.	383.7	191,307	3.53	87 "
Canada Southern Ry.	281.0	1,647,408	3.21	58 "
Canadian National Ry.	21,941.2	454,655	3.53	97 "
Canadian Pacific Ry.	17,030.1	549,210	2.78	80 "
Northern Alberta Ry.	927.6	108,853	2.45	78 "
Temiskaming & N. O. Ry.	531.7	272,038	3.18	78 "
Wabash in Canada Ry.	245.4	1,426,963	2.70	78 "

**Exhibit "F"**

A comparison of the percentage of each subdivision of total operating expenses on eight Canadian railways and all railways in Canada for the year 1933.

	Mile. of Way	Mile. of Equipmt.	Traffic %	Transportation %	General %	Total Expenses %
Pacific Great Eastern Ry.	44.7	12.8	1.5	37.8	3.2	100
Algoma Central Ry.	25.1	19.0	1.5	46.1	3.3	100
Canada Southern Ry.	10.1	34.3	4.5	43.2	7.4	100
Canadian National Ry.	21.9	21.1	3.5	48.5	5.0	100
Canadian Pacific Ry.	19.7	19.4	7.5	56.8	3.4	100
Northern Alberta Ry.	36.1	11.4	1.4	47.2	2.9	100
Temiskaming & N. O. Ry.	21.4	21.5	3.0	48.3	7.2	100
Wabash in Canada Ry.	12.7	17.5	8.4	56.8	8.6	100
All railways in Canada	20.6	20.6	5.0	49.1	4.7	100
All Canadian Railways for 15 years prior to and including 1933	20.8	22.5	4.9	49.3	3.4	100

**Exhibit "G"**  
**Pacific Great Eastern Railway Company.**

Subdivisions of total operating expenses expressed as percentages of total expenses for the years 1927, and 1933 to 1938 inclusive.

	1927	1933	1934	1935	1936	1937	1938
Maintenance of Way	36.5	44.7	41.6	42.1	39.8	40.3	37.9
Maintenance of Equipment	13.9	12.8	12.5	12.3	13.0	13.9	16.2
Traffic	2.0	1.5	1.6	1.2	1.7	1.5	2.9
Transportation	34.0	37.8	41.2	40.5	41.8	40.3	40.2
General	3.6	3.2	3.1	3.4	3.7	3.5	3.7
Total Operating	100.0	100.0	100.0	100.0	100.0	100.0	100.0

this condition of traffic the maintenance of equipment and transportation costs of the P.G.E.R. are proportionally low, and on account of the high traffic density these sub-items of total expenses on the Canada Southern are proportionally high. The high proportional cost of P.G.E.R. maintenance of way is, therefore, not an indication of over-expenditure, but of low volume of traffic. A large increase in volume of traffic on the P.G.E.R. would lower the proportional cost of maintenance of way to the average of the other Canadian railways. There is a tendency to decreasing proportional cost of maintenance of way

expenses and increasing proportional costs of maintenance of equipment and transportation expenses until the capacity of the railway machine is reached. Beyond that point increasing traffic may require the additional expense of a larger plant and double tracking in the case of a single track railway. The Canada Southern and Wabash are both double track railways and capable of handling a far larger volume of traffic than that reached in 1933. In fact, during the peak year of 1928 the traffic density of both these railways was double that of 1933.

Neither these sub-items of expenses

nor the total operating expenses of any railway vary in exact proportion with traffic increase or decrease. Some expenses of a railway are not connected in any way with traffic movements, other expenses are directly connected with the movement of passengers and tonnage.

Under the heading of maintenance of way expenses, regardless of traffic, the track and structures of a railway must be kept up to a standard ensuring the safe operation of trains. The elements of nature cause ties to decay, wash-outs of embankments, cuttings, bridge foundations and culverts. Wear on account of traffic does not appreciably affect station and other buildings, and accounts only in part for the deterioration of bridge structures. Repairs and renewals of fences, road crossings, signs, cattle guards, and telegraph lines are not affected by traffic.

In like manner it may be said of maintenance of equipment expenses, that cars are worn out almost as much by carrying a half as a full load, locomotives deteriorate little more from hauling heavy loads than light loads, and both cars and locomotives are often replaced as much on account of them being obsolete as from wear and tear.

Traffic expenses are only lightly affected by changes in traffic.

Transportation expenses for superintendence, station service and supplies, watchmen, flagmen and switchmen are not affected appreciably by changes in the volume of traffic. The wages of locomotive engineers, and roundhouse forces, costs of fuel and water, train supplies and service are affected by traffic, although the expense for a fully loaded train is not much greater than for a partially loaded train.

**General Expenses Are Only Slightly Affected by Traffic**—The distribution of costs not affected by traffic and costs affected by traffic for a series of years has been apportioned by actual accounting as:

	Costs not affected by traffic	Costs affected by traffic
Maintenance of Way	13.5%	7.3%
Maintenance of Equipment	11.3%	11.2%
Traffic	4.0%	
Transportation	17.3%	32.0%
General	3.4%	
Total Operating	49.5%	50.5%

That is, practically 50% of the total operating expenses of a railway are not affected by traffic volume, and 50% of the expenses are directly affected.

It has been stated above that an increase in traffic would have the tendency to lower the proportional cost of maintenance of way expenses, and raise the proportional costs of maintenance of equipment and transportation expenses.

Traffic has increased from a density of 13,423 in 1927 to a density of 26,270 in 1938. This increase, small though it is, has had an appreciable effect on the proportional costs of maintenance of way, maintenance of equipment and transportation expenses as illustrated in Exhibit "G".

The train mile costs for the eight Canadian railways used in these comparisons for the year 1937 are as follows:—



## CANADIAN TRANSPORTATION

	Train Mile	Costs
Pacific Great Eastern Ry.	\$3.19	
Algonia Central Ry.	4.44	
Canada Southern Ry.	2.58	
Canadian National Ry.	3.58	
Canadian Pacific Ry.	3.07	
Northern Alberta Ry.	3.16	
Temiskaming & N. O. Ry.	2.75	
Wabash in Canada Ry.	3.29	

The train mileage used includes motor car passenger mileage.

Conclusions derived from a study of the statistics presented with this statement are:—"There has been an appreciable increase in traffic output, that is

passenger and ton mileage since 1927, with no corresponding increase in train mileage, fuel consumption or staff personnel, which is a positive indication of increased efficiency, and an evidence of good management."

## Railway Operating and Financial Results