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For Subscription Rates,
See page 509.

Overhauling Electric Ry. Rolling Stock.

W. R. McRae, Master Mechanic, Toronto Ry.

In presenting these remarks concerning the periodical overhauling of rolling stock, it is my intention to endeavor to convince those interested in the maintenance of electric railway rolling stock that periodical overhauling is absolutely necessary to obtain the maximum of efficiency and also that when this work is completed, the term, general overhaul will be amply justified.

Prior to three years ago very few of the cars on the Toronto system were overhauled with any degree of regularity. This neglect was responsible for some of the following results: Average daily cripple cars amounted to about 17% of all motor-operated rolling stock, failures in service were very common, line blockades interrupted schedules, cars out of service when required to fill schedules, inconvenience to passengers, lost mileage and revenue. This condition of affairs necessitated the introduction of a method of repairs whereby the average daily number of cripples would be reduced to a minimum. Instructions were issued by the management that all cars were to be put in first-class condition at once. This was done, but not without a very large expenditure of money; the results obtained, however, were such as to prove without the shadow of a doubt the wisdom of permitting the above-mentioned expenditure. To-day in Toronto there are comparatively speaking no motor breakdowns in service, and as a comparison I may say, that instead of 17% of the cars being crippled as before stated every 24 hours, the daily average is now 3.7%; and it must be borne in mind that every car that is repaired, whether large or small repairs, is classed in the totals from which this percentage is struck. Those not included are those cars repaired by the night and day inspectors and repair men, after the cars are housed and have completed their day's run; or, in other words, cars which have not caused any interruption to service or schedules. This is a considerable reduction you will admit, but we are endeavoring to lower this record, and those in charge of the rolling stock are of opinion that this can be done. The vastly superior service which we are now enabled to give has secured to the company a very valuable asset in the citizens' good-will.

It is very necessary that the good work of overhauling rolling stock should be done in a most thorough and systematic way. The work should be laid out so that there will be no confusion of material, men or ideas. All the work should be done in a pre-determined manner. Gauges, measurements and tools should be supplied for the proper carrying out of the same. When a system

of overhaul is finally decided upon as being the best suited to local conditions, it should become a law in the shop, and any employe departing from the standard of practice should be dealt with accordingly. The introduction of new methods or stunts or experiments should not be permitted until they are carefully considered by the proper officials. I strongly recommend that employes be encouraged to promote new ideas, and if on the presentation of them to the

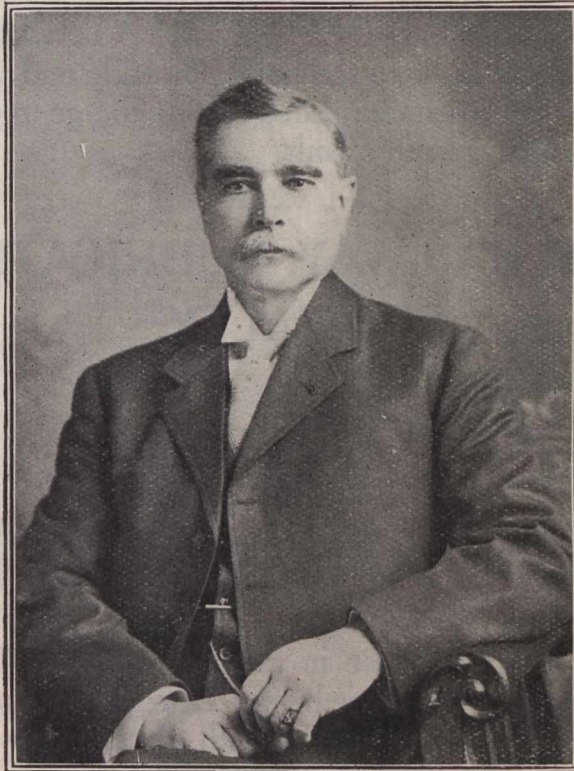
methods in use in the Toronto Ry. Co.'s central shops. This system no doubt would be more readily understood by a visit to our works, which we will at all times welcome. The cars are overhauled on a mileage basis; 50,000 to 55,000 miles being the limit of distance a car travels before being brought to the shops and thoroughly overhauled. Owing to the fact that our roadbed is now in a very much better condition than it formerly was, and the cars standing up so much better, the matter of permitting cars to run 70,000 to 75,000 miles before over-hauling is now under serious consideration.

I will now trace the course of overhauling a car. Owing to the fact that overhauling was first started by rotation of car numbers, it is quite easy for us in the shops to know just about the car or cars due to come in, and as accurate mileage is kept on all cars, a glance at the mileage statements is sufficient to procure the proper car for overhauling. This done, the central car dispatcher is instructed to have that car delivered to the shops ready for the following morning. The car is then placed in a section set aside for the purpose, brake and cable connections unfastened, car body raised and placed on trestles, trucks are then pulled out from under the body and shunted to truck overhaul section; here the motors are removed and sent to motor overhauling section.

The truck is completely stripped down, except side and end frame, wheel centres marked, and trammel points used to test for truck frame being true. Journal boxes are stripped of braced wedges and waste, and thoroughly cleansed. Wheels and journals are now replaced if necessary. The stripped material has been placed on one side of the truck, the floor on the other side is swept clean, the truck inspector inspects the old material and o.k.'s that which is to be used again. This o.k. material is now moved to the clean space on the other side of the truck, the balance is taken to the shop storekeeper, who gives in return a new

or repair part for every one sent in; this is then delivered to the truck fitters, and is placed with the balance of the o.k. material. The trucks are now built up, the journals being packed with clean, oil-soaked waste; the trucks having been thoroughly scraped and blown off with compressed air, are now given a coat of mineral quick drying black paint, and ready for the motors.

The motors are first stripped of armatures and field coils; these with the brushholders are sent to the armature and machine departments respectively. The motor frame is next scraped inside and out, grease boxes cleaned out, bottom oiled, wells cleaned and washed with kerosene. The inside of motor frames are next painted with black insulating compound, oiled canvas liners are placed around permanent pole pieces, frames are



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proper officials, they are found to possess even some small merit, every encouragement should be given the originator to perfect the same, and on the adoption of his proposal in practice he should, so far as the shop is concerned, receive all the credit due him.

In preparing the repair material in the Toronto Ry. shops, carefully kept gigs, patterns and gauges are always used in production. By this means absolute accuracy is assured, and the parts are interchangeable. The fact that the pit men or fitters have no work other than to bolt together and put to place, is a strong argument in favor of the repair material being properly produced in the company's shops or by outside manufacturers.

I will endeavor to explain some of the

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Railway Freight Statistics.

During the year ended June 30, 1908, the railways of Canada carried 63,071,167 tons of freight, distributed among the various classes of traffic as follows:— Products of mines, 22,636,227 tons; products of forests, 12,912,226 tons; products of agriculture, 9,396,967 tons; manufactures, 6,655,719 tons; products of animals, 2,472,359 tons; merchandise, 2,008,267 tons; miscellaneous consignments, 6,938,135 tons. Of the total tonnage relating to commodities 38,821,418 tons were reported as originating on the line, and 24,198,482 tons as having been received from connecting lines. The railway statistics give full details of the various classes of freight under both headings, and the following table shows the grand totals of the various classes of freight carried, whether originating on the various lines, or received from connecting lines:—

Name of Railway.	Tonnage Originating on Road.	Tonnage received from connecting Roads & other Carriers	Total Freight Tonnage
Alberta Railway and Irrigation Co.....	77,697	18,486	96,183
Algoma Central and Hudson Bay.....	366,810	259	367,069
Atlantic and Lake Superior.....	32,241	.....	32,241
Bay of Quinte.....	268,549	.....	268,549
Bedlington and Nelson.....	1,251	804	2,055
Beersville Coal and Ry. Co. (now North Shore).....	11,082	.....	11,082
Bessemer and Barry's Bay.....	.....	.....	.....
Brandon, Saskatchewan and Hudson Bay.....	29,160	12,223	41,383
British Yukon.....	3,178	28,974	32,152
Brockville, Westport and Northwestern.....	11,086	13,309	24,395
Buctouche and Moncton.....	.....	26,621	26,621
Canada Coals and Railway Company.....	83,698	3,055	86,753
Canada Southern.....	534,638	5,397,709	5,932,347
Can. Gov. Railways.....	.....	.....	.....
Intercolonial.....	3,629,682	378,859	4,008,541
Prince Edward Island.....	90,599	7,991	98,590
Canadian Northern.....	2,615,580	.....	2,615,580
Can. Northern Ontario.....	92,098	.....	92,098
Can. Northern Quebec.....	229,063	228,047	457,110
Canadian Pacific.....	10,736,619	3,495,687	14,232,306
Cape Breton.....	1,695	1,230	2,925
Caraque.....	6,102	7,276	13,378
Carillon and Grenville.....	78	.....	78
Central Ontario.....	153,806	80,225	234,031
Crow's Nest Southern.....	177,321	51,205	228,526
Cumberland Railway & Coal Co.....	314,954	19,455	334,409
Dominion Atlantic.....	292,998	62,972	355,970
Elgin and Havelock.....	12,600	3,305	15,905
Grand Trunk.....	7,857,014	4,616,209	12,473,223
Grand Trunk (Canada Atlantic).....	664,844	1,413,891	2,078,735
Halifax and Southwest'n.....	149,849	32,212	182,061
Hampton & St. Martins Hereford.....	10,158	1,269	11,427
Inverness Railway and Coal Co.....	180,563	6,130	186,693
Iroindale, Bancroft and Ottawa.....	313,904	8,571	322,475
Kalso and Slocan.....	21,803	3,865	25,668
Kent Northern.....	8,444	839	9,283
Kettle River Valley.....	.....	139	27,550
Kingston and Pembroke.....	27,411	.....	27,550
Klondyke Mines.....	90,284	31,882	122,166
Liverpool and Milton.....	6,502	.....	6,502
Lotbiniere & Megantic.....	.....	.....	.....
London & Port Stanley.....	48,953	1,963	50,916
Manitoulin and North Shore.....	85,419	379,997	465,416
Massachusetts Valley.....	249,963	578	250,541
Midland Railway Co. of Manitoba.....	81,200	432,998	514,198
Montreal and Atlantic.....	18,461	31,709	50,170
Montreal and Province Line.....	133,352	789,542	922,894
Montreal and Vermont Junction.....	14,823	63,845	78,668
Morrissey, Fernie and Michel.....	6,532	740,586	747,118
Maganetawan River.....	560,225	28,228	588,453
Napierville Junction Ry. Nelson and Fort Sheppard.....	2,255	12,429	12,429
New Brunswick Coal and Railway Co.....	30,678	53,774	56,029
New Brunswick & Prince Edward Island.....	.....	7,846	38,524
New Brunswick South'n.....	52,419	2,441	54,860
.....	32,206	7,656	39,862
.....	26,944	445	27,389

Name of Railway.	Tonnage Originating on Road.	Tonnage received from connecting Roads & other Carriers	Total Freight Tonnage
New Westminster South-ern.....	25,615	61,058	86,673
Nosbonsing & Nipissing Nova Scotia Steel and Coal Co.....	4,990	1,218	6,208
Orford Mountain.....	21,281	6,089	27,370
Ottawa and New York.. Phillipsburg Railway & Quarry Co.....	24,007	71,407	95,414
Princeton Branch of Washington Co. Ry.....	3,604	2,240	5,844
Pere Marquette Rd.....	.....	135,925	135,925
Quebec Central.....	269,585	1,579,691	1,849,276
Quebec & Lake St. John Quebec Ry., Light and Power Co., Montmor-ency Division.....	749,675	84,596	749,675
Quebec, Montreal and Southern.....	260,862	6,210	345,458
Red Mountain.....	104,678	438,701	543,379
Rutland and Noyan.....	35,440	28,776	64,216
Salisbury and Harvey.. Schonberg and Aurora, Stanstead, Shefford and Chambly.....	86,605	336,180	422,785
St. Clair Tunnel.....	34,797	4,453	39,250
St. Lawrence and Ad-irondack.....	3,120	.....	3,120
Sydney and Louisburg Dominion Coal Co.....	12,721	751,803	764,524
Temiscouata.....	7,838	653,410	661,248
Temiskaming & North-ern Ontario.....	3,447,413	111,979	3,559,392
Thousand Islands.....	132,584	15,885	148,469
Toronto, Hamilton and Buffalo.....	273,796	161,134	434,930
Vancouver, Victoria and Eastern.....	30,171	30,171	60,342
Vancouver, Westminster and Yukon.....	126,023	1,055,700	1,181,723
Victoria & Sidney, B. C. Victoria Terminal Rail-way and Ferry Co.....	720,200	151,922	872,122
Wabash Railroad Com-pany in Canada.....	29,724	.....	29,724
Wellington Colliery Co., Wellington Colliery Co., (Ladysmith Extension) York and Carleton.....	1,200,915	3,160	1,204,075
.....	277,350	.....	277,350
.....	483,347	.....	483,347
.....	8,149	2,179	10,328
Total.....	38,821,418	24,198,482	63,019,900

now ready for assembling. Field coils are next put to place and magnet plates bolted home, finished steel bolts and hexagon nuts with spring lockwashers being used exclusively for motor and truck work. The motor frames are now bolted together and a gauge inserted between the pole pieces to prove proper distances. The proper distance between magnets having been secured, the armature is next put to place and armature boxes bolted on. Equal clearance between armatures and magnets is next secured by use of a special gauge. New spring felt feeder wicks are placed in bottom oil pocket of both armature and motor axle bearings, and oil receptacles filled with clean oil. Next a piece of felt is inserted in the grease hole at bottom of grease box touching the shaft, a square oil-soaked pad, half-inch in thickness, is then neatly fitted to the bottom of the box, the balance of space is then filled with hand-picked pure wool waste, the waste having previously soaked in oil 24 hours and dripped for 12 hours. Brush-holder yokes, and brushholders completely assembled, are now bolted to place. These parts do not require any alteration for the reason that they have been built up in a special jig, their correct position and alignment on the commutator being both electrically and mechanically correct. The overhauled motor is now subjected to a running test on the floor for three hours with 40 amperes of current for the purpose of proving the condition of the bearings. While the motor is under test it is painted with a quick drying mineral black paint. The gears, pinions and gear case having been thoroughly cleaned of grease, the motor is now swung to place on the trucks and gears and pinions given an application of special compound, the two or four motors all having come through at the same time the overhaul truck and motor equipment is now ready for service.

Just as soon as car body is placed on trestles, the controller, rheostats, trolley stand and brake cylinder are removed and sent to their respective repair departments; they are at once replaced with new or overhauled material. Cable ducts on car body are opened, cleaned and repainted, renewals being made where necessary. Car body, wood and iron work repaired and painted. Overhauled trucks and motors are now run under, and body put to place, brake and cable connections made, brakes adjusted and car given a severe tryout under service conditions before being passed as o.k. by the inspector.

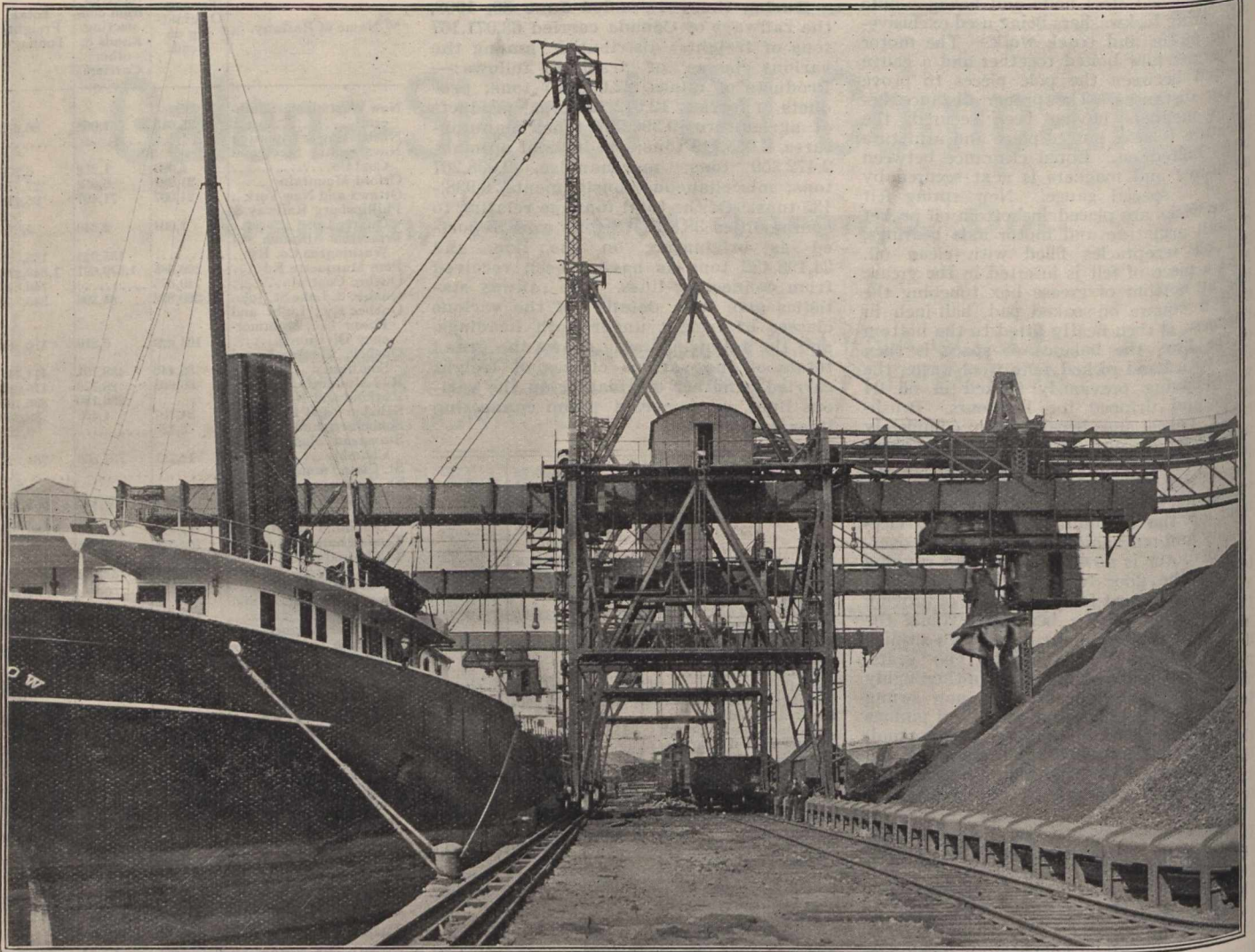
Armatures are first inspected for bearings and renewals made where necessary, cast steel sleeves lined with babbit being used for bearings. Next, the entire armature is carefully cleaned, commutator turned and polished, string band carefully inspected or renewed, and sent to the testing department. Here the millivolt drop test from bar to bar is used and finally the armature is subjected to a six hundred volt ground test, armature body then shellaced and placed in the o.k. rack. Field coils are then placed in section of motor frame without magnet, and a millivolt reading taken, next a magnet attached to an air cylinder is lowered on field coil and another reading taken while the coil is under pressure. If the coil reads up to the standard and shows no variation under pressure the outside tape is repaired and the coil dipped in air drying compound.

This description practically covers the entire performance of overhauling a car. The following remarks, however, may not be out of place. A great reduction in motor lead trouble has been secured by boring the motor frames on the axle side and bringing the leads out as near the king bolt as possible; this, of course, refers to outside hung motors.

Quebec Transportation Club.—The annual meeting was held at Kent House, June 1, at the conclusion of which, the members were the guests, at dinner, of the Quebec Ry. Light and Power Co., and subsequently conveyed to the city by special cars. The club has accepted the R. and O. Nav. Co.'s invitation for a trip to Murray Bay, July 3, and on July 19 and 27, it will entertain Boston and Chicago railroad men respectively. The officers for the current year are: Hon. President, E. A. Evans, General Manager Q. Ry. L. and P. Co.; Hon. Vice Presidents, W. M. Macpherson, Dominion Line Steamships; E. O. Grundy, Quebec Central Ry.; President, F. S. Stocking, Quebec Central Ry.; Vice Presidents, J. A. Everall, Superintendent Montmorancy Division, Q. Ry., L. and P. Co.; F. M. Spaidal, General Superintendent, C.N.Q.R. and Q. and L. St. J. Ry.; Hon. Secretary-Treasurer, A. H. Davis, C.P.R.

A. M. Nanton, Managing Director, Alberta Ry. and Irrigation Co., on the occasion of a recent visit of inspection, stated at Lethbridge, that the company was endeavoring to settle up the winter wheat land it owned. The company's policy, as it had been for years past, was to fill up its land with settlers.

The Canadian Society of Civil Engineers held its last meeting of the season at Montreal recently, when an address on "Some phases of the construction and design of the Manhattan Suspension Bridge" was delivered by J. C. Ostrup, Professor of Structural Engineering, Stevens Institute of Technology, Hoboken, N.J.



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Abitibi and Hudson's Bay Ry.—Under this title a company was incorporated by the Dominion Parliament in 1907, with power to construct a line of 200 miles from the National Transcontinental Ry. between Frederick House River and Abitibi Lake to James Bay between the Albany and Main Rivers, Ont. Nothing in the way of construction has been undertaken to date. (May, pg. 355.)

Alberta and British Columbia Ry.—The Dominion Parliament in 1908 incorporated a company with this title to construct a line from the International boundary at Kootenay River to Elko, thence to Cowley and Calgary, Alta., about 200 miles. Construction work has not yet been taken in hand. (Sept., 1908, pg. 613.)

Alberta and Brazeau River Ry.—The Dominion Parliament incorporated a company with this title in 1908 for the purpose of constructing a line from the Calgary and Edmonton branch of the C.P.R., between Olds and Innisfail, to Rocky Mountain House, thence westerly to Kootenay Plains, on the Rocky Mountains; and from between Big Horn and Sheep Rivers, north of the Saskatchewan River, to Brazeau River, thence along McLeod River to the G.T.P.R. The mileage authorized is 250 miles, but as yet there has been nothing done in the way of construction. (April, 1908, pg. 253.)

Alberta Central Ry.—This company was incorporated by the Dominion Parliament in 1901 to construct a railway from tp. 38, r. 23, 4th mer., Alta., to Red Deer, thence westerly to tp. 39, r. 7, w. 5th mer., 100 miles. The company was granted extensions of time for construction in 1903, 1905 and 1907. (May, pg. 355.)

The Alberta Ry. and Irrigation Co. was incorporated in 1904 by the Dominion Parliament to take over the Alberta Ry. and Coal Co. and the St. Mary's Valley Ry., together with the allied land and irrigation interests. The A. Ry. and Coal Co. was incorporated in 1889 to construct a line from Lethbridge to the International boundary to connect with the Montana railway system, and in 1892 it obtained power to extend through the Crow's Nest Pass to Hope, B.C. The total mileage authorized was about 700 miles, and of this there has been constructed, from Lethbridge to Coutts, Alta., 66.72 miles, and from Dunmore to Lethbridge, 107 miles. This latter line was in 1893 sold to the C.P.R.

The St. Mary's River Ry. was incorporated in 1900 to construct lines aggregating 65 miles from between Stirling and Lethbridge, Alta., to the International boundary, between r. 24 and 30, w. 4th mer., with branch lines not exceeding 15 miles each. The company constructed a line from Stirling to Cardston, 47 miles, and was subsequently amalgamated with the Alberta Ry. and Irrigation Co. In the return respecting railway charters granted 1888 to 1908, recently presented to the Dominion Parliament, the charter is classed as lapsed, and it is stated that 65 miles of line has been constructed. This is undoubtedly an error, as the A. R. and I. Co. only operates 111.82 miles of line, of which 66.72 miles were constructed by the Al-

berta Ry. and Coal Co., and about 47 by the St. M. R. Ry. (Aug., 1908, pg. 547.)

The question of the extension of the company's Kimball branch railway was discussed at Cardston, Alta., June 3, by officers of the company and the Town Council. At a meeting in the neighborhood recently it was stated that the branch would be standard gauge, but that the track would not be extended beyond the field of J. W. Woolf this season.

Algoma Central and Hudson's Bay Ry.—The incorporation of this company by the Dominion Parliament took place in 1899, and it obtained additional powers in 1901. In 1905 and 1907 the time within which its authorized lines might be constructed was extended. The lines authorized extend from Sault Ste. Marie to Dalton station on the C.P.R., to Michipicoten Harbor and to James Bay, not further north than Equam River, 600 miles. There has been constructed 91.57 miles as follows:—From Sault Ste. Marie towards C.P.R., 64.25 miles; from Michipicoten to Josephine mines, 10.50 miles; from Trout Lake to Arveres, 2.00 miles; from mileage 20 to Maple camp, 1.00 mile, and from Lake Wilde to Breiting mine, 2.00 miles. (June, pg. 413.)

Algoma Copper Range Ry.—The Dominion Parliament in 1905 incorporated a company with this title to construct a railway from Batchewana Bay on Lake Superior to the Superior Copper Mines, thence easterly about 120 miles to the C.P.R. transcontinental line between Cartier and Biscotasing, Ont., 150 miles. No construction work has been undertaken by the company to date. (April, 1905, pg. 143.)

Alsek and Yukon Ry.—In 1907 the Dominion Parliament incorporated a company with this title with power to construct a railway of about 300 miles from the International boundary at the crossing of the Klithini River, northwesterly along the valleys of the Klithini, Patsenshini, Shakwak and Alsek rivers, thence along Kluane Lake, Darjek and White rivers to the International boundary between the 62nd and the 64th parallels of latitude. Nothing in the way of construction has as yet been undertaken. (May, pg. 355.) See also White Horse and Alsek Ry.

Anthracite Coal Ry. Co.—The Dominion Parliament in 1905 incorporated a company with this title with power to construct a railway from the coal deposits in tps. 18 and 19, r. 7 and 8, w. 5th mer., to Lethbridge, Alta., 120 miles. No construction has been undertaken by the company to date. (June, 1905, pg. 241.)

Ashcroft, Barkerville and Fort George Ry.—The Dominion Parliament in 1906 incorporated a company with this title to construct a line from Ashcroft or Kamloops, B.C., to Fort George, with a branch from Quesnel to Barkerville. The length of the line authorized is 300 miles. An extension of time for construction was granted in 1908, but up to date there has not been any construction. (Mar., 1908, pg. 179.)

Athabaska Northern Ry.—The Dominion Parliament in 1905 incorporated a company with this title for the purpose of constructing a line of 100 miles from Edmonton to Athabasca Landing, Alta., and in 1907 an extension of time

for construction was granted. No construction has been undertaken to date. (Jan., pg. 17.)

Athabaska Ry.—The Dominion Parliament in 1905 incorporated a company with this title to construct a railway of about 300 miles, from Edmonton along the north side of the North Saskatchewan River to tp. 59, r. 19, w. 4th mer., thence by the Northwest end of Smoky Lake to the west end of Lake Labiche, thence to the Athabaska River at the junction with the Clearwater River. An extension of time for construction was granted in 1907, but up to date nothing in the way of construction has been done. (May, pg. 355.)

Atlantic and Lake Superior Ry.—This company was incorporated by the Dominion Parliament in 1893 to construct a railway from Gaspé Bay, Que., to St. Marys River, Ont. about 1,200 miles. It took over the Baie des Chaleurs Ry. and proposed to take over some other short lines, but its project was never carried out. The receiver for the bondholders continued the operation of the B. des C. Ry. and completed it for 100 miles. The affairs of the company have been before the courts at various times ever since, and are only just about straightened out. The Atlantic, Quebec and Western Ry. was subsequently incorporated, with power to take over the line, and it is now completing the construction into Gaspé. (See Atlantic, Quebec and Western Ry., June, pg. 413.)

Battleford and Lake Lenore Ry.—A company with this title was incorporated by the Dominion Parliament in 1902, to construct a line from Hobbema station on the Calgary and Edmonton branch of the C.P.R., easterly to Lake Lenore, thence to the Canadian Northern Ry. near Crooked River, with a branch from tp. 40, or 41, r. 24, w. 2nd mer., to Yorkton, Sask. The length of the lines authorized is 600 miles, but no construction has been done. An extension of time for construction was granted in 1905. (Feb., 1905, pg. 45.)

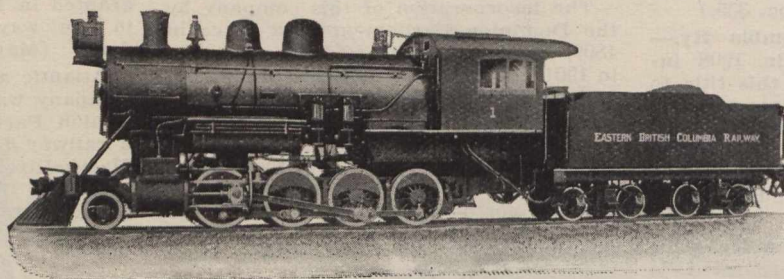
Bessemer and Barry's Bay Ry.—The Dominion Parliament in 1904 incorporated a company with this title with power to construct a railway from L'Amable station on the Central Ontario Ry. to Barry's Bay, Ont., 40 miles. The company has constructed a line of about 5 miles from L'Amable station to its iron mine. (Mar., 1908, pg. 179.)

Boundary, Kamloops and Cariboo Central Ry.—In 1904 the Dominion Parliament incorporated a company with this title for the purpose of constructing a line from Midway, B.C., to Kamloops, thence via North Thompson River to the Nechaco River, thence to Hazelton, to Teslin Lake, and on to the confluence of the Hootalinqua River with the Yukon River, about 1,600 miles. Extensions of time for construction were granted in 1906 and 1908, but no work has yet been undertaken. (Mar., 1908, pg. 179.)

Brantford and Woodstock Ry.—In 1905 the Dominion Parliament incorporated a company with this title to construct a railway of 30 miles connecting Brantford and Woodstock, Ont. No construction has been undertaken to date. (Mar., 1905, pg. 89.)

British Yukon Ry.—This title was given by an act passed in 1900 to the British Yukon Mining, Trading and Transportation Co., incorporated by the Dominion

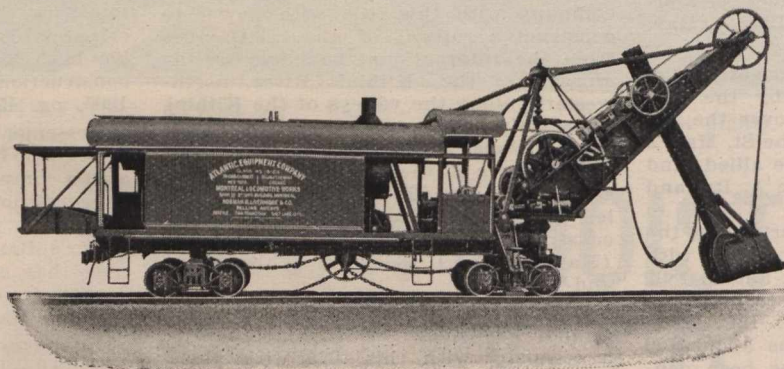
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BANK OF OTTAWA BUILDING, MONTREAL, CANADA

Parliament in 1897. This act authorized the construction of a railway from the head of Lynn Canal through the White Pass to Selkirk, 300 miles. Of this there has been constructed 90.32 miles, viz.: White Pass to White Horse spur, and a branch to White Horse, Yukon Territory, in Alaska the line extends from White Pass to Skagway, and from White Horse a line of steamers is operated during the season of navigation to Dawson, a stage route being operated during the winter. The whole is operated as the White Pass and Yukon Ry. (See White Pass and Yukon Ry., May, 1908, pg. 335.)

Brockville, Westport and North Western Ry.—A company with this title was incorporated by the Dominion Parliament in 1903, with the object of acquiring the 45 miles of railway constructed by the Brockville, Westport and Sault Ste. Marie Ry., and to extend the same from Westport to Sault Ste. Marie, and to North Bay, with a branch to Barry's Bay or other point on the Canada Atlantic Ry. The 45 miles constructed extends from Brockville to Westport, Ont., and the company has not undertaken any construction upon the other 500 miles of its projected line, but it obtained extensions of time for its construction in 1905, 1907 and at the recent session of the Dominion Parliament. (Mar., pg. 171.)

Bruce Mines and Algoma Ry.—A press despatch from Boston, Mass., June 15, stated that plans had been completed under which a syndicate of Boston and New York capitalists would take over this line, and extend it from its present terminus at the Rock Lake Copper Mines, Ont., to the timber limits to the north. The company has a charter to construct a line to the C.P.R. and northerly towards Hudson Bay. The portion already built has not been operated for some years. (Sept., 1908, pg. 613.)

Burks Falls and French River Ry.—The Dominion Parliament in 1906 incorporated a company with this title to construct a railway from Burks Falls to French River, where that river is crossed by the C.P.R. Toronto-Sudbury line. Up to date nothing has been done. (See Burks Falls Ry., May, pg. 355.)

Burrard, Westminster and Boundary Ry. and Navigation Co.—This company was incorporated by the Dominion Parliament in 1907 to construct a belt line of about 100 miles from Vancouver, through New Westminster, Port Moody, etc., to the starting point; and from a proposed bridge at the Second Narrows to the north boundary of North Vancouver, thence to the North Arm and Howe Sound, with branches. Nothing in the way of construction has been undertaken to date. (Mar., pg. 355.)

Calgary, Red Deer and Battleford Ry.—The Dominion Parliament in 1905 incorporated a company with this title, having power to construct a railway of 300 miles from Calgary, Alta., to Battleford, Sask. The company has not done any construction to date. (Mar., 1905, pg. 89.)

Calgary and Fernie Ry.—The Dominion Parliament incorporated a company with this title to construct a railway of 150 miles from Calgary, Alta., through Kananaskis Pass to Elk River and Fernie, B.C. An extension of time for construction was granted in 1908, but nothing has been done. (Mar., 1908, pg. 179.)

Calgary and Battleford Ry.—The Dominion Parliament in 1905 authorized the construction of a line from Calgary, Alta., to Battleford and Prince Albert, Sask., about 450 miles. The company has not proceeded with any construction to date. (Mar., 1905, pg. 89.)

Canada Central Ry.—The Dominion Parliament in 1902 incorporated a company with this title, with power to construct a railway of about 2,500 miles as follows: From the mouth of French River on Georgian Bay, Ont., to Lake Wanapitei, thence to the headquarters of Montreal River, and northwesterly to Albany River, thence to points not less than 50 miles north of Prince Albert and Edmonton, and to Tete Jaune Cache; with a branch to Port Arthur and Fort William, Ont. The company obtained extensions of time for construction in 1903, 1905, 1906 and 1907, but no work has been done. (May, pg. 355.)

Canso and Louisburg Ry.—An act was passed in 1892 by the Dominion Parliament authorizing the construction of a railway from the Strait of Canso via St. Peters to Louisburg and Sydney, N.S., 120 miles. No construction has been done by this company, but under the title of the Cape Breton Ry., a company chartered by the Nova Scotia Legislature, 31 miles of line have been constructed to St. Peters. (See Cape Breton Ry., Sept., 1908, pg. 615.)

Central Ry. of Canada.—The Dominion Parliament incorporated a company with the title of the Ottawa River Ry., power being given to construct a railway from Grenville on the Ottawa River to Montreal, with various branch lines, including one to Hawkesbury, Ont. An extension of time for construction was granted in 1904, and again in 1905, when the name of the company was changed to the Central Ry. of Canada. Under acts passed by the Ontario Legislature the company has secured power to construct a large number of lines throughout the old portion of the province. No construction has been done under either of the charters. (Sept., 1908, pg. 615.)

Chicago and North-Western Ry.—U.S. press reports state that this company is making active preparations for the construction of a line to reach the Pacific Coast at Seattle, Wash., and Vancouver, B.C.

The Chicago, Milwaukee and St. Paul Ry., it is reported, has decided to start at once the construction of a system of branch lines west of the Missouri River, in North and South Dakota, in connection with its main line now under construction to the Pacific Coast. The lines to the south, which have been located, will be started first, and surveys for the northern lines are said to be in progress. (June, pg. 413.)

Cobalt Range Ry.—The Dominion Parliament in 1906 incorporated a company with this title to construct a railway from Haileybury, Ont., to Lorraine tp., opposite Fort Temiskaming on the Ottawa River, and from Fort Temiskaming to Ville Marie and Kippewa, Que., on the Temiscamingue Colonization Ry. (C.P.R. Mattawa-Kippewa branch), about 70 miles, with power to operate a car ferry across the river at Fort Temiskaming, Que. The company has not yet arrived at the construction stage. (Feb., pg. 101.)

Collingwood Southern Ry.—The Dominion Parliament in 1907 incorporated

a company with this title to construct a line from Collingwood southerly to Baxter on the C.P.R. Toronto-Sudbury line, and from Collingwood to Orillia, Ont. The lines to be constructed are about 75 miles, but nothing in the way of construction has yet been arranged. (May, pg. 355.)

Detroit River Tunnel.—We are advised that construction work on the double tunnel under the Detroit River, to connect Windsor, Ont., and Detroit, Mich., is progressing satisfactorily. The tunnel approach sections on both sides of the river are expected to be completed towards the end of July. The open cut work, both in Windsor and Detroit, has been almost completed. At the beginning of June two sections of the sub-aqueous construction had to be got in place, and this work, in addition to building in the interior lining, was expected to take from four to six months. It is anticipated that if the work proceeds as satisfactorily as at present, and there are no accidents, the tunnel will be completed and ready for operation early in 1910. (May, pg. 413.)

Dominion Central Ry.—An act was passed by the Dominion Parliament incorporating a company with the title of the Kingston and Dominion Central Ry., with power to construct a railway of about 240 miles from Kingston, via Newboro and Westport, to Georgian Bay between Parry Sound and Midland, Ont. The name of the company was changed to Dominion Central Ry. in 1905, when, and in 1907, extensions of time were granted for construction. Up to date no construction has been taken in hand. (Dec., 1906, pg. 611.)

Eastern Townships Ry.—This company was incorporated by the Dominion Parliament in 1907, with power to construct a railway from the Intercolonial Ry. in St. Leonard parish to the junction of the Quebec Central Ry. and the Maine Central Rd., in Wolfe county, Que., about 75 miles. Nothing in the way of construction has yet been done. (Sept., 1908, pg. 615.)

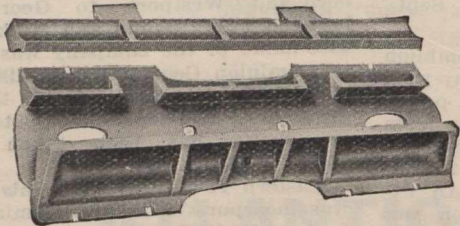
Edmonton, Dunvegan and British Columbia Ry.—The Dominion Parliament in 1907 incorporated a company with this title to construct a railway from Edmonton, Alta., to Dunvegan, thence along Peace River to its confluence with Parsnip River, to Fort George, B.C. The line authorized is 650 miles. An extension of time for construction was granted in 1908, but so far nothing in the way of construction has been done. (Mar., 1908, pg. 181.)

Elgin and Havelock Ry.—A company with this title was incorporated by the Dominion Parliament in 1894 to acquire the Elgin, Petitcodiac and Havelock Ry. (constructed under an act of the New Brunswick Legislature), and to extend it from Havelock to Chipman, and to construct a line from a point on the said line to Salisbury or Moncton, and from Elgin to Alma. The mileage authorized was 100 miles, and of this 28 miles have been constructed from Elgin, crossing the I.C.R. at Petitcodiac Jct., to Havelock, and from Havelock to Keith's Mills.

Erie, London and Tillsonburg Ry.—A company with this title was incorporated by the Dominion Parliament in 1906, with power to construct a railway from Port Burwell to London, with a branch from between Port Burwell and Aylmer to Tillsonburg, Ont. The mileage authorized is 50 miles; an extension of time

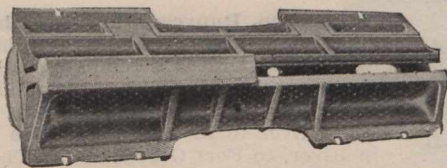
Have You Seen Williams Boltless Rail Joint?

The joint was first put in trial service on the Pecos River line of the Santa Fe at Roswell, N. Mex., where it remained for 11 months, and when removed at the end of that time it showed neither corrosion nor bright spots indicating wear. These joints have been in service for 10 months on the Fort Wayne division of the Pennsylvania Lines West, for 9 months in the yards of the St. Paul Union Depot Co., and for 8 months on the Wisconsin division of the Chicago & North Western Ry. in Chicago, where they are carrying the heavy North Shore suburban traffic of the road, as well as the through traffic for



the Wisconsin & Milwaukee division, which amounts to 316 trains every 24 hours.

The joints are made of malleable iron and have on the bottom a series of transverse ribs for strength, the outer ones of which come against the tie and prevent longitudinal movement. To prevent rail creeping, there is a round hole through the joint midway of the outer side, in which a 1-in. round bolt is inserted, the rail flanges being cut away at the adjacent cor-



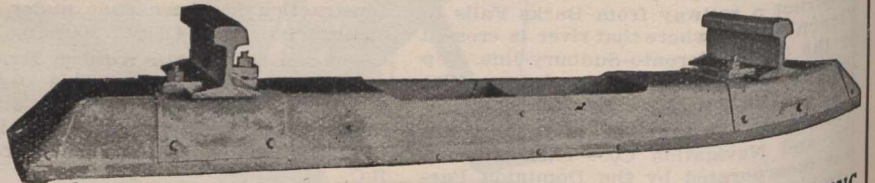
ners the slight amount necessary to permit the insertion of the bolt. The joints weigh the same as a yard of the rail to which applied; the joint for an 80-lb. rail, for example, weighing 80 lbs.



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for construction was granted in 1908, but up to date nothing has been done. (Mar., 1908, pg. 181.)

Essex Terminal Ry.—The Dominion Parliament, 1902, incorporated a company with this title, authorizing the construction of a railway of 18 miles from Walkerville to Windsor, Sandwich and Amherstburg, Ont. In 1904 and 1906 the company was given extensions of time for construction. The company laid 2 miles of track in 1906. (Dec., 1908, pg. 865.)

Fording Valley Ry.—The Dominion Parliament in 1906 incorporated a company with this title to construct a line, including branches, of 175 miles, as follows: from the British Columbia Southern Ry. (C.P.R.) between Elk River and Michel Creek to the Fording River Valley, along Henrietta Creek to the Alberta boundary, and to Okotoks, and branch line up Five Mile Creek, and other points, not exceeding 15 miles each. The company has to date undertaken any construction. (Oct., 1906, pg. 583.)

Fort William Terminal and Bridge Co.—The Dominion Parliament in 1906 incorporated a company with this title with power to construct certain bridges and a railway around islands 1 and 2 at the mouth of the Kaministikwia River, Fort William, Ont. The line to be constructed is 5 miles. An extension of time for construction was granted in 1908, but up to the present time the company has not done any work. (May, 1908, pg. 329.)

Great West Ry.—In 1903 the Dominion Parliament incorporated a company with the title of the North West Coal and Coke Co., with power, among other things, to construct a railway from Bull Park on North Fork River to Cowley or Livingstone, Alta., on the C.P.R. Crow's Nest branch. In 1905 an act extending the time for construction and changing the name of the company to the Great West Ry. was passed. The company has not yet started any railway construction. (Mar., 1908, pg. 181.)

Guelph and Georgian Bay Ry.—This company was incorporated in 1903 by the Dominion Parliament, with authority to construct a line of about 150 miles from Guelph to Elora, connecting Elora, Fergus, Arthur and Mount Forest, Ont. An extension of time was obtained in 1905, but no construction has been undertaken to date. (May, 1905, pg. 93.)

Hillcrest Ry., Coal and Coke Co.—In 1906 the Dominion Parliament incorporated a company with this title to construct a line from Morrissey, B.C., to Hillcrest Jct., on the C.P.R. Crow's Nest branch, thence to Cardston, Alta., with branches from Mill Creek to Pincher Creek, and to the coal deposits in tp. 5, r. 1, w. 5th mer. The length of the lines authorized is 150 miles, and of this there has been constructed 1.5 miles, from Hillcrest Jct. to its mine, in Alta. (July, 1908, pg. 471.)

Hudson's Bay and Northwest Ry.—This title was given by an act passed in 1899 to a company originally incorporated by the Dominion Parliament in 1897 as the Hudson's Bay and Yukon Ry. and Navigation Co. The company has power to construct a railway about 1,000 miles long from Chesterfield Inlet on Hudson's Bay to Great Slave Lake, and from the Mackenzie River to the Porcupine or Yukon River. It obtained extensions of time for construction in 1899, 1902 and 1904, but so far no work has been done,

Hudson's Bay and Pacific Ry.—In 1896 the Dominion Parliament incorporated a company with this title to construct a line from Fort Churchill on Hudson's Bay to Fond du Lac on Lake Athabasca, from Fort Churchill to the north-west end of Lake Winnipeg, thence to Prince Albert, and Calgary, and from Manitou Lake to Edmonton, Alta., 1,800 miles. The time within which these lines might be constructed was extended in 1898, 1901, 1903, 1905 and 1909, but up to the present no definite construction work has been undertaken. (May, pg. 355.)

Indian River Ry.—The Dominion Parliament in 1902 incorporated a company with this title, authorizing the construction of a line of 20 miles from the north end of Lake Megantic to the international boundary at Riviere Morte, Que. An extension of time for construction was granted in 1907, but so far nothing has been done. (June, 1908, pg. 403.)

Intercolonial Ry.—Tenders are under consideration for the construction of a three stall engine house, turntable, ring-wall with centre foundation, freight shed, loading platform, and for various alterations and additions to, and for the moving of the station at Loggieville, N.B. Loggieville is the terminal point of the extension of the old Canada Eastern Ry. from Chatham, where it crosses the I.C.R.

The newly appointed Government Railways Managing Board held its first meeting in Montreal, May 27, and subsequently made a visit of inspection over the I.C.R. and the P.E.I. Ry. The members were accompanied during their inspection by the chief officers of the lines and by the officials of the different divisions. The Minister of Railways recently announced that the headquarters of the Board would be in Montreal, where the regular meetings will be held. (June, pg. 413.)

Interprovincial and James Bay Ry.—The Dominion Parliament in 1901 incorporated a company with this title to construct a railway from Lumsden's Mill on the C.P.R. Kippewa branch to Des Quinze River. Extensions of time for construction were granted in 1903 and 1905, but no construction work has been undertaken to the present time. (June, 1908, pg. 399.)

Joliette and Lake Manuan Colonization Ry.—The line which this company was authorized to construct by its act of incorporation passed by the Dominion Parliament in 1903 was to be 140 miles long, to extend from Joliette to Ste. Emelle de l'Energie, to St. Michel des Saints and Lake Manuan, Que. No construction has been undertaken, and although it was reported to the House of Commons in the list of charters granted 1888-1908 as having lapsed, Parliament at the last session passed an act giving the company an extension of time for construction. (Feb., pg. 103, and June, 1908, pg. 403.)

Kamloops and Yellow Head Pass Ry.—This company was incorporated by the Dominion Parliament in 1906 to construct a railway from Kamloops, B.C., to Tete Jaune Cache, via the North Thompson River, Canoe River valleys and McLellan's Creek. The line authorized is 230 miles long, but up to date no construction has been undertaken. (Mar., 1908, pg. 181.)

Kettle Valley Lines.—The Dominion Parliament in 1901 incorporated a company with the title of the Kettle River

Valley Ry., with power to construct a line from the International boundary near Cascade City westerly to Carson City, with a branch from Grand Forks 50 miles up the North Fork of the Kettle River; also from Grand Forks via Greenwood to the International boundary at Midway; in 1904 it was granted an extension of time for construction, and in 1906, in addition to being granted a further extension of time, it was given authority to extend its line from Midway to Hedley, from Hedley northerly for 20 miles, and from the Midway-Hedley line to Penticton. The total length of lines authorized is 200 miles, and of this distance there has been constructed about 16 miles, viz.: from the International boundary to Grand Forks, B.C., 3.86 miles, and the remaining mileage from Grand Forks up the North Fork of the Kettle River. Of this the 3.86 miles only has been operated in connection with the company's line to Republic, Wash. (April, pg. 247.)

Klondike Mines Ry.—The Dominion Parliament in 1899 incorporated a company with this title to construct a railway from Klondike City to Bonanza Creek, to the Divide, Dominion Creek, Indian Creek and Dawson City, with branches on Klondike River, Hunker Creek, Bean Creek, Quartz, Sulphur, Eldorado and other creeks, 120 miles. Extensions of time and variation of powers were obtained in 1901, 1902, 1903 and 1907. The company has completed the construction of 32 miles from Klondike City towards Stewart River. (Sept., 1907, pg. 663.)

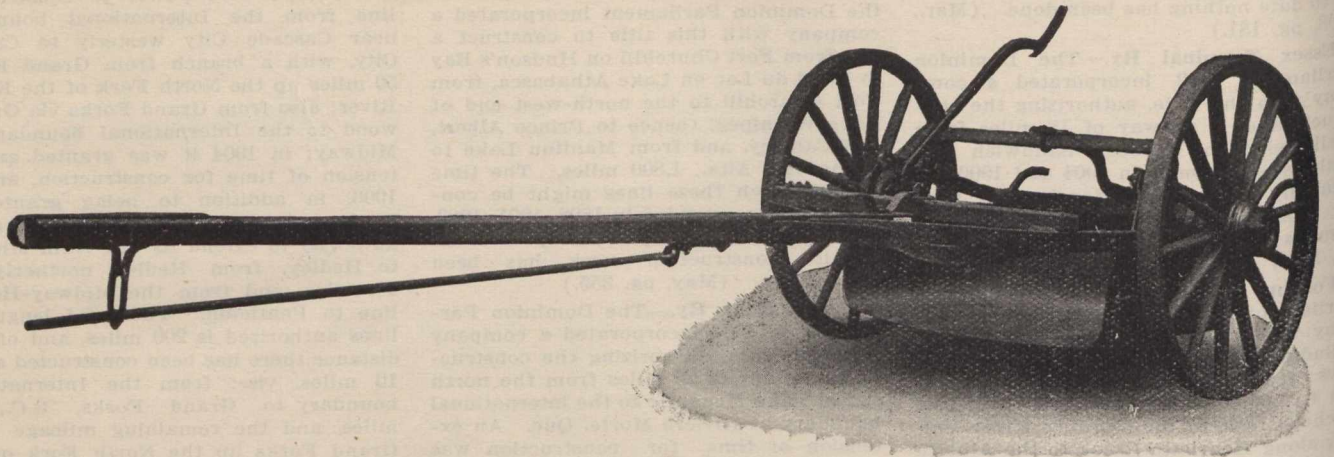
Kootenay, Cariboo and Pacific Ry.—This company was incorporated by the Dominion Parliament in 1903, and was given an extension of time for construction in 1905. The line authorized to be constructed is to start at Golden, B.C., and to extend to Tete Jaune Cache, Barkerville and Fort George, altogether 400 miles. No construction work has been undertaken to date. (Feb., 1905, pg. 49.)

Lebonk and Thunder Bay Ry.—The Dominion Parliament in 1905 incorporated a company with this title to construct a railway from Thunder Bay, following the Blende River, to Lebonk mine, on lot 1, Merrick's survey, in McTavish tp., and westerly to Loon Lake, Ont. Nothing in the way of construction has been done. (April, 1905, pg. 145.)

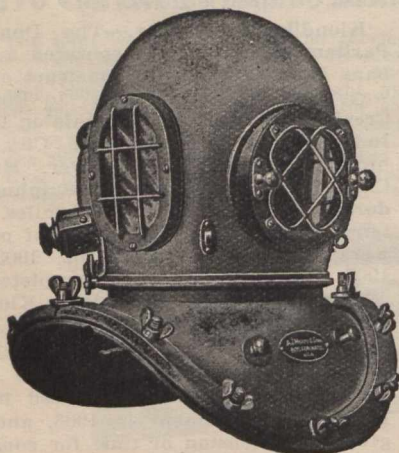
London and Port Stanley Ry.—A proposition has been made to the London, Ont., City Council, for the electrification of the L. and P.S.R. The Mayor said he had been informed that there was a possibility that the transmission lines between London and St. Thomas would run along the L. and P.S.R. right of way, but nothing official had come to his knowledge. The electrification of the line was a big problem, and it would be some years yet before the city could handle it.

London and St. Clair Ry.—The Dominion Parliament in 1905 incorporated a company with this title to construct a railway of 70 miles from the Ontario and Quebec Ry. (C.P.R.) between London and Komoka to the St. Clair River between Sarnia and Lake St. Clair. An extension of time for construction was granted in 1907, but up to date nothing has been done. (Nov., 1906, pg. 641.)

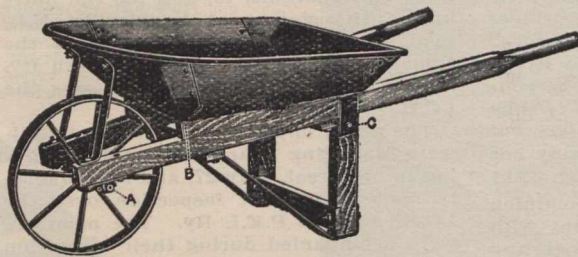
Macleod, Cardston and Montana Ry.—A company with this title was incorpor-



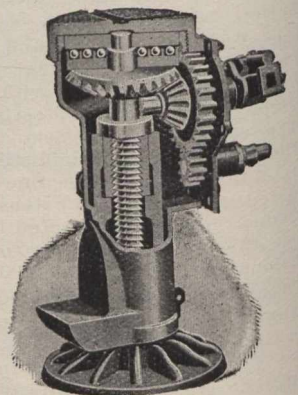
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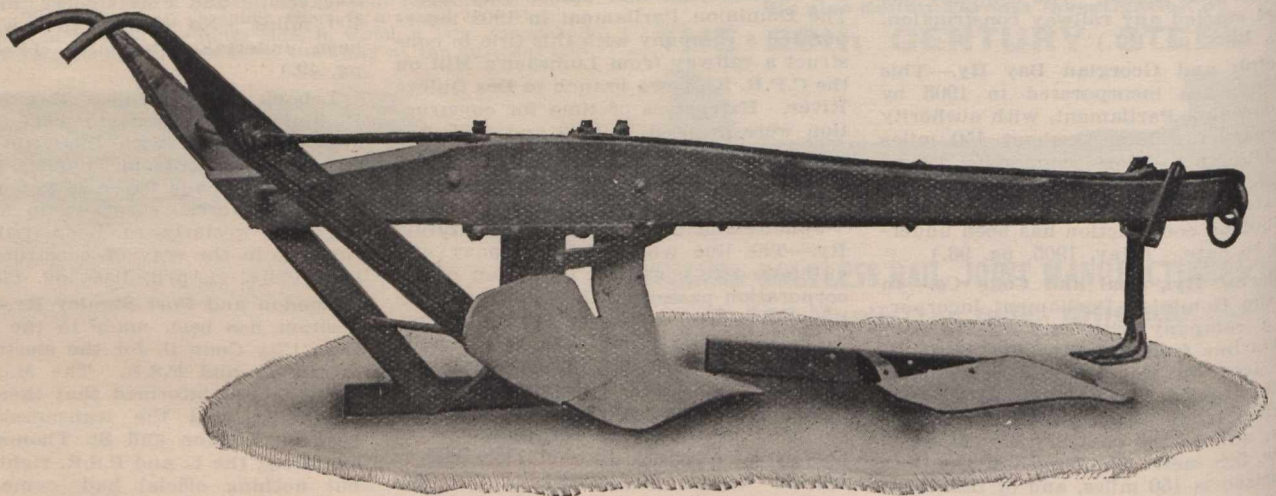
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ated by the Dominion Parliament in 1903, to construct a line of 100 miles from Macleod via Cardston to the International boundary west of range 21, with a branch from between Macleod and Cardston to tp. 1, r. 30, w. 5th mer. Extensions of time were granted in 1905 and 1908, but up to the present time no construction work has been undertaken. (Sept., 1908, pg. 617.)

Malone and Hopkins Point Ry.—The Dominion Parliament in 1907 incorporated a company with this title to construct a line from Dundee to Hopkins Point, Huntingdon Co., Que. Construction of the line has not been taken in hand to date. (Mar., 1907, pg. 161.)

Manitoba and Keewatin Ry.—By its act of incorporation, passed by the Dominion Parliament in 1902, this company was authorized to construct 1,200 miles of line located as follows: from Winnipeg or Selkirk to the west coast of Hudson's Bay or James Bay at the mouth of the Severn River, and a branch from the main line west of Cat Lake to the C.P.R. transcontinental line at Ignace or Black River, Ont. Extensions of time for construction were granted in 1904 and 1906, but so far no construction has been undertaken. (Feb., 1906, pg. 63, and Feb., 1905, pg. 49.)

Manitoulin and North Shore Ry.—This railway company was incorporated by the Dominion Parliament in 1900, to construct a line from Little Current on Manitoulin Island northerly and easterly 100 miles, crossing the C.P.R. Sault Ste. Marie branch at Onaping or Cartier, with a branch from the line in Drury of Hyman tp. to Sudbury; also a line from Little Current to the southern shore of Manitoulin Island, and from Tobermory in Bruce County through Wiarton and Owen Sound to Meaford, Ont., with power to operate car ferries between Tobermory and Manitoulin Island. The length of the line authorized was 250 miles, and there has been constructed about 16 miles in three sections connecting Sudbury with the Gertrude mines, 13.50 miles; Spanish River with the C.P.R. at Stanley Jct., 1.50 miles; and the Elsie mines with the main line, 1.00 mile. The line is owned by the Lake Superior Corporation, along with the Algoma Central and Hudson Bay Ry., and the section to Spanish River is operated by the C.P.R. Extensions of time for construction were granted in 1901, 1903, 1905, 1906, 1907 and 1908, together with powers respecting agreements with other companies. The more important legislation with regard to construction, however, has been passed by the Ontario Legislature particularly at its last session. (June, pg. 413.)

Medicine Hat and Northern Alberta Ry.—This company was incorporated by the Dominion Parliament in 1902, and was given extensions of time for construction in 1903 and 1905. It has power to construct a line from Medicine Hat to the North Saskatchewan River at Victoria, Northern Alberta. The length of the line authorized is 350 miles, but no construction work has been done to date. (Feb., 1905, pg. 49.)

Montreal Bridge and Terminal Co.—A company was incorporated by the Dominion Parliament in 1890 to construct a bridge and approaches over the St. Lawrence River and lines to connect with other lines in Montreal, a total length of 5 miles. The time for construction was ex-

tended in 1897 and 1905, and the title of the company has been changed from the Montreal Bridge Co. to the present one. (June, pg. 415.)

Montreal, Quebec and Southern Ry.—A company with this title was incorporated by the Dominion Parliament in 1905, with power to construct a railway of 25 miles from St. Guillaume station on the Montreal and Atlantic Ry. (C.P.R.) to Sorel, Que. Nothing in the way of construction has been undertaken to date. (Feb., 1905, pg. 49.)

Moose Jaw and Edmonton Ry.—The Dominion Parliament in 1905 incorporated a company with this title to construct a line from Moose Jaw to the elbow of the South Saskatchewan River, and thence to Edmonton, Alta., about 450 miles. Up to date the company has not proceeded with any construction. (Mar., 1905, pg. 93.)

New York Central Lines in Canada.—The N.Y.C. and Hudson River Ry. directly controls the Ottawa and New York Ry., extending from the St. Lawrence River near Cornwall to Ottawa, 56.90 miles; and owns jointly with the C.P.R. the Toronto, Hamilton and Buffalo Ry., 83.67 miles. Through its control of the Michigan Central Rd., it owns the Canada Southern Ry., 382.19 miles, and through its control of the Rutland Rd. it owns, leases or controls the Rutland and Noyan Ry., 3.39 miles; the St. Lawrence and Adirondack Ry., and its leased line the South Western Ry., 46.12 miles, a total of 572.27 miles.

A company with the title of the Rutland and Noyan Ry. was incorporated by the Dominion Parliament in 1899, with power to construct a line from the junction of the Canada Atlantic Ry. and the East Richelieu Valley Ry near Noyan, Que., to the International boundary. A line 5 miles long was authorized, and the line as constructed is 3.39 miles.

A company with the title of the St. Lawrence and Adirondack Ry. was incorporated by the Dominion Parliament in 1888, with power to construct a line from Salaberry de Valleyfield, Beauharnois Co., to Huntingdon, to reach the frontier of New York State, and to lease other lines. The mileage authorized was 78 miles, and of this there has been constructed 32.82 miles, viz., from the junction with the Canada Atlantic Ry. near Valleyfield to the International boundary, 19.22 miles; and from Beauharnois to a junction with the C.P.R. at Adirondack Jct., 12.90 miles. See South Western Ry. for additional information.

The Southwestern Ry. company was incorporated by the Dominion Parliament in 1888 to construct a railway from Caughnawaga to the Atlantic and Northwest bridge over the St. Lawrence, and to the International boundary near Dundee, Que. The company passed by lease under the control of the St. Lawrence and Adirondack Ry. in 1896.

Northern Empire Ry.—The Dominion Parliament in 1908 incorporated a company with this title, having for its object the construction of a railway, including branches, of 2,000 miles, located as follows: from the International boundary east of Cardston, Alta., in tp. 1, r. 20, 21, 22 or 23, w. 4th mer., through Lethbridge to Fort McMurray, thence northwesterly via Fort Vermillion, through Yukon Territory via Dawson City, to the boundary between Yukon and Alaska, with a branch from near Victoria, Alta., to Edmonton, Alta. Nothing in the way

of construction has yet been undertaken. (April, 1908, pg. 245.)

Orford Mountain Ry.—The company has not reached any decision as to what, if any, construction will be done on its line during the summer. It has partially completed its extension from Mansonville, Que., to the International boundary, near North Troy, Vt., and has also in contemplation an extension from Windsor Mills to Bromptonville, Que., about 8 miles. The work is being done under the charge of R. K. Harris, Chief Engineer of the company, Eastman, Que. (Sept., 1908, pg. 619.)

Owen Sound and Meaford Ry.—A local company was incorporated in 1905 by the Dominion Parliament to construct a line of 20 miles to connect Owen Sound and Meaford, Ont. In 1908 an extension of time for the construction was granted, but up to the present time nothing has been done. The company was given definite power to undertake the work, in event of the failure of the Manitoulin and North Shore Ry. to construct this portion of its line by a certain date. Negotiations were also carried on with the G.T.R. to construct the line, but nothing has been done, and the latest development of the plans to ensure direct communication between these towns on the shore of the Georgian Bay is the proposal of an Owen Sound livery proprietor to run a motor bus at stated intervals daily. (April, pg. 249.)

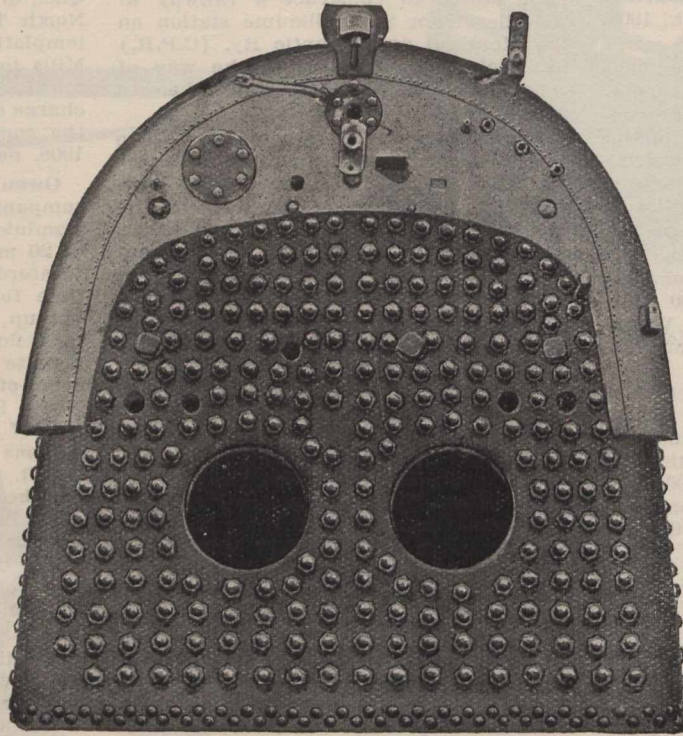
Pontiac and Renfrew Ry.—This company was incorporated by a Dominion charter in 1888, with power to construct a railway from between Braeside and Arnprior, Ont., to the Pontiac Pacific Jct. Ry., between Quyon and Smith's stations, and thence to Desert, Que., about 80 miles. It has constructed a line from Wyman's station on the Pontiac Pacific Jct. Ry. to the Bristol iron mines in Pontiac county, Que., 4.25 miles. The line has not been operated for some years. It was originally constructed by the Drummond interests of Montreal, and has recently passed into the hands of the Canada Iron Corporation, Ltd.

Prince Albert and North Saskatchewan Ry.—This company was incorporated by the Dominion Parliament in 1906, with power to construct a railway of 230 miles from Prince Albert to Pas Mission, Sask. Nothing has been done to date in the way of construction. (Oct., 1906, pg. 585.)

Prince Edward Island Tunnel.—The question of the winter communication between P.E.I. and the mainland is brought forward in one form or another at every session of the Dominion Parliament. The advocates of a direct railway service believe that the construction of a tunnel is the only real solution of the questions, and the argument which they present is that the Government should have a thorough survey made so as to settle once and for all the feasibility of such a tunnel. A partial survey was made in 1895, and upon this the present Government made an estimate showing that a tunnel could be constructed for about \$10,000,000, and it was thought if the tunnel would not cost more the province was entitled to it. A. L. Fraser, M.P., speaking in the House of Commons recently, said that 75% of the people on the island wished this matter to be settled one way or the other, and the only way to satisfy them would be to have a proper survey made and a report presented as to the cost of the tunnel.

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Rigidity of Firebox construction is unquestionably the main source of injury to the material make-up of the locomotive boiler. The heat absorbing surfaces must expand freely to enable each portion to accommodate the difference of expansion between the outer shell and firebox plates without producing strains detrimental to other portions of the structure.

The Tate Flexible Staybolt has been applied to several fireboxes covering the entire staybolt area, and over a service period of two years no expenditures have been made for maintenance and the complete assemblage was pronounced as good as when first installed.

The Tate Bolts were longitudinally adjusted in certain rigid localities to compensate for the difference of expansion between the outer shell and firebox.

The general use of the Tate Flexible Staybolt will eliminate staybolt breakage, and largely, if not entirely, fire sheet cracking, flue and seam leakage.

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If the cost would be out of proportion to what was expected the tunnel would not be asked for because the expenditure would not be justified. If these surveys were made and the estimates prepared the people would be satisfied, but until this was done they would be continually asking for a tunnel. They did not want anything unreasonable, but they wanted the terms of confederation carried out, and until this question of the feasibility of a tunnel is got out of the way they will feel that they could not have continuous communication with the mainland. No action was taken by Parliament, but the Ministers promised to keep the matter before them. (April, pg. 249.)

Quebec and Lake Huron Ry.—In 1900 the Dominion Parliament incorporated a company with this title to construct a railway of 500 miles from Quebec to the mouth of French River on Georgian Bay. The project was part of an ambitious plan with which W. Seward Webb, then President of the Rutland Rd., was interested, in connection with which local companies were chartered in Quebec, New Brunswick and Nova Scotia. The plans fell through, the only construction undertaken being the Cape Breton Ry. in Nova Scotia. The Q. and L. H. charter was renewed by the Dominion Parliament in 1904 and 1906, but beyond some preliminary surveys nothing has been done. (Feb., 1907, pg. 89.)

Quebec and New Brunswick Ry.—A company with this title was incorporated by the Dominion Parliament in 1900 to construct a railway from Connor station, Madawaska county, to St. Charles Jct. on the I.C.R., or St. Anselme on the Quebec Central Ry., or Chaudiere Jct., Que., and extensions of time were granted in 1903 and 1908. The length of the line authorized was 130 miles, but beyond some grading in 1902 near Connor nothing has been done. At the recent session of the Dominion Parliament an act was passed further extending the time for construction and varying the route, so that connection might be made with lines in the U.S. (Mar., pg. 175.)

Quebec Midland Ry.—A company with this title was incorporated in 1906 by the Dominion Parliament, for the purpose of constructing a railway of 140 miles from the boundary between Ontario and Quebec at Lake Abitibi to the west shore of Lake Mattagami, Que. The company has not yet reached the construction stage. (April, 1906, pg. 455.)

Quebec, Montreal and Southern Ry.—We are advised that beyond the completion of the extension from Pierreville to Fortierville, Que., which was opened for traffic in June, the company has not any further construction in hand. The Delaware and Hudson Co., which owns the Q., M. and S. Ry., has not yet authorized the carrying on of any further extension of the line, at present terminating at Fortierville, to the Quebec Bridge. (June, pg. 415.)

Quebec, Saguenay and St. Lawrence Ry.—A company was incorporated by the Dominion Parliament in 1903 with this title, having power to construct a line from the Bay of Seven Islands to the Saguenay River between Lake St. John and Tadousac, thence to Quebec, with branches to St. Alphonse, Murray Bay and St. Paul's Bay, about 450 miles. This charter is owned by the interests developing the pulp and power plant on

the St. Anne's River, and the wharf, etc., at Clarke City, Seven Islands Bay, under the title of the North Shore Ry. Power and Navigation Co. This company has constructed a railway of about 9 miles from Clarke City to the falls of the St. Anne River. (April, 1906, pg. 195.)

Quinze and Blanche River Ry.—This company was incorporated by the Dominion Parliament in 1907, power being given to construct a railway from Dymont, Ont., on the T. and N. O. Ry. to Des Quinze Lake, Que., about 30 miles, and construction has been started near Quinze Rapids. (Mar., pg. 175, and Sept., 1908, pg. 619.)

Red Deer Valley Ry.—In 1899 the Dominion Parliament incorporated a company with this title to construct about 120 miles of railway, and extensions of time for its construction were granted in 1891, 1894, 1897, 1899, 1900, 1903 and 1905. The lines authorized were from Calgary northeasterly to the Red Deer River in tp. 32, r. 21, 4th mer., thence to tps. 30 to 32, r. 22; also from Cheadle station to a junction with the Calgary line in tp. 26, r. 25; with branches from the main line in tp. 24, r. 29, to between Sheppard and Calgary, and from the main line in tp. 29, r. 23, easterly to Red Deer River. No portion of these lines has yet been constructed.

Regina and Hudson's Bay Ry.—The Dominion Parliament in 1903 incorporated a company with this title, power being given to construct a line from the International boundary between the 2nd and 3rd principal meridian to Regina, thence northerly to Craven, Longlaketon, Strassburg, Carrot River and The Pas, with a branch from Craven to Big Quill Lake, a total of about 600 miles. The time for construction was extended in 1905, but up to the present nothing has been done. (Feb., 1905, pg. 51.)

Rocky Mountain Ry. and Coal Co.—The Dominion Parliament in 1891 incorporated a company with this title for the purpose of constructing a railway from Anthracite on the C.P.R. northerly to Cascade River, to the south forks of Red Deer River, and to Red Deer Forks coal mine, about 50 miles. Extensions of time for construction were granted in 1894 and 1903, but no construction has been undertaken.

Saskatchewan Valley and Hudson's Bay Ry.—In 1907 the Dominion Parliament incorporated a company with this title to construct the following lines of railway: from Edmonton, Alta., to Smoky Lake; from Prince Albert, Sask., to Pelican Lake and Fort Churchill; and from Smoky Lake to Ile a la Crosse Lake and Pelican Lake. These projected lines have a length of about 1,500 miles, but up to date nothing in the way of construction has been done. (Mar., pg. 175.)

Southern Central Pacific Ry.—A company with this title was incorporated by the Dominion Parliament in 1903, and was given power to construct a railway from Vancouver via Kootenay Pass to Old Man River, Alta., thence to Hudson's Bay not less than 100 miles north of Fort Churchill. In 1906 it was given an extension of time for construction, and was also authorized to construct a branch from its main line near Skaist River, B.C., via Kamloops and Yellow Head Pass through Alberta to Cold Lake on the main line. The length of lines authorized is estimated at 2,000 miles, but so

far no construction has been undertaken. (May, pg. 357.)

St. Maurice Valley Ry.—In 1904 the Dominion Parliament incorporated a company with this title to construct a railway from Three Rivers to Shawinigan Falls and Grand Mere, Que., and thence to a junction with the National Transcontinental Ry., 250 miles. In 1905 an act was passed authorizing the company to enter into agreements with other companies. The company has constructed a line from Three Rivers to Grand Mere, 22 miles of which is operated by the C.P.R. (June, pg. 415.)

Temagami, Cobalt and Temiskaming Ry.—Under this title the Dominion Parliament in 1906 incorporated a company, with power to construct a railway of about 100 miles from Lake Temagami to the Quinze rapids of the Ottawa River, Ont. Nothing in the way of construction has been done. (May, 1906, pg. 255.)

Temiskaming and Northern Ontario Ry.—The Commissioners returned to Toronto, June 11, after a trip of inspection over the line. The chairman stated that a spur line will be constructed from Haileybury to the wharf, and another, the construction of which will be taken in hand at once, from New Liskeard station to the centre of the town. This latter spur will be extended to the government wharf as soon as the latter is built. The report upon the traffic prospects of the Elk Lake and Gowganda districts has been prepared by Engineer Cole, and the Chairman said the Commissioners are most favorable to the extension if the conditions warrant, and this will be demonstrated within the next three or four months.

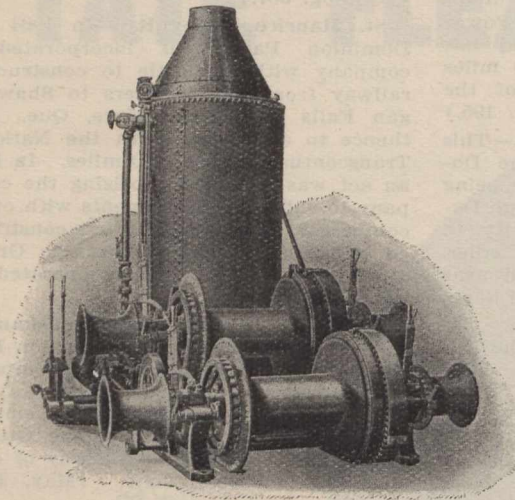
Reports from North Bay, June 15, state that the instrumental survey for the line from Charlton to Gowganda has been completed to about six miles from Gowganda, and that by the end of August, the location plans will have been completed. The total length of the line will be about 50 miles and the estimated cost is about \$2,000,000.

It is proposed to set up a creosoting plant for the treatment of all bridge timber and ties. (June, pg. 415.)

Trans-Canadian Ry.—This company was incorporated by the Dominion Parliament in 1895 to construct a railway about 3,000 miles long from Quebec, passing north of Lake Winnipeg, through the Yellow Head Pass, to Port Essington, or Port Simpson, B.C. In 1902, 1904 and 1908 extensions of time for the construction of the line were granted. No definite construction has yet been undertaken. (Sept., 1908, pg. 621.)

Vancouver, Fraser Valley and Southern Ry.—The Dominion Parliament in 1906 incorporated a company with this title to construct a railway of about 100 miles from Vancouver to New Westminster, thence to the International boundary, and from New Westminster bridge to Chilliwack and Ladner's Landing, B.C. The company has not yet undertaken any construction. (May, pg. 359.)

Vancouver Island and Eastern Ry.—During the session of the Dominion Parliament of 1908 a company was incorporated with this title to construct a railway of about 900 miles from Victoria to Seymour Narrows and from Bute Inlet, B.C., to Edmonton, Alta., with power to operate a car ferry across the Narrows. The company has not yet arranged to



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undertake any construction. (Sept., pg. 621.)

Vancouver, Westminster and Yukon Ry.—A company with this title was incorporated by the Dominion Parliament in 1901, with power to construct the following lines: from Vancouver to New Westminster; from Vancouver to Squamish Valley, to Lillooet, Quesnel and Hazelton or other point on the Skeena River, thence to Dawson and to the western boundary of the Yukon Territory, with branches easterly to Tete Jaune Cache and Edmonton, Alta. It was granted extensions of time for construction in 1905 and 1906. The lines authorized total about 2,000 miles, and there has been constructed the line from Vancouver to New Westminster, 14.81 miles, which has been sold to the Vancouver, Victoria and Eastern Ry. and Navigation Co., a line owned by the Great Northern Ry., U.S. So far as the remaining mileage authorized is concerned the charter is still operative. (June, pg. 417.)

Western Alberta Ry.—The Dominion Parliament in 1898 incorporated a company with this title to construct a railway about 350 miles long from the International boundary west of r. 20, 4th mer., to the Sarcee Indian reserve, through Canmore and Anthracite to the easterly base of the Rocky Mountains. In 1900, 1903, 1905 and 1908 the company obtained extensions of time for construction. Up to the present, however, nothing in the way of construction has been done. (June, 1908, pg. 407.)

White Horse and Alesk Ry.—The Dominion Parliament in 1904 incorporated a company with this title, with power to construct a railway from White Horse, Yukon Territory, to the International boundary on the west, 150 miles. An extension of time for construction was obtained in 1906, but up to date no construction has been taken in hand. (See Alesk and Yukon Ry., Oct., 1908, pg. 711.)

Winnipeg and North Western Ry.—This is the title of a company incorporated by the Dominion Parliament in 1907, with power to construct about 1,800 miles of railway located as follows: from Winnipeg via Stonewall and Mossy Portage to Carrot River valley, thence westerly via Fort la Corne to the Lobstick River, with branches from Prince Albert to Battleford, Sask.; from Saddle Lake to Lake La Biche, Sask.; and from Fort Victoria to Athabaska Landing and to Edmonton, Alta. Nothing in the way of construction has yet been done. (May, pg. 359.)

The Toronto Board of Control has practically decided to recommend to the City Council, that a steel bridge be constructed over the G.T.R. and the C.P.R. on Dundas St. (Brockton bridges) to carry the street railway tracks. The present bridges, while not unsafe, require strengthening.

The Toronto, Hamilton and Buffalo Ry., recently advised the Hamilton, Ont., Council, that on June 15, it would comply with the Railway Commissioners' order to sound locomotive whistles when approaching crossings, unless a by-law was passed by the Council to relieve it of this obligation. It was decided not to pass such a by-law, but the company is to be asked to abate the alleged nuisance of ringing automatic bells on shunting locomotives when they are in motion.

Telephones in Railway Stations.

D'Arcy Scott, Assistant Chief Railway Commissioner, has given judgment respecting the installation of telephones in railway stations, which, after modification, was concurred in by Chief Commissioner Mabee and Commissioner McLean, as follows:

The Board has heard applications from the Peoples' Telephone Co. and the Caledon Telephone Co. for an order to compel certain railway companies to permit telephone companies to install their instruments in a number of railway stations. Under sec. 245 of the Railway Act, the Board may grant such an order, and may impose such terms as it deems just and expedient, but in determining them, shall not take into consideration any contract giving exclusive or other privileges to any other telephone company by the railway company, with regard to the installation or maintenance in its stations of the instruments of such telephone company. The only points to be considered then are, whether such telephonic connection will be of public benefit, and if so, what terms should be imposed on the telephone company seeking the privilege. It will be a saving of time if the Board lays down certain general principles upon which it will act when such applications come before it. If the telephone company's instruments are in general use in the district surrounding the station in question, and it appears that the installation of a telephone in the station would be of substantial convenience to the public having business with the railway company, and would not be unduly oppressive or inconvenient to the railway company, then I think the Board should grant the application. As nearly all telephone companies in Canada are incorporated by provincial laws, and are consequently not under the Board's jurisdiction difficulty might be experienced in compelling such a company to comply with terms and conditions the Board might desire to impose, unless the company was bound to do so by contract. I, therefore, suggest that, where the Board is of the opinion that the application of a telephone company for an order to compel a railway company to permit the installation of a telephone in the station should be granted, that before any order is issued, the telephone company be asked to execute an agreement in the following, or like form, in which I have set out fair and reasonable conditions upon which such order should be granted:

This agreement made the _____ day of _____ in the year of Our Lord 19—, by and between _____ hereinafter called the "Railway Company" of the first part, and _____ hereinafter called the "Telephone Company" of the second part. Whereas, the telephone company is desirous of placing a telephone instrument in the station of the railway company at _____ in the Province of _____ . And whereas, the railway company is willing to permit the said telephone instrument to be placed in its said station upon the terms and conditions hereinafter stated. Witnesseth, that in consideration of the premises, it is hereby agreed by and between the parties hereto, as follows: 1. Upon the terms and conditions hereinafter stated, the railway company will permit the telephone company to install a telephone instrument in its said station, the telephone company to pay the railway company a rental of \$1 per annum for the privilege, to be paid on the 1st day of Jan. in each year, during the continuance of this agreement.

2. The telephone instruments shall be placed and maintained at the said station without damage to the railway company's property, and entirely at the risk and expense of the telephone company, free from any rental or other charge to the railway company, and the telephone company will not seek to hold the railway company re-

sponsible for any damage to said instrument, no matter how such damage may occur.

3. The telephone company may erect and maintain such poles and wires on and across the lands of the railway company as may be necessary for the installation and operation of the said telephone instrument, provided that such poles shall be placed, and such wires strung, to the satisfaction, and under the supervision of a duly authorized official of the railway company, and at such places only as he shall designate.

4. The said telephone instrument shall be of the most modern and efficient type in use by the telephone company; it shall be a desk or wall instrument, whichever the railway company may desire; it shall be placed in such position in the said station as the railway company may indicate, and shall be connected by private wire with the central of the telephone company.

5. The railway company, its officials, agents, and employees, shall have service from, to, and through the said telephone instrument with local and rural subscribers, over the telephone lines of the telephone company, without charge therefor.

6. The telephone company may, with the approval of the Board of Railway Commissioners, remove its telephone instrument from the said station, and its poles and wires from the property of the railway company at any time upon giving the railway company 30 days' notice in writing of its intention so to do. All damage done to the property of the railway company in removing the said telephone instrument, poles, and wires, shall be repaired by, and at the expense of the telephone company.

7. This agreement shall terminate at any time upon the order of the Board of Railway Commissioners granted on the application of the railway company, or otherwise, and the telephone company will, at all times, carry out and obey any order of the said Board, with regard to the installation, maintenance, operation or removal, of the said telephone instrument, poles, or wires, and hereby submits itself, in so far as this contract is concerned, to the jurisdiction of the said Board.

In witness whereof the parties hereto have executed these presents.

Upon such an agreement being signed for each of the stations in which the telephone companies before us desire to install instruments, I think the order asked for should be issued. My suggestions in this matter, apply only to cases where one or two telephone companies desire to put their instruments in a railway station; if a third or more companies desire the privilege, a special application should be made to the Board, otherwise a railway company might be put to much inconvenience.

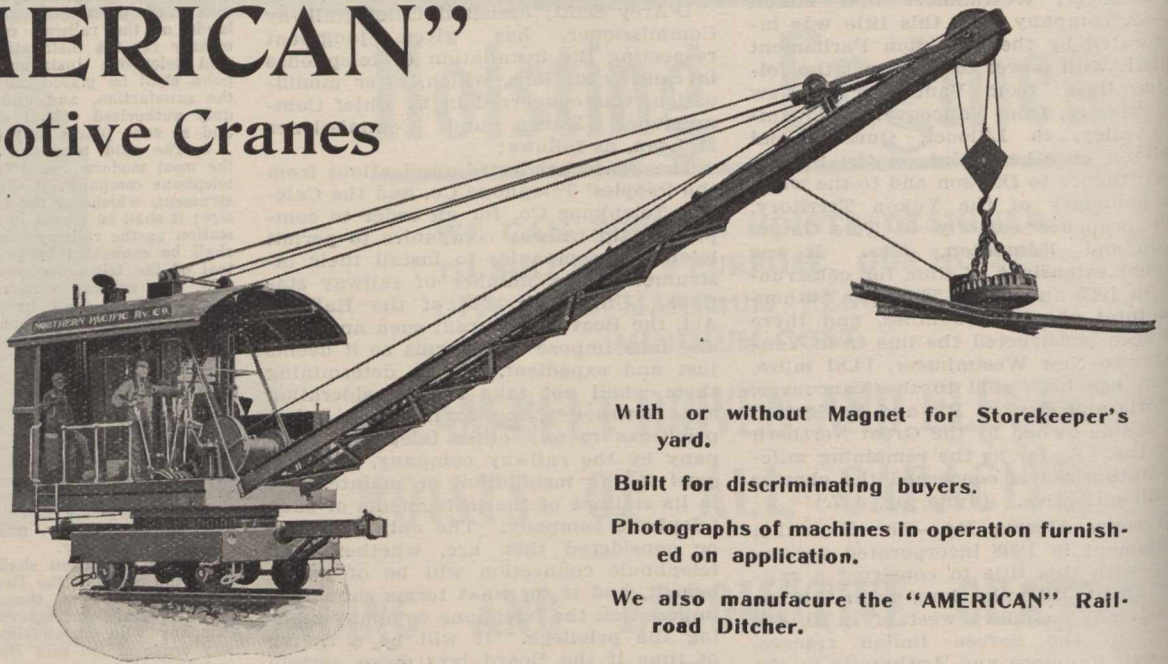
Location of Switch Stands.—The

Board of Railway Commissioners' Secretary has issued the following circular:—"In view of the numerous accidents which have occurred, owing to the location of switch stands being too close to the track, the Board considers it advisable that railway companies subject to its jurisdiction, be required to remove all switch stands and other obstructions, to a distance 6 ft. clear of the main line, and in cases where high switch stands cannot be removed to this distance, they be replaced by a dwarf switch. The Board, therefore, proposes to issue a general order, requiring within a reasonable time, the removal of all such switch stands as above set out, or the replacing, by dwarf switches, as well as the removal of all other obstructions."

The G.T.R. put in force June 1, a reduced tariff of tolls for vehicles and other traffic over the Victoria Jubilee Bridge, Montreal.

The work of colonization in British Columbia is receiving much attention from the two railway companies principally interested. The C.P.R. is looking forward to the development of the Lillooet Valley as a tourist and health resort, and is planning an hotel there. The G.T. Pacific Ry. is arranging a campaign to attract settlers to the valleys in the interior of the northern portion of the Province.

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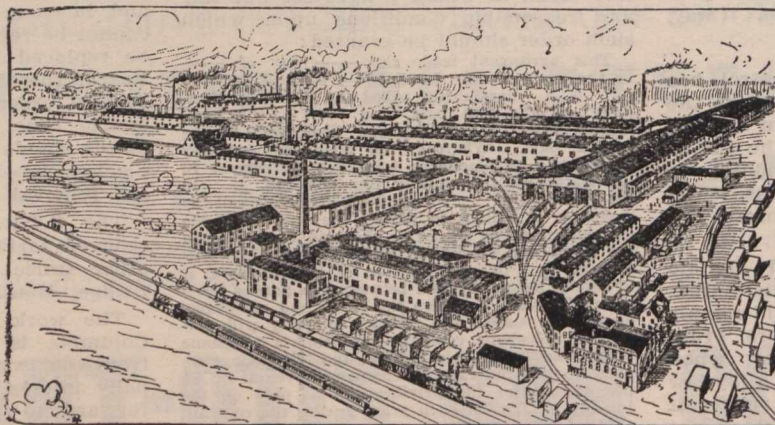
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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings. No other paper has done this.

The dates given of orders, immediately following the numbers, are those on which the hearings took place and not those on which the orders were issued. In many cases orders are not issued for a considerable time after the date assigned to them.

7048. May 21.—Authorizing N. St.C. & T. Ry. to construct standard trestle.

7049 to 7053. May 21.—Authorizing G.T.P.R. to construct railway, at grade, across various highways in North Alberta.

7054. May 22.—Authorizing G.T.P.R. to take possession of a portion of the C.N.R. right of way, St. Boniface, Man.

7055. May 20.—Ordering that the Elgin & Havelock Ry. be restrained from collecting tolls, or fares, or from collecting money for service of any kind performed until a by-law authorizing the preparation and issue of tariffs of tolls has been approved by the Board.

7056. May 20.—Ordering that the Salisbury & Harvey Ry. be restrained from collecting any tolls, or fares, or from collecting money for service of any kind performed until a by-law authorizing the preparation and issue of tariffs of tolls has been approved by the Board.

7057. May 20.—Authorizing H. P. Leonard, Roblin, Man., to institute proceedings against the C.N.R. for failure to run its passenger trains on Feb. 1 between Dauphin, Man., and Humboldt, Sask.

7058. May 22.—Extending for one month from date of order time during which the C.N.R. may cross G.T.R. spur to Edward's mills, Rockland, Ont., for construction purposes.

7059. May 22.—Temporarily approving Bell Telephone Co.'s form of agreement with Belmont Telephone Co-operative Association, Colchester Northern Municipal Rural Telephone System, Lobo Telephone Co., and Zorra Telephone Association.

7060. May 25.—Authorizing Superior & Western Ontario Ry. to join G.T.P.R. tracks at Velora Jct., Ont.

7061 to 7065. May 21.—Authorizing Bell Telephone Co. to erect wires across G.T.R. at 5 points in Hamilton and Peterboro, Ont., and St. Martins Jct., Que.

7066. May 22.—Authorizing C.P.R. to construct a branch line for W. A. McGowan, Durham, Ont.

7067. May 22.—Authorizing N. St. C. & T. Ry. to construct bridge over the Government raceway at St. Catharines, Ont.

7068. May 25.—Authorizing B.C. Telephone Co. to erect wires across E. & N. Ry. at Nanaimo, B.C.

7069 to 7072. May 19.—Dismissing Kettle River Valley Ry. applications for orders sanctioning the construction of a crossing under the V. V. & E. Ry. & Nav. Co.'s Granby spur on Columbia & Western Ry. right of way; a crossing under the C. & W. Ry.'s Granby spur, a connection with the C. & W. R., and a crossing of the C. & W. R.

7073. May 25.—Extending to Oct. 1, 1909, time within which interlocking plant between G.T.R. and C.P.R. and Ontario & Quebec Ry. east of Weston rd., West Toronto, Ont., is to be installed.

7074. May 26.—Approving Spokane & B.C. Ry. Standard Freight Tariff C.R.C. No. 6.

7075 to 7081. May 25.—Authorizing G.T.P.R. to construct railway across

various highways in Saskatchewan and Alberta.

7082. May 25.—Authorizing the town of Barrie, Ont., to lay pipe under G.T.R. at Bayfield.

7083. May 19.—Dismissing complaint of Stark Brothers Co., Ltd., Toronto, Ont., complaining that Central Ontario Ry. rate of 7c. per 100 lbs. on a car of corn from Buxton to Bannockburn, Ont., is excessive.

7084. May 19.—Dismissing complaint of Downing's American Despatch, General Merchandise Forwarders, Montreal, against C.P.R. overcharge of the local rate from Fort William, Ont., to Winnipeg, Man., on a carload of liquor shipped from England. The judgment is given on another page.

7085. May 25.—Dismissing application of the Times Publishing Co. for order directing the C.P.Ry., the G.N.W. Telegraph Co. and the Western Union Telegraph Co. to transmit press messages to the Marconi Wireless Telegraph station, Glace Bay, N.S., at the same rate as charged to other points along the Atlantic Coast of Canada. The judgment is given on another page.

7086. May 19.—Dismissing complaint of C. E. Plain & Co., Ottawa, alleging excessive rates charged by C.P.R. on shipment of apples from Picton to Smith's Falls, Ont., as compared with the rate charged from Picton to Ottawa.

7087. May 18.—Rescinding orders 6167 and 6366, Feb. 4 and 22, respectively, directing express companies operating in Canada and subject to the Board's jurisdiction to classify for the transportation of acetylene gas when shipped under the so-called "safety storage system," as it appeared to the Board that it has no jurisdiction to make the said orders. The judgment is given in full on another page.

7088. May 25.—Amending order 6033, Jan. 13, calling for light to be placed at the M.C. Rd. crossing Erie Ave., Leamington, Ont., by providing that same be kept burning all night.

7089. May 27.—Rescinding order 5223, Aug. 26, 1908, authorizing G.T.R. by-law 28 by approving the same.

7090. May 26.—Authorizing Man. Government Telephones to erect wires across C.P.R. at Ash ave., Winnipeg Beach.

7091, 7092. May 27.—Authorizing B.C. Electric Ry. to erect electric light and power wires across C.P.R., Bute St., Vancouver, B.C.

7093. May 19.—Authorizing G.T.R. to make a refund to the British-American Oil Co., Toronto. This order is given in full on another page.

7094, 7095. May 27.—Authorizing Alberta Government to erect wires across C.P.R. at Hardisty Station and Bawlf, Alta.

7096. May 27.—Authorizing People's Telephone Co. to erect wires across G.T.R. at John St., Forest, Ont.

7097, 7098. May 27.—Authorizing Alberta Government to erect wires across C.P.R. at Chin and Claresholm, Alta.

7099. May 27.—Authorizing People's Telephone Co. to erect wires across G.T.R., 4th con. east of Forest, Ont.

7100. May 27.—Authorizing Western Counties Electric Co. to erect wires across G.T.R. at Elgin St. subway, Brantford, Ont.

7101. May 27.—Authorizing Bell Telephone Co. to erect wires across G.T.R. near Unionville station, Ont.

7102, 7103. May 28.—Approving location of the C.N.Q.R. freight shed at St. Tite, and freight shed and waiting room at Heronville, Que.

7104. May 28.—Rescinding order 7055, May 20, prohibiting Elgin & Havelock Ry. from collecting tolls until filing of by-law, by approving said by-law.

7105. May 28.—Approving location of the C.N.Q.R. proposed station and freight shed at Garneau Jct., Que.

7106. May 28.—Approving location of the Q.M. & S. Ry. station, Nicolet, Que.

7107. May 26.—Authorizing Brantford Gas Co. to lay pipe under the B. & H. Electric Ry., Alfred St., Brantford, Ont.

7108. May 27.—Authorizing Consumers' Gas Co., Toronto, to lay gas main under C.P.R., Osler St., Toronto.

7109. May 26.—Authorizing North Carievale Rural Telephone Co. to erect wires across C.P.R. at sec. 5, tp. 3, r. 31, and sec. 31, tp. 2, r. 31, west 1st meridian, Sask.

7110. May 26.—Authorizing Thunder Creek Rural Telephone Co. to erect wires across C.P.R. between secs. 35 and 36, tp. 2, r. 32, west 1st mer., Sask.

7111. May 28.—Authorizing C.P.R. to construct highway bridge at Le Jeune St., Three Rivers, Que.

7112. May 18.—Authorizing M.C. Rd. to cross with two additional tracks, Sandwich St., Windsor, Ont., and temporarily approving structure pending completion of permanent structure.

7113. May 29.—Authorizing Markdale village, Ont., to lay water main under C.P.R. on Main St.

7114. May 29.—Extending until Dec. 1, 1909, time within which to receive approval of proposed tariffs of tolls of Bell Telephone Co.

7115, 7116. May 29.—Temporarily approving until Dec. 1, 1909, the Canadian, Dominion, National and American Ex. Cos.' forms of contracts.

7117. May 29.—Extending until Dec. 1, 1909, time within which North American Telephone Co. may charge such tolls as it was authorized to charge immediately previous to July 13, 1906.

7118. May 29.—Extending until Dec. 1, 1909, time within which the United States and the Great Northern Ex. Cos. may continue to use contracts, by-laws, regulations, declarations, and notices, as provided in sec. 353 of the Railway Act.

7119. May 29.—Extending until Dec. 1, 1909, time within which the Maritime Ex. Co. is permitted to use its present forms of freight and money receipts.

7120. May 29.—Extending until July 4, 1909, time within which the Chatham, Wallaceburg & Lake Erie Ry. is to equip all its cars with air brakes.

7121 to 7123. June 2.—Authorizing St. Marys, Kirkton & Exeter Telephone Co. to carry wires across G.T.R. at Main St., Granton, and public crossing at Rannock, Ont.

7124. June 2.—Authorizing R. Curtis, Okanagan Landing, B.C., to lay water main under C.P.R. at Okanagan Landing, B.C.

7125. June 2.—Authorizing city of Brantford to lay sewer pipe under G.T.R. west of Market St. bridge, Brantford, Ont.

7126. May 29.—Authorizing C.P.R. to construct branch line across public road allowance near Rathwell, Man.

7127. May 29.—Authorizing G.T.R. to reconstruct overhead bridges in iron, one between Dumfries and Grand River, and one between Harrisburg and St. George, Ont.

7128. June 2.—Authorizing J. G. Dunn, St. Etienne, Que., to erect electric light wires across G.T.R. at Tullochgorum Rd., Que.

7129. May 31.—Authorizing C.P.R. to construct bridge 2.5 over Lowry's Creek, Guelph branch, Ont.

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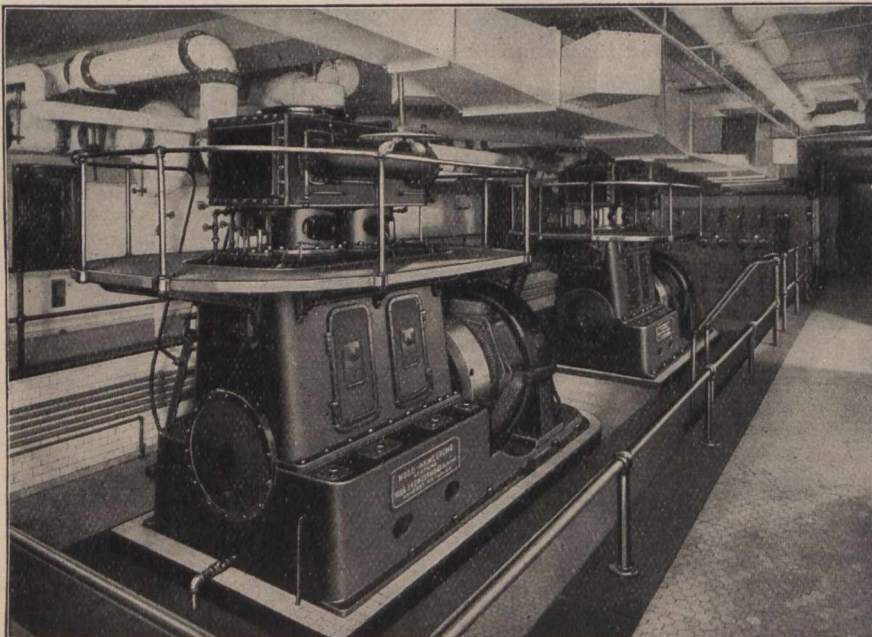
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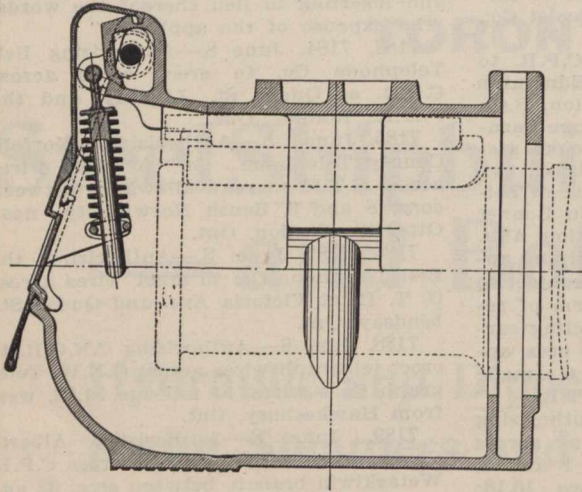
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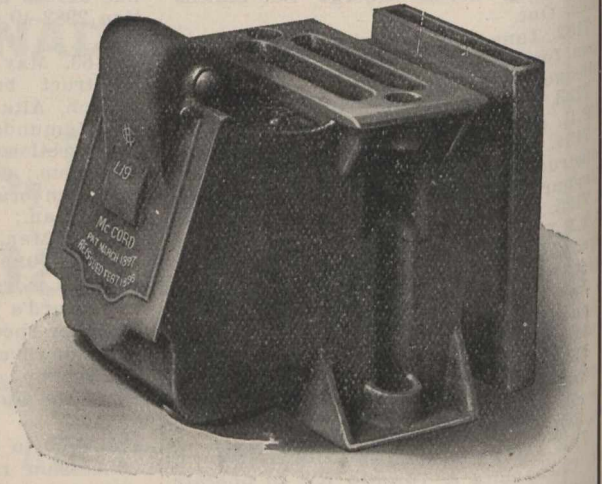
7130. June 2.—Approving G.T.P.R. by-law authorizing J. W. Loud, Freight Traffic Manager, and J. E. Dalrymple, Assistant Freight Traffic Manager, to prepare and issue tariffs of tolls to be charged for the carriage of freight traffic.
7131. May 29.—Authorizing C.P.R. to rearrange present track and to construct extra track across George St., Smiths Falls, Ont.
7132. June 2.—Authorizing G.T.P.R. to open for traffic portion of its line from mileage 3.0 to mileage 54.3.
7133. May 29.—Approving location of C.P.R. station, Weyburn, Sask.
7134. May 29.—Authorizing C.P.R. to construct railway across Third Ave., Weyburn, Sask.
7135. June 2.—Approving location of G.T.P.R. from Tete Jaune Cache, mileage 178.81 to mileage 229, Cariboo District, B.C.
7136. June 1.—Authorizing G.T.R. to connect with Essex Terminal Ry., 121 miles east of Walkerville, Ont.
7137. May 29.—Authorizing G.T.P.R. to construct its railway across highway between secs. 20 and 21, tp. 36, r. 9, w. 3rd m., East Saskatchewan.
7138. June 2.—Authorizing Niagara, St. Catharines & Toronto Ry. to operate upon tracks connecting its tracks with T.H. & B.R. in lot 27, con. 6, Crowland tp., Ont.
7139. June 3.—Authorizing New Brunswick Southern Ry. to construct bridges as follows: Clarence Stream, East Waweig, Berry Brook, West Waweig, Digdeguash Flood Opening, Menzor Stream, Campbell Brook, Porter Hill Stream and Musquash Pile Trestle.
7140. June 3.—Authorizing G.T.P.R. to use temporarily and until further order interlocking appliances at C.P.R. Oak Point Jct., near Winnipeg.
7141. June 2.—Approving Niagara, St. Catharines & Toronto Ry.'s by-law authorizing J. Paul, General Freight and Passenger Agent, to prepare and issue tariffs of tolls to be charged for all traffic carried.
- 7142 to 7146. June 2.—Authorizing Quebec, Montreal & Southern Ry to construct railway across highways at stations 2867-52, 2692-35, 2791-10, 2681-85, 2836-05, Gentilly parish, Nicolet county, Que.
- 7147 to 7149. June 4.—Authorizing Revelstoke, Trout Lake and Big Bend Telephone Co. to carry wires across C.P.R. at three points in Revelstoke, B.C.
7150. June 4.—Authorizing Zorra Telephone Association to carry wires across track of St. Mary's & Western Ontario Ry., West Zorra tp., Ont.
7151. June 4.—Authorizing city of Toronto to lay water-pipe under C.P.R. at Shaw St., Toronto.
- 7152 to 7155. June 3.—Authorizing Bonaventure & Gaspé Telephone Co. to carry wires over Atlantic & Lake Superior Ry. at 4 points near Caplin, Que.
7156. June 2.—Approving location and type proposed C.P.R. station at Stittsville, Ont.
7157. June 2.—Amending order 7107 authorizing Brantford Gas Co. to lay pipe under Brantford & Hamilton Electric Ry. on Alfred St., Brantford, by changing the figures "1500" pounds to the square inch to "150" pounds to the square inch.
7158. June 2.—Authorizing Chatham Gas Co. to lay pipe under C.P.R. on Colborne and Princess sts., Chatham, Ont.
7159. June 4.—Authorizing C.P.R. to construct bridge 1.4 over Little River, Montreal and Ottawa section.
7160. June 4.—Authorizing C.P.R. to construct bridge over public road between cons. 11 and 12, East Missouri tp., Oxford Co., Ont.
7161. June 4.—Authorizing Montreal & Atlantic Ry. to construct spur for J. E. Leonard, mileage 3818, Drummondville branch, Que.
7162. June 2.—Authorizing Quebec, Montreal & Southern Ry. to construct line across highway at rail level at station 2982-49, Gentilly parish, Nicolet Co., Que.
7163. May 29.—Authorizing C.P.R. to construct bridges, one on Edmonton branch, Alta.; one Laggan section, B.C.; one Edmundston branch, N.B.; one Farnham section, Que.; two Sherbrooke section, Que.; one Sirdar section, Sask.; two Milltown branch, N.B.; one east of Selkirk, Man.; two near Lac du Bonnet branch, Man.; one Red Deer section, Alta.
7164. June 3.—Making general and applicable to railway companies, subject to the Board's jurisdiction, the form of release, or special contract, respecting carriage of silver or other valuable ores, approved by order 6972, May 6, made upon the application of the G.T.R.
- 7165 to 7169. June 5.—Authorizing C.N.O.R. to construct its railway across concession road between con. 1 and 2, Alfred tp., Prescott co., mileage, 16.18; at public road between lots 28 and 29, mileage, 15.52; between lots 20 and 21, con. 1, of North Plantagenet tp., at mileage 23.3; between east and west halves of lot 8, con. 1, north Plantagenet tp., mileage, 20.07; and across forced road on lot 22, North Plantagenet tp., mileage 23.75, west from Hawkesbury, Ont.
7170. June 4.—Approving C. N. Telegraph Co.'s by-law, authorizing Scott Griffin to prepare and issue tariffs of the tolls to be charged for business done by company.
- 7171 to 7173. June 4.—Authorizing Bethesda & Stouffville Telephone Co., to carry telephone wires across G.T.R. at 3 points in Markham, Ont.
7174. June 7.—Authorizing city of Toronto to extend Wilton Ave. easterly from River St. across Don River by a bridge across G.T.R., C.P.R. and C.N.O.R.
7175. June 4.—Amending order 7108, May 27, authorizing Consumers' Gas Co., Toronto, to lay pipe under C.P.R. on Osler St., by striking out the figures "1500" in 7th line of par. 1, and substituting therefor the figures "150."
7176. June 5.—Authorizing New Brunswick Southern Ry. to re-construct bridges, 53.3 at Little New River, and 7.2 at Canal Brook, N.B.
7177. June 1.—Dismissing application of the municipal council of Ekfrid, Middlesex Co., Ont., for order to vary order 6914, authorizing construction and maintenance of a drain across G.T.R., east of Glencoe, Ont., and granting leave to make fresh application.
7178. June 4.—Approving plan of overhead bridge crossing Haystead rd., at mileage 119.67, lots 14 and 15, con. 4, Foley tp., Parry Sound district, Ont., and rescinding order 6832, Apr. 14.
7179. June 7.—Releasing from plan 6267R, filed in the Lands Titles office for the North Alberta Lands Registration district by the G.T.P.R., property of J. Tough, in southeast quarter sec. and fractional southwest quarter of sec. 16, tp. 53, r. 25, w. 4th mer., excepting portion already purchased by G.T.P.R.
- 7180, 7181. June 7.—Authorizing Hamilton Cataract Power, Light and Traction Co. to erect wires across north division G.T.R.; also electric power transmission wires across G.T.R. main line, Ottawa St., Hamilton.
7182. June 7.—Amending order 7125, June 2, which authorized the city of Brantford to lay sewer pipe under G.T.R. west of Market St., by striking out the words "its own expense," par. 4, line 5, and inserting in lieu thereof the words, "the expense of the applicant."
- 7183, 7184. June 8.—Authorizing Bell Telephone Co. to erect wires across C.P.R. at Queen St., Lindsay, and the P.M.R., Rodney, Ont.
7185. June 8.—Authorizing Norfolk County Telephone Co. to erect wires across G.T.R. at road allowance between cons. 8 and 9, South Norwich tp., near Otterville Station, Ont.
- 7186, 7187. June 8.—Authorizing the Bell Telephone Co. to erect wires across G. T. R. at Victoria Ave. and Queen St., Lindsay, Ont.
7188. June 8.—Authorizing C.N.O.R. to erect telegraph wires across G.N.W. Telegraph Co.'s wires, at mileage 51.63, west from Hawkesbury, Ont.
7189. June 8.—Authorizing Alberta Government to erect wires across C.P.R. Wetaskiwin branch, between secs. 32 and 33, tp. 43, r. 11, west 4th mer., Alta.
7190. June .—Authorizing B.C. Telephone Co. to erect its wires across the Ladysmith Lumber Co.'s railway, 2 miles north of Nanaïmo, B.C.
7191. June 8.—Authorizing C.N.O.R. to erect wires across G.N.W. Telegraph Co.'s wires at station 1254-40, on the Montreal & Ottawa Ry. at mileage 23.76, west from Hawkesbury, Ont.
7192. June 8.—Authorizing C.N.O.R. to open for traffic the portion of its line from Hawkesbury to South Nation River, Ont.
7193. June 8.—Authorizing C.N.O.R. to construct railway across public road between lots 35 and 36, con. 1, Alfred tp., Prescott Co., Ont., at mileage 17.36 west from Hawkesbury.
7194. June 8.—Authorizing G.T.R. to reconstruct 5 bridges in its district 18, Southern division.
7195. June 8.—Approving abutments and plans for the bridge on G.T.R. right of way west of Trent River, Ont., to carry railway over the Trent Valley Canal.
7196. June 8.—Authorizing T. H. & B. Ry. to erect wires under the T.H. & B. Ry., 1st con. east of Winemount, Ont.
7197. June 8.—Approving New Miller Frost-Proof Fire Extinguisher no. 8, for use in G.T.R. passenger coaches.
7198. June 3.—Dismissing application of city of Toronto, for order directing G.T.R. to protect the crossing at Eastern Ave., Toronto, by the Toronto Belt Line Ry. by gates and watchman.
7199. June 3.—Ordering that pending changed conditions by the construction and completion of the proposed new Union Station, Toronto, the C.N.O.R. shall continue to pay to the G.T.R. the amount agreed upon between the said companies under agreement of Nov. 7, 1906, confirmed by order 6129, Jan. 12, 1909.
7200. June 9.—Ordering that the various railways entering Toronto shall, within two years from date of order, construct a four-track viaduct from a point west of John St. to a point at or near Berkeley St., Toronto.
7201. June 10.—Ordering that notice of proposed application to the board for approval of an amalgamation agreement between the C.N.R. and the Ed-

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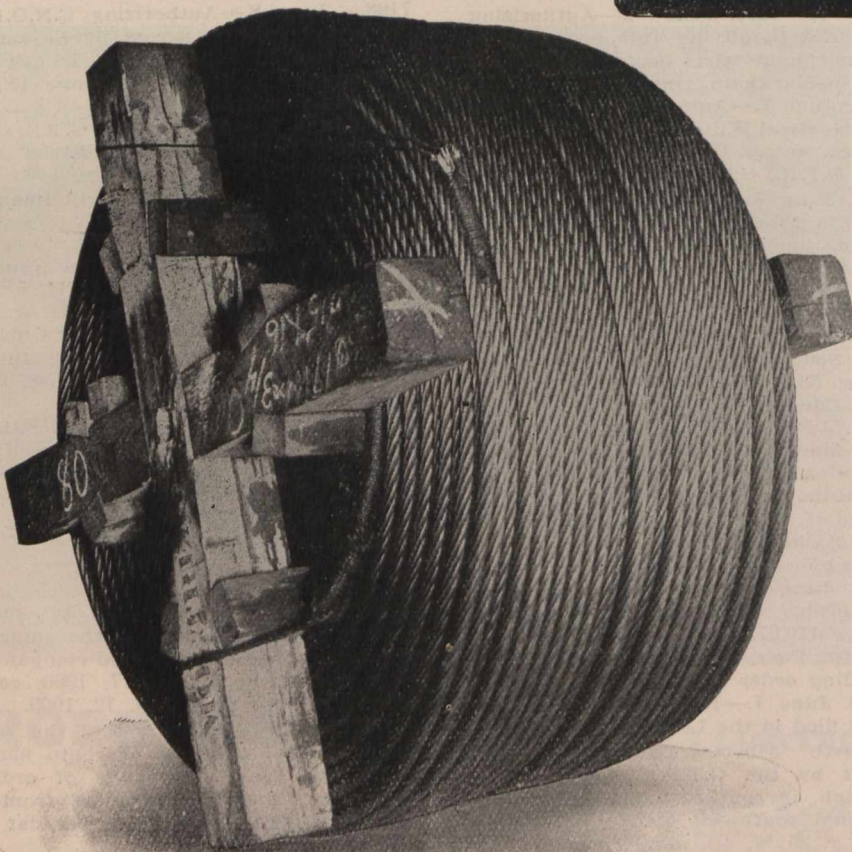


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monton & Slave Lake Ry., be published in the Canada Gazette and in one newspaper in Edmonton, Alta., and Toronto.

7202, 7203. June 10.—Recommending to the Governor-in-Council for sanction, agreements entered into June 8 and 9 respectively, between the C.N.R. and the Saskatchewan North Western Ry. and the C.N.R., and Alberta Midland Ry., for amalgamation.

7204. June 9.—Approving G.N.W. Telegraph Co.'s by-law no. XI., authorizing I. McMichael, General Manager, and G. D. Perry, Secretary-Treasurer, to prepare and issue tariffs of tolls to be charged, and to specify the person to whom, the place where, and the manner in which such tolls shall be paid.

7205. May 31.—Ordering M.C. Rd. at its own expense, to provide and maintain gates at the crossing of the W.E. & L.S.R. Ry., between townships of Sandwich West and Sandwich East, Essex Co., Ont., within 90 days from date of this order.

7206. June 10.—Authorizing C.P.R. to construct and operate branch line for the Roche Percee Coal Mining Co., Roche Percee, Sask.

7207. June 9.—Amending order 5280, Sept. 15, 1908, which authorized the G.T.P.R. to open that portion of its line from mileage 3.0 to mileage 54.3, and limiting the speed to not exceeding 16 miles an hour, by extending the speed limit to 30 miles an hour, and rescinding order 7132, June 2.

7208. June 9.—Authorizing C.P.R. to reconstruct 8 bridges in its Pacific, Ontario, Lake Superior and Atlantic Divisions.

7209. June 9.—Authorizing C.P.R. to construct branch lines for E. Hodder, Tees & Percee, and T. H. Blow, Calgary, Alta.

7210. June 9.—Authorizing C.P.R. to construct bridges 23.6, 10.9, and 19.6, on its Sirdar section, B.C.

7211. June 9.—Authorizing C.P.R. to construct bridge 4.2 over Chicot Creek on its Eustache branch, Que.

7212. June 10.—Authorizing C.P.R. to reconstruct bridge 0.77 on its Eastern Division, and 139.98 on its Central Division.

7213, 7214. June 9.—Authorizing Bell Telephone Co. to cross G.T.R. north of Otterville Station, Ont.; and the M.C. Rd. west of North Buxton, Ont.

7215. June 9.—Authorizing C.N.Q.R. to erect telegraph wires across the Quebec, Jacques Cartier Electric Co.'s power wires at Ancienne, Lorette Road, mileage 3.25 from Hedleyville Jct., Que.

7216. June 8.—Authorizing Canadian Machine Telephone Co. to erect wires across T.H. & B.R., Brantford.

7217. June 9.—Authorizing Bell Telephone Co. to erect wires across T. H. & B. Ry. west of Silverdale Station, Ont.

7218. June 11.—Authorizing Q.M. & S. Ry. to open for traffic that portion of its line from the east side of the river at Pierreville to the present terminus at Portierville, Que., about 49 miles.

7219. June 9.—Authorizing Port Hope Telephone Co. to erect wires across G.T.R. at two points in Hope tp., Durham Co., Ont.

7220 to 7226. June 11.—Authorizing Q.M. & S. Ry. to construct its railway, at rail level, across highways at 7 points in St. Gregoire and St. Philomene parishes, Que.

7227. June 10.—Authorizing C.P.R. to

construct spur for the International Har-vesters Co., Saskatoon, Sask.

7228. June 11.—Authorizing Vancouver & Lulu Island Ry. to construct its Westminster & Eburne branch across Kerr Rd., at station 221, and Cemetery Rd., at station 101, South Vancouver, B.C.

7229. June 11.—Authorizing C.P.R. to construct spur line for D. Stamper, Knechtel Furniture Co. and City of Moosejaw, near Moosejaw, Sask.

7230 to 7232. June 14.—Approving location of C.P.R. station at Blairton, Chapleau, and Erindale, Ont.

7233. June 11.—Approving location and details G.T.R. station at Powassan, Ont.

7234. June 14.—Authorizing town of Park Hill, Ont., to lay pipe underneath G.T.R.

7235. June 14.—Authorizing G.T.R. to reconstruct three overhead bridges between Darlington and Dunbar, on its Eastern division.

7236. June 14.—Authorizing C.P.R. to operate seven bridges on its Laggan section, B.C.

7237. June 14.—Authorizing town of St. Pierre, Que., to lay sewers under G.T.R. and Montreal Park and Island Ry.

7238. June 14.—Authorizing Lobo Telephone Co. to erect wires across C.P.R., near Melrose station, Ont.

7239. June 14.—Authorizing Bell Telephone Co. to place wires under M.C.R. at Metcalfe, St., St. Thomas, Ont.

7240. June 14.—Authorizing Walkerton & Lucknow Ry. to cross the Hanover Portland Cement Co.'s narrow gauge railway in Brant township, Bruce county, Ont.

7241, 7242. June 15.—Authorizing the C.P.R. to reconstruct bridge 66.5 on its Woodstock section, bridges 27.34 and 27.71 on its Lake Superior division, and bridge 53.1, on its Smiths Falls section, Eastern division.

7243. June 15.—Authorizing C.P.R. to construct spur for Knechtel Furniture Co., Hanover, Ont.

7244. June 15.—Authorizing G.T.R. to construct spur line near Greenwood Ave., Toronto.

7245. June 15.—Authorizing Bell Telephone Co. to erect wires across G.T.R. at Walkerville, Ont.

7246. June 16.—Ordering British Yukon Ry. Co., British Columbia Yukon Ry. Co., Pacific & Arctic Ry. & Nav. Co., and White Pass & Yukon Ry. to file within 30 days tariffs of companies' tolls covering all through traffic received at Skagway and destined to White Horse or any intermediate point.

7247. June 15.—Approving by-law of Ottawa and New York Ry. Co., authorizing H. K. Gays, G.P.A., Ottawa; F. J. Balch, G.F.A., Ottawa; and F. E. Herri-man, Coal Traffic Manager, New York City, to prepare and issue tariffs of tolls.

7248. June 15.—Authorizing J. G. Dunn, of St. Etienne, Que., to place electric light wires across G.T.R. at Howick station, Que.

7249. June 15.—Authorizing J. P. Ernst, of New Hamburg, to place wires across G.T.R., near Baden station, Ont.

7250. June 15.—Authorizing Canadian Machine Telephone Co. to place wires across G.T.R. in Brantford township, Ont.

7251. June 16.—Authorizing C.P.R. to construct spur line to the Constructing & Paving Co.'s premises, North Toronto, Ont.

7252. June 14.—Rescinding order 6881, amending order 6424, ordering M.C.R.

to protect highways in village of Dutton, Ont., by folding fence gates.

7253. June 14.—Rescinding order 6880, amending order 6440, ordering M.C.R. to protect highways in village of Rodney, Ont., by folding fence gates.

7254. June 15.—Directing Canada Southern Ry. to construct highway crossing over its line to connect highway laid out by Canboro township, Ont.

7255. June 14.—Reporting to Governor in Council for sanction by-law of Q.M. & S. Ry., re spitting in cars and on railway premises.

7256. June 14.—Recommending to Governor in Council for sanction, by-law adopted by Napierville Jct. Ry., re spitting in cars and on railway premises.

7257. June 14.—Rescinding order 6882, amending order 6423, ordering M.C.R. to protect with folding gates highways in village of West Lorne, Ont.

7258. June 16.—Approving location of C.P.R. station at Kleinburg, Ont.

7259. June 17.—Authorizing C.P.R. to construct its railway across road allowance and to divert road in Medonte tp., Ont.

7260. June 17.—Authorizing C.P.R. to construct spur line near Toronto St., Regina, Sask.

7261. May 31.—Ordering that all railway companies in Ontario weigh all coal carried by them received from foreign countries, at the port of entry, and also on demand of consignees at destination. This order is given fully on another page.

7262. June 16.—Approving location and plans of C.P.R. station, at Espanola, Ont.

7263. June 11.—Authorizing C.P.R. to construct spur lines in Moose Jaw, Sask.

7264. June 16.—Authorizing Bell Telephone Co. to erect wires across C.P.R., near Dumfries, Ont.

7265. June 16.—Authorizing Bell Telephone Co. to erect wires across G.T.R., at King St., Berlin, Ont.

7266, 7267. June 16.—Authorizing Farmers' Telephone Co. to erect wires across C.P.R. in Brighton parish, N.B.

7268. June 16.—Authorizing Laird tp., Ont., to erect wires across C.P.R., Algoma branch, between Laird and McDonald tps., Ont.

7269, 7270. June 16.—Authorizing Farmers' Telephone Co. to erect wires across C.P.R. in Northampton parish and in Woodstock, N.B.

7271, 7272. June 16.—Authorizing Laird tp., Ont., to erect wires across C.P.R. in McDonald tp., Ont.

7273. June 16.—Authorizing Norfolk Co. Telephone Co., to erect wires across M.C.R., near Waterford, Ont.

7274, 7275. June 16.—Authorizing Farmers' Telephone Co. to erect wires across C.P.R. near Newburg Jct. and near Hartland station, N.B.

7276. June 16.—Authorizing Welland County Lime Works, to lay gas pipe under G.T.R., in Wainfleet tp., Ont.

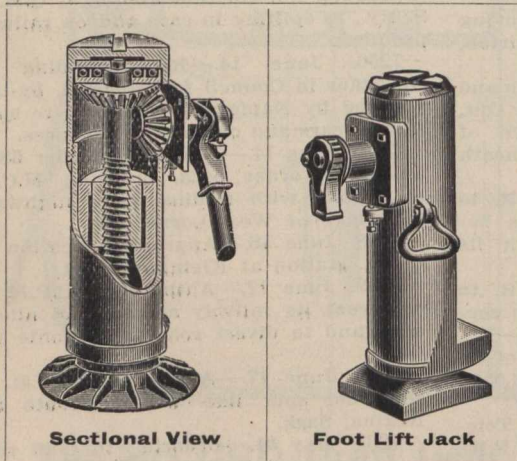
7277. June 16.—Ordering Great Northern Ry. operating Vancouver Westminster & Yukon Ry. to forthwith file and publish rates on lumber, shingles, and articles taking the same rates in the special tariffs of the C.P.R. via New Westminster or Vancouver, B.C.

7278. June 8.—Dismissing application of village of Coteau, Que., for order directing G.T.R. to open Omaha St. and Rue de l'Eglise.

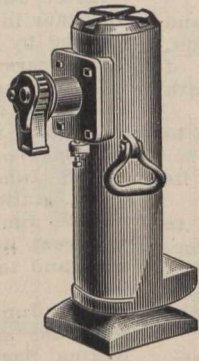
The Board of Railway Commissioners will after the next sitting, which opens July 6, adjourn until Sept. 7.

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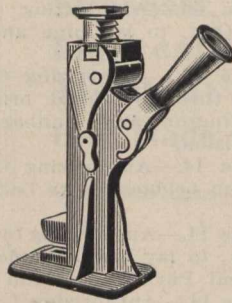
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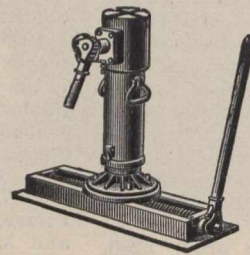
Sectional View



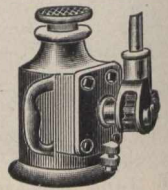
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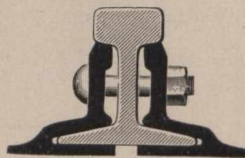
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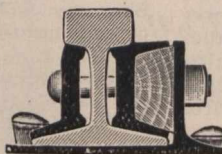
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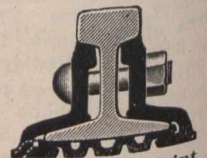
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Windsor St. Station, Montreal.

—The work of clearing away the buildings on the land between Donegana and Bisson Streets, is in progress. The buildings facing on Windsor St., down to St. Antoine St., are to be sold and removed as soon as possible. The plans for the enlargement of the station show three large entrances, one at the corner of Osborne St., the present one being closed; one where Donegana St. is at present located, and the third at the corner of St. Antoine St. From St. Antoine St. to Osborne St., the roof will be on the same level, and with the grade for the distance down Windsor St., the building will be 9 stories high, at St. Antoine St., surmounted by a tower. Near this corner an elevator will be provided to take passengers to the tracks, which will be on a level with Osborne St. The train shed will extend from Donegana St. to St. Antoine St., the entire length of the building, thus providing space for about 25 tracks. It is anticipated that the increased office accommodation provided will mean the centralization of all the Co.'s offices in the new building, with the exception of the city ticket office and telegraph office. The extension will be built in the same style as the present structure. The plans have been completed and as soon as these have been passed by the city the work will be pushed through. The cost is estimated at \$1,500,000.

Montreal Subway.—The Railway Commissioners have ordered the C.P.R. to replace the crossing at Iberville St., by a subway, the plans to be filed at once; the work to be started within 30 days, and completed within six months after the approval of the same. The only question left open is the width of the subway, and this is to be decided by the Board's Chief Engineer.

Campbellford, Lake Ontario and Western Ry.—The Dominion Parliament in 1904 incorporated a company with this title for the purpose of constructing a railway from the C.P.R. between Blairton and Ivanhoe to Cobourg, Port Hope, Newcastle, Bowmanville, Oshawa and Whitby to the C.P.R. near Toronto. The length of the authorized line is 120 miles; extensions of time for construction were obtained in 1906 and 1908, but up to date nothing has been done.

West Toronto Yards.—The company's plans for the extension of its yards at West Toronto, Ont., have been laid before the York Township council. The company has secured all the land between Dundas St. and St. Clair Ave. for the purpose. The area acquired affords room for the laying of 20 additional tracks, for which the company desires the council's permission to close Jane St., and in return the company proposes to construct a subway or a foot bridge. Residents ask for a 40 ft. subway. The question is under consideration, and will be definitely decided at a future meeting. It is understood that the carrying out of

the plans may involve the construction of an additional track between West Toronto and Leaside Jct.

Islington Spur Line.—Surveys have been completed for the construction of a spur line from the old Credit Valley line, near Islington, generally southerly to the G.T.R. Toronto-Hamilton line. The object in view in laying out this line is to afford a direct connection into and out of the yards at West Toronto, for freight via Hamilton, thereby saving the present haul into and out of Toronto.

Hamilton and Guelph Jct. Ry.—We are advised that the press reports referred to in our last issue that construction will be started upon this line are somewhat premature. Some preliminary surveys have been made, but nothing further has been done.

Berlin, Waterloo, Wellesley and Lake Huron Ry.—A company with this title was incorporated by the Dominion Parliament in 1903, with power to construct a line from Berlin to Waterloo, Wellesley Village, Glen Allan, Listowel and Goderich; and in 1904, when an extension of time for construction was granted, power was obtained to extend its lines from Wellesley to Stratford, Clinton and Mayfield, Ont. No construction has been done by the company, but it has taken over the Galt, Preston and Hespeler Ry. and the Preston and Berlin Ry., both of which are operated under lease by the C.P.R.

St. Marys and Western Ontario Ry.—This company was incorporated in 1905 by the Dominion Parliament, with authority to construct a line of about 100 miles from the C.P.R. between Woodstock and London to St. Marys, thence to Exeter and Sarnia, Ont. The company has constructed a line from St. Marys to Embro, Ont., effecting a junction there with an extension of the Tillsonburg, Lake Erie and Pacific Ry. from Ingersoll, Ont. Both the lines are operated by the C.P.R.

The official figures of the voting on the by-law in Blanshard tp., granting the company a bonus for the extension of its line from St. Marys to Exeter, May 21, shows that instead of being defeated, as was at first reported, it was carried by a majority of 76 votes.

Walkerton and Lucknow Ry.—A company with this title was incorporated by the Dominion Parliament in 1904, with power to construct a line from Walkerton to Lucknow, via Teeswater, and from Walkerton to Hanover, Ont. The company has constructed the line from Saugeen on the C.P.R. Owen Sound line to Walkerton, 37.7 miles.

Georgian Bay and Seaboard Ry.—The Dominion Parliament in 1905 incorporated a company with this title to construct a railway from Georgian Bay between Port Severn and Penetanguishene to the Ontario and Quebec Ry. (C.P.R.) between Cavanville and Maberly, Ont. The C.P.R. has constructed a line from Coldwater Jct. on its Toronto-Sudbury line to Victoria Harbor on Georgian Bay, 11.50 miles. Surveys have been made from Coldwater Jct. to various points on the O. and Q. Ry.

Port Arthur, Ont.—W. Whyte, Second Vice-President, was in Port Arthur, Ont., May 31, in connection with the re-arrangement of the company's assessment there.

A writ has been issued by the company seeking damages from the city on account of the giving way of the city dam at Current River, during the sum-

mer of 1908, which caused the washing out of about a mile of track.

Winnipeg City.—The agreement between the company and the Winnipeg city council is under discussion between the company's officials and the railway committee of the city council. A number of clauses have been agreed upon, including the construction by the C.P.R. of a footpath at St. James, and the right of the city to construct a bridge at Salter St. when necessary. Other points are in process of adjustment.

Brandon, Man.—Plans are said to be in preparation for the enlargement of Brandon station, at a cost of about \$10,000.

Saskatoon to Wetaskiwin.—It is expected that the line between Saskatoon, Sask., and Wetaskiwin, Alta., will be completed this year. At present it extends from Saskatoon to Wilkie, Sask., and easterly from Wetaskiwin to Sedgewick. The intervening section, from Wilkie to Sedgewick, about 130 miles, has been graded and is ready for track laying.

Kininvie Branch.—The location plans for the construction of a branch line to be known as the Kininvie branch have been approved by the Board of Railway Commissioners. The branch will start from near Kininvie station on the transcontinental line, about 45 miles west of Medicine Hat, Alta., and run in a north-westerly direction for 162.5 miles to the Calgary and Edmonton branch near Red Deer or Innisfail. The maximum gradient will be 0.5% westbound and 0.4% eastbound, and the maximum curvature 8 degrees. The work is average prairie, and there are no bridges. A contract for the work has not yet been let.

Langdon to Alix, Alta.—We are officially advised that while the original intention was to start this line from Cheadle, it was found expedient to change the location of the starting point to Langdon, Alta. Langdon is a station on the transcontinental line 21 miles east of Calgary, Alta., and Alix is a point about 40 miles in a northerly direction therefrom.

Lethbridge, Northerly.—The company's application for the approval of plans for a new line from Lethbridge, Alta., northerly, came before the Board of Railway Commissioners, at Ottawa, June 18. The point of junction with the existing line from Macleod to Calgary, has not been decided, but it is said that it will be at High River or Aldersyde. The company owns considerable land at Aldersyde, and if this point is selected it will involve the construction of a steel bridge across High River.

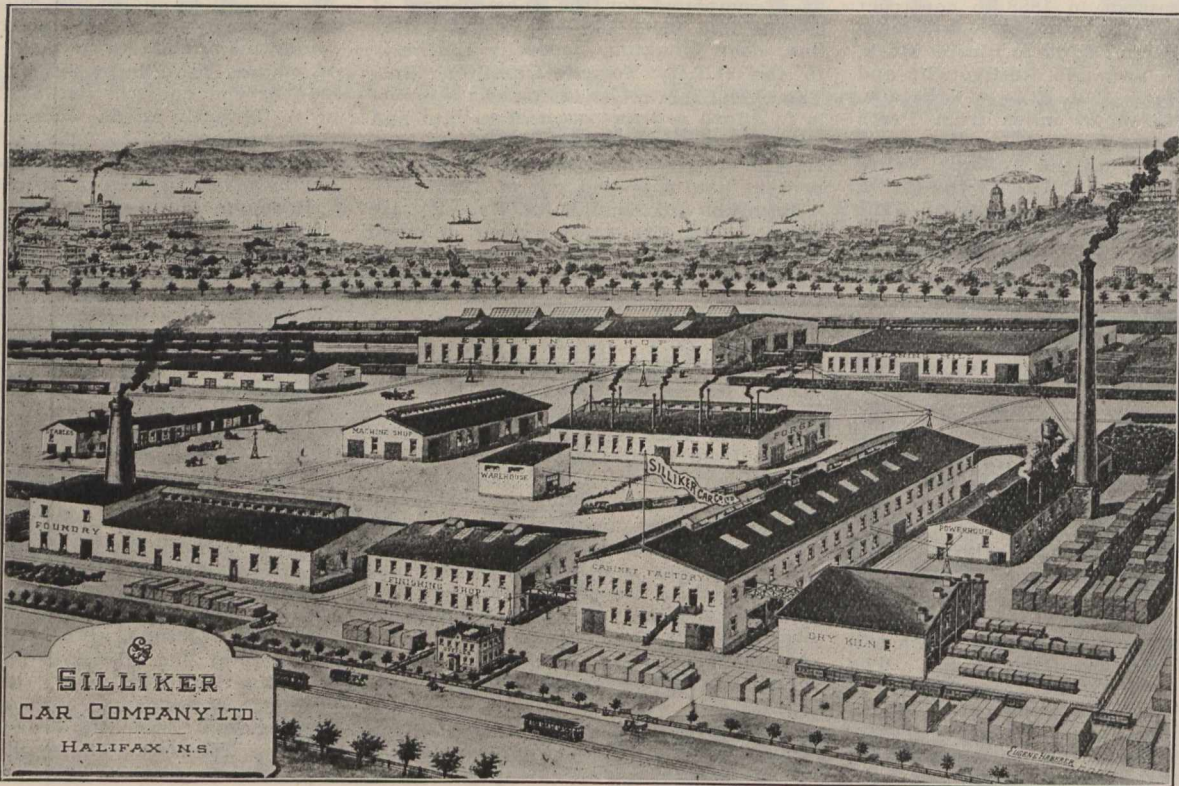
Kootenay Central Ry.—This company was incorporated by the Dominion Parliament in 1901 to construct a line from Fort Steele to Elko, and to the International boundary; also from Fort Steele to Windermere and Golden, B.C., with branches not exceeding 10 miles each. It was granted extensions of time for construction in 1903 and 1904. The length of lines authorized is about 200 miles, but up to the present no construction has been undertaken.

Vancouver, B.C.—In reference to press reports as to the construction of machine shops at Vancouver, we are advised that the company has made no appropriation therefor.

Port Simpson, B.C.—With reference to the reports mentioned in our last issue that the company had under consideration the desirability of constructing a line

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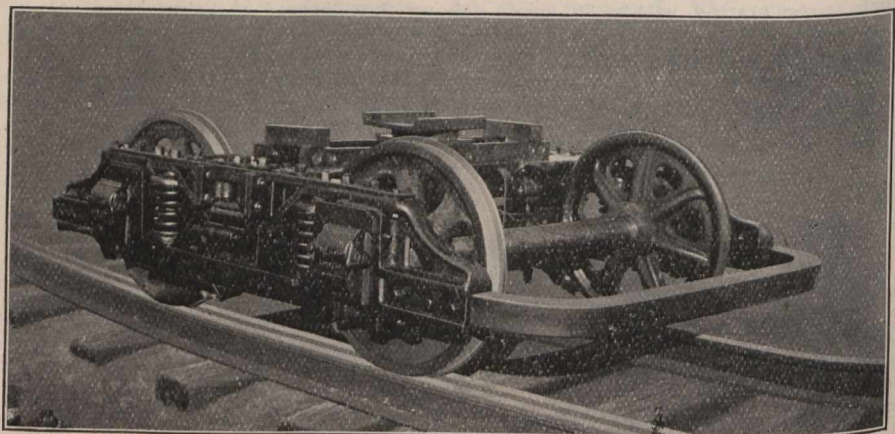
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from Edmonton via Yellow Head Pass to Port Simpson, B.C., Montreal despatches quote C.P.R. officials as stating that the report is absurd, but that if any line is to be constructed by the C.P.R. from Edmonton in the future it will be into the Peace River Valley.

Esquimalt and Nanaimo Ry.—The plans or the extension of the E. & N. Ry. from French Creek to Alberin, Vancouver Island, B.C., have been approved by the Board of Railway Commissioners, and it is understood that bids will be asked for the grading and other construction work at an early date.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—W. Whyte, Second Vice-President C.P.R., was in Montreal, June 5, in connection with the proposal to construct a line from Thief River Falls to Duluth, Minn., to connect with the Duluth South Shore and Atlantic Ry. It was subsequently announced that the work on the new line will be pushed forward with all speed, and it was expected to have 100 miles completed and in operation this year. (June, pg. 423.)

C. P. R. Mechanical Conference.

A general meeting of the master mechanics of the seven great divisions of the C.P.R. was held at Fort William recently for the purpose of considering the methods used at different points on the system and the possibility of improving the construction of the company's locomotives or general practice. In addition to the master mechanics of the various divisions, the following mechanical officials were in attendance: H. H. Vaughan, Assistant to the Vice-President; Grant Hall, Superintendent of Motive Power, Western Lines; L. R. Johnson, Assistant Superintendent Motive Power, Angus Shops, Montreal; C. Kyle, Supervisor Trains and Engines; S. J. Hungerford, Superintendent, Winnipeg shops; G. I. Evans, Chief Locomotive Draughtsman, Montreal; A. C. Frith, Chief Draughtsman, Mechanical Dept., Winnipeg. G. J. Bury, General Manager Western Lines, was also present and took a keen interest in the proceedings throughout. Seventy-three subjects were discussed, and in the majority of cases a definite conclusion was arrived at. It is the intention to hold these meetings periodically in future so that the entire experience of the company's master mechanics from the Atlantic to the Pacific may be drawn upon to improve the company's locomotive construction and enable the management to adopt the most economical methods of maintaining the motive power.

In connection with the report mentioned in our last issue, that the C.P.R. had decided to establish plants at two or three points on its line for creosoting ties, we are advised that at present the company does not propose making any experiments in the direction indicated.

During Apr., 13 employes were killed and 19 injured in the course of their work on Canadian railways. Of the fatalities, 7 were due to being run over, 2 to explosions of dynamite, and one each to being struck by a passing object, to machinery, to falling material and to electric shock. Of the other accidents, 4 were due to falling material, 3 each to derailments and to falls, 2 each to explosions of dynamite, to being caught between cars, to a boiler explosion, and to being run over, and one to machinery.

Canadian Northern Ry. Earnings, Etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-08, from July 1, 1908:

	Earnings.	Expenses.	Net Profits.	Net Increase or Decrease.
July	\$ 728,500	\$525,600	\$202,900	\$159,000—
Aug.	747,400	561,300	186,100	30,400—
Sept.	901,700	650,600	251,100	42,000+
Oct.	1,172,700	752,600	420,100	110,200+
Nov.	1,156,900	744,300	412,600	144,300+
Dec.	927,900	642,800	285,100	42,400+
Jan.	526,200	425,900	100,300	15,400—
Feb.	502,600	409,200	93,400	9,700+
Mar.	738,700	534,200	204,500	32,600+
Apr.	741,200	517,300	223,900	68,200+
May	720,100	537,200	182,900	51,100+
	\$8,863,900	\$6,301,000	\$2,562,900	\$290,700+
Inc. or Dec.	\$ 525,900	\$ 235,200	\$ 290,700	.....

Approximate earnings for May, \$720,100 and for 3 weeks ended June 21, \$544,400; against \$654,900 and \$455,700 for same periods 1908.

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

Gross earnings, working expenses, net profits, increases or decreases over 1907-8, from July 1, 1908:

	Earnings.	Expenses.	Net Profits.	Net Increase or Decrease.
July	\$6,292,889.82	\$4,018,207.57	\$2,274,573.24	\$232,279.41—
Aug.	6,385,956.69	3,807,057.98	2,578,898.71	8,623.56+
Sept.	6,391,672.48	4,277,064.71	2,114,607.77	36,745.58—
Oct.	7,381,970.41	4,726,703.70	2,655,266.71	25,050.93—
Nov.	7,303,303.20	5,082,223.85	2,221,079.35	223,954.86—
Dec.	6,955,874.11	4,759,122.54	2,196,751.57	119,561.99+
Jan.	4,761,859.93	4,372,110.10	389,749.83	234,241.95—
Feb.	4,966,208.14	4,204,063.36	762,144.78	405,048.17+
Mar.	6,518,763.14	4,715,055.01	1,803,708.13	502,678.64+
Apr.	6,384,038.32	4,240,530.80	2,143,507.52	421,273.08+
	\$63,342,527.24	\$44,202,239.62	\$19,140,287.62	\$704,912.71+
Inc. or Dec.	\$2,906,758.72	\$2,201,846.01	\$704,912.71	.....

Approximate earnings for May, \$6,333,000, and for 2 weeks ended June 14, \$2,902,000; against \$5,338,000 and \$2,394,000 for same periods 1908.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross revenue for Apr., \$218,355.65; net revenue, \$77,568.13; against \$205,362.86 gross, and \$63,642.26 net for Apr., 1908. Aggregate gross revenue for 10 months ended Apr. 30, \$2,299,988.68; net revenue, \$702,405.92; against \$2,611,347.30 gross and \$726,669.60 net for same period 1907-08. Approximate earnings for May, \$241,674, and for 2 weeks ended June 14, \$125,968; against \$185,184 and \$91,915 for same periods 1908.

MINERAL RANGE RD.—Gross revenue for Apr., \$67,544.14; net revenue, \$11,857.72; against \$66,507.17 gross and \$8,185.13 net for Apr., 1908. Aggregate gross revenue for 10 months ended Apr. 30, \$691,299.56; net revenue, \$116,855.06; against \$674,471.87 gross and \$104,870.84 net for same period 1907-08. Approximate earnings for May, \$68,983, and for 2 weeks ended June 14, \$30,718; against \$69,119 and \$31,481 for same periods 1908.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross revenue for Apr., \$949,499.44; net revenue, \$377,228.13; against \$812,446.33 gross; and \$273,315.24 net for Apr., 1908. Aggregate gross revenue for 10 months ended Apr. 30, \$10,549,608.97; net revenue, \$4,679,648.44; against \$9,852,348.52 gross and \$3,827,902.65 net for same period 1907-08. Approximate earnings for May, \$927,709 and for 2 weeks ended June 14, \$444,878; against \$761,555 and \$384,381 for same periods 1908.

Grand Trunk Ry. Earnings, Expenses, Etc.

The following figures give the earnings of the G.T.R., the C.A.R., the G.T. Western Ry., and the D.G.H. & M. Ry., separately, for Apr., as compared with Apr. 1908:

	GRAND TRUNK RAILWAY.	
	1909	1908.
Earnings	\$2,377,500	\$2,278,673
Expenses	1,619,200	1,623,658
Net Earnings	\$758,300	\$655,015
	CANADA ATLANTIC RAILWAY.	
	Earnings	\$138,900	$104,705
Expenses	130,300	119,315
Net Earnings	\$8,600	*\$14,610
	GRAND TRUNK WESTERN RAILWAY.	
	Earnings	\$495,200	$439,761
Expenses	331,700	325,316
Net Earnings	\$163,500	\$114,445
	DETROIT, GRAND HAVEN & MILWAUKEE RAILWAY.	
	Earnings	\$131,100	$113,958
Expenses	117,900	114,445
Net Earnings	\$13,200	*\$487

*Deficit.

Approximate earnings for May, \$3,239,791 and for 2 weeks ended June 14, \$900,000 against \$3,096,154 and \$900,000 for same periods 1908.

TRAFFIC RECEIPTS OF THE SYSTEM

Aggregate from Jan. 1 to May 31.

	1909	1908	Inc.	Decr.
Grand Trunk	\$2,309,061	\$2,238,235	\$70,826	.....
Canada Atlantic	132,022	121,104	10,918	.....
G. T. Western	454,909	433,828	21,081	.....
D. G. H. & M.	128,639	119,231	9,408	.....
Total	\$3,024,631	\$2,912,398	\$112,233	.....

Grand Trunk Veterans Association.

Among those entitled to the Ontario Government's free grant of 160 acres of land in New Ontario for services in repelling the Fenian Raid in 1866, are nearly 100 Grand Trunk Ry. veterans who have an organization, the Grand Trunk Veterans Association, with headquarters in Toronto, Major J. A. Carlaw, being President, H. T. Meredith, Treasurer, and Jno. Earls, Secretary. Several meetings of the veterans have been held during the past few years, and while some of them decided to locate their claims promptly or sell their certificates, the majority decided to await the final location of the G.T. Pacific Ry. west of Lake Abitibi, and to ask the Government to set apart a township so that they could locate together. The Government acceded to the request and set apart Lennox tp., Sudbury district. A meeting was held in Toronto in June to decide upon the best mode of selection, and to draw for and allocate the lots.

The Manual of Statistics.—The thirty-first annual issue of the volume bearing this title and published by the Manual of Statistics Co., 20 Vesey St., New York City, has been issued. The information given within the 1,094 pages of this annual with reference to railroad, industrial and other securities is of such a character as to make it of value to everyone who has any business connection with them, or is interested in the movements of the shares and stocks of the various companies on the exchanges of the continent. The financial reports quoted in the descriptive articles of the different companies are the latest available, and the comparisons with the figures of other years is interesting. The Canadian companies noted in the volume are those in which United States capital is interested, or on the boards of which U.S. capitalists are represented. The price of the volume is \$5.

The Chicago Municipal Engineer states that since the elevation of the railway tracks in that city, there have been 1,380 fewer fatal accidents, and 2,510 fewer non-fatal accidents in connection with the railways.

The Department of Agriculture has made arrangements with the Canadian Northern Quebec and the Quebec and Lake St. John Rys. for the provision of special iced refrigerator cars for the transportation of cheese in carloads, between July 5 and Sept. 11, without extra charge.

The action of J. Battle, T. Conlon, of Thorold, Ont., and J. Armstrong of Toronto, contractors, against the C.P.R., claiming the difference between their contract price for the construction of a part of the company's Toronto-Sudbury line, and that paid to another construction firm under a contract for another portion of the same line, was dismissed with costs, at St. Catharines, Ont., June 2.

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Lachine, Jacques Cartier and Maisonneuve Ry.—At the recent session of the Quebec Legislature an Act was passed incorporating a company with this title for the purpose of constructing a railway from Lachine to Hochelaga Ward, Montreal, or to Maisonneuve, passing in the rear of Montreal mountain, with power to extend the line from the starting point to Dorval, on one side, and to the northern end of Montreal Island on the other. The company is authorized to enter into agreements with other railway companies, and to construct docks, dockyards, wharves, slips, piers, warehouses and elevators, and to operate steam and other vessels for the conveyance of cargo and passengers upon any navigable waters which its railways reach or connect with. The company shall not exercise any of its powers within the limits of Montreal harbor, without the consent of the Harbor Commissioners. The provisional directors are:—A. Bergerin, A. Wainwright, E. A. Bernard, Montreal; and Hon. W. Mitchell, Drummondville, Que. This line we are advised has been partially surveyed, but it has not yet been definitely determined when construction will be started.

Bonaventure Station.—A Montreal dispatch says the G.T.R. has plans completed for a station to replace the present one, that it will be built much on the lines of the St. Louis, Mich. Union Station. It is said that the elevation of tracks in the city will be gone on with at the same time and that the total expenditure will be about \$2,000,000. We were officially advised June 24, that nothing is known at G.T.R. headquarters of any new plans that have recently been completed for a proposed station. The officials have on a number of occasions, during the past 10 or 12 years, figured on new plans, but nothing has been definitely determined. The report referred to is probably due to the preparation of the Montreal city council to make application to the Board of Railway Commissioners for an order requiring the elevation of the tracks to Bonaventure station, which would doubtless require the reconstruction of the station.

Carlsbad Springs, Moose Creek, Ont.—The line in the vicinity of Carlsbad Springs, Ont., is being raised. A large area of land has been acquired at Moose Creek, 20 miles further on for use as a ballast pit, in connection with the ballasting operations on this line. It is also intended to erect a new station at Moose Creek.

Ottawa Station and Hotel.—The Minister of Public Works reported June 1, that the G.T.R. had paid the Dominion Government the purchase price of the hotel site on Major's Hill Park. On the same day it obtained from the City Council a permit for the erection of the hotel, the estimated cost of which is placed at \$864,000. The plans filed with the application for the permit show that granite will be used up to the first floor; the remainder of the building being of Ohio or Indiana sandstone—the roof being copper-covered. The building will front on Rideau St., and there will be entrances on Mackenzie Ave., along which its length will run. The main entrance to the hotel will be reached through a large portiere, entering upon a hall. Opening off a spacious rotunda on the ground floor are lounging-rooms,

parlor, garden, tea room and reception room, a general dining room and a ladies' dining room. There will be reception rooms, a large foyer, banquet hall and ballroom on the first floor; and a music gallery will be so arranged as to overlook the dining rooms and the lounge. On the first floor there will be 35 bedrooms and some parlors, from which several suites of state apartments can be made up. The remaining floors are to be entirely given up to bedrooms, of which there will be in all 350, of which 210 will be provided with private baths, and 62 with stationary washstands with hot and cold water connections. All corridors on the upper floors will have a uniform width of nine feet, and the main ones will lead directly to fire escapes. A subway will lead from the hotel to the station, the entrance to the latter being slightly below the level of the basement floor. Tenders are being asked for the erection of the building. The company started about 100 men on the preparation of the site May 27.

The erection of the annex to the present Central Station is being proceeded with, and it is expected that it will be well on to completion by November. The new building will be 300 ft. long, 85 ft. wide, and 40 ft. high. The foundations will be of blue lime stone, the main walls of buff brick, and the cornices and face work of Ohio sandstone. Over the approach there will be an iron and glass canopy and overhead a large clock. This annex will provide for the carrying on of the work of the station pending the removal of the existing station, and the erection of the new structure, of which it is to form a part. The work is being done by the G.T.R., under Ottawa Terminals Co.'s charter.

Kingston, Smith's Falls and Ottawa Ry.—At the annual meeting of shareholders at Kingston, Ont., June 1, the G.T.R., was represented by F. Scott, its Treasurer. The retiring directors were re-elected. Local reports state that the line will be under construction within two years.

Cobourg Freight Sheds.—A press report states that the company has appropriated \$50,000 for improvements at Cobourg, Ont. These include a new station, freight sheds and additional yard accommodation.

Midland to Cobourg, Ont.—A. S. Going, has been making a survey of the company's lines between Midland and Cobourg, Ont., with a view of securing a route which will avoid the present heavy gradients. The route between Midland and Millbank has been laid out, and Mr. Going is preparing for completing the work. One route proposed between Millbrook and Cobourg is to run over the old Harwood and Rice Lake route, which the G.T.R. owns, but which is not in use, for about four miles north of Cobourg, then proceed across country touching Plainsville and on to Millbrook.

We were advised June 17, that while the company has been making surveys during the last five or six years for the purpose of getting a more convenient connection between the old Midland Ry. (which runs from Brockville to Midland, Ont.), and the main line between Port Hope and Cobourg, nothing final or definite has been determined upon.

Guelph Station.—The question of the erection of a new station at Guelph,

Ont., has been under discussion recently between a representative of the G.T.R. law department and the City Council, and the Mayor, said it would be a matter of only a short time before it was finally settled. The only difficulty is the settlement of the question of the closing up or the diversion of Neeve St.

Stratford to Listowel.—Steel rails, 80 lbs. to the yard, are being laid between Stratford and Listowel, Ont.

Stratford to Goderich, Ont.—Relaying between Goderich and Thamesville, with 80 lb. steel rails is practically completed. This work is being carried out because of the increasing freight traffic.

London Track Elevation.—The Mayor stated June 8, if something is not done by the G.T.R. within a reasonable time with regard to the question of track elevation, the Board of Railway Commissioners will take up the question and deal with it. The members of the Board are conversant with the situation, and know what is required.

London, Eng., Offices.—The company has opened a suite of offices at 17-19 Cockspur St., London, Eng., for the use of passengers. Canadians visiting London can use this address for their correspondence, write their letters there, and make appointments, etc. (June, pg. 411.)

The Canadian Society of Civil Engineers, held its annual summer excursion June 23, when Windsor, Ont., was visited, and the works of the M.C. Rd.'s Detroit River tunnel inspected.

The Central Railway and Engineering Club's annual excursion took place June 19, when the members travelled from Toronto to Jackson's Point over the Toronto and York Radial Ry.

The township of Lennox, Sudbury District, Ont., has been set apart by the Ontario Government for the G.T.R. veterans of the Fenian Raid, and selection of lots (¼ sections) may now be made by or for those entitled to them.

Judgment was delivered in the Supreme Court, June 11, on the appeal of R. Z. Walker, I.C.R. station agent, Fredericton, N.B., against conviction for a breach of the Scott Act, by receiving and warehousing intoxicating liquor. In delivering judgment, the Chief Justice, held that the police magistrate's decision to convict was not justified. The I.C.R., was constructed under the British North America Act, and being the property of the Crown and operated in the public interest, could not be interfered with by any act of Parliament, unless that act was made specially applicable to it.

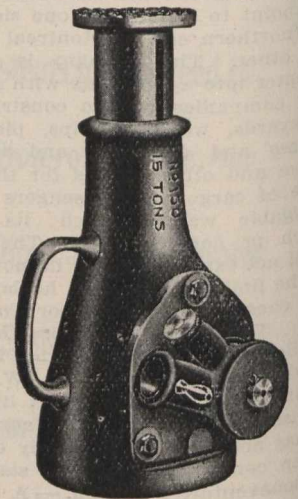
The railway to be constructed across the Andes, from Arica in Chile to La Paz in Bolivia, for which a contract has been let to Sir John Jackson, Ltd., London, Eng., will have a length of 300 miles, and in crossing the divide will attain a height of over 12,000 ft. The first 50 or 60 miles will be across a desert, and the next 50 miles through the Andes, and the last 200 miles will be over the high tableland upon which La Paz, the highest city in the world, is built. At present the only means of transit to the coast is by mule trains, in which two mules have to carry water for every mule carrying baggage. The first work which the contractors will carry out will be the provision of a water supply for the desert section of the line.

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THE ELECTRIC HEADLIGHT

The following letter was received under date of May 8, 1908, from Mr. J. W. Cleary, Travelling Engineer Pyle-National Electric Headlight Co.:

"I learn from _____ the Master Mechanic here, that an engineer running between _____ and _____ discovered a broken rail with the Pyle-National Electric Headlight and made the stop without ditching his train. One or two pairs of wheels got off, but that was a small affair to what it would have been where a foot of the rail was broken off. Also an engineer running east of here found some cars shoved out on the main line. He saw them with the 'Electric' and made the stop without hitting them."

PYLE-NATIONAL ELECTRIC HEADLIGHT CO.
MONADNOCK, CHICAGO

Railway Commissioners' Traffic Orders

Summaries of other traffic orders passed are given on another page under the heading of Orders by Railway Commissioners.

LIQUOR FREIGHT ENGLAND TO FORT WILLIAM.

7084. May 19.—Re complaint of Downing's American Despatch, general merchandise forwarders, Montreal, complaining against overcharge made by C.P.R. of local rate from Fort William, Ont., to Winnipeg, on a carload of liquor shipped from England to Fort William, instead of a pro rata proportion of lake and rail rates agreed upon between the C.P.R. and the steamship companies, upon hearing the complaint in the presence of counsel for the railway company, the complainants being represented at the hearing, and what was alleged, it is ordered that the same be dismissed.

Chief Commissioner Mabee gave the following judgment:—In this case the whole matter seems to us to be a question of fact, or, at least in so far as it may be necessary to determine the application it must turn upon a question of fact. The applicants allege that they were duly appointed agents of Jacques & Co. and were parties along with the C.P.R. Co., to this lake and rail through freight tariff on general merchandise from London and a number of other places, via Quebec, Montreal and so on, and points between Kenora and Strathcona and a number of other places named upon the tariff. It would seem that Jacques & Co. have no office in Great Britain, that they entered into some sort of an arrangement with the Downing's Despatch Co., whereby the Despatch Company should receive a certain percentage upon freight directed over this route covered by this tariff. The Despatch Company assuming that they had authority to do so, issued through bills of lading in their own name upon their own forms for this traffic, and they assumed by that act to bind all the parties who were named as carriers in this joint tariff. When this particular shipment arrived at Fort William the C.P.R. Co. refused to recognize the authority of Downing's American Despatch Co. to bind them by issuing a through bill of lading, and they charged instead of the through rate under the tariff their local rate from Fort William to the destination. The applicants asked that the C.P.R. be ordered to refund to them the difference between what would have been their charge on the through rate governed by the joint tariff, and the local rate which had been charged. The Despatch Company I suppose having paid, or the consignee perhaps having been compelled to pay in order to get the goods released, this sum, and then I presume the consignee had had recourse back on the Despatch Company and it has had to make a refund. It seems to us there is not sufficient evidence here, even for the moment assuming, which perhaps is a matter of some doubt, that Jacques and Co. could have authorized some agent there to bind the C.P.R. Co.; that as a matter of fact they did not have any agent and did not intend that the Despatch Company should have any such agency or authority to do what they attempted to do in the case in hand. A letter was produced by counsel for respondents, from Jacques & Co. in which they repudiate having given the Despatch Company authority to issue this through

bill of lading upon their own forms. The applicant, Mr. Holloway, who appeared, produced a letter in which he confirmed the arrangement made orally with Jacques & Co. under which they were to be paid certain commission for diverting this traffic, but there is nothing in the letter which he produced which would be read as showing that Jacques & Co. were intended to confer upon the Despatch Company—again assuming they had the power to do it, and as to which it is not necessary to say anything now—the authority to issue bills of lading of the kind they assumed to issue. It was simply a correspondence showing that upon this traffic they were to be paid the commission mentioned in the correspondence. So that we find on the question of fact, that Jacques & Co. did not confer upon the Despatch Company a general agency which would be necessary to confer in order to authorize them to issue bills of lading of the kind issued in this case. Finding that fact it is not necessary to consider further whether—even if there had been sufficient evidence of the attempt to establish an agency of that sort—whether Jacques & Co. would have had the authority to appoint an agent there who could bind the various carriers in the course of transit including the respondent. The result is that the application failed and it must be dismissed.

CRUDE OIL SHIPMENTS.

7093. May 31.—In the matter of the complaint of the British American Oil Co., Toronto, that the G.T.R. unjustly discriminated against crude oil shipments from Stoy, Ill., to Toronto, by refusing to carry it at the published and filed joint tariff 5th class rate, in accordance with the official classification and at the same rate as animal and vegetable oils, in carloads; and that the company refused to deliver at Toronto cars containing crude oil from Stoy, except upon the payment of 12½c. per 100 lbs., which additional rate, had been paid under protest and which the company refuses to refund, upon hearing the application, the evidence adduced, the argument of counsel for the complainants and the G.T.R. and C.P.R., and what was alleged, it is declared that the legal rate chargeable upon the shipments complained of was 20c. per 100 lbs., the joint tariff 5th class rate under the official classification, published and filed with the Board, which rate is still in force; and it is further ordered that the G.T.R. be, and it is hereby, authorized to refund to the complainants the difference between the said rate of 20c. per 100 lbs. and the rate of 32½c. per 100 lbs. charged and collected by it on the said shipments.

CARRIAGE OF VALUABLE ORES.

7164. June 3.—Re application of C.P.R. Co., for order making general and applicable to all railway companies subject to the Board's jurisdiction, the form of release or special contract, respecting carriage of silver and other valuable ores, approved upon the application of the G.T.R. Co. It is ordered that the form of release or special contract respecting the carriage of silver and other valuable ores, approved by order 6972, of May 6, 1909, as published in the Railway and Marine World for June be extended to apply to all railway companies under the Board's jurisdiction, the companies being authorized to use the form upon their respective lines until the Board shall hereafter otherwise order and determine.

The following is the form:—

Release or Special Contract respecting the carriage of silver and other valuable ores.
 Consignee.
 Destination.
 Description of Property
 "In consideration of the station and its connecting lines receiving for transportation over their lines at station ore consigned to at station, and carrying same at the rates mentioned in the freight tariff in force at the time of shipment, do hereby undertake and agree that no claim in respect of any loss of or damage to such ore for which the said company and its connections, or any of them, may be responsible, will be made against the said company, or its connections, or any of them, for an amount exceeding \$500 per net ton of such ore, and that in case of any such loss or damage arising from which the said company or its connections, or any of them, shall be liable, any claim therefor shall be computed and paid upon the basis of the actual weight of the ore lost or damaged and of the value thereof which shall not, however, exceed in any case the amount of \$500 per net ton as herein provided. The rates fixed by this tariff are made in consideration of the shipper giving an undertaking and guaranty to the railway company that in case of any loss or damage to the ore, the railway company shall not be held responsible for an amount exceeding the actual value of the ore lost or damaged, which value, however, shall not exceed in any case the sum of \$500 per net ton."

WHITE PASS AND YUKON RAILWAY RATES.

7246. June 16.—Re application of Board of Trade of Dawson and the White Pass route, the White Pass and Yukon Ry. Co., the Pacific and Arctic Ry. and Navigation Co., the British Columbia-Yukon Ry. Co., the British-Yukon Ry. Co., and the British-Yukon Navigation Co. It is ordered:

1. That the White Pass and Yukon Ry. Co., the Pacific and Arctic Ry. and Navigation Co., the British Columbia Yukon Ry. Co., and the British Yukon Navigation Co. be added as parties to these proceedings. That this application in so far as it affects or is directed against the British Yukon Navigation Co. be dismissed.

That the British Yukon Ry. Co., the British Columbia Yukon Ry. Co., the Pacific and Arctic Ry. and Navigation Co., and the White Pass and Yukon Ry. Co., or one or more of the said companies do within 30 days file with the Board pursuant to the Railway Act, tariffs of the companies tolls covering all through traffic received at Skagway and destined to White Horse or to any intermediate point or points between the International boundary line between Alaska and British Columbia upon the line of railway, and White Horse; and covering all through traffic received at any point or points upon the railway between White Horse and the International boundary and destined to Skagway. That for the purpose of filing such tariffs, the said companies or some or more of them enter into the necessary agreements (if any such are not now in existence). That the said tariff shall cover and include at least all the class and commodity rates now in existence upon the White Pass and Yukon route. That the Board shall be informed of the proportion in which the said tolls is divided or allotted between the said companies if any such division or allotment is continued or made.

WEIGHING COAL IN ONTARIO.

7261. May 31.—Re application of Retail Coal Dealers' Association for an order that all railway companies weigh all coal carried by them, received from foreign countries, at the port of entry, and for other matters: it is ordered that, in the event of any consignee of any car or cars of bituminous coal, shipped from the United States, desiring to have such car or cars weighed at the port of

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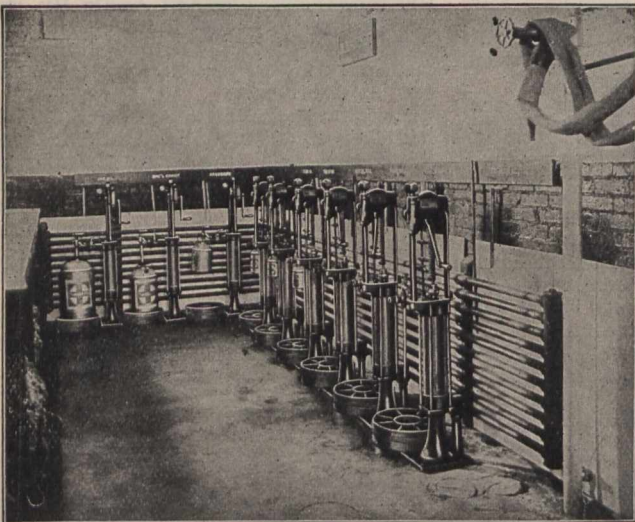
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MANAGER

entry, he shall be at liberty to give a written notice to the agent of the railway company, receiving for delivery or furtherance such car or cars at such port of entry, before the said coal is received by such railway company, that he requires the same or any car or cars of such consignment weighed; and upon the receipt of such notice it shall be the duty of the company to weigh free of charge, at such port of entry, all cars covered by the notice. Any consignee may give a general or continual written notice that he requires all cars consigned to him weighed as above provided. For such weighing at the port of entry, the cars to be weighed may remain coupled one to another in a train. On notice in writing from a consignee of such coal, to the freight agent of the railway company hauling the same at the point of destination, within 24 hours of the arrival of the coal at the point of destination and before the car or cars containing same have been unloaded, that he wishes the car weighed, the company shall weigh any car of such coal at the scales nearest to the point of delivery; and for such service the railway company may charge and collect from the consignee, 5c. for every ton of coal in the car, with a minimum \$1, and a maximum \$2 per carload; but no such charge shall be made and no amount collected for such service, if the weight of the car is more than 500 lbs. less than the weight of the coal at the port of entry, or if the coal is not weighed at the port of entry, then the weight shown by the waybill to be in the car at the time of shipment, plus the weight of the car itself as shown by the tare. On notice in writing from a consignee of such coal, to the freight agent of the railway company hauling the same at the point of destination, within five hours from the unloading of any car containing such coal, that he wishes the empty car weighed, the company shall weigh the same at the scales nearest to the point of delivery; and for such service the railway company may charge and collect from the consignee \$1 a car; but no amount collected for such service, if the actual weight of the car exceeds the tare marked on it by more than 500 lbs. This order shall only apply, in case the port of entry or point of delivery is in the Province of Ontario. Any person or company affected by this order may, after one year from the date hereof, apply to the Board to vary or rescind it.

VANCOUVER, WESTMINSTER AND YUKON RY. RATES.
7277. June 16.—Re complaint of British Columbia Mills, Timber & Trading Co., Burnaby, B.C., alleging excessive freight rates charged on Vancouver, Westminster & Yukon Ry., from Vancouver to Burnaby: Upon hearing this application, and hearing what was alleged on behalf of the applicant as well as the railway company, and the parties agreeing, and upon the consent of the C.P.R. Co., it is ordered that the Great Northern Ry. Co. operating the V.W. & Y. Ry., shall forthwith file and publish rates on lumber, shingles, and articles taking the same rates in the special tariffs of the C.P.R. Co., via New Westminster or Vancouver in connection with the C.P.R. as follows:—From points on the V.W. & Y.R. Co.'s line between Vancouver and New Westminster, not inclusive, to points

on the C.P.R., except such points as may be reached directly by the G.N.R. or its connections; joint rates based upon 1c. per 100 lbs. higher than the rates established from Vancouver by the C.P.R.; the V.W. & Y.R. to be allowed 2½c. per 100 lbs. Order 6613, Feb. 23, 1909, is rescinded.

SUPPLEMENTS TO CANADIAN FREIGHT CLASSIFICATION.

7295. June 14.—Re application of Canadian Freight Association, through W. R. MacInnes, Chairman of Advisory Committee, under section 321 of the Railway Act, for an order approving proposed supplements to Canadian classification, namely: no. 1, submitted to the Board Jan. 25, 1909; the other, also no. 1, submitted March 4, 1909: Whereas, by order 7023, of May 10, 1909, the additions and changes embodied in the proposed Supplements to Canadian Freight Classification 14, were approved, subject to the exception, amongst others, that the proposed advance in the rating of tinned copper boiler sides or sheets be withdrawn pending consideration by the Canadian Manufacturers' Association and the Montreal Board of Trade of the similarity for classification purposes between these articles and other articles of copper in the Canadian classification 14, pg. 19, items 10 and 16, statements from the bodies named to be filed with the board in time for the traffic sittings on June 15; and whereas statements on behalf of the bodies named have been filed as required under the said order—upon reading the same; and upon the report and recommendation of the Chief Traffic Officer of the Board. It is ordered that order 7023, approving additions and changes in proposed supplements to Canadian Freight Classification 14, subject to exceptions and additions named in the order, be amended by striking out clause 4, directing the withdrawal of the proposed advance in tinned copper boiler sides or sheets, and substituting therefor the following clause, viz:—"That the proposed advance in rating on tinned copper boiler sides or sheets embodied in the said proposed supplements to Canadian Freight Classification 14, be approved."

SPECIAL COMMODITY RATES.

7325. June 22.—Re application of Canadian Freight Association, through W. R. MacInnes, Chairman of the Advisory Committee, under sec. 39 of the Railway Act, for an order rescinding clause "h" of order 3258, July 6, 1907, which provides "that no special commodity rates now existing, which may be lower than the corresponding class tariff rates herein prescribed, shall be advanced by reason of the changes herein ordered, or without the sanction of the Board": Upon hearing the application in the presence of counsel for the C.P.R., the G.T.R. and the C.N.R. companies, the Canadian Manufacturers' Association and the Montreal Board of Trade being represented at the hearing, and upon the report of the Chief Traffic Officer of the Board; and it appearing that the said clause has served the purpose for which it was intended, it is ordered that order 3258, dated July 6, 1907, be amended by striking out clause "h."

The Morrissey, Fernie and Michel Ry. has filed a copy of its by-law fixing tolls for switching at Michel, with the British Columbia Government, and the same has been approved.

Recent Provincial Legislation.

The acts passed at recent sessions of the Provincial Legislatures affecting transportation interests include the following:

NEW BRUNSWICK.

Canadian Terminal Ry.—Extending time for construction.

Maritime Steamship Co.—Authorizing exemption from taxation in County of Charlotte.

Moncton Electric Tramway Co.—Amending act of incorporation and extending time for construction.

New Brunswick Coal and Ry. Co.—Authorizing granting of loan by the Government for betterment of railway.

New Brunswick Docks and Terminals Co.—Incorporation.

St. John City.—Authorizing city to transfer harbor property and privileges to harbor commission.

St. John Valley Ry. Co.—Incorporation.

Tobique and Campbellton Ry.—Extending time for construction.

Twin Tree Mines Ry.—Amending act of incorporation, altering location of terminals and changing name to Northern New Brunswick and Seaboard Ry. Co.

QUEBEC.

Angus Short Line.—Incorporation.

Dominion Line Co.—Amending charter. (The company constructed a railway from Dudswell, Que., to the lime quarries, 4.80 miles, which is operated by Hereford Ry., leased to Maine Central Rd.)

Grand Lake and Bell River Ry.—Incorporation.

Hull Electric Co.—Respecting company's power.

Lachine, Jacques Cartier, and Maisonneuve Ry.—Incorporation.

Matane and Gaspé Ry.—Extending time for construction.

North Eastern Ry.—Defining company's powers and extending time for construction.

Quebec and Lake St. John Ry.—Extending time for construction of branch lines and extensions.

Quebec and Saguenay Ry.—Extending time for construction.

Quebec County Ry.—Extending time for construction.

Quebec Public Utilities Commission.—To create a commission.

The Spokane and British Columbia Ry. (Kettle Valley Lines) has registered its Standard Passenger Tariff C.R.C. 6 with the Board of Railway Commissioners, providing for a maximum passenger fare between all stations in British Columbia at 4c. a mile.

Vancouver, B.C., press reports state that an agreement has been signed under which the Union Pacific Rd., the Northern Pacific Ry., and the Great Northern Ry. will enter Vancouver from Tacoma, Wash., jointly, and thus obviate the construction of separate tracks.

Hon. W. Pugsley, Minister of Public Works, whose name has been mentioned in the report of the New Brunswick Commission on the financing of the New Brunswick Coal and Ry. Co., which took over the old Central Ry., has entered an action against the old directors of the company for an accounting of all subsidies and other monies from either Dominion or Provincial Governments, as well as proceeds of all bonds, debentures, etc. It is expected that the action will be tried in the fall.

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HEAD OFFICES AND WORKS: SYDNEY, CAPE BRETON, CANADA

Canadian Northern Ry. Construct'ion.

Canadian Northern Quebec Ry.—The construction of the cut-off between Garneau Junction and Quebec, is being proceeded with rapidly, and it is expected to get it completed by July 31. Over 500 men are at work.

The St. Leon Ry. Co. was incorporated by the Dominion Parliament in 1907, to construct a line of railway from Louisville, Maskinonge Co., northward to Alexis, with branches from St. Leon to Three Rivers, and to Lake Maskinonge, Que. No construction has been undertaken.

Canadian Northern Ontario Ry.—On the line between Hawkesbury and Ottawa construction is being pushed forward rapidly and it is expected that the line will be completed to Ottawa during Aug. The plans for the entrance into Ottawa were approved by the Minister of Railways June 18.

Matters in connection with the projected line from Toronto to Ottawa, are still in process of settlement. A deputation from the Lanark County Council waited on the Minister of Railways, June 18, to ask that the line be located through that county, and a deputation from Smiths Falls appeared in opposition, as the line is wanted through that district. The Minister said the arguments presented would be fully considered when the matter came up for settlement.

The Board of Railway Commissioners gave judgment, June 1, confirming the agreement made between the C.N.O.R. and the G.T.R. and C.P.R., by which the first named was to pay \$1 a car in and out of the Union Station, Toronto, and that the C.N.O.R. should not be called upon to contribute towards fixed charges. The judgment was given upon an application for an order to compel the C.N.O.R. to pay one-third of the fixed annual charges of Toronto Union Station.

At Parry Sound, about three miles of line is under construction, to connect the C.N.R. with the C.P.R. This line will give both companies access to the water front, and enable them to make connection with the principal industries of the town. The C.P.R. has constructed its half of the line, and the remaining 1.50 miles is now under construction by the C.N.R. It will be operated and maintained jointly.

There are over 1,000 men at work on the extension from Selwood Junction, Ont., towards Port Arthur, and it is expected to get about 32 miles completed this season.

Schomberg and Aurora Ry.—In 1896 the Dominion Parliament passed an act authorizing the construction of a line from between King and Newmarket to Schomberg, Ont., and in 1906 a further act was passed authorizing the construction of additional lines to Beaton and Collingswood, Oshawa to Bowmanville, from Bond Lake to Big Bay Point—and from Barrie to Sutton, Ont. The total mileage authorized is 135 miles, and of this there has been constructed 15 miles from near Bond Lake, on the Metropolitan Division of the Toronto and York Radial Ry., to Schomberg. The line is owned by Mackenzie, Mann & Co. interests and is operated by steam.

Nipigon Ry.—An act was passed by the Dominion Parliament in 1902 incorporating a company with this title to construct a railway from Nipigon station

on the C.P.R. transcontinental line, to Lake Superior, and to Nipigon Lake, Albany River and James Bay, a total of about 500 miles. An extension of line was obtained in 1904 for the construction of the line, and the charter subsequently passed into Mackenzie, Mann & Co.'s possession. No construction has been done.

Duluth, Winnipeg and Pacific Ry.—We are advised that it has not been decided when the line from Virginia to Duluth, Minn., will be constructed. This line is the southerly extension of the Duluth, Rainy Lake and Winnipeg Ry., which connects with the Canadian Northern Ry. at Fort Frances, Ont., and which was recently acquired by C.N.R. interests.

The company is reported to have filed a mortgage to secure \$1,250,000 of bonds, to provide funds for the construction of the proposed line from Virginia southerly to Duluth, Minn. (June, p. 427.)

Canadian Northern Ry.—Good progress is being made with the erection of the Winnipeg Union Station. The original contract with Peter Lyall & Co., called for a basement, ground floor, two office floors, and an attic. A further contract has been made for the addition of another office floor. The total cost of the building will be about \$1,250,000.

In Manitoba the construction in hand for the present includes the extension of the Rosburn branch from Russell, westerly for 40 or 50 miles. From Hallboro, a line is to be constructed through Rapid City for about 60 miles. The Oak Point line is being extended from Oak Point northerly and northwesterly, and 15 miles is being constructed from Ochre River easterly.

In Saskatchewan a line is being constructed from Maryfield southwesterly. The Goose Lake line, which now ends about 75 miles from Saskatoon is being further extended. An extension is also under construction from Prince Albert westerly, for 30 miles. This extension will, it is understood, ultimately connect with the main line at or near Battleford.

There have been some large real estate transactions in Regina, Sask., recently, and on June 8, it was reported that the C.N.R. had secured options on a large area in the city for terminal purposes. The company's Winnipeg officials state that the C.N.R. is not buying any land in Regina.

The freight sheds at Saskatoon, Sask., have been completed and opened for business. Tenders have been asked for a passenger station at Saskatoon. The plans provide for a building, including a covered way of about 40 ft., 224 ft. in length, with a projecting roof at either end. The waiting rooms, and other public offices are on the ground floor; upstairs there will be the operating offices, and there will also be a third floor, the use of which is not yet specified.

Construction has been started from Vegreville, Alta., to Camrose, the objective point of the line being Calgary. D. D. Mann, Vice President, stated recently that this section of the line would undoubtedly be constructed during the summer.

The company's application for the amalgamation with it of the Saskatchewan North-Western Ry., and the Alberta Midland Ry., was heard by the Board of Railway Commissioners at Ottawa, June 10. These two companies were incorporated under charters granted by the Saskatchewan and Alberta Legislatures,

to construct certain lines of railway, as branches of the C.N.R., for which guarantees of bonds were given.

In 1899 the Dominion Parliament passed an act incorporating the Edmonton and Slave Lake Ry., with power to construct a railway, having a length of 400 miles from Edmonton via Athabasca Landing and Lesser Slave Lake to Peace River. In 1902 and 1904 acts were passed extending the time for construction. There was completed in 1906, a section of the line extending from Edmonton to Morinville, 21.50 miles, which is being operated as the C.N.R. Morinville branch.

Work is in progress upon an extension of this line from Morinville towards Athabasca Landing, the point at which the navigable waters of the Mackenzie River basin is reached. It is said that in course of time the line will be extended into the Peace River Valley. M. McCrimmon, Edmonton, Alta., is the contractor. (May, 1908, pg. 319.)

It is under the E.Y. and P. Ry. charter, that the C.N.R. route from Edmonton to the Pacific Coast is being surveyed, and its amalgamation was provided for in the act granting aid towards the construction of the line. The preliminary plans for the line from Edmonton to Vancouver and New Westminster, B.C., have been approved, but it is not expected that construction will be undertaken this season. The distance between the Yellowhead Pass and Vancouver is about 500 miles, and T. H. White, who is in charge of the surveys, said June 6 that he expected the location survey would be completed by the end of the year, as very satisfactory progress was being made. From Yellowhead Pass the route surveyed follows the Fraser River for about 40 or 50 miles to opposite Tete Jaune Cache, and thence through a low pass to the head waters of the North Thompson River, via Cranberry and Bridal Lakes. A fourth survey party with C. F. Hannington in charge, has been started at the head waters of the North Thompson River working west; and J. Irvine is working from 50 miles up the North Thompson River, and is running east to meet Hannington's party. J. V. Nimmo has been detached from the North Thompson survey, and with a party is now working down the Fraser River from Lytton, and W. K. Gwyer is working in the Yale district to meet the Nimmo party. As soon as this gap is covered the location of the line to the coast, and also between Lytton and Kamloops along the main Thompson River will be undertaken. The object of all these surveys is to locate a route from the Yellowhead Pass and the mouth of the Fraser River, to Tete Jaune Cache, over by Cranberry Lake, and Albreder Lake to the head waters of the North Thompson River and down it to the junction with the South Thompson at Kamloops. The route down the Thompson River from Kamloops will be on the opposite bank to that occupied by the C.P.R. From above Lytton where the Thompson joins the Fraser River, the line will take the same side of the river as the C.P.R., but at a lower level, and crossing it under one approach to the cantilever bridge at Cisco flat.

The Company's right of way and town-site agents reached Kamloops, May 31, and are reported to be arranging for securing land for terminal purposes, station sites, etc. (June, pg. 427.)

The Hudson's Bay Company



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National Transcontinental Railway.

Quebec Bridge and Ry. Co.—The Minister of Railways returned to Ottawa, June 11, from New York, where he had been in consultation with the engineers, who are preparing plans for the reconstruction of the bridge over the St. Lawrence River at Quebec. He stated that the report as to the plans would be ready at an early date. While nothing definite has been given out it is said that the Commissioners will recommend that the present piers be utilized for the new bridge, and that the central span be 1,600 ft., instead of 1,800 ft., as in the structure which collapsed. This reduction of 200 ft. will be effected by the construction of two new piers, one at each side of the river, 100 ft. towards the centre from the present ones. The bridge will be constructed on the cantilever principle, the towers standing on two piers each, instead of on single piers as in the old plans. The material to be used it is said will be nickel steel. The new bridge will cost, it is stated, about \$6,000,000.

Quebec Terminals.—The Dominion Premier, visited Quebec, June 7, and discussed the question of the purchase of the Champlain market for a terminal site for the N.T.R.

National Transcontinental Ry.—The section from Winnipeg easterly to the junction with the G.T.P.R. branch from Fort William to Lake Superior Jct., was reported completed, so far as the grading is concerned, June 8, and engineers representing the G.T.P.R. and the N.T.R. Commission, have been going over the line preparatory to its being taken over for operation by the company. This inspection is being made for the purpose of fixing the cost, upon which the company is to pay the percentage named in the Act as rental. Should the two engineers disagree, C. Schreiber, the Dominion Government's consulting engineer, is the final arbitrator. The length of the piece of line is 240 miles, and the cost of construction has been heavy. Track laying is being gone on with from both ends. Already 70 miles of track has been laid from Winnipeg to the Winnipeg River, where a bridge is being built, and 20 miles from Lake Superior Jct. westerly. The gangs are laying about three miles of steel a day, and it is expected that the 150 mile gap will be closed by the end of July, and everything got ready for the opening of the line by Sept. 1.

Grand Trunk Pacific Ry.—It is expected that by Sept. 1, the company will be able to have its line in operation from the head of the lakes to Edmonton, Alta., a distance of about 1,200 miles.

The work of tracklaying between Wainwright and Edmonton, Alta., has been interfered with, it is reported, by wet weather, and has been closed down altogether at intervals. In some places the rails are said to have sunk two or three feet in the mud. It is confidently expected, however, that track will be laid into Edmonton, by the middle of July. The weather has also interfered with the work west of Edmonton, but tracklaying is being pushed forward as fast as circumstances will permit, so as to enable the company to haul in material for the construction of the big bridge across the Pembina River.

On the line already in operation between Winnipeg and Wainwright, Sask.,

the company is proceeding with the work of station building and otherwise providing facilities for carrying the increasing traffic.

Location surveys for the line to Vancouver, are being proceeded with along the valley of the North Thompson River.

At Prince Rupert, C. M. Hays, President, stated recently, it was expected that of the first 100 miles there would be completed by Oct. 1, the section to the Copper River. The sale of lots at the Prince Rupert townsite took place at Vancouver, B.C., May 25 to 29, and it was reported that over \$1,000,000 was realized.

Pacific, Northern and Omineca Ry.—In 1902 the Dominion Parliament incorporated a company with this title, to construct a railway having a total length of about 900 miles, from Kitimat Inlet on the Pacific coast, via Hazelton to Teslin, or Atlin Lake, or both, and from Hazelton to Peace River Pass, and thence to Edmonton, Alta. Extensions of time were granted in 1904 and 1906. The charter came into the possession of the G.T. Pacific Ry., and a section of the line is now under construction.

G.T.P. Branch Lines.—E. J. Chamberlin, General Manager, stated recently that the company was preparing to let contracts for all its branch lines in Western Canada, so that construction could be gone on with. The Mayor of Regina, stated that W. Wainwright, Fourth Vice-President G.T.R., had informed him that the first line to be constructed would be that from near Yorkton to Regina, and that it would be finished this year if men and money could do it. Contracts have been awarded to McMillan Bros. & Kenny, Winnipeg, for the section from Melville towards Regina, Sask., 35 miles; and to Rigby & Hyland, Fredericton, N.B., for the section from Melville to Yorkton, Sask., 25 miles. Tenders have also been received for the construction of a branch line from Biggar, northerly to Battleford, Sask., 49 miles. It is also hoped to be able to start construction this year on lines north and south from Melville, Sask. (June, pg., 439).

Great Northern Ry. Lines in Canada.

A Winnipeg press despatch referring to railway construction work in Manitoba and the other western provinces says that under the name of the Great Northern Ry. the Hill interest operations are practically nil, but there are at least a dozen companies operating under local charters actively engaged in constructing short lines, or in surveying for short lines, which when connected will form a formidable rival to existing lines in Canada, as seven or eight of them will give direct connection between the projected main line in Canada and the main line in the U.S., making outlets for Canadian wheat which, of course, will be taken direct to Minneapolis mills.

Jas. Fisher, K.C., the legal representative of the G.N.R. in Winnipeg, stated May 27 that all surveys for the G.N.R. direct air line between Noyes, N.D., and Winnipeg had been completed, and he had no doubt but that the line would be constructed this year. A contract had not yet been let, but it was not too late, as the line would be only 60 miles long.

The company's plans for entering Winnipeg have been filed with the Railway Department, but not with the city coun-

cil. The plans show that in order to come into the city by surface tracks it will be necessary to cross Leonard, Ellen, Isabel, Nena, Tecumseh, Brant, Xante and McPhillips Sts. The company proposes to put in subways at Nena and Isabel Sts., the two main avenues.

Brandon and Southwestern Ry.—The Dominion Parliament in 1890 incorporated a company with this title to construct a line from tp. 1, r. 23 or 24, w. prin. mer., to the C.P.R. near Brandon, and extensions of time for construction were granted in 1894, 1896 and 1898. In 1899 it was given power to construct an additional line from tp. 1 to the western boundary of Manitoba, and in 1900 to construct lines to Gladstone, Cameron and Winnipeg, with a number of branches. This latter act also granted an extension of time for construction, and a further extension was granted in 1903. The original mileage authorized was 70 miles, and no construction has taken place.

Kaslo and Lardo-Duncan Ry.—The Dominion Parliament in 1877 incorporated a company with this title to construct a railway of 150 miles from Kaslo to Lardo, thence to Upper Kootenay Lake, to the mouth of the Duncan River, to the headwaters of the Duncan River, with a branch from the mouth of Lardo River to Lardeau on Arrow Lake. The time for the construction of the railway was extended in 1900 and in 1905, but up to the present there has been no work done.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—Vancouver press reports state that the company will start construction shortly upon its proposed wharves on Burrard Inlet. A spur in connection with the work is under construction from the head of False Creek, and will be completed by June 30.

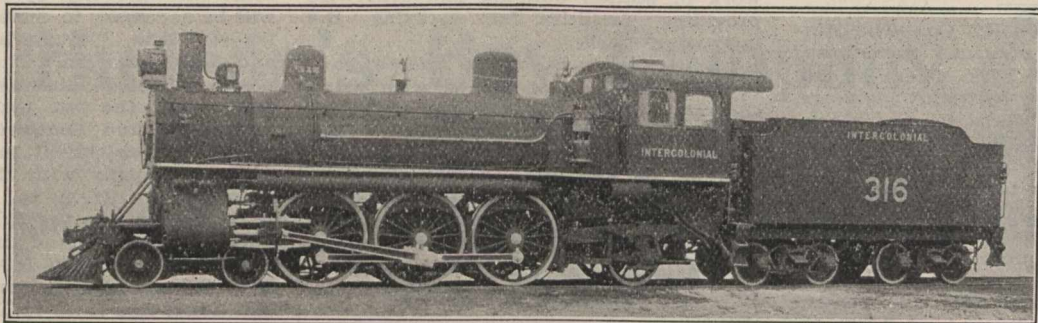
It is reported that 80% of the grading between Hedley and Princeton, B.C., on this line has been completed. Tracklaying from Keremeos will be started as soon as there is no danger from high water, but Chief Engineer Kennedy says he cannot state when the steel will be laid into Princeton. The grading has reached a point near the Similkameen bridge, where a temporary structure will be put up for construction purposes. Plans have been prepared for a tunnel and a roundhouse at Princeton, for terminal purposes during the construction of the Ashurta branch, and the main line up the Tulameen. A number of spurs and side tracks are also to be constructed in the vicinity for the handling of the output of the V.F.M. Co.'s colliery. (June, pg. 417.)

The Canadian Northern Ry. is reported to have purchased the Empire Hotel, Winnipeg, adjacent to the Fort Garry station, at present under construction.

The C.P.R. Winnipeg shop employes held a picnic June 29, when a special train conveyed the party to Selkirk, where a programme of sports was gone through.

The Montreal Locomotive Works has delivered two 4-wheel locomotives to the Quebec Contracting Co., details of which were given in our May issue; 14 locomotives to the C.P.R., already noted, and one small contractors' locomotive.

W. J. Christie has been nominated by the Canadian Northern Ry., to represent the company's interests in the investigation into the requests of its Winnipeg employes, for increases of pay, etc. J. G. O'Donoghue will represent the men.



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Railway Finance, Meetings, Etc.

Alberta Ry. and Irrigation Co.—Approximate net profits from all sources, exclusive of land sales, for Apr., \$10,089 against \$18,220 for Apr., 1908. Cumulative net profits, for ten months ended Apr. 30, \$342,641. Approximate railway traffic receipts for May, \$22,293, against \$15,294 for May, 1908. Aggregate railway traffic receipts for 11 months ended May 31, \$287,942.

Canada Southern Ry.—Following are the directors elected at the annual meeting at St. Thomas, Ont., June 2, of which Nicol Kingsmill and W. B. Kingsmill, Toronto, acted as Chairman and Secretary, respectively:—W. K. Vanderbilt, F. W. Vanderbilt, C. M. Depew, W. H. Newman, W. C. Brown, H. McK. Twombly, H. B. Ledyard, E. A. Wickes and J. E. Brown. The same directors were also elected for the Niagara River Bridge Co., and the Niagara Island Bridge Co.

Canadian Northern Ry.—An issue of \$3,000,000 C.N.R. Winnipeg terminal bonds has been purchased by the Dominion Securities Corporation, Toronto.

There has been deposited with the Secretary of State at Ottawa, a mortgage dated May 18, made between the C.N. Ry. Co., the National Trust Co., Toronto, the British Empire Trust Co., London, Eng., and the King represented by the Province of Saskatchewan, securing an issue of 30 year 4% guaranteed stock or bonds on specified lines of railway to be constructed in Saskatchewan.

Central Ontario Ry.—Following are the officers and directors for the current year:—President, C. E. Ritchie; Vice-President, J. J. Warren; General Manager, G. Collins; other directors, J. H. Moss, and C. B. Stockdale.

Dominion Atlantic Ry.—Gross earnings for Apr., \$85,250, against \$76,978 for Apr. 1908. Aggregate gross earnings for 4 months ended Apr. 30, \$286,200, against \$278,037 for same period 1908.

Grand Trunk Pacific Ry.—A deed of trust made by the company to the Royal Trust Co., as trustee, the G.T.R. being guarantor, securing \$10,000,000, 4% mortgage bonds, due 1919, was deposited with the Dominion Secretary of State, June 8.

G.T. Pacific Railway Branch Lines.—A London, Eng., press despatch, May 29, says the issue of £1,000,000 of bonds of the G.T. Pacific Branch Lines Co., has been oversubscribed.

Lake Superior Corporation.—The following officers were elected for the current year, at a meeting of the directors held in New York, June 11:—President, C. D. Warren, Toronto; Vice-President, J. T. Lea, Philadelphia, Pa.; second Vice-President, T. J. Drummond, Montreal; third Vice-President, J. F. Taylor.

London and South Eastern Ry.—The annual meeting was held at London, Ont., June 22, when the report for the year was submitted. Following are officers and directors for the current year: President, W. J. Reid; Vice President, T. H. Smallman; Secretary and Treasurer, J. W. Little; other directors, M. Stevely, J. Labatt, J. M. Dillon and M. Masuret.

Quebec and Lake St. John Ry.—Traffic earnings for May, \$45,483.43, against \$52,879.12 for May, 1908. Aggregate traffic earnings for 5 months ended May

31, \$226,030.42, against \$200,867.26 for same period, 1908. Mileage operated 285.6 miles, against 240.279 at same period, 1908.

Quebec Central Ry.—Gross earnings for Apr., \$80,344.40; expenses, \$56,784.77; net earnings, \$23,559.63, against \$100,762.01 gross earnings; \$65,907.47 expenses; \$34,854.54 net earnings for Apr., 1908. Aggregate gross earnings for 10 months ended Apr. 30, \$843,395.60; expenses, \$600,300.99; net earnings \$243,094.61, against \$908,119.87 gross earnings; \$635,135.44 expenses; \$272,984.43 net earnings for same period 1907-08.

St. Marys and Western Ontario Ry.—Application is being made to the Board of Railway Commissioners for sanction of a lease to the C.P.R., dated Feb. 25, 1909, of the lines and appurtenances of the St. M. and W.O. Ry.

Temiskaming and Northern Ontario Ry.—Railway receipts for Apr., \$161,869.50; expenses, \$72,014.36; net earnings, \$89,855.14; ore royalties, \$10,952.71. Approximate receipts for May, \$126,000; expenses, \$65,000; net earnings, \$61,000.

Toronto, Hamilton and Buffalo Ry.—Following are the directors for the current year:—Sir. Thos. G. Shaughnessy, W. C. Brown, W. H. Newman, H. B. Ledyard, J. N. Beckley, D. McNicoll, C. F. Cox, E. B. Osler, W. P. Torrance, W. L. Scott. They represent the New York Central and Hudson River Rd., and the C.P.R., which own the line jointly. The company does not issue a report.

July Birthdays.

Many happy returns of the day to—
J. H. Black, Superintendent Temiskaming and Northern Ontario Ry., North Bay, Ont., born, near Smith's Falls, Ont., July 8, 1874.

M. S. Blaiklock, Engineer Maintenance of Way, G.T.R., Montreal, born at Quebec, July 19, 1859.

D. E. Blair, Superintendent of Rolling Stock, Montreal St. Ry., Montreal, born at St. Thomas, Montmagny, Que., July 25, 1877.

D. C. Coleman, Superintendent Car Service C.P.R. Western Lines, Winnipeg, born at Carleton Place, Ont., July 9, 1879.

Geo. Collins, Director and Manager Central Ontario Ry., Trenton, Ont., born at Kingston, Ont., July 20, 1860.

D. D'E. Cooper, Canadian Freight Agent Lehigh Valley Rd., Toronto, born at Buffalo, N.Y., July 8, 1862.

John Corbett, General Foreign Freight Agent C.P.R., Montreal, born in Lanarkshire, Scotland, July 19, 1863.

E. J. Coyle, ex-Assistant General Passenger Agent C.P.R., Vancouver, B.C., born at Stayner, Ont., July 23, 1870.

S. E. Dewey, Travelling Freight Agent G.T.R., New York City, born at Beckenham, Kent, Eng., July 4, 1879.

J. F. Dolan, City Passenger and Ticket Agent Richelieu and Ontario Navigation Co., Montreal, born at Kingston, Ont., July 1, 1868.

F. C. Foy, Canadian Passenger Agent, New York Central Lines, Toronto, born there, July 5, 1881.

J. A. Goodearle, General Manager Turbine Steamship Co., Toronto, born at Kingston, Ont., July 4, 1867.

J. H. Gordon, Travelling Freight Agent, C.P.R., Winnipeg, born there, July 21, 1883.

W. R. Haldane, ex-General Freight

Agent C.P.R., Vancouver, B.C., born at Galashiels, Scotland, July 6, 1867.

J. H. Hanna, ex-Division Freight Agent G.T.R. at Hamilton, Ont., now at Calgary, Alta., born at London, Ont., July 27, 1867.

R. K. Harris, Chief Engineer, Orford Mountain Ry., Kingsbury, Que., born at Maitland, Ont., July 20, 1866.

A. D. Huff, Division Freight Agent G.T.R., Ottawa, born at Chatham, Ont., July 17, 1866.

C. A. Jaques, General Manager Merchants-Montreal Line Steamers, Montreal, born there July 15, 1849.

J. P. Kavanagh, Local Manager Ogdensburg Coal and Towing Co., Montreal, born at Plattsburg, N.Y., July 17, 1862.

E. W. Kolb, Assistant Superintendent Sleeping, Dining and Parlor Cars and News Service, C.P.R. Central Division, Winnipeg, born at Cincinnati, Ohio, July 22, 1878.

D. T. Lawrence, Manager National Despatch-Great Eastern Line, Boston, Mass., born at Marysville, Ohio, July 20, 1871.

T. J. Maguire, Accountant Quebec Central Ry., Sherbrooke, Que., born at Quebec, July 31, 1860.

R. Preston, Master Mechanic, Central Division, C.P.R., Winnipeg, born at Toronto, July 28, 1863.

J. E. Quick, General Baggage Agent G.T.R., Toronto, born at Richmond, Ontario Co., N.Y., July 10, 1851.

G. G. Ruel, Chief Solicitor Canadian Northern Ry., Toronto, born at St. John, N.B., July 5, 1866.

P. E. Ryan, Secretary National Transcontinental Railway Commission, Ottawa, born there July 26, 1876.

Geo. Stephen, General Freight Agent Canadian Northern Ry., Winnipeg, born at Montreal, July 5, 1876.

R. F. Struthers, Chief Inspector of Time Service, C.P.R., Winnipeg, born at Stratford, Ont., July 31, 1879.

T. Tait, Chairman Board Railway Commissioners for Victoria, Melbourne, Australia, born at Melbourne, Que., July 24, 1864.

H. T. Wilgress, Agent C.P.R. Pacific Steamship Service, Yokohama, Japan, born at Lachine, Que., July 29, 1857.

Cost of Stopping and Starting Trains.

Luther Starratt, locomotive engineer, Truro, N.S., writes as follows: "Please state what it costs to stop and start a two car passenger train, also passenger trains up to 10 cars and the same in freight service."

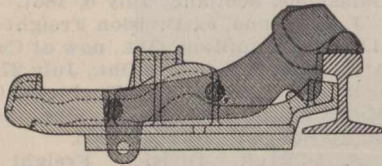
We would be pleased to receive answers to this enquiry from any of our readers.

Railway Lands Patented.—Letters patent covering lands in Manitoba, Saskatchewan, Alberta and British Columbia were issued during Mar., as follows:—

	Acres.
C.N.R.	45,933.96
G.T.P.R.	1,277.00
Manitoba Southwestern Col. Ry.	80.00

46,390.96

Manitoulin & North Shore Ry.—We were advised June 16 that no contract had been let for the first section of the extension of this railway. It was expected, however, that a contract would be let and construction proceed without delay. Surveys have been made for one line between Sudbury and Little Current, but it is expected that a revision survey will enable such alterations to be made as will reduce the cost of construction considerably.



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THROUGH TRAINS between BOSTON (via Boston & Maine R.R. and Cent. Vermont Ry.) MONTREAL, TORONTO and CHICAGO.

THROUGH TRAINS between NEW YORK, TORONTO and CHICAGO via Lehigh Valley R.R. and Niagara Falls. Dining, Cafe-Parlor, and Library Cars on Day Trains. Pullman Vestibuled Sleeping Cars on Night Trains.

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The "Railway Greyhound of Canada," the finest and fastest train in the Dominion, runs every day in the year between Montreal and Chicago.

MAINLY ABOUT PEOPLE

F. H. Phippen, General Counsel, C.N.R., has been appointed a K.C. for Ontario.

Chevalier J. Heney, an old-time contractor, died at Ottawa, June 8, aged 88 years.

Sir Wm., Lady, and Miss Van Horne, returned to Canada, June 11, from Great Britain.

Scott Griffin, Manager Canadian Northern Express and Telegraph Companies, is visiting England.

Wm. Whyte, Second Vice-President C.P.R., returned to Winnipeg June 7 from a short visit to Montreal.

Miss B. Brodeur, daughter of the Minister of Marine, was married at Montreal, June 16, to J. G. de Lorimier.

Lord Strathcona is reported to have offered an ornamental fountain to Ottawa, to be erected in Strathcona Park.

F. Jno. Bell has resigned as director and Secretary-Treasurer of the Canadian Crocker-Wheeler Co., Ltd., Montreal.

Wm. Whyte, Second Vice-President C.P.R., Winnipeg, has been re-elected a director of the Imperial Bank of Canada.

Hon. L. P. Brodeur, Minister of Marine, sailed for England, June 25, to attend the Imperial Conference on Naval Defence.

Sir Robt. W. Perks, head of the Montreal and Georgian Bay Canal Co., addressed the Empire Club, Toronto, recently.

R. B. Angus, director C.P.R., and Miss Angus returned to Montreal from Great Britain, on the s.s. Empress of Ireland, June 11.

C. S. Gzowski, of Macdonell, Gzowski & Co., railway contractors, Vancouver, B.C., was married in Toronto, June 5, to Mrs. Patterson.

Col. H. H. McLean, M.P., Vice President St. John, N.B., Ry., sailed on the C.P.R. s.s. Empress of Britain, June 18, for England.

J. F. Lash, youngest son of Z. A. Lash, K.C., Director C.N.R., was married at St. James' Cathedral, Toronto, June 5, to Miss G. C. Baldwin.

W. Whyte, second Vice-President C.P.R., has been elected first W.M. of Asiniboine Lodge of Freemasons, newly instituted in Winnipeg.

A. D. MacTier, assistant to Vice-President, C.P.R., with Mrs. MacTier and family, sailed from Montreal, June 18, on a visit to Great Britain.

Lady Shaughnessy and family left Montreal towards the end of June, to spend a few months at their country home, St. Andrews, N.B.

M. S. Blaiklock, Engineer Maintenance of Way, G.T.R., Montreal, was elected a member of the Canadian Society of Civil Engineers, June 12.

M. J. Butler, Deputy Minister of Railways and Canals, and Chairman Government Railways Managing Board, has been made a Companion of the Order of St. Michael and St. George.

Mrs. D. McNicoll, wife of the Vice President C.P.R., was a passenger on the C.P.R. s.s. Empress of Britain, which sailed from Quebec, June 18.

D. McNicoll, Vice President and General Manager C.P.R., returned to Montreal June 4, after an inspection trip over the company's Ontario lines.

G. E. Smyth, Assistant General Man-

ager Great Southern and Western Ry., Ireland, and Mrs. Smyth visited relatives in Montreal and Toronto during June.

G. J. Bury, General Manager, and C. E. E. Ussher, Assistant Passenger Traffic Manager, C.P.R. Western lines, were in Vancouver, B.C., during June.

Sir Wm. C. Van Horne and Sir H. Montagu Allan are Canadian Directors of the International Banking Corporation which is opening business in Japan.

Lady Reid and Miss Reid have given an observation pavilion to the Alexandra Hospital for Contagious Diseases, Montreal, in memory of the late Sir Robert G. Reid.

R. Kerr, Passenger Traffic Manager, C.P.R., returned to Montreal June 5 from Chicago, where he had been attending the meetings of the Western Passenger Association.

Earl Fitzhugh, only son of E. H. Fitzhugh, Third Vice-President G.T.R., died at Saranac Lake, June 2, where he had been staying for some time on account of his health.

A. M. Grantham, Purchasing Agent Toronto Ry., has recovered from an attack of ptomaine poisoning, which developed while on a fishing expedition on the Nipigon River.

H. E. Curry, resident engineer on construction, National Transcontinental Ry., on section near Lake Nipigon, Ont., was drowned there recently. He formerly resided at Kingston, Ont.

W. R. Haldane, who relinquished his duties as General Freight Agent, C.P.R. Pacific Division, on account of ill health, is at present undergoing treatment at a sanatorium at Alma, Mich.

G. H. Merrick, freight clerk, C.P.R., Winnipeg, was presented with a travelling bag, June 4, on his removal to Brandon, Man., where he has been appointed City Ticket Agent, C.P.R.

Hon. R. W. Scott, formerly Secretary of State, and father of D'Arcy Scott, Assistant Chief Railway Commissioner, has received the honor of knighthood on the occasion of the King's official birthday.

In our list of birthdays of transportation men for June in our last issue, Allan Purvis, Superintendent, District 3, Pacific Division, C.P.R., Nelson, B.C., was stated to have been born in 1864, instead of 1878.

Hon. G. P. Graham, Minister of Railways and Canals, will sail for Europe, July 2. He will be absent about 2 months, and during that time intends to study transportation problems on the Continent.

In announcing the death of N. L. Lusher, steamship and passenger ticket agent, and Canadian Passenger Agent, L. and N.W.R. Eng., at Montreal, in our June issue, the name was inadvertently spelt Luther.

T. Grimes, General Yardmaster, C.P.R. Toronto Terminals, West Toronto, was sentenced to three years in the penitentiary, June 4, for defrauding the C.P.R. of various sums of money by means of padded pay rolls.

F. W. Morse, formerly Second Vice-President and General Manager, G.T.P.R., who sailed from New York for Europe, Jan. 21, after his resignation from the G.T.P.R. management, returned to Canada recently.

The list of subscriptions to the South African Memorial Association includes: Z. A. Lash, K.C., director C.N.R., \$1,000; E. B. Osler, M.P., director C.P.R., \$500; Wm. Mackenzie, President C.N.R., \$500; and Æmilius Jarvis & Co., \$200.

F. W. Peters, Assistant to Second Vice President, and W. B. Lanigan, Assistant Freight Traffic Manager, Western Lines, C.P.R., Winnipeg, attended meetings of the Associated Boards of Trade at Saskatoon, Sask., during June.

H. Swinford, who was recently appointed General Agent, Northern Pacific Ry., at Vancouver, B.C., was the chief guest at a dinner given by the Winnipeg Garrison Officers recently, on his leaving Winnipeg, where he occupied a similar position.

Of the total of over \$18,000,000 paid out by the life assurance companies in Canada during 1908, among the largest policies paid were the following: John Torrance, ship broker and agent, Montreal, \$49,259; and J. I. Tarte, formerly Minister of Public Works, \$27,000.

B. Robb, son of W. D. Robb, Superintendent Motive Power, G.T.R., along with a number of engineering students of McGill and other universities, is taking a summer course of practical mechanics at the G.T.R. locomotive repair shops, Stratford, Ont.

Jas. Ross, former C.P.R. contractor, now President of the Dominion Coal Co., and associated with other industrial enterprises, who some years ago presented the Ross Memorial Hospital to Lindsay, Ont., proposes to add a nurses' home to his benefaction.

R. W. and Mrs. Long, of London, Ont., who celebrated the fiftieth anniversary of their wedding recently, are the parents of R. W. Long, G.T.R. Division Freight Agent at Hamilton. Mr. Long was for many years before his retirement in the employ of the G.T.R.

A. Price, General Superintendent, and R. J. Lydiatt, Trainmaster, District 3, Western Division, C.P.R., returned to Calgary, Alta., June 4, from St. Louis, Mo., where they had been attending the Y.M.C.A. Railway Department's International Conference.

A London, Eng., paper, dated May 29, states that D. D. Mann, Vice-President C.N.R., was among the arrivals in England by the s.s. Laurentic. This is incorrect; Mr. Mann was in Toronto at the time, and though his passage was booked on the Laurentic, he did not sail.

P. H. Roy, Secretary-Treasurer Eastern Valley Ry. Co., ex-President of the Banque de St. Jean, Que., and a former Speaker of the Quebec Legislature, was sentenced to 5 years in the penitentiary recently for making false returns in connection with the bank which failed some time ago.

Lawford Grant, Manager for Canada of the British Insulated & Helsby Cables, Limited, has been appointed Honorary Secretary-Treasurer for Canada for the Institution of Electrical Engineers of London, Eng., in succession to Prof. R. B. Owens, late of McGill University, Montreal.

W. S. Cookson, Assistant General Passenger Agent, G.T.R., Chicago, Ill., has been elected Chairman Michigan Passenger Association. This position was hitherto held by G. W. Vaux, then Assistant

(Continued on pg. 511.)

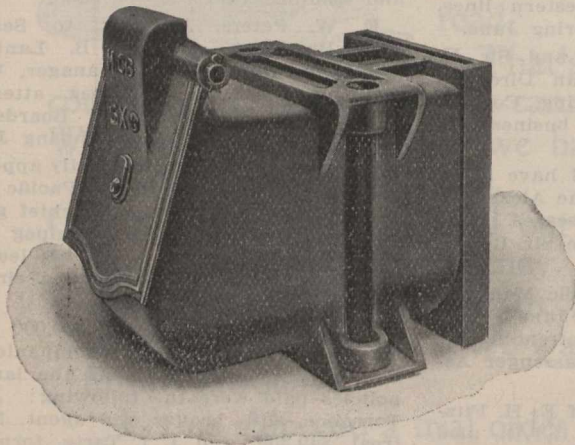
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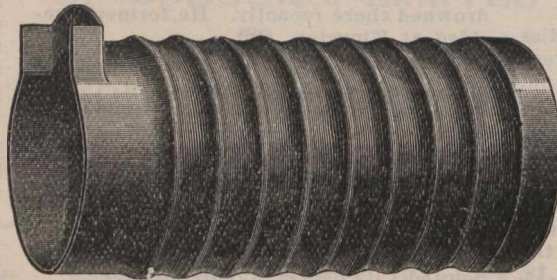
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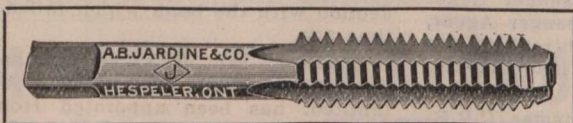
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TORONTO, CANADA, JULY, 1909.

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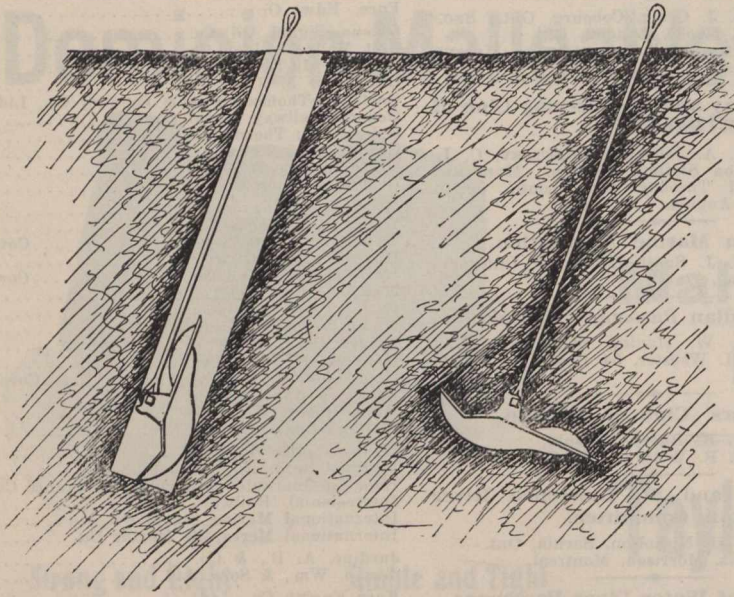
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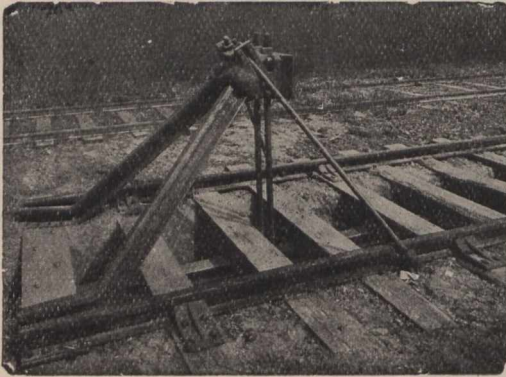


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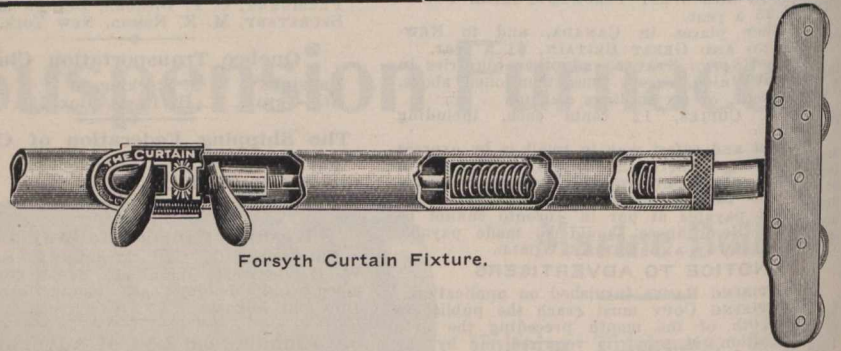
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General Passenger Agent, G.T.R., Chicago, Ill., now General Passenger Agent, G.T.R., Montreal.

E. A. Evans, General Manager, Quebec Ry. Light and Power Co., was elected Second Vice President, and A. A. Dion, General Superintendent Ottawa Electric Co., was appointed a member of the managing committee of the Canadian Electric Association, for the current year, at its annual meeting, June 17.

W. R. Allan, of Allan, Lang, Killam & McKay, general insurance agents, Winnipeg, and who is also Canadian Northwest Agent for the Allan Line, and is a son of the late Andrew Allan, of Montreal, was married there, June 1, to Mrs. Killam, widow of the late A. C. Killam, K.C., Chief Railway Commissioner for Canada. Mr. and Mrs. Allan are now in Europe.

Jas. Dunsmuir, principal owner of the Wellington Colliery Co., with its railways on Vancouver Island, and its steamship lines trading along the Pacific Coast, and formerly principal owner of the Esquimalt and Nanaimo Ry., has asked the Dominion Government to relieve him of his duties as Lieut.-Governor of British Columbia, a position which he has held since 1905.

L. B. Merriam, who recently resigned his position as Division Engineer on the G. T. Pacific Ry. at Winnipeg, has opened an office in the Builders' Exchange Building there, and will pay special attention to municipal engineering, as well as undertaking railway and irrigation works. He is a member of the Canadian Society of Civil Engineers and of the Western Society of Engineers.

E. W. Kolb, who has been appointed Assistant Superintendent Sleeping, Dining and Parlor Cars and News Service, C.P.R. Central Division, Winnipeg, was born at Cincinnati, Ohio, July 22, 1878, and entered railway service at the age of 17, with the Pullman Co., at St. Augustine, Fla., and remained with that company ever since, chiefly in the southern winter service. During the past three years he was, during the summer months, in C.P.R. service. When he left the Pullman Co., he was Service Inspector of Dining Cars.

O. V. Dotts, who has been appointed Superintendent Sleeping, Dining and Parlor Cars and News Service, C.P.R. Central Division, Winnipeg, was born at Philadelphia, Pa., April 3, 1875, and entered the Pennsylvania Rd. service in 1890, in the passenger department, remaining with that company until his present appointment, principally in the Dining Car and Restaurant Department. When he left the P. Rd. service he was Assistant to the Assistant Superintendent Dining Cars and Restaurants, which position he had held for 4 years.

V. Kistler, who has been appointed District Freight and Passenger Agent, G.N.R., Grand Forks, B.C., was born at Clyde, Ohio, Sept. 4, 1881, and entered railway service July 1, 1901, since when he has been, to Sept. 1, 1901, stenographer Freight Claim Department, Lake Shore and Michigan Southern Ry.; Sept. 1, 1901, to June 1, 1902, stenographer Assistant Traffic Manager's office, Erie Rd.; June 1, 1902, to Jan. 1, 1906, stenographer and clerk General Freight office, G.N.R.; Jan. 1, 1906, to May 15, 1909, Travelling Freight Agent G.N.R.

H. R. Charlton, G.T.R. General Advertising Agent, was the recipient recently of an interesting souvenir of the early days of railways in Canada. It consisted of an annual pass issued in 1863 by the Great Western Ry., now part of the G.T.R., signed by T. Swinyard, as General Manager, to H. P. Dwight, then Superintendent Montreal Telegraph Co. It is interesting to note that both Mr. Swinyard and Mr. Dwight are over 80 years of age, the latter now being President G.N.W. Telegraph Co., and the former having retired from active business several years ago.

C. H. Temple, who has been appointed Assistant Superintendent of Motive Power, C.P.R., Winnipeg, was born at Montreal in 1862, and entered railway service in 1874, since when he has been, to 1881, office boy and apprentice, G.T.R., Belleville, Ont.; 1881 to 1886, mechanic and mechanical clerk in the Mechanical Superintendent's office, G.T.R., Montreal; in 1886 he was appointed foreman, C.P.R. shops at Yale, B.C., and subsequently, to 1902, he acted as foreman at Kamloops, Vancouver, North Bend and Revelstoke, B.C. In 1902 he was appointed Master Mechanic, C.P.R., Pacific Division, and transferred to a similar position, C.P.R. Central Division, Winnipeg, Jan., 1905.

R. E. Larmour, who has been appointed General Freight Agent, Central Division, Winnipeg, was born at Brantford, Ont., Sept. 26, 1868, and entered railway service Aug., 1884, at Stratford, Ont., as office boy in the office of his father, who was then Division Superintendent, G.T.R., remaining there until 1886; since when his record has been: 1886 to 1888, clerk in office of General Manager, Great Eastern Fast Freight Line, Detroit, Mich.; 1888 to 1890, Accountant to General Superintendent, Chicago and Grand Trunk Rd., Detroit, Mich.; 1890 to 1892, G.T.R. Local Freight Department, Detroit, Mich.; 1892 to 1898, Transfer Clerk, Through Freight from Wabash Rd. to G.T.R., at Windsor, Ont.; 1898 to Nov., 1899, Chief Clerk Freight Office, C.P.R., at Fort William, Ont.; Nov. 1899, to May, 1900, Acting Agent, Fort William; May, 1900, to Aug., 1900, Chief Clerk, Superintendent's Office Fort William; Aug., 1900, to Feb., 1903, Agent, Port Arthur, Ont.; Feb., 1903, to Feb., 1905, Freight Claims Agent, Pacific Division, Vancouver, B.C.; Feb., 1905, to Feb., 1906, Freight Claims Agent, Central and Western Divisions, Winnipeg; Feb. to Aug., 1906, City Freight Agent, Winnipeg; Aug., 1906, to June, 1908, Freight Agent, Fort William, Ont.; June to July, 1908, General Agent, Fort William, Ont.; July, 1908, to June, 1909, General Freight Agent, Kootenay and Boundary District, Nelson, B.C.; from 1898, all service with C.P.R.

Fair Visitor—"Why are all vessels spoken of as 'she'?" It's because they glide so gracefully, isn't it?"

Mariner—"No, miss. It's because their riggin' costs so much."

A New Englander was travelling in Texas on a new railway.

"Hello, neighbor!" he called out to a fellow traveller. "How about the southbound train? How often does it run?"

"She's a try-weekly," said the Texan. "She runs down one week and tries mighty hard to get back the next."

American Railway Master Mechanics Association.

The President for the year 1908-09, H. H. Vaughan, Assistant to the Vice President C.P.R., in opening the 42nd annual convention at Atlantic City, N.J., June 16, gave a comprehensive historical sketch of the organization and work of the Association, and the many investigations and tests undertaken by it, which have been of considerable value to engineering in general, and railway engineering in particular. The history of the Association was shown to be the history of the development of the locomotive on this continent, and the services of the Association were claimed to be unique, as in other countries, similar organizations are non-existent, development being left to the individual. In dealing with the future of the Association, he pointed out the changes in motive power which are impending. The steam locomotive is faced by the electric locomotive, and while the articulated locomotive has increased the field of steam propulsion, the results and experiences with electricity as a motive power should be at the disposal of the members of the Association, so that they may be adequately equipped when the time arrives for making the change. He said that members have paid attention to the technical side of motive power rather than to the business side, and suggested that more attention should be given to the commercial side of the business in which they were engaged, and recommended properly prepared performance sheets as having a bearing on the commercial and financial questions under their charge. The locomotive repair shops of the country spend annually about \$80,000,000, and there is no reason why properly trained observers should not prepare information about one operation after another, which, with a systematic exchange of information would tend to economy. He also advocated closer relations with railway clubs, as the latter are more to be depended on as sources of information than are circular letters, and many of the minor questions at present coming before the convention could with advantage be discussed in the clubs. A union with the Master Car Builders' Association was strongly favored, which he considered would obviate the giving up of two weeks to these annual meetings.

Subsequently a committee was appointed to report on the recommendations contained in the President's address.

The report of the committee on motor cars covering the development of motor cars on steam railways led to a discussion, in the course of which H. H. Vaughan, declared against the steam motor car as an anomalous arrangement. He considered that unless there is a future for the gasoline engine, there is nothing in motor cars for the railways at present.

Among other subjects discussed were, the grading of lumber for railway use; the revision of standards; the standard decimal gauge; safety appliances for locomotives; bank versus level firing; superheating; tender truck types, etc.

Michigan Central Rd.—We are advised that the company intends starting the erection of a 20-stall round house and a passenger station at Windsor, Ont., early in July. (June, pg. 415.)

The Northern Navigation Co.

OF ONTARIO, Limited

GRAND TRUNK LINE

"A FRESH WATER SEA VOYAGE"---1500 Miles up the Great Lakes.

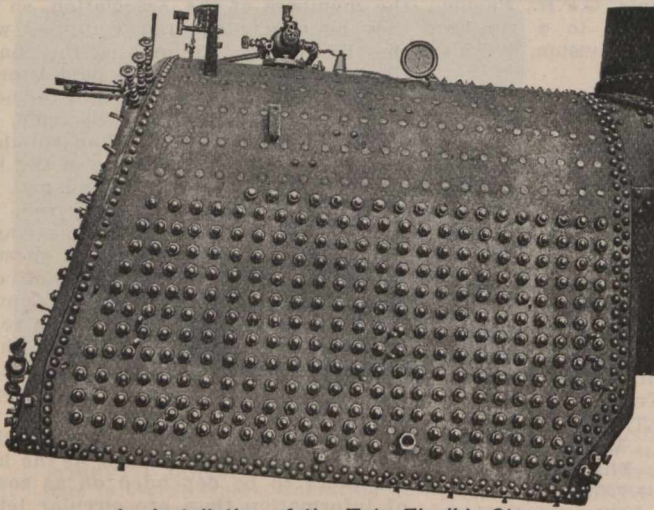
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Also from Penetang and Midland for Parry Sound and Point Au Baril after June 15th.

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Transportation Appointments.

The information under this head, which is almost entirely gathered from official sources, is compiled with the greatest care, so as to ensure absolute accuracy. Anyone who may notice any error in our announcements will confer a favor by advising us.

Canadian Government Railways.—F. P. Brady, Member Canadian Government Railways Board of Management, has also been appointed General Superintendent. Office, Moncton, N.B.

Canadian Northern Ry.—O. C. Bishop, heretofore dining car conductor, has been appointed Inspector Sleeping and Dining Car Service, vice J. E. Durham resigned. Office, Winnipeg.

E. H. Williams is reported to have been appointed Locomotive Foreman at Kipling, Sask.

Canadian Pacific Ry.—F. L. Hutchinson has been appointed Manager Chateau Frontenac Hotel, Quebec, vice C. L. DeRouville transferred to Hotel Vancouver, Vancouver, B.C.

A. Dixon, General Foreman, West Toronto shops, will in future have charge of all matters which came under the jurisdiction of R. Preston, Superintendent, who has been promoted.

Jno. Morton has been appointed night locomotive foreman at Kenora, Ont., vice A. J. Gibbons resigned.

H. W. Wills, manager of the Royal Alexandra Hotel, Winnipeg, has also been appointed Superintendent of Western hotels, with jurisdiction over hotels west of Lake Superior. Office, Winnipeg.

R. E. Larmour, heretofore General Freight Agent Kootenay and Boundary district, Nelson, B.C., has been appointed General Freight Agent, Central Division, vice W. C. Bowles transferred. Office, Winnipeg.

C. H. Temple, heretofore Master Mechanic, Central division, Winnipeg, has been appointed Assistant Superintendent of Motive Power, Western lines. Office, Winnipeg.

R. Preston, heretofore Superintendent West Toronto shops, has been appointed Master Mechanic, Central Division, vice C. H. Temple promoted. Office, Winnipeg.

O. V. Dotts, heretofore Assistant Superintendent Sleeping, Dining and Parlor Cars and News Service, has been appointed Superintendent same service, Central Division, vice C. C. Barclay resigned. Office, Winnipeg.

E. W. Kolb has been appointed Assistant Superintendent Sleeping, Dining and Parlor Cars and News Service, Central Division, vice O. V. Dotts promoted. Office, Winnipeg.

G. B. Williams, heretofore Inspector Refrigerator Service, Western lines, Winnipeg, has been appointed Car Service Agent, Central Division, vice F. T. Anderson, car distributor, transferred. Office, Winnipeg.

R. A. Gamble has been appointed Inspector Refrigerator Service, Western lines, vice G. B. Williams transferred. Office, Winnipeg.

R. H. Rogers, heretofore Assistant General Baggage Master, has been appointed General Baggage Master, Winnimaster, vice W. R. White appointed station master, Winnipeg.

J. Moore, heretofore District Master Mechanic, district 1, Pacific division, Revelstoke, B.C., has been appointed Foreman of repair track, Winnipeg.

J. H. Scott, heretofore Chief Dispatcher, District 4, Western Division,

Cranbrook, B.C., has been appointed Chief Dispatcher, District 4, Central Division, Souris, Man., vice J. E. Ryan transferred.

G. H. Merrick, of the General Passenger Agent's office, Winnipeg, has been appointed city ticket agent at Brandon, Man.

R. F. Chapman, heretofore Chief Dispatcher at Moose Jaw, Sask., has been appointed Chief Dispatcher at Saskatoon, Sask.

N. S. Fraser, heretofore Chief Dispatcher at Revelstoke, B.C., has been appointed Chief Dispatcher at Moose Jaw, Sask., vice R. F. Chapman transferred.

C. D. Andrews has been appointed chageman at Lanigan, Sask., vice G. S. Sellars transferred.

J. A. Jenson, heretofore car foreman at Stettler, Alta., has been appointed car foreman at Swift Current, Sask., vice D. Smyth transferred.

F. T. Anderson, heretofore Car Distributor, Winnipeg, has been appointed Car Service Agent, Western Division, vice A. J. MacMillan who has resigned. Office, Calgary, Alta.

D. Smyth, heretofore car foreman at Swift Current, Sask., has been appointed car foreman at Stettler, Alta., vice J. A. Jenson transferred.

F. W. Bergman, has been appointed Manager Banff Springs Hotel, Banff, Alta.

R. W. Drew, District and Travelling Freight Agent, Saskatoon, Sask., has been appointed acting General Freight Agent, Kootenay and Boundary District, vice R. E. Larmour, transferred. Office, Nelson, B.C.

J. E. Ryan, heretofore Chief Dispatcher, District 4, Central Division, Souris, Man., has been appointed Chief Dispatcher, District 4, Western Division, Cranbrook, B.C., vice J. H. Scott transferred.

E. E. Austin, heretofore District Master Mechanic, District 3, Pacific Division, Nelson, B.C., has been appointed District Master Mechanic, Pacific Division, Revelstoke, B.C., vice J. Moore, transferred.

C. A. Cotterell, heretofore Chief Dispatcher at Saskatoon, Sask., has been appointed Chief Dispatcher at Revelstoke, B.C.

W. C. Bowles, heretofore General Freight Agent, Central division, has been appointed General Freight Agent, Pacific division, vice W. R. Haldane, who has relinquished his duties on account of ill health. Office, Vancouver, B.C.

T. L. Roberts, heretofore General Fuel and Locomotive Inspector, Winnipeg, has been appointed acting Master Mechanic, Pacific division, during the absence of S. Phipps on leave.

C. L. DeRouville, heretofore Manager Chateau Frontenac Hotel, Quebec, has been appointed Manager Vancouver Hotel, Vancouver, B.C.

Chicago, Milwaukee and St. Paul Ry.—T. Donald, formerly Travelling Freight Agent at Minneapolis, Minn., has been appointed Commercial Agent at Winnipeg, vice J. I. Gillick transferred to Aberdeen, S.D., on account of ill health.

Commercial Express Line, Grand Trunk Despatch, Lackawanna-Grand Trunk Line, Milwaukee and Michigan Line, Reading Despatch. A joint circular signed by the General Traffic Manager, Erie Rd., and Chairman, Commercial Express Line; the Vice-President Delaware, Lackawanna and Western Rd.; the Chairman, Lackawanna-Grand Trunk Line; the Freight Traffic Manager, New York Central and West Shore Rds., and Chairman, Grand Trunk Despatch and Milwaukee & Michigan Lines; the Freight Traffic Manager Lehigh Valley Rd., and Chairman Reading Despatch, and the Freight Traffic Manager, G.T.R., states that the office of Manager of the Commercial Express Line, Grand Trunk Despatch, Lackawanna-Grand Trunk Line, Milwaukee and Michigan Line and Reading Despatch, has been discontinued in each case. The operation of these fast freight lines for the routing and handling of through freight traffic eastbound and westbound, will be continued under the direct supervision of the railways interested. Correspondence relating to the accounting affairs of these lines should, until otherwise advised, be addressed to I. W. Gantt, who has been appointed Treasurer pro tem., with office, Brisbane Building, 403 Main Street, Buffalo, N.Y.

Grand Trunk Pacific Ry.—R. W. Jones, heretofore Division Engineer, Edmonton, Alta., is said to be about to be appointed District Engineer, St. John, N.B., vice G. C. Dunn transferred.

D. Smith, heretofore shop foreman at Rivers, Man., has been appointed Locomotive Foreman at West Fort William, Ont., in charge of the locomotive and car works there, vice W. P. Agnew, who has left the company's service.

B. B. Kelliher, Chief Engineer; J. G. LeGrand, Bridge Engineer; K. J. C. Zinck, Assistant Engineer, and 11 other engineers, have been transferred from Montreal to Winnipeg.

G. C. Dunn, heretofore, District Engineer, St. John, N.B., has been appointed Divisional Engineer, east of Edmonton, Alta., with headquarters at Winnipeg, vice L. B. Merriam resigned.

C. W. Johnston, heretofore Travelling Passenger Agent, G.T.R., Montreal, has been appointed chief clerk to General Passenger Agent, G.T.P.R., at Winnipeg.

R. C. W. Lett, has been appointed Travelling Passenger and Colonization Agent. Office, Winnipeg.

G. W. Robb, heretofore Assistant Master Mechanic, has been appointed Master Mechanic, in charge of Motive Power, Cars and Shops, vice W. Gell resigned on account of ill health. Office, Rivers, Man.

W. E. Mann, heretofore Branch Lines Engineer, Winnipeg, has been appointed Division Engineer, Edmonton, Alta., vice R. W. Jones.

Grand Trunk Ry.—By agreement with its eastern connecting railways, the G.T.R. has assumed the supervision of the solicitation in the West of the traffic of the following fast freight lines:—Commercial Express Line, via Erie Rd.; Grand Trunk Despatch, via West Shore Rd.; Milwaukee and Michigan Line, via N.Y.C. & H.R. Rd.; Lackawanna-Grand Trunk Line, via Delaware, Lackawanna and Western Rd.; Reading Despatch, via Lehigh Valley Rd.; National Despatch-Great Eastern Line, via Central Vermont Ry., Boston and Maine Rd., and Maine S.S. Co.

I. W. Gantt, heretofore Division Freight Agent, Toledo, Ohio, has been appointed Assistant General Freight Agent, office Buffalo, N.Y. He will have charge of traffic from connecting railways at the Niagara frontier; from connecting railways when from points south of the Michigan-Indiana State line destined to points east of the Detroit and

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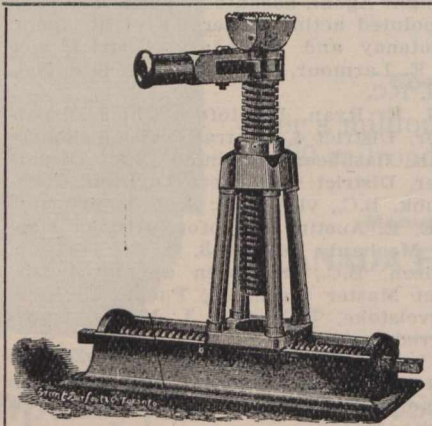
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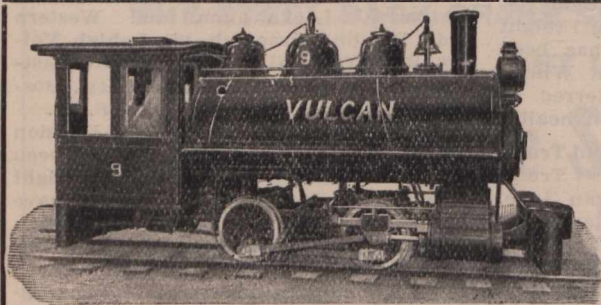
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10 New Coaches per month

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St. Clair frontiers, when routed via G.T.R. junctions in Michigan, including Detroit; and will also have supervision over commercial agencies at Buffalo, N.Y., Toledo, and Cincinnati O., Pittsburg and Philadelphia, Pa. The office of Division Freight Agent at Toledo, O., has been abolished.

H. C. Martin, heretofore Chief of Tariff Bureau, Chicago, Ill., has been appointed Second Assistant General Freight Agent, Chicago, Ill., in charge of tariffs and percentage divisions of G.T.R. lines west of Detroit and St. Clair Rivers. He will report to Assistant General Freight Agent R. L. Burnap, Chicago. The title of Chief of Tariff Bureau is abolished.

The following agents have been appointed:—St. Paul, Que., J. W. Atkinson; Lindsay, Ont., A. MacNabb; Woodville, Ont., T. E. Lord; Whitby, Ont., D. F. Milloy; Brooklin, Ont., W. Brown; Mariposa, Ont., S. McPhaden; Craigvale, Ont., L. G. Armstrong; Allandale, Ont., J. E. Bilingsley; Barrie, Ont., J. E. Billingsley; Novar, Ont., W. W. Langford; Powassan, Ont., F. A. Tebo; Dorchester, Ont., N. G. Case; Clandeboye, G. M. Case; Greenfield, Ont., T. L. Vernier; Rockland, Ont., F. O. Parent (temporary); Algonquin Park, Ont., G. A. Thurston; Rainy Lake, Ont., R. E. Reid.

Great Northern Ry.—V. Kistler has been appointed Division Freight and Passenger Agent, Grand Forks, B.C., vice P. H. Burnham, appointed Assistant General Freight Agent, St. Paul, Minn.

Inland Navigation Co.—W. J. King, heretofore General Agent, Toronto, has been appointed General Agent at Montreal, vice H. W. Cowan.

H. J. Truscott has been appointed acting General Agent, Toronto.

Michigan Central Rd.—A. A. Ingram has been appointed Solicitor at St. Thomas, Ont., vice W. B. Kingsmill, resigned.

The Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. having leased the Wisconsin Central Ry., is now operating the same as a part of its system under the name of the Chicago division. All persons holding positions on the Wisconsin Central Ry. are subject to the authority and control of the M.S.P. & S.S.M.R. Co.'s general officers, and will be governed accordingly in the transaction of business, heretofore managed by similar officers of the W.C. Ry.

C. W. Gardner, heretofore Auditor, has been appointed Comptroller. Office, Minneapolis, Minn.

R. Toombs has been appointed Auditor, R. Kirkwood Assistant Auditor, and A. A. Bell Auditor Traffic Accounts. Their jurisdiction will cover the entire system, including Chicago division.

P. Swenson's jurisdiction as Superintendent of Bridges and Buildings is extended over Chicago Division. All employees of that department will report to him, at Minneapolis.

New York, New Haven and Hartford Rd.—J. F. Stevens, Vice President, has resigned to accept service elsewhere. It is reported that he has been appointed to a position in the Great Northern Ry. in connection with its operations in the Canadian West.

Northern Pacific Ry.—W. E. Belcher, formerly General Agent Freight Department, Detroit, Mich., who was mentioned in our last issue as having been

assigned to other duties, has been appointed Travelling Freight Representative in the Detroit territory, with headquarters at Detroit, Mich.

Wisconsin Central Ry.—H. N. Paist has been appointed Assistant Treasurer. Office, Minneapolis, Minn.

See also Minneapolis, St. Paul and Sault Ste. Marie Ry.

Railway Rolling Stock Notes.

The I.C.R., between May 17 and June 15, received 3 second class sleeping cars from the Silliker Car Co., Halifax, N.S., and 2 baggage cars from the Preston Car and Coach Co., Preston, Ont.

Between May 13 and June 14, the Canadian Locomotive Co., Kingston, Ont., delivered 6 mogul locomotives to the G.T.P.R., and one 6-wheel saddle-tank locomotive to the Hamilton Steel and Iron Co., Hamilton, Ont.

The Canadian Northern Ry., between May 15 and June 15, received the following additions to rolling stock:—25 stock cars and 100 flat cars from the Crossen Car Mfg. Co., Cobourg, Ont.; 290 box cars from the Canada Car Co., Montreal, and 305 box cars from Rhodes, Curry & Co., Amherst, N.S.

The G.T.R., since Jan. 25, has ordered 6 first class cars and 4 parlor buffet cars to be built at its Montreal shops; and has received 5 baggage cars and 25 cinder cars. Of the 25 eight-wheel locomotives ordered from the Montreal Locomotive Works, none had been delivered up to the middle of June, and of the 25 moguls ordered from the Canadian Locomotive Co., Kingston, Ont., 12 have been delivered.

The C.P.R., between May 12 and June 13, ordered the following rolling stock: 1 hump switching locomotive, 1 mail and express car, 63 box cars, 2 refrigerator cars, 7 stock cars, at its Angus shops; 2 vans at its Farnham shops; 15 mixed traffic locomotives, from the Montreal Locomotive Works; and one steel coal car from the Dominion Car and Foundry Co., Montreal.

The May report of the G. T. Pacific Ry. shows that it owns the following rolling stock:—86 locomotives, 18 first class coaches, 10 second class coaches, 6 mail and express cars, 12 baggage cars, 18 combination cars, 6 sleeping cars, 3 official cars, 9,000 box cars, 1,278 flat cars, 45 cabooses, 700 Hart convertible ballast cars, 376 construction cars, 5 gondola cars, 11 steam shovels, 2 wrecking cranes, 2 coaling cranes, 1 pile driver, and 1 ditcher.

The C.P.R., between May 12 and June 13, received the following additions to rolling stock: 5 freight locomotives, 8 dining cars, 16 baggage and express cars, 4 mail and express cars, 1 tourist car, 6 second class cars, 4 observation library cars, 296 stock cars, 17 ballast cars, 1 sample coal car, from its Angus shops; 8 vans from its Farnham shops; 131 steel coal cars from the Dominion Car and Foundry Co., Montreal; 2 69-ton cranes, 1 75-ton crane, 3 ballast unloaders, 4 spreaders and 9 ballast plows, from the U.S.

The C.P.R., has added to its equipment 22 observation cars, for use on its transcontinental line. The observation room is 28 ft. long and provided with large windows on each side and the rear, the

rear windows reaching to within 12 ins. of the floor, so that passengers have an unbroken view of the passing scenery. The walls are finished in padouk, a wood similar to Spanish mahogany but of a deeper red. The furnishings include 18 large armchairs of various designs of the same wood, upholstered in morocco. Some of the chairs are fitted with a small tray rest, pivoted to the arm for light refreshments, prepared in a buffet situated in the car. Each car is also provided with a selected assortment of books in a cabinet placed at the end of the observation room, at the left of which is an escritoire provided with stationery, etc. In the centre of the car is a large smoking room, similar in design, but finished in English oak, and in front of this are situated a state room and drawing room, each provided with toilet accommodations. The rear ends of the cars have spacious platforms enclosed by massive brass railing and gates, and deck chairs are provided and about 15 passengers accommodated.

The Montreal Locomotive Works is building two 10-wheel locomotives for the New Canadian Co., of which the following are chief particulars:—

Weight in working order	108,500 lbs.
Weight on drivers	83,000 lbs.
Weight on engine truck	25,500 lbs.
Wheel base, driving	10 ft. 6 in.
Wheel base, engine	29 ft. 8 in.
Wheel base, engine and tender	49 ft. 0 in.
Cylinders	18 in. by 24 in.
Driving wheels, diameter	51 in.
Boiler, type	Extended wagon top.
Boiler, diameter	54 in.
Boiler, pressure	160 lbs.
Firebox	90 3/8-16 in. by 33 7/8 in.
Tubes, no. and diameter	198, 2 in.
Tubes, length	12 ft. 3 in.
Brakes	Westinghouse
Capacity of tank	3,500 imp. gals.
Style of tank	V shape, sloping front.
Tender truck	4 wheel, arch bar.
Tender journals	4 1/4 in. by 8 in.

Following are details of the 15 ten-wheel mixed traffic locomotives which are being built for the C.P.R., by the Montreal Locomotive Works:—

Weight in working order	194,700 lbs.
Weight on drivers	143,000 lbs.
Weight on engine truck	51,700 lbs.
Wheel base, driving	14 ft. 10 in.
Wheel base, engine	26 ft. 1 in.
Wheel base, engine and tender	54 ft. 4 1/4 in.
Valve gear	Walschaert
Cylinders	22 1/2 in. by 28 in.
Driving wheels, diameter	63 in.
Boiler, type	Extended wagon top.
Boiler, diameter	69 in.
Boiler, pressure	180 lbs.
Firebox	103 in. by 70 1/2 in.
Tubes, no. and diameter	240, 2 in. and 24, 5 in.
Tubes, length	14 ft. 4 in.
Brakes	Westinghouse
Tank, capacity	5,000 imp. gals.
Tank, type	C.P.R. standard, semi water bottom.
Tender truck	4-wheel pedestal type.
Tender journals	5 1/2 in. by 10 in.

"You know, Miss Blank," said the proprietor of a railway station restaurant, "there is a great deal in having your sandwiches look attractive."

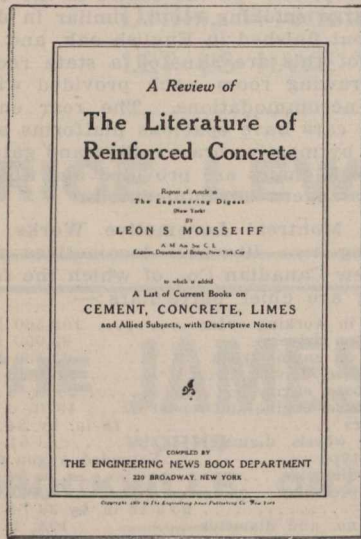
"Yes, sir, I know it," replied the girl; "I have done everything I could. I have dusted those sandwiches every morning for the last ten days!"

"Has your son had any success as a lawyer?"

"Well, no, to tell the truth, he hasn't. He has been practising now for nearly eleven years, and he has never been elected to the Legislature, or been appointed receiver for anything, or even become president of any railway company. It begins to look as if he may have to eke out a living just practising law."

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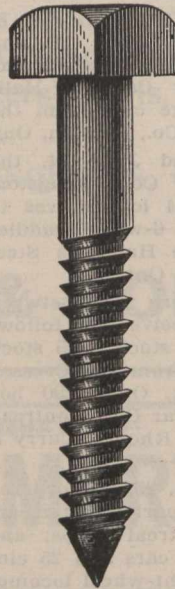
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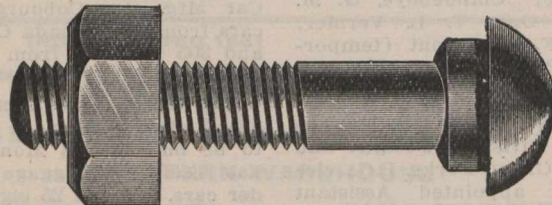
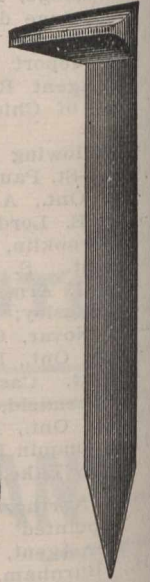
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The Tehuantepec Route.

The question of establishing a route for the shipment of western grain from Pacific coast ports, has been taken in hand by the C.P.R., and other transportation companies, and investigations which have taken place have led to the inauguration of a connected service from British Columbia to Salina Cruz, Mexico, thence via the Tehuantepec National Ry., to Puerto Mexico, connecting with Atlantic steamships. The main link in the route, the Tehuantepec National Ry., is owned by an English company, with Sir Weetman D. Pearson as President, and S. Pearson and Son, Ltd., as managing directors. The railway, which is 188 miles long, connects the Pacific port of Salina Cruz with Puerto Mexico on the Atlantic, across the Tehuantepec isthmus.

Arrangements have been completed with the Canadian Mexican Pacific Steamship Line for the continuation of the Pacific service from B.C. ports to Salina Cruz, and with the Elder-Dempster Co., for the Atlantic service between Puerto Mexico and ports in Eastern Canada; while trans-Pacific and trans-Atlantic connections have also been arranged from the ports respectively. A monthly service will be operated from Montreal and Eastern Canada points via Tehuantepec to Victoria, Vancouver and all B.C. ports and inland points, which it is claimed will enable the Eastern Canadian manufacturer to compete with European manufacturers there.

The route to Europe, via Tehuantepec, for western grain is considered to be the most feasible yet, if the facilities for handling grain in bulk are provided. The cost of sacks and sacking for the grain, such has been proposed is too great, while it is not considered a necessity, as it is when shipping round the Horn or through the Suez canal, when the wheat is likely to be damaged in crossing the equator. Several schemes are at present under discussion for the erection of elevators on the B.C. coast, to deal with western grain, and while the Tehuantepec National Ry. at present has no elevator accommodation at either port, such construction is under consideration by the directors, and it is anticipated that a definite move will shortly be made to enable the railway to deal with grain. F. W. Peters, Assistant to Second Vice President, Winnipeg, was in Mexico recently when he conferred with Sir Weetman Pearson, and the suggested facilities were discussed.

Resuscitation After Electric Shock.

J. Murphy, Electrical Engineer, Board of Railway Commissioners, made the following report April 29: "Yesterday, while inspecting a wire crossing at the Elgin St. subway at Brantford, Ont., I learned from the G.T.R. section foreman some particulars regarding the death by electric shock of one of their sectionmen on April 8. The foreman assured me that a small burn on one finger of deceased was the only visible sign of injury on the latter's body. In reply to my inquiry as to whether anyone had attempted to revive the deceased by means of artificial respiration, the foreman replied, 'Oh, no, the doctor said he was dead, and his body was carried away.' I proceeded to explain to the foreman that many persons shocked into insensibility—and apparently dead—had been revived by the same method that is employed to revive persons apparently dead

from drowning, and that so many cases of complete revival were well known that it was always worth trying, and trying constantly for several hours, to revive anyone who had been shocked into insensibility, no matter how many pronounced the victim dead. To my astonishment, the foreman replied: 'I guess you are right because one of our gang used to be a lineman and he had some fingers burnt right off. He says he was stone dead for two hours—but they brought him back.' With this knowledge so close at hand it seems very strange that no attempt was made to revive the man above referred to. One of the first things I did when I became connected with the Department of Railways and Canals three years ago was to have copies of an illustrated sheet, entitled, "Resuscitation from Apparent Death from Electric Shock," distributed amongst the various places belonging to the Department where electrical energy was generated, received, or used. I am attaching a copy of this sheet. In view of the circumstances outlined above, it is, in my opinion, very desirable to have the railway companies directed to supply the information contained in this sheet to all their employes without delay. An unfortunate circumstance in connection with this question is that some medical men—apparently not familiar with the fact that many persons have been revived who would otherwise have died—actually interfere and deter willing persons in their well-meant attempts by announcing that the victim is dead. On the other hand, generally speaking, the medical profession now recognizes the value of the means described and illustrated in the attached sheet."

The Secretary of the Board of Railway Commissioners has issued a circular letter to railway companies, asking what steps have been taken by them to notify their men as to the methods of resuscitation suggested by Mr. Murphy.

ELECTRIC RAILWAYS.

Canadian Street Railway Association.

The annual meeting held at Winnipeg recently was probably the most successful in the Association's history. Representatives of eastern member companies assembled in Toronto May 29 and left that night in a special car placed at their disposal by the C.P.R., travelling by that line to Winnipeg, where they arrived early in the afternoon of May 31, being welcomed at the station by Wilford Phillips, Manager, and other Winnipeg Electric Ry. officials.

Meetings were held at the Royal Alexandra Hotel on May 31, June 1 and 2, J. E. Hutcheson, President, occupying the chair. A. W. Warnock, G.P.A., Twin City Rapid Transit Co., Minneapolis, Minn., attended as a special delegate from the American Street & Interurban Railway Association and spoke at length on matters of mutual interest to the two associations. The Hull Electric Co. was unanimously elected to membership in the Association.

The Secretary-Treasurer, Acton Burrows, presented a report covering the Association's work for the year and dealing, among other matters, with membership, annual returns to Dominion Government, the transfer question, transportation of mails and letter carriers, taxation of real estate and gross earnings, responsibility for interlocking crossing accidents, Sunday electric car service,

zone fares for Ontario interurban lines, fire insurance, use and occupancy insurance, and statistics of employes' wages. Reports were presented by the special committee on transfers and on transportation of mails and letter carriers. Papers were read on electrical franchises, their legal status and basis of valuation, on the care of interurban railway tracks and on the British Columbia Electric Ry. Co.'s Fraser Valley branch. The reading of each paper was followed by discussions thereon. There were topical discussions on the following questions:—

Accident claims and how to dispose of them.

Concrete track construction. Has past experience proven the initial expenditure for such construction justified?

Have A.S.C.E. rails of 70 or 80 lb. sections been used with entire satisfaction in paved streets? Are not the ties in such track too near the paving to be permanently satisfactory?

What improved joints can be suggested?

In considering a department of statistics, how much expenditure should be made for such information?

When should apparatus be withdrawn from service and scrapped on account of excessive repairs?

What are the rates for fire insurance paid by the several companies and have any had experience with automatic sprinklers in car houses and shops?

What is the cost per 1,000 miles to oil cars operated by the different companies belonging to the Association?

What kind of babbit is used for journal and motor bearings, what does it cost per pound, and do the different companies manufacture their own babbit?

The relative merits of aluminum and copper in the transmission of power.

Considerable time was devoted to a discussion on the various topics and a large amount of valuable information was elicited.

A standing committee on the maintenance of rolling stock was appointed.

The following officials were elected for the current year: President, D. McDonald; Manager Montreal Street Ry.; Vice-President, J. Anderson, Manager, Sandwich, Windsor & Amherstburg Ry.; Secretary-Treasurer, Acton Burrows, Managing Director and Editor in Chief, The Railway and Marine World. In consequence of the large increase in the Association's work, it was decided to appoint an Assistant Secretary, and Aubrey Acton Burrows, Secretary and Business Manager of the Railway and Marine World, was elected. The following were elected members of the Executive Committee: P. Dube, Secretary, Montreal Street Ry.; E. A. Evans, General Manager, Quebec Railway, Light & Power Co.; H. M. Hopper, Secretary-Treasurer, St. John Ry.; C. B. King, Manager, London Street Ry.; R. J. Fleming, General Manager, Toronto Ry. The by-laws having been amended by providing that the retiring President be a member of the Executive Committee for the year following his retirement, J. E. Hutcheson is ex officio a member of the committee for the current year.

The visit to Winnipeg was much enjoyed by representatives of eastern companies, many of whom had not been there before. The weather was very fine and every opportunity was afforded them to see the city thoroughly. On the evening of May 31 they were the guests of the Winnipeg Electric Ry. Co. at the

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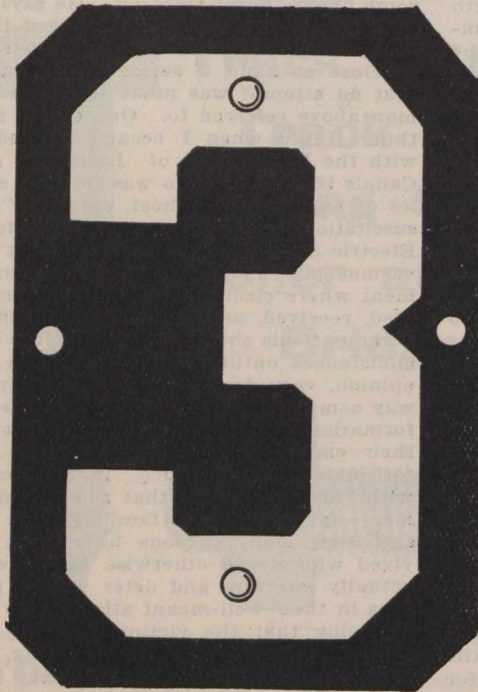
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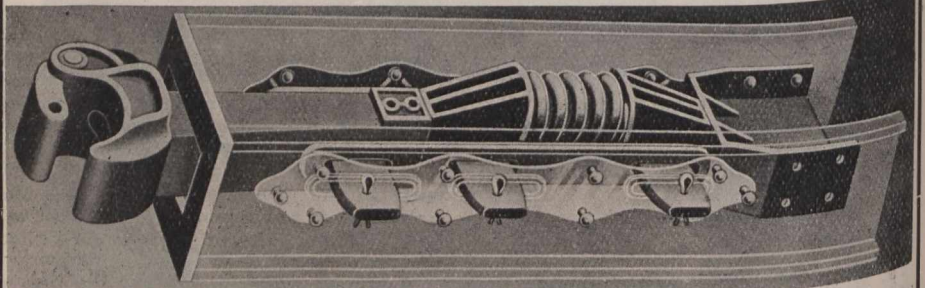
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Walker Theatre. On June 1 they were entertained at luncheon at the Royal Alexandra Hotel by the W.E.R. Co. and on June 2 they went over the company's interurban line to Selkirk and inspected the company's car barns and car shops, and also paid a visit to River Park, a beautiful summer resort owned by the company.

Montreal St. Ry. Mutual Benefit Association.

Following are extracts from the report for the year ended Apr. 30, presented at the annual meeting, June 17: A summary of the relief work done during the years shows that 554 members were disabled through sickness or injury; \$9,457.40 was paid to such members; \$1,697.07 was paid for medicine; \$255 for pensions, and \$6,566.67 for death and burial insurance. Since the organization of the Association, \$27,192.72 has been paid for death and burial insurance, and \$44,511.45 for sickness and injury benefits. The 5th annual picnic realised a net profit of \$7,325.35. During the year \$15,509.25 was invested, which, together with the sum previously invested, amounts to \$48,725.50. The securities are held by the Royal Trust Co. for safe keeping. The committee of management acknowledged a special Christmas donation of \$3,000, received from the Montreal St. Ry., making the total contributions received from the company, \$13,910.27, which amount, added to the fees and dues received from the members, \$13,008.50, and the proceeds of the picnic, and interest on investments and bank deposits, \$10,395.69, makes a total revenue for the year of \$37,314.46, the expenses being \$24,400.76, leaves a surplus of \$12,913.70.

At a meeting held June 14, the following committee of management was elected for the current year:—W. G. Ross, President; J. Delaney, R. M. Hannaford, A. S. Byrd, J. Hughes, J. Gagne, N. Lachance, W. Butler, A. Arel, A. Leblanc, H. G. Taylor, A. Gaboury, D. McDonald; P. Dubee, Secretary-Treasurer. After the meetings, the members proceeded in 10 special cars to Dominion Park, where supper was served, followed by a concert.

Height of Street Car Steps.

The question of the height of street car steps came up before the Ontario Railway and Municipal Board recently, after a number of adjournments to enable certain tests to be made as to the practicability of the addition of another step to the cars. In delivering judgment, June 2, J. Leitch, K.C., Chairman of the Board, said:—

This is an application filed by Dr. Helen MacMurchy on Sept. 10, 1908, with the Board for the purpose of having a regulation or order made fixing the height of the first step on street and electric railway cars at from 9 to 12 in. from the ground, and the other steps with a rise of from 7 to 9 in., one above the other. The application was served on all street and electric railways under the Board's jurisdiction and upon the clerks of the different municipalities in which such railways are operated. The only municipalities that took an active interest in the matter were the city of Toronto and the then city of West Toronto. A. O. Graydon, City Engineer, London, Ont.,

wrote a letter to the Board in which he expressed the opinion that a 12 in. step should be the maximum height for street cars and that anything over that should be prohibited by law. An order was made by the Toronto Board of Control Sept. 21, instructing the city Solicitor to represent Dr. MacMurchy on this application, and from that time on the controversy was between Toronto and the Toronto Ry. Co., and was confined to the company's cars and operating conditions in Toronto. Dr. MacMurchy called the most eminent medical gentlemen in the city to testify, who gave it as their opinion that the height of the first step from the ground should be as near 12 in. as possible. This was only one aspect of the case. The Board could not overlook the difficulties and possibilities connected with operation. It appeared from the evidence that there was little difficulty, if any, in reference to the steps on the Toronto Ry. Co.'s single truck cars. It was the double truck open cars that were complained of. It appearing to the Board that the difficulty and expense of lowering the bodies of open double truck cars so as to permit of lowering the steps was insuperable, they suggested that the application should be adjourned and that the Toronto Ry. Co. should equip a double truck open car with three steps instead of two, in order to test the feasibility of having the first step not higher than 12 in. from the ground. The matter was consequently adjourned for several weeks, and the Toronto Ry. Co. did equip a double truck open car with three steps instead of two. In actual operation the Board found that, while the three steps would be very convenient and comfortable, they extended out so far into the street as to render them very dangerous to pedestrians and vehicles, and the adoption of such car steps would involve a reconstruction of the car barns, repair pits, etc. It was clear to the Board that the difficulty could not be solved in this way. The Board then instructed its Engineer, J. F. H. Wyse, to ascertain if the longitudinal seats in the Toronto cars could be taken out and replaced by lateral seats with an aisle down the centre of the car, for the reason if this was feasible the difficulty in reference to the height of the steps would be solved. By reason of the narrow devil strip in the city of Toronto, the Board's Engineer found it impossible to operate a car with a wider inside breadth than 80 in. Under these conditions it would only be possible to have lateral seats 32 in. wide with an aisle of 16 in. Every expert car operator or builder consulted by the Board and the Engineer was of the opinion that seats 32 in. wide with an aisle of 16 in. would be impracticable, and the scheme of changing the seating had to be abandoned. The Toronto Ry. Co. built another car as an experiment to assist the Board in coming to a conclusion. M. Power, the company's Master Car Builder, built this car so that the body came to within 38 in. from the ground. The Board is of opinion that this was so close down that there was no margin of safety left for the operation of the brake rods or the compressed air pipes. The Board has come to the conclusion that to be safe the floor of the car should be not less than 40 in. above rail level. From the evidence adduced the Board is of opinion, as to all cars hereafter built and put in operation, it would be safe in standardizing the steps of open double truck cars at from 14 to 16 in. for the first step,

and 14 and 12 in. for the two upper steps. On open single truck cars from 12 to 15 in. for the first step, and 12 and 9 in. for the two upper steps would be reasonable. On closed double truck cars the first step should be from 14 to 16 in. from the ground, and on closed single truck cars from 12 to 15 in.

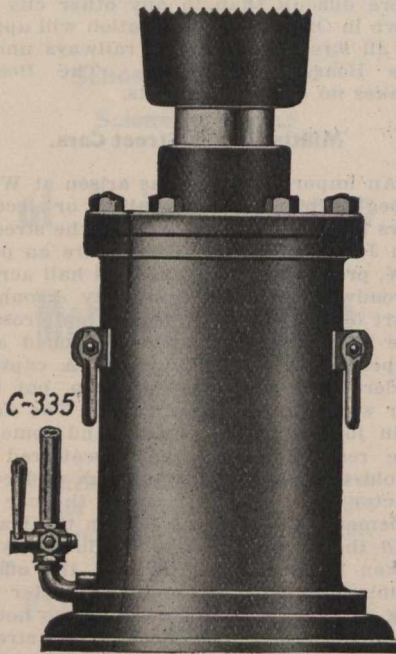
A regulation will be promulgated by the Board to the above effect. As the conditions of operation in Toronto are more difficult than in any other city or town in Ontario, the regulation will apply to all street and electric railways under the Board's jurisdiction. The Board makes no order as to costs.

Militia Versus Street Cars.

An important issue has arisen at Winnipeg as to whether the militia or electric cars have the right of way on the streets. On June 1, the 90th Rifles were on parade, proceeding from the drill hall across Broadway to the University grounds. Part of the leading company had crossed the track, when a car approached and appeared to be slowing up. A captain ordered the motorman to stop, but the car went on for a few yards. The Captain jumped on the fender and some of the rest of the company scattered to avoid the car. The motorman and conductor were hauled from the car by riflemen, the car being left on the track, and the motorman and conductor were taken under guard before the officer commanding the regiment, and after being detained by him for some two hours, they were marched through the streets to the police cells, escorted by a guard of ten armed riflemen. When the case was heard in the police court, the motorman testified that he thought he could get over the crossing ahead of the regiment, but on getting closer found he could not do so and he applied the emergency brake. The wheels skidded, and when the car stopped the fender was partly over the crossing. The evidence of the conductor, who is also a corporal in the 90th regiment, showed that the car did not completely block the crossing, and that after it stopped, the balance of the regiment could easily have crossed in front of it. Counsel for the railway company contended that the Militia Act only applied in times of war or riot, when troops were on active service.

The Police Magistrate, Hon. T. Mayne Daly, in giving judgment said: "It seems the desire of the company not to let this matter stand, but to know exactly what their rights are on the city streets. I find that there is an entire absence of the word 'wilful' in the section of the act referred to. In the act regarding the handling of His Majesty's mails there is the word wilful, and it is an indictable offence to wilfully delay the mails. The question raised in this instance is of more importance in that it is a question of whether the militia of Canada have the right of way. To my mind there is not the slightest doubt that they have. This despite the fact that the company has secured a charter from the city which has been passed upon by the provincial legislation that they have the right of way under any circumstances. A militia corps proceeding to drill is under orders and is lawfully pursuing its course as prescribed in the act. In my opinion it is not necessary that the interference should be wilful to come within the act. The fact of the motorman having seen

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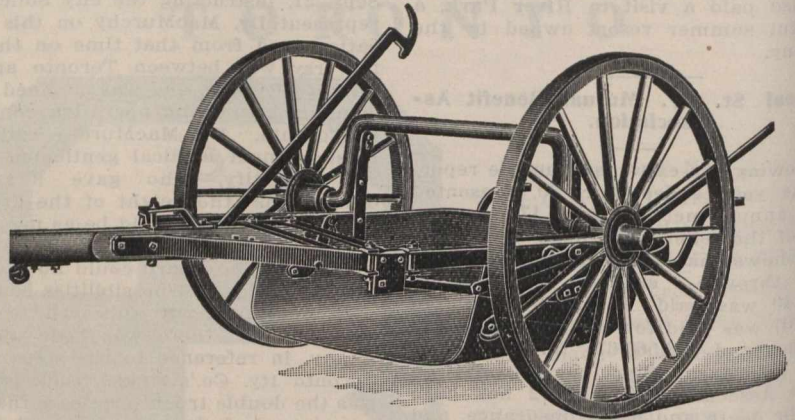
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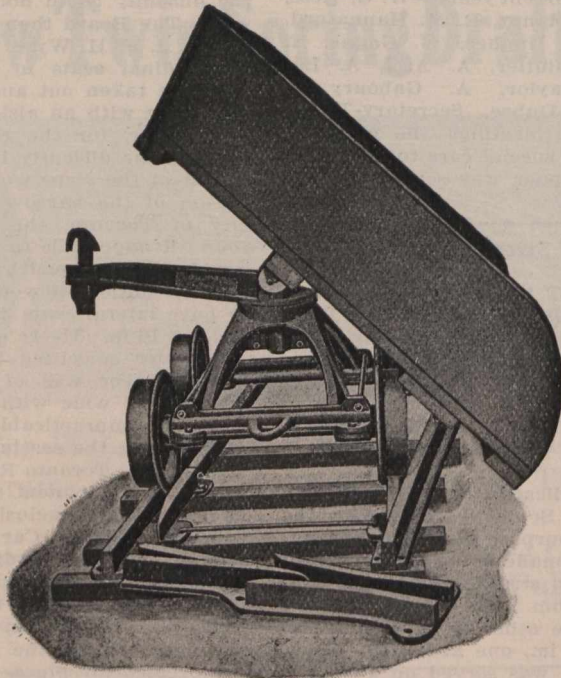
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the troops approaching should have dictated to him that he should have stopped the car. It would almost seem that he did not know what his duties were under the circumstances and he was going through anyway. I find from the evidence given that there was an obstruction as charged. If it were only a question of whether the obstruction were wilful I would find in his favor. But it is probably best to find what were his rights. In this case the rights of the militia are paramount, first because they are His Majesty's troops, and secondly because the militia act covers that very point. Entirely to show the standing of the motorman I will fine him \$5 so that the case may be carried to a higher court. It must not be forgotten, however, that the motorman, like the troops, was acting under orders from his superiors. He had orders from his superior officers and was carrying them out as he saw best. I hope that no bad blood will result from this action."

The case against the conductor was dismissed. The motorman's conviction is being appealed by the company.

Niagara, St. Catharines and Toronto Ry.

Following are extracts from the directors' report for the year 1908: During this period your company suffered, in common with other transportation companies, in the general business depression throughout the country, and, in view of the conditions prevailing, the returns shown may be considered satisfactory. With the exception of the completion of the construction under way, referred to in the last annual report, no new work was undertaken during the year. The permanent improvement work on the main line is now finished with the exception of the change of line at Merriton, which will receive consideration during the coming year. The Welland division was completed as far as the Welland River, and opened for traffic on May 1. During the summer a pile bridge was constructed across the river, and the line extended into the town of Welland. Connection was subsequently arranged with the Toronto, Hamilton and Buffalo Railway at this point. This, with the business developed locally, should result in a large increased revenue to your company. The company has constructed spur tracks into the Lincoln Paper Mill, Merriton, and the Hedley-Shaw Milling Co.'s plant, Thorold. Arrangements have been made for the construction of a branch line into the Welland Vale Manufacturing Co.'s plant at St. Catharines, all of which promise considerable freight business. The equipment and rolling stock has been maintained in a high state of efficiency, notwithstanding the fact that all our passenger cars are in almost daily use. Owing to the increased mileage operated and the additional traffic requirements, the question of further purchase of equipment will receive early attention. The company's steamers will receive the usual repairs during the winter, and will be in first-class shape for next season's business. While the company handled considerably more tonnage last year than the previous year, the revenue was somewhat less, due to the reduction in fruit rates ordered by the Railway Commission, as well as to the cutting of rates by the large freight boats which handled business in opposition to your boats across the lake from Port-Dalhousie.

ASSETS.	
Investment account	1908.
Current Assets:—	\$2,598,679.04
Accounts receivable	8,646.48
Stores	21,563.15
Stations	2,985.24
Cash	14,972.93
Suspense	
Navigation stock in treasury	100,000.00
	\$2,746,846.84

LIABILITIES.	
Capital Stock—Railway	1908.
Navigation	\$ 925,000.00
First Mortgage Bonds—	
Niagara, St. Catharines and Toronto Ry. Co.	866,000.00
Niagara, St. Catharines and Toronto Navigation Co.	200,000.00
Current Liabilities—	
Accounts payable	101,792.99
Bills payable	49,186.90
Interest accrued but not due	8,882.00
Permanent improvement account	103,867.95
Welland extension	161,483.62
Profit and loss	230,633.38
	\$2,746,846.84

EARNINGS.	
Main Line—Passenger earnings	1908.
Freight earnings	\$93,007.94
Express earnings	55,702.30
Sundry earnings	1,018.77
Wesley Park—Earnings	2,319.42
Local Line—Earnings	31,731.34
Welland Division—Earnings	20,460.69
Navigation Co.—Pass. earnings	10,671.99
Freight earnings	30,972.79
Sundry earnings	21,152.25
	1,171.83
	\$268,209.32

EXPENSES.	
Maintenance bridges and buildings	1907.
Maintenance locomotive and car department	1908.
Maintenance passenger department	\$16,885.71
Maintenance freight department	\$17,703.91
Maintenance boat department	35,427.92
Maintenance power house	35,761.50
General expenses	32,004.91
Total operating	19,686.78
Net earnings from operations	35,656.27
Interest and discount	35,612.01
Surplus for year	12,491.69
Per cent. total operating to total earnings, 70%.	14,103.14
DESCRIPTION OF FREIGHT CARRIED.	32,277.41
Flour	\$183,103.20
Grain	\$188,311.38
Lumber	\$87,360.05
Coal	\$79,897.94
Building material, stone, sand, cement, etc.	\$47,304.00
Paper, pulp	\$51,571.20
Iron, hardware, etc.	\$40,056.05
Fruit and canned goods	\$28,326.74
Miscellaneous	

The directors of the current year are: D. B. Hanna, President; J. D. Morton, Vice-President; E. H. Wood, Z. A. Lash, F. Nichols, H. G. Nicholls, A.E. Jarvis.

St. John, N. B., Ry. Report.

Following are extracts from the report for the year ended April 30, 1909, presented at the annual meeting, June 9: The year's business showed a net profit, after providing for the interest on bonds and all other charges, of \$52,980.58, out of which the directors have declared two half-yearly dividends of 3%, amounting to \$48,000, leaving a balance of \$4,980.58, which has been transferred to profit and loss account. The roadbed, rolling stock, buildings and other property have been efficiently maintained. The agreement with the city of St. John

for the removal of snow and repairs of streets has been renewed for 10 years, from April 1, 1908. This agreement now covers all the company's tracks in the city. While the general business of the company shows a satisfactory increase for the last year, the net earnings from the street railway have not increased. This is due to the extra car service provided, and the loss in operating the street railway system on the west side of the harbor.

ASSETS.	
Cost of property	\$1,898,486.39
Accounts receivable	33,071.00
Stores	37,444.43
Cash on hand	1,000.00
Cash in bank	51,519.18
	\$2,021,521.00

LIABILITIES.	
Capital stock	\$ 800,000.00
Bonds	1,000,000.00
Accounts payable	39,746.67
Dividends payable June 9	24,000.00
Outstanding tickets	1,981.66
Contingent and depreciation	49,412.20
Profit and loss	106,380.47
	\$2,021,521.00

INCOME ACCOUNT.	
Profits for the year after providing for interest on bonds and all other charges	\$52,980.58
Dividends	\$48,000.00
Transferred to profit and loss	4,980.58
	\$52,980.58

Projects, Construction, Betterments, Etc.

Brantford and Hamilton Ry.—In 1904 the Dominion Parliament incorporated a company with this title for the purpose of constructing an electric railway connecting Brantford and Hamilton, Ont., 23 miles. The line has been constructed and is in operation. The charter passed out of the hands of the original holders to the Dominion Power and Transmission Co., Hamilton, and it is being operated in connection with the other lines owned by that company. (Jan., pg. 51.)

British Columbia.—A U. S. press report states that J. T. Lanigan of Chicago, Ill., is interested in a company which proposes to construct 100 miles of electric railway in the vicinity of Vernon, B.C.

A Vancouver press report states that the construction of an electric railway about 100 miles in length to serve the fruit growing districts on both sides of the Okanagan River is under consideration. The route of the projected line is from Vernon, along the west side of the lake as far as Summerland; and, another line on the east side of the lake as far as Kelowna, a distance of nearly 40 miles. It is proposed to use water power for generating electricity. J. F. Lanigan, of Chicago, Ill., who is interested in the undertaking, has returned after an inspection of the routes, and stated in Vancouver, that there was no reason why the line could not be in operation within 18 weeks. The company is reported to have been incorporated under the provincial laws.

British Columbia Electric Ry.—The General Manager states in connection with the company's franchise in D. L. 301 and Hastings townsite, that it has a perpetual franchise on certain streets only, and that there is nothing to prevent any other company or corporation obtaining a franchise upon other streets at any time. (June, pg. 447.)

The taxpayers of South Vancouver by a majority of 730 out of a total poll of

1,032, granted the B.C.E. Ry. a franchise May 29. A date has been fixed for the voting on the by-law for a franchise in Coquitlam municipality, but all the details have not been settled.

A contract has been let to Naylor Bros., Huddersfield, Eng., for the enlargement of the hydraulic tunnel connecting lakes Coquitlam and Buntzen. The capacity of the tunnel will be trebled by the improvement, which is undertaken in connection with the construction of the new dam at the outlet of Lake Coquitlam.

Buffalo, Niagara and Toronto Ry.—The Dominion Parliament in 1906 incorporated a company with this title to construct an electric railway of 40 miles from Niagara-on-the-Lake to Fort Erie, with branches from St. David's to St. Catharines; from Fort Erie to Port Colborne, and from the main line near the crossing of Welland River into Welland. It has not done anything in the way of construction. (Dec. 1907, pg. 927; see also Fort Erie and Buffalo Bridge Co., Mar., pg. 214.)

Calgary, Alta.—All the material for the construction of the municipal street railway, was reported to have been delivered June 5. The first portion of the line to be completed and opened, will be that of the fair grounds. (June, pg. 447.)

Chatham, Wallaceburg and Lake Erie Ry.—A company with this title was incorporated by the Dominion Parliament in 1903, with power to construct 75 miles of electric railway located as follows: from Chatham to Wallaceburg and Petrolia; Chatham to Rondeau, with branches to Dresden, and Blenheim, Ont. Of these lines there has been constructed a line from Wallaceburg to Lake Erie, 21.50 miles. (May, pg. 365.)

Cobourg, Port Hope and Havelock Electric Ry.—The Northumberland-Durham Power Co., has obtained from the Dominion Government a lease of the remaining portion of the water power at Healey Falls. The development of this power will, it is said, proceed concurrently with the construction of the Trent Valley Canal. It is said that the C.P.H. and H.E. Ry., when it is constructed, will be operated by power obtained from this source. (May, pg. 365.)

Edmonton Radial Ry.—The work on the 5½ mile extension of this line is approaching completion. The rails recently ordered were 600 tons of 60 lb., and 200 tons of 80 lb., and it is anticipated that the whole will be ready for operation early in Aug. Lubbock and Matheson, Edmonton, Alta., are the contractors.

Egerton Tramway Co.—See Pictou County Electric Co.

Hamilton, Galt and Berlin Ry.—This company was incorporated by the Dominion Parliament in 1903 and an extension of time for construction was granted in 1905. The line, which is to be operated by electricity, will be about

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IN ONTARIO, the entire range of the Muskokas, the Georgian Bay hinterland, the French, Pickerel, Still and Maganetawan rivers—well stocked with bass, mascalonge, and pickerel, are best reached by the Canadian Northern Ontario Railway.

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Hamilton, Waterloo and Guelph Ry.—A line 90 miles in length from Hamilton to Elmira, and from Hamilton to Elora and Fergus, Ont., was authorized to be constructed by a company with this title, which was incorporated by the Dominion Parliament in 1906. Up to date, nothing in the way of construction has been done. (Mar., pg. 215.)

Huron and Ontario Ry.—Originally incorporated by the Dominion Parliament in 1896, to construct a railway from Port Perry to Kincardine, Princeville to Kincardine, Walkerton to Goderich, and a connection between Lucknow and Kincardine, this company obtained various additional powers in 1903, 1906, 1907 and 1909, and proposes to develop its lines as electric rather than steam railways. The total mileage authorized is 250 miles, but no construction work has yet been started. (Jan., pg. 53.)

Manitoba Radial Ry.—This is the title of a company incorporated by the Dominion Parliament in 1907, having for its object the construction of a line of 160 miles from Winnipeg to Clandeboye, Lake Manitoba; to Grand Rapids on Lake Winnipeg with a branch from Winnipeg to Stonewall and Lake Francis, Man. No construction has been undertaken to date, but an extension of time for construction was granted at the recent session of Parliament. (April, pg. 281.)

Montreal and Southern Counties Ry.—This company was incorporated by the Dominion Parliament in 1897 to construct a railway from the northern limit of Chambly Co., to Sherbrooke, Que., 80 miles. It obtained additional powers as to construction, connection and amalgamation with other lines in 1898, 1902 and 1905, and has an arrangement with the G.T.R. for a line over the Queen Victoria Jubilee Bridge, and with the Montreal city council for the entrance of its lines into the city. The lines in Montreal and St. Lambert are now under construction. Contracts have been placed for steel rails, special track work, spikes, switch ties, tubular poles, brackets, trolley poles, etc. The companies obtaining contracts include Montreal Steel Works and Canadian Ramapo Iron Works. (June, pg. 449.)

Niagara Gorge Rd.—The damage done by the ice jam to this railway was sufficiently repaired to permit traffic to be opened on the outer track, May 23, and the inner track was opened up at a later date. The principal part of the cost, about \$18,000, was for the removal of ice on the road, which varied from a few feet at the whirlpool, to 25 and 30 ft. at the lower end near Lewiston, N.Y. (May, pg. 367.)

Niagara, Queenston and St. Catharines Ry.—This company was incorporated by the Dominion Parliament in 1903, and authorized to construct 30 miles of electric railway from St. Catharines, via Queenston and Niagara-on-the-Lake, back into St. Catharines, Ont. An extension of the time for construction was granted in 1906, but up to date no work has been done. (May, 1906, pg. 275.)

Niagara, St. Catharines and Toronto Ry.—This company was incorporated by the Dominion Parliament in 1899 to acquire the St. Catharines and Niagara Central Ry., and extend the same to Fort Erie, also to Toronto via Hamilton, with

a branch from St. Catharines to Port Dalhousie, Ont. The mileage authorized by the new act was 130 miles, and of this 30 miles has been constructed. Extensions of time were granted in 1905, 1906 and 1908. (June, pg. 449.)

We have been advised that nothing has been decided as to the construction of the projected extension to Port Colborne.

Nipissing Central Ry.—In 1907 the Dominion Parliament incorporated a company with this title to construct a railway from Latchford to Blanche River, Windigo, and to the National Transcontinental Ry. at Matagami River; also from Latchford along Montreal River through Barr and Willison tps. to the National Transcontinental Ry.; also from Latchford to Temagami station on the T. and N. O. Ry., with some branch lines. The length of the lines authorized is 500 miles. The company was granted an extension of time for construction in 1908, but up to the present time no work has been done.

Work is reported to have been started on the construction of the section of the line from Cobalt to Haileybury, and it is expected to have it completed and in operation by Sept. The route will be on the west side of the T. and N. O. Ry. at North Cobalt, which will be made the point from which the line will be operated. (May, pg. 367.)

Ontario West Shore Ry.—The question of the appointment of an independent engineer to check the progress certificates, came up at a meeting of the Ashfield tp. council, June 19. A statement credited to the council's solicitor, says that municipalities have no power under the Railway Act to make such an appointment. The certificates are made out by the company's engineer, who is liable to a severe penalty for any falsification. The same question has already been raised at the Goderich council, where it was referred to a special committee with instructions to consult the Ontario Railway and Municipal Board. Considerable progress has been made between Goderich and Kincardine, and it is said that the line will be running in "due time." The operations in connection with the Maitland River power development scheme, which is considered to be a necessary feature for the success of the railway, will probably be pressed forward at an early date, and it is anticipated that the question of an agreement between the two companies will be brought before the Ontario Legislature at its next session.

Ottawa and St. Lawrence Electric Ry. We were advised June 16, that there have been no surveys made to date for this projected railway, but it was expected to start them in the near future. The line as projected will have a total length, including three branches, of about 250 miles, the main line being 201.50 miles in length. It will start at Ottawa, run south to Morrisburg, thence westerly to Brockville, then north through Perth, Lanark, White Lake to Arnprior, then east through Fitzroy, Harborne, and Britannia to Ottawa. The branches are from Kenmore to Russell, four miles, from Morrisburg easterly to the Interprovincial boundary, about 30 miles, and from Darling, Lanark county, to High Falls, about 15 miles. It is proposed to get the power from Ottawa, the Clints Falls, Fitzroy, the Madawaska River near White Lake, and Morrisburg,

with probably a steam plant in the vicinity of Brockville. The total cost would approximate \$3,000,000. It is said that construction may be started this season. The distances between the principal points on the projected main line are: Ottawa to Morrisburg, 44 miles; Morrisburg to Brockville, 33.5 miles; Brockville to Perth, 42 miles; Perth to Arnprior, 46 miles; Arnprior to Ottawa, 36 miles; total 201.50 miles. A. H. N. Bruce, Ottawa, is Chief Engineer. (June, pg. 449.)

Ottawa Electric Ry.—Work was started June 1 upon the construction of the loop line at the end of Elgin St. The work was expected to be completed within 15 days. (Apr., pg. 283.)

Pictou County Electric Co.—The franchise, plant and line of the Egerton Tramway Co., at Stellarton and New Glasgow, N.S., has been acquired by the P. C. E. Co., which has also acquired the New Glasgow Electric Light Co. The company operated 8.10 miles of electric lines. The company proposes to add to its power equipment, and is reported to have placed orders for additional power plant.

Quebec and Saguenay Ry.—In connection with the report that interests allied with this company had secured a controlling interest in the Quebec Ry., Light and Power Co., and that the rearranged company will undertake the construction of the projected Q. and S. Ry. from St. Joachim to Murray Bay, we are advised that no proposition for such an extension has been brought before the Q. Ry., L. and P. Co. (June, pg. 449.)

Quebec Ry., Light and Power Co.—See Quebec and Saguenay Ry.

Thorold and Lake Erie Ry.—The Dominion Parliament in 1904 incorporated a company with this title to construct an electric railway from Thorold to Port Colborne, thence easterly to Fort Erie, and westerly to Brantford, Ont., about 80 miles. An extension of time was granted in 1906, but up to date no construction has been done.

Three Rivers, St. Maurice and Champlain Ry.—In 1905 the Dominion Parliament incorporated a company with this title, to construct an electric railway from Three Rivers westerly through Pointe au Lac, Temachiche, and other places to Maskinonge parish, and from Three Rivers easterly to St. Anne de la Parade parish, Que., about 60 miles. The company has not undertaken any construction.

Toronto, Niagara and Western Ry.—The Dominion Parliament in 1903 incorporated a company with the title of the Toronto and Hamilton Ry., with power to construct an electric railway from Toronto to Hamilton, 40 miles. In 1904, 1906 and this year extensions of time for construction were granted and in 1906 the name of the company was changed to the Toronto, Niagara and Western Ry. (May, pg. 369.)

Vancouver Island Power Co.—Notice has been given of an application for a license under the Water Act, in the Malahat and Renfrew districts. The proposed works comprise a plant for the generation of electricity, and the construction of a dam across a stream flowing into a small lake about 1,000 ft. east of the Jordan Meadows in the Malahat district. The company, with office at Victoria, has a capital of \$75,000, and has power to generate electricity for a

number of purposes, including the propelling of tramways, etc.

Windsor, Chatham and London Ry.—A company bearing this title was incorporated by the Dominion Parliament in 1906, with power to construct an electric railway of 120 miles from Windsor to Chatham and London, Ont. It obtained an extension of time for construction in 1908, but up to the present time it has not done any work. (Apr., 1908, pg. 283.)

Electric Ry., Finance, Meetings, Etc.

Berlin and Waterloo St. Ry.—The Berlin Light Commission and the Waterloo Town Council have held several meetings, with a view of deciding the amount which Berlin will pay to Waterloo for the right to operate its street railway in Waterloo, Ont. Waterloo ask 5% of the gross receipts, but the Berlin authorities refuse this, and decline to make any offer. The Waterloo Council proposes to appeal to the Ontario Railway and Municipal Board.

B.C. Electric Ry.—Gross operating earnings for Apr., \$188,071; working expenses, \$109,267; net operating earnings, \$78,804; renewal funds, \$13,958; net earnings, \$64,846; approximate income from investments, \$13,550; net income, \$78,396, against \$153,725 gross operating earnings; \$95,352 working expenses; \$58,373 net operating earnings; \$10,750 renewal funds; \$47,623 net earnings; \$11,036 approximate income from investments; \$58,659 net income for Apr., 1908. Aggregate gross earnings for 10 months ended Apr. 30, \$1,900,352; net earnings, \$861,531, against \$1,643,985 gross, and \$785,789 net for same period, 1907-08.

Egerton Tramway Co.—See Pictou County Electric Co.

International Railway Co.—The accounts of the Commissioners for the Queen Victoria Niagara Falls Park for the year, 1908, show a receipt of \$10,000 as rental from the I. Ry. Co.

Kingston, Portsmouth and Catarqui Ry.—A letter has been sent by H. W. Richardson, President, to the Kingston, Ont., Council, offering to sell the line to the city, for a sum equal to that invested in 1905, plus 6% interest. The operating of the line has not paid the company. The company purchases its power from the city at 1.66c. a kilowatt hour. The matter is being considered by the finance committee. The question of purchasing the line has been discussed upon more than one occasion. During the spring of 1905, when the line was in the hands of the bondholders, they offered to sell to the city for \$125,000, but this was declined, a suggestion being made that \$50,000 be offered, but this was not done.

London St. Ry.—Gross earnings for May, \$19,172.85; operating expenses, \$14,191.27; net earnings, \$4,981.58, against \$18,891.22 gross earnings, \$14,385.32 operating expenses, \$4,505.90 net earnings for May, 1908. Aggregate gross earnings for 5 months ended May 31, \$89,809.25; operating expenses, \$67,246.16; net earnings, \$22,563.09, against \$86,356.90 gross earnings, \$66,928.59 operating expenses, \$19,428.59 net earnings for same period, 1908.

The directors declared an interim dividend of 3%, June 17, payable July 2.

Montreal St. Ry.—Total earnings for May, \$329,339.28; operating expenses,



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\$184,147.58; net earnings, \$145,191.70; city percentage on earnings, \$28,005.30; interest on bonds and loans, \$14,386.85; rent leased lines, \$498.67; surplus, \$102,300.88, against \$313,678.91 total earnings; \$169,723.59 operating expenses; \$143,955.32 net earnings; \$26,595.72 city percentage on earnings; \$19,422.34 interest on bonds and loans; \$444.43 rent leased lines; \$97,492.83 surplus for May, 1908. Aggregate total earnings for 8 months ended May 31, \$2,437,055.68; net earnings, \$912,972.76; total charges, \$261,756.86; surplus, \$651,215.90; against \$2,341,551.62 aggregate total earnings; \$855,928.09 net earnings; \$270,571.05 total charges; \$585,357.04 surplus for same period, 1907-08.

Pictou County Electric Co.—This is the title of a company which has taken over the Egerton Tramway Co. of New Glasgow, N.S., and the New Glasgow Electric Light Co. The N.G.E.L. Co. carried on the business of supplying electric light and power in New Glasgow, Stellarton, and the vicinity, and supplied power to the E.T. Co.

Quebec Ry. Light and Power Co.—The annual meeting was held at Quebec, June 23. The following directors were elected for the current year to replace the previous board, which resigned: W. G. Ross, Managing Director Montreal St. Ry., President; Hon. R. Mackay, J. N. Greenshields, N. Belleau. This constitutes an entirely new control of the company, rumors of which have been current for some time. (June, pg. 451.)

Toronto Ry.—Gross earnings for Apr., \$298,258; operating expenses, maintenance, etc., \$153,594; net earnings, \$144,664, against \$273,329 gross earnings; \$161,826 expenses; \$111,503 net earnings for Apr., 1908. Aggregate gross earnings for 4 months ended Apr. 30, \$1,160,026; net earnings, \$541,602, against \$1,077,097 gross and \$440,854 net for same period 1908.

Approximate earnings for May, \$323,322.95, against \$295,809.05 for May, 1908.

Winnipeg Electric Ry.—Gross earnings for Apr., \$192,400; expenses, \$96,900; net earnings, \$95,500, against \$172,700 gross earnings; \$93,500 expenses; \$79,200 net earnings for Apr., 1908. Aggregate gross earnings for 4 months ended Apr. 30, \$827,500; net earnings, \$410,000, against \$680,700 gross and \$347,600 net for same period 1908.

Electric Railway Notes.

The Winnipeg Electric Ry. is building 30 or more electric cars this year at its Fort Rouge car shops. They will be 45 ft. long and 7 ft. platforms, and seating accommodation for 50 passengers.

The time within which the Chatham, Wallaceburg and Lake Erie Ry., was ordered by the Board of Railway Commissioners to equip all its cars with air brakes, was extended recently to July 4.

The Mexico Electric Tramways, Ltd., incorporated under the Imperial Parliament of Great Britain and Ireland, has been licensed under the act respecting extra provincial corporations to carry on its executive and administrative Toronto, as its attorney.

Electric railway enterprise in Canada is beyond anything we have imagined, if the mention of the Toronto and New York Radial Ry., by the Manitoba Free Press, in reporting the Canadian Street

Railway Association's meetings in Winnipeg recently, can be taken as evidence.

The municipal census of London, Ont., for the current year shows that the population is still under 50,000, consequently there cannot be a vote, under the act passed by the Ontario Legislature last session, upon the question of the operation of the street cars on Sundays.

The question of the operation of the street railway in Kingston, Ont., is likely to remain unsettled, the directorate being divided on the subject. H. W. Richardson, the President, is opposed, whilst W. F. Nickle, the Secretary-Treasurer, is favorable to the running of cars on Sunday, which it is claimed the company's charter permits.

The board of conciliation at Winnipeg has filed a decision giving the Winnipeg Electric Ry. Co.'s men a nine-hour day with an increase of pay, and some minor changes in the condition of working. The arbitrators direct that there shall be no discrimination by either parties to the agreement against any man for being or not being a member of the union.

At a meeting of the St. Thomas, Ont., Board of Works, June 15, permission was granted the Southwestern Traction Co., to lower the subway at First Avenue one foot, to allow freight cars to pass over the M.C.R. Complaint was made that the company is violating its agreement by hauling freight cars through the city at other times than permitted by the agreement, and that the speed of its passenger cars is too high.

The Ontario Court of Appeal has dismissed the defendants' appeal in the case of Bradenburg v. Ottawa Electric Ry. Co. Plaintiff E. Bradenburg, minor engineer, was riding in a car of defendants last year in Ottawa when he sustained serious injuries. He was at the time under an agreement for his services with five years to run at a yearly salary of \$6,000. He was awarded \$30,000 damages. The award stands.

The cost of cleaning the snow off Montreal streets upon which the street railway operates, last winter was \$219,308, for which the Montreal St. Ry. Co. is alleged to be liable, under the by-law for \$109,654. The company has paid \$60,000. For the winter of 1907-08, the company withheld \$20,000, on the ground that the cost was excessive, and the question is before the courts. The company before the commencement of the winter of 1908-09 offered to take over the whole work on the understanding that the cost would not exceed \$3,000 a mile.

The claim of the St. Catharines, Ont., council against the Niagara, St. Catharines and Toronto Ry., for \$4,451.95, the cost of construction of a portion of the asphalt block paving between the rails on Ontario St., St. Catharines, was dismissed in the Divisional Court, Toronto, June 3. It was held that the agreement with the company provided only for macadamizing the space between the rails, and as the portion of the street in question was, and continued to be macadamized, and as the space between the rails has been laid by the company and under the direction of, and as required by the Board of Works, there was no liability as to the asphaltting.

James Anderson, Manager and a dir-

ector of the Sandwich, Windsor and Amherstburg Ry., who has been elected Vice President of the Canadian St. Ry. Association, was born on a farm near Ayr, Ont., June 20, 1851. At the age of 19, he entered the old Great Western Ry. Co.'s service, and after serving a few years, was appointed a conductor, which position he held until Nov., 1883, when he resigned and went into the grocery business as a member of the firm of Robinson & Anderson, which partnership was continued for 10 years. In June, 1893, he sold his interest to his partner, and associated with Jno. Davis, W. J. Tucker, Dr. Coventry, W. J. Pulling, of Windsor, and the late Robt. Thomson and Wm. Hendrie, of Hamilton, purchased the Sandwich, Windsor and Amherstburg Ry., which was operated under that ownership for eight years. When it passed into the hands of the present owners, the Detroit United Ry. Co., in 1901, the D.U.R. Co. appointed Mr. Anderson General Manager, and the road has since extended to Amherstburg and Tecumseh, and now operates 35 miles of line. Mr. Anderson married in 1879 Anna M. Smith, daughter of the late Sidney Smith, of Acton, Ont., and has two sons and one daughter. He is a Scotch Liberal and a Presbyterian.

Duncan A. L. McDonald, Manager Montreal St. Railway Co., and Montreal Park and Island Ry. Co., who has been elected President of the Canadian St. Ry. Association, was born at St. Thomas, Montmagny, Que., June, 1859, and removed to Montreal in 1875. He entered the Montreal St. Ry.'s service in 1881 as a driver in order to acquire a thorough knowledge of street railway work from its very commencement. He was soon changed to conductor, and after about twelve months service in that capacity was appointed roadmaster. In 1886 he severed his connection with the company and engaged in other business. Anticipating the progress that the trolley system would make, he went to St. Paul and Minneapolis, Minn., in 1889, and secured a practical knowledge of the operation of electric tramways. He returned to Montreal in 1892, and re-entered the Montreal St. Ry.'s service as inspector, and in 1894 was appointed Superintendent of Transportation, which position he held until 1898, when he resigned to become General Manager of the East Parisian Tramway Co. with headquarters at Paris, France, in which position he organized the Parisian system to a high state of efficiency. In 1903 he returned to Montreal, having been offered the position which he now holds. He is a director of the Montreal Park & Island Ry. Co., President of the Pay-as-you-enter Car Company, director and late President of the Automobile Club of Canada, and a member of the Civil Engineers' Society of France, and is also interested in the direction of several other corporations.

Grain Elevator Notes

The Brackman-Kerr Milling Co., has erected a 50,000 bush. elevator at Hobema, Alta.

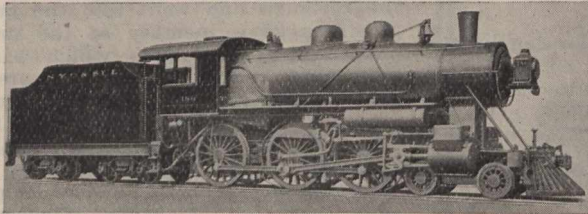
The Canada Grain Co., is said to be arranging to erect an elevator at Auburn, Ont., during this year.

The British American Grain Elevator Co., is reported to be erecting 9 elevators on the C.N.R., between Brandon, Man., and Regina, Sask.

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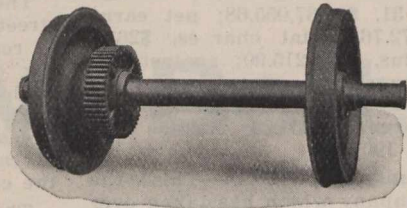
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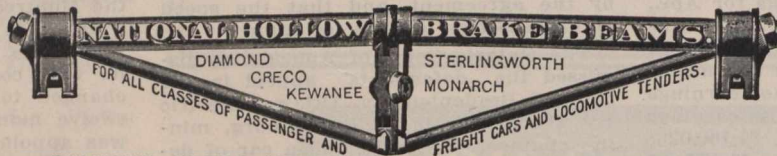
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THOS. C. IRVING,
Gen. Man. Western Canada, Toronto.

The Consolidated Elevator Co., is reported to have placed a contract for the erection of an elevator plant at Fort William, Ont., with a capacity of 1,700,000 bushels.

The Alberta Pacific Elevator Co., is arranging for the construction of an elevator at Daysland and Strome, Alta., this year. Applications for elevator sites at Daysland, Alta., have been received from the Alberta Grain Co., Strathcona, Alta.; J. Richardson & Son, Kingston, Ont., and the Great West Grain Co.

The Department of Trade and Commerce has taken up the question of grain shortages, and is reported to have an inspector looking into the methods of elevator management on both sides of the lakes, with a view to the adoption of some regulations for the removal of the complaints.

The Consolidated Elevator Co., has let a contract to J. Stewart & Co., for the construction of a 1,000,000 bushel addition of reinforced concrete to its present elevator capacity at Fort William, Ont. The cost is estimated at \$250,000, and the addition will be ready for operation early in 1910.

The work on the Ogilvie Milling Co.'s elevator at Fort William, Ont., it is stated, will be commenced at once, the contract having been let to the Barnett and McQueen Co., Fort William. A press report states that when the elevators at present building and contemplated are completed, the elevator capacity at Fort William will be 20,000,000 bush., and of Fort William and Port Arthur, combined, 30,000,000 bush. Elevators are in course of erection for the Empire, Western, and G.T. Pacific companies; contracts have been let for the erection of the new Consolidated and the Ogilvie elevators, and the Muirhead and Black contract will be let immediately.

Grain Elevator Capacity.

A circular issued by the railway companies operating in Manitoba, Saskatchewan and Alberta, gives the elevator capacity of the West as follows:

	Bushels.
C. P. R. terminals	14,752,405
C. P. R. interior	29,041,490
C. N. R. terminals	7,000,000
C. N. R. interior	10,875,500
G. T. P. R. interior	1,374,000
Midland Ry. interior	235,000
Hudson Bay interior	435,000
Alberta Ry. & I. Co.	294,000
Total	64,007,395

The number of elevators in the provinces are situated on the various lines as follows: C.P.R., 975; C.N.R., 396; G.T.P.R., 46; Midland Ry., 8; Hudson Bay Ry., 15; Alberta Ry. and Irrigation Co., 15.

MARINE DEPARTMENT.

Lake Navigation History.

The Nautical Gazette is publishing "A history of the first century of steam navigation" in instalments. No. 46 deals with Lakes Ontario and Erie, as follows:

"Up to 1816 three steamboats, the Accommodation (1809), the Swiftsure (1813), and the Malsham (1814), all Canadian boats, had been built for service on the St. Lawrence, the latter having accommodations, it is said, for 1,000 passengers. The engines of these vessels were constructed by Bolton & Watt, at their Soho works, Birmingham, England, the builders of the engine of the North River

steamboat of Clermont in 1806. In 1816 the Frontenac, the first Canadian steamboat to navigate Lake Erie, was built at Finkel's Point, 18 miles above Kingston, Ont., being launched on Sept. 7 of that year. She was built by Teabout & Chapman, of Sackett's Harbor, N.Y., and was owned by a company made up of citizens of Kingston, Niagara, Queenston, York and Prescott, all Canadians. She was 170 ft. long over all, and of 700 tons. Her engine was built by Bolton & Watt, and her entire cost was \$100,000. The Frontenac was placed on the Prescott and York (Toronto) route, on June 5, 1817, and made a round trip each week. Her commander, Capt. James Mackenzie, remained in charge until she was totally destroyed by fire at Niagara, in 1827.

"To an American steamboat named Ontario, however, belongs the honor of having been the first to navigate Lake Ontario—or any of the Great Lakes for that matter—this vessel having been built at Sackett's Harbor, N.Y., in 1816. In the Albany Advertiser of Aug. 16, 1816, we find the following item regarding this vessel:

"Steam Boat on Lake Ontario.—We are requested to state for the information of the public that the Sackett's Harbour steamboat is expected to be in operation in all the month of September next, to ply between Lewiston and Ogdensburg. She will carry freight and passengers."

"The Ontario was built by C. Case, Sackett's Harbor, N.Y., in 1816, her official measurements, filed in the collector's office at the port in which she was constructed, being 232 tons, 112 ft. in length from stem to stern, 28 ft. breadth, and 8 ft. 3 ins. depth 'from spar deck to keel.' Her first trip was made in April, 1817, or two months in advance of that of the Frontenac, and over a year before the famous Lake Erie steamboat Walk-in-the-Water started on her first voyage. The Ontario was constructed under a grant obtained from the heirs of Robert Fulton, and her engine, of 28 horse-power, was built by S. Sexton, on the plan of those used in the Fulton steamboats. When the Ontario started out on her first trip she encountered heavy weather on Lake Ontario, and the waves lifted her paddle-wheels bodily, tearing the main shaft from its bearings, smashing the paddle-boxes and wrecking things generally. She was with difficulty got back to port, where repairs were made and the matter of securing the outboard bearings in a more rigid manner effected, after which she proved a conspicuous success, plying on Lake Ontario for many years. Her owners were E. Camp & Co.

"The Ontario's success as a passenger packet was immediate and it is said she made handsome returns to her owners on their investment. An item from the New York Evening Post in the summer of 1817, soon after she went into service, will show how well the craft was patronized:

"Oswego, Aug. 7.—The Steam Boat Ontario, Capt. Mallaby, touched here this morning from Niagara on her way to S. Harbour, Ogdensburg, etc. She was so much crowded with passengers that the captain was under the necessity of leaving a number of applicants at Niagara, for want of more extensive accommodations. Among those left was the Russian Minister and suite. It could scarcely have been anticipated by the most sanguine friends of the steam boat establishment on this lake, that this route would so soon have become so fashionable."

"C. Case, the builder of the Ontario, afterward constructed other steamboats at Sackett's Harbor, among which were the Brownville, and the Charles Carroll, in 1831, and the Wm. Avery in 1833.

In 1817 another American steamboat was built for use on Lake Ontario. She was named Sophia, and was placed on the route between Sackett's Harbor and Kingston, Ont. She was much smaller than the Ontario, being only 67 ft. 8 ins. long, 18 ft. 2 ins. beam, and 4 ft. 7 ins. deep, and of 50 tons, official figures. A. S. Robberts was her builder and J. P. Allaire, the New York engine-builder, was the constructor of her machinery.

"In the year following the Sophia's advent the Canadians set afloat their second Lake Ontario steamboat, the Queen Charlotte, which was launched on April 22, 1818. She was constructed in the same yard as that in which the Frontenac was built, and largely from material left over from the building of the latter vessel. Ward Bros., Montreal, furnished the machinery, and she is described as being a very substantially-built craft, though of limited dimensions. For twenty years she plied from Prescott, on the St. Lawrence, to the Carrying Place at the head of the Bay of Quinte. The hull was finally broken up in Cataragui Bay."

If any of our readers have any facts in their possession in regard to the above-mentioned matters, or if any of the statements made are not in accordance with facts, we would be pleased to receive correspondence on the subject.

Notices to Mariners

The Department of Marine has issued the following:—

No. 38. May 21. 95.—Quebec, Gulf of St. Lawrence, Magdalen Islands, Grindstone Island, hand fog horn at Etang du Nord light station. 96.—Quebec, River St. Lawrence, mouth of Saguenay River, Prince shoal, position of gas and bell buoy. 97.—Quebec, River St. Lawrence, above St. Thomas de Montmagny, gas buoys placed temporarily for dredging purposes. 98.—Quebec, River St. Lawrence, Orleans Island, west end, Maranda rocks, change in character of buoy.

No. 39. May 21. 100.—British Columbia, Vancouver Island, east coast, Stuart channel, Boat harbor, uncharted rock. 101.—British Columbia, Juan de Fuca Strait approach, Swiftsure Bank, gas, whistling and bell buoy withdrawn.

No. 40. May 22. 102.—Ontario, Lake Ontario, entrance to Presqu'île Bay, Salt Point light re-established. 103.—Ontario, Lake Huron, Goderich, shoal south of outer breakwater marked by buoy, caution.

No. 41. May 27. 104.—Quebec, River St. Lawrence, Port-neuf-en-bas, change in position of range lights. 105.—Quebec, River St. Lawrence, below Québec, Orleans channel, off Pointe au Pavillon, buoy established. 106.—Quebec, Richelieu River, Chambly wharf light discontinued.

No. 42. May 28. 107.—Ontario, Lake Ontario, Kingston harbor approach, Myles shoal, gas buoy placed temporarily for experimental purposes. 108.—Ontario, Lake Ontario, Kingston approach, Penitentiary shoal, gas buoy established. 109.—Ontario, Lake Erie, Port Stanley, light on west pier moved inwards.

No. 43. June 4. 110.—Nova Scotia, Cape Breton, names of certain geographical features fixed. 111.—New Brunswick, Chaleur Bay, Caraqueet Island, lighthouse and light improved. 112.—Ireland, south-west coast, Mizen Head, fog signal established. 113.—Scotland, west coast, Stourhead lighthouse, alteration of light.

No. 44. June 7. 114.—Ontario, Detroit River, Windsor, shoal. 115.—Ontario, St. Joseph Channel, Shoal Island lighthouse burned down, temporary light.

No. 45. June 7. 116.—Nova Scotia, south coast, Beaver Island, fog alarm established.

No. 46. June 8. 117.—Quebec, River St. Lawrence, Bicquette Island, temporary light. 118.—Quebec, Richelieu River, St. Jean, open lantern replaced by lighthouse tower.

No. 47. June 9. 119.—Quebec, River St. Lawrence, St. Roch Shoals, change in

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position of can buoy no. 61B. 120.—Quebec, River St. Lawrence, Orleans Island, St. Jean, light moved to new freight shed on outer end of wharf.

No. 48. June 10. 121.—British Columbia, Strait of Georgia, sandheads of Fraser River, Roberts bank, Canoe pass, buoy established. 122.—British Columbia, Chatham Sound, Alexandra patch, uncharted rock. 123.—United States of America, Juan de Fuca strait entrance, Duntze rock, whistling buoy established.

No. 49. June 124.—Nova Scotia, Bay of Fundy, Cumberland basin, off Minudie Point, buoy established. 125.—Nova Scotia, southwest coast, Cockerwit passage, buoys established. 126.—Nova Scotia, northwest, Northumberland strait, Pugwash harbor, Fishing point, change in character of light. 127.—Prince Edward Island, south coast, Northumberland strait, Belle River, buoy established.

No. 50. June 19. 128.—Ontario, Lake Ontario, east end, Simcoe Island, Four mile point, hand fog horn established. 129.—Ontario, Lake St. Clair, Belle River, day beacons established. 130.—Lake Huron, westward of Cove Island, whistling buoy established.

No. 51. June 22. 131.—Quebec, St. Lawrence River, Chat River, light established on wharf. 132.—Quebec, St. Lawrence River, above St. Thomas de Montmagny, additional gas buoys placed temporarily for dredging purposes.

The U.S. Hydrographic Office has issued the following:—

No. 22. May 29. 1072.—Lake Huron, Martin reef, light vessel established, gas buoy withdrawn.

No. 23. June 5. 1140.—St. Marys River, Sailors' Encampment, blasting in channel, caution.

Atlantic and Pacific Ocean Marine.

C. Holdsworth, General Manager, Union Steamship Co. of New Zealand, was in Montreal, June 14, on his way from New Zealand to England for a holiday trip.

The White Star-Dominion Line s.s. Megantic ran her trial trip at Belfast, Ireland, June 4, after which she proceeded to Liverpool, Eng., and sailed for Montreal, June 17. She is a sister ship to the s.s. Laurentic, and is similar in all respects but in machinery, which is composed of reciprocating engines only as against the combination of reciprocating and turbine engines of the s.s. Laurentic.

Speaking in the Senate recently, the Minister of Trade and Commerce said, while referring to amendments to the Ocean Steamships Subsidies Act, "I may remark that the Union Steamship Co. have been requesting an increase in their subsidy, which I am afraid, in the present state of finances, looking at the volume of trade, we can hardly give." The company receives a subsidy of about \$230,000 a year for service between Canada and New Zealand and Australia.

The Plant Line s.s. Halifax, which was running between Havana and Florida during the winter, has been overhauled at Halifax, N.S., and is to be run during the summer between Charlottetown, Port Hawkesbury, Halifax and Boston.

The Quebec Steamship Co.'s s.s. Campana, inward bound, grounded near St. Valier, about 20 miles below Quebec, June 17. The passengers were landed

safely and subsequently the vessel was raised, and after examination abandoned to the underwriters.

Press reports from Montreal are again busy with the statement that the White Star-Dominion Line is planning to invade the Pacific ocean as the result of an agreement with the G.T.P.R., with Prince Rupert, B.C., as its headquarters. The rumor is chiefly based on the statement made by C. M. Hays, President G.T.P.R., some time ago to the effect that should the company enter the ocean steamship business it would probably be by arrangement with some ocean steamship company, and not on its own account.

A proposal was made at the recent session of the Dominion Parliament to subsidize a steamship line between Eastern Canada and New Zealand and Australia and possibly South Africa. It was stated that a company had offered to establish such a line, to sail eight times each year with vessels having a dead-weight capacity of 6,000 tons, in return for a subsidy of \$250,000 a year for three years. The matter is to be brought up at the next session, and in the meantime some enquiries will be undertaken regarding the possibility of such a line becoming a paying business.

The Minister of Marine recently announced that the deepening of the St. Lawrence ship channel to 30 ft. will be practically completed this year, and in order to cope with the growing requirements of deep draught vessels using that route it was necessary to further deepen the channel. The work of deepening to 35 ft. will in all probability be taken in hand next year, so that the largest of ocean going vessels can utilize the channel with complete safety. A dredge for operation in the channel for this purpose is at present under construction at the Government dockyards, Sorel, Que.

A press despatch, which evidently emanated from Montreal, and which has been reproduced in most of the newspapers throughout the Dominion and in various U.S. periodicals, in the latter part of May and early in June, states that A. Piers, Manager C.P.R. Steamships, who recently sailed for England, "is understood to carry with him instructions from the C.P.R. executive to place with one of the big British shipbuilding firms orders for the immediate construction of two new Empress liners for the Atlantic service." We have at various times given denials on official authority to similar statements. We were advised, May 27, by letter over the signature of Sir Thos. G. Shaughnessy, President, that "there is no foundation for these periodical reports about orders having been placed for the construction of some new steamers for our Atlantic line."

Maritime Provinces and Newfoundland.

Capt. J. G. Rayne, a well-known West Indies captain, died at Barrington, N.S., June 2.

H. Cann and Sons, Yarmouth, N.S., have sold their steam tug Marina to F. R. Eaton for use on the Gaspé route.

Capt. G. W. J. Bissett, commander of the Dominion Government s.s. Lansdowne, died at St. John, N.B., June 4, aged 64.

The name of the schooner Annie,

no. 80,886, registered at St. Andrews, N.B., has been changed by order in council to Fred Greene.

J. F. L. Parsons, Agent of the Department of Marine at Halifax, N.S., died there, June 14, aged 68. He occupied the position for 15 years.

Capt. C. Barkhouse, Liverpool, N.S., has been appointed a Fishery Officer in the Fisheries Protection Service with the rank of Master Mariner.

The name of the schooner Maggie Roach, no. 74368, registered at Richibucto, N.B., has been changed by order in council to Maude Weston.

Sandy Point, N.S., a customs preventive station, has been established a customs out-port and warehousing port, under the survey of Shelburne, N.S.

The Reid Newfoundland Co., recently purchased the s.s. Dromedary in Glasgow, Scotland, to replace the wrecked s.s. Virginia Lake in the Labrador mail service.

The Dominion Department of Marine is reported to have purchased the schooner W. J. Foley from H. Le Blanc, Tusket Wedge, N.S., for use on the lakes as a lightship.

Capt. F. Wollard, of Yarmouth, N.S., who was sentenced to 16 years in the penitentiary at St. John's, Nfld., in 1903, for shooting one of his crew, has been released and pardoned.

The British Admiralty surveying ship, Ellinor, has resumed her summer work, surveying along the Newfoundland coast.

The Quebec Steam Whaling Co., Ltd., received tenders recently for the purchase of its whaling plant, which included the steamer Falken.

N. A. Currie, formerly chief engineer Dominion Atlantic Ry. s.s. Boston, and at one time second engineer Dominion Government s.s. Stanley, has been appointed inspector of marine boilers and machinery for Nova Scotia, succeeding J. P. Esdaille, deceased.

The Government ice-breaking steamship Earl Grey, which is to be operated across the Northumberland Straits, was launched at Barrow-in-Furness, Eng., June 18. The ceremony was performed by the Countess of Antrim, on behalf of the Dominion Government.

Capt. C. N. Mylius, who was for 41 years a commander of Allan Line and other steamships and subsequently, to the date of his retirement about 15 years ago, was master of the mail steamer Newfoundland, running between Halifax and St. John's, died at Halifax, June 12.

The contract for the dredging to be done on the western side of St. John harbor, near Beacon Bar, recently awarded by the Public Works Department, was signed May 10, and the work immediately commenced. The dredge Iroquois, with a capacity of 250 cubic yards an hour, up to a depth of 27 ft., is at present working there, and arrangements have been made to place an additional dredging plant on the contract, so that the work may be pushed through as speedily as possible.

The Home Steamship Co.'s s.s. Morien, which was launched at Sunderland, Eng., May 20, is on her way to Halifax, N.S., with a cargo of pipe for that city, in charge of Capt. C. M. Burchell. Her dimensions are:—Length, 215 ft.; beam, 31ft. She is equipped with electric light and

has three hatches, respectively, 21 ft., 25 ft., and 44 ft. She has been specially designed and built for the coal trade, and is considered one of the finest collier coasters. After discharging her cargo, she will proceed to go on charter with the North Atlantic Collieries.

The Sincennes McNaughton Line's steam tug, Sin-Mac., which has been built for that company at Dumbarton, Scotland, underwent trials of her machinery there, June 3, when she ran at about 13 knots an hour. The dimensions are: length, 138 ft.; breadth, 26 ft.; depth, 14 ft. Her equipment includes the most up-to-date arrangements for the speedy handling of vessels, and in addition to all the necessary tugboat fittings, she has a large salvage pump and a fire pump. The vessel is fitted with electric light, and water ballast is arranged for in the cellular double bottom under the engine, and in the fore and aft peaks.

The collier Fornebo has just performed a smart bit of work. She arrived at Quebec recently, in the afternoon, from Sydney, N.S., with a cargo of 7,000 tons of coal, and proceeded to Montreal, where she arrived at 4 p.m. the following day, discharged her cargo there and passed Quebec outbound at 4.30 p.m. on the third day. Thus she made the run from Quebec to Montreal, discharged 7,000 tons of coal there, and returned to Quebec in a little over 40 hours, which is certainly fast work. The Norwegian steamer Wacousta has also done some fast work. She left Quebec, May 25, at 11 p.m., proceeded to Sydney, N.S., where she loaded 5,700 tons of coal and reached Quebec at 2.30 a.m. May 31, notwithstanding the fact that she was detained 29 hrs. by fog.—Shipping Illustrated.

An order in council has been issued granting permission for the changing of the name of the steamboat Phantom to Mabel Reid, under which name the vessel has been registered at St. Andrews, N.B.

The Home Steam Ship Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$95,000 and office at Sydney, N.S., to own and operate steam and other vessels, and to carry on the business of common carriers within and without the Dominion. The provisional directors are: J. T. Burchell, J. A. Young, F. A. de Young, H. C. Harrington and H. Ross, Sydney, N.S.

In our June issue we gave a report to the effect that the Bras d'Or Steamship Co., was building a steamboat at Shelburne, N.S., which it hoped to launch about June 1. This vessel which is being built to take the place of one controlled and operated by the Bras d'Or Steamship Co., is, however, owned by the North Shore Steamship Co. The dimensions of the new vessel, which is named Aspy, are:—Length, 124 ft.; breadth, 25ft.; depth, 9 ft. The machinery consists of a compound engine, 15" by 32", supplied with steam from a Scotch boiler, 10 ft. by 11'6", and she is equipped with electric light. When completed she will be operated in the passenger and freight trade of the north shore of Cape Breton, calling at St. Ann's, Ingonish, Aspy Bay, and Bay St. Lawrence.

Following are the vessels, with their captains and chief engineers, of the Black Diamond Steamship Co., operated by the Dominion Coal Co., Glace Bay, N.S., for the current season. Of those named, the Bonavista, Cabot, Cacouna, Cape Breton, Coban and Louisburg, are owned by the company; the remainder

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 Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians. 10.00 to 25.00 per acre.
 Map No. 3—Main Line, 3rd Meridian to Range 10, W. 4th Meridian (generally). 8.00 to per acre.
 Map No. 5—South-Western Alberta. 8.00 to 15.00 per acre.
 Map No. 6—Part of Alberta, Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian. 10.00 to 25.00 per acre.
 Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians. 10.00 to 25.00 per acre.
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" " 10.00 " " " " " " " " " "	239.70	" " " " " " " " " "	81.62	" " " " " "
" " 11.00 " " " " " " " " " "	263.60	" " " " " " " " " "	89.78	" " " " " "
" " 12.00 " " " " " " " " " "	287.60	" " " " " " " " " "	97.96	" " " " " "
" " 13.00 " " " " " " " " " "	311.55	" " " " " " " " " "	106.10	" " " " " "
" " 14.00 " " " " " " " " " "	335.60	" " " " " " " " " "	114.32	" " " " " "
" " 15.00 " " " " " " " " " "	359.50	" " " " " " " " " "	122.44	" " " " " "

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

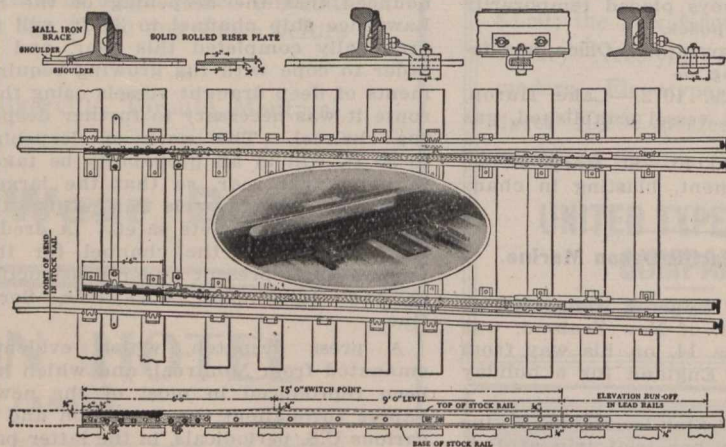
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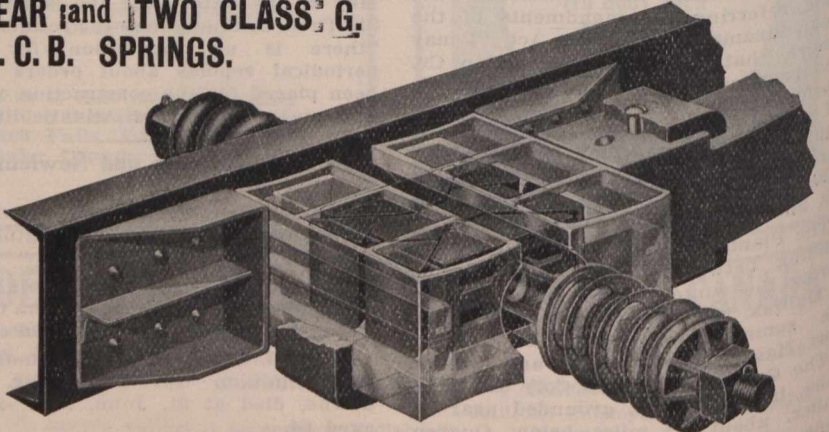
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Province of Quebec Marine

The Department of Marine received tenders June 29, for about 625 tons of steel plates and shapes required for the construction of elevator dredge no. 26, to be built at the Government shipyard, Sorel.

A deputation representing the Quebec Harbor Commission visited the Montreal harbor, June 2, and inspected the works completed and in progress there, with the view to the carrying out of a number of improvements in the Quebec harbor.

The two vessels operated by Revillon Bros., Montreal, during the current season, with their officers are as follows: Minawa, W. P. Moore, captain; J. Fowler, chief engineer—and Ompabika, G. A. Patton, captain; E. Drinkwater, chief engineer.

It is announced that the aids to navigation in the St. Lawrence Channel between Montreal and Quebec, in Lake St. Louis and the Ottawa River, have been placed under the Marine Departments' staff at Montreal instead of at Quebec as heretofore.

The Montreal Harbor Commissioners' large floating crane which was built in England last year, and which should have arrived at Montreal nearly a year ago has at last reached its destination. The crane broke loose from the tug towing it last year and was subsequently picked up on the north west coast of Scotland and towed to Barrow-in-Furness, Eng.

La Compagnie de Navigation Canada has been incorporated under the Quebec Companies Act, with a capital of \$20,000 and office at Montreal, to own and operate steam and other vessels, and to carry on a general business in navigation, towage, the construction of wharves and other works connected with navigation. The provisional directors are:—L. Lacouture, L. E. Morin, Jr., Montreal; A. G. W., and H. L. Couture, Sorel, Que.

The S.S. Torgorm from the West Indies consigned to the Robt. Reford Co., Montreal, collided with and sank, the river steambot Pierreville, owned by Niquet et Freres, Pierreville, June 14, near Ile aux Raisins. The crew escaped in the boats. The Pierreville is a paddle wheel steamer with engine of 8 n.h.p. She was built at Pierreville, Que., in 1906, her dimensions being, length, 100 ft.; breadth, 24 ft.; depth, 3.7 ft.; with a tonnage of 121 gross, 76 register. A notice has been issued to mariners that the wreck is located right in the channel and advising caution to both incoming and outgoing vessels.

An act passed at the recent session of the Dominion Parliament defines the extended boundaries of Montreal harbor,

and empowers the corporation controlling the harbor to maintain and operate tracks and harbor lines and move cars by any motive power for the carriage of goods, and for such purpose to build, purchase or otherwise acquire rolling stock and machinery of all descriptions. The previous acts are amended by confining the corporation powers to the harbor of Montreal, as apart from the port of Montreal, as defined by sub-sec. 1, sec. 5 of the Montreal Harbor Commissioners' Act 1894, which is under the jurisdiction of the Minister of Marine.

Ontario and the Great Lakes.

Capt. Wm. Nanson, a well known lake navigator, died at Port Hope, June 3, aged 59.

The Inland Navigation Co.'s steamboat, Stadacona, was launched at Detroit, Mich., May 29.

The ratepayers of Toronto defeated a by-law, June 5, to raise \$700,000 for the completion of the construction of a sea wall on the west side of the city.

Polson Iron Works, Ltd., has applied to the Toronto city council for a site for the construction of a shipbuilding plant, including a large floating drydock.

The Niagara Navigation Co. has completed the repairing of its wharf at Lewiston, N.Y., which was wrecked during the recent ice jam in the river.

Captain Robert Clapp, who retired from the command of the Niagara Navigation Co.'s steamboat Corona, about two years ago, owing to a paralytic stroke, died at Picton, Ont., June 13.

The Northern Navigation Co.'s s.s. Ionic has had 5 ft. of new steel welded to her starboard propeller shaft, and a few other repairs completed at Duluth, Minn.

Residents on both sides of the Detroit River are agitating for a reduction of the fare from 10c. to 5c. for passages charged by the Detroit, Belle Isle and Windsor Ferry Co.

The board of conciliation appointed to deal with the longshoremen's troubles at Owen Sound consisted of D. Ross, Barrie, chairman; Wallace Nesbitt, K.C., and J. G. O'Donoghue.

Capt. G. Moulton, of the Toronto Ferry Co.'s ferry steamboat Mayflower, was presented with a gold mounted pipe by the crew, June 3, on the completion of 19 years service with the company.

B. W. Renaud, has been appointed Superintendent Bisco-Gowganda Transport Co., at Biscotasing. The company is said to be building a large number of scows and launches for service on the route.

Plans for the construction of proposed coal and general freight docks at lots 13 and 11, concession K, Fort William, have been filed with the Minister of Public Works, and application has been made for approval of same.

In carrying out some excavations at Merriton, one of the locks of the original Welland canal has been unearthed. This structure was a part of the construction which was commenced in 1824, and completed 5 years later.

A report is current that the operation of the Kingston drydock is about to pass from the Government into private hands, and the Canadian Locomotive Co., or interests intimately connected therewith,

has been named as the future owner.

The Department of Marine is erecting an octagonal wooden lighthouse tower on the summit of the northern Lawyer Island, Chatham Sound, replacing the old one. The work will be completed and the light exhibited from the new tower during the present season.

J. C. Eaton, Toronto, President Turbine Steamship Co., and Hamilton Steamboat Co., has recently purchased a pleasure yacht, named Tekla, which he has had equipped with a wireless telegraph system in connection with a station erected on the T. Eaton Co.'s store, Toronto.

An order in council has been passed declaring Owen Sound harbor, comprising all the waters of Owen Sound harbor, and the navigable portions of all streams flowing into it, south of a line drawn due west, astronomically from the northern extremity of Squaw Point, to be a public harbor.

The s.s. Iron Age, owned and commanded by Capt. W. J. Willoughby, Windsor, was destroyed by fire, June 4, near Bar Point in Lake Erie. The captain and crew escaped in a small boat. The vessel, which was a wooden steamer, was valued at \$32,000, but was only insured to the extent of \$5,000.

The Pelee and Lake Erie Navigation Co. is reported to have purchased the steamboat Saugatuck in the U.S., for operation between Pelee Island and the mainland. Another report states that the steamboat Ossifrage, formerly owned by the Algoma Central Steamship Line, has been acquired for a similar purpose.

Sir Robt. W. Perks, who has been in Canada in connection with the proposed Georgian Bay canal scheme, returned to England by the s.s. Laurentic June 19. It is stated that the Premier has conveyed to him the impossibility of the Dominion Government guaranteeing the bonds of the company during the present fiscal year.

The Keystone Transportation Co.'s steamboat Key West, arrived at Montreal, June 6, from England, and was followed by the Keyport later on. These vessels, details of which were given in our last issue, will be operated in the interests of the Montreal Light, Heat and Power Co., carrying coal between Lake Erie ports and Montreal.

The Thornbury Transportation and Reduction Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of \$500,000, and office at Thornbury, Ont., to own and operate steam and other vessels, and to carry on a reduction works, etc. The provisional directors are: K. Davidson, M. Vail and G. G. Athery, Meaford, Ont.

The Board of Conciliation appointed under the Labor Disputes Act, in the case of the complaints of the Owen Sound longshoremen against the C.P.R., consisting of W. Nesbitt, K.C., D. Ross and J. G. O'Donoghue, has reported, recommending an increase of 2c. an hour in the men's pay. A minority report has been sent in on behalf of the men suggesting further increases.

At a joint meeting of the St. Catharines and Toronto boards of trade, June 9, a resolution was adopted to the effect that it is highly desirable that the enlargement of the entire canal system from Port Colborne to the Atlantic Ocean be proceeded with, and to such dimensions as will permit the passage of

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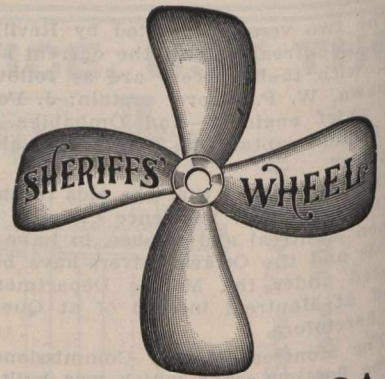
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the largest lake vessels from the head of the lakes to the seaboard.

The Toronto Cuban Grape Fruit Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$100,000 and office at Toronto, to carry on the business of nurserymen, etc., and in connection therewith to build, acquire and operate steam and other vessels. The provisional directors are: J. Robson, F. W. Sawtell, A. A. Raynor, A. E. Longbottom, L. M. Heal, Toronto.

The Montreal River Navigation Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of \$40,000, and office at Cobalt, Ont., to acquire and operate steam and other vessels, and to conduct a general passenger and freight business on the lakes and rivers of Northern Ontario. The provisional directors are: A. G. Smith, Latchford, Ont.; R. J. Jemmett, and H. H. Lang, Cobalt, Ont.

The Western Drydock and Shipbuilding Co., is reported to have signed an agreement with the Port Arthur city council for the construction of a large drydock and shipbuilding plant there, capable of repairing and building the largest lake vessels. A by-law is being prepared for submission to the public vote granting a subsidy for the proposed works. A. Bowerman, Southampton, Ont., represented the company in the negotiations.

The Union Mining and Transport Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of \$40,000 and office at Toronto, to carry on a general mining business, and to build, purchase or otherwise acquire and operate steam and other vessels, and to carry on the business of common carriers. The provisional directors are: I. M. Scott, Lambton Mills; F. R. Baumhard and R. F. Stibbard, Toronto.

The Port Stanley Navigation Co.'s steamboat, Lakeside, which arrived at Port Stanley from Cleveland, O., on its first trip for this recently incorporated company, was built at Toledo, O., in 1901. She is 156 ft. long, with 28 ft. beam and tonnage, 225 register. She has license to carry 650 passengers. It is stated that a guarantee of \$7,000 has been given for the operation of the vessel between Port Stanley and Cleveland for the season to Sept. 15.

The U.S. Lake Survey reports the levels of the Great Lakes for May, in feet, above tide water, as follows: Superior, 601.65; Michigan and Huron, 580.84; Erie, 572.54; Ontario, 247.16. It was anticipated that during June, Superior would rise 3¾ ins.; Michigan and Huron, 3 ins.; Erie, 2½ ins.; Ontario, 1 in. Compared with the average May levels of 10 years, Superior is 8¾ ins. lower; Michigan and Huron, ½ in. higher; Erie ¼ in. lower, and Ontario 7¼ ins. higher.

The Sault Ste. Marie Dry Dock and Shipbuilding Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of \$1,000,000 and office at Sault Ste. Marie, Ont., to construct and operate dry docks, marine railways; to build, repair and equip ships and other vessels, and to carry on all kinds of business connected with the operation of a dry dock and marine railway. The provisional directors are: J. O'Boyle, W. H. Plummer, W. O'Brien, W. H. Hearst and J. McKay, Sault Ste. Marie, Ont.

A deputation, consisting of those interested in the project, was received by

the Premier and Minister of Public Works, at Ottawa, June 11, when it was stated that the town of Sault Ste. Marie had voted a bonus of \$100,000 towards the construction of a drydock, payment to be made in 20 annual instalments of \$5,000. The Government is being asked to grant assistance to the project by the payment of 3% on \$500,000, annually for 20 years. The matter was promised consideration.

The Fort William Milling Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$100,000 and office at Montreal, to carry on throughout Canada the business of grain dealers, and to own and operate all necessary equipment for the conduct of the business of transportation by water in connection with the company's business. A. J. Brown, K.C.; G. H. Montgomery, R. C. McMichael, R. O. McMurry, F. G. Bush, G. R. Drennan and H. W. Jackson are provisional directors.

The Port Stanley Navigation Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$10,000 and office at St. Thomas, Ont., to acquire and operate sheds, docks, wharves, elevators, steamboat terminal facilities, steam and other vessels, and to aid by bonus, guarantee, etc., any person or firm engaged or interested in navigation and the transportation of passengers and merchandise. The provisional directors are: W. R. Jackson, B. F. Ronsinger, T. Donley, J. R. Green, J. Griffin, St. Thomas, Ont.

In response to questions in the House of Commons recently, the Minister of Public Works stated, that the amount spent on the Honora dock, Manitoulin Island, during the 1908 season, was \$2,591.98, and that the work continued from Sept. 16 to Dec. 31. The dimensions of the dock, which was built in 1904, are shore approach, 175 ft. by 20 ft. wide on top; woodwork, 280 ft., consisting of 7 cribs, each 20 by 20 ft., and an outer block 40 by 20 ft., standing 6 ft. above low water, and with a depth of water of 23¼ ft. at low water.

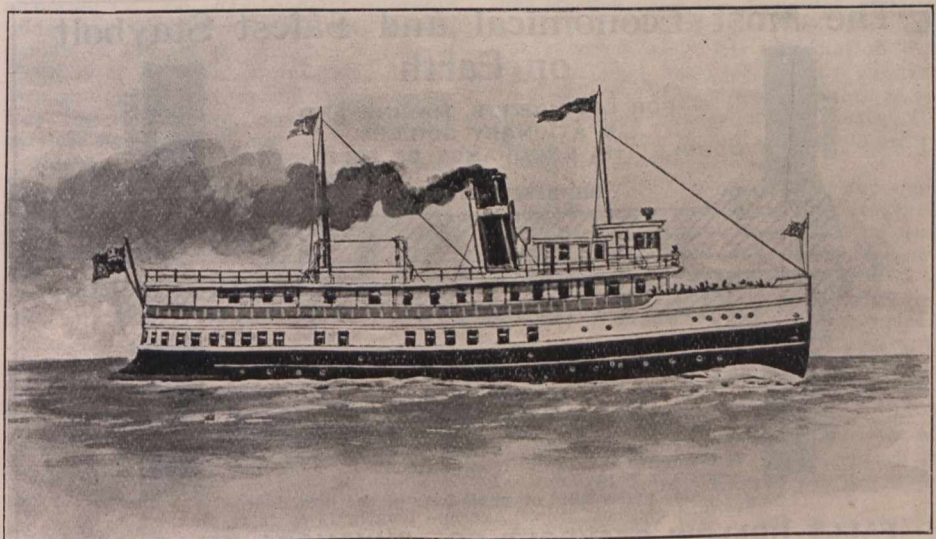
Replying to a question in the House of Commons recently, as to whether or not the proposed Waterways and Boundaries Treaty would prevent the construction of the proposed enlargement of the St. Lawrence and Welland canals, or the construction of the proposed Georgian

Bay canal without the consent of the Commissioners, because of the fact that these works, or either of them, might reasonably be expected to affect the height of water in Lakes Huron, Erie and Ontario, the Minister of Justice reminded the questioner that the whole subject of the treaty is still under consideration.

The Fort Erie and Buffalo Ferry Co., Ltd., has been incorporated under the Dominion Companies Act with a capital of \$20,000, and office at Fort Erie, Ont., to operate a ferry between Fort Erie, Ont., and Buffalo, N.Y.; to own and operate steam and other vessels for the transportation of passengers and merchandise; to act as common carriers, forwarders, wharfingers and warehousemen; and to construct, own and use such docks, terminal facilities, etc., as may be convenient or necessary for the purposes of the company. The provisional directors are: B. F. Matthews, P. B. Troupe, J. J. Foster, W. E. Hunt, A. C. Mackintosh, W. J. Hawley, C. E. Harris and R. Jeffrey, Fort Erie, Ont.

An order in council has been passed, rescinding clause 43 of the general regulations governing ports, as added to by order in council, Feb. 19, 1907, and substituting the following therefor: "All through-bound vessels in passing through the St. Clair River in the vicinity of the St. Clair middle grounds, and of Stag Island, in the harbor of Sarnia, shall keep to the right, that is to say, all up-bound boats shall pass through the eastern channel, and all down-bound boats shall pass through the western channel. This rule shall apply to through-bound vessels only, and not to vessels running between local points in the river, which vessels may take either channel, conforming to the ordinary rules of the road for the Great Lakes."

The Dominion Government steamboat Simcoe, which recently arrived in Georgian Bay from England, for the lighthouse and buoy service there, has been the cause of some alarm amongst a section of the daily press, which seems anxious to serve its readers with something sensational, without regard to facts. Statements as to her construction and equipment have been made to show that she is specially adapted for speedy transformation into an armed cruiser and prepared to carry heavy guns,



THE NORTHERN NAVIGATION COMPANY'S STEAMBOAT WAUBIC.

"which, as is known for a fact, the Canadian Government has, for the present, stored away at some Georgian Bay port." An official statement was issued recently that the description as published in the daily papers was entirely erroneous. The Simcoe is not a cruiser but a buoy boat, and if she performs any fisheries protection work it will be only incidentally.

The survey board appointed some time ago by the U.S. Congress to enquire into the feasibility of constructing a navigable waterway from the Great Lakes to the Gulf of Mexico, reports that a 14 ft. channel is practicable, and may be constructed by any one of six different plans. A combined plan giving varying depths of 8 ft. and 9 ft. at different points was recommended, costing approximately \$158,697,462, with an annual maintenance cost of \$6,810,000. In concluding its report, the board says: "Such a depth (14 ft.) is greater than required for successful river navigation and less than required for economical lake or ocean navigation, and if adopted would require for common use on lake, river and gulf a type of vessel not now in existence, and which, if designed, would be less economical than modern lake or ocean vessels in use on

those waters or than towboat and barge navigation on the connecting waterway."

The Northern Navigation Co.'s steamboat Waubic, the keel of which was laid March 15, was launched at Collingwood, June 1. She is of steel construction, with triple expansion engines driving twin screws, with a speed of 16 miles an hour, and has been specially designed for the requirements of the tortuous channels of the 30,000 islands of Georgian Bay. The main deck, in addition to engine and boiler space, accommodates baggage, smoking and toilet rooms. The entrance hall in quarter sawn oak, forms an attractive lobby, from which ascends the stairway to the saloon above. The purser's office is located in the lobby and aft it is the dining saloon, finished in natural woods with large observation windows. The general saloon is designed in colonial style, in ivory white enamel with crimson carpet and furnishings. The staterooms are located aft of the saloon and are provided with all modern conveniences. The vessel is lighted throughout by electricity and she is provided with a powerful searchlight. There is accommodation for upwards of 600 passengers. Her dimensions are, length, 142 ft.; breadth, 25 ft.; molded depth, 9 ft. She was placed on her route June

NIAGARA NAVIGATION CO., LIMITED

Notice is hereby given that an interim dividend of four per cent. (being at the rate of eight per cent. for the year) has been declared upon the Capital Stock of this Company, and the same will be payable on the 2nd of July, 1909.

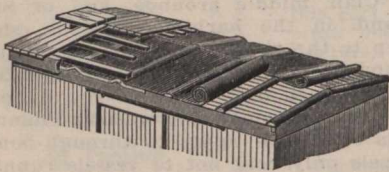
The Transfer Books will be closed from June 16 to June 30, 1909, both days inclusive.

By order of the Board.

B. W. FOLGER, General Manager.
Toronto, June 1, 1909.

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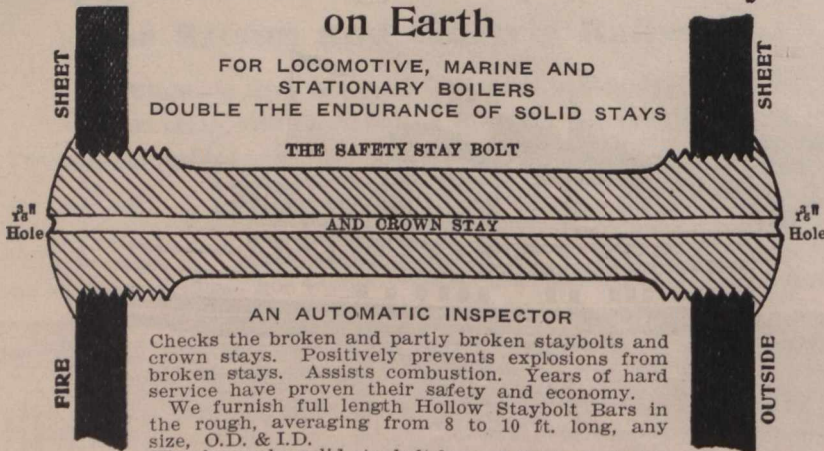
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N. F. Loomer, Letelier, Man., has patented a boat propelling device at Washington, D.C., under no. 923,283.

The U.S. steamboat Grand Forks, arrived at Winnipeg, June 7. This is reported to be the first steamboat to arrive from south of the boundary in 28 years.

Among the subjects discussed at the annual meetings of the Western Canada Associated Boards of Trade, at Saskatoon, June 15 to 17, was that of the navigation of the North Saskatchewan River.

The Dominion Government has chartered a vessel from Capt. Ross of Medicine Hat, Alta., for use in the fisheries service on Lake Winnipeg. She is about 50 ft. long with 11 ft. beam, and draws about 4 ft. of water. She was taken from Collingwood to Fort William, and from there was shipped by rail to Winnipeg.

The Peace River Trade and Navigation Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$1,000,000 and office at Montreal, to conduct a general trading business, and to act as common carriers. The provisional directors are: F. S. Lawrence, Fort Vermillion, Alta.; W. D. Lighthall, C. A. Harwood, E. Greenwood and G. S. Wilson, Montreal.

The steamboat Winnitoba, built by Capt. Bellefeuille, at the mouth of the Seine River, has dimensions, as follows: length, 186 ft.; breadth, 44 ft.; with a draught of 4½ ft. She has been specially designed for service on the Red River and passage through the St. Andrews Locks, to the lake. The engines will develop 500 n.h.p., driving side wheels. There are 41 staterooms with promenade and hurricane decks, and she will probably be licensed to carry 1,000 passengers. It was anticipated that she would be in service by July 1.

The plant of the Pioneer Navigation and Sand Co., Winnipeg, which was offered for sale recently, includes the steamboats Alexandria and J. M. Smith. The former was built in Winnipeg in 1902, her dimensions being:—length, 84 ft.; breadth, 19.8 ft.; depth, 3.2 ft.; tonnage, 164 gross, 38 register. The latter vessel was built in Winnipeg in 1905, and has dimensions:—length, 120 ft.; breadth, 21 ft.; depth 4 ft.; tonnage, 179 gross, 122 register. Both vessels are described in the schedule of sale as stern wheel paddle steamers, but in the Canadian register for 1907, the Alexandria, appears as, Alexandra, and is given as a screw driven vessel.

The completion of the construction of the whole of the works connected with the St. Andrews locks and dam, is expected by about Oct. 1. The structures which were begun in 1900, consist, in the main, of abutments on each bank of the river, 7 large piers, 100 ft. apart, the lock with outer and retaining walls strengthened by a pier, and a permanent dam between the piers. The piers will carry a steel traffic bridge, from which a movable dam will be operated. The dimensions of the lock are: length, 200 ft.; width, 45 ft.; depth at lowest stage of water over sills, 9 ft.; lift, 21 ft. Following are the vessels of the Rat Portage Lumber Co., St. Boniface, Man., for the current season, with their cap-

tain and chief engineers respectively:—

Empress	M. McRitchie	H. Johnston
Ethel Banning	J. W. Johnston	F. Gaudreau
Kingfisher	J. J. McKenzie	J. Smith
Mary Hatch	F. Mongrain	G. Shearer
Wendigo	J. Shovedice	C. Johnson

B.C. and Pacific Coast Marine.

The name of the steamboat R. P. Rithet, no. 85316, registered at Vancouver, B.C., has been changed by order in council to Baramba.

Capt. C. Barnes, Victoria, has been appointed a Fishery Officer in the Fisheries Protection Service with the rank of Master Mariner.

D. A. Foster is captain, and J. Watt, chief engineer for the current season of the steamboat, City of Quesnel, operated by T. Marion, Quesnel.

The Dominion Government is negotiating with the British Admiralty concerning the acquirement of a cruiser, suitable for a training ship and for the fisheries protection service on the Pacific coast.

Brown and McCabe Stevedores, a company incorporated in the U.S., with a capital of \$100,000 and head office at Portland, Ore., has been licensed to carry on its business in B.C., with P. G. Groves, Vancouver, as its attorney.

The Pacific Woods Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$100,000, to carry on the business of timber merchants, etc., and to own and operate steam and other vessels and carry passengers and freight.

E. L. Kinman, managing director Island Dock and Warehouse Co., Vancouver, was arrested there, June 2, for assault and resisting a police officer, in attempting to secure a landing at Deadman's Island on behalf of his company.

The Malahat Sand and Gravel Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$25,000, with power, among other things, to own and operate steam and other vessels and to carry on business as carriers of passengers and freight.

The Union Steamship Co.'s s.s. Coquitlam, which sailed from Vancouver, May 26, for northern coast ports, returned to port the following day with a fire in the engineer's room. One death, and serious injuries to four men were reported as a result.

The Howe Sound and Northern Construction Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$10,000, to carry on a general business of builders, contractors, etc., to own and operate steam and other vessels, wharves, warehouses, etc., and to act as carriers by land and water.

The steamboats operated by the White Pass and Yukon Ry., for the current season, are, Casca, Dawson, Gleaner, Selkirk, Victorian and White Horse. The Gleaner runs between Caribou and Atlin, and the others make daily sailings from White Horse. The season extends from June 1 to about the end of Oct.

The Vancouver Towing and Lightering Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$75,000, to take over the tugs, barges, etc., of J. D. Foreman, Vancouver, and to carry on the businesses of general carriers, railway and forwarding agents, warehousemen, bonded and common car men, etc.

The Dry Belt Settlements Utilities Ltd. has been incorporated under the

B.C. Companies Act, with a capital of £50,000, to acquire and develop properties in the province, and in connection therewith to build, acquire and operate railways and tramways worked by steam, electricity or other motive power; and telephone and telegraph lines.

High water in the Skeena River has stopped the navigation of Kitselas canyon. The Hudson's Bay Co., has arranged to transport freight to the canyon by boat, and round the canyon by teams, where it will be transhipped to another of the company's vessels. It is anticipated that the waters will subside early in July.

The Canadian Mathews Gravity Carrier Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$100,000, to acquire patents and to manufacture articles similar to those manufactured by a company of similar name in the U.S.; and to carry on the businesses of ship owners, ship brokers, freight contractors and general carriers by land and sea.

Rear-Admiral Kingsmill, left Victoria, June 10, for Ottawa where, he will, it is said, report to the Government as to the advisability of making Esquimalt the headquarters of the Pacific coast light-house and fisheries protection service. He will sail for England shortly in company with the Minister of Marine, to attend the Imperial Conference on naval matters, when the future of Esquimalt harbor, the establishment of a training ship in the Pacific coast, and other matters will be discussed.

The Vancouver Shipmasters' Association at a recent meeting endorsed the proposed new regulations for navigation in Vancouver harbor, and withdrew its suggestions as to the line to mark the limit for a 7-knot speed, which had been drawn from Brockton Point to the Indian Mission church, and to substitute a line from Brockton Point to the incinerator at Heap's Mill. It was also agreed that an investigation be made into the matter of operating launches between upcoast points without certified masters, and that action be taken if deemed necessary.

The Minister of Marine stated in the House of Commons recently that prices were being asked for a lifeboat to replace the one wrecked at Bamfield Creek some time ago. In the meantime, a temporary boat has been placed on that station. He also said that, regarding the wreck of the gasolene surf boat, which cost \$25,000, his information was that the boat was left in an exposed condition and the crew was on shore and no one in charge of the boat at all. The men who should have been in charge have been dismissed.

N. Thompson, President Vancouver Drydock and Shipbuilding Co., returned to Vancouver June 5, from Ottawa, and reported that he had succeeded in obtaining the promise of a subsidy of 3% of the total cost of the dock for 20 years. An option is said to have been secured on a site at the east end waterfront. The proposed dock will be a steel pontoon floating structure, 500 ft. long, capable of accommodating vessels of 10,000 tons. The estimated cost is quoted as \$1,250,000, and the President proposes to go to England shortly in connection with the financing of the scheme.

The rate war which has been waged between the C.P.R. and the International Steamship Co., on the Victoria, Van-

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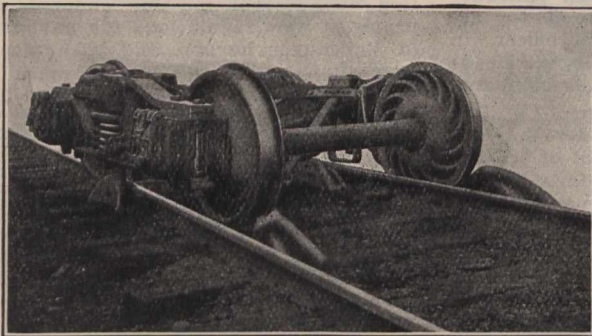
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Sailing from New York Saturdays.

WHITE STAR LINE

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couver and Seattle route, has come to an end by the withdrawal by the latter company of its vessel from the service. In announcing the discontinuance of the service the President said: "In withdrawing the Iroquois from the Vancouver route, we realised that it would not be possible for the steamer, under the advanced rates, to show any earnings. Between the Canadian Pacific's fancy steamers, the rail lines, and the Iroquois, business would be so divided that our steamer could not operate at a profit. So she has been temporarily taken off, but next winter she will resume service on this run."

St John, N. B., Shipping Statistics.

The St. John, N.B., Board of Trade has issued a pamphlet giving a record of the shipments from the port during the 1908-09 winter season, and a comparative table of exports for the past 12 years. The summary for the 1908-09 season, is as follows:—

	VALUES	
Wheat, 6,806,485 bush.	\$8,345,343	
Barley, 527,998 bush.		
Oats, 341 bush.		
Peas, 10,893 bush.		
Hay, 12,068 tons		150,338
Flour and meal, 678,754 packages..		2,034,346
Cheese, 90,022 packages		957,084
Butter, 2,551 packages		23,985
Eggs, 1,228 packages		8,924
Meat, 80,327 packages		4,278,117
Cattle, 22,923	1,684,160	
Sheep, 149	745	
Horses, 63	15,400	
Lumber, 21,169 stds.	641,385	
Other lumber, 3 583 tons	352,329	
Apples, 78,934 barrels	236,927	
Lard, 222,554 packages	1,339,239	
Manufactures, 285,274 packages....	2,873,046	
Miscellaneous, 84,393 packages	1,023,467	
Furs estimated	600,000	
	\$24,564,840	

During the past season, the number of sailings was 108, showing a total registered tonnage of 474,620 tons, against 111 sailings and 473,934 tons for the previous season. In 1895-96, there were 22 sailings from the port with a register tonnage of 50,892, and the increase has been gradual each year since. The record season was that of 1906-07 when there were 116 sailings with a register tonnage of 482,895. It is interesting to notice the average tonnage per vessel, which in the first mentioned season was approximately, 2,315 tons, in 1906-07, the record season, 4,165 tons, and in the 1908-09 season, 4,395 tons. For the season 1897-98 the number of sailings was 58, with a register tonnage of 102,316 tons, and cargo value, \$4,848,768; so that the past season shows an increase of approximately 100% in the number of sailings, 365% increase in the register tonnage, and 410% in the cargo value.

Sault Ste Marie Canal Accident.

The lock gates of the Canadian canal at Sault Ste. Marie were wrecked June 9, by the Gilchrist Co.'s s.s. Perry G. Walker. It is stated that through mistaken signals, the vessel rammed the lower gates, while the C.P.R. s.s. Assiniboia was in the lock, and the Pittsburg Steamship Co.'s s.s. Crescent City was entering at the upper end, the upper gates being still open. The consequence was that the upper gates were wrenched from their fastenings by the force of the water, and the Assiniboia and Crescent City swept through the lock to open water, at tremendous speed. The Assiniboia ripped

a hole in the Perry G. Walker with her port anchor, and the Crescent City in overtaking the Assiniboia struck her and was similarly damaged. Of the three vessels, the Assiniboia was the one to suffer least damage, and after an examination, it was decided that it was not sufficiently serious to detain the vessel. She therefore proceeded to Owen Sound with her passengers, and later to Collingwood, where she was docked for thorough examination. The Canadian lock, which is 900 ft. long by 60 ft. wide, was completed in 1896. The work of repairing the lock was immediately taken in hand, but considerable difficulty was experienced at the outset, owing to the impossibility of stopping the torrent of water rushing through. The moveable dam was lowered with the exception of one leaf which was badly twisted. The new gates were, however, placed in position, and the canal opened for traffic June 21. The Minister of Railways and Canals visited the canal while the work was proceeding. Enquiries have been held, in camera, on board the Perry G. Walker, as to the causes of the disaster, and it is stated that the cause was a mistake by the engineer of a signal to go full speed astern, he instead going full speed ahead.

A New Toronto Tug.

The steam tug, Erl King, which the Polson Iron Works has built at Toronto for the Frank Simpson Contracting Co., is constructed on a combination of ideas decided on after visits paid to a number of shipbuilding yards on the American continent. The hull is of composite frames 2" by 2" by 1/4", spaced 18" centres; sheer plate 3/8" by 18", Keel plate 1/2" by 14", margin plate, 3/8" by 14"; planking, white oak dressed to 3"; deck plank, 3" B.C. fir; and it is divided into 4 water-tight compartments by steel bulkheads, one between engine and boiler-room, one between boiler-room and crew's quarters, and one between crew's quarters and the forepeak. The vessel has a mean draught of 6' 4" when the forepeak is filled with water. The water bunkers are also constructed of steel, and the stiffening bars are rivetted to the floor plate and house coaming, and extend to the top of the cabin, making the steel frame for the deck house. The shaft is 5", horseshoe thrust bearing; iron stern tube with brass and lignum vitæ bearing 21" long; solid wheel 6 ft. diam.; 9 ft. pitch; boiler pressure 145 lbs., with fires from forward; coal capacity 17 tons. One of the features of the vessel is the solid cast steel stern and stern post, each cast in one piece weighing 800 lbs and 950 lbs. respectively. The rudder frame is also of cast steel. On her recent trial trip with 144 lbs. of steam, she made 12 3-5 miles an hour over a measured course, turning 133 rev. a minute. When under full headway she will come about, when the wheel is put hard up, in 200 ft., with an extreme list of 3 1/2" at the water line. Her dimensions are:—Length, 52 ft.; breadth, 14.5 ft.; depth, 8 ft.; tonnage, 46 gross, 25 register, and she is equipped with engine of 6 n.h.p., driven a screw. She is being used in connection with the dredging plant in and around Toronto harbor. The work of construction was executed under the direct supervision of W. Newman, Superintendent for the owning company.

Grounding of the s.s. Odland.

Capt. L. A. Demers, F.R.A.S., Chief Examiner of Masters and Mates, assisted by Capt. Bain and Mr. Raymond, Director of the Corporation of Pilots of Quebec, held an investigation at Quebec, June 15, into the circumstances attending the grounding of the s.s. Odland, on a shoal off Point a Pic on the north shore of the River St. Lawrence, whilst in charge of Pilot Alphonse Asselin, branch no. 69. The court found Asselin solely responsible for the grounding, but taking into consideration his former good reputation and also the straightforward and direct manner in which he gave his testimony, therefore inflicted upon him the minimum penalty of \$50, to be paid in two instalments.

The facts of the case as adduced are as follows: The Odland, flying the Norwegian flag and in charge of a crew of that nationality, has been plying off and on in the River St. Lawrence chartered by F. Carbray & Son, Quebec. Asselin took charge of the vessel at Quebec and piloted her down to St. Simeon, where she loaded pulp wood destined for Erie, Penn. On May 31 the vessel left St. Simeon, five miles east of Cape Salmon, laden with pulp wood, it being the intention to call at Murray Bay to obtain clearance papers. The pilot claims that he was unfamiliar with the river in the vicinity of Murray Bay and in his endeavor to bring the vessel as close as possible in order to facilitate the work of the crew in pulling ashore and thereby gaining time, thought proper to hug the land as closely as he deemed advisable. At 8 p.m. on May 31 the vessel struck on the shoal extending from Point a Pic, the existence of which is marked by a red buoy. The pilot avers that he knew only through hearsay that the buoy was there, and that he had not previously seen it. It has been proved that although the pilot was unfamiliar with the river in the vicinity of Murray Bay, he did not take any extra precautions to ascertain the position of his vessel from the land which, in the court's opinion, would have been the proper action under the circumstances. Moreover, it has been adduced that no direct courses were given to the wheelsman to steer by, but instead he was merely instructed to keep certain land objects so many points on the starboard side of the vessel, which mode of navigation in the court's opinion is unsatisfactory, indefinite and unsafe. The pilot was also guilty of neglect when, knowing the existence of a buoy marking the shoal which extends from Point a Pic, he failed to advise any of the officers on duty in order that they might keep a keen lookout for it and report to him when sighted. The evidence shows that the weather was clear, calm and no wind, that the sun had just set and that objects were still clearly discernible, and it appears according to testimony that if the buoy had been looked for it could have been seen a mile or a mile and a half distant with the aid of glasses. The pilot's evidence conclusively shows that the man at the wheel, though of limited experience and youthful years, nevertheless steered the vessel to his entire satisfaction, and therefore in the court's opinion no blame can be attributed to the wheelsman, and the crew of the ship being strangers were unaware of the existence of any danger in the course of the vessel. If, however, this court was empowered with

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Thew No. 1 Full Circle Shovel, 1 yard (Traction)	3,650
Traction Shovel "Little Giant," 1 yard	2,500
Austin "New Era" Grader; new belt; fine	650
50 tons 20 lb. Steel Rail and splices (per ton)	23

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jurisdiction, it would certainly censure the Captain, who was then on duty, for not familiarizing himself with the dangers and obstacles along the coast, notwithstanding the fact that there was a pilot on board, the court holding that the master is still the responsible man. Under the existing weather conditions, which were most favorable, it is conclusive that the mishap could have been avoided if even the most elementary precautions had been taken by the pilot whilst navigating his ship.

Northern Navigation Co.'s s. Hamonic.

The trial trip of the s.s. Hamonic took place June 12 and 13, when, at the invitation of the Northern Navigation Co., and the G.T.R., a number of press representatives from Ontario, Quebec and Michigan, joined the officials of the two companies in a run on the vessel. A G.T.R. special train left Toronto at 8 a.m., June 12, for Collingwood, where the party embarked. A call was made at Owen Sound, and Sarnia was reached about 12.30 p.m. June 13, where, after inspecting the recently erected terminals, the party returned on a special to Toronto.

Prior to arriving at Sarnia, a presentation of silver plate was made to the vessel, for which the press representatives subscribed about \$250, and acknowledged by Capt. Foote. Votes of thanks were also extended to the Northern Navigation Co., and the G.T.R., and responded to by C. H. Nicholson, Traffic Manager, Northern Navigation Co., and C. M. Hays, Second Vice President and General Manager, G.T.R.

Among the officials present, representing the G.T.R., were: C. M. Hays, Second Vice President and General Manager; A. E. Beckett, Solicitor; L. C. Stanley, Attorney, Detroit, Mich.; W. E. Davis, Passenger Traffic Manager; G. W. Vaux, General Passenger Agent; J. D. McDonald, District Passenger Agent, Toronto; J. E. Quick, General Baggage Agent; L. L. Grahill, Assistant General Baggage Agent; H. R. Charlton, General Advertising Agent; E. W. Smith, Superintendent Dining and Parlor Car Service; C. A. Hayes, General Freight Agent; R. W. Long, Division Freight Agent, Hamilton; J. W. Kneeshaw, Assistant Stationery Agent, Detroit, Mich.; G. B. Filgiano, Auditor Passenger Accounts; W. G. Brownlee, General Transportation Manager; H. G. Kelley, Chief Engineer; M. S. Blaiklock, Engineer Maintenance of Way; W. D. Robb, Superintendent of Motive Power; J. Coleman, Superintendent Car Department; F. Price, Superintendent Car Service; W. W. Ashald, Superintendent of Telegraphs; H. E. Whittenberger, Superintendent Eastern Division; W. R. Tiffin, Superintendent Northern Division; F. W. Egan, Superintendent Western Division; and representing the Northern Navigation Co.: W. J. Shepard, President; H. Y. Telfer, Vice-President; H. H. Gildersleeve, Manager; C. H. Nicholson, Traffic Manager; C. A. Macdonald, Comptroller.

The contract for the construction of the vessel was made in Mar., 1908. H. Calderwood, Toronto, acted as inspecting engineer during construction, with F. Kirby, Detroit, Mich., as consulting naval architect. She is a single screw driven vessel, of 5,264 tons gross, and has dimensions: length, over all, 365 ft.; between perpendiculars, 341 ft.; breadth,

molded, 50 ft.; depth, molded, to main deck, 18.6 ft.; to spar deck, 24 ft.; to awning deck, 35 ft.; depth water ballast tank in freight holds, 4 ft.; in engine-room, 5.9 ft. The engines are quadruple expansion with cylinders, 24, 35, 52 and 80 ins. diam., by 42 ins. stroke, supplied with steam by 6 Scotch boilers, 12½ by 11 ft., at 250 lbs. to the sq. in., developing about 6,200 h.p. There is accommodation for 400 first-class passengers, 70 second-class passengers, and about 100 of a crew. The dining saloon has a capacity for about 180 passengers. She has been constructed with strict regard to the rules of the Bureau Veritas and the Great Lakes Register, and under the inspection of the last named; her rating is therefore of the highest possible for lake service. In addition to the passenger accommodation named, she has capacity for 3,000 tons of package freight, or 100,000 bush. of grain below the main deck. The estimated cost of the vessel was placed at \$500,000. During 1908, the company entered into a 10-year contract with the G.T.R. and G.T.P.R. for the exchange of passengers and freight. At her first short trial towards the end of May, she averaged about 19 miles an hour, while during the trip, June 12, the average was about 15 miles an hour. When the machinery has settled down, it is anticipated that a speed of 21 miles will be attained. The vessel is in charge of Capt. R. D. Foote, formerly of the company's s.s. Huronic, with S. Brisbane as chief en ineer.

A full description of the vessel was given in our Jan. issue, and illustrations in our June and July, 1908, issues.

Grain Shortages in Vessels.

In introducing a bill into the House of Commons, during the recent session, to amend the Manitoba Grain Act, J. A. Currie, M.P., Simcoe, said: This bill is intended to correct a grievance under which the vessel men suffer. Most of the grain from the North-west is shipped by rail to the head of the lakes and then carried by steamers to the terminal elevators on the lakes, or to the seaboard. The law at present provides for the inspection of this grain, and that the certificates should follow it to the seaboard; which is a very wise provision. It provides also that the grain shall be weighed into the terminal elevator on the Great Lakes by special weighmen, and there is no provision in the law which renders it compulsory that the grain shall be weighed into the vessel and out of the vessel again. The result of that has been great loss to the steamship interests on the Great Lakes. The following were the net shortages, in bushels, charged against the different companies named last year:—

Northern Navigation Co.	3,160
Montreal Transportation Co.	10,357
Canadian Northwest Steamship Co. .	1,152
Midland Navigation Co.	7,592.06
Farrar Transportation Co.	3,913.30
Canadian Lake and Ocean Navigation Co.	5,557.48
Canadian Lake Transportation Co. .	2,819.38
St. Lawrence and Chicago Steam Navigation Co.	6,005
F. E. Hall & Co.	380
S.S. "Seguin"	1,264
Inland Navigation Co.	4,773.68
Collingwood Shipping Co.	785.42
Mathews Steamship Co.	652
Turret Crown	1,028
Net shortage in outturns	50,439.32

There does not seem to be any method

by which vessel owners can find out how this grain flies out of the hatches, but at all events it is alleged to disappear somewhere during transport on the lakes. The shortages charged for in the statement I have given are far in excess of what they naturally should be; so much so that it simply meant that these steamship companies were, last year, robbed out of \$50,000, when the shortages actually should not have amounted to more than 5,000 bush. all told, allowing for shrinkages and everything else of that kind. The Dominion Marine Association held a meeting here and presented a memorial to the Minister asking that something should be done in this respect. It also adopted a uniform bill of lading which provided that vessel owners would not be responsible for shortages except to the extent of half a bushel for every 1,000 bush. carried. There was a deadlock between the shippers and the carriers, with the result that this arrangement has now been broken, and the steamer interests have to fall back on the same old rules that prevailed before, and there is no doubt that this year they will be unjustly taxed with a shortage of 75,000 bush. There is plenty of money in this business for all concerned; there is no necessity for there being any graft on the part of anybody. The law now provides that the official weighmen at the head of the lakes shall be remunerated out of charges on the grain, and the government is not out one cent on that score. The bill provides for the repeal of sub-sec. 4, sec. 19 of cap. 83, R.S.C., 1906, and the substitution thereof of a new subsection, as follows: "No grain shall be received into or shipped from a public terminal elevator or an eastern transfer elevator, without being officially weighed, unless both the owner and the carrier, or their duly authorized agents order otherwise."


The bill did not reach its final stages before the session closed.

Dominion Canal Statistics.

In submitting the canal statistics for the year ended Dec. 31, 1908, J. L. Payne, Comptroller of Statistics, states that it has been possible to prepare the report earlier this year on account of the changes in the method of tabulation. The freight carried on the Dominion canals during the year aggregated 17,502,820 tons against 20,543,639 tons in 1907, a decrease of 3,040,819 tons. The traffic for 1908, though below that for 1907, which was the largest on record, was largely in excess of the record for all years prior to 1907. The decrease in traffic in 1908 from the total for 1907 was made up of 2,568,658 tons in east-bound and 472,161 tons in west-bound traffic, and almost wholly related to U.S. business passing through Canadian canals. The following statement shows the tonnage passing through Dominion canals, and also shows that while there was a decrease of 3,129,661 tons in the traffic between U.S. ports, there was an actual increase of 88,842 tons in the business affecting Canadian ports:

	1907.	1908.
	Tons.	Tons.
Canadian to Canadian ports	4,196,891	4,320,668
Canadian to U.S. ports	1,117,830	839,457
U.S. to U.S. ports	13,052,837	9,923,176
U.S. to Canadian ports	2,176,081	2,419,519
	20,543,639	17,502,820

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The decrease in traffic tonnage related very largely to iron ore, of which 10,105,016 tons passed through the canals in 1907, and 7,402,672 in 1908. Of wheat, oats and barley, there were considerable increases. There was also an increase of tonnage of Canadian vessels using the canals, of 451,878 tons over the preceding year. The report for 1908 introduces a table showing the origin of cargoes, as follows:

Canal.	Canada. Tons.	U.S. Tons.
Welland	776,245	927,208
St. Lawrence	1,261,651	747,451
Chambly	379,674	123,602
Ottawa	258,527	
Rideau	77,519	12,121
St. Peters	72,015	
Trent Valley	81,690	
Murray	12,595	13,306
Sault Ste. Marie	2,092,231	10,666,985
	5,012,147	12,490,683

The capital expenditure on the Dominion canals, to Mar. 31, 1908, exclusive of the outlay by the Imperial Government on the Carillon and Grenville canal, records of which were destroyed by fire in 1852, are:

St. Peter's	\$ 648,547.14
Lachine	11,801,058.03
Beauharnois	1,636,690.26
St. Lawrence River and canals	3,365,317.57
Lake St. Louis	298,176.11
Lake St. Francis	75,906.71
Cornwall	7,234,182.60
Farran's Point	
Williamsburg	
Galops	
Rapide Plat	10,473,624.10
Welland	28,082,629.86
St. Anne's	1,170,215.63
Carrillon and Grenville	4,182,092.96
Culbute	382,776.46
Rideau	4,085,889.21
Murray	1,248,820.26

Chambly	637,214.66
St. Our's	121,537.65
Trent	5,773,664.71
Tay	489,599.23
Sault Ste. Marie	4,779,613.84
Soulanges	6,955,317.59
	\$93,442,874.58

Marine Insurance Gambling.

The President of the Board of Trade has introduced a bill into the British House of Commons, having for its object the prohibition of gambling in the loss of vessels by maritime perils. The bill provides that, if any person effects a marine insurance without having any bona fide interest in the safe arrival of a ship or in the safety of the subject-matter insured, or a bona fide expectation of such interest, or if any person in the employ of the owner, and not being a part owner of a ship, effects insurance in relation to the ship, and the contract is made "interest or no interest," or "without further proof of interest than the policy itself," or "without benefit of salvage to the insurer," or any other like term, the contract shall be deemed to be a contract by way of gambling on loss by maritime perils, and the person effecting it shall be guilty of an offence, and shall be liable, on summary conviction, to imprisonment for a term not exceeding 6 months or to a fine not exceeding £100, and in either case to forfeit any money he may receive under the contract. Any broker and any insurer through or with whom such contract is effected shall be guilty of an offence and liable on summary conviction to the like penalties if he

acted knowing that the contract was within the meaning of this act. Proceedings under this act shall not be instituted without the consent of the Attorney-General, nor against a person (other than a person in the employ of the owner of the ship in relation to which the contract was made) alleged to have effected such contract until an opportunity has been afforded him of showing that the contract was not by way of gambling on loss by maritime perils, and any information given by that person for that purpose shall not be admissible in evidence against him in any prosecution under this act. The bill also provides that the term "owner" as used includes a charterer; and that any person, not being in the employ of the owner of the ship insured, may appeal against conviction.

Vessels Removed from the Register.

The following vessels were removed from the Canadian register during May, for the reasons assigned:—Steam: Kootney, Vancouver, B.C., 5 tons, wrecked; La Reine, Winnipeg, 15 tons, burnt; Lyon C., Montreal, 13 tons, broken up; Minnehaha, Collingwood, 22 tons, foundered. Sailing: Edith, Maitland, N.S., 45 tons, abandoned at sea; Fauna, Windsor, N.S., 120 tons, wrecked; Lakeside, Yarmouth, N.S., 726 tons, stranded; Lost Heir, St. John, N.B., 15 tons, broken up; Marcella Butler, Halifax, N.S., 38 tons, abandoned; Persia, Windsor, N.S., 578 tons, sold to foreigners; Rossignol, Liverpool, N.S., 199 tons, lost; Strathcona, Halifax, N.S., 27 tons, transferred to Newfoundland.

LIST OF STEAM VESSELS REGISTERED IN CANADA DURING MAY, 1909.

Name	No.	Where and When Built	Engines, etc.	Length	Breadth	Depth	Gross Tons	Reg. Tons	Port of Registry	Owners
Aphia	126,360	Tetraultville, Que., 1907	Screw 4 N.H.P.	45 1	9 8	3 9	11 7	7	Montreal	R. Lucas, Lachine, Que.
Ayuda	126,359	St. Joseph, Mich., 1908	" 2 "	38 9	9 3	6 3	10 7	"	"	W. Cuthbert, Montreal.
Burwash	126,403	Kippewa, Que., 1909	Paddle 18 "	68 5	15 1	5 8	45 28	28	Ottawa	McLachlin Bros., Ltd., Arnprior, Ont.
Eileen G.	126,423	Vancouver, B. C., 1908	Screw 1 "	26 0	7 5	3 3	6 4	4	Vancouver B. C.	J. D. Gamble, Vancouver, B. C.
Eril King	126,270	Toronto, 1909	" 6 "	52 0	14 5	8 0	46 25	25	Toronto	F. Simpson, Toronto.
F. Paul	126,150	Sorel, Que., 1909	" 12 "	54 1	12 8	6 7	18 13	13	Sorel, Que.	J. Paul, Sorel, Que.
Jeska	126,128	Kingston, Ont., 1909	" 16 "	108 0	24 4	7 3	189 107	107	Kingston, Ont.	J. H. Davis, Kingston, Ont.
Louisville	126,140	Notre Dame de Pierreville, Que., 1909	Paddle 37 "	120 2	32 0	6 4	383 224	224	Sorel, Que.	C. Salvat and I. Yargeau, J. O. Pierreville, Que.
Lubricator	126,425	Davis Creek, B. C., 1909	Screw 1 "	39 0	9 2	4 0	10 7	7	Vancouver, B.C.	W. Lomberg, Vancouver, B. C.
Opeongo	126,402	Arnprior, Ont., 1909	Paddle 54 "	104 5	21 3	6 5	121 77	77	Ottawa	McLachlin Bros., Ltd., Arnprior, Ont.
Ordenez	126,241	Victoria, 1909	Screw 3 "	35 5	9 0	4 6	10 4	4	Victoria	D. H. Bale, Victoria, B. C.
Orvil	126,404	Carleton Place, Ont., 1909	" 6 "	34 6	8 0	4 0	7 5	5	Ottawa	J. Cunningham, Gaudette, Que.
*Racey	100,630	Buffalo, N. Y., 1903	" 4 "	55 0	14 7	7 6	25 17	17	Port Dover, Ont.	H. W. Ansley, M. O., Port Dover, Ont.
Ray C.	126,363	Cornwall, Ont., 1908	" 6 "	59 4	13 8	4 2	29 14	14	Montreal	L. Cohen, Montreal, Que.
Sooke	126,240	Unknown	" 2 "	29 3	8 3	3 0	8 4	4	Victoria	S. M. Maysmith, Victoria.
Tuant	126,242	Victoria, B. C., 1908	" 1 "	28 4	10 0	4 8	7 4	4	"	W. E. Adams, Victoria.
Tussler	126,239	Olympia, Wash., 1899	" 6 "	45 8	12 8	4 6	19 11	11	"	A. C. Gardner, Victoria.
Whiteley	126,224	Sombra, Ont., 1909	" 3 "	22 4	6 5	2 9	3 2	2	Sarnia, Ont.	T. W. Whiteley, Sombra, Ont.
Wren	104,200	Hull, Eng., 1895	" 45 "	94 0	20 7	10 4	135 44	44	Canso, N. S.	Pioneer Steam Trawling Co., Ltd., Halifax, N. S.

*Formerly Planet.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING MAY, 1909.

Name	No.	Where and When Built	Rig	Length	Breadth	Depth	Reg. Tons	Port of Registry	Owners
Bruiser	126,139	U. S. A.	Dredge.	100 0	39 6	8 7	509	Halifax, N.S.	Canada Construction & Dredging Co., Toronto.
Bruiser No. 1	126,140	"	Scow	105 0	31 0	11 0	308	"	"
Bruiser No. 2	126,371	"	"	105 0	31 0	11 0	308	"	"
Bruiser No. 3	126,372	Dartmouth, N. S., 1908	"	44 0	11 6	5 3	14	"	Cape Breton Dredging Co., Toronto.
Eva C.	126,393	La Have, N. S., 1909	Schr	94 6	25 3	10 4	105	Lunenburg, N. S.	A. V. Conrad, M.O., La Have, N.S.
Evelyn	125,969	Port Greville, N.S., 1909	"	126 5	31 0	10 6	250	Parrsboro, N.S.	G. M. Cochrane, M.O., Fox River, N.S.
G. H. Millen	112,005	Granville, N. S., 1907	"	142 6	30 9	11 5	287	"	W. Pickels, M.O., Annapolis Royal, N.S.
Harry Dixon	126,407	Hull, Que., 1909	Scow	108 0	22 9	7 2	448	Ottawa	Ottawa Transportation Co., Ottawa.
Hawanee	116,688	Richibucto, N. B., 1909	Sloop	32 8	11 8	5 0	10	Richibucto, N. B.	W. E. Forbes, Richibucto, N.B.
Kittimouse	126,392	Lunenburg, N. S., 1909	Schr	101 2	25 8	10 8	99	Lunenburg, N. S.	W. C. Smith, M.O., Lunenburg, N.S.
Lanark	126,424	Vancouver, B. C., 1909	Cat	21 7	9 4	3 2	3	Vancouver, B.C.	S. Busby, Vancouver, B.C.
M. S. Kenny	126,362	Cornwall, Ont., 1907	Dredge.	79 4	22 8	5 3	132	Montreal	L. Cohen, Montreal.
P. B. & Co., No. 1	126,343	Trenton, Ont., 1908	Schr	72 0	21 6	8 2	66	Barrington, N.S.	W. H. Kenney, M.O., Clarke's Harbor, N.S.
P. B. & Co., No. 2	126,382	St. Thomas, Que., 1908	Barge.	130 0	30 0	7 3	245	Quebec, Que.	Price Brothers & Co., Quebec.
P. J. McLaughlin	126,383	"	"	130 0	30 0	7 3	245	"	"
Quinte Chief	125,968	Parrsboro, N.S., 1909	Schr	96 9	28 0	8 8	147	Parrsboro, N.S.	P. J. McLaughlin, M.O., Parrsboro, N.S.
Ready Now	126,129	Trenton, Ont., 1908	Dredge.	89 6	30 0	6 4	210	Kingston, Ont.	R. Weddell, Trenton, Ont.
Tomasco	122,596	Boston, Mass., 1859	Schr	50 5	15 8	5 8	18	St. Andrews, N.B.	S. Brown, Campobello, N.B.
W. H. Rowley	126,361	Coteau du Lac, Que., 1893	Dredge.	75 1	26 2	5 8	128	Montreal	T. Gauthier, Montreal.
Waegwoltic	126,406	Hull, Que., 1909	Barge.	113 0	21 2	7 8	179	Ottawa	Ottawa Transportation Co., Ottawa.
	126,394	Bridgewater, N.S., 1909	Scks	108 5	29 0	10 6	174	Lunenburg, N.S.	A. H. Zwicker, M.O., Lunenburg, N. S.

Government Harbors and Piers.

The Dominion Parliament at its recent session passed an amendment to the Government Harbors and Piers Act deleting sub-section 1 of section 1 of the act, and substituting the following therefor:

16. If the minister deems it desirable to lease to any provincial government, municipal council, harbour commission, shipping company, or railway company any wharf, pier or breakwater under the control of the minister, tenders by public advertisement for such lease shall be invited by the minister for a term not exceeding three years, and the Governor in Council may thereupon lease such wharf, pier or breakwater upon such terms and conditions as are agreed on: Provided that nothing in this section shall interfere with the public use of such wharf, pier or breakwater; and provided further that the lessee of such wharf, pier or breakwater shall not charge wharfage tolls or dues in excess of the tolls and dues established under the authority of this act by the regulations for the government of breakwaters, piers or wharfs in Canada as approved from time to time by the Governor in Council.

Sub-section 3 was also amended by the addition of the following:

The minister shall submit within one month after the meeting of parliament a statement of the leases and the conditions thereof made under the provisions of this act.

Ocean Steamship Subsidies.

The following clause has been added to the Ocean Steamships Subsidies Act:—
"The Governor in Council may enter into contract or contracts for a term or terms not exceeding in all 10 years with any individual or company, for the performance of a steamship service between a port or ports in Canada and a French port or ports, on such terms and conditions as the Governor in Council deems expedient, and may grant therefor a subsidy not exceeding \$200,000 a year, based upon a minimum service of 15 round voyages a year, and a subsidy therefor not exceeding \$100,000, and so in proportion for a more frequent service. The amount required for the payment of this subsidy shall be paid out of the Consolidated Revenue Fund of Canada."

The object of this amendment is to

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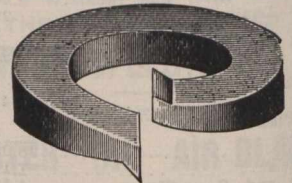
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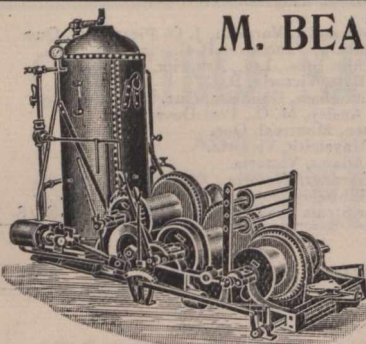
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diminish by three the number of voyages required to earn the minimum subsidy of \$100,000, previously granted. Under the clause which the present one replaces, the number of voyages required was 18, at a stipulated average speed of 10 knots an hour, and under the new clause, while the number of voyages is decreased by 3, the average speed is raised to 12 knots an hour. It is announced that a contract for such service for one year has been made with the Allan Line.

The Giving and Accepting of Commissions.

The Minister of Marine and Fisheries recently dismissed a number of the Department's employes as the result of the report of Mr. Justice Cassels, upon his investigation. If not the main ground for the dismissal of these officials, one of the grounds was that they had accepted commissions from the firms from whom supplies were purchased for the Government lighthouses, vessels, etc. That the practice has been carried on for years in the service, and that it is the almost universal custom in the mercantile marine, and prevails to a very great extent in nearly every branch of commercial life, is no answer to the charge that the acceptance of such commissions is immoral, if not dishonest. No man can conscientiously give the best of service to his employer, if at the same time he is receiving a commission from merchants from whom he is making purchases for such employer. Men who are scrupulously honest in every respect pay and receive these commissions without giving the slightest thought to whether they are doing right or wrong, merely because it is an established custom. When an established custom is found to be a bad one, it should be abandoned. In abandoning such a custom, whether by a moral awakening among those who follow it, or by the force of a judicial enquiry, some men must suffer. It is true that those most guilty may not suffer, but the lesson has to be learned. The custom of commission paying, and commission taking is a bad one, from an economical as well as from a moral standpoint, and the sooner this is recognized the better it will be for those placed in positions of responsibility, as well as for the entire community.

Reciprocating Engines and Turbines.

In a discussion at the last meeting of the Institution of Naval Architects in England of the best method of combining the reciprocating engine and the steam turbine in the propulsion of steamships, the proposition was made that the best results would be obtained if the reciprocating engine were of the compound type. A member of the Institution claims that the consumption of 100 lbs. of steam per hour at an initial pressure of 10 lbs. to the square inch would give 2.4 horse-power in a reciprocating engine, and 4.18 h.p. in a turbine. The wide difference between 2.4 and 4.18 h.p. can, of course, be secured only when the steam is of low pressure. The impossibility of carrying the expansion in a reciprocating engine down to the low point that is possible in a turbine, is due to the fact that the low-pressure piston would have to be of such enormous size and weight, that the additional power secured by the increased expansion of the steam would be used up in overcoming the increased friction due to the heavy moving weights. In tramp steamers, and all steamships with a full model at the stern, it is advisable to use a large propeller running at a low rate of revolution. In a triple-screw vessel of this class, it is suggested that the best arrangement would be to use a compound reciprocating engine for the centre propeller, and propellers running at a high speed of revolution driven by two turbines in the wings. It is stated that in the new White Star liners Olympic and Titanic, which, however, are vessels of fine form, the wing propellers will be driven by reciprocating engine, and the centre propeller by a low-pressure steam turbine.

Dominion Ex. Co's Appointments.

W. Walsh, heretofore Assistant to the General Manager and who has also acted as Superintendent of the Southern Division, has been appointed General Superintendent, Lines east of Port Arthur, Ont., office, Toronto. The position of Assistant to the General Manager has been abolished.

D. J. McFeggan, heretofore Chief Clerk, office of Assistant to the General

Manager, has been appointed Superintendent Southern Division, office, Toronto.

G. Ford, heretofore Superintendent Western Division, has been appointed General Superintendent, Lines west of, and including Port Arthur, Ont. Office, Winnipeg.

W. M. Gordon, heretofore General Agent, Winnipeg, has been appointed Superintendent Western Division. Office, Winnipeg.

J. Blackhall, heretofore in charge of Money Order Department, has been appointed Superintendent Money Order Department. Office, Toronto.

W. H. Plant, heretofore in charge of Traffic Auditing, has been appointed Auditor Traffic. Office, Toronto.

H. C. Anderson, heretofore in charge of Money Order Accounts Auditing, has been appointed Auditor Money Order Accounts. Office, Toronto.

J. Richardson, has been appointed Line Auditor.

Among the Express Companies.

W. W. Williamson, General Auditor Canadian Ex. Co., Montreal, sailed from Quebec in the s.s. Canada, in June, on a visit to England.

The Maritime Ex. Co. has been granted an extension of the time to Dec. 1 within which it is permitted to use its present forms of freight and money receipts.

The Dominion Ex. Co., has removed its office at New Liskeard, Ont., from the station to the town proper, with L. J. Boland, formerly of North Bay, in charge.

The Board of Railway Commissioners has temporarily approved, until Dec. 1, the forms of contracts issued by the Canadian, Dominion, National and American Ex. Cos.

The Canadian Northern Ex. Co. has opened an office at Lavenham, Man., and has reopened its offices at Sparrow Lake, Lake Joseph and Footes Bay, Ont., for the summer season.

The Board of Railway Commissioners has extended until Dec. 1 the time within which the United States and the Great Northern Ex. Cos. may continue to use contracts, by-laws, regulations, declarations and notices as provided in sec. 353 of the Railway Act.

The claim of the Dominion Ex. Co., to recover \$1,300 from John Maughan & Son, was dismissed at Toronto, recently. The claim was for money orders issued by the firm as agents of the company, but it was shown that the orders were signed by H. Maughan, who is not a partner in the firm, and who has since left the country.

At the annual convention of the Associated Boards of Trade of Western Canada, held at Saskatoon, Sask. June 15 to 17, among the subjects discussed were, express charges over the Alberta Ry. and Irrigation Co.'s line, and the question as to the advisability of compelling express companies to deliver goods to all parts of cities and towns.

The Dominion Ex. Co.'s appeal against the judgment of the Court of Revision which upheld an assessment of \$450 made on the company's agency at Alliston, Ont., was successful at Toronto, June 10. The town claimed \$12.52 taxes and seized a wagon and scale valued at \$100 for non-payment. The assessment has been disallowed, and an injunction granted against the proposed sale of the property seized.

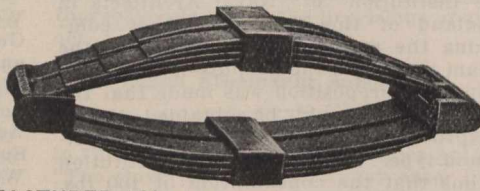
SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie Canals in May :

ARTICLES.		CANADIAN CANAL	U. S. CANAL	TOTAL
Copper.....	Eastbound.....Net tons	210	21,403	21,613
Grain.....	".....Bushels	4,129,851	2,548,094	6,677,945
Building stone.....	".....Net tons	.....	450	450
Flour.....	".....Barrels	449,113	447,470	896,583
Iron ore.....	".....Net tons	962,949	2,055,580	3,018,529
Pig iron.....	".....".....	.....	3,808	3,808
Lumber.....	".....M. ft. B.M.	4,667	57,897	62,564
Wheat.....	".....Bushels	8,103,946	5,104,484	13,208,430
General merchandise.....	".....Net tons	17,056	11,955	29,011
Passengers.....	".....Number	736	73	809
Coal, hard.....	Westbound.....Net tons	38,178	203,367	241,545
Coal, soft.....	".....".....	251,295	476,536	727,831
Flour.....	".....Barrels	860	.....	860
Grain.....	".....Bushels	.....	.....	.....
Manufactured iron.....	".....Net tons	14,590	34,217	48,807
Iron ore.....	".....".....	.....	.....	.....
Salt.....	".....Barrels	31,613	115,655	147,268
General merchandise.....	".....Net tons	60,289	66,543	126,832
Passengers.....	".....Number	814	62	876
Vessel passages.....	.....Number	662	1,276	1,938
Registered tonnage.....	.....Net	1,346,984	2,734,962	4,081,946
Freight—Eastbound.....	.....Net tons	1,354,537	2,441,849	3,796,386
—Westbound.....".....	368,955	798,010	1,166,965
Total Freight.....".....	1,723,492	3,239,859	4,963,351

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Carriage of Acetylene by Express.

In re the application of the Commercial Acetylene Co., of New York, for an order directing express companies operating in Canada and subject to the Board's jurisdiction to classify for transportation of acetylene gas when shipped under the so-called safety storage system, and in the matter of the Board's jurisdiction to make order 6167 of Feb. 4, 1909, directing express companies to carry acetylene gas under rules and regulations prescribed in Official Classification 13, the Board of Railway Commissioners issued order 7057, May 18, rescinding orders 6167 and 6366 of Feb. 4 and 22.

Chief Commissioner Mabee gave the following judgment:—The applicants ask for an order compelling the express companies operating in Canada to accept and carry a commodity manufactured by them, consisting of gas absorbed in asbestos encased in copper or metal tanks. The companies have refused to carry these tanks upon the ground that they are dangerous, or liable to explode, but in the view we take of the matter it is not necessary to deal with the validity of these objections or with the nature of the contracts between the express companies and the railway companies. The fundamental question is whether the Board has power to require express companies to carry any class of commodity they object to or refuse to accept. The group of clauses from sec. 348 to 354 of the Railway Act are, with sec. 317, sub-sec. 6 and sec. 2, sub-sec. 9, the provisions relating to express companies, and show the control that Parliament has conferred upon the Board over them. Is there anything in these sections that empowers the Board to require these companies to grant the applicants' request? The main group of clauses is headed "Express Tolls" and generally speaking they refer chiefly to tariffs and conditions and contracts limiting liability for carriage, and as to these matters all the provisions of the Act relating to freight tolls and tariffs, so far as applicable, are to apply to express companies. Sec. 352 provides that the Board may by regulation, or in any particular case, prescribe what is carriage or transportation of goods by express. Sec. 353, sub-sec. 3 (b) provides that the Board may in any case or by regulation "prescribe the terms and conditions under which goods may be collected, received, cared for or handled for the purpose of sending, carrying, or transporting them by express, or under which goods may be sent, carried, transported or delivered by express by any such company, person or corporation,"

and it was upon this section that the principal argument was based in support of the Board's jurisdiction. It does not seem to us that this can fairly be read to mean more than that when an express company decided to carry any particular class of goods, the Board may prescribe the terms and conditions under which the collection, receipt, care for and handling of the same shall take place, and this view is strengthened when this clause is found among a group of sections that do not seem to be dealing with anything except tariffs, tolls, and contracts or conditions limiting liability. The "terms and conditions" governing the collection, receipt and handling of goods that the Board might deem proper to impose under this sub-section, relate to the extent to which liability may be impaired, restricted or limited under sub-sec. 3 (a). The Act does not confer upon the Board as wide jurisdiction over express companies as it does over railway companies, and of course jurisdiction is limited to such matters that the Act plainly and clearly covers. There should be no straining after jurisdiction, and as we read this clause it is limited as above indicated. It was also argued that sec. 353 (1) gave jurisdiction, but we think this relates only to contracts "limiting liability" after a company has decided to accept or collect for carriage any particular commodity. Whether it was the intention of Parliament to limit the control of express companies to tariffs, tolls, conditions and contracts or not, it seems to us the above is the only fair reading of the Act, and we are of opinion that express companies are at liberty to exercise their own discretion in refusing to carry by express any particular commodity. This judgment was concurred in by Assistant Chief Commissioner Scott and Commissioner McLean.

Telegraph and Cable Matters.

The Government wireless telegraph station on the Tarte pier in Montreal harbor was opened for business June 25.

The C.P.R. telegraph department is reported to have made a survey for the erection of a telegraph line to Gowganda, Ont.

J. Kent, Manager C.P.R. Telegraphs, left Montreal June 3 on his annual inspection trip through the maritime provinces.

The C.P.R. Telegraph Department has opened offices at International Pier, N.S.; Hemlo, Hurkett, Naughton, Rockcliffe (night only), Ont.; Winnipeg Beach, Man.; Bulyea and Froude, Sask.; and has

closed its offices at Stinson, Ont.; Pearce and Shepherd, Alta.

An Ottawa dispatch says, the Civil Service Commissioners have appointed C. P. Edwards of Montreal to be Superintendent of Government wireless telegraph stations under the Department of Marine.

The C.P.R. telegraph staff at Saskatoon, Sask., has recently been moved to larger quarters in Second Ave. Saskatoon is now the repeating station for the territory extending from the main line northerly as far as the wires extend, and westerly to Lacombe, Alta.

A proposal has been submitted to the Pacific Cable Board for the introduction of a reduced rate on the deferred delivery system for cable messages which are not urgent. Such messages would not be delivered until 24 hrs. after being handed in, and the rate proposed is one shilling a word.

In response to a question in the British House of Commons recently, the Postmaster General said that it had been reported to him that damage to one of the trans-Atlantic cables had occurred in the vicinity of Ireland, which had been attributed by the cable company to trawlers. He said he appreciated the seriousness of the interruptions, and he hoped that the steps it was proposed to take to inspect trawlers, with the view of minimizing such danger would prove effective.

The telegraph operators' union has recently reorganized its methods of management. The C.P.R. system has been classed as System Division 1, under one management and one treasury. It has been divided into districts as follows:—Pacific, Western, Central, Lake Superior, Ontario, Eastern and Atlantic, each with separate officers and committee, which, with the President and Secretary, comprise the central executive. C. E. Hill, Toronto, is President, and D. Warner, Winnipeg, Secretary-Treasurer, for the current year.

E. H. Millington, Superintendent, M. C. Rd. Telegraphs, Detroit, Mich., died at St. Thomas, Ont., June 22, following a paralytic seizure June 8, while addressing a Y.M.C.A. meeting there. He was born in Guelph, Ont., in 1860, was educated at St. Thomas, and learned telegraphy in the G.N.W. Telegraph Co.'s employ at London, Hamilton and Montreal. He held the position of Superintendent since 1902, with headquarters at Detroit, Mich. In addition to taking an active part in Y.M.C.A. work, he was connected with the Detroit West Railroad Association and the Detroit Trans-

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Falls Hollow Staybolt Co. Cuyahoga Falls.
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- Brake Shoes, Locomotive Driver**
Am. Brake Shoe & F'dry Co. Mahwah, N.J.
Canada Iron Corporation, Ltd. Montreal.
- Brass and Copper Cloth**
The B. Greening Wire Co. Hamilton, Ont.
- Bridge Numbers**
Acton Burrows, Limited Toronto.
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Dominion Bridge Co. Montreal.
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- Buildings, Steel**
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Dominion Bridge Co. Montreal.
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McCord & Co. Chicago, Ill.
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Safety Car Heat. & Light. Co. New York.
- Buoys**
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Canada Car Co., Ltd. Montreal.
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Kerr Engine Co. Walkerville, Ont.
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- Castings, Malleable**
Galt Malleable Iron Co. Galt, Ont.
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Montreal Steel Works. Montreal.
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portation Club, and was also a Royal Arch Mason, Knight Templar, and member of the Railroad City Tent Knights of the Maccabees.

The Telegraph Age has prepared statistical information, showing the various railways on the American continent which have adopted telephones for train despatching, with the mileage on which it is adopted. The results show a total mileage of all the important railways of 213,552 miles, of which 6,681 miles of single track and 4,951 miles of double track, are operated by telephone. Of the Canadian railways reporting, the C.N.R. shows a total mileage of 3,355 miles, 443 miles of single track being operated by telephones; C.P.R., total mileage, 10,396 miles, with 96 miles single track and 18 miles double track operated by telephone; G.T.R., total mileage, 4,644 miles, over none of which the telephone system of train despatching has been adopted. The C.N.R. and C.P.R. contemplate extensions of the system, and the G.T.R. proposes to adopt telephone despatching over portions of its line in the near future.

The 28th annual convention of the Association of Railway Telegraph Superintendents, was held at Detroit, Mich., June 23 to 25, under the presidency of W. J. Camp, Superintendent C.P.R. Telegraphs, Montreal. The association was formed in 1882. W. W. Ashald, Superintendent G.T.R. Telegraphs, Montreal, and W. Marshall, C.P.R. Telegraphs, Toronto, were on the committee in charge of the entertainment of visiting superintendents. On June 25, a trip to Port Huron was arranged at the invitation of the G.T.R., where opportunity was afforded of inspecting the St. Clair Tunnel, recently electrified by the G.T.R., after which the party returned to Detroit by boat. Among the papers read were those on the Necessity for Censoring Railroad Telegrams; the Difference between the Trouble Shooter and the Division Lineman; the Advantages or Disadvantages of using Cable in bringing Telephone and Telegraph Wires into Local Offices; Efficient Office Organization; Telephone Construction; Benefits of Standards in Telegraph and Telephone Construction; Dry Batteries; Wireless Telegraphy; Wire Testing and Care of Wires, and Pole Preservation.

Telegraph Rates for Press Messages.

The Board of Railway Commissioners passed order 7085, May 25, as follows: Re the application of the Times Publishing Co., of London, Eng., with Canadian head office in Ottawa, under the Railway Act and the Act, chap. 61, 7-8 Edward VII., amending the Railway Act, for an order directing the C.P.R. Co.'s Telegraph Co. of Canada, and the Western Union Telegraph Co. to transmit press messages to the Marconi Wireless station at Glace Bay, N.S., at the same rate as charged to other points along the Atlantic coast of Canada, upon hearing the application in the presence of counsel for applicant and the telegraph companies, the evidence adduced, and what was alleged, it is ordered that the application be dismissed.

Chief Commissioner Mabee gave the following judgment:—We have come to the conclusion that there is not sufficient information before the Board upon which we would be justified in granting the

order asked for by the applicants. They desire an order that the C.P.R. Co.'s Telegraphs, the G.N.W. Telegraph Co., and the W.U. Telegraph Co. transmit press messages to the Marconi wireless station at Glace Bay at the same rate as is charged to other points along the Atlantic coast of Canada. They allege that while the usual rate on press messages from Ottawa to Canadian Atlantic coast points is 35c. per 100 words at night, and 50c. per 100 words in the day time, the telegraph companies charge private message rate on all press messages to Glace Bay intended for transmission by Marconi wireless, and that these charges are excessive and discriminatory. It appears from what took place in the discussion that there is in fact as between the cable companies on the one hand and the Marconi system on the other discrimination in favor of the former or against the latter. On the other hand it seems that under the present existing rates as charged, that the sender of a message via Glace Bay over the Marconi system, as a matter of fact pays some 20c. or 30c. less to the land line for delivering at Glace Bay to the Marconi system than the same sender would pay to the cable company, as the share that the cable company under its existing contract with the land line would pay to the land line for the delivery of a message of the like number of words to the cable company at the coast, so that, in so far as the existing charges being discriminatory, and in favor of the cable companies as against the Marconi system, the facts are otherwise. As to the larger system of discrimination that was discussed by counsel as to the system now in operation being alleged to be discriminatory in favor of the American press as against the press of Great Britain or the Transatlantic press, it is not necessary at present to deal with that question. The counsel who appeared in the case suggested that when the larger question of communication generally and the rates as applicable thereto was considered by the Board, and in view of there being no sufficient information before us to deal intelligently with this application, we think that is perhaps the better disposition to make of that matter in the meantime. The attempt here is really to extend the existing system which was voluntarily established by the telegraph companies as to press rates. They have an extremely low rate apparently throughout Canada, and with their connecting lines throughout the United States for press purposes. These rates are applicable or intended to be applicable in so far as Canada is concerned to that class of business that is addressed to newspapers, for publication in the various towns and cities and villages in the Dominion. There is a press rate to Glace Bay. It is said there is a newspaper there, and so I presume that from other parts of Canada the press rates would apply to the publisher of that newspaper at Glace Bay. The attempt here is to have the Board extend, against the will of the telegraph companies, this system of reduced rates for press purposes, in this particular instance, to the London Times published in London, Eng. Now, we have no information whatever as to the reasons that moved the telegraph companies to establish these low press rates. We have no information whatever as to the profit of the telegraph companies, as to whether these rates are fairly remunerative or not, and we have

no information as to the volume of business of that class. All of these would be most material to enable the Board to say whether or not it was a fair thing to require the telegraph companies to give to newspapers published on the other side of the Atlantic rates upon a like basis. It was said that press rates could not apply reasonably to cable messages by reason of their being so condensed and so on, and that there was in some instances greater expense imposed upon the telegraph companies by reason of their having to have operators in the cable offices. All of these matters would have to be inquired into carefully before we could deal intelligently with the case, and say whether or not transatlantic press rates should be upon the same basis as domestic press rates. This may be a matter that will be developed when the telegraph rates are looked into as they probably will have to be before very long. All that I have said is, of course, quite apart from the question of jurisdiction that counsel raised, as to which in the meantime it will not be necessary for us to say anything. That feature of it may be deferred for consideration when the balance of the complaint is more fully developed, so that we can dispose of it in a manner that we are unable to at present.

Proposed "All Red" Cable.

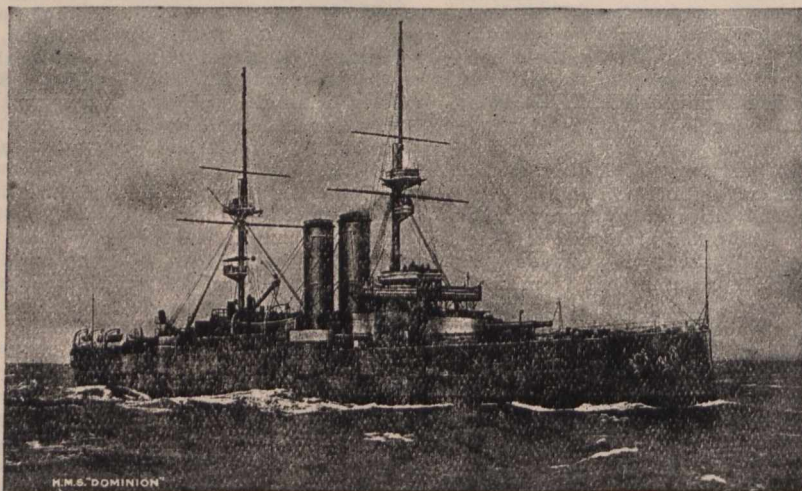
At the conference of press representatives of the British Empire held in London, Eng., the following resolution was moved: "That this conference regards it as of paramount importance that telegraphic facilities with various parts of the Empire should be cheapened and improved, so as to insure fuller intercommunication than exists at present, and appoints a committee to report to the conference, at its reassembling on June 25, as to the best means to attain this object."

In moving an amendment, P. D. Ross, Ottawa, advocated an "all red" cable route by Government cable to Canada, and Government control of wires across Canada. He said he had no objection to the original motion, but sent in his notice of amendment in the hope of accomplishing something practical that morning.

He said they should discuss lines of communication, method and press organization separately, and declared that Canada was almost unanimous in favor of bringing in the State to improve the cable service with Britain. The Canadian Postmaster General and the Chambers of Commerce of the Empire favored it. Meetings in Canada had been practically unanimous in favor of it. He believed the Canadian Government had information to the effect that with a State cable the cost of commercial messages could be reduced without loss to the service. There was no reason why the British and Canadian Governments should not go into the matter.

The Earl of Crewe, Secretary of State, for the Colonies, said that on the question of cable development the Government is thoroughly sympathetic, and they would look forward to the business discussions at the conference in the hope of finding a solution of the question. The great development of wireless telegraphy must be borne in mind. The Government was constantly receiving suggestions with regard to wireless developments, the latest being one in relation to the Western Pacific.

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Burnham, Williams & Co.Philadelphia, Pa.
Canadian Locomotive Co.Kingston, Ont.
Montreal Locomotive Works.Montreal.
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R. M. Burns & Co.Chicago, Ill.
Canadian Locomotive Co.Kingston, Ont.
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Hicks Locomotive & Car Works.Chicago.
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Taylor & Arnold.Montreal.
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- Nickel for Nickel Steel**
The Orford Copper Co.New York.
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Cleveland City Forge & Iron Co.Cleveland.
- Nuts, Square and Hexagon**
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Toronto Bolt and Forging Co.Toronto.
- Oakum**
The Hudson's Bay Company.
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- Porter**
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- Powder, Blasting**
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Southam Press.Toronto.
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Sheriffs Mfg. Co.Milwaukee, Wis.
- Pumps**
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Ontario Wind Engine & Pump Co.Toronto.
James Smart Mfg. Co.Brockville, Ont.
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