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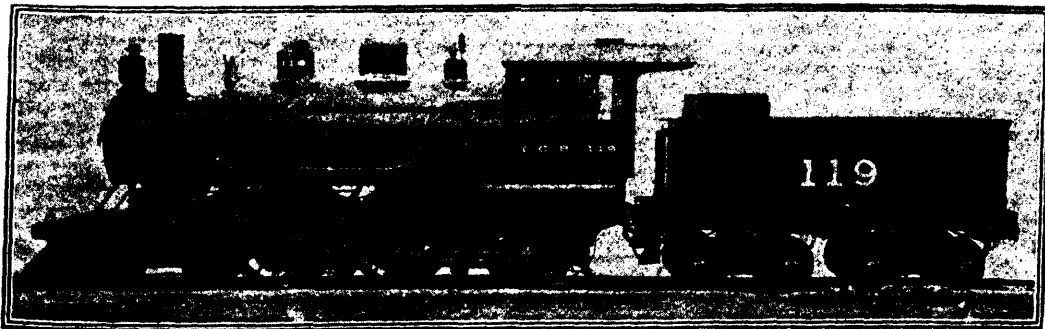
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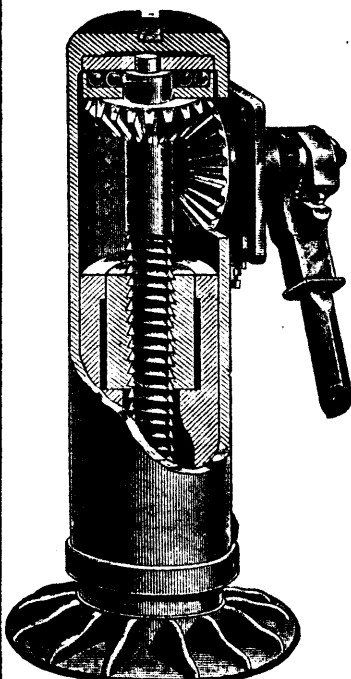
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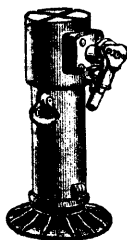
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## Investigation of Railway Accidents.

In view of the discussions which have taken place in the House of Commons this session on the question of investigating railway accidents and the suggestion that Parliament should take steps to provide for such investigations, it will be of interest to learn particulars of the system pursued in Great Britain. We recently communicated with Lt.-Col. Yorke, R.E., Chief Inspecting Officer of Railways, Board of Trade, who has very courteously supplied the following information:—

The Regulation of Railways Act of 1842 renders it obligatory upon every railway company to give notice to the Board of Trade of its intention to open for passenger traffic any railway or section of a railway. The Act has no reference whatever to lines used wholly for goods traffic. On receipt of such notice the Board of Trade is required to cause the line to be inspected before the opening takes place. If the officer appointed by the Board should after inspection report to the Department, that in his opinion "the opening of the line would be attended with danger to the public using the same, by reason of the incompleteness of the works or permanent way, or of the insufficiency of the establishment for working such railway," the Department may direct the company to postpone the opening of the line for one month at a time, the process being repeated from month to month as often as may be necessary. The company is liable to a fine of £20 a day if it should open the railway in contravention of such order. The inspections made by the officers of the Board of Trade are very complete; the permanent way, bridges, viaducts, tunnels, stations, and other works are carefully examined, iron and steel girders are tested, and the signalling and interlocking are thoroughly tried, and every means are employed to ascertain that the railway has been constructed and completed in the most satisfactory manner. A simple code of requirements has been prepared by the Department for the guidance of railway companies, and as the special circumstances of each line are considered on their merits, it does not often happen that it becomes necessary to postpone the opening of a new line. The Act does not authorize the Department to inspect any railway after it has been opened, unless some alteration or addition is made to it. It is the duty of the company to maintain the line in accordance with the standard of efficiency which it originally possessed, but whether it does so or not, the Board of Trade has no power to interfere. It may be of interest to state here that all tramways or street railways, or any extension of them, whether worked by horses, steam, or electricity, have also to be inspected for the Board of Trade, and "certified as fit for traffic," before they may be opened for public use.

The Regulation of Railways Act of 1871 renders it obligatory on all railway companies to give notice to the department of any acci-

dent which may occur in or about the railway, or any works or buildings connected therewith, that is to say, any accident attended with loss of life or personal injury to any person whatsoever; any collision in which one of the trains is a passenger train; any passenger train or part of such train leaving the rails; or any other accident likely to have caused loss of life or personal injury, specified on that behalf by any order made from time to time by the Board of Trade. On receipt of such report the Department is authorized to cause an enquiry to be made into the cause of any accident so reported, and the officer appointed to hold the enquiry has power to enter upon any railway premises

bound by the strict law of evidence; it is simply a court of enquiry. The admission of the general public and of the press rests within the discretion of the officer; the usual practice being to admit the press and public in cases of general interest, unless there has been loss of life, and there is any chance of any servant of the company, or of any other person, being put upon their trial for manslaughter or other grave offence, such as criminal negligence, in which case it is not as a rule considered advisable to admit the press, etc., lest the person implicated might be prejudiced by anything that transpired during the enquiry. It must be clearly borne in mind that the enquiry by the Board of Trade is for the purpose of ascertaining the cause of the accident with the view of preventing a recurrence of the same, and not for the purpose of penalizing anyone; the latter is left to be dealt with by the usual process of law. A Board of Trade enquiry, therefore, is in addition to, and independent of any proceedings before the coroner or magistrate. The Act of 1871 confers upon the coroner, when holding an inquest on the death of a person occasioned by a railway accident, the right to request the Board of Trade to appoint an inspector, or some person possessing special knowledge to act as assessor to the coroner, and this is sometimes done. But such a course does not prevent the Department from holding an independent enquiry. The same Act empowers the Board of Trade to hold what is called a "formal investigation" into the cause of any accident in lieu of or in addition to the less formal enquiry to which reference has been made. In the event of such "formal investigation" being held, the Board may appoint "any person or persons possessing special or legal knowledge to assist an inspector holding" the enquiry, or may "direct the county court judge, stipendiary magistrate, metropolitan police magistrate, or other person" to hold the enquiry with the assistance of an inspector or any other assessor. Such an investigation has to be held in open court, and the witnesses may be examined on oath, and the court has all the powers of a court of summary jurisdiction, besides all the powers of an inspector under the Act. But the necessity has never arisen hitherto for holding such a formal investigation. The inspector after making his enquiry is required to make to the Board of Trade a report as to the causes of the accident and the circumstances attending the same, with any observations on the subject which he deems right, and the Board "shall cause every such report to be made public in such manner as they think expedient." The usual manner of publishing such reports is to forward them to the railway companies concerned, and to the press, and to anyone else who is interested. The reports are subsequently included in a "blue book" and presented to Parliament. It should be noted that although the officer may in his report make recommendations with a view to guarding against any similar accident occurring in



WILLIAM MCWOOD.  
Superintendent Car Department, G.T.R.

for the purpose of his enquiry, to summon any person engaged upon the railway to attend the enquiry as a witness, and to require the production of all books and documents which he considers necessary for the purpose. There is no statutory procedure laid down for such enquiries, which are conducted in the manner that seems to the officer best suited to the circumstances of the case, but a fairly well recognized procedure has grown up. The site of the accident is first visited, and a careful investigation made of all the circumstances attending the disaster. An adjournment is then made to a room, and the evidence of the various witnesses is taken down verbatim. The court is not a court of law, and witnesses are not examined on oath, nor is the officer

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NEXT MEETING, Toronto, Ont., in 1904.

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## Investigation of Railway Accidents.

(Continued from page 257.)

the future, no power is given to the Board of  
Trade, or any other authority, to compel any  
railway company to adopt such recommenda-  
tions. This omission is sometimes criticized  
as a defect in the Act, but it is not really so.  
The moral effect of the publication of the re-  
port with the criticisms of the company's meth-  
ods is great, and it seldom happens that a  
company refuses to adopt, or at least to test  
the recommendations made by the officer who  
held the enquiry. If, however, the company  
is of opinion that the suggestions of the offi-  
cer are not likely to be useful, or are for any  
reason inexpedient, the company is at liberty  
to reject them, the responsibility of so doing  
resting on it. The effect of this latitude is to  
give the company discretion in the matter,  
and to enable the Act of Parliament to be ad-  
ministered without undue interference.

An important Act was passed in 1889, put-  
ting on the Board of Trade the duty of call-  
ing upon all railway companies throughout

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the United Kingdom to adopt upon all lines  
carrying passengers the system of block  
working; to interlock points and signals, and  
to fit all trains carrying passengers with  
"continuous brakes." A reasonable time was  
allowed to the companies in which to com-  
plete, and the work is now practically com-  
plete. In respect of block working and inter-  
locking, therefore, the lines of the United  
Kingdom are far ahead of those of any other  
country, and a marked diminution of accidents,  
particularly of collisions, has resulted from  
this cause. The use of the electric staff or  
electric tablet for single line working, which  
practically combines the principle of block  
working with the use of the ordinary train  
staff, is held to be a compliance with the Act.  
If, however, the ordinary train staff is used  
in conjunction with train "tickets," then block  
instruments have to be provided in addition.  
When the line is of such small importance  
that the traffic can be handled by one engine  
in steam, block instruments are, of course, not  
required. The effect of the regulations is that  
single lines as well as double lines in Great  
Britain are worked with a remarkable im-  
munity from accident, and head-on collisions  
are almost unknown.

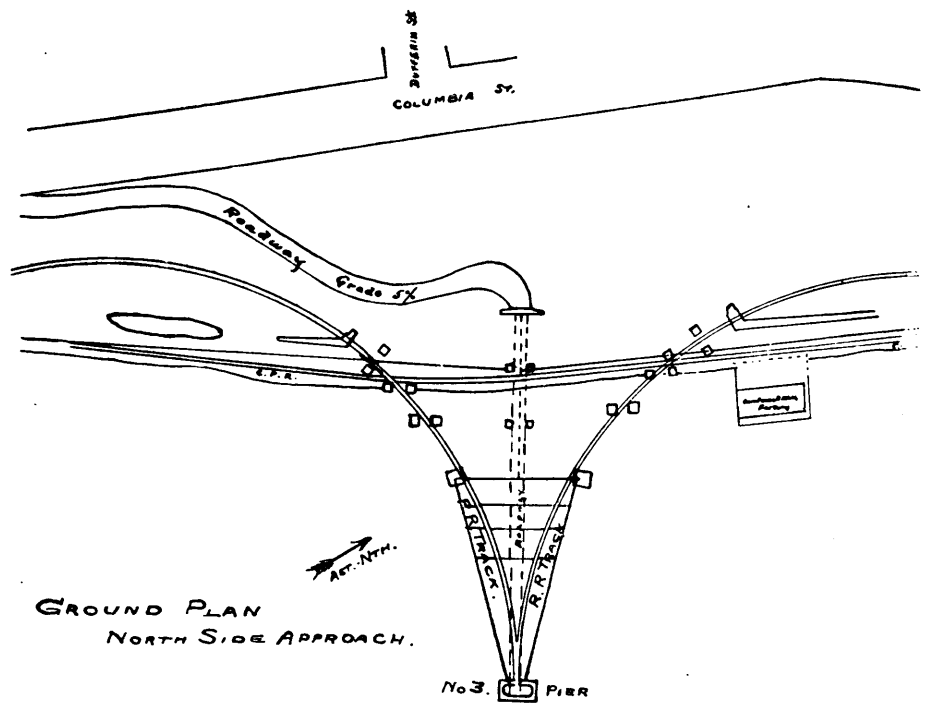
In addition to the Acts of Parliament safe-

guarding the interests of passengers, recent legislation has been directed to the protection of the servants of railway companies, and investigations are held into numerous cases of injury, fatal or otherwise, which befall railway men. A code of rules has been drawn up by direction of Parliament for the safety of the men, and further rules are at present under consideration.

There are four inspecting officers, including Lt.-Col. Yorke, whose duties are chiefly, though not entirely, confined to the inspection of new railways and tramways, or new works on railways, e.g., signal boxes, stations, sidings, junctions, etc., and to the investigation of accidents to trains. There are also two assistant inspecting officers and two sub-inspectors, whose duties are chiefly directed to the investigation of accidents to railway servants. The above staff deals with all the railways and tramways in the United Kingdom, including Scotland and Ireland. The duties are sufficiently onerous and responsible. The relations between the officers of the Board of Trade and the officers of the railway companies are of a friendly nature, and the latter do all they can to assist the former in the performance of their duties.

### The Manual of Statistics.

The Manual of Statistics Co., 220 Broadway, New York, has published its 25th annual volume, which comprises within its 1044 pages, a substantial increase on its size for 1902, information, statistical and otherwise, as to railway and other transportation, and allied companies as well as to general industrial and other corporations. The arrangement under the different departments is a good one, and the thumb index aids in locating the section which it may be desired to consult. In regard to the information respecting the Canadian railways and other companies included in the volume, it would be advisable that the proof sheets should be submitted to some one in Canada for correction before going to press, with a view of preventing errors, which detract from the value of the work. For instance, we note the following: On pg. 48 it is stated that the Canadian Northern Ry. Co. has issued \$7,000,000 of the \$24,750,000 of ordinary stock authorized, and has a funded debt of \$1,418,300, in respect of 1,221 miles of railway owned and leased, while the reports to the Dominion Government for the year ended June 30, 1902, show that the company had issued the \$24,750,000 of common stock authorized, and there was paid up on its debenture stock \$10,881,726, which includes the \$2,000,000 of land grant bonds, and the \$7,361,152 of bonds, the interest of which is guaranteed by the Manitoba Government, in respect of 892.62 miles of line. On pg. 150, under the heading of the Kingston and Pembroke Ry. Co., there appears a sentence, "It was stated in 1901 that the Canadian Pacific had acquired the property," while the list of officers shows that out of the nine directors, there are one C.P.R. director and five C.P.R. officials, one of whom is Vice-President and General Manager. On pg. 151, under the Lake Erie and Detroit River Ry., it is reported that in Nov., 1902, the Pere Marquette Rd. had acquired the control of the line, and the new officers are given; while under the Pere Marquette Rd., on pg. 226, mention is made of its being "stated in Dec., 1902," that the L.E. and D.R. Ry. had been acquired in the interests of the P.M. Rd. Errors of this kind are calculated to impair the value of the work, and show the necessity of fixing a date each year up to which the information published is obtained from the latest issued reports, with a supplement showing changes and alterations up to the date of going to press.



THE NEW WESTMINSTER END OF THE FRASER RIVER BRIDGE.

On the New Westminster side the bridge ends in a Y, the left or westerly fork of which leads to the location for a station for any new lines entering the city, while the right or easterly fork heads for Sapperton, on the way to Vancouver.

### The Fraser River Bridge.

The substructure for the bridge being constructed by the B.C. Government over the Fraser river at New Westminster is almost completed, and preparations are well under way for starting the erection of the superstructure. The completed structure, of which a view of the engineer's perspective sketch is given on pgs. 274 and 275, will span the Fraser river from near the foot of Dufferin st. to a point not far from the little Indian church on the south side of the river, above Brownsville. It will have thirteen spans, five each 160 ft. in length; one of 225 ft.; one of 380 ft.; and a swing span 361 ft., giving a passage for steamers on either side of 180 ft. Also there will be two plate girder spans, each 40 ft. wide, and one of 90 ft., at the railway track on the city side. At the south, or Surrey end, there will be a trestle approach 1,310 ft. long. The clearance under the bridge, with an average tide, will be 25 ft. This will allow steamers only that height to pass without opening the draw or swing span, but most of the small river tugs may thus pass, while even larger tugs may do so by simply having their funnels constructed so that they may be lowered, as is done in other places. The structure will be of the double-deck type, the railway track occupying the lower chord of the bridge. Where this track leaves the bridge it will pass 23 ft. above the C.P.R. track on the city shore, and the same height above the Great Northern Ry. track on the Surrey shore; and on the city shore, moreover, space is left beneath for building two tracks outside that of the C.P.R. The railway approach on the city side presents a novelty in bridge architecture, viz., a fan tail approach. From the end of the bridge proper, at the deep water pier, the railway track will branch into two, one curving westerly, the other easterly. A sketch showing this approach appears on this page. At pier no. 3 is the deepest water and a 225 ft. span. Over this pier the girders are 20 ft. centres, while on no. 2 pier, nearer shore, the fan spread has extended to 135 ft., no. 2 pier being a double pier, in shallow water near shore. On

the south, or Surrey side of the river, the railway approach will be on a high embankment or trestle curving east from the bridge. The grades of the approaches will be 1% compensated. Where the track crosses the C.P.R. it will be 25 ft. above it, but at a distance of 700 or 800 yards it reaches the level of the C.P.R. track on Front st., about the Brackman-Ker wharf, the level to the east being reached beyond the penitentiary. On the south side the level is reached on neutral ground, where connection is made with the tracks of the G.N.R. or any other railway seeking to cross the river at this point. The highway for wagons and other vehicular traffic will be on the upper deck of the bridge, with the usual clearance of 23 ft. above the railway track. On the shorter spans this deck will be on the upper chord, and on the longer spans it will be about mid-height. On the city side this highway does not follow the curves of the railway tracks beneath, but, on leaving the bridge proper at no. 3 pier, goes straight ahead and strikes the bank of the Pleasure Grounds, about 50 ft. above the level of Front st., and nearly as much below the level of Columbia st. at that point.

The substructure possesses a number of features of interest. Piers 1 and 2 are double, making seventeen piers, exclusive of the abutments and pedestals on the shore. The borings failed to discover solid rock bottom within reasonable depth. The water at no. 3 pier was found to be 80 ft. deep, at low tide, and as the foundations of this pier are sunk in the river silt 55 ft. this makes the distance from the surface of the river at low tide to the bottom, 135 ft., one of the deepest foundations sunk in America. On this is built a stone pier 35 ft. high, and on this in turn is a truss 50 ft. high, so that from the extreme top of the bridge to the bottom of this pier the distance is 215 ft. The pressure of the water at the bottom of the caisson used in sinking the foundation is too great for man to work at that depth, either in diving suits or by pneumatic process, being about 52 lbs. a square inch. The necessary excavating, therefore, is being done by open dredging system. The caissons are built on shore, of

# Galena-Signal Oil Company,

Franklin, Pa., and Toronto, Ont.

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

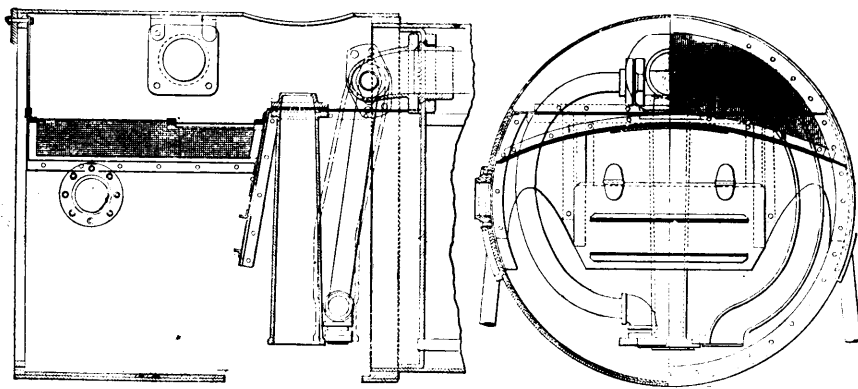
**CHARLES MILLER,**  
PRESIDENT.

dressed timbers a foot square, and floated to the site of the pier. In the centre is a large well hole, but the surrounding sections of the caisson are at the bottom, of solid timber which tapers gradually to a cutting edge about a foot wide, furnished with steel. This framework being kept in position by piles, etc., the outer compartments are filled with concrete, and as the whole affair settles down, the walls and cross sections are built upon by timbers of like dimensions, so that there is always a considerable portion above the level of the river or the temporary wharf erected on the site. Eventually this huge concrete-laden frame reaches the river bottom, and then the work of raising the silt and other material commences. When the flow of silt, etc., stops, and only clear water comes up, the operators know something is wrong, and the long heavy pipes are hauled up and there is lowered in their place a heavy clam-shell dredging bucket, which grasps any boulder or tree trunk and never lets go until the obstruction has been removed. Nowhere else on this coast can this operation of the hydraulic jack and clam-shell companion be seen on such a large scale. The hydraulic jack, as this affair is called, is operated by a pump with a hydraulic pressure of 180 lbs. A large steel pipe, 5 or 6 in. in diameter, is put down to the bottom of the well. The deepest water was encountered at pier no. 3, though at no. 4 it was nearly as deep. At this point the water at low tide is 75 ft. deep. The foundations for some of the piers in the shallow water towards the Surrey side are piles. These were driven under great pressure deep down into the clear hard sand and gravel. In fact, hydraulic work had to be resorted to, to loosen this bed of natural cement-like sand and gravel. This now grips the piles and seals them, far below the bed of the river. The approaches on the Surrey side have required over 1,000 piles. The incline commences not far from the Liverpool station of the Great Northern Ry. and rises gradually till it reaches the level of the track on the bridge, the curve being near the Indian church at Brownsville. The traffic approach will lead from the upper floor of the bridge straight inland, the level being reached about a fifth of a mile back from the river, where connection will be made with the country roads, including no doubt the proposed Ladner river road extension.

The engineers for the bridge are Waddell & Hedrick, of Kansas City, Mo., and the contractors for the substructure are Armstrong, Morrison & Balfour, of Vancouver, B.C.

Compiled from New Westminster Daily Columbian.

**A report on a visit to America,** made in the autumn of 1902 by Lieut.-Col. H. A. Yorke, R. E., Chief Inspecting Officer of Railways, Board of Trade, London, Eng., which has been issued as a "blue book," contains an interesting account of trips over a number of United States steam and electric railways, and a comparison between them and lines in Great Britain, written in a thoroughly impartial manner. Naturally, Col. Yorke considers the methods adopted on railways in Great Britain superior to those in use on this side of the Atlantic in some respects, but the American practices most favorably impressed him in several instances, and he frankly admits their superiority in these cases. Col. Yorke's visit to Canada was very brief, only a couple of days, during which he came from Buffalo to Hamilton and Toronto. In sending us a copy of his report, he writes: "It was a matter of much regret to me that time did not allow me to visit some of the Canadian railways and to make myself acquainted with their methods of working, but it is my sincere hope that an opportunity may occur hereafter of my doing so."



G.T.R. LOCOMOTIVE FRONT END.

**G.T.R. Locomotive Front End.**

The G.T.R. is using a front end arrangement which combines simplicity with effectiveness. The illustrations on this page show the netting in the smokebox of a crossover compound. The receiver pipes are not shown, in order that the netting arrangement may be more clearly seen. The netting is put in as a rather flat arch of 8 ft. radius, which goes across the smokebox and springs from the sides about 6 ins. above the center line. The netting, which is cut to suit the receiver pipe, is carried back to the deflector plate, which is just in front of the exhaust pipe. The deflector plate is carried up a few inches above the highest point of the netting arch, and runs straight across the smokebox. In fact the deflector plate is placed at the level of the joint between exhaust pipe and exhaust nozzle. From the deflector plate to the flue sheet a solid no. 10, B. W. G. steel plate cuts off the space below the top tubes from that above, and through this horizontal plate the steam pipes pass with closely fitted openings. In the center of the netting there is a manhole 18x14 ins., which, when open, enables a workman to get his arms and head well into the upper chamber of the smokebox, and when in that position he stands directly in front of the exhaust pipe, and within reach of all joints, openings, flanges, etc., which he may wish to get at. A piece of upright netting, about the shape of a half-moon counterbalance, though larger, is placed in the front of the box. This prevents sparks or cinders from getting around the arched netting and from entering the upper chamber without being broken up in passing through the standard mesh. The deflector plate is not made so as to be adjustable. The central portion is cut in the form of a door, and is hinged from the top, which affords convenient ingress to the flue sheet. Our illustration shows the sides cut to suit the curves of the receiver pipe, but this plate is carried solidly across in other engines, which do not use receiver pipes. The determination of the position of the deflector plate is arrived at by test for a given class of engine, and when its most satisfactory position has been determined, all the engines of that class are equipped with non-adjustable deflector plates and a certain amount of what is generally called "grief" connected with front ends is thereby eliminated. The salient feature, however, about the whole arrangement, is its lack of complication and the room and convenience it affords to those who are compelled to work in the smokebox. Lifting up the hinged door in the deflector plate gives immediate access to the flue sheet, and removing the netting manhole cover in the netting gives access to the upper chamber. The rest of the smokebox appears to be positively roomy.—Railway and Locomotive Engineering.

**RAILWAY FINANCE, MEETINGS, ETC.**

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

	1902.	1903.	Increase or Decrease.
<b>GROSS EARNINGS.</b>			
Railway—Vancouver division	\$11,514	\$13,522	\$2,008+
Victoria	9,854	10,459	605+
Westminster	8,795	10,002	2,107+
Lighting—Vancouver division	10,431	14,060	4,238+
Victoria	5,080	6,113	1,033+
	45,674	55,065	9,991+
Less working expenses	29,409	32,642	3,233+
	16,265	23,023	6,758+
Renewal funds	3,458	4,222	764+
Net income	12,807	18,801	5,994+
Aggregate gross earnings, July 1, 1902, to May 31, 1903	532,553	615,445	82,892+
Aggregate net earnings, July 1, 1902, to May 31, 1903	\$171,697	\$203,054	\$31,357+

**Brockville, Westport and Sault Ste. Marie Ry.**—On the motion for the third reading of this bill in the House of Commons, a number of amendments were proposed in the interests of the creditors. One provided that upon completion of the line the unearned subsidy, if Parliament sees fit to grant it, shall be paid over to the estate of the late James Cooper, of Montreal, who held an assignment of the subsidy as security for rails supplied. Another proposed that if the company asks for further powers a Parliamentary inquiry shall be held into the claims against the road for materials supplied, wages, dues, etc., while a third set forth that nothing in the act shall prejudice the claims in a suit pending in the court to determine whether the Ontario court had jurisdiction to order the sale of the railway. The matter was discussed at considerable length and the bill was finally passed. (July, pg. 223.)

**Calgary and Edmonton Ry.**—Net earnings for May \$28,093.47, against \$16,743.74 for May, 1902, making for five months ended May 31, \$128,841.54, against \$141,796.50 for same period 1902.

A special general meeting of the shareholders was held in Toronto when a resolution was passed sanctioning an agreement with the C.P.R. for the lease of the C. and E. Ry. for a term of 99 years. A further meeting of the shareholders has been called for Aug. 4, for the purpose of sanctioning the issue of debenture stock to the amount of £1,121,700 to carry out the arrangement made with the committee of the bondholders in England. (July, pg. 223.)



**Canada Atlantic Ry.**—At the current session of the Dominion Parliament an act was passed authorizing the increase of the capital from \$7,200,000 to \$10,200,000, and providing for the issue of a proportionate part of the

new stock as preference stock at not exceeding 5%; and authorizing an issue of bonds to the extent of \$35,000 a mile, in lieu of the bonding provision in the existing act.

**Canada Eastern Ry.**—The arrangement

for the re-organization of the various Gibson enterprises, which include the Canada Eastern Ry., has been postponed, owing to the unsettled condition of the money market. (Mar., pg. 105.)

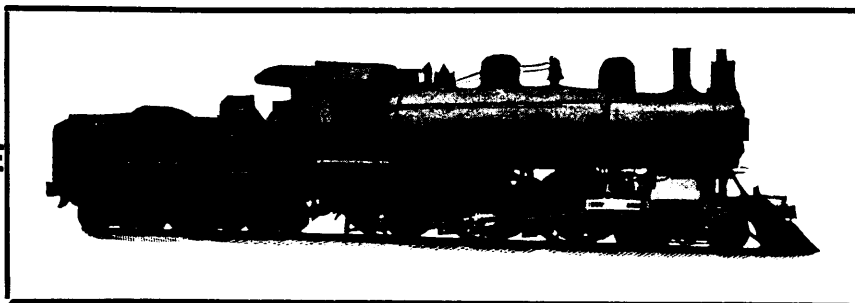
# American Locomotive Company

**BUILDERS OF LOCOMOTIVES FOR ALL CLASSES OF SERVICE.**

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Vice-President, A. J. PITKIN.

Secretary, LEIGH BEST.  
Second Vice-President, R. J. GROSS.

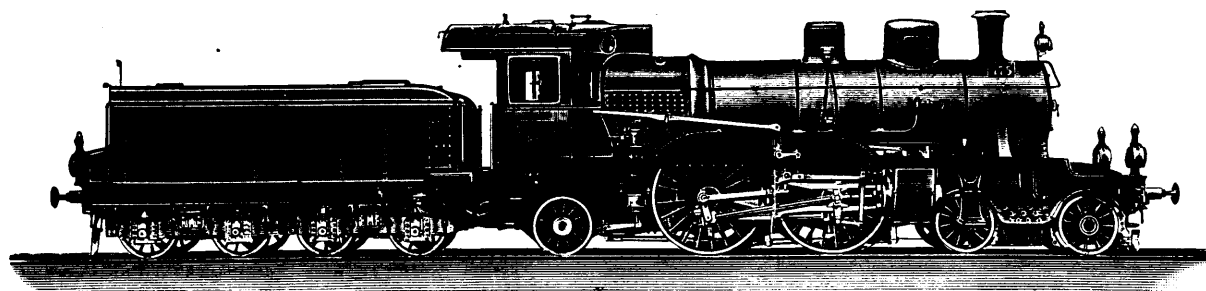
Treasurer, C. B. DENNY.  
Mech. Engr., J. E. SAGUE.



**SCHENECTADY WORKS**, Schenectady, N. Y.  
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**RHODE ISLAND WORKS**, Providence, R. I.  
**DICKSON WORKS**, Scranton, Pa.  
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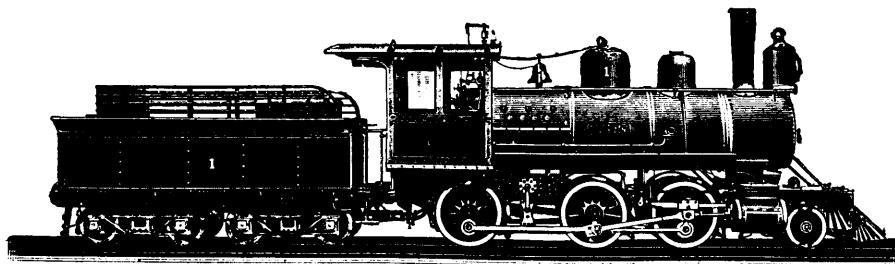


## The Saxon Engine Works, late Rich. Hartmann, Limited

**CHEMNITZ** (Germany),

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

**Number  
of  
Workmen,  
5,200.**



**Capital,  
\$3,000,000.**

Canadian Northern Ry.—Gross earnings:			
	1902-03.	1901-02.	Increase.
July.....	\$132,300	\$ 87,200	\$45,100
Aug.....	130,900	97,000	33,900
Sept.....	209,300	103,300	106,000
Oct.....	190,200	120,610	69,590
Nov.....	259,800	119,142	140,658
Dec.....	202,300	129,918	72,382
Jan.....	154,700	102,067	52,633
Feb.....	147,825	109,524	38,301
Mar.....	174,700	116,900	57,800
Apr.....	108,125	109,924	88,201
May.....	240,600	119,300	121,300
June.....	204,000	119,900	144,100
	\$2,304,750	\$1,334,785	\$969,965

The earnings, from all sources, of the C.N.R. for the fiscal year ended June 30 totaled \$2,448,000, being an increase of nearly \$1,000,000 over those of 1902. The working expenses amounted to \$1,588,000, and fixed charges \$637,000, leaving a surplus over working expenses and fixed charges of \$223,000. (July, pg. 223.)

**Canada Southern Ry.**—The lease of the line to the Michigan Central Rd. has been approved by the shareholders of the latter company. (July, pg. 226.)

**Central Vermont Ry.**—The C. V. Ry. which is the sub-lessee of the Brattleboro and Whitehall Rd., is opposing the application of that company for the appointment of a receiver on the ground that the road was allowed to run down and that not enough cars were furnished patrons. The C. V. Ry. Co. contends that the court has not jurisdiction to appoint a receiver for the causes alleged, and that a remedy can be had in other courts.

**Chignecto Marine Ry.**—The proposition to pay \$500,000 to the bondholders in settlement of any and all claims for compensation was submitted to Parliament by the Finance Minister, and the discussion has been held over. (July, pg. 223.)

**Dominion Atlantic Ry.**—Gross earnings for June \$81,400, against \$77,468 for June, 1902; making for six months to June 30, \$360,300, against \$379,960 for same period 1902.

**Grand Trunk Ry.**—The receivership of the Detroit and Toledo Shore Line was discharged July 1, and the line taken possession of by the G.T.R. and the Toledo, St. Louis and Western Ry. The mortgage of \$3,000,000 held by the Detroit Trust Co. has been discharged by the new owners. The management of the line will be under the control of a separate board of directors, of which C. M. Hays, of the G.T.R., is President; J. M. Morton, President of the Toledo, St. Louis and Western Rd., Vice-President, and J. H. Muir, Secretary-Treasurer. Press reports to the effect that the G.T.R. had acquired the Toledo, St. Louis and Western Rd., are denied by C. M. Hays, 2nd Vice-President and General Manager. (July, pg. 223.)

**Halifax Electric Tramway Co.**—Gross receipts from railway:

	1903.	1902.	Increase or Decrease.
Jan.....	\$10,867.33	\$10,764.58	\$ 102.75+
Feb.....	9,321.75	8,498.39	823.36+
Mar.....	10,195.12	9,761.57	433.55+
April.....	10,532.55	10,025.66	506.89+
May.....	10,768.11	11,126.66	358.55-
June.....	11,843.82	11,528.19	315.63+
	\$63,528.68	\$61,705.05	\$1,823.63+

**Hamilton Radial Ry.**—A payment of \$149 has been made to the Hamilton city council for mileage on the company's tracks within the city, for the three months ended June 30.

**Hamilton Street Ry.**—For the quarter ended June 30, the Hamilton city council has received from the H.S.Ry. Co. \$5,168, an increase of \$764 over the amount paid in the corresponding quarter of 1902.

**Lake Erie and Detroit River Ry.**—A special meeting of shareholders was called for July 27 to authorize the execution of a mort-

gage supplemental to and in amendment of the mortgage given to the National Trust Co., Aug. 1, 1902, to secure an authorized issue of bonds to the amount of \$5,000,000. The additional mortgage is also in favor of the National Trust Co.

**N. W. Harris & Co. and R. Winthrop & Co.** have acquired from the Pere Marquette Rd. the entire issue of \$3,000,000 4½% gold bonds, secured by a first lien on the Lake Erie & Detroit River division, through the deposit of \$3,000,000 5% first mortgage gold bonds of the Lake Erie & Detroit River Ry. (Mar., pg. 106.)

**London and Port Stanley Ry.**—The act respecting the rearrangement of the finances of the L. and P.S. Ry. Co. has been finally passed by the Dominion Parliament. (May, pg. 154.)

**London, Ont., Street Ry.**—Gross earnings:

	1902-3.	1901-2.	Increase or Decrease.
Dec.....	\$15,041.80	\$12,947.48	\$2,094.32+
Jan.....	12,132.54	10,117.60	2,014.94+
Feb.....	10,716.42	8,894.78	1,821.64+
Mar.....	11,533.68	10,233.21	1,300.47+
Apr.....	11,818.06	9,941.04	1,876.12+
May.....	13,144.76	12,233.68	911.08+
June.....	16,223.80	13,942.77	2,581.03
	\$90,611.06	\$78,011.46	\$12,599.60

**Montreal St. Ry.**—Earnings and expenses for June:

	1903.	1902.	Increase or Decrease.
Passenger earnings.....	\$205,454.13	\$132,875.27	\$72,578.86+
Miscellaneous earnings.....	3,293.23	4,787.06	863.83-
Total earnings.....	209,377.36	187,662.33	21,715.03+
Operating expenses.....	121,580.12	80,655.00	40,925.12+
Net earnings.....	87,797.24	107,007.33	19,210.09-
Fixed charges.....	24,197.58	19,391.91	4,805.67+
Surplus.....	63,599.66	87,615.42	24,015.76-
Expenses % of car earnings.....	59.18	44.10	

From Oct. 1, 1902, to June 30, 1903:

	1902-3.	1901-2.	Increase or Decrease.
Passenger earnings.....	\$1,546,525.35	\$1,424,182.66	\$122,342.69+
Miscellaneous earnings.....	25,415.96	20,997.57	4,418.39+
Total earnings.....	1,571,941.31	1,445,180.23	126,761.08+
Operating expenses.....	993,652.19	846,892.91	146,759.28+
Net earnings.....	578,289.12	598,287.32	19,998.20-
Fixed charges.....	134,667.11	144,298.70	20,368.41+
Surplus.....	443,622.01	453,988.62	40,366.61-
Expenses % of car earnings.....	64.25	59.47	
Interest on M. P. & I. Ry. Co.'s bonds owned by the Co. not included.			

**New Brunswick and Prince Edward Island Ry.**—Press reports state that the option held by B. F. Pearson and others on the line has expired, and that negotiations for its purchase have been declared off. (July, pg. 225.)

**New York and Ottawa Ry.**—The United States Circuit Court at New York has altered the date fixed for the sale under foreclosure of this line to a date in Nov. yet to be fixed, and has extended the date of the payment of receiver's certificates, amounting to \$585,000, due on July 11, 1903, to Jan. 1, 1904. The receiver is H. W. Gays, of the Ottawa and New York Ry., Ottawa. (June, pg. 191.)

**Ottawa Electric Ry. Co.**—By an act passed at the current session of the Dominion Parliament the company has been authorized to issue bonds to the amount of \$1,000,000 in addition to the existing securities, and on the redemption of these the new bonds will become a first charge on the lines and property of the O. E. Ry. Co. (Mar., pg. 107.)

**Pere Marquette Rd.**—The regular semi-annual dividend of 2% on the preferred stock, and an initial dividend of 1% on the common stock has been declared. (July, pg. 225.)

# Niagara River Line

## THE NIAGARA-TORONTO ROUTE



For Lewiston, Queenston, Niagara-on-the-Lake, Niagara Falls, Buffalo, New York, Boston, Philadelphia, Cleveland, and all points South, East and West.

**DIRECT CONNECTING LINES:** At Lewiston, N.Y., New York Central and Hudson River R.R., and Great Gorge Road; Niagara-on-the-Lake, Michigan Central R.R.; Queenston, International R.R. Co.; Toronto, R. & O. Navigation Co., Canadian Pacific R.R., Grand Trunk R.R.

**5 TRIPS DAILY (Except Sunday)**

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TORONTO, CANADA

## Pintsch System Car and Buoy Lighting.

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

## Car Heating.

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

**Automatic Steam Couplers.** Straight Port Type.

**THE SAFETY CAR HEATING and LIGHTING CO.,**

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# STEEL RAILS

We have pleasure in offering highest grade Bessemer Steel Rails made by THE ALGOMA STEEL CO., Ltd., of Sault Ste. Marie, Ont.

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== IT STANDS ALONE ==

The BEST in the WORLD.

**Qu'Appelle, Long Lake and Saskatchewan Ry.**—Net earnings for May \$4,418.13, against a net loss of \$9.12 for May, 1902; making for six months ended May 30, net earnings of \$21,297.54, against \$48,212.05 for same period 1902.

**Quebec Central Ry.**—The report of the directors presented at the recent annual meeting of the shareholders showed that after providing \$84,891 for the year's interest paid and accrued upon the outstanding prior lien bonds and 4% debenture issued, there remained a net revenue balance of \$117,338, which, added to the \$1,879 brought forward from 1901, made an available balance of \$119,217. The interest on the 3% second debentures amounted to \$49,348, and a dividend at the rate of 2 1/4% on the 7% income bonds had been declared absorbing \$37,011, leaving a balance of \$32,858. The interest on the income bonds for 1901 was at the rate of 1 1/2%. Up to Dec. 31, 1902, £252,737 of the new 4% debentures had been issued. Of this amount £198,000 had been used in retiring a like amount of prior lien bonds, and £54,737 had been sold to provide funds for a portion of the requisite additional capital expenditure authorized by the Act of 1899. There remained £152,000 prior lien bonds unexchanged on the 31st December, 1902. (July, pg. 225.)

**Shuswap and Okanagan Ry.**—Net earnings for three months ended Mar. 31, \$3,307 against \$2,755 for the same period 1902.

**St. Thomas Street Ry.**—It was reported to the St. Thomas, Ont., city council that the receipts of the street railway for June amounted to \$1,481.22.

**Temiscouata Ry.**—Net earnings for May, \$3,214, making for five months to May 30, net earnings of \$4,718.

**Temiskaming and Northern Ontario Ry.**—The T. and N. O. Ry. commissioners are offering for public subscription \$2,000,000 of 3 1/2% 30-year gold bonds, to be delivered Oct. 1; \$250,000, to be delivered Dec. 1; \$250,000 to be delivered Feb. 1; 1904; and \$250,000 to be delivered April 1, 1904. The total issue will consist of 5,500 bonds of \$500 or £102.14.10 each payable in gold in Toronto, New York, or London, Eng., 30 years from the date of issue, the interest of 3 1/2% to be payable half yearly on April 1 and Oct. 1 in each year. Tenders will be received to Sept. 12. The bonds are being issued under the provision of the act passed at the recent session of the Ontario Legislature, which authorized the commissioners to issue bonds to the extent of \$25,000 a mile of the projected railway at not exceeding 4% and redeemable within 40 years. (July, pg. 225.)

**Toronto, Hamilton and Buffalo Ry.**—Gross earnings for June, \$47,547.93 against \$35,380.91 for June, 1902.

**Toronto Railway Co.**—Car earnings:

	1903.	1902.	Increase or Decrease
Jan.	\$161,038.22	\$137,135.21	\$24,803.01+
Feb.	146,539.17	127,981.01	18,558.16+
Mar.	150,913.85	141,681.22	18,232.63+
April	162,276.30	132,546.56	29,729.80+
May	174,519.58	145,195.54	29,324.04+
June	177,893.21	131,865.85	45,727.36+
	\$982,780.39	\$816,405.39	\$166,375.00+

On July 1, the total receipts amounted to \$9,988.83, an amount \$1,700 in excess of that taken on any previous Dominion day celebration in the history of the company.

**White Pass and Yukon Ry.**—Gross earnings for June \$279,000, making for the year ended June 30, \$1,726,807.

When the locomotive whistles on the docks at Athabasca Landing there will be brought into touch with commerce and traffic the most extensive system of internal navigation in the world.—Globe.

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

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

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July	\$3,246,620.51	\$2,070,909.25	\$1,175,711.25	\$79,844.32+
Aug.	3,554,184.56	2,191,283.11	1,362,901.46	57,269.36+
Sept.	3,651,481.42	2,240,726.92	1,410,754.50	58,022.78+
Oct.	4,127,402.07	2,511,267.44	1,616,134.63	149,095.41+
Nov.	3,976,668.87	2,417,828.63	1,558,840.24	117,362.10+
Dec.	3,959,146.15	2,286,704.31	1,672,441.84	103,759.33+
Jan.	3,148,455.27	2,231,684.50	916,770.77	96,309.97+
Feb.	2,827,294.65	2,084,553.96	742,740.69	68,386.01+
Mar.	3,615,752.57	2,357,188.11	1,258,564.46	203,649.50+
Apr.	3,795,394.50	2,302,221.19	1,493,173.31	201,466.68+
May	3,902,962.05	2,519,604.78	1,383,357.27	216,464.80+

\$39,804,762.62 \$25,213,972.40 \$14,590,790.22 \$1,351,615.35+

Approximate earnings for June, \$4,100,000, against \$3,114,000 for June, 1902.

**DULUTH, SOUTH SHORE AND ATLANTIC RY.**—Gross earnings for May, \$244,305.46; net earnings, \$85,835.97, against \$226,553.41 gross and \$79,381.96 net for May, 1902. Net earnings for eleven months ended May 31, \$901,935.88, against \$895,293.35 for same period, 1901-02. Approximate earnings for June, \$268,913, against \$253,425 for June, 1902.

**MINERAL RANGE RY.**—Approximate earnings for June, \$50,027, against \$43,556 for June, 1902.

**MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.**—Gross earnings for May, \$579,524.81; net earnings, \$243,847.91, against \$527,984.32 gross and \$245,003.84 net for May, 1902. Net earnings for eleven months ended May 31, \$3,230,724.15, against \$3,023,555.81 for same period 1901-2. Approximate earnings for June, \$618,646, against \$527,557 for June, 1902.

**Canadian Pacific Railway Land Sales.**

	Acres.		Amount.	
	1902-03	1901-02	1902-03	1901-02
July	155,344.93	49,089.96	\$562,876.50	\$154,646.84
Aug.	130,728.83	50,747.82	473,091.85	165,871.16
Sept.	145,535.83	60,060.36	542,811.11	197,057.61
Oct.	476,616.23	150,572.96	952,645.35	465,655.62
Nov.	46,688.83	151,922.89	598,788.99	512,862.94
Dec.	577,382.61	132,151.16	1,683,289.45	493,261.78
Jan.	102,581.29	109,846.99	428,611.21	347,761.91
Feb.	183,554.82	78,039.43	749,235.13	256,156.70
Mar.	184,139.22	101,029.22	782,968.76	333,852.22
April	207,344.12	231,127.11	884,432.24	695,071.68
May	187,416.19	207,153.95	618,337.87	739,021.45
June	349,524.43	244,673.34	1,421,451.13	877,622.18
	2,550,851.33	1,566,414.59	\$9,638,680.59	\$5,145,942.09

**Grand Trunk Ry. Earnings, Expenses, &c**

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

	1903.	1902.	Increase.	Decrease
Jan.	\$2,634,200	\$2,278,978	\$355,222	....
Feb.	2,432,061	2,018,926	413,735	....
Mar.	2,067,498	2,535,873	429,535	....
April	2,787,954	2,436,756	350,298	....
May	2,913,553	2,574,198	339,355	....
June	3,008,626	2,593,824	504,802	....
	\$16,743,502	\$14,359,555	\$2,383,947	....

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

**GRAND TRUNK RY.**

Revenue for May:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£482,500	£422,000	£60,500	....
Working expenses	319,100	266,000	53,100	....
Net profit	£163,400	£156,000	£7,400	....

Aggregate from Jan. 1 to May 31:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£2,267,200	£1,946,700	£320,500	....
Working expenses	1,597,800	1,285,500	312,300	....
Net profit	£669,400	£661,200	£8,200	....

**GRAND TRUNK WESTERN RY.**

Revenue for May:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£99,900	£87,000	£12,900	....
Working expenses	77,300	66,000	11,300	....
Net profit	£22,600	£21,000	£1,600	....

Aggregate from Jan. 1 to May 31:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£459,800	£396,100	£63,700	....
Working expenses	397,700	327,300	70,400	....
Net profit	£62,100	£68,800	....	£6,700

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

Revenue for May:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£16,200	£20,000	....	£3,800
Working expenses	15,900	17,000	....	1,100
Net profit	£300	£3,000	....	£2,700

Aggregate from Jan. 1 to May 31:

	1903.	1902.	Increase.	Decrease.
Gross receipts	£94,700	£91,100	£3,600	....
Working expenses	75,700	69,100	6,600	....
Net profit	£19,000	£22,000	....	£3,000

NOTE—There were only 26 working days in 1903, compared with 27 working days in 1902.

**TRAFFIC RECEIPTS OF THE SYSTEM.**

Aggregate from Jan. 1 to June 30:

	1903.	1902.	Increase.	Decrease.
Grand Trunk	£2,778,920	£2,373,604	£405,316	....
G. T. Western	549,787	466,202	83,585	....
D. G. H. & M.	113,587	108,935	4,652	....
Total	£3,442,294	£2,948,741	£493,553	....

**Recent Dominion Legislation.**

The following acts relating to transportation interests have been passed at the current session of the Dominion Parliament, in addition to those mentioned in our last issue:

- Respecting the Quebec Bridge Co., and changing its name to the Quebec Bridge and Ry. Co.
- Respecting the Vancouver and Coast Kootenay Ry. Co.
- Respecting the London and Port Stanley Ry. Co.
- Respecting the Rocky Mountain Ry. and Coal Co.
- Incorporating the New Canadian Co. (Ltd.)
- Amending the Customs' Act.
- Providing for further advances to the Montreal Harbor Commissioners.
- Respecting aid for the extension of the Canadian Northern Ry.
- To aid in the settlement of railway labor disputes.

**The Cooper-Hopkins Supply Co. (Ltd.)** has been incorporated under the Dominion Companies' Act to carry on the business of manufacturers' agents, merchants, manufacturers and dealers in materials and supplies, mining, contractors' and railway supplies, etc., and to acquire the business carried on by James Cooper, of Montreal. The capital is fixed at \$100,000 and the head offices are to be in Montreal. The incorporators are: James Cooper, J. M. Ward, J. J. Rosevear, G. Milroy, and F. H. Hopkins. The incorporation was completed July 10, a few days before the death of Mr. Cooper. Mr. Hopkins who has been general manager for Mr. Cooper for a number of years and had an interest in the business, is at present in charge of the late Mr. Cooper's various business interests.

The House of Commons has inserted a clause in the act providing for the appointment of a railway commission to the effect that the railway companies shall furnish free transportation to members of the Senate and of the House of Commons, and for members and officials of the commission.

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## RAILWAY DEVELOPMENT.

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

**Algoma Central and Hudson Bay Ry.**—In the circular issued by the President of the Consolidated Lake Superior Co., July 9, he says: "The period of construction has been passed, with the exception of the railway extension, on which work has been suspended." (July, pg. 221.)

**Atlantic and Lake Superior Ry.**—An attempt was made in the House of Commons to have the bill of the A. and L.S. Ry. Co., which had been thrown out by the Railway Committee, again placed on the list for consideration, but the House voted against the motion, and it was declared lost. (June, pg. 213.)

**Atlantic, Quebec and Western Ry.**—The application of the New Canadian Co. (Ltd.), incorporated in London, Eng., under the Joint Stock Companies' Acts, has been granted a Dominion charter by an act passed at the current session of the Dominion Parliament. The company has been granted power to construct terminals for the A.Q. and W. Ry. at Gaspé Basin, Que., and is stated to be the construction company for the railway. The directors of the company include C. B. K. Carpenter, and others who are promoters of the railway. (July, pg. 232.)

**Bay of Quinte Ry.**—Plans and profiles for the extension of the line from Tweed to Bannockburn, Ont., about 29 miles, have been deposited with the Public Works Department, Toronto. The grading of the line is in progress. (July, pg. 232.)

**Belleville Street Ry.**—The Belleville, Ont., city council recently decided to sell the rails of the abandoned street railway to the Belleville Portland Cement Co., for the line it is constructing from Belleville to Point Anne. An injunction has been obtained to prevent the sale at the price mentioned, \$10 a ton, as it is considered too low.

**Brandon, Saskatchewan and Hudson's Bay Ry.**—On the reconsideration of the application for the incorporation of a company with this title the Railway Committee of the House of Commons reduced the capital stock to \$1,000,000, limited the bonding powers to \$15,000 a mile, and refused to authorize the construction of a branch to the Souris river. The line authorized to be constructed extends from the International boundary between ranges 23 and 25 west of the principal meridian in Manitoba, via Brandon and Pas Mission to Fort Churchill, or some other point on Hudson's Bay; and the company is authorized to enter into an agreement with the Canadian Northern Ry. or any other railway company for amalgamation. (July, pg. 233.)

**Brockville and Northwestern Ry.**—See Brockville, Westport and Sault Ste. Marie Ry.

**Brockville and Western Ry.**—See Brockville, Westport and Sault Ste. Marie Ry.

**Brockville, Westport and Sault Ste. Marie Ry.**—The applications for acts respecting the B.W. and S.S.M. Ry., which were referred to a sub-committee of the Railway Committee of the House of Commons, in order to see if the various interests could not be harmonized so that the best interests of the line might be promoted, were again considered by the committee, on a report from the sub-committee. The sub-committee recommended the rejection of the applications in the interests of the Brockville and Northwestern Ry. Co. and of the Brockville and Western Ry. Co., and favored the passing of the application giving the purchasers of the line at the recent sale a title and other powers. The different questions at issue will be dealt with by the House of Commons. (June, pg. 213.)

**Canada Atlantic Ry.**—We were recently advised that the company's plans relative to the projected extension from near Whitney to Sault Ste. Marie, Ont., had not been formulated.

The logging line known as the Macaulay road, which runs from the Egan estate on the western division of the C.A. Ry. to C. J. Booth's timber limits, about eight miles, is to be extended a further distance of five miles. G. A. Mountain, Chief Engineer C.A. Ry., is making the survey.

Arrangements have been made respecting the crossing of the macadamized road in Nepean tp. by a spur line from the C.A. Ry. to some new piling grounds secured by Mr. Booth. Construction of the spur will be commenced as soon as the plans and the agreement for crossing the road have been approved by the Railway Committee of the Privy Council. (July, pg. 233.)

**Canada Central Ry.**—Press reports state that work will be begun on an early date on the construction of the section of the line between Sudbury, Ont., and the French river, and that the line from Scotia Jct. to Sault Ste. Marie will be completed in two years. F. H. Clergue, who is connected with the projected line, it is stated, will devote his whole time to the C.C. Ry. Co., but will retain his position as a director of the Consolidated Lake Superior Co. (July, pg. 233.)

**Cape Breton Coal, Iron and Ry. Co.**—It is proposed to construct an electric railway from the company's coal mines at Cochrane's lake, near Sydney, N.S., to Mira Bay, 4 miles, and to establish a shipping port there.

**Cape Breton Electric Ry.**—The line has now been completed to Queen's pit, finishing the construction in Sydney Mines, N.S., and a regular service was expected to be placed in operation by the end of July. (July, pg. 233.)

**Cape Breton Ry.**—Track has been laid into St. Peter's, N.S., and the first locomotive reached there from Point Tupper, 31 miles, June 19. Ballasting and other work is going on, and a regular train service is expected to be placed in operation on an early date. (June, pg. 213.)

**Chateauguay and Northern Ry.**—Considerable work has been done upon the C. and N. Ry. both in Montreal and on the mainland between Charlemagne and Joliette, Que. The total length of the line is about 34 miles, and it was recently reported that over 10 miles of grading had been done, and that it was expected that trains would be running over the whole line by the end of Sept. The entrance into Montreal will be alongside the line of the Montreal Terminal Ry., and on this section over three miles had been graded early in July, while the work was being pushed by a large force of men. On the mainland over six miles had been graded and a number of gangs of men were at work on different points of the route. The principal work on the line is the construction of the bridge over the two channels of the Ottawa river at Bout de L'Isle. Both the stone abutments on the west channel have been completed, together with piers 1, 2, 3 and 10, while the concrete foundations have been laid for piers 4 and 5. The Dominion Bridge Co. expects to have the superstructure on this section of the bridge completed in Sept. A temporary wooden bridge will be constructed over the eastern channel until the erection of the superstructure there early in 1904. On the mainland there will be three steel bridges on concrete piers. The substructure of the one at Lac Oureau river has been commenced. This will consist of two spans of 50 ft. each, and a central span of 140 ft.; a similar bridge will cross the L'Achegan river at L'Epiphany, while that near St. Esprit will have two spans of 30 ft. each with a central span of 70 ft.

The W. J. Poupore Co. have the general contract for the work, and F. A. Hibbard is engineer in charge.

An injunction was served on the Company to restrain it from constructing its line through the property of A. Dulunde, Montreal. The case is still before the court. (July, pg. 233.)

**Detroit River Bridge.**—H. M. Perkins, of Detroit, Mich., recently stated that a syndicate of Detroit capitalists had been formed to construct a bridge connecting Windsor, Ont., and Detroit, Mich., and that work would be commenced as soon as the necessary Government permission had been obtained. (June, pg. 213.)

**Duluth, Superior and Western Terminal Co.**—P. Betts and F. H. Church, of Madison, Wis., have filed articles of incorporation in West Virginia for a company with this title for the purpose of building docks, wharves, warehouses and railroads in Wisconsin, Minnesota, and in Canada. The Company has also been registered to do business in Wisconsin.

**Duluth, Virginia and Rainy Lake Ry.**—Tracklaying has been completed to mileage 22.5 north of Virginia, and grading is in progress to mileage 40, near Pelican lake, about 45 miles south of Koochiching, opposite Fort Frances, Ont. (June, pg. 213.)

**Elgin and Havelock Ry.**—The work done on the E. and H. Ry. since the new owners took hold of it includes the repairing and strengthening of the bridges, the lifting and ballasting of the track, and the overhaul and repair of all station buildings. The line is now in first-class shape. All this work was done under the direction of P. S. Archibald, C.E., General Manager.

We are advised that nothing has been decided in respect of the proposed extensions for which parliamentary powers were obtained at the current session of the Dominion Parliament. It is understood, however, that work will be gone on with this year if Parliament grants the usual subsidies. (July, pg. 235.)

**Grand Valley Ry.**—A new station is being erected at Grand Valley Park near Brantford, Ont. A Brantford paper states that the city of Guelph is actively co-operating in the proposal to bring the G.V.Ry. into that city. (June, pg. 214.)

**Great Northern Ry., U.S.**—Plans are being prepared for the construction of a cut-off from Columbia Falls, Mont., on the main line to a point just north of Jennings, on the line from that town to the Canadian boundary, where connection is made with the Crow's Nest Southern Ry. to Fernie, B.C. The distance is 100 miles and will throw the main line of the Great Northern several miles north of its present position. The cost of the work will be \$2,000,000. The object of the change is to escape heavy grades between Columbia Falls and Jennings, which have been a source of delay and expense ever since the road has been built.

**Halifax and Southwestern Ry.**—The Halifax city engineer and T. H. White, chief engineer of the line, have been in consultation respecting the road crossings on the proposed entrance into the city. The clearing of the route in the vicinity of the city has been nearly completed. About a mile of track has been laid from Mahone towards Halifax and bridge building materials, etc., are being hauled in. (July, pg. 235.)

**Halifax Electric Tramway.**—The new power station, which is estimated to cost \$200,000, is expected to be completed by the end of the year. The new building will contain boilers and engines with a capacity of 45,000 h.p. Adjoining there has been erected a coal handling plant, and on the land reclaimed during the construction of the pier, a large coal warehouse is to be erected. (June, pg. 214.)

**Hampton and St. Martin's Ry.**—This line has not been operated for some time, but recently a number of local men arranged to operate it as soon as they could organize a company to do so. Pending this the line is being repaired and got ready for traffic. A number of bridges have been repaired and a portion of the line reconstructed, owing to an extensive wash out. R. Carson, S. E. Vaughan, E. A. Titus, T. Titus and W. E. Skillen are interested in the new company.

**Huntsville and Lake of Bays Ry.**—Plans for the construction of a one mile piece of railway on the portage between Lake of Bays and Peninsula Lake have been filed in the Department of Public Works, Toronto. A deputation from the company recently waited on the Premier of Ontario to ask that the Government would recommend the granting of a subsidy for the line. It is understood that the application will be favorably considered. (July, pg. 235.)

**Intercolonial Ry.**—The supplementary estimates under consideration in the Dominion Parliament include \$470,283.49, for the I.C.R., distributed as follows: Exchange drawbars for freight cars, \$15,000; to equip passenger cars with vestibules, \$8,000; to increase accommodations at Levis, \$76,500; towards improving the ferry service at Strait of Canso, \$20,000; improvements at Nicolet Station, \$600; towards building a branch from Riviere Quelle Station, \$30,000; air-brakes to freight cars, \$10,000; steel rails and fastenings, \$275,000; Eastern Extension Railway of N.B., balance, \$1,250; Eastern Extension Railway, Nova Scotia, \$5,184.49.

Tenders are under consideration, or will be received early in August, for the following works: baggage and express rooms at Levis, Que.; engine house at Ste. Flavie, Que.; conductor's room, express room, etc., at Moncton, N.B.

Press reports state that a new round house will be erected at Halifax, near Africville, and that it will be used by the Dominion Atlantic Ry. and the Halifax and Southwestern Ry., as well as by the I.C.R.

The new bridge over the northwest Miramichi river, N.B., has been completed, and work is in progress preparing for the placing of the superstructure for the bridge over the southwest river. The work is being done by the Dominion Bridge Co., Montreal.

The new station at Levis has been completed and the offices were removed there July 6. (July, pg. 235.)

**Kingston and Frontenac Ry.**—The act incorporating a company with this title was passed at the last session of the Ontario Legislature. (July, pg. 236.)

**Lake Erie and Detroit River Ry.**—The freight sheds at Walkerville were considerably damaged by fire July 2. Additional freight shed and siding accommodation is needed at London, Ont., and negotiations are in progress with the city council and others in respect thereto. (July, pg. 237.)

**Lindsay, Bobcaygeon and Pontypool Ry.**—A contract for the construction of this line has been let to E. F. Fauquier, Ottawa, and work is to be commenced immediately. It is expected to complete the line from Burketon station on the C.P.R., to Bobcaygeon, Ont., by Jan. 1. The right of way touches the Scugog lake and river at several points, making the delivery of ties and other material comparatively easy. A large portion of the right of way has been purchased, and the balance is being secured as rapidly as possible.

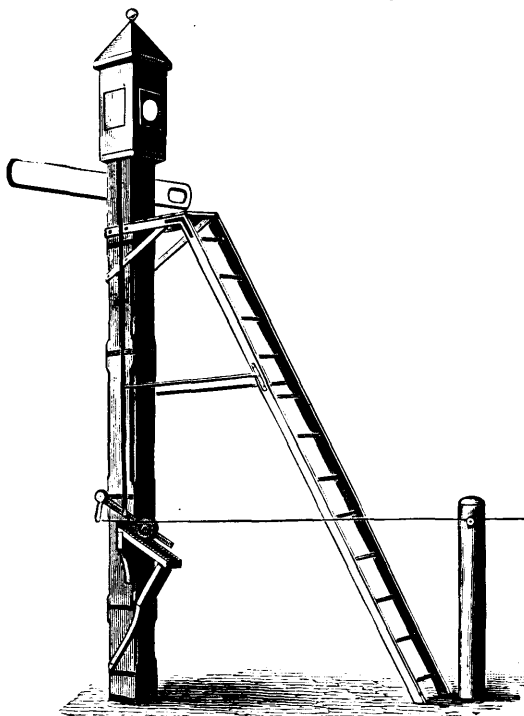
Plans and profiles have been deposited with the Department of Railways at Ottawa. The route chosen from Lindsay to Burketon is the most direct possible, and an exceptionally good, comparatively level line has been secured. The grades against south-bound traffic average 45 ft. to the mile, and against north-bound traffic will be 53 ft. The maximum of

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curves is 4°. The line from the southern boundary will follow the river bank and Lake Scugog until it passes Cæsarea about one and a-half miles, when it makes a slight curve and runs directly to Burketon, where it joins the main line of the C.P.R. with a Y. It will pass Janetville about two and a half miles east. (July, pg. 237.)

**Mabou and Gulf Ry.**—Bids are being asked for the construction of the extension of this line from the crossing of the Inverness Ry. and Coal Co.'s line, near Mabou, N.S., to Orangedale on the I.C.R., about 34 miles. (May, pg. 149.)

**Manitoba Cement Co.**—The town of Morden, Man., has offered a free site for the company's mill and other advantages, together with a free right of way for the railway to the marl deposits. The directors have accepted this offer and preparations are being made to go on with the buildings and the construction of the railway. The railway will be about 14 miles in length. (April, pg. 119.)

**Manitoulin and North Shore Ry.**—F. H. Clergue recently stated that the projected line from Sudbury to Manitoulin Island, a portion of which has been constructed, has not been abandoned, but that construction on it will be proceeded with simultaneously with the projected Canada Central Ry. (April, pg. 119.)

**Middleton and Victoria Beach Ry.**—This line, which is under construction from Middleton to Victoria Beach, N.S., about 40 miles, is reported to have been acquired by Mackenzie, Mann, & Co. (May, pg. 149.)

**Montreal and Southern Counties Ry.** (Electric).—Negotiations are in progress between A. J. DeB. Corrivreau and the officials of the Central Vermont Ry. respecting the construction of a bridge over the Richelieu river between St. Johns and Iberville. The C.V. Ry. has a bridge at this point, but it is proposed to erect a new one suitable for the railway, electric railway, and ordinary traffic. (July, pg. 237.)

**Montreal Bridge Co.**—The application of this company at the current session of the Dominion Parliament for an act extending the time for the commencement and completion of its undertaking, and to change its name to the Montreal Bridge and Terminal Co., was withdrawn. (April, pg. 119.)

**Nelson and Fort Sheppard Ry.**—A considerable portion of the track between Wanaeta and Northport, B.C., was recently washed out, and traffic was suspended for several days. The line is considerably exposed in this section, and is always in considerable danger during heavy rains and floods.

**Nepigon Ry.**—J. Conmee, M.L.A., says that the projected line from Nepigon station on the C.P.R. transcontinental line, to Nepigon Lake, about 40 miles, will be commenced at once, and will be completed this year. The company will construct its own terminals, and J. Conmee has the general contract for the construction of the line. A contract for 100,000 ties was let to A. Seaman, and these are in course of delivery. The new line will follow the valley of the Nepigon river to the south end of the lake. It is intended to carry the line to a junction with the Government section of the Grand Trunk Pacific line, which it is expected will pass about 30 miles north of Lake Nepigon. (July, pg. 237.)

**North Colchester Ry.**—The Midland Ry. Co. of Nova Scotia, which owns the charter of the N.C. Ry., which has power to construct a line from Truro to a point on Northumberland Strait, N.S., expects to have all preliminaries completed this year, but will not commence actual construction until early in 1904. (June, pg. 217.)

**North Shore Ry., Power and Navigation Co.**—We are advised that the track from the

shore of the bay of Seven Islands, to the falls of Ste. Marguerite river, Que., about 9 miles, has been laid, and that the dock, which is under construction, to 36 ft. of water, will be completed by Nov. 1. Active preparations are being made to start work on the dam and the pulp mill. On July 16 the force at work consisted of 200 men, with steam shovel, locomotives and a first-class outfit of modern construction. M. Connolly is the contractor, and H. Holgate, of Ross & Holgate, is engineer in charge. (July, pg. 239.)

**Ottawa Valley Ry.**—The application of the O.V. Ry. Co., which has a 10-mile line from St Andrews to Lachute, Que., to extend its line to Montreal, and to acquire the Carillon and Grenville Ry., was defeated in the House of Commons. The original promoter of the bill was C. N. Armstrong, who was also the promoter of the Atlantic and Lake Superior Ry., which was intended to amalgamate a large number of small railways, so as to have a line from the Atlantic ocean at Gaspé to Lake Superior. The O.V. Ry. was one of the small lines it was intended to include in the amalgamation, which was never completed. In the course of the discussion it was stated that C. N. Armstrong did not have any interest in the project, the present shareholders being local people who desired to have a railway constructed through a now un-served district.

**Peterborough and Ashburnham Street Ry.**—See Peterborough Radial Ry.

**Peterborough Radial Ry. (Electric).**—The Peterborough, Ont., city council, July 28, granted a franchise to the Peterborough Radial Ry. in respect of its electric line within the city. The P. R. Ry. Co., which is practically the American Cereal Co., acquired the charter of the Peterborough and Ashburnham Street Ry., which line has not been operated for some time, and has power to construct an extensive system of radial railways, with Peterborough as a center. These lines are projected to run to Lakefield, Young's Point and Chemong. Under the franchise agreed to five miles of line are to be in operation not later than July 1, 1904. (Aug. 1902, pg. 267.)

**Prince Edward Island Ry.**—The supplementary estimates under consideration by the House of Commons for the P.E.I.R. amount to \$467,500, and include: addition to freight house at Mount Stewart, \$300; to straighten line at Blue Shank, \$4,000; Murray Harbor Branch and Hillsboro Bridge, \$450,000; to provide and lay steel sails, \$13,400.

The question of straightening the curve at Milton is not yet advanced to the stage when any decided information can be given out by the officials.

Tenders were received up to Aug. 1 for the construction of nine stations, two water tanks and an engine house for the Murray Harbor branch. (July, pg. 240.)

**Quebec Bridge and Ry. Co.**—By an act passed at the current session of the Dominion Parliament the title of the Quebec Bridge Co. has been changed to that of the Quebec Bridge and Ry. Co.

We are advised that erection of the superstructure for the spans between the anchor piers and abutments is being gone on with, and that preparations are being made for the manufacture of the steel for the main spans. The railway connections are not finally determined upon, but it is expected that all arrangements will be made during the summer. (July, pg. 240.)

**Quebec, New Brunswick and Nova Scotia Ry.**—The act incorporating a company with this title has been passed by the House of Commons. The route finally adopted is to be from a point on the Canadian Northern Ry. near Quebec bridge, and by the shortest route to Moncton, N.B., and thence to Pugwash, N.S., with permission to build a branch

line to St. John. The line is not to approach nearer than five miles to the Quebec and New Brunswick Ry. unless by agreement on order of the Governor-General-in-Council. (May, pg. 151.)

**Sandwich, Windsor and Amherstburg Ry. (Electric).**—The extension of the line from Ojibwa to Amherstburg, Ont., was opened for traffic July 10. (July, pg. 241.)

**Schomberg and Aurora Ry.**—An action is being heard at Toronto against the S. and A. Ry. Co., by shareholders of the Metropolitan Ry. who acquired the shares of Capt. Armstrong and other promoters of the line, for damages for breach of contract. The allegation is that the plans for the railway were changed in such a way that the line was not built to Lloydtown. An endeavor was made to effect a settlement, but it failed and evidence is being taken by Judge Winchester. (Feb. pg. 46.)

**Sherbrooke, Que. Street Ry.**—Some further negotiations are in progress between the company and the city council in respect of the proposal to lay double track on Bridge street, and for some extensions of track in East Sherbrooke. (July, pg. 241.)

**Southwestern Traction Co. (Electric).**—The overhead work on the section of the line from London to Lambeth, Ont., was expected to be completed by the end of July. The entrance into London has not been decided on, and cars will not be operated until the arrangements for this are completed. (July, pg. 241.)

**St. Thomas Street Ry. (Electric).**—The St. Thomas, Ont., city council is making application to the railway committee of the Privy Council, for permission to construct a subway at Ross st., and level crossings for the street railway at William st., and Elgin st., across the Michigan Ry. Co.'s tracks. (July, pg. 241.)

**Temiskaming and Northern Ontario Ry.**—We are advised that it is hardly likely that any stations will be built on the line this year. Tracklaying was proceeded with rapidly until July 24 when, owing to the demands of the men for higher wages, work was suspended. The ties for the whole of the 70 miles to be completed this year have been delivered. The Commissioner of Public Works and a number of officials recently went over the line as far as New Liskeard, the proposed terminal. (July, pg. 241.)

**Toronto Ry.**—An application has been made to the York township council by the Toronto Ry. Co. respecting the construction of a line from the city boundary on Avenue road to the Upper Canada College. The company suggests that the township council construct the line, in return for which the company would operate it, giving a five cent fare to and from all points in the city. The matter was referred to a committee. The company proposes extending its line on Avenue road in the city, and is negotiating for power to extend the line to the city boundary. (Feb. pg. 49.)

**Vancouver and Coast Kootenay Ry.**—By an act passed at the current session of the Dominion Parliament the V. and C.K. Ry., for which a B.C. charter was passed in 1902, has been declared to be a work for the general advantage of Canada. The contracts made with the B.C. Government under the provincial charter have been confirmed, and the other arrangements made in connection therewith approved. The capital stock is declared to be \$10,000,000, and power is given to enter into agreements with other companies, but it may not lease its line to, or amalgamate with the C.P.R., or any line leased to the C.P.R. (Feb. pg. 49.)

**Vancouver, Westminster, Northern and Yukon Ry.**—Application has been made to the city council for the approval of the plans



for the entrance of the line into the city. The company asks that the city give 3 1/2 acres of land at the head of False creek on the south side for railway yards and a privilege to build from there to the Royal City mills, crossing all street ends. The company also wants the city to open Keefer street and Columbia avenue, so that the station site will be more easily accessible. From Westminster avenue to Granville street the company wants the privilege to build a trestle work down False creek to carry their tracks to the shingle mills and other manufactories along the waterfront. The matter has not been decided upon by the council. (July, pg. 243.)

**Canadian Northern Ry. Construction.**

**Branch from Warroad.**—Press reports state that the contract for the branch from Warroad, Minn., for 25 miles into the Badger district, will be let on an early date, and that work will be started this year. The same report also states that the branch will ultimately be carried to a junction with the Thief River branch of the Great Northern Ry., U.S., at Thief River Falls, Minn.

**Branch Through Springfield.**—We are advised that the final surveys for the line through Springfield have not been completed, but that it is intended to construct the line this season. (July, pg. 243.)

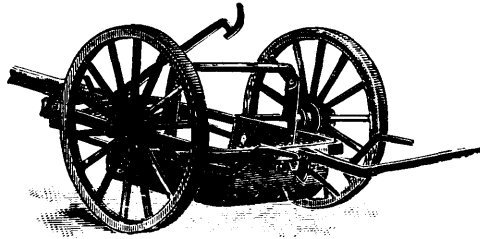
**Branch to Oak Point.**—We were advised July 16 that 18 miles of track had been laid on the old Winnipeg and Hudson's Bay line, from Winnipeg, and that it was expected to have the grading completed to Oak Point, on Lake Manitoba, 53 miles from Winnipeg, a few days thereafter. It is expected that track will be laid into Oak Point this season. The entrance of the line into Winnipeg has not been definitely decided and will not be until the Railway Committee of the Privy Council has approved of the route and given permission to cross the C.P.R. tracks in the north end. The proposed route as laid down by the C.N.R. is along Rachel st., and thence out of the city in a northwesterly direction. (July, pg. 243.)

**Greenway Southwesterly.**—The location of the 40-mile branch from Greenway, on the Morris-Brandon line, southwesterly, has been definitely located for 20 miles. Beyond that point there is a piece of very heavy work, and surveys are being made with a view of avoiding it. The route located runs due south for about six miles, then turns westerly, passing through Glenora, and between Rock Lake and Louise Lake. The terminal point of the branch will lie at the base of Turtle Mountain. Grading is in progress on the first 20 miles of the branch, A. R. Mann being the contractor. (July, pg. 243.)

**Hartney to Virden and Westerly.**—Surveys are in progress for the branch projected from Hartney, on the Hartney extension of the Morris-Brandon branch, to Virden and westerly. (May, pg. 174.)

**Carberry to Neepawa.**—The line from Carberry northerly passes near Petrel and through Oberon to a junction with the line constructed in 1902 from Katrim to Neepawa. It is intended that the line will be carried south from Carberry, about 5 miles to a junction with the line now under construction from Portage la Prairie, through the Rosendale district. Up to June 30, we were recently advised, that 7 miles of grade had been completed on this branch. W. J. Cowan is the contractor. (July, pg. 243.)

**Portage la Prairie Southwesterly.**—The route located for this line runs in a straight line southwesterly from Portage la Prairie to Rosendale, about 20 miles, and then will run due west, ultimately reaching Brandon, which is about 55 miles from Rosendale. We were



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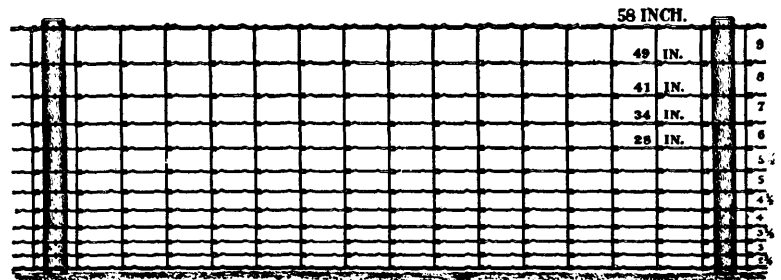
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recently advised that 17 miles of the grade had been completed. The contractor is A. C. Mackenzie. (July, pg. 243.)

**Rosburn Branch.**—Grading is being pushed on this line which will extend from Rosburn Jct., about 10 miles north of Neepawa, to the western boundary of the province. Of this line 13.1 miles were completed in 1902. The work in progress this year is not in direct construction of this line, as the route is not finally approved of, an endeavor being made to secure a change of route between Clanwilliam and a point about five miles northwest of Indian Reserve no. 67. Grading is in progress between this latter point and a point near Ranchvale, the route located passing through or near Glenforse, Elphinstone and Oakburn. It is expected that 85 miles of this branch will be completed this year. The McDonald, McMillan Co., of Westbourne, Man., are the contractors. (July, pg. 243.)

**McCreary Branch.**—Tracklaying on this branch has been completed, and it was expected that the surfacing-up would be finished so as to permit of the running of trains from Neepawa by the end of July. (July, pg. 243.)

**Manitoba Branches.**—In respect to the other branch lines, for the construction of which the Manitoba Government was authorized at the last session of the Legislature to guarantee bonds, the surveys have not been undertaken owing to the difficulty of obtaining engineers for locating purposes. It was expected that the difficulty would be overcome and the work undertaken later in the season. The branch lines to which this refers are: Roland or Myrtle to Morden, 20 miles; Minto or Elgin, southwesterly, 30 miles; Fairfax to Souris, 15 miles. (July, pg. 243.)

**Prince Albert and Edmonton Extensions.**—The act authorizing the guarantee of bonds in respect of the construction of the 100 miles from Prince Albert easterly, and for the line from Grand View to Edmonton, about 620 miles, has been passed by the Dominion Parliament. (July, pg. 244.)

**Grand View—Edmonton Extension.**—The following contractors are at work on this extension: G. H. Strevel, Winnipeg; The McDonald, McMillan Co., Westbourne, Man.; Alex. Fisher, Winnipeg, and J. D. McArthur, Winnipeg. It was expected that another contractor would be started between the contracts of the two last named by the end of July. The right of way to the south Saskatchewan river is all under contract, and it is expected that track will be laid to that point before the freeze-up. The work on the substructure of the bridge over the south Saskatchewan river is being pushed under the charge of the C. N. Ry. foreman. (July, pg. 244.)

**Swan River Branch.**—A contract has been let to John Hunter, of Swan River, Man., for grading the branch from Swan River southwesterly to the boundary of Manitoba, about 20 miles. Work will be commenced immediately thereon. (April, pg. 131.)

**Prince Albert Extension.**—It is intended to get the track laid as far as Prince Albert this year, 180 miles from Erwood, but if this is not possible, Melfort will at any rate be reached. The contractors who are grading on the extension are: Neil Keith, A. D. Mann, and Stanley & Gerrond. (July, pg. 244.)

**Hudson's Bay Line.**—A survey party left Prince Albert, Sask., recently on a trip to Cumberland House, via the Saskatchewan river, from which point the survey to Hudson's Bay will be started. The party is not expected to return until the winter.

**Edmonton.**—M. McCrimmon, of Edmonton, Sask., is grading the line to the new station and yards at the Hudson's Bay reserve recently acquired, and as soon as this work is finished, he will work easterly on the main

line. Although the distance between the terminal point of the line completed in 1901, and the site of the station is only five blocks apart it is necessary to construct about  $4\frac{1}{2}$  miles of line to connect them, owing to the height of the hill. (July, pg. 244.)

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

**Sand Point Wharves.**—The permanent repairs to the wharves at Sand Point, St. John, N. B., and the construction of the new conveyors from the C.P.R. elevator, necessitated by the fire, are being delayed until it is seen whether any alteration in the plans will be required, on the approval by the city council of the plans for No. 4 shed. (May, pg. 179.)

**Selbois Sinkhole.**—A sinkhole near Selbois, Me., 314 miles from Montreal, which from time to time has given a good deal of trouble, has been filled in, and the new embankment is completed. One of the gravel trains employed upon the work has been taken off and placed at work ballasting on the Maine sections of the Atlantic Division.

**East End Stock Yards.**—C. W. Spencer, General Superintendent of Transportation, Eastern Division, recently waited on the finance committee of the Montreal city council to arrange for the enlargement of the stock yards at the east end. An appropriation of \$47,000 was asked for this purpose. The question was held over for full consideration.

**Chateau Frontenac, Quebec.**—Sir T. G. Shaughnessy, President C.P.R., recently visited Quebec in connection with the projected extension of the Chateau Frontenac. The proposal is to erect a new building in the Lower town, directly below the Terrace and facing the present structure. The new building will be run up to a height on a level with the Terrace, and the main office will be in the Lower town. An elevator will carry passengers from the new to the present structure and vice versa. A definite decision as to what will be done has not been arrived at. (Feb., pg. 52.)

**Caledonia Springs Hotel.**—The hotel at Caledonia Springs, Ont., has passed under the control of the C.P.R., the price paid, press reports state, being \$100,000. A number of improvements are being made to bring the hotel in line with the other hotels belonging to the C.P.R.

**White River, Ont.**—Office buildings and houses for employes are under construction at White River, Ont., to which point the officials, now at Schriber, will be removed.

**Fort William Elevators.**—Press reports state that the C.P.R. contemplates the erection of a 6,000,000-bush. storage elevator at Fort William, Ont.

**Winnipeg Station and Subway.**—In connection with the erection of the new station, the agreement for the construction of which has not been reached, the Postmaster-General recently stated in the House of Commons, that provision was to be made in the new building for a post office department. If the C.P.R. did not immediately proceed with the construction of the station the Government would consider the question of erecting a new building at the station for the department. (July, pg. 245.)

**Winnipeg Yards.**—The following details have been published relative to the alterations and improvement in progress and to be made at the Winnipeg yards. About 350 acres of land have been acquired for additions to the yards, and some 35 miles of additional sidings will be laid. The land embraced in the addition to the yards is about half a mile wide by about a mile long. It is bounded on the east by McPhillips st. and on the west by Keewatin st. The southern boundary is the line between blocks 11A and 35 St. John, and the

northern boundary—the line between blocks 35 and 36 St. John. All the important additions will be located in the newly acquired ground except the cattle yards. These will be to the south of the main line and east of McPhillips st., which extend along Fonseca st., where they will have a frontage of 1,000 feet; their width will be 250 feet and the yards will have accommodation for feeding, watering and rest purposes. The plans are so laid out that the yards can be extended westwardly as the increase in the cattle trade goes on. The additions to and reconstruction of the yards will include a change of tracks in several of the branch lines. The branches to Souris, Teulon and Selkirk and Winnipeg Beach will be moved further west from their present diverting points. The new buildings to be put up will include two passenger car shops, 100 x 240 feet; a freight car shop, 100 x 400 feet; a planing mill, 100 x 200 feet; power house, 100 x 100 feet; blacksmith shop, 100 x 200 feet; locomotive shop, 162 x 700 feet; foundry and stores building, 100 x 100 feet; freight sheds, 100 x 400 feet. Besides these there will be additional storehouses, oil houses, coaling sheds and bins and new stock yards. (July, pg. 245.)

**New Westminster, B.C.**—The C.P.R. has decided to appeal to the Government against the decision of the Railway Committee of the Privy Council giving the Vancouver, Westminster, Northern and Yukon Ry. an entrance into the city. The V.W.N.Y. Ry. is practically the Great Northern Ry., U.S., and the route by which it is proposed to get into New Westminster crosses the C.P.R. tracks, and, it is alleged, interferes with the C.P.R. right of way.

**Vancouver, B.C.**—A spur line is under construction from the southern end of Granville st., along the south side of False creek. McQuarrie & Co. are the contractors.

**Victoria, B.C.**—The C.P.R. is negotiating for a site in Victoria on which to erect a building for office purposes.

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

**Track Elevation in Montreal.**—The Chairman of the level crossings committee of the Montreal city council recently had an interview with the management relative to the building of a viaduct, so that the tracks may be raised from St. Henri into Montreal. The interview terminated with a message from the management to the members of the level crossings committee to the effect that the company at the present time was much disposed to have the level crossings abolished. The company wished the city council to know that it would pay half the cost of the improvement. The cost of the work is estimated at \$4,000,000. The question is under discussion. (June, pg. 195.)

**Toronto Freight Sheds.**—The application for the construction of crossings at John and Front streets, Toronto, in connection with the new yards on the old Parliament Buildings grounds is being considered by the railway Committee of the Privy Council. (July, pg. 243.)

**The Dufferin Street Crossings.**—The G.T.R. has made application to the Toronto city council for permission to construct an additional crossing over Dufferin st., and the matter is under consideration.

**Burlington Swing Bridge.**—The new swing bridge over the canal at Burlington Beach, Ont., on the old Northern and Northwestern Ry., has been opened for traffic. The bridge is 372 ft. in length and is swung by electric power. It cost about \$80,000.

**London Switching Agreement.**—An agreement has been reached between the railway companies entering London, Ont., respect-

ing the switching transfer of cars from one company to the other, and from the manufacturers' spur lines in the city. By the agreement the G.T.R. will immediately construct a connecting line with the C.P.R., and will enter into negotiations with other railways for general interswitching arrangements.

**Sarnia Tunnel.**—We are advised that the question of adopting electricity as a motive power at the Sarnia tunnel is, and has been for a long time under the consideration of the management; no definite decision has been reached.

**Ontario, Sault Ste. Marie Ry.**—An act was passed at the recent session of the Ontario Legislature reviving the act incorporating a company with this title to construct a railway from near Gravenhurst, via French river to Sault Ste. Marie, Ont., with power to construct branches to lake Nipissing and lake Timiskaming. The charter is held in the interests of the G.T.R., and the application for its revival was made by John Bell, K.C., of Belleville, General Counsel for the G.T.R. The last meeting of the directors was held in 1893, and the act now passed authorizes the surviving directors to meet within two months of the passing of the act for reorganization. The time for the completion of the line is fixed for five years from the date of the act.

The shipment of coal from the Nova Scotia collieries during the six months ended June 30, amounted to 2,212,570 tons, an increase of 435,547 tons over the shipments for the same period, 1902. The following were the shipments of the principal companies: Dominion Coal Co., 1,378,183 tons, increase 168,895 tons; Cumberland Ry. and Coal Co., 230,438 tons, increase 43,836 tons; Nova Scotia Steel and Coal Co., 177,716 tons, increase 68,199 tons; Acadia Coal Co., 168,953 tons, increase 62,466 tons; Intercolonial Coal Co., 114,428 tons, increase 24,087 tons; Inverness Ry. and Coal Co., 59,575 tons, increase 34,475 tons.

The Dominion Government has chartered the Newfoundland Government str. Neptune to convey a scientific expedition to Hudson's Bay. The object is to determine the availability of the bay for a Canadian grain route. The expedition, which will winter at Chesterfield Inlet, will be under the command of Capt. S. Bartlett.

Sir William Van Horne has declined to act on the proposed transportation commission. It was recently stated in the House of Commons that the Government was considering whether it should postpone the issuing of the commission until Sir W. Van Horne was in a position to act, or to appoint someone else in his place.

The Michigan Central Rd. has adopted the telegraphone for use on its line. The system which permits the use of telegraph wires simultaneously for telegraphing and telephoning, has been in use for some time on the company's line between Detroit, Mich., and St. Thomas, Ont., 111 miles

The C.P.R. steamship Monterey recently went ashore near St. Pierre, Miquelon, and has been abandoned to the underwriters. The cause of the stranding is said to be due to the inefficient lighting of the French islands there. This is the first disaster to the C.P.R. Atlantic fleet.

The Melbourne (Australia) papers, recently received, give full particulars of the receipt there of T. Tait, chairman of the Railway Commission of Victoria.

The Canadian Northern Ry. commenced running a daily fast passenger train between Port Arthur, Ont., and Winnipeg, Man., July 12.

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### THE GRAND TRUNK PACIFIC RY.

The agreement between the Dominion Government and the G.T.R. directors and officials, acting on behalf of the Grand Trunk Pacific Ry. Co., was published July 30, and the "act to provide for the construction of a national transcontinental railway" was introduced in the House of Commons by the Premier. The agreement is signed by W. S. Fielding, acting Minister of Railways, on behalf of the Government, and by C. M. Hays, 2nd Vice-President and General Manager, and W. Wainwright, Comptroller, of the G.T.R., on behalf of the second party. The representatives of the Grand Trunk Pacific Ry. Co. mentioned in the body of the agreement are: Sir C. Rivers Wilson, Lord Welby, J. A. Clutton Brock, Joseph Price, A. W. Smithers, of London, Eng., directors of the G.T.R.; C. M. Hays, 2nd Vice-President and General Manager, F. W. Morse, 3rd Vice-President, and W. Wainwright, Comptroller, all of the G.T.R., Montreal.

The preamble sets forth that "having regard to the growth of population and the rapid development of the production and trade of Manitoba and the Northwest Territories, and to the great area of fertile and productive land in all the Provinces and Territories as yet without railway facilities, and to the rapidly expanding trade and commerce of the Dominion, it is in the interest of Canada that a line of railway, designed to secure the most direct and economical interchange of traffic between eastern Canada and the Provinces and Territories west of the Great Lakes, to open up and develop the northern zone of the Dominion, to promote the internal and foreign trade of Canada, and to develop commerce through Canadian ports, should be constructed and operated as a common railway highway across the Dominion from ocean to ocean, and wholly within Canadian territory." The clauses, stripped of legal verbiage, follow:

(1) This clause is a definition clause.

(2) A through line of railway of the gauge of 4 ft. 8½ in., comprising two divisions to be called the "eastern division" and the "western division" respectively, shall be constructed between the city of Moncton, N.B., and the navigable waters of the Pacific ocean, at or near Port Simpson or some other port in British Columbia as may be agreed upon. The eastern division shall comprise the portion of the railway to be constructed from its eastern terminus through the central part of New Brunswick and through Quebec by the shortest available line to the city of Quebec, then westerly through the northern part of Quebec and Ontario and through the Province of Manitoba to Winnipeg and the western division shall comprise the portion of the railway between Winnipeg or some point on the said eastern division and the Pacific ocean, extending westerly through Manitoba, the Northwest Territories and British Columbia.

(3) The railway shall be constructed wholly upon Canadian territory.

(4) The western division is considered as being divided into two sections, one extending from the eastern terminus thereof westerly to the eastern limit of the Rocky Mountains (designated as the prairie section) and the other extending westerly from the eastern limit of the Rocky Mountains to the western terminus (designated as the mountain section). The eastern limit of the Rocky Mountains shall be established after the location of the line, and after actual surveys have determined the profile thereof, upon such location, and be fixed and agreed upon by the chief engineer of the company and the chief engineer of the Government, as the result of such surveys, having regard to the physical features of the country and to the cost of construction and endeavoring as fairly as possible to determine where the more easy and less expensive work

characteristic of prairie construction comes to an end, and the more difficult and expensive work characteristic of mountain construction begins, and in case the engineers shall differ, the question shall be determined by the engineers and a third arbitrator to be chosen by them, and in the event of their inability to agree on a third arbitrator, the Chief Justice of the Supreme Court of Canada may appoint the said third arbitrator, and the decision of the majority shall be final.

(5) The eastern division shall be constructed by the Government, having due regard to directness, easy gradients and favorable curves.

(6) The company agrees to construct, maintain and operate the western division, and to take a lease of, maintain and operate the eastern division, upon the terms and conditions hereinafter set forth.

(7) In order to insure, for the protection of the company as lessees of the eastern division of the railway, the economical construction thereof in such a manner that it can be operated to the best advantage, it is agreed that the specifications for the construction shall be submitted to and approved of by the company before the commencement of the work, and that the work shall be done according to the specification, and shall be subject to the joint supervision, inspection and acceptance of the chief engineer appointed by the Government and the chief engineer of the company, and in the event of differences as to the specifications, or in case the engineers shall differ as to the work, the questions in dispute shall be determined by the engineers and a third arbitrator, to be chosen in the manner provided in paragraph four.

(8) The construction of the eastern division shall be commenced as soon as the Government has made the surveys and plans and determined upon the location and shall be completed with all reasonable despatch.

(9) The western division shall be constructed by and at the cost of the company, according to plans and specifications to be approved by the Government.

(10) The work of locating and constructing the western division shall be commenced forthwith after the ratification of this agreement by Parliament and shall proceed with the utmost despatch, and shall be completed within five years from Dec. 1, 1903, and in case of the interruption or obstruction of the work of construction from unforeseen causes, the time fixed for the completion of the division shall be extended for a corresponding period.

(11) The company shall lay out, construct and equip the said western division of said railway to a standard not inferior to the main line of the G.T.R. between Montreal and Toronto, so far as may be practicable in the case of a newly completed line of railway, but this section shall not be held to oblige the company to construct a double-track railway.

(12) The company shall, within thirty days after the passing of the act confirming this agreement and of the act incorporating the company deposit with the Government \$5,000,000 in cash or approved Government securities, or partly in cash and partly in such approved securities, as security for the completion of the western division and for the first equipment of the whole line of railway, as provided for in this agreement. The Government shall pay interest at the rate of 3% per annum on any cash so deposited, and shall, from time to time, as received, pay over to the company any interest received by it on securities so deposited, unless and until the said deposit shall become forfeited to the Government or returned to the company as provided.

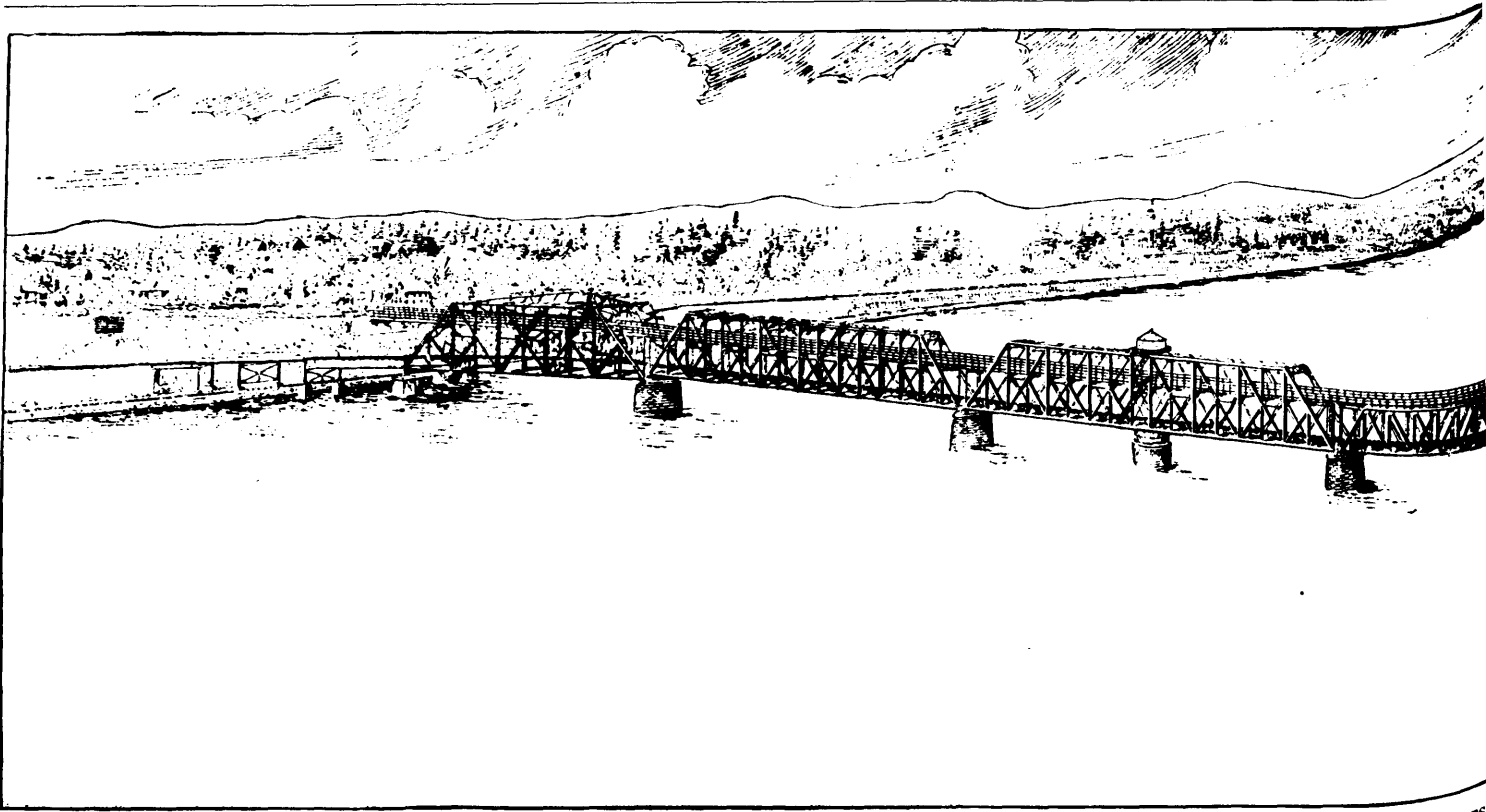
(13) This clause provides for the return of the \$5,000,000 deposit on the completion of the western division and the first equipment of the whole line, or by instalments if such be

necessary to secure the full equipment of the line, and is to be forfeited if default be made.

(14) For the purposes of this agreement, the expression, "working expenditure," as applied to the eastern division of the railway, shall mean and include all expenses of maintenance of the division and of station buildings, works and conveniences, and of rolling and other stock and movable plant used in its working, and all tolls, rents or annual sums as are paid in respect of property leased to, or held by, the company in respect of the said eastern division (apart from the rent of any other leased line), or in respect of the hire of rolling stock let to the company as part of the equipment of the said eastern division, but not including the rental of the said division payable by the company to the Government; also all rent charges or interest on the purchase money of lands belonging to the company, purchased for the use of the said eastern division, but not paid for, or not fully paid for; and also all expenses of, or incidental to, working the said eastern division and the traffic thereon, including stores and supplies and all necessary repairs and supplies to rolling stock thereof while on the western division, or on the lines of another company or of the Government; also rates, taxes, insurance and compensations for accidents or losses payable in respect of the said eastern division; also all salaries and wages of persons employed in and about the working of said division and the traffic thereon, and the due proportion of all office and management expenses, including directors' fees, agency, legal, medical and other like expenses, and of any sums of money contributed to any fund for the benefit of employes of the company; also all costs and expenses of, and incidental to, the compliance by the company with any order of the Railway Company of the Privy Council or of any board of authority which may hereafter be duly constituted by the Parliament of Canada for the regulation of railways, and made in reference to the said eastern division; and generally all such charges, if any, not above otherwise specified, as in all cases of English railway companies are usually carried to the debit of revenue as distinguished from capital account.

(15) The expression "cost of construction" in the case of the eastern division shall mean and include all the cost of materials, supplies, wages, services and transportation required for or entering into the construction of the said eastern division, and all expenditure for right of way and other lands required for the purposes of railway and for terminal facilities, accommodation works, and damages and compensation for injuries to lands, and for accidents and casualties, cost of engineering, maintenance, repairs and replacement of works and material during construction, and superintendence, bookkeeping, legal expenses and generally costs and expenses occasioned by construction of the said division, whether of the same kind as, or different in kind from, the classes of expenditure specially mentioned, including interest upon the money expended. The interest upon such outlay in each year shall be capitalized at the end of such year, and interest charged thereon at three per cent. per annum until the completion of the work, and until the lessees enter into possession under the terms of the said lease, and for the purposes of this agreement, the amount of such cost of construction, including the principal and all additions for interest, to be ascertained in the manner aforesaid, shall, on completion, be finally determined and settled by the Government upon the report of such auditors, accountants or other officers as may be appointed by the Government for that purpose.

(16) In case after the completion of said eastern division, and taking possession thereof by the company under the lease thereof, hereinafter referred to, or at any time thereafter during the continuance of said lease,



THE NEW BRIDGE ACROSS FRASER RIVER AT NEW WEST

the Government shall deem it necessary to expend any sums of money for the improvement of the said eastern division, the replacement of structures by others more modern, or otherwise upon capital account for betterments, and not being working expenditure, payable by the company, the Government may expend such sums, and the amount thereof shall be added to the capital of construction account at the end of the year, in which such expenditure takes place, and shall thereafter be considered as part of the cost of construction, upon which interest, by way of rental, is to be paid by the company, provided that no such expenditure shall be entered upon without the consent and approval of said company.

(17) Provides that customs duties are not to be counted as part of the costs of construction where there is a direct importation of materials or supplies by the Government.

(18) Defines the cost of construction of the western division to include the like classes of expenditure as on the eastern division, but the amounts are to be established to the satisfaction of the Government.

(19) Provides for the inspecting of the accounts of the company, in order to determine the cost of construction on any portion of the line, or the net earnings of the line or any portion of it by Government auditors; and for the reference to arbitration of any questions to the proper division of the earnings.

(20) When completed the eastern division shall be leased to and operated by the company for the period of fifty years at a rental payable as follows, namely: For the first seven years the company shall operate the same, subject only to the payment of "working expenditure," as defined in paragraph 14. For the next succeeding 43 years the company shall pay annually to the Government by way of rental a sum equal to 3% upon the cost of construction of the division, ascertained in the manner defined in paragraphs 15 and 16, provided that if during any one or more of the first three years of the period of 43 years the net earnings of the said division, over and above "working expenditure," shall not am-

ount to 3% of the cost of construction, the difference between the net earnings and the rental shall not be payable by the company, but shall be capitalized and form part of the cost of construction upon the whole amount of which rental is required to be paid at the rate aforesaid after the first ten years of the lease and during the remainder of that term.

(21) If upon the termination of the lease the Government shall determine not to undertake the operation of the said eastern division, the company, provided the terms offered by it are as favorable to the Government as those offered by any other railway company equally competent to perform and fulfil the obligations required by the Government to be assumed by the lessees thereof, shall have the right to an extension, or renewal, of the said lease for a further period of fifty years, upon such terms as may be agreed upon. Notices of the intention of parties shall be given, as may in such lease be provided.

(22) Provides for the equipment of both divisions of the line by the company of modern rolling stock sufficient for the handling of all classes of traffic, the first equipment to be of the value of \$20,000,000, of which \$5,000,000 worth shall be supplied for the eastern division, and shall be marked as being assigned to, and shall be maintained for the eastern division for the term of the lease, 50 years.

(23) Provides for including in the lease of the eastern division to the company all the provisions considered by the Government necessary for securing the proper maintenance and the efficient working of the line during the continuance of the lease.

(24) The lease shall also contain proper and usual provisions:—(a) Reserving to the Government in respect of its ownership, present and future, of the Intercolonial and any other line or lines of railway running powers and haulage rights over the said eastern division upon equal terms with the lessees, subject to such reasonable restrictions as may be necessary to secure safety and convenience in the operation of all the traffic over the said division, and subject to the payment by the Government to the company of such reasonable

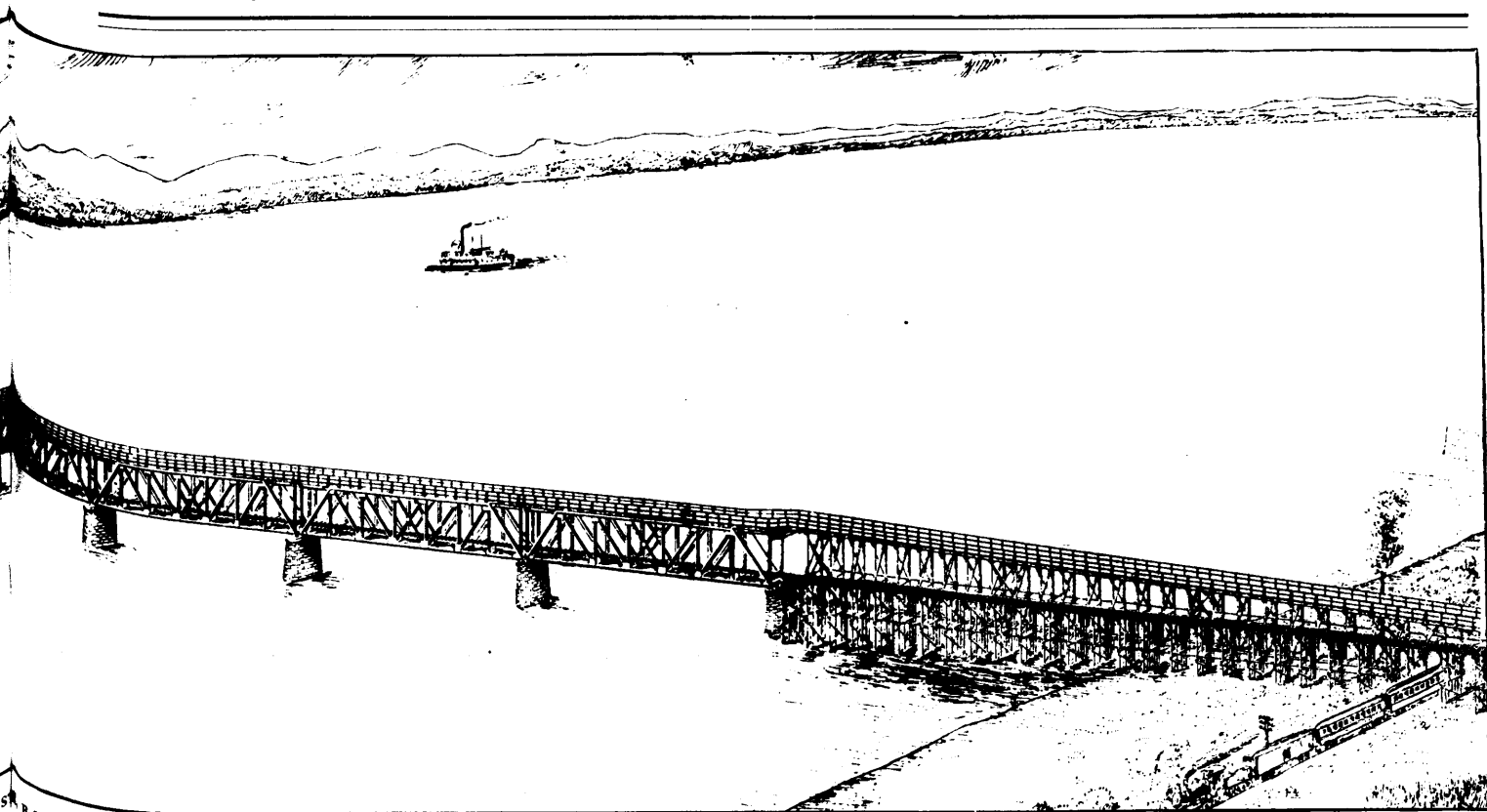
compensation as may be agreed upon between the Government and the company; (b) reserving power to the Government to grant running powers and haulage rights sufficient to enable any railway company desiring to use the said eastern division, or any part thereof, to do so upon such terms as may be agreed upon between the companies, or, in case of their failure to agree, then upon such terms as may be deemed reasonable and just by the Government, having regard to the rights and obligations of the lessees; (c) securing to the Government, in respect of its ownership as aforesaid, running powers and haulage rights over the western division, or any portion thereof, upon such terms as may be agreed upon between the Government and the company; (d) securing to any railway company desiring to make use of the same running powers and haulage rights over the said western division, or any portion thereof, upon such terms as may be agreed upon between the companies, or in case of their failure to agree, then upon such terms as may be deemed reasonable and just by the Government; (e) securing to the company running powers and haulage rights over the Intercolonial Railway, or any portion thereof, upon such terms as may be agreed upon between the Government and the company.

(25) Provides for the reference of any question arising under a., c. and e., of clause 23, in default of agreement, to arbitration, under clause 47, or to the Board of Railway Commissioners, if such be appointed, as proposed by bill No. 21 under consideration.

(26) Gives power to include in the lease any other provisions which may be found necessary in order to properly carry out the agreement.

(27) The capital stock of the company shall be \$45,000,000, of which not more than \$20,000,000 shall be preferred, and not less than \$25,000,000 common stock.

(28) The company undertakes that the G.T.R. shall acquire and take the said common stock to the amount of \$25,000,000 except shares held by directors, not exceeding 1,000, and shall hold the same during the term of the lease, and so long as any of the bonds



B.C., UNDER CONSTRUCTION FOR THE B.C. GOVERNMENT.

guaranteed by the Government under the terms of this agreement shall remain outstanding until paid.

(29 to 31) These clauses cover the issue of bonds. The Government guarantees the principal and interest of bonds to the extent of 75% of the cost of the western division, but the amount guaranteed shall not exceed \$13,000 a mile on the prairie section of the line, nor \$30,000 a mile on the mountain section. The bonds may be issued in currency or sterling, and shall be payable 50 years from the date of issue, the interest to be at the rate of 3½%. Other provisions relating to the bond issue, the payment of interest, etc., are contained in clauses 32 and 33.

(34) Inasmuch as the bonds to be guaranteed by the Government only make provision for part of the cost of construction of the western division, the company hereby agrees that the G.T.R. Co. of Canada shall guarantee bonds of the company for the balance required for the construction of the same western division, exclusive of the said \$20,000,000 required for first equipment, which the company is required to provide under paragraph twenty-two of this agreement, and the company may issue a second series of bonds, to be guaranteed as aforesaid by the Government and G.T.R. Co. of Canada, to be a second charge upon the property described in paragraph twenty-five (b) hereof, and to be subject to and to rank upon the said property next after the said bonds so to be issued and guaranteed by the Government. "Bonds" whenever used in the agreement is held by clause 34 to include debentures and debenture stock.

(35) For the purpose hereinafter in this paragraph respectively defined, the company may and shall create mortgages to trustees as follows:—(a) A mortgage which shall be a first charge upon the railway undertaking, equipment and property, tolls, rights and franchises of the company, including all equipment and property to be thereafter acquired by the company (but not including branch lines exceeding six miles in length or the revenue therefrom, or the franchises in connection therewith, or such additional rolling

stock as may with the assent of the Government be designated and marked by the company as constituting the equipment thereof, and not including ships or any municipal or Provincial grants of land, by way of bonus or subsidy, to the said company other than for railway purposes), to secure the payment of the issue of first mortgage bonds provided for by paragraph thirty-five (a), save and except the rolling stock constituting the equipment of the eastern division, to secure the bonds to be guaranteed by the G.T.R. Co. of Canada, as aforesaid. (c) A mortgage which shall be a charge upon the rolling stock constituting the equipment of the eastern division next after the charge mentioned in paragraph thirty-five (a) to secure to the Government the rental payable in respect of the eastern division, the efficient maintenance and continuous operation of the said eastern division, and the observance of and performance by the company of the terms of this agreement.

(36) Gives power to the company to issue interim bonds secured by first mortgages from time to time as the work progresses.

(37) The company shall purchase all material and supplies required for the construction of the western division and the equipment of the whole of the railway from Canadian producers, when the same are produced in Canada, and when such material and supplies can be purchased in desired quantities and of equal quality suitable for the purpose required, and for prices and upon terms equally advantageous with those procurable elsewhere.

(38) The Railway Act of Canada, and any amendments enacted heretofore, or which shall hereafter be enacted, shall apply to the operation of the eastern division of the line, and to the rights, liabilities and obligations of the company as lessees thereof, and to the location, construction and operation of the western division thereof, except as otherwise provided by this agreement, by the act confirming the same or by any special act of the company.

(39) The rates to be levied and taken by the company upon any part of the railway shall be under the control of the Governor in Council, or of such authority, commission or

tribunal as is designated or constituted under any act of the Parliament of Canada for the regulation or control of the business of railways.

(40) The company shall, before being entitled to the guarantee provided by this agreement, furnish evidence, satisfactory to the Government, that all just claims of contractors, etc., for the construction of the railway have been duly paid.

(41) During the terms of the said lease the company shall continuously and efficiently operate both divisions of the said railway, giving due and sufficient service for the accommodation of all traffic to the satisfaction of the Government.

(42) It is hereby declared and agreed between the parties to the agreement that the aid herein provided for is granted by the Government of Canada for the express purpose of encouraging the development of Canadian trade, and the transportation of goods through Canadian channels. The company accepts the aid on these conditions, and agrees that all freight originating on the line of the railway, or its branches, not specifically routed otherwise by the shippers, shall, when destined for points in Canada be carried entirely on Canadian territory, or between Canadian inland ports, and that the through rate on export traffic from the point of origin to the point of destination shall at no time be greater via Canadian ports than via United States ports, and that all such traffic not specifically routed otherwise by the shipper shall be carried to Canadian ocean ports.

(43) The company agrees that it shall not, in any matter within its power, advise or encourage the transportation of freight by routes other than those above provided, but shall, in all respects, use its utmost endeavors to fulfil the conditions upon which public aid is granted, namely, the development of trade through Canadian channels and Canadian ocean ports.

(44) In respect of the tolls, for any traffic carried partly over any line of railway operated by the company, and partly over any of the lines of the Intercolonial Railway, a fair and equitable rateable division of all such

tolls shall be made by mutual agreement, or, in cases of dispute, such division shall be fixed by arbitrators appointed in the manner provided by paragraph 47, or by a Board of Commissioners which may hereafter be appointed, as mentioned in paragraph 19.

(45) The company shall arrange for and provide, either by purchase, charter, or otherwise, shipping connections upon both the Atlantic and Pacific Oceans, sufficient to take care of and transport all its traffic both inward and outward, at such ocean ports within Canada, upon the line of railway, or upon the line of the Intercolonial Railway, as may be agreed upon from time to time, and the company shall not divert, or, so far as the company can lawfully prevent, permit the diversion to ports outside of Canada any traffic which it can lawfully influence or control, upon the ground that there is not a sufficient amount of shipping to transport such traffic from or to such Canadian ocean ports.

(46) Provides for the granting from the public lands right of way and land for stations, yards, terminals and shops.

(47) And dispute which may arise as to the construction of this agreement or as to the performance of any of the obligations of either of the parties to this agreement, or as to the working expenditure or cost of construction shall, if not herein otherwise provided for, be determined by the word of a single arbitrator, if the parties concur in his appointment, or if not by the award of three arbitrators, one of whom shall be appointed by the Government, one by the company, and the third by the two so appointed, or in the case of their being unable to agree, by the Chief Justice of the Supreme Court of Canada, and the award of a majority of such three arbitrators shall be final.

(48) Provides for the nomination of one director by the Government so long as the lease of the eastern division continues, and so long as any portion of the bond issue guaranteed remains outstanding, such director to be paid by the Government at the rate of \$2,000 a year.

The last two clauses provide for the confirmation of the agreement by Parliament, and for its coming into force upon the passing of the act incorporating the Grand Trunk Pacific Ry. Co.

The Premier, in introducing the bill confirming the agreement, said it comprised two parts. The first provides for the creation of a commission to be composed of three members to be empowered to construct the eastern division of the line, from Moncton to Winnipeg. The provisions generally are such as are to be found in bills of this character, to empower commissioners to do certain work, and they define the powers and obligations of the commissioners. The second part of the bill provides for the ratification of the contract, the provisions of which are quoted in the first part of this article, entered into between the Government and the applicants for incorporation under the title of the Grand Trunk Pacific Ry.

Parliament was asked to assent to this policy because the Government felt certain that in so doing it was giving voice to a sentiment existing in the mind and heart of every Canadian that a transcontinental railway to extend from the shores of the Atlantic ocean to the shores of the Pacific ocean, and to be every inch on Canadian soil was a national as well as a commercial necessity. The necessity for the construction of such a line was not of the future, it was a present necessity, and it was imperative that steps be taken at once to meet the call upon the Government as representing the country. In order to give the people the full benefit which they had a right to expect from such a line, it should extend westward from the heart of the Maritime Provinces, from the town of Moncton, N.B., at the junction of the two sections of the In-

tercolonial Ry., which proceed from Halifax, N.S., and St. John, N.B. It was objected that it would be sufficient that the line should start from Quebec, because the Intercolonial Ry. already was in operation between Mon-

ton and Levis, opposite Quebec, but the answer of the Government was that the Intercolonial Ry. never was intended, never was conceived and never was constructed for transcontinental traffic. It was conceived as

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a military line, and constructed and located for political and not for any commercial considerations. It was not the purpose of the Government to complain of that, but the fact had to be recognized. In constructing a transcontinental railway the Government had to consider what was best for the whole country, not for the present only, but for the future. He continued: "The line which we propose will extend from the Quebec bridge down on the southern slope of the mountain, which extends through the counties of Levis, Bellechasse, Montmagny, L'Islet, Kamouraska and Temiscouata, up to the town of Edmundston. At the town of Edmundston that line will connect with the system of railways which now unites there, and which has direct railway connection with St. John. From the town of Edmundston the railway will proceed eastward to the town of Moncton, it is impossible to say at this moment by what route, perhaps that of Chipman, or in the vicinity of Chipman. At all events, from this point it is impossible exactly to locate any precise line, or to be able to say where it will be ultimately. Suffice it to say that we desire to have the best and the shortest line between Levis and Moncton. This is the line which would have been adopted in 1867, but in 1867 the settlements within the territory which will be covered partly by this line were few and far between. If there were any at all they were certainly very few in number. But the condition of things has been changed since that time. The surplus of population north of the chain of mountains has overstepped the mountains, and is to be found upon the other side. It has occupied these fertile valleys, which are now rapidly settling up. New farms are being established, new parishes are springing up, and therefore this is our justification, not only for the scheme which we propose, but it is one of the justifications for it which did not exist in 1867, and which exists in 1903."

This line it was argued would parallel the Intercolonial Ry.—in fact the ex-Minister of Railways took strong ground upon this point. If members of the House would look at the map they would perceive that the "Intercolonial when it leaves the station at Halifax proceeds almost directly in a straight line to the head waters of the Bay of Fundy, where it reaches Truro, and that from Truro the line proceeds in an almost due west course to Moncton; that from Moncton it strikes northward to the waters of the Baie des Chaleurs; that when reaching the waters of the Baie des Chaleurs it hugs the shore very closely until it comes to the confluence of the Restigouche river; at the Restigouche river the line strikes westward and follows the waters of the St. Lawrence river to Chaudiere Junction, a little west of Levis. Thus the line makes a long loop towards the north, it describes almost a complete semi-circle, and the distance covered by it is no less than 488 miles. If it were possible to have a direct line from Moncton to Levis it would be possible to abridge the distance by one-half, but the State of Maine intervenes, and the International boundary line had to be followed, but he believed that by following that line the distance between Moncton and Levis could be abridged by from 120 to 140 miles. Between the existing link, and the one now projected there would be a distance at every point of at least 30 miles, and at some points of at least 75 miles. It was impossible under these circumstances, he contended, to argue that the proposed line would parallel the line of the Intercolonial Ry. Having referred to the attempts made to secure a short all-Canadian line after the completion of the Intercolonial Ry., and to the construction of the C.P.R. line through Maine, the Premier referred to surveys made by the St. Lawrence and Maritime Province Ry., which tradition

said was acting under a tacit understanding between the G.T.R., and Sir John Macdonald for the construction of a railway between Edmundston and Moncton. That line was surveyed, and Mr. Davey, in reporting on it, said: "The total length of the line surveyed from Grand Falls to Berry's Mills was 166 miles, and, adding 36 miles from Edmundston to Grand Falls, and seven miles from Berry's Mills to Moncton, the total distance from Edmundston to Moncton would be 209 miles, which would make the distance from Montreal to Halifax, by the G.T.R., to Chaudiere Junction, the Intercolonial Ry. to Riviere du Loup, the Temiscouata Ry. to Edmundston, and the proposed line to Moncton, and thence by the Intercolonial Ry. to Halifax, 759 miles in all. If, however, the line from the Grand river, north of the Sisson range, which I explored myself, with an assistant engineer, be adopted, a saving of distance of, at least, ten miles would be obtained, and the improvement of the line at the De Chute river, as recommended by Mr. Cranston, would also effect a saving of distance, so that, in my opinion, the total length from Edmundston to Moncton may be reduced to 199 miles, or 749 miles from Montreal to Halifax. Time did not allow for our making a complete survey of the line by these alternative routes at the two points I have referred to, but I believe that when made it will result in the saving of distance already stated." The project, however, fell through.

The line which was to be constructed must be all Canadian, so that the country would be altogether independent of the U.S., and that in the case of any abrogation of the bonding privileges by the U.S., Canadian produce would be carried to the sea upon Canadian railways. The division of the line between Moncton and Winnipeg was to be built by the Government and operated by the Grand Trunk Pacific Ry. "But why did we keep this section of the road in our own hands? Why did we not give it to the company to build as well as the other section? We did it because we want to keep that section of country, which is to be the exit of the productive portion of the west, in our own hands, so as to be able to regulate the traffic over it. The prairie section will be teeming with business, as we know; it will be teeming with activity, as we know. Already there are three lines of railway—the C.P.R., the Great Northern, and the Canadian Northern—and this will be still another. Other roads are also going to be built there to meet the increasing wants of the people. The C.P.R. has its exit on the north shore of Lake Superior; these other railways have no exit. It is our intention that this road shall be kept and maintained under our supervision, so that all railways may get the benefit of it, so that the Canadian people may not be compelled to build another road across that section of the country. The Government would not undertake to construct a line from Winnipeg to the Pacific coast because they did not believe, under existing circumstances, and for many years, perhaps for many generations to come, it will be possible, with such activity as may be developed in that section of the country successfully to operate it as a Government road."

Having mentioned many matters in connection with the country through which the western division of the line would pass, and referred to the possibilities of the country, the Premier continued: "It becomes my duty to lay before the House the conditions on which we are to have this railway built, and unless I am greatly mistaken they will astonish friend and foe by their superior excellence. I may say at once that one of the first sections of the contract (produced) is to provide that the capital stock of the Grand Trunk Pacific, which in the bill before the House to-day is said to be \$75,000,000, is to be reduced to

the sum of \$45,000,000. Of this sum of \$45,000,000, \$20,000,000 shall be preferred stock and \$25,000,000 common stock, and I would call special attention to this feature of this common stock. It is provided that the whole of the \$25,000,000 shall be acquired by the G.T.R. itself. When we were approached by the gentlemen associated with the intended Grand Trunk Pacific Railway, with the view of coming to an arrangement with the view for the building of this line, strong and respectable as were the gentlemen connected with the enterprise, we told them that we would not act with them separately or individually, that we would not act with them unless they brought into this enterprise the old G.T.R., well tried, with a foothold in every city, town, village and hamlet in Ontario and Quebec, and there is the consequence of this first covenant between the incorporators and the Government." It is the intention that the Government should build the eastern section from Moncton to Winnipeg, but that it should be leased to and operated by the G.T.P. Ry. It is also provided that the western section from Winnipeg to the Pacific Ocean shall be built, owned and operated by the G.T.P. Ry. After reviewing the whole of the provisions of the contract the Premier went on to deal with the question of the relative aid of the C.P.R. and G.T.P. Ry. He said that \$25,000,000 was paid in cash to the C.P.R., and works were handed over to that company which had been built by the Canadian Government at the expense of the Canadian people, the cost of which was at least \$35,000,000. Therefore the cash aid which was given to the C.P.R. was in the neighborhood of \$60,000,000—the cash subsidy which is promised and which is to be given under this contract to the G.T.P. Co. will not exceed \$13,000,000 or thereabouts. Under the contract with the C.P.R. Company for twenty years there was an exemption of competition, in this contract there is no exemption whatever. Everybody is free to compete with the G.T.P. Ry., and the G.T.R. Co. has to face competition from whatever quarter it may come. Exemption from taxation was given to the C.P.R. in a manner that is felt even to this day in the Northwest Territories and Manitoba—no one dollar of exemption from taxation is given to the G.T.P. Ry. Co. Under these circumstances he could appeal to Parliament to grant leave for the introduction of the bill.

### Respecting Railway Labor Disputes.

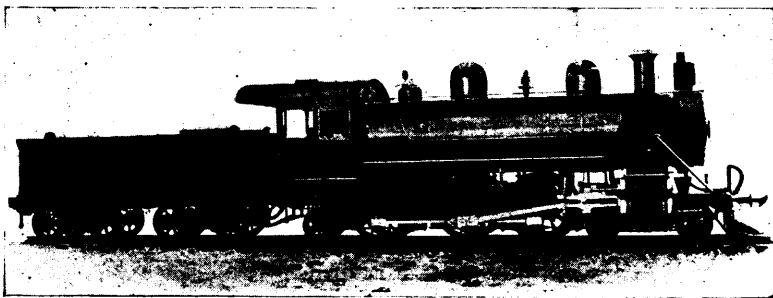
An act was passed at the current session of the Dominion Parliament "to aid in the settlement of railway labor disputes." During the session of 1902 an act was introduced by the Minister of Labor dealing with the matter, but was withdrawn after introduction, for the purpose of giving the railway companies and the employes an opportunity of discussing the matter and making suggestions in regard to it. As a result the bill was re-drawn before introduction this session and is now law.

The act provides that whenever a difference exists between any railway employers or employes, and it appears to the Minister of Labor that the parties thereto are unable satisfactorily to adjust it, he may cause enquiry to be made into the cause of the difference. The Minister of Labor may act either on his own initiative or on the application of either of the parties to the dispute. The method of enquiry is to be by a committee of conciliation, mediation and investigation to be composed of three persons, one to be named by the railway company interested, one by the employes, and these two shall choose the third, or in the event of their failing to agree, then the third member shall be named by the Minister of Labor. In the event of this committee failing to bring about



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

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#### TERMS OF PAYMENT.

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

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

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

#### DISCOUNT FOR CASH.

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

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

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Land Commissioner C.P.R. Co.,  
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a settlement the Minister of Labor may refer the matter to arbitration. The arbitrators may be the committee of conciliation, or any members of it, or an entirely different committee, the members to be appointed as in the case of the committee of conciliation, except that the appointment shall be under the seal of the Minister of Labor, and that the arbitrators shall have power to summon witnesses, etc. In the case of difference on the Intercolonial Ry., it is provided that the power to name conciliators or arbitrators shall be exercised by the Lieut.-Governor-in-Council of Quebec, New Brunswick, Nova Scotia, or Prince Edward Island, as may be directed in each case by the Minister of Labor.

The important difference between the act and the proposal of the Minister of Labor in 1902, is that each separate difference may be brought before a specially constituted committee, whereas it was originally proposed to establish a permanent board for the settlement of differences.

### Canadian Freight Association.

The regular summer meeting was held at Murray Bay, Que., July 9, W. P. Hinton, President, in the chair. The following were present: Bay of Quinte Ry., J. F. Chapman; Canada Atlantic Ry., C. J. Smith, W. P. Hinton; C.P.R., W. B. Bulling, M. H. Brown, S. P. Howard, W. R. Haldane; Delaware and Hudson Rd., P. Wadsworth, J. E. Hawkins; G.T.R., J. Pullen, F. J. Watson, J. J. Cunningham, C. E. Dewey, J. P. Gay; Intercolonial Ry., J. Hardwell; Kingston and Pembroke Ry., F. Conway; Michigan Central Ry., Carl Howe; New York and Ottawa Ry., G. A. Brown; Richelieu and Ontario Navigation Co., T. Henry, R. McEwan; Seely Packet Line, J. D. Seely; Toronto, Hamilton and Buffalo Ry., E. Fisher, F. F. Backus; Hon. Member, D. De Cooper, Lehigh Valley Rd.; Thos. Ridgedale, Chicago Great Western Ry., present by invitation; Secretary-Treasurer, J. Earls.

The following were elected active members: J. R. McIsaac, Traffic Manager, Dominion Iron and Steel Co., operating Sydney and Louisburg Ry., and Black Diamond Steamship Line, Sydney, N.S.; H. V. Harris, General Manager, Midland Ry., Truro, vice A. R. Evans; C. S. Papps, Quebec Southern Ry., Montreal.

The Freight Committee recommended the following for adoption: "That the cartage arrangement as in effect at cartage points on lines east of Fort William which provides, at present, for the collection on inwards and outwards cartage freight of a rate, in addition to the freight charges, when cartage is performed, of 1¼c. per 100 lbs., on freight classifying 1st to 4th, and 1c. on 5th class, minimum charge 10c. in addition to the Railway Companies' rates be increased to 1½c. per 100 lbs., on classes 1st to 5th, inclusive, minimum 15c., and, that the additional charge of 2c. per 100 lbs., now charged on freight classifying 6th to 10th, inclusive, when the cartage is undertaken or performed by the Railway Companies' Cartage Agents, be increased to 2½c. per 100 lbs." This recommendation was adopted by all the representatives present, with the exception of one member who was not prepared to vote, and J. W. Lond, W. R. MacInnes and C. J. Smith were appointed a special committee to decide as to the date when the change should become effective.

The members of the association and the friends, who accompanied them, travelled to Murray Bay, via the Richelieu and Navigation Co.'s steamers, and the meeting was held at the Manoir Richelieu, the company's hotel there. Facilities for travel were extended to the members by the Intercolonial Ry. and the Quebec and Lake St. John Ry.

### Dominion Marine Association.

Since the article under this heading on pg. 286 went to press, we are advised that the following additional members have been enrolled and tonnage declared:

Hamilton and Fort William Navigation Co. (Ltd.), Hamilton, Ont. Strs.: Strathcona, 1,465 tons; Donnacona, 1,222 tons.

Hamilton and Montreal Navigation Co. (Ltd.), Hamilton, Ont. Str.: Lake Michigan, 360 tons.

Montreal Transportation Co., Montreal. Strs.: Bothnia, 478 tons; Fairmount, 1,183 tons; Rosemount, 989 tons; Westmount, 1,171 tons. Sailing vessels and barges: Augustus, 802 tons; Dunmore, 590 tons; Hamilton, 960 tons; Melrose, 740 tons; Minnedosa, 1,041 tons; Quebec, 988 tons; Selkirk, 719 tons; Winnipeg, 681 tons; Acadia, 375 tons; Alberta, 314 tons; Bella, 434 tons; Brighton, 607 tons; Cobourg, 607 tons; Colborne, 301 tons; Cornwall, 586 tons; Dorchester, 375 tons; Eagle, 316 tons; Gaskin, 487 tons; Hector, 539 tons; Iowa, 365 tons; Jennie, 438 tons; Kildonan, 499 tons; Kingston, 578 tons; Montreal, 338 tons; Nebraska, 387 tons; Regina, 411 tons; Star, 321 tons; Toronto, 335 tons; Valenica, 543 tons. Total: strs., 3821 tons; sailing vessels and barges, 15,686 tons.

New Ontario Steamship Co. (Ltd.), Hamilton, Ont. Str.: Wacouah, 996 tons.

A. E. Pontbriand, Sorel, Que. Strs.: Victoria, 183 tons; Robert, 418 tons.

The Department of Customs has arranged to bring into effect the contemplated arrangements by which all charges for customs officers for extra services will be borne by the public revenue and the transportation companies thereby relieved. The Department is waiting the passing of an order-in-council before issuing instructions to its officers, but hoped to be able to send out the necessary orders before the end of July, the new arrangement to date from July 1. The Department, however, has expressed its intention not to undertake to pay for extra service provided on Sundays. Some correspondence has taken place between the Association and the Minister of Customs on this point, but the Minister has expressed himself averse to allowing Sunday to follow in the same category as the other days of the week. The bill introduced by the Minister of Marine to amend the Steamboat Inspection Act, and providing for the carrying out of the petitions of the Ottawa convention by removing the inspection fees and tonnage and placing them under the control of the Governor-in-Council has been printed. The bill also provides for reciprocal inspection arrangements with other countries, so that when Canadian vessels obtain free inspection in any other country, vessels from that country will have similar privileges in Canada.

### Sunday Travelling in Ontario.

A number of cases under the Lord's Day Act of Ontario have been tried in the courts with varying results, but by the decision given by the Judicial Committee of the Privy Council, in London, Eng., all doubt on the law has been set at rest. The case on which the decision was given in London, was that of the Attorney-General of Ontario against the Hamilton Street Ry. Co. and others, which, with certain questions relative to the act, were referred to the Privy Council by the Lieut.-Governor of the Province. The case was argued before a full court by counsel representing the Province, the Dominion, the Ontario Lord's Day Alliance, the G.T.R., the Metropolitan Ry. and others interested.

The Lord Chancellor in delivering judgment said the court was of opinion that the act, treating it as a whole, was beyond the competency of the Ontario Legislature, and, therefore, it was invalid. The reservation in

the British North America Act of the criminal law for the Dominion was given in very plain, ordinary and intelligible language. With regard to the other questions which it had been suggested should be reserved for further argument, the court considered it would be inexpedient and undesirable and contrary to precedent to attempt to give any judicial opinion upon them. The main and substantial question was that on which an opinion had first been expressed that this Ontario act was beyond the jurisdiction of the Ontario Legislature. No order would be made as to costs.

### August Birthdays.

Many happy returns of the day to

H. H. Adams, Assistant Superintendent Canadian division, Michigan Central Rd., at St. Thomas, Ont., born at Detroit, Mich., Aug. 13, 1876.

H. W. D. Armstrong, Chief Engineer, Lindsay, Bobcaygeon and Pontypool Ry., at Lindsay, Ont., born at Ottawa, Aug. 1, 1852.

R. Atkinson, ex-Superintendent of Rolling Stock, C.P.R., born at Crewe, Eng., Aug., 1851.

G. J. Chadd, Purchasing Agent, Central Ontario Ry., at Trenton, Ont., born in London, Eng., Aug. 21, 1837.

H. G. Elliott, Assistant General Passenger and Ticket Agent, G.T.R., at Montreal, born at Chambly, Que., Aug. 22, 1860.

Hon. W. Gibson, railway contractor, Beamsville, Ont., born at Peterhead, Scotland, Aug. 7, 1849.

G. H. Ham, Advertising Agent, C.P.R., at Montreal, born at Trenton, Ont., Aug. 23, 1847.

W. P. Hinton, General Freight and Passenger Agent, Canada Atlantic Ry. and Canada Atlantic Transit Co., at Ottawa, Ont., born at Hintonburg, Ont., Aug. 30, 1871.

R. Kerr, Passenger Traffic Manager, C.P.R., at Montreal, born at Toronto, Aug., 1845.

G. M. Lang, Resident Engineer, C.P.R., at Medicine Hat, Assa., born at Ottawa, Ont., Aug. 16, 1859.

J. D. McDonald, District Passenger Agent, G.T.R., at Toronto, born there Aug. 27, 1855.

T. McHattie, Master Mechanic G.T.R., at Montreal, born at Dufftown, Banffshire, Scotland, Aug. 8, 1854.

W. E. Mullens, Superintendent of Transportation Central Vermont Ry., at St. Albans, Vt., born at Stratford, Ont., Aug. 13, 1870.

W. S. Nevins, Travelling Freight Agent, C.P.R. and Minneapolis, St. Paul & Sault Ste. Marie Ry., at Buffalo, N.Y., born at Towanda, Pa., Aug. 13, 1850.

C. R. Scoles, General Manager, Atlantic and Lake Superior Ry., at New Carlisle, Que., born at Grantham, Lincoln, Eng., Aug. 27, 1856.

M. C. Sturtevant, Car Service Agent, G.T.R., at Montreal, born at St. Albans, Vt., Aug. 28, 1866.

W. N. Warburton, General Freight Agent, Niagara, St. Catharines and Toronto Ry., at St. Catharines, Ont., born at St. Thomas, Ont., Aug. 24, 1851.

The first sod for the new Y.M.C.A. building at Stratford, Ont., towards the erection of which the G.T.R. has given a free site and \$4,000, was turned July 11.

The supplementary estimates passed by the House of Commons contain an item of \$3,000 for the cost of the cattle guard's commission.

Mackenzie, Mann & Co. are reported to have secured control of the Kayak oil fields in Alaska.

**Death of Mr. Jas. Cooper.**

James Cooper, manufacturer of railway and other supplies, Montreal, died there, July 11, after a brief illness, aged 68. For some years Mr. Cooper was a traveller for Rice Lewis & Co., Toronto, but in 1872 started in business in conjunction with F. Fairman, as Cooper, Fairman & Co., in the heavy hardware trade. Later on manufacturing was added, and separate companies were subsequently formed to take over district branches

of the business. These included the Dominion Wire Manufacturing Co., the Dominion Wire Rope Co., the James Cooper Manufacturing Co., of each of which Mr. Cooper was President. The firm, which was dissolved in 1889, held a controlling interest in the Dominion Bridge Works, and since 1889 Mr. Cooper was a director of that company. In addition to his many company interests, he did a very large general contractors' and railway supply business, representing such English firms as Chas. Cammell & Co., Sheffield; John Hendry,

Andrew & Co., Sheffield, as well as large American manufacturing concerns. The funeral took place July 14, and was largely attended by manufacturers of railway supplies, and others. In his will, Mr. Cooper, after providing for his widow, leaves \$60,000 to McGill University to endow a chair for the investigation of diseases of the internal organs; \$25,000 for a child's memorial hospital, now being organized by Dr. A. Mackenzie Forbes, and directs that the balance be divided among Montreal charitable institutions.

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### MAINLY ABOUT PEOPLE.

A. F. Read, Foreign Freight Agent, G.T.R., is taking a holiday and business trip to Europe.

W. F. Egg, C.P.R. ticket agent at Montreal, had a slight stroke of paralysis, July 23, but is recovering.

R. Doyle, trainmaster Wabash Rd., at St. Thomas, Ont., was married at West Lorne, Ont., to Miss N. Hirst, July 21.

R. Colecleugh, on the staff of the general manager I.C.R., Moncton, N.B., was married there recently to Miss B. N. Geldart.

A. C. Mackenzie, Canadian Northern Ry. contractor, has purchased a 560-acre farm near Portage la Prairie, Man., for \$20,000.

H. B. Darnell, eastern travelling agent, C.P.R. in Japan, was married in Yokohama, to Miss C. E. Mackenzie, of London, Ont., July 1.

M. J. Haney, contractor for the substructure of the Hillsboro' river bridge, has taken up his residence for the summer at Charlottetown, P.E.I.

C. C. Young, formerly general agent Lake Erie and Detroit River Ry. at London, Ont., has been appointed C.P.R. day operator at Yorkton, Assa.

A. Angstrom, manager of the Canadian Ship Building Co., on Lake Erie, recently had a narrow escape from drowning while out boating at Shanty Bay.

P. H. Peabody, formerly a clerk in the employ of the C.P.R. at Farnham, Que., has fallen heir to \$75,000 worth of real estate and \$150,000 of bonds and cash.

Miss A. Long, daughter of Thos. Long, President Northern Navigation Co., it is announced, is engaged to be married to H. Wheeler, of St. Paul, Minn.

Arthur White, formerly Division Freight Agent, G.T.R., at Toronto, has been appointed special agent for the Canada Life Assurance Co. Headquarters at Toronto.

A. Butze, General Purchasing Agent, G.T.R., left Montreal, July 18, on the Str. Canada for England, intending to return about the end of August, via Montreal.

Sir C. Rivers Wilson, President G.T.R., was a member of the party invited by King Edward to meet the Khedive of Egypt at dinner at Buckingham Palace, London, Eng., recently.

C. Pison, Passenger Agent for Ontario of the White Star and other lines of the International Mercantile Marine Co., and Mrs. Pison, are spending the summer at Niagara-on-the-Lake, Ont.

M. Neilson was presented with a cabinet of silverware by the directors and employes of the St. John Ry. Co., July 11, on his resigning the General Managership to take a position in Mexico.

H. Greenwood, who is resident engineer of the Transvaal and Orange River colony railways at Johannesburg, was formerly engineer in charge of construction of the Cornwall canal at Cornwall, Ont.

J. Murray, G.T.R. train dispatcher, Toronto, has been in the company's service for over forty years, and was acting as dispatcher when Edison was a news vendor on the Stratford-Detroit run in 1869.

Colonel Sir P. Girouard, who has charge of the Government railways in the Transvaal and Orange River colonies, is about to be married to Miss G. Solomon, only child of the Chief Justice of the Transvaal.

Mrs. McNicoll, wife of D. McNicoll, second Vice-President and General Manager C.P.R., is in England on a visit, and will be accompanied home by Miss McNicoll, who has been pursuing her art studies in London.

C. C. Young, of London, Ont., was presented with an address and a travelling bag, by a number of railway men, on his leaving the service of the Lake Erie and Detroit River Ry., to join that of the C.P.R.

Press reports announce that Professor S. J. McLean, who conducted the investigation into railway rates for the Dominion Government in 1901-02, will be appointed secretary of the projected Railway Commission.

Sir A. L. Sarle, formerly General Manager of the London, Brighton and South Coast Ry., who died recently in London, Eng., was vice-chairman of the board of directors of the White Pass and Yukon Ry. Co. (Ltd.)

John Kyle, locomotive foreman, Canadian Northern Ry. at Winnipeg, was presented with an address and a sum of money from the employes at the shops on the occasion of his marriage, July 16, to Miss L. Johnson.

The formal presentation of the Kirkpatrick memorial fountain to the county of Frontenac was made at Kingston, July 27. The fountain has been erected as a memorial to the late Sir G. A. Kirkpatrick, President, Dominion Express Co.

C. Adcock for a period of thirty-four years connected with the Great Western Ry. and the G.T.R. in various capacities, latterly in the passenger department in Montreal, was recently presented with a casket by the members of the staff on the occasion of his retirement.

Sir James Hector, who has recently retired from the position of director of the Geological Survey of New Zealand, was medical officer and geologist of the Palliser expedition to the Rocky Mountains, and was the discoverer of the pass by which C.P.R. crosses the mountains. The station of Hector, B.C., was named after him.

W. G. Reid, railroad contractor, Montreal, died there suddenly June 17. Mr. Reid was associated with his brother, R. G. Reid in the construction of the C.P.R. along the north shore of Lake Superior, and on his own account carried out several large contracts, the last being the construction of the Midland Ry. of Nova Scotia.

H. Johnson, formerly clerk in the C.P.R. audit office, and P. Carlin, formerly C.P.R. conductor, who were sent to gaol for conspiracy in connection with the giving out of information relating to the secret audit of trains, have been released on ticket of leave. The petition for their release was signed by Sir T. G. Shaughnessy, President C.P.R.

Waddell and Hedrick, engineer, of Kansas City, Mo., who are in charge of the construction of the B.C. Government bridge over the Fraser river, are credited by the local and the engineering papers with a highly creditable piece of emergency construction at Kansas City, in re-building the flood-wrecked structure carrying the city's water supply pipes across the Kansas river.

F. H. Clergue recently visited London, Eng., in connection with the floating of bonds for the projected railway from Scotia Jct. to Sudbury, Ont., to be constructed by the Canada Central Ry. An Ottawa despatch states that Mr. Clergue proposes devoting the whole of his time to the promoting of the interests of the new company, and that he will continue to act as a director of the Consolidated Lake Superior Co.

J. C. Bailey, C.E., died at Toronto, after a long illness, July 27, aged 78. He was for many years employed in railroad work; among the lines on which he was engaged in connection with surveys or construction were: Credit Valley Ry., Toronto and Nipissing Ry., Lake Simcoe Jct. Ry., Toronto and Ottawa Ry., Midland Ry. and its various extensions, and the Northern and Pacific Jct. Ry.

Arthur White, formerly Division Freight Agent G.T.R. at Toronto, has recently been the recipient, through Noel Marshall, representing shippers on the G.T.R., of a handsome testimonial in recognition of his many acts of courtesy. A dual committee, without any attempt at publicity, collected a sum, which has been deposited with a trust company, which will pay \$300 a year to Mr. White, or to Mrs. White, as long as the fund lasts, which will be for some years to come.

F. W. Flanagan, who has been appointed General Passenger Agent, C.P.R., in London, Eng., was born at Kingstown, County Dublin, Ireland, Nov. 23, 1862, and entered railway service 1882, his record being: April, 1882, to 1886, shorthand correspondence clerk in office of Allan Begg, General European Emigration Agent, C.P.R., London, Eng.; 1886 to 1892, chief clerk, passenger department under Archer Baker, European Traffic Manager, at London; Sept., 1892, to June, 1903, City Passenger Agent, C.P.R., London, Eng.

W. McWood, whose portrait appears on the first page of this issue, was born at Montreal in 1830, and entered railway service in 1855; his record being: 1855 to 1860 car department G.T.R., at Montreal; 1860 to 1873 foreman car department, same road at Montreal; in 1873 he was appointed assistant Mechanical Superintendent, with charge of the car department of the entire system, and latterly his title has been Superintendent of Car Department. He has been a member of the Master Car Builders' association since 1875, being Vice-President from 1882 to 1887, and President from 1887 to 1890.

T. A. MacKinnon, First Vice-President and General Manager, Boston and Maine Rd., of Boston, Mass., died at Marble Head Neck, Mass., July 12. Mr. MacKinnon was Superintendent of the Brockville and Ottawa and Central Canada Ry. at Brockville, Ont., from 1873 to 1880; from 1880 to 1885 he managed the South Eastern Ry. of Canada; from 1885 to 1890 was General Superintendent Ontario and Atlantic divisions C.P.R. at Montreal, becoming subsequently General Manager of the Concord and Montreal Ry., and in 1894 General Manager Boston and Maine Rd. G.S. MacKinnon, C.P.R. Master Mechanic, Winnipeg, is a brother.

J. W. Dawsey, who has been appointed Superintendent of Winnipeg terminals and lines west of Winnipeg, Canadian Northern Ry., was born at Aylmer, Que., June 10, 1861, and entered transportation service Sept., 1883, since which time his record has been: Sept., 1883, to Dec., 1886, successively, operator, dispatcher and chief clerk in Superintendent's office, Flint and Pere Marquette Rd., at Saginaw, Mich.; Dec., 1886, to Aug., 1892, successively agent, chief clerk at Ottawa, and general agent at Montreal and Toronto, Canada Atlantic Ry.; Aug., 1892, to June, 1893, agent National Despatch Fast Freight Line, Toronto; June, 1893, to Dec., 1897, General Manager Quebec Southern Ry., Montreal; Dec., 1897, to July, 1901, successively freight agent, Station and Weighing Inspector, and Inspector for Manager, eastern lines, C.P.R., at Montreal; July, 1901, to June, 1903, Superintendent Algoma Central and Hudson's Bay Ry., Sault Ste Marie, Ont.

P. M. Arthur, chief engineer of the Brotherhood of Locomotive Engineers, dropped dead during a speech which he was making at the banquet at the annual convention in Winnipeg, July 16. He had just said, "It may be my parting words to many of you," when he fell back and died in a few minutes. The Railway and Engineering Review says: "Mr. Arthur had for many years maintained a dignified and conservative attitude which commanded universal respect. During the earlier years of his official career he met with continual opposition from the more radical and hot-headed elements in the organization. He was always opposed to strikes except as a last resort. While he was not always able to control the situation, and hence at times was forced into positions not always tenable, he gradually brought all elements over to his side and made the organization respected by railway officials as well as the public. Few so-called labor leaders have ever won respect in so high a degree. The success of the brotherhood under its conservative policy has been so marked that it is hardly possible that it can in the future be led to depart from it by any leader who might be so disposed."

Geo. Spencer, who has been appointed Superintendent district 1 Ontario division, C.P.R., at Toronto, was born in London, Eng., Feb. 21, 1865, and entered railway service in 1880, since which his record has been: July, 1880, to March, 1881, assistant

agent, Toronto, Grey and Bruce Ry., at Dundalk, Ont.; Mar., 1881, to July, 1881, agent, Waldemar, Ont., same road; July, 1881, to Oct., 1882, operator Toronto freight office, same road; Oct., 1882, to Nov., 1883, train dispatcher, Toronto, same road; Nov.,

1883, to June, 1884, same position with Ontario and Quebec Ry., which leased the T.G. and B.Ry.; June, 1884, to Aug., 1887, same position with C.P.R., that company having absorbed the O. and G.Ry.; Aug., 1887, to Aug., 1889, train dispatcher, C.P.R., at

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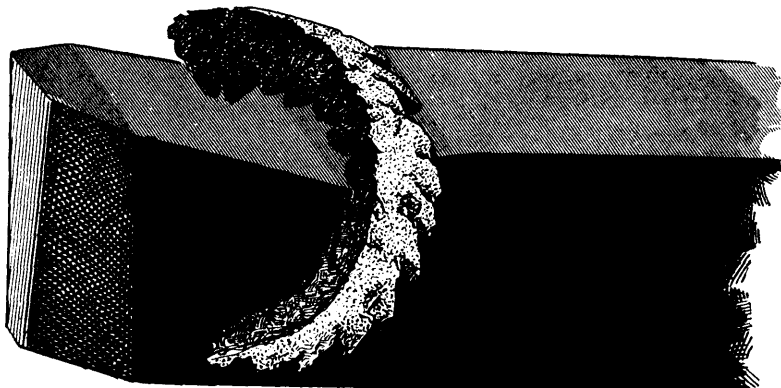
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½-inch cut, ¼-inch feed. Speed 20 to 40 feet per minute. Tools hardened by heating white hot and cooled in air.

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**WM. JESSOP & SONS, Limited, Sheffield, Eng.**

Chief American Office, 91 John St., New York. C. L. BAILEY, Agent, 80 Bay St., Toronto.

Smith's Falls, Ont.; Aug., 1889, to Oct., 1891, train dispatcher, C.P.R., Toronto; Oct., 1891, to May, 1901, Chief Train Dispatcher, C.P.R., Smith's Falls, Ont.; Nov., 1892, the duties of Train Master were added to those of Chief Train Dispatcher, but in Mar., 1898, the office of Train Master was abolished; May, 1901, to May, 1903, Chief Train Dispatcher, Ontario division, C.P.R., at Toronto.

J. J. Scully, who has been appointed acting Superintendent district 5, Central division C.P.R., at Regina, Assa., was born at Montreal, Feb. 3, 1872, and entered railway service 1887, since which his record has been, entire service having been with the C.P.R.: Jan., 1887, to June, 1888, in car service department at Montreal; June, 1888, to Sept., 1888, clerk in Superintendent's office, at Farnham, Que.; Sept., 1888, to Aug., 1890, chief clerk and car distributor, at Farnham, Que.; Aug., 1890, to April, 1891, Superintendent's office at Montreal; April, 1891, to Mar., 1893, Superintendent's office, Farnham, Que.; Mar., 1893, to Sept., 1894, Mechanical department at Farnham; Sept., 1894, to Mar., 1898, Mechanical department at Toronto, during this time the mechanical departments of the lines east and west of Montreal were consolidated; Mar., 1898, to Aug., 1901, assistant master mechanic Ontario and Quebec Division, at Toronto Jct., Ont.; Aug., 1901, to Aug., 1902, assistant master mechanic, Western division, for roadwork, at Winnipeg; Aug., 1902, to May, 1903, assistant to General Superintendent Central Division, at Winnipeg; May, 1903, to June, 1903, in office of Assistant General Manager, lines east of Port Arthur, Ont., at Winnipeg.

**TRANSPORTATION APPOINTMENTS.**

**Boston and Maine Rd.**—F. Barr, heretofore Assistant General Manager, has been appointed Third Vice-President and General Manager, succeeding T. A. MacKinnon, deceased.

**Canadian Pacific Ry.**—R. Chapple, heretofore Superintendent of old district no. 2 at Chapleau, Ont., has been appointed chief clerk to C. W. Spencer, General Superintendent of Transportation, eastern lines.

T. Burgess is reported to have been appointed Roadmaster for line between Brockville and Prescott, via Ottawa. Office at Ottawa.

J. Nicholl, formerly G.T.R. agent at Brantford, Ont., has been appointed C.P.R. agent at Regina, Alta.

S. J. Montgomery, heretofore C.P.R. agent at Bedford, Que., has been appointed assistant city passenger agent at Ottawa, Ont.

**Chicago, Rock Island and Pacific Ry.**—A. C. Turpin is appointed General Agent, Passenger and Freight departments, with office at 77 Yonge Street, Toronto, Ont., in charge of the Provinces of Ontario and Quebec, Canada. Effective July 16.

**Grand Trunk Ry.**—A. B. Atwater, assistant to C. M. Hays, second Vice-President

and General Manager, with executive jurisdiction over the western subsidiary companies, will, it is reported, be chief operating official of the Detroit and Toledo Shore Ry., recently acquired by the G.T.R. and the Toledo, St. Louis and Western Rd.

W. Robinson, heretofore General Travelling Agent Intercolonial Ry., at Toronto, has been appointed G.T.R. Travelling Passenger Agent, with headquarters at Pittsburg, Pa.

J. C. McFadzean has been appointed acting agent at Detroit, Mich.

A. E. Dornan, heretofore agent at Thousand Islands Jct., is acting as Travelling Passenger agent. Office at Alexandria Bay, N.Y.

**Great Northern Ry. of Canada.**—In addition to the officials mentioned in our last issue, P. A. LaRiviere is Trainmaster and Chief Dispatcher, with office at Grand Mere, Que. B. Bourgeois is Superintendent of the Montford branch, with office at Montford, Que.

**Intercolonial Ry.**—B. C. Gesner having resigned from the railway service, W. C. Hunter has been re-appointed General Air Brake Inspector.

**Lehigh Valley Rd.**—J. A. Middleton, Second Vice-President, with office at 26 Cortlandt Street, New York, will hereafter be in general charge of the Co.'s passenger and freight traffic.

H. H. Kingston, General Traffic Manager, having resigned to engage in other business, that office is abolished. The G.P.A. and the G.F.A. will report to the Second Vice-President.

J. W. Platten is appointed Assistant to the President, with office at 228 South Third Street, Philadelphia, and will have charge of the financial and accounting affairs of the Company and of its Purchasing Department. The General Auditor, the Treasurer and the Purchasing Agent will report to the Assistant to the President.

**Michigan Central Rd.**—R. H. L'Hommi-dieu, heretofore General Superintendent of the M.C.R., has been appointed General Manager. Office, Detroit, Mich.

S. P. Hutchinson, heretofore Assistant General Superintendent, has been appointed General Superintendent, succeeding R. H. L'Hommi-dieu, promoted. Office, Detroit, Mich. The office of Assistant General Superintendent has been abolished.

**Rutland Rd.**—During the absence, through ill-health, of Dr. W. Seward Webb, President, the duties of the office have been delegated to an executive committee, consisting of S. R. Callaway, E. V. W. Rossiter, and H. H. Powers.

G. T. Jarvis, General Manager, has been elected Vice-President.

**St. John, N.B., Ry.**—W. Z. Earle, C.E., formerly Chief Engineer of the Algoma Central and Hudson Bay Ry., has been appointed Manager of the St. J. Ry., vice M. Neilson, appointed Resident Manager of the Mexican Light, Heat and Power Co.

**Toronto Ry.**—F. Nicholls has been elected Vice-President, succeeding James Ross, resigned.

**Railway Equipment Notes.**

The B.C. Electric Ry. Co. has completed two new cars at its Vancouver Works.

The Elgin and Havelock Ry. has purchased an additional locomotive from the I.C.R.

The St. John, N.B., St. Ry. has received four more double truck cars fitted with air brakes from the Montreal St. Ry. car works, completing the order for six placed there.

The C.P.R. has not ordered 300 flat cars from J. W. Ellsworth & Co., as stated in press reports, but that firm is having 300 coal cars built at Chicago, to be used in the C.P.R. business.

The C.P.R. private car Cornwall, part of the Royal train in which the Prince and Princess of Wales travelled across Canada, has been sent to the west from Montreal in the ordinary course of business.

The Temiskaming and Northern Ontario Ry. commissioners has ordered 100 flat cars, 60,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; and 50 flat cars, 60,000 lbs. capacity, also in Canada, for delivery in May, 1904.

G.T.R. Conductor Parker, of London, Ont., exhibited at the recent convention of the Master Car Builders of America, at Saratoga, N.Y., a device, for which he has secured a patent, to prevent steam pipes in passenger cars from freezing.

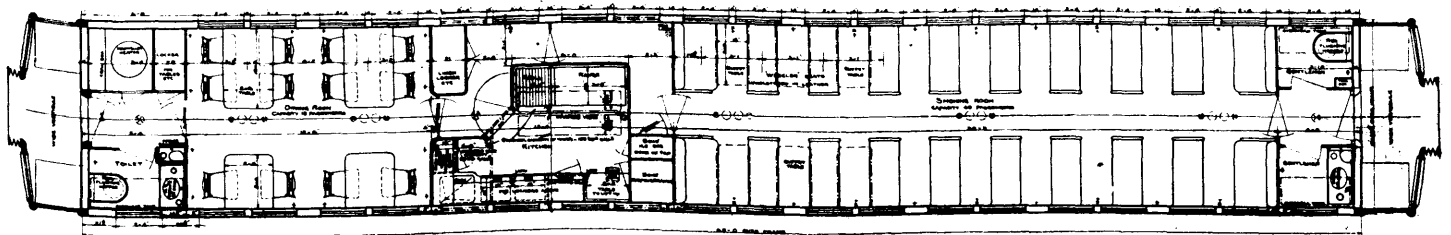
The Winnipeg Electric Street Ry. Co. has received 6 40-ft. double truck cars from the shops of the Toronto Ry., and has completed, at its own shops in Winnipeg, a 45-ft. double truck car. The Co. is now in a position to turn out all its own car equipment.

The first of 4 10-wheel express locomotives has been completed at the I.C.R. shops, Moncton, N.B. The engine has 20 in. cylinders, 26 in. stroke, a boiler pressure of 200 lbs. to the square inch; 72 in. driving wheels, and the tender has a capacity of 5,000 gallons of water.

The C.P.R. placed orders for the following equipment between June 13 and July 15: 10 freight locomotives in Toronto, 4 baggage cars to be built at the Co.'s Hochelaga shops, 500 box cars, 60,000 lbs. capacity, to be built at the Co.'s Perth shops; 26 vans, to be built at the Co.'s Farnham shops.

John J. Gartshore, Toronto, reports having recently secured a contract for rails and fastenings to equip a railway in Mexico, about 5 miles long, which he is supplying direct from the mills to Tampico. He has recently sold a standard gauge locomotive and three narrow gauge saddle tank locomotives besides a quantity of cars for logging lines.

The G.T.R. added to its equipment from Mar. 28 to June 20: 15 Richmond compound mogul locomotives, 22½ in. and 35 in. by 26 in., and 3 Richmond compound locomotives from its Montreal shops; 144 box cars, 60,000 lbs. capacity, 5 1st class passenger cars, 8 34-ft. cabooses, 5 60-ft. baggage cars, 35 cheese cars, 60,000 lbs. capacity, from its Montreal shops; 15 34-ft. cabooses from its London shops, and 15 34-ft. cabooses from its Port Huron, Mich., shops.



DINING AND SMOKING CAR FOR CANADIAN PACIFIC RY. AND BOSTON AND MAINE RD.

The Canadian Northern Ry. recently received from the American Locomotive Co.'s Brooks works two 10-wheel freight locomotives, which were ordered by the Great Northern Ry. of Canada, but transferred to the

C.N.R. Following are the general dimensions: cylinders, diameter, 20 in.; stroke, 26 ins.; driving wheels, diameter, 63 ins.; boiler, diameter, 66 ins.; firebox, length, 114 ins., width, 42 in.; flues, no. 300, diameter, 2 ins.;

length, 13 ft. 2 1/4 in.; wheel base, rigid, 14 1/2 ft., driving, 14 1/2 ft., engine, 24 ft. 10 ins.; total, 52 ft. 2 ins; weight in working order, drivers, about 122,700 lbs.; total weight of engine, about 156,700 lbs.

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**Newfoundland**

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**The Finest Caribou Hunting Grounds in the World**

Miles and miles of barrens being covered with a rich carpet of moss on which the animal feeds, the Stags weighing as heavy as 600 lbs.

The best Salmon and Trout Streams that have yet been discovered, fish of all sizes and full of fight to the last breath.

**Grouse, Geese, Ducks and Curlew in Countless Thousands**

A fine Railway traversing the island, equipped with Sleeping, Dining and Parlor Cars, and everything to please the taste and to add to the comfort of the Tourist is provided.

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**LABRADOR**

**The Land of the Midnight Sun.**

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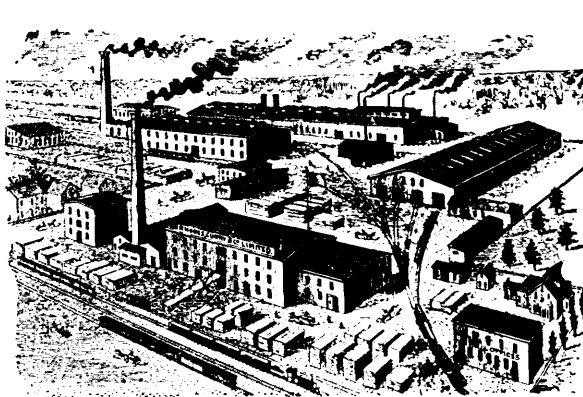
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Ltd.,

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of all descriptions.

Special Cars for Coal, Ore, Lumber, &c., with Ball-Bearing Wheels.

**Car Wheels, Castings, Forgings, &c. AMHERST, NOVA SCOTIA.**

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

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Electric Light Line Wire, Incandescent and Flexible Cords,  
**RAILWAY FEEDER AND TROLLEY WIRE**

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

**RAILWAY SPRINGS**

Equalizing, Drawbar, Buffer and Spiral Springs of all kinds.

Locomotive, Tender and Passenger Car Springs of every description.

Electric Car Springs from the largest to the smallest.

MANUFACTURED BY

**B. J. COGLIN & CO., 432 St. Paul Street, Montreal, Canada.**

The C.P.R. received the following new equipment between June 13 and July 15: 10 passenger and 6 freight locomotives from the American Locomotive Co.'s Schenectady works; 8 passenger locomotives from Glasgow, Scotland; 2 switching locomotives from the Co.'s Montreal shops; 3 sleeping cars, 5 1st class passenger cars, and 10 fruit express cars, from the Co.'s Hochelaga shops; 104 refrigerator cars, freight service, from the Co.'s Perth shops; 17 refrigerator cars, passenger service, from Rhodes, Curry & Co., Amherst, N.S.; 1 wrecking crane from the U.S.; 86 flat cars, 60,000 lbs. capacity, built in Canada; 144 flat cars, 60,000 lbs. capacity, from the Algoma Central and Hudson's Bay Ry. Co., Sault Ste. Marie, Ont.

The C.P.R. and the Boston and Maine Rd. have had built in Chicago, for joint service between Montreal and Boston, two dining and smoking cars, two first class cars, two first class and smoking cars, four second class cars, and four baggage and express cars, which will replace cars at present in service. The cafe or dining and smoking cars are 65 ft. long over frame and 72 ft. 11 in. over all. The cars have been built to C.P.R. standard dimensions and outside finish of varnished natural mahogany. They will be equipped with six-wheeled trucks, steel axles, Krupp steel tired wheels, Pullman wide vestibules, steel platforms, Westinghouse air signal and brake with American brake slack adjusters, also steel needle beams and queen posts for truss rods. Each car is divided into three compartments, dining, buffet, and smoking, the dining room being equipped with two double and two single tables and leather upholstered chairs with seating capacity for 12 passengers. The buffet or kitchen will be fitted with a range or grilling stove, refrigerator, ice boxes, sink, cupboards and overhead water tanks. The smoking room has seating capacity for 40 passengers, in leather upholstered seats; this compartment is also fitted with buffet tables for convenience of passengers when dining room is full. The women's toilet room is located next the dining room and opposite the heater room; the men's toilet being arranged at the other end of the car and adjoining the smoking room; both rooms are equipped with nickelene washstands and coolers and flushing hoppers. Storm doors are hung at each bulkhead and in kitchen passage to prevent any odors from kitchen and smoking room pervading the entire car; the end doors also have a patent door check. The general finish throughout the cars is of mahogany, with marquetry panels and designs; the ceiling being of Empire style in dining and smoking rooms. The cars will be illuminated with Pintsch gas, with especially selected design of lamps; they are also wired for electric light. An illustration of the floor plan is given on pg. 283.

### The M.C.B. Report on Couplers.

The Committee on Couplers of the Master Car Builders' Association recommended at the June convention a number of changes in the coupler specifications. Chief among these were the exclusion of the malleable iron coupler and a change in the contour lines to provide for a larger pin and greater strength in the lugs and in the knuckle hub. The report says that "The present contour was designed for very much lighter service than it is now compelled to stand and there is a limit to the additional strength that can be obtained with the present contour by improving the material in the coupler." If such changes are necessary it is time that the railroads gave some serious thought to the prevention of the abuse to their rolling stock which takes place in the yards and which is the cause of the ever increasing number of failures of couplers and draft gears resulting in serious wrecks and break-in-twins. Coup-

lers are not broken or draft attachments pulled out as a result of stresses induced by the engine on the road. The damage is done in the yards, although it may not appear until the train is on the road and breaks in two on a stiff grade. Cars cannot be kicked into sidings and brought up sharp against a bumping post or a string of other cars at a speed of 6 or 8 miles an hour without damage, yet this is what occurs daily all over the country. The automatic coupler has done its work too well. The men no longer risk life and limb in coupling cars; they simply open the knuckle and the engineer backs up. No one is killed or hurt when the cars come together just a little too hard, and it seems to the engineer and yard men a waste of time to make easy couplings. This is the reported practice in most yards and it is plain that the use of the humane and economical automatic coupler has developed a new source of loss and danger in careless handling. There is needed as concise a set of rules and as rigid discipline for yard men as has been developed in the standard code for enginemen and trainmen. A large proportion of the wrecks caused by break-in-twins can be prevented by discipline in the yards. To give the men to understand that they are just as likely to lose their jobs if they handle cars recklessly as they were to lose their arms with the old link and pin couplers is obviously a right beginning.—*Railroad Gazette.*

### The M.C.B. Report on Tank Cars.

The tank car has gradually assumed the character of the tramp and outcast in the car family—ragged, down at the heel and dirty. It has little respect from owner or carrier and is a menace to its associates wherever found. It is surprising that the railroads have continued to haul tank cars in such bad condition without more emphatic protest. This indifference is perhaps responsible for their present weak construction, and for the failure of the tank line companies to keep up with the procession in the use of modern designs in the maintenance of their equipment. The American Railway Association is now awake to the situation. It finds that the tank cars are the weak link in the chain of a freight train. At the same time they are loaded with inflammable and explosive materials, which cause wrecks to be doubly destructive.

The report on tank cars presented at the Master Car Builders' convention was made by request of the American Railway Association, and although the committee was appointed only in May, it has presented a report which explains the situation fully from a mechanical standpoint. It also suggests remedies which should not be difficult to apply, and which should rapidly improve the strength and safety of tank cars. This report and the one on "Steam Lines for Passenger Cars" are good illustrations of the effective work which can be done for the associations when the task is placed in the hands of someone who can take time to make it his special business, without the interruptions of regular routine work, with which all officers have been loaded down. The committee recommends the use of center sills only 18 inches apart instead of 48 inches, as heretofore. This will make the car much stronger in resisting buffing blows, and it will admit of the usual form of draft timbers, instead of the very weak form which has been used heretofore. The wooden bolsters, body and truck, are to be replaced by metal ones of modern design. It is surprising to find that many tanks are not equipped with air brakes, and these are now to be required for all cars, so that tank cars may occupy a central position in a train and thus be protected from both head and rear collisions. The trucks of the older tank cars should be entirely replaced by stronger ones, as they have become decrepit by long service.

They hardly admit of repairs which will make them adequate to present service. The experiments made by the Union Tank Line Co. on safety valves for tank cars have thrown new light upon the subject. They show that in order to carry off the vapors from a tank of naphtha and prevent pressure from accumulating when the tank is heated from below, two 5-inch safety valves are necessary for the large cars. They should be provided with a lip encircling the outer edge of the valve chamber at the top to prevent the vapor from the valve from igniting from a fire below.

The recommendations of the committee should be commenced promptly and immediately placed in effect. Their enforcement will be instrumental in insuring a much greater degree of safety to trains containing tank cars.—*Railway Age.*

### Fast Run on the Canada Atlantic Ry.

The Canada Atlantic Ry. has from time to time made some very fast runs in connection with its express service between Montreal and Ottawa. The latest and the fastest was made recently; the train consisting of five cars, including the private car of C. M. Hays, Second Vice-President and General Manager, G.T.R., left the Central station, Ottawa, at 8.20 a.m. for Montreal. The cars were hauled by engine no. 618, with an engineer named Ferguson in charge. This engine is probably the finest and fastest passenger locomotive in Canada, and with her mate, engine no. 620, comprise the most interesting pair of locomotives in America to-day. Very little is said or even known to the general public as regards the great running powers of these engines, but their work on the eastern division of the line is conclusive evidence of their speed and endurance. After leaving Ottawa the train clipped along at an exceptionally fast pace, but owing to unforeseen delays at crossings, due to other trains and certain connections, the express arrived at Coteau Junction about seven minutes behind its schedule time. A short stop was made at Vaudreuil, and it was at this point that the engineer determined to make extra fast time. In a minute the train was under full steam, and from Vaudreuil to a point a little west of Dorval the express flew along at the record speed of exactly one hundred miles an hour or a mile in thirty-six seconds, arriving at Bonaventure station, Montreal, on time. When the train was stopped Mr. Hay, Senator Cox and other gentlemen who were on the train, made a minute inspection of the engine and the party incidentally congratulated Ferguson on his splendid run.

In conversation with a press representative Engineer Ferguson said that he felt certain that there was a speed of one hundred and ten miles an hour in his engine if he had occasion to put her to the test, and that he could make the run from Ottawa to Montreal, a distance of a hundred and sixteen miles, in one hour and fifty minutes without any great effort. The engine, which has driving wheels 7 ft. 6 in., was built at the Baldwin Locomotive Works two years ago.

The Canadian Westinghouse Co. (Ltd.) has been incorporated under the Dominion Companies' Act with a capital of \$2,500,000 to manufacture and deal in all kinds of machinery, engines, air brakes, etc., to acquire factories making such machines, etc. The company's offices are to be in Hamilton, where factories are to be constructed. The incorporators are: H. H. Westinghouse, of New York city; G. Westinghouse, G. C. Smith, F. H. Taylor, L. A. Osborne, of Pittsburg; T. Ahearn, W. Y. Soper, of Ottawa, Ont.; and P. J. Mylor, of Hamilton, Ont.



**Grain Elevator Notes.**

The G.T.R. is constructing a 1,000,000 bush. elevator on Windmill Point wharf, Montreal.

The press reports that the Great Northern Ry. elevator at Quebec was to be permanently closed down, are denied by the Company's officers.

The Prescott elevator, together with the buildings and wharves, etc., the property of the Prescott Elevator Co. (Ltd.), in liquidation, were advertised to be sold July 31.

The Ogilvie Flour Mills Co. are building 18 new elevators this season in Manitoba and the Northwest Territories. This will bring the number of elevators owned by the Company up to 100.

The Farmers' Elevator Co. of Roland, Man., has declared a dividend for the year of 40%. During the past five years the shareholders have divided 115% of the cost of the elevator, besides effecting considerable improvements.

The elevator under construction for the Montreal Harbor Commissioners, under the supervision of an engineer of the Department of Public Works, will not be completed until the opening of navigation, 1904. It was originally expected that the elevator would have been completed by Aug. 1. The elevator will have a storage capacity of 940,000 bush.

The new elevator under construction at Point Edward, Ont., for the Point Edward

Elevator Co., is expected to be completed early in August. The elevator consists of a working house, power house and annex or storage house. The working house is 48x48 feet and rests on 20 stone piers, each pier resting on 16 piles driven close together and sawed off at the river level. The basement is floored with concrete at the water line. The equipment of the working house consists of a marine leg of 12,000 bush. capacity, two sets of unloading shovels, a receiving leg to carry the grain from the marine leg, and two shipping legs to deliver the grain to cars. At the top of the building are three scales of 72,000 lbs. capacity. The bins in this building will contain 75,000 bush. The annex is 30 ft. distant from the working house, back from the river, and separated by the railway track. It is 166 x 126 ft. and has 36 bins; with a total capacity of 450,000 bush., which, with the bins already mentioned, gives the elevator a total capacity of 525,000 bushels. The method of conveying the grain is by means of wide rubber belts. These belts are in channels at each side of the building, between the rows of bins and below, and when the bins are opened the grain runs out on to the belt and is carried along to any desired bin or back to the working house to be weighed before going into the cars. The power house is 48 x 48 ft., and stands on the river bank just south of the main building. It will contain a 350-hp. engine and two boilers 16 ft. x 72 in. There will be a conical brick smokestack 177 ft. high, being one foot higher than the elevator.

**SHIPPING MATTERS.**

**Dominion Marine Association.**

The enrollment of members of the Dominion Marine Association is proceeding satisfactorily, the following owners, with a list of vessels and tonnage represented, having been registered:

W. E. Bishop, Hamilton, Ont., representing the Hamilton Steamboat Co. Strs.: Macassa, 164 tons; Modjeska, 461 tons.

The Calvin Co. (Ltd.), Garden Island, Ont. Strs.: Simla, 973 tons; India, 573 tons; D. D. Calvin, 483 tons; Chieftain, 179 tons; Parthia, 85 tons; Frontenac, 64 tons; Johnston, 53 tons. Barges, etc.: Burma, 885 tons; Ceylon, 908 tons.

Canadian Lake and Ocean Navigation Co.,

**DOMINION LINE STEAMSHIPS**

**FAST TWIN-SCREW SERVICE. WEEKLY SAILINGS.**

**MONTREAL TO LIVERPOOL**  
**HALIFAX TO LIVERPOOL Via Queenstown**  
**BOSTON TO LIVERPOOL Via Queenstown**  
**BOSTON TO MEDITERRANEAN PORTS**

**MONTREAL TO LIVERPOOL**

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

**BOSTON TO LIVERPOOL**

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

**BOSTON TO MEDITERRANEAN**

Vancouver	June 6th	July 18th	August 29th
Cambroman	" 20th	Aug. 8th	Sept. 19th

Spacious Promenade Decks, Electric Light, Passenger Accommodation all amidships.

The steamers on the Montreal and Boston services to Liverpool are all twin-screw and powerful steamers. They are fitted in the most modern style to enable the patrons of the Company to cross the Atlantic with comfort.

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**DOMINION LINE OFFICE,**  
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**THE CANADA SWITCH AND SPRING CO., Limited,**  
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**Manufacturers of Steel Castings**  
 (Open Hearth System)

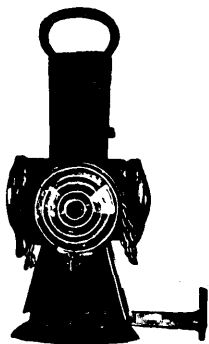
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- SHIP LAMPS
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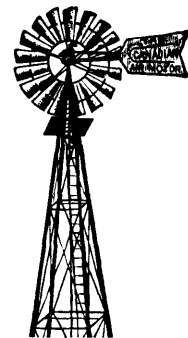


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**T. A. MORRISON & CO.,**  
 208 St. James St., Montreal.

**New and Secondhand Contractors' Plant, etc.**

**The Accident and Guarantee Co. of Canada, MONTREAL.**

Capital, authorized, \$1,000,000.00  
 Subscribed - - - 250,000.00

Personal Accident, Sickness, Fraternal and Working Men's Benefit Insurance.

Toronto. Strs.: Turret Court, 1,197 tons; Turret Chief, 1,197 tons; Turret Cape, 1,142 tons.

The Canadian Pacific Car and Passenger Transportation Co. (Ltd.), Prescott, Ont. Strs.: City of Belleville, 68.80 tons; International, 268.82 tons; William Armstrong, 181 tons; Henry Plumb, 46.39 tons.

Jas. Carruthers, Toronto. Str.: Advance, 358 tons.

J. & T. Conlon, Thorold, Ont. Str.: Erin, 411 tons. Barge: F. L. Danforth, 643 tons.

R. Cunningham & Son, Port Essington, B.C. Strs.: Hazleton, 235.94 tons; Chieftain, 38 tons.

Dominion Fish Co. (Ltd.), Selkirk, Man. Strs.: Premier, 281.52 tons; City of Selkirk, 311.32 tons; Rocket, 21.05 tons; Fisherman, 30.06 tons; Idell, 36.67 tons; Daisy, 8.14 tons; Ogema, 14.07 tons; Chieftain, 28.23 tons; Angler, 10.99 tons; Miles, 42.87 tons.

Dominion Iron and Steel Co. (Ltd.), Sydney, N.S. Strs.: Bonavista, 837 tons; Caouna, 931 tons; Coban, 689 tons; Cape Breton, 1,109 tons; D. H. Thomas, 144 tons; Louisburg, 1,182 tons. Barges, etc.: Grandee, 1,262 tons; Rembrandt, 1,413 tons; Mabel, 136 tons; Alice, 248 tons; Lizzie, 245 tons.

The Donnelly Salvage and Wrecking Co. (Ltd.), Kingston, Ont. Str.: Donnelly, 90 tons. Barge: Grantham, 325 tons.

Ewing & Fryer Fish Co. (Ltd.), Selkirk, Man. Strs.: Eagle, 5.79 tons; Keewatin, 14 tons; Cygnet, 10 tons.

F. E. Hall, L'Orignal, Ont. Str.: Iona, 157 tons.

Jas. J. Hall, Ottawa. Strs.: Hall, 136 tons; Olive, 103 tons; Welshman, 100 tons; Scotsman, 114 tons.

A. W. Hepburn, Picton, Ont. Strs.: Alexandrian, 508 tons; Niagara, 215 tons; Lloyd S. Porter, 379 tons; Aberdeen, 87 tons; Water Lily, 56 tons. Barges, etc.: Isabel Reed, 480 tons; L. W. Drake, 397 tons; Rob Roy, 341 tons.

A. Hicks, Trenton, Ont. Str. Varuna, 85 tons.

R. F. Holcomb, Ottawa. Strs.: Hebron, 98 tons; Robert Anglin, 52 tons.

Huntsville, Lake of Bays and Lake Simcoe Navigation Co. (Ltd.), Huntsville, Ont. Tonnage not fully completed.

International Ferry Co., Buffalo, N.Y. Str.: Hope, 170 tons.

Midland Navigation Co. (Jas. Playfair), Midland, Ont. Str.: Midland Queen, 1,348.97 tons.

J. B. Miller, Toronto. Str.: Seguin, 566 tons.

Montreal Transportation Co., Montreal. Tonnage not fully completed.

Ottawa River Navigation Co. (R. W. Shepherd), Montreal. Strs.: Sovereign, 323 tons; Empress, 372 tons; Duchess of York, 261 tons; Princess, 298 tons; Victoria, 107 tons; Maude, 144 tons.

Niagara Navigation Co. (Ltd.), Toronto. Strs.: Chippewa, 763.55 tons; Corona, 648.90 tons; Chicora, 539.69 tons; Ongaira, 64.34 tons.

Northern Fish Co., Selkirk, Man. Str.: Lady of the Lake, 155.10 tons.

Northwest Navigation Co. (Ltd.), Selkirk, Man. Strs.: Princess, 228.62 tons; Frank Burton, 35.36 tons. Barges: Berens River, 334.94 tons; Nelson River, 219 tons; Sultana, 227.29 tons; Saskatchewan, 219 tons; Empress, 82.92 tons.

Rainy River Navigation Co. (Ltd.), Rat Portage, Ont. Strs.: Keenora, 268.89 tons; Agwinde, 143.13 tons; Edna Brydges, 119.72 tons; Majestic, 94.93 tons; Maple Leaf, 50.02 tons; City of Alberton, 38.84 tons; Undine, 6.44 tons.

The Rathbun Co., Deseronto, Ont. Strs.: Resolute, 262 tons; Reliance, 169 tons; Rescue, 37 tons; Ella Ross, 190 tons; Deseronto, 37 tons. Barge: Recruit, 296 tons.

Richelieu and Ontario Navigation Co., Montreal. Tonnage not fully completed.

Rideau Lakes Navigation Co., Kingston, Ont. Strs.: Rideau Queen, 195 tons; Rideau King, 196 tons.

The St. Lawrence and Chicago Steam Navigation Co. (Ltd.), Toronto. Strs.: Iroquois, 1,451 tons; Algonquin, 1,172 tons; Rosedale, 977 tons.

The Toronto and Montreal Steamboat Co. (Ltd.), Toronto. Str.: Persia, 500 tons.

The Trent Valley Navigation Co. (Ltd.), Bobcaygeon, Ont. Strs.: Esturion, 84.97 tons; Empress, 57.48 tons; Ogema, 45.15 tons; Maneta, 23.19 tons; Ajax, 23.42 tons.

The Upper Ottawa Improvement Co. (Ltd.), (G. B. Greene), Ottawa. Strs.: E. H. Bronson, 180 tons; Alex. Fraser, 174 tons; C. B. Powell, 172 tons; Pembroke, 122 tons; Hamilton, 202 tons; J. B. Murphy, 109 tons; Albert, 199 tons; G. B. Greene, 218 tons; G. B. Pattee, 18 tons; Hercules, 13 tons; Samson, 7 tons; Beaver, 8 tons; Mink, 9 tons.

The Wentworth Navigation Co., Toronto. Str.: Ocean, 455 tons.

A. Wright, Toronto. Strs.: Charlton, 265 tons; Reginald, 13 tons; Tadousac, 2,500 tons.

The Secretary, F. King, of Kingston, Ont., has received a large number of replies to the circular sent out in reference to the proposed alterations of the Steamboat Inspection Act, and the information contained therein will be laid before the special committee to which the bill was referred by the House of Commons. A meeting between the engineers and the owners of steamers for the discussion of the matter has been suggested, and may take place before the Committee of the House of Commons sits. In connection with the removal of the canal tolls on the St. Lawrence route, it is reported from all points that there has been a very large increase in the quantity of grain passing through, and the statement is made that the transshipping facilities at Kingston are insufficient. The Kingston people say that this is not the case, as at no time have the elevators there been taxed in the slightest degree, the difficulty being due to the lack of barge capacity, and this is occasioned by the delay in freeing the river barges at Montreal.

An incident in connection with the use of the Government dock at Kingston showed the usefulness of the association. A very small Government tug, the Delisle, was to be docked for repairs of a lengthy duration, and a mild protest was sent to the Department of Marine, as there is a smaller dock and a marine railway at Kingston, either of which might have been used. The Department replied that the Government must use its own dock for its own purposes, but the satisfactory announcement was made that the Delisle would not be stripped, but would be held ready for removal at a few hours' notice should occasion require. As a matter of fact the Delisle was removed July 8, to make way for a larger steamer requiring repairs.

**Shipping Federation of Canada.**

The Dominion Parliament has passed an act incorporating the Montreal representatives of the trans-Atlantic lines and others interested in marine matters who may hereafter become associated with them, under the title of the Shipping Federation of Canada. The objects of the federation are to amalgamate ship owners and shipping agents and others interested in shipping into one association for the purpose of considering all questions affecting the shipping trade of Canada, or other trades connected therewith, and to take such action as may be deemed advisable to protect and indemnify its members against loss arising in the management of their trade, without their actual privity or fault, which in the opinion of the federation, should in its interests or in the

interests of the trade, be made good; to establish branches throughout Canada; and to have all the necessary powers for carrying these objects into effect. For the purposes of organization H. A. Allan, W. I. Gear and J. Thom are named in the act as the provisional council, with full power to act until the permanent executive council is chosen. (April, pg. 143.)

**Notices to Mariners.**

The following notices to mariners have been issued by the Department of Marine:

No. 29. July 18.—Lake Huron—1472. St. Clair river, northern approach, shoal spot reported. 1473. St. Clair river approach, menace to navigation.

No. 44. June 10.—Ontario—106. Georgian bay, Meaford, lights, description of harbor. 107. Lake Huron, Stokes bay, back beacon blown down.

No. 45. June 11.—Copies of U.S. notices relating to Juan de Fuca strait and Alaska.

No. 46. June 12.—Ontario Lighthouse division—112. River St. Lawrence, Lake St. Louis, off Windmill point, gas buoy removed.

No. 47. June 13.—New Brunswick—114. Northumberland strait, Kouchibouguac bay, Sapin point, fishing light established.

No. 48. June 16.—Quebec—115. Gulf of St. Lawrence, Gaspé coast, Barachois de Malbaie, pole light established. 116. River St. Lawrence, ship channel Quebec and Montreal, intended changes between Platon and Grondines.

No. 49. June 17.—Ontario—117. River St. Lawrence, shoal off Wolfe island, displacement of buoys, warning. 118. Georgian bay, Collingwood harbor, sailing directions. 119. Lake Huron, north channel, St. Joseph island, Tenby bay, uncharted shoal.

No. 50. June 18.—Quebec—123. River St. Lawrence, ship channel between Quebec and Montreal, Ile Bouchard range lights put in operation.

No. 51. June 22.—Quebec—124. River St. Lawrence, ship channel between Quebec and Montreal, off Cap Levrant, shoal spot reported. 125. River St. Lawrence, ship channel between Quebec and Montreal, Champlain cut, bar formed.

No. 52. June 22.—New Brunswick—126. Chaleur bay, Restigouche river, Maguacha spit, character of buoy. Prince Edward Island—127. Northumberland strait, Wood islands channel, buoyage. 128. Gulf of St. Lawrence shore, New London harbor, new range lights established. 129. North coast, Cascumpeque harbor, Northport, range light towers enclosed.

No. 53. June 23.—Ontario—130. Lake Huron, Pine Tree harbor, private lights discontinued. 131. Georgian bay, east side, Lone rock, bell buoy replaced in position.

No. 54. June 30.—Quebec—132. River St. Lawrence below Quebec, Rimouski road, gas buoy established. 133. River St. Lawrence below Quebec, colors of buoys changed.

No. 55. June 30.—Quebec—134. River St. Lawrence, ship channel between Montreal and Quebec, Lake St. Peter, lightship no. 2, temporarily removed.

No. 56. July 3.—Nova Scotia—138. South coast, off Gannet dry ledge, bell buoy established. 139. Northumberland strait, Pictou bar, lighthouse burned down, temporary light. New Brunswick—140. Bay of Fundy, Passamaquoddy bay, Cherry island, fog bell established.

No. 57. July 6.—New Brunswick—143. East coast, Escumiac point, fog alarm temporarily discontinued. 144. Gulf of St. Lawrence, Miscou island, fog alarm temporarily discontinued.

No. 58. July 8.—British Columbia—145. Queen Charlotte sound, uncharted rock off Redfern island.

No. 59. July 13.—Nova Scotia—148.

South west coast, Baccaro point, charge in light. New Brunswick—149. Northumberland strait, Buclouche harbor, buoyage.

No. 60. July 14.—British Columbia—151. Vancouver Island, southeast coast, Esquimalt, Duntze head, longitude. 152. Strait of Georgia, Fraser river, removal of beacon lights. 153. Queen Charlotte sound, Egg island, lighthouse moved.

No. 61. July 16.—Quebec—155. River St. Lawrence, ship channel between Quebec and Montreal, Champlain Cut, dredging. 156. River St. Lawrence, ship channel between Quebec and Montreal, Ile aux Raisins, back range lighthouse rebuilt.

No. 62. July 17.—Nova Scotia—157. South coast, Pennant harbor, light established. New Brunswick—158. East coast, North Tracadie, outer range light re-established.

The following notices have been issued by the U.S. Hydrographic department:

No. 26. June 27.—Lake Erie—1297. Presque Isle bay, Erie harbor, buoys to be shifted in position.

No. 27. July 4.—Lake Erie—1357. Presque Isle bay, Erie harbor, buoys shifted. 1358. St. Mary's river, buoyage. 1359. St. Mary's river, St. Joseph island, Tenby bay, shoal reported.

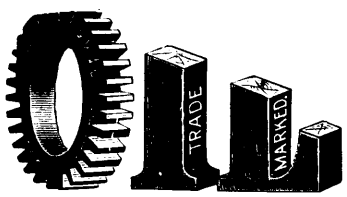
**Maritime Provinces and Newfoundland.**

Capt. A. N. Smith, commander of the Battle line str. Nemea, and a native of Yarmouth, N.S., died recently in Antwerp.

The Beatrice E. Waring, a new steamer for the Belle Isle route, has been completed at St. John, N.B., and placed in service.

Capt. Jesse Harris, of Westport, N.S., who died there recently, aged 97, was probably the oldest mariner in the Maritime Provinces.

Capt. Hatfield, a well-known Nova Scotian mariner, and latterly a marine surveyor in Liverpool, Eng., died there recently, aged 67.



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TORONTO and QUEBEC.

**MANITOBA**

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

**CROPS.**

ACRES.	AVERAGE YIELD.	TOTAL.
Wheat... 2,039,940	26. bus.	53,077,207 bus.
Oats... 725,060	47.5 "	34,478,160 "
Barley... 329,799	35.9 "	11,848,422 "
Potatoes... 22,005	157.	3,459,325 "

**STOCK.**

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

Horses... 146,591	Sheep... 20,518
Cattle... 282,343	Pigs... 95,598
Value of Dairy Products... \$926,314	

**15,000 FARM LABORERS**

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


**MANITOBA FARMERS ARE PROSPEROUS.**

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

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

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

For full information, maps, etc., FREE, address **JAMES HARTNEY**, Manitoba Emigration Agt., 77 York Street, Toronto, Ont.  
Or **J. J. GOLDEN**, Manitoba Emigration Agt., 617 Main St., Winnipeg, Man.



**FARMING IN THE SOUTH.**

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

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

**G. B. WYLLIE,**  
Canadian Passenger Agent,  
210 ELLICOTT SQUARE, BUFFALO, N.Y.

**RICHELIEU AND ONTARIO NAVIGATION COMPANY.**

**"Niagara to the Sea."**

**MAIL LINE STEAMERS**  
(Palatial Steel Steamers)

Leave Toronto (from June 1st to 13th) Mondays, Wednesdays and Saturdays; thereafter daily, except Sunday, for Rochester, Kingston, Clayton, 1,000 Island Points and intermediate ports (running all the Rapids) to Montreal, where connection is made with steamers for Quebec, Murray Bay, Tadousac and points on the famous Saguenay River.

**HAMILTON LINE**  
(Fine Iron Steamers)

Plying between Hamilton, Toronto, Montreal and intermediate ports, passing through the picturesque scenery of the Bay of Quinte, 1,000 Islands and shooting the Rapids.

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

For further particulars apply to

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2 King Street E., Toronto.  
**JOS. F. DOLAN, C.P. & T.A.,**  
128 St. James Street, Montreal;  
or,  
**THOS. HENRY,** Traffic Manager,  
Montreal.

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**New York Central,**

**\$9.00** BY THE **\$9.00**  
**West Shore,**

With privilege of a trip on Hudson River Steamers between Albany and New York.

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**L. DRAGO,**  
Canadian Passenger Agent,  
881 Yonge Street, Toronto.  
Telephone Main 4361.

The Eastern Steamship Co.'s new str. Calvin Austin made her initial trip between Boston, Mass., and St. John, N.B., July 16.

The St. Pierre, a 75 ton steamer has recently been completed at Yarmouth, N.S. She will trade between St. Pierre, Miquelon, and Newfoundland.

Press reports state that the Canada Atlantic and Plant Steamship Co. will have a new steamer, to be named the St. John, built in Scotland, to run between Boston, Mass., St. John, N.B., and Halifax, N.S.

Among recent launches have been a 277 ton schooner at Parrsboro, N.S., a 250 ton barkentine at Liverpool, N.S. and a 270 ton schooner at Port Greville, N.S.

The Dominion Government has awarded a gold watch and chain to Capt. Bray, of the Boston barkentine Kremlin, for rescuing the crew of the Nova Scotian bark May in Sept., 1901.

A French firm of shipbuilders at St. Nazaire, France, proposes to establish a shipbuilding and repairing yard at St. Pierre, Miquelon, Nova Scotia and Newfoundland yards at present secure the business of this French possession.

The Dominion Atlantic Ry. has removed the offices of its marine department from Boston, Mass., to Yarmouth, N.S. Yarmouth was the headquarters of the Yarmouth Steamship Co., which was absorbed by the D. A. Ry. Co. early in 1902.

The court of enquiry into the recent grounding of the str. Halifax, in Halifax harbor, N.S., has found that the cause of the grounding was owing to her having been caught by a strong westerly current, and that the officers were in no way to blame for the accident.

**Province of Quebec Shipping.**

The Norwegian str. Protector, with a cargo of pulp from Chicoutimi, which was wrecked near the mouth of the Saguenay river, has been sold by the underwriters for \$3,100.

The Quebec Steamship Co. has purchased the str. Allendale in Great Britain, for the New York—West Indies run, to replace the steamer lost off the Bermuda islands, early in the year.

The Minister of Marine has ordered 25 of the latest pattern of gas buoys for the St. Lawrence channel between Montreal and Quebec. The buoys are to be put in position this season.

Capt. Fraser, of Sydney, N.S., has taken over the duties of Marine Superintendent of the Montreal Transportation Co., and is visiting the different ports between Montreal and Port Arthur.

About 440 ft. of the new wharf under construction at Father Point has been completed and it is expected to have the remaining 160 ft. completed this year. Heney & Smith are the contractors.

A fine of \$25 has been inflicted on Capt. Murray of the str. Devona, for unnecessary whistling when passing Quebec. Many residents of Quebec city are complaining of the whistling of steamers when passing up and down the river.

The Easton Steamboat Co., (Ltd.), has been incorporated under the Dominion Companies' Act to carry on a general navigation and wrecking business. The capital of the company is fixed at \$10,000 and the offices are to be at Quebec. The incorporators are W. and I. B. Easton, of Albany, N.Y.; G. F. Gisborne, L. A. Taschereau, L. A. Cannon, of Quebec.

The Ewart Co. (Ltd.) has been incorporated under the Dominion Companies' Act, with a capital of \$90,000 and offices at Montreal, to acquire the coal and ice business of J. T. Ewart, and in connection therewith to "ac-

quire tugs and other means of transport." The incorporators are J. Farquharson, G. MacL. Webster, J. T. Ewart, W. Johnston, F. Bayard, F. X. St. Onge, D. W. Lockerby, and G. Maybury, of Montreal.

The Richlieu and Ontario Navigation Co. has placed the str. Virginia in service on its Quebec-Saguenay route. The Virginia is a sister ship to the Carolina acquired by the company in 1902, and was formerly owned by the Baltimore Steam Packet Co. The Virginia is an iron steamer, built at Wilmington, Del., in 1879, her dimensions being: length, 251 ft.; breadth, 34 ft.; depth, 7 ft. 9 in.; tonnage gross 990 tons; register, 666 tons. She is fitted with a single cylinder vertical beam engine; boiler, five ft. by eleven ft., and develops 800 h.p., nominal.

**Ontario and the Great Lakes.**

The Dominion Government lightship tender Arabian went ashore recently on Pigeon island, near Kingston, Ont.

Local reports in Hamilton credit the Hamilton Steamboat Co. with having decided to have a new steamer built on the Clyde and to sell the Macassa as soon as the new steamer is ready.

It is currently reported in Hamilton that negotiations are in progress for the purchase of a turbine steamer to be brought out from Scotland and operated between Hamilton and Toronto.

The Northern Navigation Co. is considering the building of a steamer for the local excursion trade on Georgian bay. At present there is not a steamer available for this special traffic.

The Colonial Portland Cement Co. has deposited plans with the Department of Public Works, Ottawa, for a large dock which it proposes to construct on Colpoys' bay, near Warton, Ont.

The G.T.R. car ferry Lansdowne has been thoroughly overhauled, fitted with new boilers, and a fourth smoke-stack added. The Lansdowne is used on the Detroit river between Detroit, Mich., and Windsor, Ont.

The Dominion Government has granted a gratuity of \$1,050 to Capt. McGregor, of Goderich, on his retiring from the command of the hydrographic survey steamer Bayfield, recently sold out of the service, and replaced by a larger and more powerful steamer.

The Huntsville, Lake of Bays and Lake Simcoe Navigation Co. has placed its new str. Maple Leaf in service. The Maple Leaf has a length of 56 ft., a breadth of 11 ft., and is fitted with fore and aft compound engines, 6 in. and 12 in. cylinders, by 19-in. stroke.

The second of the new steamers ordered in Great Britain by the Montreal Transportation Co., has arrived at Kingston from Newcastle-on-Tyne, Eng. She is named the Fairmount, and is a sister ship to the Westmount, dimensions of which were given in our last issue.

The opening of the Canadian Northern Ry. to Port Arthur, Ont., is responsible for the shipping of white pine from the Rainy River district to Scotland, for shipbuilding purposes. Sixteen carloads of white pine were recently received at Port Arthur and shipped to Glasgow, via Quebec.

The str. Lawrence, of the Thousand Islands Steamboat Co., broke her walking beam, while running at full speed in midchannel July 15, and considerable damage was done to the machinery and upper works before the engine could be stopped. The St. Lawrence will be repaired at Kingston.

The Dominion Parliament has passed an act settling the title to certain lands in Hamilton, over which a mortgage was given to the Crown in 1832 in connection with the construction of the Desjardins canal, from Ham-

ilton to Dundas. The act declares the lands to be discharged from any claim under the mortgage.

The U.S. courts at Rochester, N.Y., have given a decision in favor of W. L. & H. W. Visger Co., who sought docking rights at Alexander's Bay, N.Y., where the Thousand Islands Steamboat Co., Kingston, Ont., claimed special rights. H. S. Folger, General Manager of the T.I.S. Co., says that the decision will be appealed against.

The Canadian Northwest Steamship Co. has been incorporated under the Dominion Companies' Act, to carry on a general navigation business on the Great Lakes and adjacent waters and on the high seas. The capital is placed at \$250,000, and the head offices are to be at Port Arthur, Ont. The incorporators are G. T. Marks, H. A. Wiley, F. S. Wiley, G. M. Murray, of Port Arthur, and H. Cassels, K.C., of Toronto.

The str. White Star, of Toronto, which had been undergoing extensive repairs at the Polson Iron Works after a recent accident to her machinery, was removed to her dock, July 10, to resume her route to Oakville on the following day. During the night fire broke out and the steamer was completely destroyed. The steamer is valued at \$40,000, and insurance of \$25,000 was carried. The Oakville Navigation Co. chartered the str. Niagara for the service, pending the purchase or building of another steamer.

The str. W. D. Matthews, for the St. Lawrence and Chicago Steam Navigation Co., was launched at Collingwood recently. Her dimensions are: length over all, 375 ft.; breadth, 48 ft.; depth of hold, 28 ft.; register tonnage, 3,959 tons; deadweight capacity, 5,500 tons on a draught of 13 ft., and 6,100 on a draught of 19 ft. She is fitted with three pole masts, three derricks and three steam hoists to facilitate the handling of freight. The engines are triple expansion with cylinders 20 in., 33½ in. and 55 in. diameter, by 40 in. piston stroke, and steam is supplied by two Scotch boilers 14 ft. diameter by 12 ft. long.

The Canadian Transit Co. (Ltd.) has been incorporated under the Ontario Companies' Act to carry on a general transportation business, and for that purpose to acquire steam and other vessels; to construct piers, wharves, etc.; to enter into an agreement with the New Canadian Co. for the purchase of its undertaking. The capital of the company is fixed at \$1,000,000, and the head office is to be at Ottawa. The incorporators are: R. Bickerdike, marine underwriter; A. Lemieux, C. N. Blakely, steamship agents; R. Lemieux, K.C., all of Montreal; C. B. K. Carpenter, of London, Eng. Some of the incorporators are also promoters of the New Canadian Co. (see under Railway Development, etc.) R. Bickerdike states that the company has five steamers are being built in England for the company's grain-carrying trade between Montreal and Port Arthur, and that a number of barges will be purchased.

The total freight passing through the Canadian and the U.S. canals at Sault Ste. Marie, in June, was 5,105,078 tons, against 4,721,608 tons in June, 1902. The figures for the Canadian canal are:

	1903.	1902.	Increase or Decrease.
April . . . . .	159,763 tons	190,926 tons	31,163 tons—
May . . . . .	636,747 "	314,262 "	322,485 " +
June . . . . .	917,105 "	1,118,564 "	201,459 " +
	1,713,615 tons	1,623,752 tons	89,863 tons—
	+ increase.	— decrease.	

A committee has been appointed by the board of trade of Fort William to act with J. Connee, M.L.A., in bringing the claims of the port for improvement before the Dominion Government. It is claimed that the development of the port is being hindered by reason of the small amount of money voted for im-

provements. The river is from 25 to 30 ft. deep for nearly six miles from the lake, with the exception of one or two points where sand bars have been formed. There would be no difficulty, it is stated, in dredging and maintaining a channel 400 ft. wide and 22 ft. deep, for the whole six miles, and thus make Fort William one of the best natural harbors on the lakes.

**Manitoba and the Northwest Territories.**

The Imperial Fish Co., of West Selkirk, Man., has had built a new steamer, the Wolverine. The dimensions are: length of keel, 125 ft.; length over all, 135 ft. 10 in.; breadth 25 ft.; depth, 8 ft. 10 in.

The feasibility of navigation on the Saskatchewan river, east and west of Edmonton, Alta., is being investigated by Crockett and Blum, of Forsythe, Montana. In the fall of 1902

representatives of this firm made a trip on the river, and as result have constructed a soft gasoline launch, with which a thorough survey will be made of the river to ascertain what size and character of a steamer will be most suitable for the probable traffic.

**B.C. and Pacific Coast Shipping.**

The Coutli Shipping Co., (Ltd.) has been incorporated under the B.C. Companies' Act with a capital of \$50,000 for the purpose of owning and operating steamers and other vessels and to carry on a general navigation business.

Capt. C. Hackett has been appointed to the command of the Dominion cruiser Quadra, at Victoria, B.C., succeeding Capt. Walbran. Capt. Hackett is interested in the Victoria Sealing Co. and has been navigating vessels on the B.C. coast since 1889.

The Bark Antiope Co. (Ltd.) has been incorporated under the B.C. Companies' Act with a capital of \$32,000 to purchase the Antiope of Liverpool, and carry on a general navigation business. The Antiope is an iron bark, built at Port Glasgow, Scotland, in 1866, and is of 1,365 tons register.

The str. Ramona, which was wrecked near Sumas, B.C., some months ago, has been practically re-built at New Westminster, and has been again placed in service on the Fraser river. The rebuilt steamer has a draught of 20 inches aft, and 14 inches forward, about one-half the former draught.

The Ship Lord Templeton Co. (Ltd.) has been incorporated under the B.C. Companies' Act, with a capital of \$70,400 to carry on a general navigation business. The Lord Templeton is now registered at Victoria, B.C., but was built at Belfast, Ireland, in 1886. She is a steel ship of 2152 tons gross.

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Steam and Hot and Cold  
Water Pipes.**

**COLD STORAGE INSULATION**  
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the World.

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AMERICAN EXPOSITION, AND  
GRAND PRIZE AT PARIS**

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To New York, Philadelphia, Atlantic City, Baltimore, Washington and the South. The Grand Trunk Railway in connection with the

**LEHIGH VALLEY RAILROAD**

Forms the Direct Line from Toronto, Hamilton, London and all points in Canada for the above cities.

ROUTE OF THE  
**"Black Diamond Express"**  
(Handsomest train in the world.)

The Great double-track scenic highway, stone ballasted, protected by automatic electric block signals. Through Pullman Parlor and Sleeping Car Service. Dining Car Service à la carte. Everything first class. Call on Grand Trunk Ticket Agents for tickets and further information, or address

ROBT. S. LEWIS,  
Canadian Passenger Agent, 35 Yonge Street, Toronto.  
A. A. HEARD, CHAS. S. LEE,  
Asst. Gen. Pass. Ag't, New York. Gen. Pass. Ag't, New York.  
G. R. CHESBROUGH,  
West'n Pass. Ag't, Buffalo, N. Y.

**When You Stop to Think**

How much the success of your business and the comfort of your household depend on communication with others, you will appreciate the fact that telephone service is worth a great deal more than it costs.

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**METALLIC CIRCUIT SERVICE**  
EFFICIENT, RAPID, CONSTANT.  
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**THE BELL TELEPHONE COMPANY**  
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LIMITED,  
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SPRING STEEL.**

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Railway and Tramway Equipment.

New and Second-hand Rails  
(All Sections.)

Locomotives, Cars, Derricks,  
Hoisting Machinery, etc.

Old Material Bought and Sold.

**THE PLACE VIGER  
MONTREAL.**

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

**RATES: \$3 UPWARDS.**

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

**IMPERIAL BANK OF CANADA.**

Capital authorized	- - -	\$4,000,000
Capital paid up	- - -	2,983,896
Rest	- - -	2,636,312

DIRECTORS:

T. R. MERRITT, President; D. R. WILKIE, Vice-President; W. M. RAMSAY, ROBERT JAFFRAY, T. SUTHERLAND STAYNER, ELIAS ROGERS, W. M. HENDRIE.

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W. MOFFAT - - - - Chief Inspector.

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OTTAWA, ONTARIO.



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

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Manager

The B.C. Tourist Association, Vancouver, B.C., has secured, as a relic, one of the life-boats of the str. Beaver, built at Blackwall, Eng., in 1836 for the Hudson's Bay Co., and the pioneer steamer in the Northern Pacific. It is proposed to make an endeavor to raise the Beaver, which was wrecked at Stanley Park, July 26, 1888.

The North Vancouver Ferry and Power Co. (Ltd.) has been incorporated under the B.C. Companies' Act, with a capital of \$100,000 to carry on a ferry business on Burrard Inlet, and a general navigation business in the province. The Co. has acquired the str. Mermaid for the ferry service between Vancouver and North Vancouver.

A proposal has been made by an English shipbuilder to establish an ocean patrol for the purpose of giving aid to vessels in distress. The proposal is to have a number of specially equipped vessels to patrol the North Atlantic ocean along the line of the great ocean steamers on a regular schedule, of which all steamship lines would have due notice, so that in case of accident they would be able to know when and where they might look for a patrol boat to render aid.

The judicial committee of the Privy Council in London, Eng., has decided that the Anchor Line str. Furnesia cannot recover salvage for rendering aid to the ferry str. Scotia while being brought out from England to Halifax, N.S., for the Intercolonial Ry. The court held that the Scotia was the property of the crown, and no action could lie, but recommended that the Dominion Government make a payment as a matter of grace.

The Department of Marine proposes to establish a new certificate to be called a home trade certificate, and to otherwise amend the act with respect to certificates to masters and mates.

The act increasing the Government subsidy towards the construction of dry docks to 3% has been passed by the Dominion Parliament.

**Among the Express Companies.**

The Dominion Ex. Co. has withdrawn its service from the Esquimalt and Nanaimo Ry.

The Dominion Ex. Co. has opened a route on the C.P.R. from Forest to Lenore, Man.

The Dominion Ex. Co. has extended its service on the Bay of Quinte Ry. from Napanee to Deseronto, Ont.

The Dominion Ex. Co. has extended its route from West Selkirk to Winnipeg Beach, Man., on the Winnipeg Beach branch, C.P.R.

Geo. Severs has been appointed Foreign Traffic Agent, Canadian Ex. Co. at Montreal. He is to be addressed on all matters relating to European business.

C. A. Folwell, Chief Clerk, Dominion Ex. Co. at Sault Ste. Marie, Ont., has been transferred to the Company's Winnipeg office, and has been succeeded by A. McPhail.

R. Murphy, heretofore acting Route Agent, Central division, Canadian Ex. Co. at Montreal, has been appointed Route Agent, same division, succeeding F. H. Hackett.

The Dominion Ex. Co. has closed its offices at the following points: Creston Jct., Ladysmith, B.C.; McTaggart, Assa.; Anderson's Pit, Atbara, Norman, Ont.; Conception, L'Ange Gardien West, Quebec.

On July 1 all the express companies doing business in Canada and the United States introduced a new schedule of rates on all small parcels. This re-arrangement of rates on all small stuff was ordered at the last meeting of the amalgamated board of express companies and has been found necessary on account of the increased freight rates being charged by the railroads.

**Telegraph and Cable Matters.**

The G.N.W. Telegraph Co. has opened an office at Little Metis Lighthouse, Que.

The United States Government proposes to erect a number of wireless telegraph stations in Alaska.

The new lines being strung in Cape Breton, by the Public Works Department, will be connected at North Sydney with the lines of the Western Union system.

The recently completed U.S. telegraph line in Alaska, connecting St. Michael with Dawson, Yukon territory, and with the U.S. cable at Sitka, has been seriously damaged by forest fires.

Mackenzie, Mann & Co. propose to install a system of wireless telegraphy, with stations at convenient points between Toronto and Port Arthur, Ont., in connection with the steamship service of the Canadian Northern Ry.

J. C. Leslie, in the employ of the Anglo-American Telegraph Co. at Corn River, Nfld., is spending a holiday in Canada, the first time he has been away from his station during the entire period of his service of nearly fifty years.

The Pacific Commercial Cable Co.'s cable from San Francisco, Cal., to Manila, in the Philippine islands, has been completed. Congratulatory messages were exchanged between C. H. Mackay, President of the company, and the President of the United States.

The Globe of July 9 republished the following item from its issue of July 9, 1853: "It is about a year since the Grand Trunk Telegraph Company was organized. An advertisement in another column will speak its progress. Every share of the stock is now taken. We learn it will reach Montreal and Buffalo in a moment."

A Vancouver, B.C., press report of recent date states that the G.N.W. Telegraph Co. has under consideration a proposal to construct a land cable to Dawson, Yukon Territory, from some convenient point. The suggestion is made that the line will be carried through Alaska, and reach the U.S. cable to Seattle, Wash., at Sitka, Alaska.

Replying to a question in the British House of Commons recently, the Colonial Secretary stated that the capital outlay in connection with the all-British trans-Pacific cable did not include the cost of special surveys made by the Royal Navy. The soundings made by the surveying ships of the Royal Navy on the route, though of great value, were incidental to and made in the course of their ordinary operations. The special detailed survey required for the determination of the exact route to be followed by the cable was carried out, not by the Royal Navy, but by the contractors for the construction and laying of the cable. He added the information that "the question of a connection with the United States cable at Honolulu has been raised, but no action has yet been taken in that direction."

**Dominion Telegraph Company.**

The annual meeting was held at Toronto July 9. Following is the financial statement for the year ended June 30, 1903:

ASSETS.	
Capital expenditure.....	\$1,281,819 47
Toronto, Grey & Bruce Ry. Co. 1983 bonds and interest thereon.....	1,596 24
Cash in Bank.....	29,539 58
Suspense.....	52 87
	<hr/>
	\$1,313,008 16

**LIABILITIES.**

Capital stock paid up.....	\$1,000,000 00
Dividends unclaimed.....	769 85
Dividend No. 108, payable July 15, 1903.....	15,000 00
	<hr/>
Balance at credit of Profit and Loss Account.....	\$1,015,769 85
	<hr/>
	297,238 31
	<hr/>
	\$1,313,008 16

The directors reported the regular payment, quarterly in advance of the guaranteed interest at the rate of 6% per annum on the capital stock of the Co. by the lessees, the Western Union Telegraph Co., up to June 30, 1903, which interest has been duly distributed quarterly to the shareholders of the Dominion Co.

The officers for the current year are: President, T. Swinyard; Vice-President, T. R. Wood; other directors, B. Brooks, T. F. Clark, R. C. Clowry, Æ. Jarvis, C. O'Reilly, M.D., H. Pellatt, A. G. Ramsay; Secretary and Treasurer, F. Roper.

**General Telephone Matters.**

The Bell Telephone Co. declared a dividend of 2%, payable July 15, to shareholders of record of June 30.

The Sault Ste. Marie, Ont., town council has granted a franchise to the Bell Telephone Co. for a period of five years.

The Bell Telephone Co. has issued a map of its long distance lines in Ontario and Quebec, specially lithographed for affixing on office walls.

There is one telephone to every 63 inhabitants in British Columbia; one to every 89 inhabitants in Ontario, and one to every 102 inhabitants in Quebec.

The Rat Portage town council will take over the business of the Citizens' Telephone and Electric Light Co. as soon as the accounts between them are adjusted.

The Westport and Digby Telephone Co. proposes selling its business and winding up the Company. A meeting of its shareholders was called for July 31, at Westport, N.S., to consider the proposal of the directors.

By an act passed at the last session of the Ontario Legislature it is enacted that neither the town council of Fort William nor of Port Arthur can sell or lease its municipal telephone system without obtaining the assent of the taxpayers.

The New Brunswick Telephone Co. is equipping a local exchange at St. Andrew's, N.B. It proposes to string new lines from St. John to Fredericton; from St. John to Sussex, and from Woodstock to Houlton. The new lines will require about 200 miles of wire.

The Montreal city council has decided to appoint an engineer to prepare plans and estimates for a conduit system for the wires of the electric companies doing business in the city. J. A. Baylis has been appointed by the Bell Telephone Co. to act as its engineer in connection with the preparation of plans, etc.

The franchise of the Bell Telephone Co. in Kingston, Ont., will expire July 1, 1904, and after negotiations a new contract has been arranged with the city council. The wires are to be placed underground, the company paying \$500 a year for the use of the streets, giving three free telephones, and agreeing not to charge more than \$25 and \$30 for telephones during the life of the contract, which is to run for five years.

In the action brought by the Fort William, Ont., town council for injunctions and damages against the Bell Telephone Co., recently heard at Port Arthur, Ont., the judge ordered the case to be dismissed, and directed that the town council should not take any further proceedings until the action of the Toronto city council against the Bell Telephone

Co. had been decided. The Company was given \$1 damages, and costs for loss sustained by reason of the injunctions granted.

The Conn Telephone Co. has been incorporated under the Ontario Companies' Act to carry on a general telephone business in the counties of Wellington, Grey and Dufferin, and to maintain offices in Mount Forest, Conn, Egerton, Stonywood, Monck, Damascus, Kingscote, Cedarville, and other places. The capital is fixed at \$1,500, and the offices are to be at Conn. The incorporators are: A. R. Perry, G. W. Burrows, Conn; T. Begley, Proton; M. Manion, A. Howes, West Luther.

The Central Telephone Co. (Ltd.) is applying for incorporation, under the New Brunswick Companies' Act, to construct a telephone line from St. John to Fredericton, and throughout the counties of Kings, Queens, Sunbury and York; with power to acquire local lines in these counties. The head office is to be at Belleisle Creek, and the capital is fixed at \$10,000. The applicants for the charter are; G.G.G. Scovill, Belleisle Creek; E. G. Evans, Hampton; J. M. Scovill, St. John; L. P. Farris, White's Cove; W. Pugsley, J. Domville, Rothesay.

**PURCHASING AGENTS' GUIDE.**

(Continued from third page of Cover.)

- Steam Shovels**  
James Cooper.....Montreal.  
W. H. C. Mussen & Co.....Montreal.
- Steel**  
James Cooper.....Montreal.  
B. J. Coghlin & Co.....Montreal.  
Wm. Jessop & Sons.....Sheffield, Eng.  
Rice Lewis & Son.....Toronto.
- Steel Buildings**  
Dominion Bridge Co.....Montreal.
- Steel for Springs**  
James Hutton & Co.....Montreal.
- Steel Plate**  
Jas. W. Pyke & Co.....Montreal.
- Steel Tires**  
B. J. Coghlin & Co.....Montreal.  
James Hutton & Co.....Montreal.  
Latrobe Steel Co.....Philadelphia, Pa.  
Jas. W. Pyke & Co.....Montreal.
- Structural Metal Work**  
Dominion Bridge Co.....Montreal.  
Locomotive and Machine Co. of Montreal.....  
Jas. W. Pyke & Co.....Montreal.
- Switches**  
Montreal Steel Co.....Montreal.
- Switch Lamps**  
The Hiram L. Piper Co.....Montreal.  
The N. L. Piper Railway Supply Co.....Toronto.
- Switch Ropes**  
The B. Greening Co.....Hamilton, Ont.
- Switch Targets**  
Acton Burrows Co.....Toronto.
- Tanks and Tank Fixtures**  
Ontario Wind Engine and Pump Co.....Toronto.
- Telegraph and Telephone Office Signs**  
Acton Burrows Co.....Toronto.
- Tie Plates**  
B. J. Coghlin & Co.....Montreal.
- Tobacco and Cigars**  
The Hudson's Bay Company.....
- Toilet Paper**  
The Hudson's Bay Company.....
- Tools**  
Rice Lewis & Son.....Toronto.
- Track Jacks**  
James Cooper.....Montreal.  
W. H. C. Mussen & Co.....Montreal.  
A. O. Norton.....Coaticook, Que.
- Track Tools**  
Canada Switch and Spring Co.....Montreal.  
James Cooper.....Montreal.  
Rice Lewis & Son.....Toronto.  
W. H. C. Mussen & Co.....Montreal.
- Tramway Equipment**  
James Cooper.....Montreal.  
W. H. C. Mussen & Co.....Montreal.  
J. J. Gartshore.....Toronto.
- Trucks (Electric Car)**  
Baldwin Locomotive Works.....Philadelphia, Pa.  
Montreal Steel Co.....Montreal.
- Trucks (Warehouse and Express)**  
Rice Lewis & Son.....Toronto.
- Turntables**  
Dominion Bridge Co.....Montreal.
- Varnishes**  
McCaskill, Dougall & Co.....Montreal.
- Vessels**  
Polson Iron Works.....Toronto.
- Waste**  
B. J. Coghlin & Co.....Montreal.  
Rice Lewis & Son.....Toronto.  
N. L. Piper Ry. Supply Co.....Toronto.  
The Queen City Oil Co.....Toronto.
- Wheelbarrows**  
James Cooper.....Montreal.  
Rice Lewis & Son.....Toronto.
- Windmills**  
Ontario Wind Engine and Pump Co.....Toronto.
- Window Blinds**  
The Hudson's Bay Company.....
- Wines and Liquors**  
The Hudson's Bay Company.....
- Wire & Wire Rope**  
Dominion Wire Rope Co.....Montreal.  
The B. Greening Co.....Hamilton, Ont.  
Rice Lewis & Son.....Toronto.  
W. H. C. Mussen & Co.....Montreal.  
The Wire and Cable Co.....Montreal.
- Wire, Brass and Steel**  
Dominion Wire Manufacturing Co.....Montreal.
- Wire Cloth**  
The B. Greening Co.....Hamilton, Ont.

**Wire, Copper**

- Dominion Wire Manufacturing Co.....Montreal.
- E. F. Phillips Electrical Works, Ltd.....Montreal.

**Wire, Electric**

- Dominion Wire Manufacturing Co.....Montreal.
- E. F. Phillips Electrical Works, Ltd.....Montreal.
- The Wire and Cable Co.....Montreal.

**Wire Goods**

- Dominion Wire Manufacturing Co.....Montreal.

**Wire, Insulated Copper**

- E. F. Phillips Electrical Works, Ltd.....Montreal.

**Wire, Telegraph and Telephone**

- Dominion Wire Manufacturing Co.....Montreal.
- E. F. Phillips Electrical Works, Ltd.....Montreal.
- The Wire and Cable Co.....Montreal.

**Wire, Transmission and Trolley**

- Dominion Wire Manufacturing Co.....Montreal.

**Wood Screws**

- Dominion Wire Manufacturing Co.....Montreal.

**Yachts**

- Polson Iron Works.....Toronto.

The act respecting and restricting Chinese immigration into Canada, passed at the current session of the Dominion Parliament, provides that vessels carrying Chinese immigrants shall not carry more than one for every 50 tons of tonnage, under a penalty of \$200 a head; and none shall come into Canada from the U.S. or any other place in excess of the number which would have been allowed to land had the vessel bringing them come direct to Canada. It is also provided that the railway companies shall be liable for the tax of \$500 a head if the conductor in charge of any train carrying Chinese immigrants shall fail to report and hand over to the proper officer any Chinese on board his train.

Port Colborne, the Canadian town at the junction of the Welland canal and Lake Erie, seems like a strange place for the establishment of a steel plant, and yet if the United States Steel Corporation must go to Canada with new works in order to obtain and hold trade in Canada and Great Britain, Port Colborne may present as many advantages as any other place in Canada. Ore and coal can be assembled there very cheaply by lake vessels, and vessels trading down the St. Lawrence to tidewater could also load or unload at the very doors of furnaces or mills.—Marine Review.

The American Railway Engineering and Maintenance of Way Association has published, in pamphlet form, the specifications for material and workmanship for steel structures adopted at its last annual convention. Copies of the pamphlet may be obtained from the Secretary, 1562 Monadnock Block, Chicago, Ill.

In a recent discussion on a railway bill in the House of Commons, Hon. A. G. Blair, the Minister of Railway, stated that the Government would, next session, decline to approve of a clause in railway bills sanctioning a sale to other companies. The object is to do away with obtaining of charters for purely speculative purposes.

The G.T.R. has announced that early in August it will commence running trains into St. Louis, Mo., over its own line by means of the recently acquired Detroit and Toledo Shore line. The line will be operated jointly by the G.T.R. and the Toledo, St. Louis and Western Ry., under a separate board of directors.

The Montreal Street Ry. recently made arrangements for the operation of observation cars over their lines, for the convenience of tourists, and sightseers. The cabmen objected and applied to the courts for an injunction to restrain the M. S. Ry. Co. from operating the cars. The application was refused.

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

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Montreal, Que.	Ottawa, Ont.	Quebec, Que.
St. John, N.B.	Toronto, Ont.	Vancouver, B.C.
		Winnipeg, Man.

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Gen. Man. Western Canada, Toronto.

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

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

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