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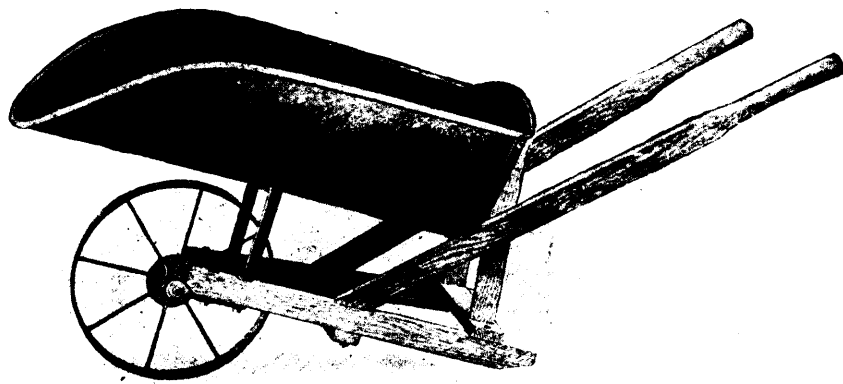
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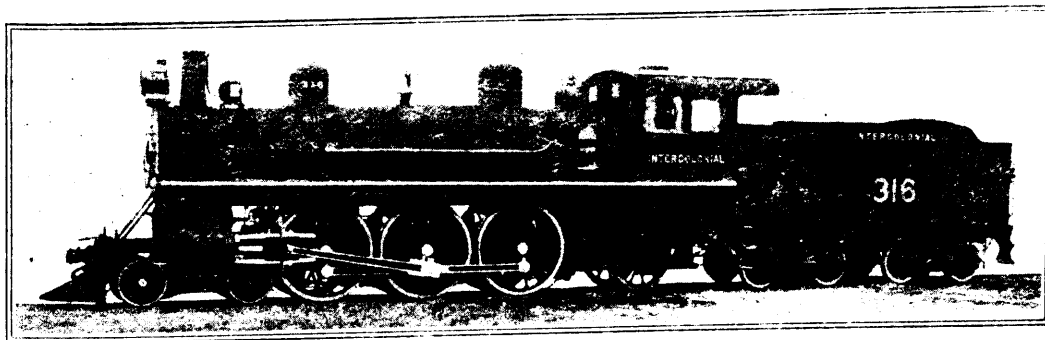


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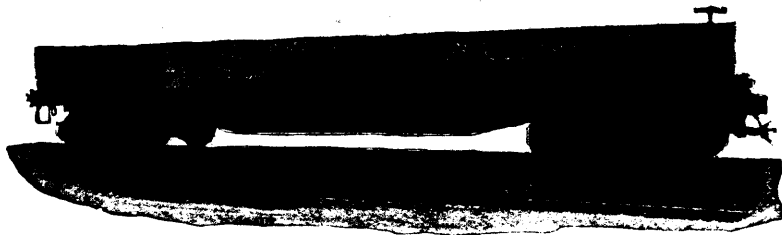
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Cartage Allowance Declared Illegal.

The Chief Railway Commissioner, A. C. Killam, K.C., gave the following judgment July 13, in the case of the Brant Milling Co. vs. the G.T.R. Co.:—This is an application to the Board for an order "allowing and instructing the G.T.R. Co. to continue" an allowance heretofore made by it to the milling company for the cost of cartage on flour and feed shipped from the company's mill to Portland, Me., and to Montreal and other eastern points in Canada.

The Brant Milling Co. is the business designation under which a milling business is carried on by A. J. Wood, at St. George, near Brantford, Ont. About 27 years ago his father, W. B. Wood, bought a small mill on the site of the present mills of the Brant Milling Co. It was a small grist mill for local business, from which no shipping was done. The nearest railway station was Harrisburg, some miles distant. Subsequently a station was established, by the name of St. George, about a mile from the mill. Shortly after the establishment of this station, W. B. Wood decided to endeavor to open up a shipping business for his products, and, learning that railway companies sometimes made allowances from their tariff rates of freight for the cost of carting the products from distant places of production, applied to the G.T.R. for such an allowance, and the company agreed to make him an allowance of 2c. per 100 lbs. on all flour and feed shipped from his mill by its line to Montreal and points east of Montreal in Canada, and to Portland for export. The business was successful, and from time to time the mill and the plant were increased and extended. At one time the railway withdrew the allowance for a few months, but subsequently, by letter dated Oct. 6, 1894, one of its officials wrote W. B. Wood that the question of allowance for cartage on the company's outward shipments of flour had been again fully considered, and that for the present and until further advised, the company would allow 2c. per 100 lbs. in lieu of cartage, on outward shipments from St. George to points on the G.T.R., Toronto and east; also to Lower Province points, and on flour for export, via Montreal or Portland in connection with the railway company's steamship lines, but refusing the allowance on certain other routes. About six years ago, W. B. Wood took his son, A. J. Wood, into partnership, and about two years ago W. B. Wood withdrew from the firm, when A. J. Wood became and still remains the sole owner of the business.

On Oct. 19, 1904, the Freight Traffic Manager of the G.T.R. wrote to the Brant Milling Co. that, in view of a recent decision of the Board of Railway Commissioners, it would not be practicable to continue the cartage allowance. The present application was

the result of this letter. The decision referred to is said to have been that reported in 3 Can. Ry. Cases, under the name of no. 124—The Manufacturers' Coal Rates Case—refusing an application of the G.T.R. to be allowed to continue, in favor of manufacturers, a difference in the rate of freight on bituminous coal, of 10c. a ton, between certain points on its line, as compared with that charged to dealers or consumers. Such a course was held by the Railway Commission to be contrary to sec. 252 of the Railway Act, 1903, requiring that railway "tolls shall always,

machinery too extensive and expensive for a merely local business. It is also claimed by the milling company that the allowance made does not nearly cover the expense to which the company is put for cartage from the railway station to the mill of grain to be ground for export, and of the product to the railway station. Evidence was given in support of these claims, but full inquiry into the question of the actual cost of the cartage, as compared with the allowance, was deferred until it should be determined whether this was material to the application.

As stated by Blackburn, J., in *G.W.R. Co. v. Sutton*, L.R. 4 H.L., at pg. 237, "At common law a person holding himself out as a common carrier of goods was not under any obligation to treat all customers equally. The obligation which the common law imposed upon him was to accept and carry all goods delivered to him for carriage according to his profession (unless he had some reasonable excuse for not doing so) on being paid a reasonable compensation for so doing; and if the carrier refused to accept such goods, an action lay against him for so refusing; and if the customer, in order to induce the carrier to perform his duty, paid, under protest, a larger sum than was reasonable, he might recover back the surplus beyond what the carrier was entitled to receive in an action for money had and received as being money extorted from him. But the fact that the carrier charged others less, though it was evidence to show that the charge was unreasonable, was no more than evidence tending that way. There was nothing in the common law to hinder a carrier from carrying for favored individuals at an unreasonably low rate, or even gratis. All that the law required was that he should not charge any more than was reasonable." Pg. 238. "I think it appears from the preamble of the 90th sec. of the Railways' Clauses Consolidation Act, 1845, that the legislature was of opinion that the changed state of things arising from the general use of railways made it expedient to impose an obligation on railway companies acting as carriers beyond what is imposed on a carrier at common law." Pg. 239. "The mode of establishing that the demand is extortionate differs in two cases. Where it is sought to prove that the charge is unreasonable, and therefore extortionate, the fact that another was charged less is only material as evidence for the jury tending to prove that the reasonable charge was the lower one. When it is sought to show that the charge is extortionate as being contrary to statutory obligation to charge equally, it is immaterial whether the charge is reasonable or not, it is enough to show that the company carried for some other person or class of persons at a lower charge during the period



M. J. BUTLER, LL.B., C.E..

Deputy Minister and Chief Engineer of Railways and Canals.

under substantially similar conditions and circumstances, be charged equally to all persons, and at the same rate," and that "no reduction or advance in any such tolls shall be made, either directly or indirectly, in favor of or against any particular person or company travelling upon or using the railway."

On behalf of the Brant Milling Co., it is claimed that this allowance is absolutely necessary to the continuance of its business and that the withdrawal of this concession renders the business of the company unprofitable and involves the practical destruction of the business and the loss of buildings and

(Continued on page 397.)

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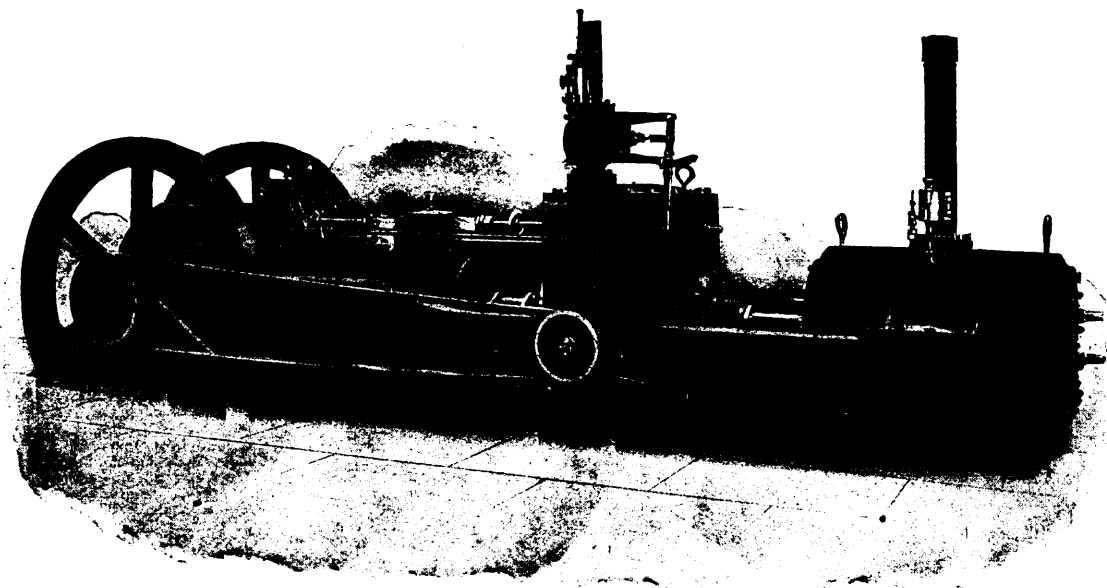
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Cartage Allowance Declared Illegal.*(Continued from page 393.)*

throughout which the party complaining was charged more under the like circumstances." As to the position at common law, see also *Oxlade v. N.E.R. Co.*, 1 C.B. (N.S.) 454, and *Baxendale v. E.C.R. Co.*, 4 C.B. (N.S.) 63.

The proviso at the end of sec. 90 of the R.C.C. Act, 1845, was: "Provided that all such tolls be at all times charged equally to all persons, and after the same rate, whether per ton, per mile, or otherwise, in respect of all passengers, and of all goods or carriages of the same description, and conveyed or propelled by a like carriage or engine, passing only over the same portion of the line of railway under the same circumstances; and no reduction or advance in any such tolls shall be made either directly or indirectly in favor of or against any particular company or person travelling upon or using the railway." In England it has been decided that the words "under the same circumstances" in this proviso refer to the conveyance or passing of the goods, etc., over the line. See *G.W.R. Co. v. Sutton*, L.R. 4 H.L. 226; *Evershed v. L. & N.W.R. Co.*, 28 Q.B.D. 254, 3 Q.B.D. 134, 3 A.C. 1029; *Denaby Main Colliery Co. v. M.S. & L.R. Co.*, 14 Q.B.D. 209, 11 A.C. 97; *Phipps v. L. & N.W.R. Co.*, (1892) 2 Q.B.D. 229.

By act of the 49th Congress of the U.S.A., 2nd Sess., Chap. 104, intitled "An Act to regulate commerce," usually known as the "Interstate Commerce Act," sec. 2, it is provided: "That if any common carrier subject to the provisions of this act shall, directly or indirectly, by any special rate, rebate, drawback, or other device, charge, demand, collect or receive from any person or persons a greater or less compensation for any service rendered, or to be rendered, in the transportation of passengers or property, subject to the provisions of this act, than it charges, demands, collects, or receives from any other person or persons for doing for him or them a like kind of traffic under substantially similar circumstances and conditions, such common carriers shall be deemed guilty of unjust discrimination, which is hereby prohibited and declared to be unlawful." Under that act a wider view seems to have been taken in the Courts of the U.S. than was taken in England under the Act of 1845, respecting the circumstances and conditions which are to be taken into consideration. See *Cincinnati, New Orleans and Texas Pacific Ry. Co. v. Interstate Commerce Commission*, 162 U.S. p. 184, 56 Fed. Rep. 925; *Interstate Commerce Commission v. Alabama Midland Ry. Co.*, 3 Am. & Eng. R. Cas. N.S. 638; *Texas & Pacific Ry. Co. v. Interstate Commerce Commission*, 162 U.S. p. 197, 5 Am. & Eng. R. Cas. N.S. 86; *Detroit, etc., R. Co. v. Interstate Commerce Commission*, 74 Fed. Rep. 803; *Interstate Commerce Commission v. Cincinnati P. & V.R. Co.*, 32 Am. & Eng. R. Cas. N.S. 581; *Laurel Cotton Mills v. Gulf & S.I.R. Co.*, 37 So. Rep. 134, 35 Am. & Eng. R. Cas. N.S. 471.

By the Canadian Railway Act, sec. 251, sub-sec. 4, "no tolls shall be charged by the company until a by-law authorizing the preparation and issue of tariffs of such tolls has been approved by the Board, nor shall the company charge, levy or collect any money for any service as a common carrier, except under the provisions of this act."

Sec. 252, sub-sec. 1. "Such tolls may be either for the whole or for any particular portions of the railway; but all such tolls shall always, under substantially similar circumstances and conditions be charged equally to all persons, and at the same rate, whether by weight, mileage or otherwise, in respect of all traffic of the same description and carried

in or upon a like kind of cars, passing over the same portion of the line of railway; and no reduction or advance in any such tolls shall be made, either directly or indirectly, in favor of or against any particular person or company travelling upon or using the railway." Sub-sec. 3. "No tolls shall be charged which unjustly discriminate between different localities."

By sec. 253, sub-sec. 1. "And no company shall make or give any undue or unreasonable preference or advantage to, or in favor of, any particular person, or company, or any particular description of traffic, in any respect whatsoever." Sub-sec. 2. "The Board may determine, as questions of fact, whether or not traffic is or has been carried under substantially similar circumstances and conditions, and whether there has, in any case, been unjust discrimination, or undue or unreasonable preference or advantage, or prejudice or disadvantage, within the meaning of this Act, or whether in any case the company has, or has not, complied with the provisions of this and the last preceding section: and may by regulation declare what shall constitute substantially similar circumstances and conditions, or unjust or unreasonable preferences, advantages, prejudices, or disadvantages within the meaning of this Act, or what shall constitute compliance or non-compliance with the provisions of this and the last preceding section."

Sec. 254, sub-sec. 1. "Whenever it is shown that any company charges one person, company or class of persons, or the persons in any district, lower tolls for the same or similar services, than they charge to other persons, companies, or class of persons, or to the persons in another district, or makes any difference in treatment in respect of such companies or persons, the burden of proving that such lower tolls or difference in treatment does not amount to an undue preference or an unjust discrimination shall lie on the company."

Sub-sec. 2. "In deciding whether a lower toll, or difference in treatment, does or does not amount to any undue preference or an unjust discrimination, the Board may consider whether such lower toll, or difference in treatment, is necessary for the purpose of securing in the interests of the public, the traffic in respect of which it is made, and whether such object cannot be attained without unduly reducing the higher tolls."

By sec. 257, sub-sec. 1, "The Board may disallow any tariff or any portion thereof which it considers to be unjust or unreasonable, or contrary to any of the provisions of this act, and may require the company, within a prescribed time, to substitute a tariff satisfactory to the Board in lieu thereof, or may prescribe other tolls in lieu of the tolls so disallowed."

By sec. 259 the tariff of tolls which the company is authorized to issue under the act is divided into three classes, namely:—"The maximum mileage tariff, herein referred to as the standard freight tariff; the reduced class or commodity tariffs, herein referred to as the special freight tariffs; and competitive tariffs."

By sec. 261, sub-sec. 1, "Every standard freight tariff shall be filed with the Board, and shall be subject to the approval of the Board." Sub-sec. 4. "When the provisions of this section have been complied with, and except in the cases of special freight and competitive tariffs, the tolls as specified in the standard freight tariff or tariffs, as the case may be, shall be the only tolls which the company is authorized to charge for the carriage of goods."

By sec. 262, sub-sec. 3, "Upon any such special tariff being so filed, the company shall, until such tariff is superseded or is disallowed by the Board, charge the toll or tolls as specified therein."

The language of sec. 252 is that "all such tolls shall always, under substantially similar circumstances and conditions be charged equally to all persons." Here, the words "under substantially similar circumstances and conditions" are connected with and qualify the words "be charged," while in the English act, as we have seen, the words "under the same circumstances" directly refer to and qualify the words "passing only over the same portion of the line of railway"; and, in the U.S. act, the words "under substantially similar circumstances and conditions" are directly connected with and appear to refer specifically to the words "transportation of a like kind of traffic."

Our act then leaves it open to consider, in reference to the making of charges, all circumstances and conditions that appear applicable, whether directly relating to the carriage or the service given by the railway company or not. Further, the direction that these tolls shall always, under substantially similar circumstances and conditions, be charged equally to all persons appears to be absolute. Preferences may be allowed if they are not unjust or unreasonable, but only when the circumstances or conditions differ substantially. The whole frame of the Act points to equality as requisite and to discrimination as forbidden, and the equality is to be preserved and the discrimination avoided, not only as between individuals, persons or companies, but also as between localities. And the company is also forbidden not merely to charge higher than the authorized tolls, but equally to charge lower ones.

So far then as the applicant company asks that the railway company be authorized or directed to make in its favor the reduction previously made upon the regular tolls laid down in its authorized tariff, the application must clearly fail. If there are circumstances or conditions warranting the charging of less or higher tolls in particular classes of cases, these must be provided for in the railway company's tariffs. In so far as the applicant company can be considered as asking the Board to make a change, in its favor alone, in the tariff of tolls to be charged for transportation of its class of products, the application again must fail. Such an act would involve a discrimination without reason as against those shipping similar goods at the same railway station and providing at their own expense for their cartage, whether for a greater or less distance, however short that distance might be, as well as against other localities.

In *Stone v. Detroit, G.H. & M.R. Co.*, 3 Inters. Com. Rep. 60, where a railway company had a tariff schedule grouping eastern points at Ionia and Grand Rapids in Michigan, Ionia being the shorter distance, and furnished free cartage at Grand Rapids and not at Ionia, it was held by the Interstate Commerce Commission of the U.S. that the free cartage at Grand Rapids was in effect a rebate and unlawful. Cooley, chairman, said: "The effect of the respondent doing the cartage at its own cost of 2c. per 100 lbs. is precisely the same that it would be if all its rates to Grand Rapids were 2c. per 100 lbs. less and the consignees were left to pay the cost of cartage. But if that were done the Ionia rates would clearly be illegal, because they would be 2c. per 100 lbs. more than the Grand Rapids rates. So if the rates to the two towns were made the same, but the Grand Rapids consignees were allowed a rebate of 2c. per 100 lbs. because of their greater distance from the railroad warehouse, the illegality would seem to be equally obvious." Morrison and Shoonmaker, Commissioners, said: "Nominally receiving a full rate with one hand and paying part of it back with the other, either in money or its equivalent in service, is plainly, whether so intended or not, a device that works an

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evasion of the law, and continues a practice that is now unlawful. . . . It results in the carrier getting less than the tariff rate for its service, and is therefore unlawful."

In *Hezel Milling Co. v. St. Louis A. & T. H.R. Co.*, 3 Inters. Com., Rep. 701, Veasey, Commissioner, said: "For the carrier to pay the larger expense of transportation of a remote shipper's merchandise to the station and not to pay the less expense of the nearer shipper's merchandise, would be the equivalent of a rebate to the former, the railroad service proper being the same to each, and at the same rate."

In the matter of divisions of joint rates and other allowances to terminal railroads, 10 Inters. Com., Rep. 661, where it appeared that a certain company transported its less than carload freight from East St. Louis to a railway station at St. Louis, and was allowed for it the same rates as were paid by the railway company for transfers by transportation companies from their depots in East St. Louis to St. Louis, the language of the Commission was: "No opinion is expressed as to whether lines leading west from St. Louis may properly apply the St. Louis rate to the station of a bona fide transfer company in East St. Louis and absorb the cost of transfer to its depot in St. Louis. Neither is an opinion expressed as to whether these same carriers might, if they saw fit by proper schedules, allow all shippers from East St. Louis a fixed sum per hundred pounds for transporting their merchandise to the receiving depot of the carrier in St. Louis. These questions are not presented by this record. So far as appears from the tariffs referred to in the statement of facts, the St. Louis rate is only applied at the depots of connecting railway lines or of transfer companies. No way is provided under these tariffs by which the shipper at East St. Louis can avoid the expense of draying his goods from his storehouse to the depot. When, therefore, the western line allows the Grant Chemical Co. 5c. per 100 lbs. for bringing its goods across the river, that being full compensation for the service, this is not only a clear violation of law as a departure from the printed tariff and the payment of a rebate, but is also a manifest discrimination in favor of that company as against its competitor who must dray his goods from the storehouse to the receiving depot in East St. Louis."

There is nothing unjust or unreasonable in a railway company charging the Brant Milling Co. the same rates as other shippers for goods transported from its St. George station to other points; in fact, it would be unreasonable for the Commission to compel a railway company to charge less to the Brant Milling Co. than to other companies for exactly the same service in order to compensate the Brant Milling Co. for any greater expense to which it might be put in hauling its goods to the station. W. B. Wood, of his own volition, purchased a mill at a considerable distance from a railway station. While he may have been induced by the cartage allowance to invest greater capital and enlarge his mill to a greater extent than the business of the locality itself warranted, no definite promise or agreement was made to or with him that the allowance would be continued for any particular period of time. On the contrary, the letter of Oct., 1894, expressly stated that the allowance was to be "for the present and until further advised." The language of Morrison and Shoonmaker, Commissioners, in *Stone v. D.G.H. & M.R. Co.*, supra, is applicable: "The fact that the practice existed prior to the law and was in use to some extent by other carriers does not aid its lawfulness. It never was general, but at most only an exceptional practice, and its lawfulness is to be determined not by former or even present use, but by the provisions of the act."

The only method by which, as it seems to me, any such allowance could hereafter be properly made by the railway company to the Brant Milling Co. would be under special tariff providing either for free cartage from the railway stations to consignees' premises, or by allowances in lieu thereof, made in such a way as to be general in character for all goods, or specified classes of goods, and framed in such a way as not to discriminate between different localities. In my opinion no order should be made upon the present application.

This judgment was concurred in by Deputy Chief Commissioner Bernier.

Interswitching at London.

The Chief Railway Commissioner, A. C. Killam, K.C., recently delivered the following judgment, Deputy Chief Commissioner Bernier concurring:—The C.P.R. Co. has applied to the Board for an order directing the G.T.R. Co. to afford proper facilities for the interchange of traffic between the said companies over the branch authorized by order of July 6, 1904, to be constructed by the G.T.R. from a point on its line between London, Ont., and St. Mary's to the C.P.R. line between London and Toronto, and fixing the amounts to be charged for such interchange of traffic and the interswitching of cars over the said branch. The lines of the two railways in the city of London before the construction of this branch were at a considerable distance apart. Their only present connection at or near London is by this branch, which is 4,800 ft. long. The railway lines now operated by the G.T.R. in and through the city of London were in existence long before the C.P.R. was constructed. The G.T.R. has extensive terminal properties at that point, including a large number of sidings to various business and manufacturing premises, and a considerable number of team tracks upon which cars are loaded or unloaded. The company has an extensive business at that point. The terminal facilities and business of the C.P.R. at London are small as compared with those of the G.T.R. By means of the branch mentioned, the railway cars can be taken to and from a large number of business premises in London to which the C.P.R. has heretofore not had direct access. The advantages which the C.P.R. can offer to the G.T.R. in this respect at and near London are very small as compared with those which this connection will afford to the C.P.R. On this account it is urged that, in the division of rates for traffic interchanged by this branch between the two companies, a very large proportion should be assigned to the G.T.R., much greater than that which would be a fair remuneration for the mere service to be rendered by the G.T.R. in the transportation of cars over this branch and its London terminal lines, and the loading and unloading of the same.

By sec. 253 of the Railway Act, 1903, "all companies shall, according to their respective powers, afford to all persons and companies all reasonable and proper facilities for the receiving, forwarding and delivering of traffic upon and from their several railways, for the interchange of traffic between their respective railways and for the return of rolling stock. . . . ; and every company which has or works a railway forming part of a continuous line of railway, with, or which intersects any other railway, or which has any terminus, station or wharf near to any terminus, station or wharf of any other railway, shall afford all due and reasonable facilities for delivering to such other railway, or for receiving from and forwarding by its railway all the traffic arriving by such other railway without any unreasonable delay, and without any such preference or advantage, or prejudice or disadvantage, as aforesaid,

and so that no obstruction is offered to the public desirous of using such railways as a continuous line of communication, and so that all reasonable accommodation, by means of the railways of the several companies, is at all times afforded to the public in that behalf; and any agreement made between any two or more companies contrary to this section shall be unlawful and null and void."

By sec. 271, "The facilities to be afforded as required by sec. 253 shall include the due and reasonable receiving, forwarding and delivering by the company, at the request of any other company, of through traffic, and in the case of goods shipped by carload of the car with the goods shipped therein, to and from the railway of such other company, at a through rate, and also the due and reasonable receiving, forwarding and delivering by the company, at the request of any person interested in through traffic, of such traffic at through rates."

Sec. 266 provides for the making of joint tariffs by agreement between companies whose railways provide a continuous route.

Sec. 267 enables the Board to require railway companies to agree upon and file a joint tariff satisfactory to the Board, or that the Board "may, by order, determine the route, fix the toll or tolls, and apportion the same among the companies interested and may determine the date when the toll or tolls so fixed shall come into effect, and traffic shall be carried by the companies in accordance therewith"; and by sub-sec. 3, "In any case where there is a dispute between companies interested as to the apportionment of a through rate in any joint tariff, the Board may apportion such rate between such companies."

With the progress of invention, new enterprises are continually supplanting or entering old ones to the ruin or loss of those interested in the former. Railways have not only directly affected in this way former modes of transportation, but they have also been instrumental in building up particular localities or enterprises at the expense of others. It has never been the policy of the law to afford compensation for losses thus occasioned. When the legislature authorizes the construction of new lines of railway in competition with those formerly existing, this is not done with a view to benefit the promoters of the new lines or to injure those interested in the old ones, but solely for the public good. The provisions of the Railway Act which require railway companies thus to interchange traffic at connecting points are introduced, not for the purpose of benefiting one railway company at the expense of another, but solely in the interest of the public. The law cannot recognize anything in the nature of a good-will of the business of either railway company thus affected for which another should give compensation. In my opinion the division between railway companies of the joint rates for tariff thus interchanged should be made upon the principle of giving reasonable compensation for the service and facilities furnished by the respective companies in respect of the particular traffic thus interchanged, and not by reference to the magnitude of the business of one company or the other at particular points or the respective advantages which each can offer to the other there, or a comparison of the loss which the one is likely to sustain with the gain likely to accrue to the other from the giving of the facilities which the law requires.

It has also been urged on behalf of the G.T.R. that the Board should deal with this question of the division of such rates or the allowance of charges for interswitching in a general way and by reference to all the points in Canada where the railways of these two companies connect. It does not appear to me that this can properly be done. I think that in each case the nature and value of the

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service to be rendered and the facilities to be used must be taken into consideration. With this in view, the Board sent its Chief Traffic Officer to look over the situation in London and give to the Board an estimate of the amounts which should be apportioned to the G.T.R. for the services to be rendered by it in the interchange of traffic over this line and the facilities which will thus be placed at the disposal of shippers and consignees of freight in London. After having examined the locality and considered the information acquired in this way, as well as that supplied by the answers of the respective companies to questions framed by the representatives of the G.T.R., the Traffic Officer has made a report, upon which, in my opinion, the Board should act.

It is clear, I think, that the G.T.R. is obliged to furnish, for the carriage over its portion of the continuous line, for the receipt and delivery of the same and for the loading and unloading of cars for the purpose, the same facilities as in respect of traffic passing over its own lines only, or transferred to or by it at distant points of the C.P.R., and the apportionment of the rates should be deemed to be made upon this basis. There should be an order requiring the G.T.R. to afford all reasonable and proper facilities for receiving, forwarding and delivering all traffic offered to it in cars wholly or partially loaded for passage over the branch in question and its lines connected therewith and of unloaded cars so offered and of freight offered to it for carriage to and over the lines of the C.P.R. by the medium of the said branch, and for the interchange by means of the said branch, of traffic between its lines and those of the C.P.R., as well as between the lines of the C.P.R. and those of other railway companies connecting with the lines of the G.T.R. The order should provide that the rates to be charged for such traffic shall be those provided for by any joint tariffs in existence between the railway companies interested, and, in the event of there being none, the rates charged by the G.T.R. between the same points, and, in the absence of either, the rates charged by the C.P.R. between the same points; also, that in the division of rates for such traffic, the G.T.R. shall be entitled to charge and receive the following tolls for switching freight and live stock traffic, in carloads, from and to the C.P.R. at or near London by means of the said branch, namely:—(a) Between the point of connection of the G.T.R. interchange track and the C.P.R. siding, and all delivery tracks and sidings owned or controlled by, or connecting with, the lines of the G.T.R. between and including the Canadian Packing Co.'s plant on the east and the London Street Ry. interchange, known as Springbank siding, on the west, except as provided in clause "b": 1c. per 100 lbs., but not less than \$5 per carload, for each complete haul in either direction; no extra charge to be made for the movement of the empty car in the opposite direction. (b) For the intermediate switching of through or joint freight and live stock traffic between the points of connection designated in clause "a" and the point of connection of the G.T.R. with the Pere Marquette Rd., \$3 per car, in either direction, regardless of the weight; no extra charge to be made for the transfer of the returning empty car. The order should also provide that all devices, such as free or assisted cartage or cartage allowances intended to equalize the facilities of the respective railways of the C.P.R. and the G.T.R., for the collection and delivery of freight at or near London, except the customary system of cartage published in the freight tariffs of the respective companies be prohibited, and that all reference, prejudice and discrimination in such cartage system be prohibited. The order should provide for its coming into force forthwith.

Freight Rate Orders.

The following order has been issued by the Board of Railway Commissioners, in the matter of the complaint of the Dominion Millers' Association, under the Railway Act, 1903, to the Board in re-rates of flour and other grain products charged by the G.T.R. and the C.P.R.:—

(1) That, so long as the companies owning or operating railway lines in Ontario find it convenient and expedient to continue the prevailing system of computing their rates to the Canadian and United States Atlantic seaboard, on freight traffic for export, on the basis of percentages of the coexistent rates from Chicago to New York, or until otherwise ordered by the Board, the said companies shall, for the station groupings and percentages previously adopted, and now in use, substitute the following station groupings, and the following maximum percentages of the Chicago to New York rates, namely:—

Group No.

1. Toronto to King, Kleinburg, Waterloo, Galt, Paris, Brantford and Jarvis, and the Niagara peninsula:	
East of Toronto to Lindsay, Lakefield, Madoc, Kingston and Sharbot Lake.....	70%
2. North and west of Group 1 to Bobcaygeon, Kinnmou, Cobocok, Sutton, Orillia, Alliston, Shelburne, Grand Valley, Fergus, Elmira St. Mary's, London, St. Thomas and Port Stanley.....	73%
3. North and west of group 2 to Haliburton, Midland, Penetanguishene, Collingwood, Proton, Listowel, Mount Forest, Harriston, Goderich and the St. Clair and Detroit rivers.....	78%
4. North and west of Group 3 to Gravenhurst, Meaford, Markdale, Durham, Elmwood, Dunkeld, Teeswater and Wingham.....	82%
5. North of Group 4 to Emsdale, Owen Sound, Wiarton, Southampton and Kincardine.....	85%
6. North of Emsdale to and including North Bay.....	90%

(2) That when, as now, the rates to Montreal on export freight traffic from Chicago, Detroit, Port Huron and intervening points are lower than the rates in effect on the same traffic, at the same time, from the same points, to New York, then at least the same difference shall exist between the export rates from Ontario points to Montreal and the rates in effect on the same traffic, at the same time, from the same points, to New York, the rates to Montreal to be the lower; and the ordinary summer class and commodity rates to Montreal (city) shall not be exceeded on export traffic, on which the said rates shall be subject to sec. 252, sub-sec. 3, of the Railway Act, 1903, as modified by sec. 268, sub-sec. 4.

(3) That, to Montreal, the rates from Toronto may, as maxima, be applied from points east as far as, and including, the Whitby-Manilla-Lindsay line, east of which line to and including the Cobourg-Hastings-Norwood line, the rates shall be 5% less than from Toronto; and east of the said Cobourg-Hastings-Norwood line to and including Belleville, Ivanhoe and Madoc, 10% less than from Toronto. From stations east of Belleville, Ivanhoe and Madoc, the rates to be graded down as in the tariffs at present in force.

(4) Transfer and harbor charges at the port of exportation shall be treated as has been, or may be, customary, and without discrimination as between ports, or between shippers or localities.

(5) That the announcement and publication of rate changes shall not be timed to the disadvantage of Canadian shippers.

(6) That the provisions of this order are to cover all export traffic, including grain and grain products.

The railway companies affected have applied for a rehearing on the alleged ground that the rates ordered are unreasonably and unnecessarily low and in some respects impractical. On Aug. 25, we were advised that the commissioners had consented to rehear the case.

Orders by the Railway Commissioners.

The following orders have been issued by the Board of Railway Commissioners:—

Granting permission to the St. Henri, Que., city council to appeal to the Supreme Court against the order of the Board dated May 1, giving the G.T.R. power to expropriate lands in Montreal belonging to St. Henri. (June 17.)

Directing the C.P.R. to instal and maintain an automatic electric bell at its crossing of the public highway at Milford, N.B., on the application of the city and county of St. John. (July 7.)

Directing the C.P.R. to erect and operate gates and maintain a day and night watchman at its crossing of Main St., Fairville, N.B., on the application of the city and county of St. John. (July 7.)

Approving of the location of the line of the Klondike Mines Ry. from Dawson City to Klondike City, Yukon Territory. Mileage 0 to mileage 0.89. (July 10.)

Authorizing the Canadian Machine Telephone Co. to carry its wires across the tracks of the G.T.R. in Peterboro, Ont., according to plans filed, and conditions appended. (July 11.)

Approving of the location of the C.P.R. for a line from Molson to St. Boniface, Man., 36 miles. (July 12.)

Authorizing the municipality of St. Andrews, Man., to construct a highway crossing at rail level of the West Selkirk branch of the C.P.R. (July 14.)

Authorizing the C.P.R. to construct a branch to the Canadian Elevator Co.'s elevator at Morris, Man. (July 14.)

Authorizing the C.P.R. to construct a branch to the Griswold Milling Co.'s elevator at Griswold, Man. (July 17.)

Authorizing a change in the location of the G.T. Pacific Ry.'s Lake Superior branch, between mileage 3.81 from Kakabeka, Ont., easterly for a distance of 11.56 miles; and from mileage 2.84 west of Kakabeka, for a distance of 31.8 miles, from the previously deposited plans. (July 17.)

Granting permission to S. D. Stevens, Hawkesbury, Ont., to maintain a telephone line across the Canada Atlantic Ry. tracks at that place on terms agreed upon. (July 17.)

Authorizing a deviation from the constructed line of the C.P.R. MacGregor branch from near mileage 37 to Varcoe, Man., near mileage 54. (July 17.)

Authorizing the C.P.R. to construct an additional track across the highway in Melancthon township, Dufferin county, Ont. (July 17.)

Approving location plan and profile of the Calgary and Edmonton Ry.'s Lacombe branch from mileage 28 to mileage 100.5, Alberta. (July 18.)

Varying the Board's order of June 21, respecting the projected branch line of the Canada Atlantic Ry. in Ottawa, by striking out paragraph 5, and substituting a new one restricting the operation of trains over the branch to between 7 a.m. and 1 p.m. (July 18.)

Authorizing the G.T.R. to construct within two years a branch line from the town plot of Brooke, Ont., to the works of the Grey and Bruce Portland Cement Co., near Brooke. (July 18.)

Approving of the location plan and profile of the C.P.R. proposed line from Wolsley to Reston, Man., 122.39 miles. (July 18.)

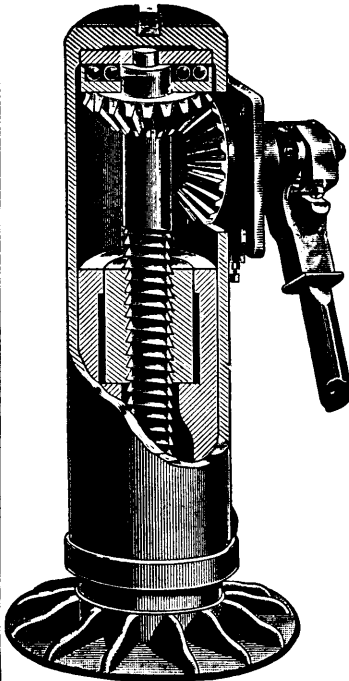
Approving location plan and profile of the Nepigon Ry. to the end of the 5th mile. (July 18.)

Approving of the connection of the G.T.R. branch line in London, Ont., with the C.P.R. there, and authorizing the opening of the branch for traffic. (July 18.)

Authorizing the Tillsonburg, Lake Erie and Pacific Ry. to construct a branch from its

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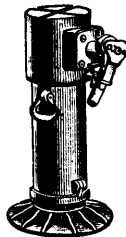
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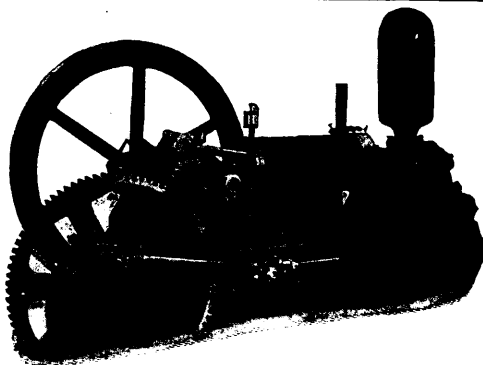
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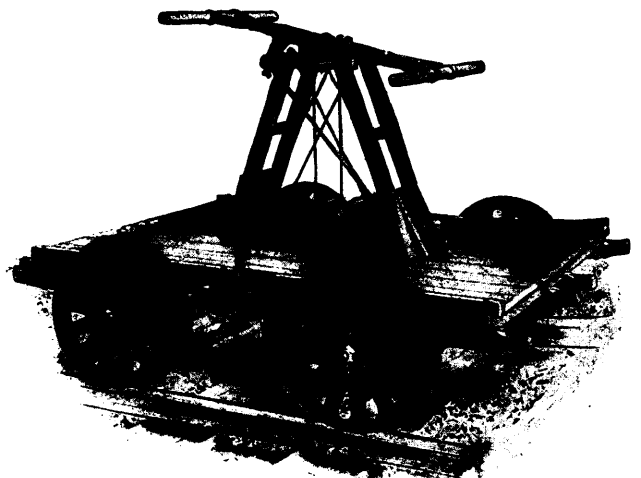
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Approving detail plans of a bridge over the Klondike River at Dawson City, Yukon Territory; and plans and specifications for standard pile and framed trestles for the Klondike Mines Ry. (July 19.)

Authorizing the Chatham, Ont., city council to carry water mains under the G.T.R. tracks in that city on terms agreed upon. (July 19.)

Authorizing the Ontario Pipe Line Co., to carry gas mains under the G.T.R. tracks in Hamilton, Ont., according to plans filed, and conditions agreed upon. (July 19.)

Approving location plan and profile for a line from Golden to Canal Flats, B.C., 103.4 miles for the Kootenay Central Ry. (July 19.)

Approving detail plans for the reconstruction of bridges on Ray, Pearl, Poulette and Garth streets, Hamilton, Ont., for the Toronto, Hamilton and Buffalo Ry., and approving of the reduction of the width of the bridges to 32 ft., 32 ft., 37 ft. and 36 ft. respectively. (July 19.)

Authorizing the James Bay Ry. to lay its tracks at grade level across the G.T.R. Sutton branch, on lot 21, con. 8, township of East Gwillimbury, York county, Ont., subject to the provision of specified safety devices by the J.B. Ry. (July 21.)

Authorizing the Lachine, Que., town council to carry two electric light wires across the G.T.R. tracks in Lachine, subject to specified conditions. (July 21.)

Authorizing the St. Catharines and Niagara Power Co. to lay gas mains under the G.T.R. in St. Catharines, Ont., as shown on plans, and on conditions specified. (July 21.)

Authorizing the G.T.R. to lay an additional track across Main St., and two additional tracks across Queen St., Palmerston, Ont., the additional crossings to be provided by watchmen. (July 21.)

Granting permission to DeW. Carter to lay gas mains under the G.T.R., at seven points of the G.T.R. in Port Colborne, Ont., according to plans filed, and subject to specified conditions. (July 22.)

Authorizing the Quebec Bridge and Ry. Co. to construct an under crossing of the public road in St. Foye parish, Que., upon certain conditions contained in a resolution passed by St. Foye municipal council, May 20. (July 25.)

Approving station sites for the James Bay Ry. (July 26.)

Approving location plan and profile of the Ontario Northern and Temagami Ry., from Sturgeon Falls, Ont., for a distance of 4.17 miles. (July 26.)

Approving station sites for the Guelph and Goderich Ry. (July 27.)

Authorizing the closing of a level crossing of the G.T.R. near Penetanguishene, Ont., the substitution thereof of an overhead bridge, and the necessary diversion of the public highway. (July 27.)

Authorizing change of location of the G.T. Pacific Ry. from mileage 40.94 west of Kakabeka, Ont., for 47.24 miles westerly, from previously deposited plans. (July 27.)

Authorizing the Bell Telephone Co. to erect telephone wires and cables across the Canada Atlantic Ry. half a mile west of Moose Creek station, Ont., according to specifications attached. Similar orders were also made respecting the crossing of the C.A.R. tracks at St. Polycarpe, Ont.; near Vars, Ont.; 75 yards west of Moose Creek, Ont., and at Casselman station, also on the application of the Bell Telephone Co. (July 28.)

The Robb Engineering Company is building two 200 horse power Robb-Mumford boilers for the Cumberland Railway & Coal Company, Springhill, N.S.

Many happy returns of the day to—

W. D. Barclay, ex-Manager, Alberta Ry. & Coal Co. and Great Falls and Canada Ry., now a contractor, St. Paul, Minn., born at Campbellton, N.B., Sept. 23, 1852.

G. T. Bell, General Passenger and Ticket Agent, G.T.R., Montreal, born there Sept. 7, 1861.

W. H. Biggar, K.C., General Solicitor, G.T.R., Montreal, born at the Carrying Place near Trenton, Ont., Sept. 19, 1852.

E. R. Bremner, Assistant General Freight Agent, Canada Atlantic Ry., Ottawa, born in Toronto, Sept. 9, 1875.

M. H. Brown, General Freight Agent, Ontario Division C.P.R., Toronto, born at Victoria Square, Ont., Sept. 2, 1866.

F. R. F. Brown, ex-Mechanical Superintendent, Intercolonial Ry., now at Montreal, born at Helensburg, Dumbartonshire, Scotland, Sept. 29, 1845.

W. G. Brownlee, Superintendent, G.T.R., Eastern Division, Toronto, born at Lawrenceville, Ill., Sept. 9, 1858.

J. R. Bruce, Traffic Auditor, Intercolonial Ry., Moncton, N.B., born at Portsoy, Banffshire, Scotland, Sept. 23, 1848.

W. B. Bulling, Assistant Freight Traffic Manager, Eastern Lines C.P.R., Toronto, born in Montreal, Sept. 16, 1858.

R. L. Burnap, General Freight Agent, Central Vermont Ry., St. Albans, Vt., born Sept. 20, 1872.

A. D. Cartwright, Secretary Board of Railway Commissioners, Ottawa, born at Kingston, Ont., Sept. 20, 1864.

G. B. Colpas, Auditor, New York and Ottawa Rd., and Ottawa & New York Ry., Ottawa, Ont., born Sept. 28, 1858.

W. F. Egg, ex-City Passenger Agent, C.P.R. at Montreal, born at Plymouth, Eng., Sept. 7, 1859.

A. W. Ecclestone, Southern Passenger Agent, Central Vermont Ry., New York, born at Hamilton, Ont., Sept. 25, 1858.

Hon. H. R. Emmerson, M.P., Minister of Railways and Canals, Ottawa, born at Maurgerville, N.B., Sept. 25, 1853.

F. A. Folger, jr., General Superintendent, Kingston & Pembroke Ry., Kingston, Ont., born Sept. 17, 1865.

C. B. Foster, District Passenger Agent, C.P.R., Toronto, born at Kingston, N.B., Sept. 30, 1871.

L. A. Hamilton, ex-Land Commissioner, C.P.R., born at Penetanguishene, Ont., Sept. 30, 1852.

L. B. Howland, President and General Manager, Irondale, Bancroft & Ottawa Ry., Irondale, Ont., born at Lambton Mills, Ont., Sept. 2, 1869.

G. R. Huntingdon, General Superintendent, Minneapolis, St. Paul & Sault Ste. Marie Ry., Minneapolis, Minn., born Sept., 1867.

J. Hone, jr., City Passenger and Freight Agent, C.P.R., Quebec, born in Montreal, Sept. 8, 1873.

J. E. Hutcheson, Superintendent, Ottawa Electric Ry., Ottawa, born at Brockville, Ont., Sept. 15, 1858.

A. C. Killam, K.C., Chairman Board of Railway Commissioners for Canada, Ottawa, born at Yarmouth, N.S., Sept. 18, 1849.

W. H. Kelson, ex-General Storekeeper, C.P.R., born at Bath, Eng., Sept. 5, 1850.

S. B. Kramer, Master of Transportation, G.T.R., Montreal, born at Maryland, Sept. 25, 1865.

R. E. Larmour, Freight Claims Agent, Pacific Division, C.P.R., Vancouver, B.C., born at Brantford, Ont., Sept. 26, 1868.

H. D. Lumsden, C.E., Chief Engineer National Trans-Continental Ry., Ottawa, born at Belhaire, Scotland, Sept. 7, 1844.

J. Bruce Macdonald, Director Niagara Navigation Co., born at Glengarry, Ont., Sept. 15, 1850.

G. A. Mountain, Engineer, Board of Railway Commissioners for Canada, Ottawa, Ont., born at Quebec, Sept. 28, 1860.

J. F. Mundle, City Freight Agent C.P.R., Montreal, born at Prescott, Ont., Sept. 20, 1857.

E. D. Nash, Assistant Superintendent Southern Division Central Vermont Ry., New London, Conn., born at Shelburne Falls, Mass., Sept. 24, 1852.

J. Osborne, General Superintendent, Eastern Division, C.P.R., Montreal, born there Sept. 19, 1861.

E. D. Parker, Assistant General Freight Agent, Minneapolis, St. Paul & Sault Ste. Marie Ry., St. Paul, Minn., born at Granville, Ohio, Sept. 20, 1839.

Jno. Paul, General Freight Agent, Niagara, St. Catharines and Toronto Ry., born in Euphrasia tp., Grey County, Ont., Sept. 13, 1858.

W. D. Robb, Superintendent of Motive Power, G.T.R., Montreal, born at Longueuil, Que., Sept. 21, 1857.

W. H. Rosevear, General Car Accountant, G.T.R., Montreal, born at Wadebridge, Cornwall, Eng., Sept. 26, 1837.

F. M. Spada, Superintendent, C.P.R., Montreal, born at Gananoque, Ont., Nov. 13, 1858.

D. Sutherland, General Freight Agent, Newfoundland Ry., St. John's, Nfld., born at Niagara Falls, Ont., Sept. 21, 1873.

W. R. Tiffin, Superintendent, Northern Division, G.T.R., Allandale, Ont., born at Hamilton, Ont., Sept., 1844.

W. Whyte, 2nd Vice-President, C.P.R., Winnipeg, Man., born at Charleston, Scotland, Sept. 15, 1843.

American Association of General Baggage Agents.—The annual convention was recently held at Cleveland, Ohio, when the following representing Canadian lines were present:—G.T.R., J. E. Quick, Toronto, Secretary-Treasurer; Intercolonial Ry., G. C. Allen, Moncton. The Secretary-Treasurer consented to act as the Association's representative at the meeting of the American Association of General Passenger and Ticket Agents in Mexico. A number of matters affecting the work of baggage agents were discussed and resolutions passed. The officers for 1904-05 were elected, J. E. Quick being re-elected Secretary-Treasurer; and Los Angeles, Cal., was selected as the meeting place for the next convention.

An advance of about 10% has been made in freight rates on the Intercolonial Ry., between non-competitive points, but, we are informed, that it is not of any great moment, as the previously existing rate was a very low one.

The Canadian Freight Association was organized Oct. 25, 1883, by 18 representatives of the then leading railways of Canada, only nine of whom now survive. John Porteous, of the G.T.R., was duly elected president, and held office for five years, 1883 to 1887 inclusive. His successors in the presidency were as follows: T. Tandy, G.T.R., 1888-1889; G. M. Bosworth, C.P.R., 1890-1891; J. Earls, G.T.R., 1892-1893; E. A. Chittenden, Central Vermont Rd., 1894; J. Burton, G.T.R., 1895; J. N. Sutherland, C.P.R., 1896; J. J. Wallace, Intercolonial Ry., 1897; C. J. Smith, Canada Atlantic Ry., 1898; J. W. Loud, G.T.R., 1899; W. B. Bulling, C.P.R., 1900; W. Woollatt, Lake Erie & Detroit River Ry., 1901; J. Pullen, G.T.R., 1902; W. P. Hinton, Canada Atlantic Ry., 1903; C. Howe, Michigan Central Rd., 1904; W. R. MacInnes, C.P.R., 1905. The Association now comprises about 90 active and 30 honorary members, representing a good majority of all the railway and inland steamship companies of Canada.



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THE CANADIAN PACIFIC RAILWAY COMPANY have 12,000,000 acres of choice farming lands for sale in Manitoba, Assiniboia, Saskatchewan and Alberta. Manitoba lands and Assiniboia lands east of third meridian, \$4.00 to \$10.00 per acre according to quality and location. Lands in South-Western Assiniboia and Southern Alberta, \$3.50 to \$8.00 per acre. Ranching lands generally \$3.50 to \$4.00 per acre. Northern Alberta and Saskatchewan lands generally \$6.00 to \$8.00 per acre. Maps showing the lands in detail will be sent free on application.

TERMS OF PAYMENT.

An actual settler may purchase not more than 640 acres, on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal with interest in nine equal instalments annually thereafter as shown in the following table:—

160 Acres at \$3.50 per acre, cash payment \$83.00, first year's interest \$28.58 and nine instalments of \$70.00	
" " 4.00 " " " 95.85, " " " 32.64 " " "	86.00
" " 4.50 " " " 107.85, " " " 36.73 " " "	90.00
" " 5.00 " " " 119.85, " " " 40.81 " " "	100.00
" " 5.50 " " " 131.80, " " " 44.89 " " "	110.00
" " 6.00 " " " 143.80, " " " 48.98 " " "	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.

F. T. GRIFFIN,
Land Commissioner C.P.R. Co., Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company has 750,000 acres of selected lands in Manitoba and Assiniboia which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

Canadian Northern Ry. Earnings, etc.

Gross earnings for June, \$388,900; expenses, \$254,200; net earnings, \$134,700 against \$297,600 gross; \$208,300 working expenses, and \$99,300 net earnings for June 30, 1904. Gross earnings for twelve months ended June 30, 1904, \$3,871,800; net earnings \$1,260,000 against \$3,124,800 gross, and \$1,006,800 net for same period 1903-04.

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

Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July. \$395,100	\$252,600	\$142,500	\$51,400+

Mileage in operation, 1,876 against 1,399.

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

Gross earnings, working expenses, net profits, increases or decreases over 1903-04, from July 1, 1904:

Earnings.	Expenses.	Net Profits.	Increase or Decrease.
July \$4,398,833.95	\$2,949,181.81	\$1,449,652.14	\$131,125.02+
Aug. 4,474,237.64	2,946,307.21	1,527,930.43	93,827.93+
Sept. 4,220,876.03	2,952,068.47	1,268,807.56	66,541.75+
Oct. 4,743,961.03	3,177,848.02	1,566,113.01	87,913.10-
Nov. 4,751,070.43	3,082,395.69	1,669,674.74	191,593.56+
Dec. 4,562,142.45	2,899,473.62	1,662,668.83	81,523.57+
Jan. 3,252,501.93	2,820,833.46	422,668.47	65,016.44+
Feb. 3,056,094.05	2,753,922.73	302,171.32	219,639.51+
Mar. 4,132,961.50	2,950,134.46	1,182,827.04	331,972.76+
April 4,229,144.59	2,697,338.29	1,531,806.21	119,273.61+
May. 4,229,131.47	2,841,196.59	1,387,934.88	3,630.10-
June 4,430,026.37	2,927,933.44	1,502,092.93	53,021.48+

\$50,481,882.25 \$35,006,793.79 \$15,475,088.46 \$1,261,983.43 + Increase. - Decrease.

Approximate earnings for July, \$4,548,000 against \$4,316,000 for July, 1904.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for June, \$255,036.05; net earnings, \$63,325.06 against \$228,274.76 gross and \$74,705.17 net for June, 1904. Net earnings for twelve months ended June 30, 1904, \$854,330.93, against \$777,155.95 for same period, 1903-04. Approximate earnings for July \$254,311 against \$235,761 for July, 1904.

MINERAL RANGE RY.—Approximate earnings for July, \$59,559, against \$56,134 for July, 1904.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for June, \$790,849.21; net earnings, \$376,323.16, against \$651,828.70 gross and \$317,307.80 net for June, 1904. Net earnings for twelve months ended June 30, \$4,214,014.25 against \$3,246,717 for same period 1903-04. Approximate earnings for July, \$746,541 against \$697,744 for July, 1904.

Canadian Pacific Railway Land Sales.

July.	Acres.		Amount.	
	1905.	1904.	1905.	1904.
July.	58,477.37	36,425.75	\$304,795.23	\$117,473.94

Grand Trunk Ry. Earnings, Expenses, etc.

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

	1905.	1904.	Increase.	Decrease.
Jan.	\$2,556,340	\$2,253,378	\$302,962	....
Feb.	2,163,683	1,649,525	514,158	....
Mar.	2,911,267	2,649,779	261,488	....
April.	2,850,125	2,838,946	11,179	....
May.	2,969,486	3,119,126	....	149,640
June.	3,063,836	3,013,149	50,687	....
	\$16,514,737	\$15,523,993	\$990,734	....

The following has been issued by the London, Eng., office:—

Subject to audit, the accounts for the half-year to June 30, show the following results:

Gross receipts.....	£2,729,000
Working expenses.....	1,923,400
Net receipts.....	£805,600
Net revenue charges for the half year, less credits.....	510,200
Balance.....	£295,400
Deduct Detroit, Grand Haven and Milwaukee Ry. deficiency for the half-year.....	10,400
Surplus.....	£285,000

This surplus of £285,000 added to the balance of £6,600 from D. C., 1904, makes a total amount of £291,600 available for dividend, which will admit of the payment of the dividends for the half-year on the 4% guaranteed stock and first and second preference stocks, leaving a balance of about £7,400 to be carried forward. The accounts of the Grand Trunk Western Ry. for the year ended June 30, show a surplus sufficient to provide for the interest on the first mortgage bonds, and leave a balance of about £2,800.

TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from July 1 to July 31:	1905.		1904.		Increase.	Decrease.
	1905.	1904.	1905.	1904.		
Grand Trunk.....	£519,791	£517,491	£2,300	....	....	....
G. T. Western.....	81,252	74,878	6,374	....	....	....
D. H. & M.....	28,512	26,771	1,741	....	....	....
Total.....	£629,555	£619,140	£10,415	....	....	....

RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alaska Central Ry.—This line is projected from Seward, at the head of Resurrection Bay, in the Kenai peninsula, about the middle of the southern coast of Alaska, northerly to the Tanana River, at or near Fairbanks. The total distance is about 460 miles, and it is intended to construct a branch from the head of Knik Arm, about 120 miles from Seward, to the coal fields in the valley of the Matanuska River, about 15 miles. The completion of the line to Knik Arm will give access to the valley of the Susitna River and will afford an easy route to all points in central Alaska. The line is being constructed to standard gauge and in a substantial manner. The line has a maximum gradient of 2%, and the track is being laid with new 65-lb. steel. At the time the present directorate was organized about 30 miles of line had been partially completed; this has been almost entirely reconstructed, and is being operated. Supplies, including rails, are on the ground or in transit for an additional 60 miles of line, which it is hoped to complete this season. The work is being done under the charge of the company's engineers, contracts being let as required. According to the latest advices about 1,500 men are employed on construction work. The company has acquired 380 acres of land on Resurrection Bay, upon which it is proposed to lay out large terminal yard, freight sheds, round house, shops, etc. It also owns the docks at Seward, at which vessels drawing 30 ft. of water can lie. A commodious office building is being erected at Seward at a cost of \$50,000, and houses are being built for the engineers and heads of departments by the company. The preliminary surveys have been completed on the entire route to the Tanana River, which is a tributary of the Yukon River, and navigable for light draught steamers. Location surveys have been completed for 50 miles ahead of the construction gangs, and eight engineering parties are in the field engaged on further location.

The executive offices of the company are at 108 La Salle St., Chicago, Ill., the purchasing and accounting departments at Seattle, Wash., and the engineering and construction departments at Seward, Alaska. Following are the officers and directors:—President, A. C. Frost, Chicago, Ill.; Vice-President, H. C. Osborne, Toronto; Secretary, J. A. Haight, Seattle, Wash.; Treasurer, G. L. Francis, Toronto; Chief Engineer and General Manager, W. B. Poland, late Superintendent Baltimore and Ohio Southwestern Rd., Seward, Alaska; other directors: G. Turner, O. G. Larabee, Spokane, Wash.; J. E. Ballaine, Seattle, Wash.; F. R. Thompson, Montreal. The surveys are in charge of G. A. Kyle, formerly District Engineer G.T. Pacific Ry., Winnipeg, Man.; the construction work is under J. B. Cameron, formerly of the Baltimore and Ohio Rd.; F. Brown, formerly Assistant Purchasing Agent Baltimore and Ohio Rd., is Purchasing Agent, and J. R. VanCleve, heretofore Master Mechanic White Pass and Yukon Ry., is Master Mechanic. (Aug., pg. 349.)

Atlantic, Quebec and Western Ry.—A trust deed dated June 26, between the A., Q. and W. Ry. Co., the New Canadian Co., and J. M. Sing, of Liverpool, Eng., Hon. C. M. Knatchbull-Hugessen, and G. Elliott, of London, Eng., securing an issue of 5% bonds of the A., Q. and W. Ry. Co., on account of construction has been filed with the Secretary of State at Ottawa. (June, pg. 241.)

Cape Breton Coal, Iron and Ry. Co.—The company has completed its line from Homeville Junction, on the Sydney and Louisburg Ry., to the collieries at Broughton, N.S., about three miles. The engineers in charge of construction are — Henniger, of Sydney, and — Case, at Broughton, and the contractors are T. Cozzolino, and McDonald and Ferguson. It is proposed to extend the line to Sydney and Louisburg, but nothing has been definitely decided as to when this will be done. Coal shipping piers will be erected, probably at Louisburg. In this connection representatives of the company have looked over the land acquired at Louisburg by the Cape Breton Ry., and it is considered very likely that that company's line from Point Tupper to St. Peter's, and the charter rights to extend the line from St. Peter's to Louisburg will be purchased. Negotiations are in progress with the Cape Breton Ry. Co. for the purchase.

At Broughton the company is laying out a town site, and erecting a summer hotel. The collieries are being opened up by means of three slopes, with the object of securing an output of 1,000 tons a day. A steel bank-head with steel carhaul are being constructed. The machinery includes compressors, Babcock and Wilcox boilers, etc. An electric light plant is also being installed. (Aug., pg. 349.)

Detroit River Tunnel.—The Canada and Michigan Bridge and Tunnel Co. has been amalgamated with the Michigan and Canada Bridge and Tunnel Co., under the name of the Detroit River Tunnel Co. The officers and directors of the new company are: President, W. H. Newman, New York; Vice-President, H. B. Ledyard, Detroit, Mich.; Treasurer, C. F. Cox, New York; other directors: W. K. and F. W. Vanderbilt, C. M. Depew, S. F. Barger, H. McK. Twombly, H. Russel, of New York; N. Kingsmill, K.C., W. P. Torrance, of Toronto. Secretary, D. W. Pardee, New York.

The following circular has been issued in connection with the construction of the tunnel, by W. H. Newman, President Michigan Central Rd.:—The construction of the Detroit tunnel line from Windsor, Ont., to West Detroit yard, Mich., including the electrification thereof, is placed in charge of an advisory board of engineers consisting of W. J. Wilgus, Vice-President of the New York Central and Hudson River Rd.; H. Carson, Consulting Engineer, and W. S. Kinneer, Chief Engineer of the Tunnel Co. The Chief Engineer will be in direct charge of construction, reporting to H. B. Ledyard, Chairman of the Board of Directors, on executive and financial matters, and to the board of advisory engineers as to plans, specifications and methods of doing the work. (July, pg. 281.)

Esquimalt and Nanaimo Ry.—We are advised that at the present time the company has a number of survey parties at work making an examination of the land grant, but that until their reports are received it is impossible to say what extensions it will be desirable to make to provide for its development. At the present time the company has not any engineering parties in the field making surveys for proposed extensions of the line. This work is under the supervision of J. S. Dennis, C.P.R. Land Commissioner for British Columbia. (Aug., pg. 349.)

Guelph and Goderich Ry.—The Board of Railway Commissioners has approved of station sites at the following points: Weisenburg, mileage 5.7 from Guelph; Elmira, mileage 16; Wallenstein, mileage 20; Linwood, mileage 24.8; Millbank, mileage 30.2; Milverton, mileage 34.5; Mornington, mileage 37.3; Moncrieff, mileage 43.4; Walton, mileage 56; Blyth, mileage 63.6; Auburn, mileage 69; Colborne, mileage 74.5.

Tracklaying has been commenced at the Guelph end of the line, and rails have been

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THE PINTSCH LIGHT AWARDED THE GRAND PRIZE ST. LOUIS, 1904

In the United States 170 railroads have equipped over 25,500 cars with Pintsch Light. In the World more than 135,000 cars, 6,000 locomotives and 1,800 buoys are using Pintsch Light, the test of experience having proven it the most economical, safe and reliable system for car lighting. Pintsch Gas Buoys adopted as standard by the United States Lighthouse Board. Highest awards taken at World's Expositions at Moscow, Vienna, St. Petersburg, London, Berlin, Paris, Chicago, Atlanta, Buffalo, and now St. Louis.

SAFETY HEATING SYSTEMS RECEIVED THE HIGHEST AWARD

Practical service for the past 18 years has demonstrated the reliability, efficiency and adaptability of the Safety Systems of Direct Steam and Hot Water Heating which are being applied in large quantities to railroad equipment. Straightport couplers. Automatic Steam Traps. 140 Railroads are using these devices, applied on 16,000 cars. Standard on Pullman cars.

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delivered at Goderich for that end of the line. A Goderich press representative recently went over the line from that end as far as the Manchester bridge, and reports the grading nearly all completed, and the bridge work well advanced. (Aug., pg. 351.)

Halifax and Southwestern Ry.—A plan and description of the site and side elevation of a proposed fixed railway bridge at the crossing of the Jordan River, Shelburne, N.S., has been filed, and application has been made for an Order-in-Council approving of the plan and location. (July, pg. 281.)

Intercolonial Ry.—A contract has been let to W. Kitchen, Fredericton, N.B., for the erection of two new bridges and the construction of a short piece of line to do away with some curves near St. Leonards Jct., and Mitchell, Que. It is expected that the work will be completed by the fall.

In connection with the projected work upon the line between Indiantown and Blackville, N.B., with a view of putting it in order for operation, we are advised that nothing has so far been done. The sum of \$25,000 has been voted by Parliament for the work.

An extension will be built on the north side of the existing train shed at St. John, N.B., to take in another track, making four under cover, instead of three as at present. This extension will be of steel columns resting on concrete piers, spaced about 16 ft. centres, the sides being left open. Every other window in the existing wall will be replaced by doors, providing access to and from cars standing on track in the extension with main building. The existing baggage room on the south side of the train house will be enlarged, making it twice its present capacity; the new addition will be carried up two stories, the upper floor being fitted up for the accommodation of the railway employees. A contract has been let for the work to A. R. Clark.

Tenders are under consideration for the construction of a cribwork quay wall at Halifax, N.S., and for grading, etc. on the Sydney Mines branch. (Aug., pg. 351.)

James Bay Ry.—The Board of Railway Commissioners has approved of sites for stations at the following points: Duncan (York Mills), mileage 10 from Toronto; Richmond Hill, mileage 20; Gormley, mileage 25.75; Vandorf, mileage 30; Pine Orchard, mileage 35; Mount Albert, mileage 40; Zephyr, mileage 44; Pefferlaw, mileage 54.75.

A contract for the grading from Parry Sound to French River, Ont., about 70 miles, has been let to Angus Sinclair, and it is expected to do the work as far as the Magnetawan River this year. The Northern Construction Co. has the contract for the grading from the French River to Sudbury. The contract for the tracklaying from Parry Sound to Sudbury has been let to Angus Sinclair. (Aug., pg. 351.)

Klondike Mines Ry.—A mortgage deed to J. Carlisle and R. A. Lowther, securing an issue of bonds at the rate of \$30,000 a mile in respect of the first section of the K.M. Ry., from Dawson City to Grand Forks, Yukon Territory, has been filed with Secretary of State at Ottawa.

New Brunswick Coal and Ry. Co.—Two tenders were received by the Commissioners for the reconstruction of the bridges and trestles, and making improvements on the permanent way between Norton and Chipman, N.B., but neither fully complied with the terms. The Commissioners have entered into negotiations with the contractors tendering, and it is expected that some arrangement will be reached. Included in the work to be done is the provision and erection of 1,200 rods of Page woven wire fencing, 13,500 new ties, the construction of half a mile of spur track near Belle Isle,

the provision of 30 new cattle-guards, the remodelling and strengthening of trestles, the reconstruction of culverts, and the ballasting of the entire line. The principal bridge work includes the rebuilding of abutments of Kennebecasis bridge and the provision of two steel Howe truss spans; Washademoak bridge, 1,030 ft. in length, is to be reconstructed, 660 ft. of the trestle work is to be filled with earth, the remaining 150 ft. of trestle to be strengthened, and the two 74 and 146 ft. truss spans to be torn down and replaced; Cumberland Bay bridge, 340 ft. in length, is also to be reconstructed, 188 ft. of trestle work to be earth filled, two new trestles 52 and 54 ft. each to be constructed, and a new steel truss span of 50 ft. to be erected on new piers; Coal Creek bridge, 585 ft. in length, to be reconstructed with 518 ft. of trestle work and a new 67 ft. steel truss span; the Elliott trestle, 125 ft. in length, is to be reconstructed. We were advised Aug. 16, that the Commissioners had awarded the contract to Brown Bros. The work will be done under the charge of A. R. Wetmore, Provincial Engineer. The line, we are informed, has already branches to ten coal mines, and it is hoped within the next twelve months to have branches to other mines which are being opened up. The output of coal from the mines already opened up is considerable and, the Commissioners say, quite warrants the expenditure proposed by the Government. W. C. Hunter continues as Manager of the line. (Aug., pg. 351.)

Nova Scotia Eastern Ry.—A prospectus was recently issued in London, Eng., offering for public subscription £940,000 of 5% first mortgage gold bonds of £100 at £92.10s., redeemable in 1955, the company having the option of redemption at any time, on giving six months' notice at £105. The redemption of the whole of the bonds at maturity is provided for by a sinking fund policy with the Norwich Union Life Assurance Co., subject to an annual premium of 17s. 3d.%. The bonds are secured by a mortgage on the projected N.S.E. Ry. from Dartmouth to the Strait of Canso, with a branch to Country Harbor, N.S., about 236 miles. The Canadian promoters are to receive £50,000 in cash as consideration for their having obtained the charter, and the Government subsidies, and recoup them their expenditure on engineering surveys and other services, estimated to already exceed £40,000. In addition they are to receive an amount of fully paid stock, and upon completion of the line £50,000 by an allotment of bonds, calculated at the issue price of £92 10s. The officers and directors are: President, J. R. Stratton, Peterboro', Ont.; Vice-President, J. W. Grier, Montreal; other directors: J. White, Orillia, Ont.; W. C. Trotter, St. John's, Que.; C. Klopfer, Guelph, Ont.; H. K. Fitzpatrick, New Glasgow, N.S.; T. P. Coffee, Toronto; E. M. Macdonald, Pictou, N.S. A London board of directors is to be organized on completion of the bond issue.

The N.S.E. Ry. was incorporated by the N.S. Legislature in 1901, and amending acts have been passed from time to time. The original proposition was to construct a line from Halifax to the Strait of Canso, and there was also power to construct a bridge or tunnel at the Straits. By one of the amending acts the Musquodoboit Valley Ry. project was amalgamated. Under these several acts the company surveyed a line of railway with branches aggregating 236 miles in length, and contracts for its construction have been made with the Provincial and the Dominion Governments. The Provincial subsidy is \$5,000 a mile, and the Dominion subsidy is at the rate of \$3,200 a mile, but may be increased to \$6,400 a mile if the cost of construction is over certain figures. A free right of way is provided for, power is also given to use materials from Government lands adjoining without charge,

and other rights, which may or may not be of value, are given by the act. The total cost of constructing the line, including \$1,500 a mile for rolling stock, is estimated at \$23,000 a mile, and J. W. Grier, Montreal, and T. P. Coffee, Toronto (now members of the Canadian Board of Directors), have stated that they are prepared to retire from the board and take a contract to complete the line at that figure. The prospectus stated that the plans had been revised by P. S. Archibald, C.E., Moncton, N.B., and H. Donkin, Sydney, N.S. The former estimated the earnings of the line at \$4,000 a mile, and another estimate placed the total earnings at £355,000. Deducting working expenses at 66½% of the gross earnings, the net earnings would be £64,746 on Mr. Archibald's estimate and £118,333 on the second estimate. (Aug., pg. 351.)

Orford Mountain Ry.—An extension from Eastman south to Potton Springs, Que., 12 miles, with stations at Bolton Centre, South Bolton and Potton Springs, was completed in 1905. A regular daily train service was put in operation over this piece of line June 5. Construction was started in Nov. 1904, on an extension from Kingsbury north-erly to Windsor Mills, about 10 miles, but work was closed down Jan. 15, when about eight miles had been graded and 3½ miles of track laid. Construction was resumed April 15, and it is expected that the work will be fully completed by Sept. 30. On the branch from a point between Lawrenceville and Eastman to Lake Bonella, four miles have been completed, and it is expected to complete the remaining mile this season. R. K. Harris is Chief Engineer, and the company is doing the work itself.

Prince Edward Island Ry.—The reconnaissance survey recently made for the proposed branch line between Kensington and Stanley Bridge, P.E.I., was made by W. B. MacKenzie, Chief Engineer of the Government railways.

The branch line between Montague and Cardigan, P.E.I., which is being constructed by W. Kitchen, is expected to be completed early in Oct. Four spans of the superstructure of the Hillsboro' River bridge have been erected from the north end and seven from the south end, and the swing span is in course of erection. It is hoped to have the bridge completed in Sept. Tenders are being asked for the construction of a telegraph line on the Murray Harbor branch.

The line in Charlottetown has been extended for about half a mile from the yards to the Marine Department's yard.

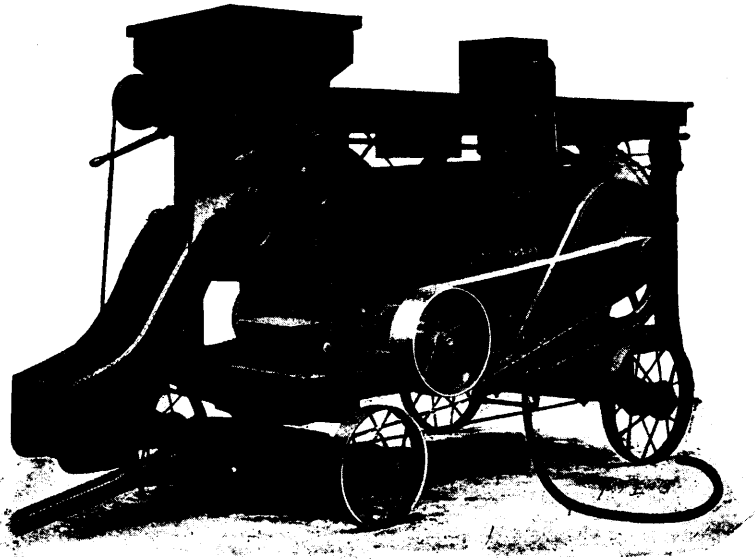
An elevated water tank service is to be installed at eight stations covering the main line. The tanks will have a capacity of 25,000 galls. each. An addition is being built to the wharf at Georgetown. (Aug., pg. 351.)

Quebec and Lake Huron Ry.—We are advised that the following are officers and directors for the current year:—President, Hon. A. Turgeon; Vice-President, Sir A. P. Pelletier; Secretary, J. C. Langelier; other directors: Hon. R. G. Carroll, Hon. C. A. P. Landry, Hon. C. Langelier, Hon. J. Tessier, R. Larue. The trustees for the company's bonds are F. Langelier and P. B. Dumolin. The financial affairs of the company, we are advised, are arranged, and R. J. Campbell, of New York, is the contractor for the line, which it is proposed to construct from Quebec to a point on Georgian Bay, near the mouth of French River. (Feb., pg. 51.)

Standard Coal and Ry. Co.—The survey referred to is being made by L. Lynn, and is expected to be completed by Sept. 20. (Aug., pg. 351.)

Temiskaming and Northern Ontario Ry.—The party which is to make an exploration survey from Lake Abitibi to James Bay, started from the first named point July 15.

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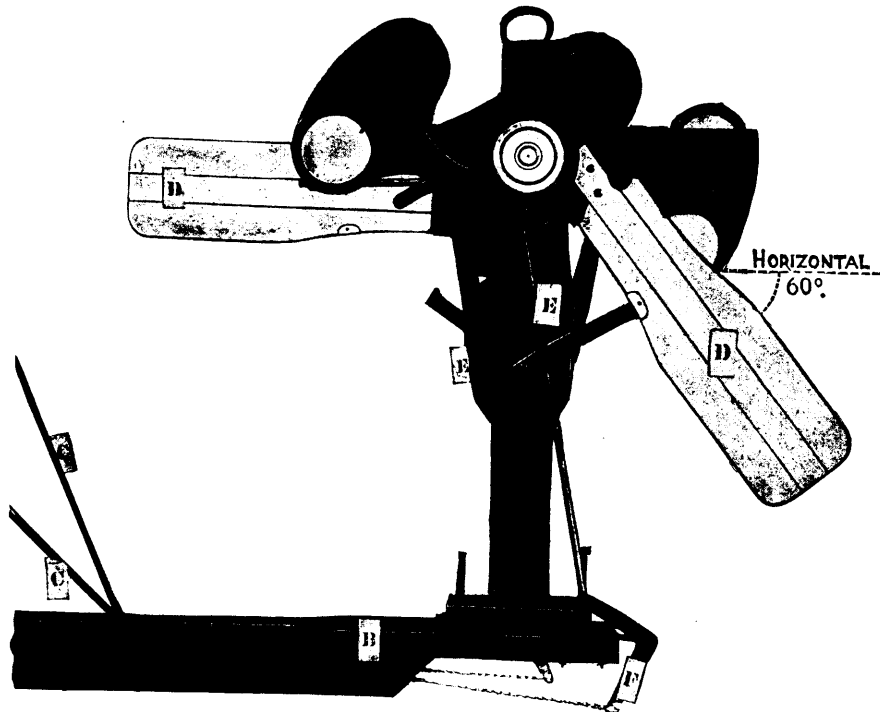
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E. A. Sullivan is engineer in charge, and A. G. W. Wilson, of Montreal, is geologist. It is expected that the exploration party will be absent about five months. A recent report states that the parties are experiencing considerable difficulty in their work on account of forest fires, and that one party had been burned out twice.

The proposition to electrify the section of the line from North Bay to New Liskeard, Ont., is under consideration by the Government. It is understood that the recommendation is that the single phase system be adopted. B. S. Arnold, of Chicago, is the consulting electrical engineer, and Chase and Richards, electrical engineers, Toronto, made the reports under his direction. (Aug., pg. 351.)

Tillsonburg, Lake Erie and Pacific Ry.—The Board of Railway Commissioners has approved of plans for the extension of this line from the present southerly terminus at Port Burwell, Ont., across Otter Creek to the southerly limits of the company's property at that point.

The negotiations in progress for the extension of the line from Ingersoll, through Embro and St. Mary's to Stratford, where it will join a projected branch of the Guelph and Goderich Ry., from Conestogo, are progressing satisfactorily. The St. Mary's town council has decided to submit a by-law for the provision of a \$35,000 bonus. The Stratford joint railway committee has completed an agreement with the C.P.R., which controls the T.L.E. and P. Ry., as well as the G. and G. Ry., respecting the line between Stratford and Conestogo. This provides for a \$30,000 bonus for the right-of-way in Stratford, the line to be completed by Dec., 1906, and that to Ingersoll by Dec., 1907. (Aug., pg. 353.)

Toronto, Hamilton and Buffalo Ry.—The Board of Railway Commissioners has approved of plans for the reconstruction of four bridges in Hamilton, Ont., subject to the Hamilton city council approving of the present width being reduced.

The Canadian Westinghouse Co., Hamilton, Ont., has recently issued the following booklets descriptive of its manufactures:—Type B Westinghouse integrating Wattmeters; Westinghouse multiple-alternating arc lamp system; Instructions for operating Westinghouse portable lamp testing Wattmeter; Instructions for the installation and operation of Westinghouse type 167a auto-starters for constant speed induction motors; Instructions for the installation and use of Westinghouse multiple alternating current arc lamps; Instructions for the installation and operation of type R motors; Direct current engine type generators, 125, 250 and 550 volts; Westinghouse regulating and reversing controllers.

The Delaware & Hudson Co. recently had as its guests a party of some 20 ticket agents and others principally from the Montreal district, to show them the picturesque scenery of Lakes Champlain and George. The party left Montreal on a Saturday evening for Plattsburg, N.Y., where they slept on the S.S. Vermont, on which they made the trip through Lake Champlain the following morning, reaching Fort Ticonderoga shortly after noon. They then went by train to Baldwin and took the S.S. Sagamore through Lake George, travelling by special car from Lake George station to Saratoga, thence by electric car to Lake Saratoga for dinner. They returned to Montreal by special compartment car tendered by the Pullman Co. General Passenger Agent Heard met the party at Plattsburg and accompanied them to Saratoga Lake. The company's Canadian Passenger Agent, W. H. Henry, went with them throughout the trip.

Railway Equipment Notes.

The Dominion Bridge Co. has placed an order for a locomotive in the U.S.

The Cumberland Ry. and Coal Co. is at present in the market for a consolidation locomotive.

The G.T.R. recently added to its equipment 28 cabooses, which were constructed at its Montreal shops.

The Canadian Northern Ry., we were advised Aug. 17, was not in the market for any additional rolling stock.

The Intercolonial Ry. has received two new dining cars from the United States. They are being used on the Ocean Limited.

The G.T.R. has completed at its London, Ont., shops, two mail cars for the Toronto-North Bay run. The cars are 50 ft. in length.

The Cape Breton Coal, Iron and Ry. Co., Broughton, N.S., will shortly be in the market for locomotives, coal cars and other equipment.

The Dominion Coal Co., Sydney, N.S., has received a number of steel coal cars of 100,000 lbs. capacity. The total number ordered is 150.

The Temiskaming and Northern Ontario Ry. Commission has placed an order for three workmen's cars with the Crossen Car Manufacturing Co., Cobourg, Ont.

F. H. Hopkins & Co., Montreal, are having built by Rhodes, Curry & Co., Amherst, N.S., five Rodger Ballast Hart convertible cars, for the Winnipeg City Council.

The Reid Newfoundland Co. is building at St. John's, Nfld., one first-class passenger coach which will be sheathed with copper; three second-class coaches and one rotary snow plow.

The New Brunswick Coal and Ry. Co. will shortly be in the market for additional rolling stock, locomotives, snow plows, etc. Hon. G. G. King and G. McAvity are Commissioners in charge for the New Brunswick Government.

Record of Recent Construction, no. 51, of the Baldwin Locomotive Works, Philadelphia, Pa., contains illustrations and descriptions of a number of locomotives recently completed by it; and no. 52 deals with forged and rolled steel wheels.

T. Drummond, Vice-President Lake Superior Corporation, recently stated that the Algoma Central Ry. car shops at Sault Ste. Marie, Ont., were ready for opening at any time sufficient business offered. The works have a capacity of eight completed freight cars a day.

The C.P.R. between July 17 and Aug. 16, placed orders for the following:—10 switching locomotives, five first-class cars, eight baggage and mail cars, and three flangers, at its Angus shops, Montreal; 36 vans at its shops, Farnham, Que.; and two pile drivers in the United States.

The investigation into the cause of the explosion of the boiler of the C.P.R. locomotive, 1143, at Kincorth, Man., showed that the accident was caused by the crown sheet coming down, due to mud. This was caused by the very muddy condition of water in a water tank resulting from a cloud burst. The locomotive was built at Richmond, Va., June, 1900.

The Intercolonial Ry. received the following additional equipment between June 15 and Aug. 19:—Two dining and four sleeping cars from the United States; three first-class cars and 74 box cars from Rhodes, Curry & Co., Amherst, N.S.; four second-class sleeping cars, four postal cars and four baggage cars from the Crossen Car Manufacturing Co., Cobourg, Ont. Six box cars have also been received to replace equipment.

The C.P.R. between July 17 and Aug. 16, received the following rolling stock:—Four freight locomotives, one first-class car, one mail and express car, and 525 box cars from its Angus shops, Montreal; four freight locomotives from the Canadian Locomotive Co., Kingston, Ont.; 14 freight locomotives from the Locomotive and Machine Co., of Montreal; five vans from its shops at Farnham, Que., and one pile driver from the U.S.

The general specifications for the 10 switching engines for which the C.P.R. has placed an order at its Angus shops, Montreal, are:—

TYPE.—0-6-0. Simple.
WEIGHT.—On drivers, 126,000 lbs.; total in working order, 126,000 lbs.
CYLINDERS.—18 ins. by 26 ins.
BOILER.—Type, radial stayed; material, steel, C.P.R. special; working pressure, 200 lbs.; diameter at smallest ring, 5 ft. 2½ ins.
FIREBOX.—Length, 8 ft. 0½ in.; width, 42½ ins.; depth, 65½ ins., front, 60½ ins.
TUBES.—No. 234; diameter, 2 in.; length, 11 ft. 5½ ins.
HEATING SURFACE.—Tubes, 1,406 sq. ft.; firebox, 138 sq. ft.; total, 1,544 sq. ft.
GRATE SURFACE.—26 sq. ft.
DRIVING WHEELS.—Diameter, 52 ins.; centres cast steel.
TENDER.—Style, slope back; water capacity, 3,500 gals.; coal 5 tons.
SPECIAL EQUIPMENT.—C. P. R. blow-off valves, brakeshoes, journal bearings and headlights; Simplex tender brake-beams and Westinghouse air-brakes.

The Northern Construction Co. has been incorporated under the Dominion Companies' Act, with a capital of \$100,000 and offices at Montreal, for the purpose of carrying on a general contracting business. E. M. O'Brien, J. B. Ross, E. C. Perkins, G. A. Lafontaine, W. R. Staveley, of Montreal, are the provisional directors.

By an amendment to the Government Railways' Act passed last session of the Dominion Parliament, the Government has secured running rights over the G.T.R. between Montreal and Coteau Junction, and over the line of the Canada Atlantic Ry., to Depot harbor, as well as over any future extensions or branches of the C.A. Ry. The Government railway may transact a through freight and passenger business, and a local passenger business, and the terms upon which such business shall be done, as well as the tariffs, shall be decided upon by, and subject to the approval of the Railway Commissioners.

The N. J. Holden Co. has been incorporated under the Dominion Companies' Act, with a capital of \$200,000 and offices at Montreal, to manufacture and sell railway passenger, freight and street cars; car trucks, car wheels and any and all parts of cars, car trucks and all the accessories thereto, and all car and railway equipments, appliances and specialties; to contract for building railways and for other purposes; and in connection with the same to acquire the business now carried on by N. J. Holden & Co., Montreal. The formal incorporators are: L. Johnson, clerk; W. Palmer, clerk; P. A. Masse, engineer; C. Bethell, machinist; Miss A. L. DeGuire, stenographer, Montreal.

At the last session of the Dominion Parliament an act was passed amending the act respecting an arbitration between the Government as owning the Intercolonial Ry., and the G.T.R., providing that the arbitrators or the majority of them may make awards from time to time as may appear to be necessary, upon the various agreements referred to them, and that such awards may be made at any time within three months after the final hearing of evidence and arguments upon the point involved. It is also provided that the present, or any future arbitrators, shall not be incapacitated from acting in these matters in the event of their being appointed members of the Railway Commission.

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MAINLY ABOUT PEOPLE.

A. M. Bell, father of A. G. Bell, inventor of the telephone, died at Washington, D.C., Aug. 7, aged 86.

John, the seven-year-old son of T. F. Patterson, C.P.R. locomotive foreman at Kenora, Ont., was drowned there, Aug. 11.

The estate of the late John Bell, K.C., for many years Chief Solicitor to the G.T.R., has been valued for probate at \$123,000.

The private car of W. R. Tiffin, Superintendent Northern Division, G.T.R., was badly damaged by fire at Toronto recently.

A. U. Bain, chief clerk to General Superintendent Timmerman, Toronto, has resumed his duties after an absence caused by illness.

The marriage of A. G. Robb, of the Robb Engineering Co., Amherst, N.S., to Miss G. Steil, was celebrated recently at Sackville, N.S.

Capt. E. B. Anderson, of the C.P.R. Upper Lake str. Manitoba, and Mrs. Anderson, celebrated their golden wedding at Owen Sound, Aug. 4.

D. D. Mann, of Mackenzie, Mann & Co., has purchased the Falling Brook Park property at Scarboro' Bluffs, east of Toronto, for residential purposes.

J. D. Farrell, President of the Great Northern Steamship Co., has retired, and it is stated will retire from active work in the transportation field.

W. Gormaly, Superintendent Toronto Union Station, has returned from a trip to Prince Edward Island, undertaken for the benefit of his health.

H. Tranche-Montague, an engineer on the Transcontinental Ry. Survey, was drowned in the headquarters of the Ottawa River, while canoeing, recently.

J. C. Darnborough, has been in railway service since 1871, and has put in 21 years at the Toronto Union Station, of which he is Depot Station Master.

W. J. Crossen, General Manager of the Crossen Car Manufacturing Co., Cobourg, Ont., who was operated upon for appendicitis in the last week of July is recovering.

J. Carbutt, who for some years was official photographer for the C.P.R., and who, in 1879, invented the "Carbutt dry plate," died at Philadelphia, Pa., July 28, aged 73.

Capt. Midford, who was one of the engineers engaged upon the construction of the Southwestern Traction Co.'s line between London and St. Thomas, Ont., has received an appointment in Japan.

Press reports state that F. Dillinger, formerly in the C.P.R. service at Ottawa and other points, but now in private business at Kitchener, B.C., will be appointed Inspector to the Board of Railway Commissioners.

Miss R. Bracken, who for 40 years was in the employ of the Michigan Central Rd. as operator and train dispatcher, and who retired from active work at the beginning of 1905, died at Niles, Mich., recently.

J. C. Sullivan was entertained at dinner by the C.P.R. engineering staff at Winnipeg, on leaving that company's service to take the position of Assistant Engineer on the staff for the construction of the Panama Canal.

C. A. Millener, Secretary-Treasurer Bay of Quinte Ry., and of the other Rathbun companies at Deseronto, Ont., was married at Trenton, Ont., Aug. 15, to Miss M. M. Evans, daughter of J. D. Evans, C.E., Trenton.

Mrs. Ham, wife of G. H. Ham, C.P.R. head office staff, died in Montreal, Aug. 12.

Mr. Ham, who recently underwent an operation, had sufficiently recovered on that date to be removed from the hospital to his house.

C. A. Pison, Passenger Agent for Ontario, International Mercantile Marine Co., returned to Toronto at the end of July, from Jersey, Channel Islands, where he went to see his father, General Pison, who is seriously ill.

J. Gunn, Inspector General of Railways at Alexandria, Egypt, for the British Government, and Capt. Adams, General Manager of the Egyptian Delta Light Ry., have been spending some time with their friends at Kingston, Ont.

L. J. Ferritor, formerly Trainmaster G.T.R. at Stratford, Ont., and subsequently with the Wabash Rd., at St. Thomas, Ont., has been appointed Superintendent Central Division, Wabash Rd., at Decatur, Ind., succeeding S. E. Cotter.

C. E. Rolfe, G.F.A. Delaware & Hudson Co., and C. Wurtele, G.E.A. Great Northern Ry., U.S.A., have been elected active members of the Canadian Freight Association. A. H. Harris and G. Cantin have resigned from the Association.

H. Glendenning, of the I.C.R. Passenger Department, Moncton, N.B., was presented with a travelling bag by the officers of the department on leaving for Winnipeg, where he enters the service of the C.P.R., in the office of the General Passenger Agent, Western Lines.

R. H. Ingram, who was one of the U.S. officials appointed to the G.T.R. when C. M. Hays became General Manager, and was subsequently appointed Secretary Central Vermont Ry., has been appointed General Superintendent Southern Pacific Rd., at Los Angeles, Cal.

S. E. Cotter, who has been promoted to the position of General Superintendent of the Wabash Rd., at St. Louis, Mo., is a brother of G. F. Cotter, recently appointed General Superintendent, Fort Worth and Denver City Rd., and of W. D. Cotter, General Manager, Pere Marquette Rd.

Capt. A. Pollock, who died recently at Duluth, Minn., aged 85, was engaged in a seafaring life from 1832 to 1842, when he came to reside at Port Stanley, Ont. For over forty years he was engaged as a master mariner on the Great Lakes, and was one of the best known and daring of navigators there.

H. Moody, who has retired from the position of Deputy Secretary and Registrar in London, Eng., for the C.P.R., was presented with a silver finger bowl of Louis XIV design, bearing a suitable inscription, by the members of his staff. The presentation was made by T. Skinner, the London director of the C.P.R.

E. B. Jack, who has been appointed Professor of Civil Engineering at Dalhousie College, N.B., has been engaged on railway surveys and construction work, and bridge construction in Canada and the United States, and from 1901 until 1904 he was in charge of the engineering school of the University of New Brunswick.

Lord Strathcona; Sir C. Rivers Wilson, President G.T.R.; T. Skinner, director C.P.R.; and Archer Baker, European Manager C.P.R., have been appointed members of a committee formed in London, Eng., to collect funds from Canadians in England for the purpose of purchasing a piece of plate or other suitable article for the new battleship Dominion.

Hon. R. Prefontaine, Minister of Marine, left Montreal for Quebec, Aug. 23, from which place he will start on a tour of inspection to Anticosti, and the principal light and marine stations in the Gulf of St. Lawrence and Maritime Provinces. He has arranged to go to England in Oct. for a couple of months, on business with the Admiralty.

The Minister of Railways, accompanied by M. J. Butler, Deputy Minister; D. Pottinger, General Manager; E. Tiffin, General Traffic Manager; W. B. Mackenzie, Chief Engineer, and G. R. Joughins, Superintendent of Motive Power, Government Railways, recently spent some time looking over the Prince Edward Island Ry., and a portion of the I.C.R.

M. Adson, who has been appointed General Passenger Agent, Duluth, South Shore and Atlantic Ry., and the Mineral Range Ry., was born in 1872, and entered railway service Aug., 1893, since which his record has been: 1893 to 1894, stenographer; 1894 to 1898, ticket clerk and cashier, city office, first at Superior and then at Duluth, Minn.; 1898 to 1901, Travelling Passenger Agent; 1901 to July, 1905, General Agent, Duluth. Entire service with Duluth, South Shore and Atlantic Ry.

S. N. Parent, who has been appointed Chairman National Transcontinental Railway Commission, was born at Beauport, Que., Sept. 12, 1855, educated at Laval University, Montreal, graduating LL.L., and was called to the Quebec bar, 1881. He was elected a member of the city council in 1890, and in the same year a member of the Quebec Assembly. He was elected Mayor of Quebec, 1894, which he has retained to the present time. He was made Commissioner of Crown Lands in 1897, and became Premier in the following year, which office he has recently resigned. He was interested in transportation matters, and was President of the Quebec Bridge and Ry. Co.

T. Marshall, who has been appointed Secretary-Treasurer Canadian Freight Association, entered railway service 1882, his record being: Aug., 1882, to Mar., 1883, telegraph operator, Northern and Northwestern Ry., Elmdale, Ont.; April, 1883, to Dec., 1885, telegraph operator and ticket clerk same road, Allandale, Ont.; Jan., 1886, to Sept., 1887, relieving agent same road; Mar., 1887, to June, 1899, chief clerk to Traffic Manager, Lake Erie and Detroit River Ry., Walkerville, Ont.; July, 1899, to Nov., 1901, Assistant General Freight and Passenger Agent, same road; Dec., 1901, to Jan., 1904, General Freight Agent same road; Feb., 1904, to Jan., 1905, General Agent Pere Marquette Rd., London, Ont.; Jan., 1905, to July, 1905, Division Freight Agent, same road, London.

B. B. Kelliher, who was recently appointed Chief Engineer Grand Trunk Pacific Ry., was born in Ireland, Dec. 26, 1862, is the son of a civil engineer, and was educated at Trinity College, Dublin, and studied his profession under J. Dillon, of that city. He was engaged on survey work on two local railways, and on the Barrow River improvement works in Ireland before going to the United States in 1886. Since then his record has been:—1886 to 1890, successively, topographer, transitman and assistant engineer, Union Pacific Rd.; 1890 to 1896, assistant engineer Northern Pacific Rd., chiefly on the Cascade and Pacific Divisions; 1896 to 1897, mining engineer Anaconda Copper Co., Butte, Mont.; 1897 to 1903, Division Engineer, Oregon Short Line Rd.; 1903, Resident Engineer Denver, Northwestern and Pacific Rd.; 1904 to 1905, Division Engineer G.T. Pacific Ry., Winnipeg.

J. E. Price, General Superintendent Intercolonial Ry., died at Moncton, N.B., Aug. 2. He was born at Petitcodiac, N.B., Oct. 18, 1854, and entered railway service in 1867 as a telegraph operator on the I.C.R. In 1873 he became train dispatcher at Moncton, and three years later Assistant Superintendent of the Moncton and Campbellton division. In 1879 he went to Campbellton as train dispatcher, where he remained until 1881, when he was appointed District Superintendent of the Moncton and Ste. Flavie district. From 1892 to 1898 he held a similar position

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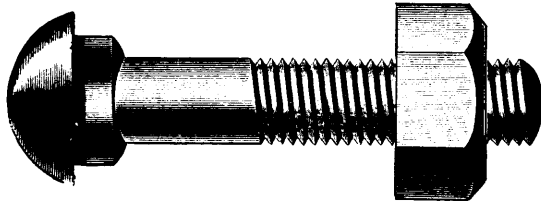
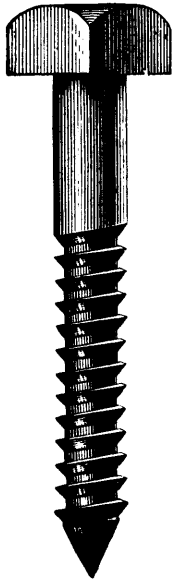
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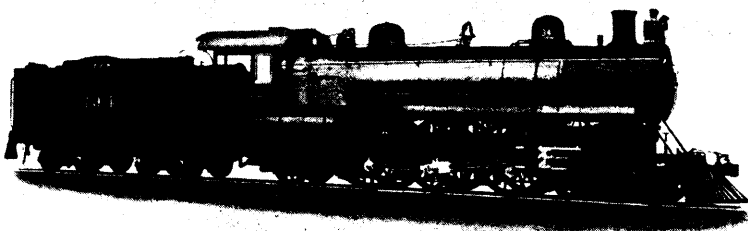
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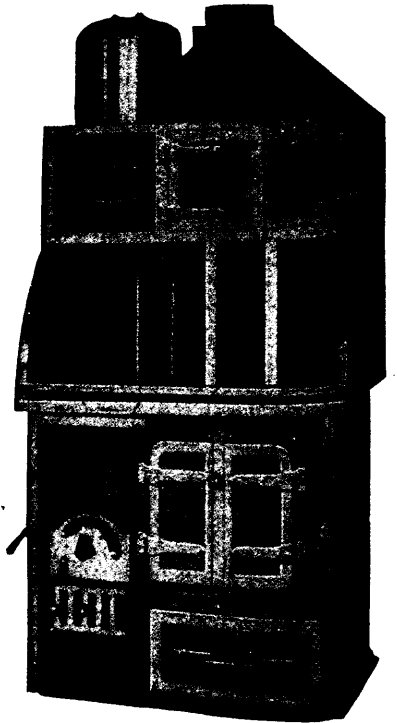
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on the Halifax and St. John district, and in 1898 became General Superintendent. In the fall of 1901 the position of General Superintendent was abolished, and he went to the Moncton and Ste. Flavie district as Superintendent, where he remained until reappointed General Superintendent Aug. 15, 1902. His entire railway service has been with the I.C.R.

Jno. Pullen, who has been appointed Assistant Freight Traffic Manager G.T.R., was born at Shepton Mallett, Somerset, England, Jan. 23, 1863. He entered railway service in 1877 as a boy in the office of Assistant General Freight Agent G.T.R., G. B. Reeve, at Sherbrooke, Que. In 1878 he was transferred to the general freight office, Montreal, and in 1880 went to Chicago as secretary to Traffic Manager Reeve, of the Chicago and G.T.R. In 1890 he was appointed agent of the West Shore Fast Freight Line, and subsequently agent of the Reading Despatch in Chicago. On the reorganization of the G.T.R., under the present management, in 1896, he was appointed Division Freight Agent at Stratford; in 1897 Division Freight Agent at Hamilton, Ont., and when the Central Vermont Ry. passed under the control of the G.T.R. on May 1, 1899, he was appointed General Freight Agent of that company at St. Albans, Vt., subsequently becoming General Freight Agent G.T.R., which position he held until his present appointment.

J. E. Dalrymple, who has been appointed General Freight Agent, G.T.R., was born in Montreal, Jan. 1, 1869. He entered railway service as apprentice in the Treasurer's office of the G.T.R., July 1, 1883, in which office he served until 1890 in various capacities, and finally as correspondence clerk. He left Montreal April 1, 1890, and entered the service of the Chicago and G.T.R. at Chicago, as Secretary to Traffic Manager Reeve. On Feb. 1, 1896, he was appointed Secretary to General Traffic Manager Reeve, of the G.T.R. System at Montreal. On May 1, 1899, he was appointed Division Freight Agent, G.T.R., at Hamilton, Ont. On Aug. 1, 1899, he was appointed Division Freight Agent G.T.R., at Detroit, also Manager of the G.T. Despatch, a fast freight line operating over the G.T. Ry., West Shore Rd. and Fitchburg Rd. On May 1, 1900, he was appointed General Freight Agent of the Central Vermont Ry., and was subsequently made assistant to the General Manager G.T.R., when G. B. Reeve was appointed to that office in 1902, returning to the Central Vermont Ry. as General Freight Agent on the return of C. M. Hays to the G.T.R. in 1903.

The professional career of John Earls, which terminates after 40 years of railway work, need not be allowed to entirely obscure the quite different service he has been able to render to the community through his public-spirited efforts to promote the culture of music. The pioneer choral organization of this city was the Philharmonic Society, and its successful record for many years was largely due, after the personal aptitude and professional skill of Dr. Torrington, to the financial support cheerfully given by a number of prominent citizens who were not known to have any connection with music other than their love of it. Of this group of public benefactors Mr. Earls was a steadfast member. How much of its prosperity and efficiency in its palmy days was due to his personal exertions only those intimately associated with him ever knew, for it was not his nature to do his work in the limelight. More recent achievements in choral performance were rendered possible by the pioneer work of the older societies, including the diffusion of musical skill by the discipline of preparation for the great annual concerts. So long as we have not

the State, either as Province or as municipality, directly promoting musical training, this city will be fortunate if it always finds such men as Mr. Earls and his lay fellow-workers ready to make sacrifices for the esthetic enjoyment of their fellow-citizens.—Toronto Globe.

Canadian Ticket Agents' Association.—Owing to the difficulty in obtaining hotel accommodation in Portland, Me., during the second week in Oct., when the Maine Musical Festival will be in progress, a change has been made in the date of the annual meeting, etc., of the C.T.A.A. The party will rendezvous in Montreal, leaving there by special G.T.R. train on Saturday, Oct. 14, at about 8 a.m. Luncheon will be taken at Gorham, N.H., and Portland will be reached about 6 p.m. The annual meeting and the dinner will be held on Monday, Oct. 16. Tuesday and Wednesday will be spent doing Portland harbor, Casco Bay and other features of the city and suburbs. Portland will be left on Thursday, Oct. 19, by special train via Maine Central, Boston and Maine and Canadian Pacific. A stop will be made at Fabyans for lunch and Montreal will be reached in time for dinner. The headquarters at Portland will be at the New Falmouth.

Lake Superior Traffic.—The Hon. Peter White, is the title of a book issued by the Marine Review Publishing Co., Cleveland, Ohio, in connection with the celebration of the 50th anniversary of the opening of the U.S. canal at Sault Ste. Marie, Mich., Aug. 2 and 3. The book is not so much the history of the man, as it is a history of the development of trade on Lake Superior. In the prologue the early trading expeditions on the lake are treated of, but the main chapters deal with the development since 1855. The great development of the trade of the lake began with the discovery of iron ore in the Marquette district, and the organization of the Marquette Iron Co. in 1849. Peter White went into the country as a young man in that year, has grown up with it, and was always the chief man in promoting its development. In 1855 the shipments of iron ore only reached a total of 1,449 tons, but with the opening of the canal in that year, there was an increase in 1856 to 36,343 tons. This traffic has grown until in 1904 it was 21,822,839 tons. The book is well illustrated and contains a large amount of interesting information—historical and statistical—about Lake Superior and the surrounding territories as well as of the development of its resources.

The Great Northern Ry. and the Northern Pacific Ry. have been notified by the U.S. authorities that their request to establish several sub-ports of entry on the International boundary between Manitoba and Montana, cannot be granted. The request was made in order to facilitate the importation of Canadian wheat into the U.S.

The rates for the conveyance of packing house products from Ontario points to the Atlantic seaboard for export, are, as a rule, based on the rate on similar commodities from Chicago to New York. This rate was reduced on May 3, from 30c. to 20c. per 100 lbs., and on Aug. 7, was restored to its original figure of 30c. As the rates from Ontario were reduced in May, so there has now been a corresponding increase. We are informed that this is only one of the ordinary fluctuations in rates on export traffic which is liable to occur at any time. We are also informed that the rates from the principal packing house points west and north of Toronto are lower, at present, than has prevailed under normal conditions for some considerable time. Outside of Toronto the principal packing house points in Ontario are: Brantford, Collingwood, Hamilton, Harriston, Ingersoll, London, Peterboro' and Stratford.

TRANSPORTATION APPOINTMENTS.

Canadian Pacific Ry.—W. R. Baker, heretofore assistant to the Vice-President, has been appointed assistant to the President.

C. W. Spencer, General Superintendent of Transportation, Eastern Lines, has resigned to enter Mackenzie, Mann & Co.'s service.

J. M. R. Fairbairn, heretofore Assistant Engineer, Maintenance of Way, has been appointed Acting Division Engineer, Eastern Division, taking over the duties of D. MacPherson, Division Engineer, resigned on his appointment as Assistant Chief Engineer, National Transcontinental Ry. Commission. Office, Montreal.

J. G. Sullivan, Engineer of Construction, Western Lines, Winnipeg, has resigned to become Assistant Chief Engineer of the Panama Canal.

J. E. Schwitzer, heretofore Division Engineer, Central Division, has been appointed Principal Assistant Engineer. Office, Winnipeg.

W. A. James, heretofore Assistant Engineer at Kenora, Ont., has been appointed Divisional Engineer in charge of grade revision and double-track work on Western lines east of Winnipeg.

J. Callaghan has been appointed Division Engineer in charge of location and construction on Western Lines west of Winnipeg.

F. Lee, heretofore attached to the staff of the Assistant Chief Engineer, has been appointed Division Engineer, Central Division, vice J. E. Schwitzer, transferred. Office, Winnipeg.

H. P. Lake has been appointed Chemist for Western Lines, succeeding the late Professor E. B. Kenrick. Office, Winnipeg.

G. H. Eaton has been appointed Assistant Master Car Builder in charge of the car work upon Western Lines, with headquarters at Winnipeg. He will report to the Assistant to the Second Vice-President, and observe all standards established by the M.C.B. All correspondence will in future be sent direct to him and also the returns with copies to the Master Car Builder at Montreal. This class of work at Fort William, Winnipeg, and Vancouver, will in future class as car department work.

Hugh Craig has been appointed General Car Inspector of Western Lines with headquarters at Winnipeg.

Wm. Hodgson has been appointed General Car Foreman at Winnipeg.

C. W. Graves, heretofore District Freight and Passenger Agent Great Northern Ry., U.S.A., at Montreal, has been appointed Travelling Passenger Agent C.P.R. Headquarters, Winnipeg.

W. C. Toole, C.P.R. Land Agent at Calgary, Alta., is reported to have been appointed Commissioner of the reclaimed areas in the irrigated district of Alberta.

A. Anthony has been appointed locomotive foreman at Nakusp, B.C., succeeding H. Ingram, transferred.

H. Ingram, heretofore locomotive foreman at Nakusp, B.C., has been appointed locomotive foreman at Eholt, B.C., succeeding A. E. Bennetts, transferred.

A. E. Bennetts, heretofore locomotive foreman at Eholt, has been appointed locomotive foreman at Kamloops, B.C., succeeding F. E. Hobbs, resigned.

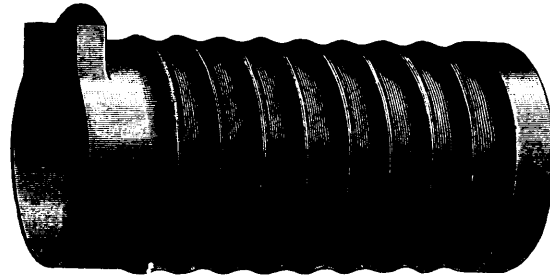
J. Anderson has been appointed Roadmaster at Field, B.C., succeeding V. Anderson, transferred.

V. Anderson, heretofore Roadmaster of the Beaver-mouth-Laggan section, Pacific Division, has been appointed Roadmaster at Revelstoke, B.C., succeeding W. Newman, transferred to the Esquimalt and Nanaimo Ry.

The C.P.R. has established an agency at Shanghai, and has appointed A. R. Owen,

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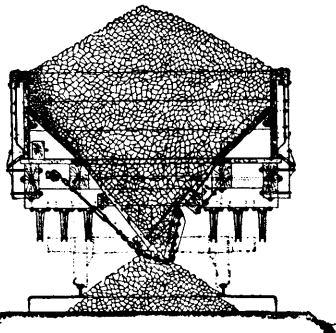
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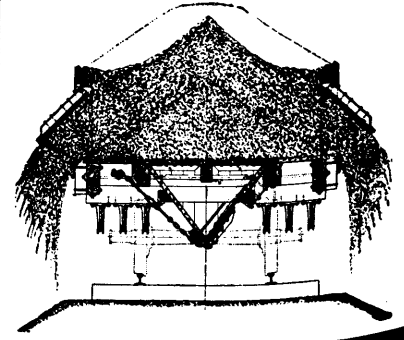
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heretofore successively in its Hong Kong and Yokohama offices, as Agent. The circular adds: "Jardine, Matheson & Co., who have so long and satisfactorily represented the company in north China, will continue as formerly, to act as agents at the other China coast and Yangtse ports."

Central Vermont Ry.—R. L. Burnap, heretofore Commercial Agent, C.V.R., and General Agent National Despatch Line, New York, has been appointed General Freight Agent, C.V.R., succeeding J. E. Dalrymple, appointed General Freight Agent, G.T.R. Office, St. Albans, Vt.

H. M. Baker, has been appointed Commercial Agent at New York, succeeding R. L. Burnap, promoted.

Commissioners of the Transcontinental Ry.—S. N. Parent, ex-Premier of Quebec, has been gazetted a member and Chairman of the Corporation of the Commissioners of the Transcontinental Ry., vice F. B. Wade, deceased.

C. F. McIsaac, ex-M.P. for Antigonish, N.S., has been gazetted a member of the Commission, succeeding A. Brunet, resigned.

Grand Trunk Ry.—J. Pullen, heretofore General Freight Agent, has been appointed Assistant Freight Traffic Manager. Office, Montreal.

J. E. Dalrymple, heretofore General Freight Agent Central Vermont Ry., has been appointed General Freight Agent, G.T.R., succeeding J. Pullen, promoted.

The jurisdiction of A. F. Read, Foreign Freight Agent, has been extended to include import freight traffic; correspondence relative thereto, which has heretofore been addressed to the General Freight Agent, will in future be addressed to the Foreign Freight Agent.

The following agents have been appointed—Aston, Que., J. O. Laroche; Howick, Que., F. E. Mahon; Beaconsfield, Que., H. Tanney; Newmarket, Ont., J. Willoughby; Oakville, Ont., H. D. Galbraith; Pinkerton, Ont., J. K. Sutherland; Ethel, Ont., J. Smith.

Great Northern Ry. (U.S.A.)—C. W. Graves, District Freight and Passenger Agent, Montreal, has resigned.

Mackenzie, Mann & Co.'s Lines.—It is semi-officially announced that C. W. Spencer, heretofore General Superintendent of Transportation C.P.R. Eastern Lines, is about to be appointed Manager of M. M. & Co.'s lines east of Port Arthur, in charge of operating the James Bay Ry., the Great Northern Ry. of Canada, the Halifax & Southwestern Ry. and Inverness Ry. & Coal Co.'s line, and that his office will be in Montreal.

Pere Marquette Rd.—R. W. Young, heretofore agent at Chatham, Ont., has been appointed Division Freight Agent at London, Ont., succeeding T. Marshall, resigned.

The Great Western Ry., of England, has issued a handsome book for American travellers in England, describing the historic sites and scenes of England reached by its line.

The business, plant, etc., of M. Beatty & Sons, Welland, Ont., has been taken over by M. Beatty & Sons, Ltd. The factory will be under the same management and control, and will continue to manufacture the same lines of machinery as heretofore.

The Toronto Transportation Club abandoned its proposed outing to Niagara Falls which it was proposed to hold on Aug. 11, as only about a dozen members signified their intention of attending, in response to the Secretary's circular.

It has been announced that the C.P.R. Atlantic liners, under construction in Scotland, will be named the Empress of Britain and the Empress of Ireland, respectively. One of these steamers was expected to be launched by the end of Aug., and the other early in Oct.

Canadian Car Service Bureau.

The Canadian Car Service Bureau has been organized with jurisdiction over all Canadian territory east of Port Arthur, Ont., and embracing all railways operating in that territory. Its object is to secure the prompt loading and unloading of cars and to that end enforce a reasonable and uniform charge for detention to cars and use of tracks. The members are railway companies, each member being entitled to one vote, but where the aggregate mileage of any member exceeds 1,000 miles, such member shall have one additional vote for each additional 1,000 miles or part thereof operated within the Bureau's territory. The annual meeting is to be held in Montreal on the second Thursday in July. An executive board of five shall be selected at the annual meeting, and the board shall elect one of its members as chairman. The board shall appoint a Manager, who shall be ex-officio Secretary of the Bureau and of the board. The board shall have power to make rules to carry out the purposes of the Bureau and decide all questions which may arise. The board shall meet on the second Thursday of each month. Each member shall have the privilege of sending a representative to meetings of the board, when claims in which it is interested are to be considered. The Manager shall construe all rules and regulations and his decisions shall be final unless changed by the board. The Manager shall obtain from the local agents of the respective railways daily reports of all cars subject to car service rules. The Manager shall make a monthly report to the members showing respectively by railways, the expenses of the Bureau, the number of cars handled and the average detention thereto, also the amount of car service charges collected, uncollected and refunded. The expenses of the Bureau shall be assessed monthly on the basis that the number of cars reported by each railway during the previous month bears to the total cars reported by all members and shall be paid to the Manager prior to the 15th of the month. Car service charges accruing under the rules shall be collected by and belong to the member on whose tracks the cars are detained.

At a meeting in Montreal July 27, at which the operating departments of various railways were represented, articles of organization were adopted, from which the above are extracts. The following were elected as the executive board:—M. C. Sturtevant, Car Service Agent, G.T.R.; G. S. Cantlie, Superintendent Car Service, C.P.R.; J. B. Morford, Assistant to the General Manager, Michigan Central Rd.; T. E. Henderson, Superintendent Car Service, Intercolonial Ry.; G. Collins, Receiver and Manager, Central Ontario Ry. J. B. Morford was elected chairman of the board. The board appointed as Manager, J. E. Duval, heretofore Chief Inspector of the Board of Railway Commissioners, who took charge on Aug. 1, and has opened offices at 121 Board of Trade, Montreal. The car service department of the Canadian Freight Association, which has heretofore dealt with car service matters, ceased to exist on that date. The Manager will probably divide the territory under the Bureau's jurisdiction into five or six districts, each in charge of an inspector, who will have authority to settle matters on the spot. P. K. Perry, who has been an inspector under the Canadian Freight Association, will be given the Toronto district. J. Wiley, heretofore a train dispatcher on the Canada Atlantic Ry., at Ottawa, has been appointed chief clerk at Montreal.

The board drafted car service rules which were considered at a conference between the board, the Manager, and J. R. Marlow, Manager of the Canadian Manufacturers' Association's Transportation Department, who also represented the Dominion Millers' Association

and the Lumbermen's Association of Ontario. J. Hardwell, Chief Traffic Officer, Board of Railway Commissioners, was also present at the conference. Certain changes were made at the conference and the proposed rules have since been submitted to the Railway Commissioners for approval. The Commissioners have given full publicity to the rules, so that other interested parties may be heard if they desire. In the meantime the old rules of the Canadian Freight Association are being used. The proposed rules are as follows:—

All freight in carloads, or less, handled by shippers or consignees, is subject to a service charge of \$1 a car, per day of 24 hours, or part thereof, if not loaded or unloaded within 48 hours. Exception—Twenty-four hours additional will be allowed on cars loaded with coal and coke in bulk, boards and deals.

Cars delayed under load beyond the free time, for any reason for which shippers or consignees are responsible, will be subject to the car service charge.

On cars placed before 12 noon, free time begins at noon; if placed after 12 noon, free time begins at 7 a.m. following. Cars to be accessible at all times during the period allowed for loading and unloading. Time lost through interruption, for which the railway is responsible, to be added to the free time allowance.

No charge will be made for Sundays or legal holidays.

When, owing to wet or stormy weather, loading or unloading is temporarily impracticable, agents will extend the free time allowance so as to give altogether the full free time period of suitable weather. Agents must immediately report particulars to the Manager, and note in their daily reports "Waived rule 5" opposite each car affected, giving dates on which the car service charge has not been assessed.

When, owing to irregularities in transportation, cars have been "bunched" and are tendered to the consignee in numbers beyond his ascertained reasonable ability to unload within the authorized free time, he shall be allowed such additional time as may be necessary to unload the cars so in excess, by the exercise of due and usual diligence. The agent must at once report the particulars to the Manager and obtain his ratification.

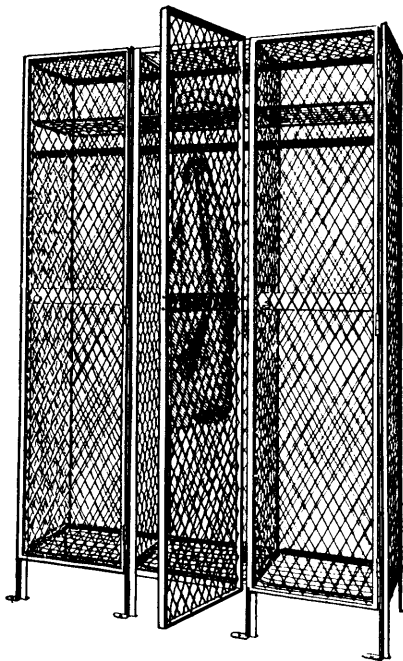
When both cars and tracks are owned by the same private party, no charge will be made.

Consignees must be promptly notified of the arrival of their freight, and will be held to have been notified when notice of arrival is given at their address or place of business, or if notice is mailed to the address given on the way-bill, consignee will be held to have been advised at 7 a.m. of the day following.

Twenty-four hours will be allowed to consignees, after notice of arrival, in which to pay charges, if any, and give orders for special placing or delivery. If not ordered within that time, car will be considered as for public team track delivery, and will be placed accordingly, and if not unloaded within the free time will be subject to the car service charge. Twenty-four hours additional will be allowed for clearance of customs, where the destination is a port of entry. Where the destination is not a port of entry, 48 hours will be allowed for clearance of customs at the outside port of entry.

The extra time after notice of arrival for paying charges and ordering, will not apply on cars for which agents have previous or standing orders or arrangements for placing for regular delivery on designated tracks or private sidings.

The delivery of cars to private tracks shall be considered to have been made either when such cars have been placed on the tracks designated, or when they would have been placed but for some condition for which shipper or consignee is responsible.



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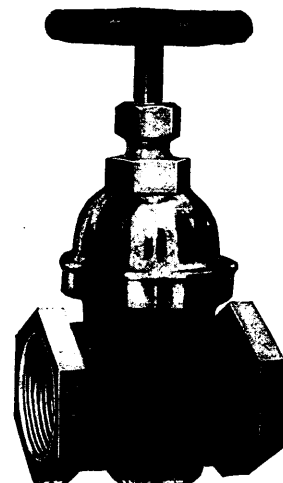
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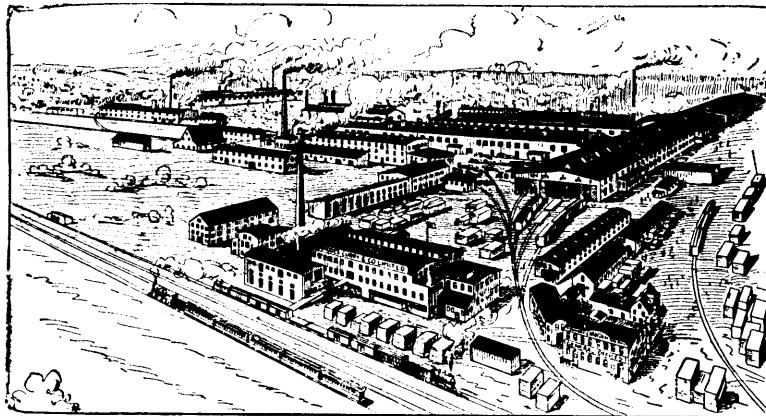
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CAPACITY PER MONTH

300 Freight Cars	4 Passenger Cars	4 Snow Plows	3,000 Car Wheels
2,500 Car Axles	500 tons Castings	1,000 tons Forgings	

DEPARTMENT OF AGRICULTURE AND IMMIGRATION

MANITOBA with its network of railways, giving markets near at hand for all farm products, offers unrivalled opportunities for investment.

PROVINCIAL GOVERNMENT LANDS can still be purchased at from \$3 to \$6 per acre.

IMPROVED FARMS in all districts of the province can be purchased at from \$10 to \$40 per acre. These prices are advancing every year.

A FEW POINTERS

On arrival at Winnipeg the wisest policy for any new settler to adopt is to remain in Winnipeg for a few days and learn for himself all about the lands offered for sale and to homestead.

There are districts that have been settled for many years in which land can be purchased. Some of this may be unbroken prairie which still possesses all the richness and productive powers of our virgin prairies. Other lands, cultivated and having comfortable farm buildings, are ready for immediate possession.

There are Provincial Government lands, Dominion Government homesteads, and railway lands to be secured.

The price of land varies from \$3 to \$40 per acre. Location with respect to railways, towns, timber and water determines the price of land.

For information regarding homesteads, apply at the Dominion Land Office.

For purchase of Provincial lands apply at the Provincial Land Office in the Parliament Buildings.

For C.P.R. or C.N.R. lands apply at the land offices of said railway companies.

For lands owned by private individuals apply to the various real estate agents in the city.

For situations as farm laborers apply to :

J. J. GOLDEN,

PROVINCIAL INFORMATION BUREAU

617 MAIN ST., WINNIPEG

If, after placing, cars are ordered to another siding on the same road to complete loading or unloading by the same shipper, or the same consignee, and no switching or re-consigning charge is made, the free allowance will be computed from the original placing, less the time occupied in replacing the car.

If car is reshipped or reconsigned, the original consignee shall pay \$1 per car per day, or part thereof, for all time in excess of the period allowed by these rules, so that 48 hours' free time may remain to the party taking delivery.

Should a switching road give notice that it is unable to receive cars for private sidings, owing to conditions for which shippers or consignees are responsible, then any railway having cars for such consignees must so advise them. Car service will accrue until the cars are accepted by the switching road, and will be collected by the railway which is holding them.

Cars held in transit for inspection, cleaning, bagging, completion or change of load, change of destination, etc., and detained over the time allowed for such purpose, will be subject to car service charges, which must be billed forward as directed by the accounting department. If such shipments are transferred to other cars, the car service charges will follow on the cars to which transfer is made. The forwarding agent, or in the case of change of destination, the agent by whom arranged, must make the following notation on the bill of lading, "Subject to car service charges at" The amount must also be inserted in the "back charges" column of the bill of lading, when practicable.

So-called industrial, logging or private roads handling cars for themselves or other parties, must be charged car service on all cars delivered to them from the time placed upon the interchange tracks until returned thereto, allowance being made for the time necessary to perform the switching service (not to exceed 24 hours), in addition to the free time herein authorized.

Cars must not be held short of the destination for the purpose of evading these rules. Loaded cars held back for cause must be reported to the Manager.

When cars are delayed or refused by consignees because of alleged incorrectness in the railway weights or charges, car service must be collected if charges or weights are found to be correct.

Agents must in all cases collect car service charges as soon as accrued. Should payment be refused, agents will withhold delivery, either by sealing or locking car, or placing it where it will not be accessible.

When the contents of a car are apparently not worth the combined freight and car service charges, and consignee fails to take delivery, the agent must wire the Manager for instructions.

All complaints, disputes and uncertainties which may arise under these rules must be referred at once to the Manager. The Manager may reduce or cancel the charges should he consider that the circumstances justify such action.

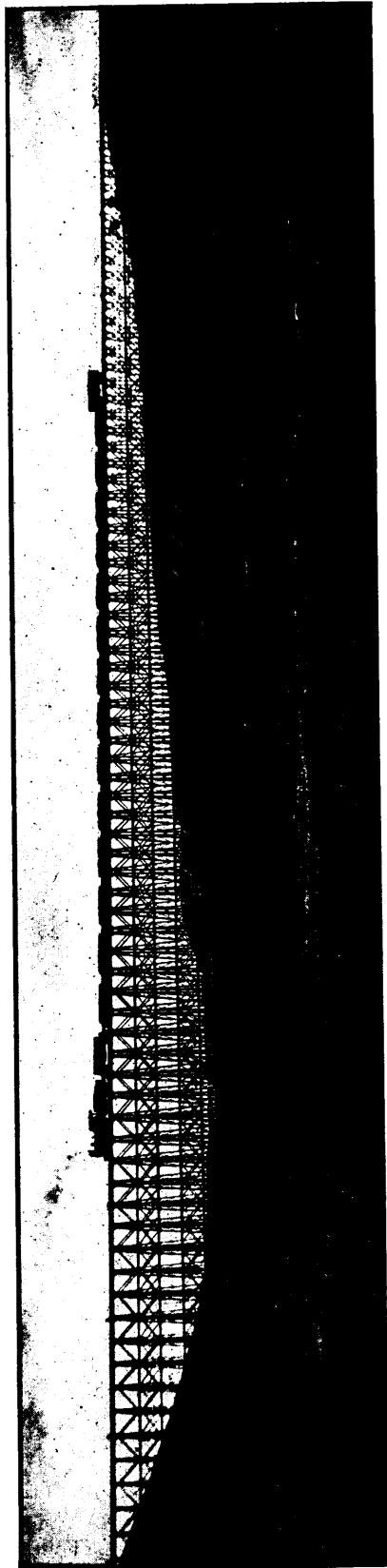
Claims should be filed with the Manager direct, and must be accompanied by the receipted bills for the amounts paid.

The Railway Commission has expressed an opinion that any rules which may be adopted should, as far as circumstances permit, be of uniform application throughout Canada. The Board has arranged to hold sittings at Fort William, Sept. 7; Winnipeg, Sept. 11, and New Westminster, Sept. 19, when representations will be heard with respect to the allowance of charges for car services and the rules governing them.

The address of the English office of the Atlantic, Quebec and Western Ry. has been changed to 87 Strand, London, W.C.

Canadian Northern Ry. Construction.

The Dominion Parliament at its recent session passed an Act granting an extension of time for the construction of this line, and



[From the Western Home Monthly, Winnipeg.]

CANADIAN NORTHERN RY.'S CROSSING OF THE SOUTH SASKATCHEWAN RIVER AT CLARK'S CROSSING, SASK.

from Regina to Humboldt, thence to Pas Misson, Sask.; from near Humboldt, Sask., to the Prince Albert branch at the crossing of the Saskatchewan River, and from west of Battleford into Battleford, Sask. During the discussion of the bill of the James Bay Ry. in the Senate Committee, W. H. Moore, Secretary C.N.R., said the James Bay Ry. would be a part of the C.N.R. The company had acquired the Great Northern Ry. of Canada, and the J.B.R. was a link which would connect the C.N.R. with the G.N.R.

The work of tracklaying on the main line is being pushed, and it is expected that the track will be laid into Edmonton, Alta., by the end of the season. The grading gangs expected to get into Fort Saskatchewan by Aug. 30, and hope to get into Edmonton by the middle of Sept. The steel was reported to be laid some miles west of Lloydminster, and trains had been run to that place. Tenders have been asked for the construction of a station and 16-stall round-house at Edmonton. The station building will be of brick and stone, two storeys in height, and 138 ft. by 33 ft.

On branch lines a considerable addition to the mileage will be put in operation this fall. This will include the Wakopa extension, the Rosburn extension, the Brandon short line, the Prince Albert line, and the extension from Hartney to Virden, providing the company receive permission to cross the Canadian Pacific at Hartney in time.

The company's main line crosses the South Saskatchewan River at Clark's Crossing, 485 miles west of Winnipeg, by a bridge with trestlework approaches, of which an illustration is given on this page. The superstructure consists of six 180 ft. pin-connected deck spans designed for a live load of two 306,000 lb. consolidation engines followed by a train load of 4,200 lbs. per lineal foot. The piers and abutments are built of concrete, the former being faced with heavy steel plate, and otherwise constructed to resist the heavy ice rush. The height from low water to top of pier is 50 ft. and to rail 87 ft. The east trestle approach is 415 ft. long and west approach 135, the total length of structure being 1,630 ft. A temporary bridge to carry trains, and steel superstructure was also constructed, the material for same being shipped to Saskatoon via the C.P.R. and floated down the river to the bridge site, so that tracklaying was not delayed on reaching the structure. All the steel work was handled by a derrick car, a traveller not being used. The total quantities of material used in work were as follows:—5,400 cu. yds. concrete; 995 tons steel; 40 tons iron; 925,000 B.M. timber; 76,000 lin. ft. piling. The piers, approaches, etc., were built by the company, and the superstructure by the Canadian Bridge Co., Walkerville, Ont. The steel work spans the river at high watermark.

An Order-in-Council has been passed by the Dominion Government making it clear that the bounty on steel manufactures does not apply to steel rails. The order was passed after the Algoma Steel Co. had successfully claimed the bounty on 60,000 tons of rails.

The Superintendent of Transportation, C.P.R. Western Lines, has issued the following notice to conductors, yardmasters and others concerned:—"When freight trains consist of dead freight and live stock, the cars containing the stock must be placed and hauled behind those containing dead freight, and when there are shipments of horses and cattle on a train, the cars containing the horses must be placed and hauled behind those containing the cattle. Of course, it is not intended that these instructions will interfere with those in effect about cars not equipped with air being placed immediately ahead of the van."

authorizing the laying out of the following additional lines:—from Regina to Red Deer River, Alta., with a branch west of the Saskatchewan River, northerly to near township 45, range 4, west of the third meridian—

MONTREAL STEEL WORKS

MANUFACTURERS OF **STEEL CASTINGS**

LIMITED

(ACID OPEN HEARTH SYSTEM)

SWITCHES AND TRACK WORK

FOR STEAM AND ELECTRIC ROADS

SPRINGS

OF ALL KINDS

MANGANESE STEEL CASTINGS

For wearing Parts, Insuring Great Hardness and Durability

INTERLOCKING PLANTS

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Town Lots for sale at Winnipeg, Ft. William, Edmonton, Prince Albert, etc.

The Company has General Stores at Winnipeg, Vancouver, Calgary, Edmonton, and other places where purchasers will find the best of goods at moderate prices.

Transportation by the Company's Steamers, brigades of boats and canoes throughout the Territories not traversed by railways.

Full information at the Company's Offices, Winnipeg, or 1 Lime St., London, E.C.

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FRIED. KRUPP, ESSEN, GERMANY.

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FOR STEAM AND
ELECTRIC RAILWAYS.

OFFICE: MERCHANTS BANK BUILDING **MONTREAL.**
205 ST. JAMES STREET,

Grand Trunk Pacific Railway.

The G. T. Pacific Ry. has let a contract to Macdonald, MacMillan & Co., Westbourne, Man., for the construction of a section of the main line from Portage la Prairie, Man., to the Touchwood Hills, 27.5 miles. This section of the line will be light work, there being only about a total of 75 miles where the work will be at all heavy. The firm consists of D. Macdonald, A. M., and C. MacMillan, and has been engaged on the Canadian Northern Ry. construction. The contractors have a large outfit at Portage la Prairie, and work was started at once. The section of line to be built will almost parallel the C.P.R. from Portage la Prairie to a point a little west of McGregor, Man., and then proceed in a straight line west to the Assiniboine River, running about midway between the Manitoba and North-Western Ry. and the C.P.R. main line for some distance west of McGregor. Brandon is about 12 miles to the south of the located line, and will be reached by a spur; and Rapid City north of the line. The line will cross the Arrow River near Crandall and the Assiniboine River, near Crowe, and crosses the second meridian a little north of Summers. The C.P.R. made an objection to the plans, on account of the located line paralleling their line for a considerable portion of the way, but the Government upheld the plans.

Plans and specifications for the Lake Superior branch from Fort William to the Transcontinental Ry. were completed early in Aug., and it is expected that tenders will be awarded for its construction early in Sept. The following mortgages have been filed with the Secretary of State at Ottawa:— Dated Mar. 15, to the National Trust Co., securing an issue of 4% bonds to the extent of £4,150,000, guaranteed by the G.T.R.; redeemable 1955; dated Mar. 15, to the National Trust Co., securing an issue of £1,550,000 of 4% first mortgage bonds, guaranteed by the G.T.R., redeemable in 1955, for the construction of the Lake Superior branch; dated June 10, to the Royal Trust Co., securing an issue of £14,000,000 of 3% first mortgage bonds, guaranteed by the Dominion of Canada, redeemable in 1962.

So far as the Transcontinental Ry. is concerned, the new chairman of the Commission, S. N. Parent, has taken hold, and has been making himself familiar with what has already been done. The principal work that is before the Commission at present is the consideration of plans for the line from Grand Forks to Moncton, whether it will be by the St. John River route, or by the Central route. Another question is the final location of the line from Winnipeg easterly to the point of junction with the Lake Superior branch of the G.T. Pacific Ry. The Minister of Railways recently stated that it was expected that this work would be sufficiently forward to permit of tenders being let for its construction in Nov.

Grain rates from points in Ontario to New York, Philadelphia, Baltimore, Boston and Portland, heretofore 11½¢ per cwt., will be increased to 13½¢ per cwt., Sept. 1. This rate has nothing to do with rates for export, which were recently ordered to be reduced by the Railway Commissioners, and against which the railway companies are appealing.

The Randolph Macdonald Co. has been incorporated under the Dominion Companies' Act, with a capital of \$100,000 and offices at Three Rivers, Que., to acquire the business of Randolph Macdonald, Toronto, and to carry on and extend the same. The provisional directors are R. Macdonald, Toronto; W. R. Macdonald, Three Rivers, Que.; A. Stephen, Collingwood, Ont.; W. H. Morrow, Three Rivers, Que.; M. McAndrew, St. Catharines, Ont.

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

Fort William-Winnipeg Second Tracking.—The headquarters of Foley Bros. and Larson, contractors for the second track work between Fort William, Ont., and Winnipeg, are at Kenora, Ont., and J. W. Stewart, who is the managing partner for Canada, will have full charge of the work. (Aug., pg. 363.)

Molson-St. Boniface Line.—In connection with the double-tracking of the line from Fort William, Ont., to Winnipeg, Man., a cut-off will be constructed, which will obviate the necessity of running trains round by Selkirk, thereby making a saving of nine miles. The cut-off will leave the transcontinental line at Molson, and will run direct to the bridge crossing the Red River at St. Boniface. The cut-off will be 36 miles in length. Plans for this line have been approved of by the Board of Railway Commissioners. (Aug., pg. 363.)

Cut-off North of Winnipeg.—Consideration is being given to a proposal to construct a cut-off north of Winnipeg, from Selkirk to near Reaburn, Man., but nothing has been definitely decided. Should this cut-off be built it would save several miles of haul on traffic from west of Winnipeg to eastern points.

Moose Jaw Northerly.—A branch line, 12 miles in length, is under construction from Moose Jaw, Sask., northerly. The work is expected to be completed by Sept. 30. Jackson & McMenemy, Moose Jaw, Sask., are the contractors.

Branch from Yahk.—Construction is being gone on with on a branch line from Yahk, at mileage 40.8 west of Cranbrook, B.C., to the International boundary, 9.19 miles. The contractors are Breckenridge & Lund. At the International boundary the line will make connection with the Spokane International Rd., now under construction from Spokane, Wash., of which D. C. Corbin is the promoter. (June, pg. 255.)

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

In connection with the construction of the new Union Station at Toronto, representatives of the G.T.R. are engaged in negotiating with the lessees of the burned area expropriated as the site, for the surrender of their leases. The final legal complication in the case was removed when the Judicial Committee of the Privy Council, in London, refused one of the lessees leave to appeal against the expropriation order.

The double-track work on the line in Western Ontario was expected to be completed Aug. 30, the grading between Komaka and Kingscourt Jct. having been completed at the beginning of the month, and the grading being pushed between Kingscourt Jct. and Hyde Park.

The company is negotiating for the purchase of the fair grounds, Guelph, Ont., from the Militia Department, for use as a freight yard. The department is willing to sell, but the approval of the city has to be obtained. If the sale goes through the G.T.R. will provide a new site for the militia armouries, and will erect on the old fair grounds freight sheds and lay out large yards.

We are advised that there is no truth in the report that the G.T.R. contemplates constructing a line from St. John's, Mich., to either Perrington or Middleton, via Maple Rapids, Mich.

The Canadian General Electric Co., Toronto, has issued section 4 of its supply catalogue, illustrating snap, flush and knife switches.

The C.P.R., W. Whyte, Second Vice-President, states, will not at present make any change in its rates in Manitoba and the new provinces to the west, to meet the rate of the Great Northern Ry. and other lines on the U.S. side of the International boundary. There was a considerable margin in favor of Canada in the old rate, said Mr. Whyte, and the cut has not wiped it out.

Canadian Freight Classification.

Supplement No. 5 to Canadian Freight Classification No. 12, has been submitted for the approval of the Railway Commissioners. Following is the present classification, and the changes proposed to be made:—

PRESENT.		PROPOSED.	
	LCL. CL.		LCL. CL.
Page 43, Grain and Grain Products— Flour and Meal in barrels, cotton, jute or paper sacks or bags, estimated weight 200 lbs. per bbl.	5 8	Page 21, Cattle Food— Chopped Straw, Hay, Ensilage, Faramel, Meal, and other similar common cattle food	4 8
Page 40, Furniture— Mixed cars, Furniture, Wire Mattresses and Spring Beds, minimum 14,000 lbs.	4	Mixed cars, Furniture, Wire Mattresses and Spring Beds O.R. released, min. 14,000 lbs. per car.	4
Furniture and Chair Stock in white	3 6	Furniture and Chair Stock in white O.R. released	3 6
Page 40, Furs, Robes and Skins— Antelope, Deer or Elk Skins, dry, in bales (C.L. minimum weight 16,000 lbs.) (Subject to rule 27)	1½ 3	Antelope, Deer, Elk and Goat, in bales or cases	1½ 3
Page 42, Grain and Grain Products— Cereals, not otherwise specified, rolled, pressed, cracked, dried or dessicated, in boxes or paper sacks	4 8	Page 46, Groceries— Postum, cereal, same as Coffee.	
Cereals, not otherwise specified, rolled, pressed, cracked, dried or dessicated, in barrels or cotton or jute bags	5 8		
Page 56, Iron and Steel Anchors, Anvils and Heavy Forgings	3 5	Forgings, heavy, same as Castings.	
Page 58, Iron and Steel— Forgings, heavy, in the rough	4 5	Forgings, heavy, same as Castings.	
Page 75, Machinery— All kinds as per above C.L. minimum 20,000 lbs. N.O.S.)	6	Erase the words "C.L. minimum 20,000 lbs."	
Page 91, Swings, Wooden, K.D. and tied in bundles	3 5	Wood, or wood and iron combined, S.U. in crates or boxes	4-1 ..
		Same folded in crates or boxes	1 5
		Same entirely taken apart K.D. flat in bundles, crates or boxes	2 5
Sup. 4, page 22, Vehicles Automobile bodies, in the white	D1 ..	Automobile bodies in the white, crated or boxed	D1 ..
Page 98, Vehicle parts Buggy seats, in white, nested, crated or boxed	1 ..	Buggy seats, in white, nested crated or boxed	3 ..
Buggy seats, in white, nested	3 ..	Eliminated.	

The fifth annual issue of the Annual Financial Review for Canada, compiled by W. R. Houston, Toronto, has been published. The review gives the financial statements of the leading Canadian railways and electric railways, navigation companies, shipbuilding companies, telegraph and other companies, as well as a large number of financial and other corporations having their headquarters in Canada. The reports of a number of companies operating out of Canada, but in which Canadian investors are interested are also given. The statistical information as to movements of the stock on the exchanges, etc., are carefully compiled, and form with the other information, a valuable record for investors.



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**Canadian Pacific Ry.,
and Toronto, Hamilton and
Buffalo Ry.**

If you are going to or from New York,
you arrive at or depart from the

NEW GRAND CENTRAL STATION

of the

NEW YORK CENTRAL

which is not only in the

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A fact to remember is that the **NEW
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COLD STORAGE INSULATION
The Highest Non-Conductor in
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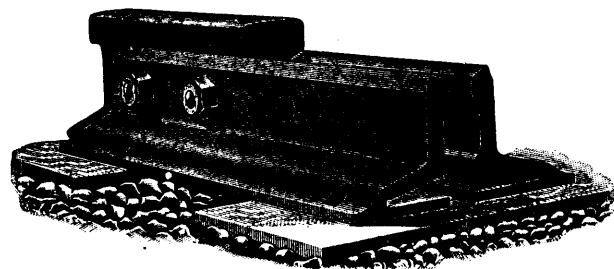
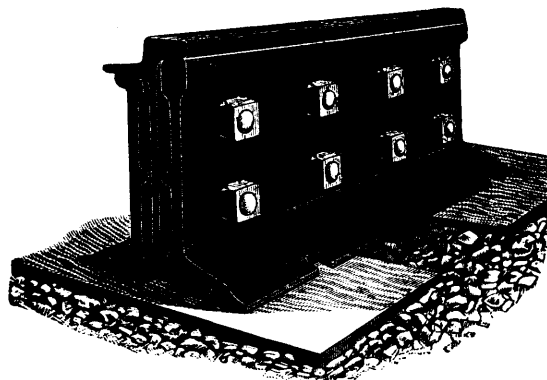
A MAGNIFICENT NEW TRAIN—COMFORTABLE,
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COACHES OF LATEST DESIGN
EXCELLENT DINING CAR SERVICE**

CONNECTIONS AT PORT ARTHUR with steamers of the Northern Navigation Co., Canadian Pacific Steamship Line, Booth Line, and Canadian Pacific Railway TO AND FROM ALL POINTS IN THE EAST.

Through tickets, sleeper reservations, etc., obtainable from any Agent of the Grand Trunk or Canadian Pacific Railways and their connections.

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Medals awarded at Paris and Buffalo Expositions.

I.C.R. Staff Reorganization.

On his return from the Maritime Provinces to Ottawa, Aug. 21, after making an inspection of portions of the Intercolonial Ry., and the whole of the Prince Edward Island Ry., the Minister of Railways stated in an interview to the Ottawa correspondent of the *Globe*:—"So far as our recent trip went to show anything, it proved beyond question that the Intercolonial to-day, even though it has seemed to cost a very considerable sum, is in the best position it ever was as regards road-bed, rolling stock, station and terminal facilities, and traffic. The conditions which prevailed during the past year were exceptional, and they certainly wrought havoc with the financial results of operating the line. But the close inspection of the Deputy Minister, his clear analysis of the conditions presented, and his businesslike grasp of the whole situation, give promise of better results hereafter. I may say that as a result of our investigations up to the present a reorganization of the several branches or departments of the railway has been mapped out and will be immediately put into effect. The office of Chief Superintendent, held by the late J. E. Price, of Moncton, will be abolished, on the recommendation of the Deputy Minister and General Manager, who advise me that by this step about \$1,000 a month will be saved in salaries, without in any way impairing the efficiency of the operation of the line. This will be accomplished by adding further duties to those now discharged by the divisional superintendents, and holding them more strictly to account for results than heretofore. By the policy of decentralization we shall be able to relieve the central office of considerable routine business, and give the General Manager time to go out over the Intercolonial system and closely watch operations with a view to greater efficiency. It has been decided to place the track and maintenance of way departments under the charge of T. C. Burpee, C.E.; he and all the other leading officials whose responsibilities are increased will be held accountable for the results in their respective spheres of action, and if not satisfactory they will have to reckon with their superiors.

We have yet to inspect the Cape Breton section of the line and also the divisional points between Moncton and Montreal. The changes to which I have referred will take effect immediately, as they cannot be delayed. The remainder will be dealt with in a detailed and comprehensive report which Mr. Butler will prepare at the close of our tour."

Referring to press reports that offers had been made on behalf of certain interests to purchase the I.C.R., the Minister stated that he did not know of any such having been submitted to members of the government. Certainly none had ever been brought before the cabinet.

A Request to Subscribers.

The supply of copies of our July issue at our disposal has been completely exhausted and owing to an oversight in our office the usual number required for our files were not retained.

We are extremely anxious to obtain a few copies for July and shall be very much obliged to any subscribers who do not file their copies if they will mail us July numbers.

Eastern Canadian Passenger Association.—At a special meeting of the Eastern Canadian Passenger Association, held in Montreal, Aug. 15, T. Henry, Chairman, presided and the following lines were represented: C.P.R., G.T.R., Great Northern Ry. of Canada, New York Central and Hudson River Rd., North-

ern Navigation Co., Ottawa and New York Ry., Quebec Central Ry., Quebec Ry. Light and Power Co., Quebec Southern Ry., Richelieu and Ontario Navigation Co., Rutland Rd., Temiscouata Ry.; and G. H. Webster, Secretary. Notice of the granting of reduced fares was given by the several lines for Labor Day, Sept. 4th; National Encampment Grand Army of the Republic at Denver, Col., Sept. 4-7; excursions to Port Huron, Mich., Chicago, Ill., and as far west as St. Paul, Minn.; harvest excursions to Manitoba and the Canadian North-west; hunters' excursions; convention of Women's Christian Union at Los Angeles, Cal., Oct. 25-Nov. 2. A resolution was adopted that a letter be prepared and sent to the Dominion Government asking that Thanksgiving Day be celebrated on the Monday after the third Thursday in Oct.

The Great Northern Ry. of Canada is suing the G.N.W. Telegraph Co. for \$4,000 damages caused by the burning of the Hawkesbury, Ont., station.

The C.P.R. stations on the Lyleton branch have been changed as follows:—Corona to Dalny, at mileage 21.5 from Deloraine; and Eggo to Lydiatt, at mileage 28.6 from Deloraine, Man.

The Conservative Association of the newly founded Province of Alberta, has declared, among the resolutions passed at its initial convention, that the C.P.R. exemption from taxation was a consideration given by the Dominion as a whole, and should not be saddled on the western provinces alone; and that it is the duty of the Government "to so adjust this right with the company that such exemption may be removed and said lands become liable to taxation, and that this view should be constantly pressed upon the Dominion Government by the provincial authorities until this end is accomplished."

C. A. Matcham, Manager of the Lehigh Portland Cement Co., of Allentown, Penn., accompanied by A. W. Thorn, representative of the company for Canada, were in Belleville, Ont., recently and closed the purchase of about 1,000 acres of limestone and clay lands preparatory to the erection of what will be one of the largest single cement plants in the world; namely, to have a capacity of 4,000 barrels a day. The company hopes to be turning out cement at its Canadian plant some time next summer. The Thorn Cement Co., Buffalo, N.Y., will be the Canadian distributors. Until the completion of the Canadian plant the Lehigh cement will be supplied from the Lehigh Portland Cement Co.'s present mills at Allentown, Pa., where it manufactures some 9,000 barrels a day. This company also has a large mill at Mitchell, Ind., of 2,000 barrels a day, and is erecting another large mill at Mitchell of a capacity of 4,000 barrels a day.

C. W. Spencer, who has been appointed Manager of the Mackenzie, Mann & Co's lines east of Port Arthur, Ont., was born at Kemptville, Ont., Oct. 11, 1857, and entered railway service May 7, 1871, since which he has been consecutively to 1874 operator and clerk at Ottawa station; 1874 to May, 1880, assistant agent at Ottawa; May, 1880, to Jan., 1881, assistant train dispatcher; Jan. to May 11, 1881, Chief Train Dispatcher; May 11 to June 29, 1881, Traffic Superintendent; June 29, 1881, to Aug. 1, 1884, Assistant Superintendent; Aug. 1, 1884, to Sept. 30, 1887, Assistant General Superintendent; Oct., 1887, to June, 1903, General Superintendent, eastern division, at Montreal; June, 1903, to Aug., 1905, General Superintendent of Transportation lines east of Fort William, Ont.; entire service on C.P.R. He was also Vice-President and Managing Director of the Kingston and Pembroke, the Pontiac Pacific Jct., and the Ottawa, Northern & Western railways which had been acquired by the C.P.R.

Railway Finance, Meetings, etc.

The Albert Southern Ry. has not been operated for several years, and the shareholders have not been called to meet for some years. W. A. Trueman, Albert, N.B., is Secretary.

Atlantic and Lake Superior Ry.—The Court of Exchequer has given judgment in the application of this company for approval of a scheme of arrangement with its creditors. The court holds that the scheme cannot be confirmed, the line being in possession of the bondholders who are operating it. It was further declared that the court could not see its way to hand over the line and its appurtenances to the company in view of the manner in which it had administered its affairs heretofore.

An action has been entered by P. J. Galindez & Co., London, Eng., against the company to recover \$336,054, which they had invested in its bonds, etc. The plaintiffs state that they endeavored to make an arrangement with the company's creditors, but had failed; they now sought to recover the money they had invested.

Bay of Quinte Ry.—A recent press report stated that D. D. Mann had been inspecting this line with a view to purchasing it for the Canadian Northern Ry. Mr. Mann subsequently stated that the story was absolutely without foundation.

Canada Atlantic Ry.—It has been announced that the G.T.R. will take over the C.A.R. and the C.A. Transit Co. from the present owners, as soon as the new bonds are signed and delivered.

The Canadian Pacific Ry. Co. since 1901 has spent nearly \$40,000,000 on additions and improvements. In three years the company has spent about \$12,000,000 on equipment and \$4,000,000 on shops, \$5,000,000 on bridges and line improvement, \$2,000,000 on grade reduction, \$3,000,000 on yards, \$1,500,000 on terminals, \$850,000 for elevators. Of this expenditure in three years \$23,500,000 came from capital account and \$3,000,000 from surplus.—Wall St. Journal.

The accounts for the year ended June 30, show gross earnings of \$50,480,882; working expenses, \$35,006,794; net earnings, \$15,475,088; income from other sources, \$1,584,663; total net earnings, \$17,059,751. From this there has to be deducted fixed charges, \$7,954,066, and \$230,000 applied against ocean steamships and pension fund, leaving available for dividend \$8,875,685. The directors have declared a dividend of 2% on the preference stock, and of 3% on the common stock for the half year, which with the dividend paid for the previous half-year will absorb \$7,091,133, leaving a balance of \$1,784,553 to be carried forward.

Central Ontario Ry.—The Judicial Committee of the Privy Council in London has upheld the decision of the Canadian courts in the action in which the trustee for the bondholders asked for an order for the sale of the line. The company contended that a railway being a public utility, could not be sold. The Ontario courts decided against this contention and ordered the sale. The litigation has been going on for nearly three years.

Grand Trunk Ry.—A suit has been instituted by the Connecticut Valley Lumber Co., claiming \$300,000 damages by fire to 30,000 acres of timber lands alleged to have been caused by sparks from a G.T.R. locomotive. Other lumber firms have claims for damages amounting to \$200,000 arising out of the same fire.

Iroindale, Bancroft and Ottawa Ry.—A report is current that an arrangement is being made for the amalgamation of the I.B. and O.R. with the Central Ontario Ry.

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The two lines have their terminal points near each other at Bancroft, Ont., and they both have power to construct extensions from that point. Neither line is financially strong, the C.O.R. particularly being the subject of continued law proceedings as to title and its bond issues. The I.B. and O.R. is one of the lines which the James Bay Ry. Co. has power to purchase as part of a connection with Ottawa and the Great Northern Ry. of Canada. We were recently advised that there is no truth whatever in this press report.

Midland Ry.—It is expected that the transfer of this line to the Dominion Atlantic Ry., the sale of which has been authorized by the shareholders, and approved by Parliament, will be made Oct. 1.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Half-yearly dividends of 2% on the common stock and 3½% on the preferred stock for the half-year ended June 30, have been declared.

New Brunswick Ry.—The officers and directors for the current year are:—President, R. Meighen; Vice-President, H. H. McLean; other directors: Lord Strathcona and Mount Royal, J. Turnbull, J. Hardisty, J. S. Kennedy, S. Thorne, D. W. James, E. W. Burpee, F. S. Meighen.

Reid Newfoundland Co.—It has been officially stated that the Newfoundland Government has decided not to purchase the interests of the R.N. Co. in the railway and steamships. R. G. Reid, who was in St. John's, Nfld., during the negotiations, has gone to England, and is reported to have said before leaving that the Government would not have another chance of acquiring the property at the same price as it had recently been offered them. Negotiations are said to be in progress with private capitalists, for a sale of the property.

Temiscouata Ry.—Gross earnings for July \$13,897.33 against \$13,765.47 for July, 1904.

Temiskaming and Northern Ontario Ry.—The Provincial Treasurer of Ontario stated Aug. 15, that the net traffic receipts of the line for April, May, June and July averaged \$8,000 a month. The working expenses averaged, for the same period, 55% of the gross earnings.

Toronto, Hamilton and Buffalo Ry.—Estimated receipts for July, \$56,740.72, against \$56,760.12 for July, 1904.

The Algoma Steel Co., an officer recently stated, had orders in hand for 75,000 tons of steel rails. The mill is turning out 500 tons a day. The Intercolonial Ry. has placed an order for 25,000 tons of 80-lb. steel rails in Nova Scotia.

Residents of Windsor, Ont., are again complaining that the Pere Marquette Rd. is neglecting its local passenger traffic, and say that if an improvement is not made the matter will be brought to the attention of the Railway Commission.

The war on passenger differential rates from Chicago, Ill., which had been going on for some time between the Michigan Central Rd. on the one hand, and the C.P.R. and G.T.R. on the other, has been settled, and normal rates were restored Aug. 20.

P. S. Archibald, C.E., of Moncton, N.B., is acting as engineer for A. E. Trites of Bangor, Me., who has the contract for building the Northern Maine Seaport Ry., from La Grange to Stockton Harbor, Me. The line, which is an extension of the Bangor and Aroostook Ry., is about 60 miles in length, with 10 miles of branch lines. At the terminal at Stockton Harbor there are piers for passenger, freight and coal traffic. Work was started on April 1, and it is hoped to have the line completed early in Nov.

I.C.R. Relief and Insurance Association.

The 16th annual report for the year ended June 30, shows a net surplus of \$13,890.22. The total receipts for the year were \$78,661.27, and the credit balance from June 30, 1904, was \$13,329.56. The total expenditures were \$74,260.62, leaving a credit balance of \$17,790.92, which, less estimated outstanding liabilities, \$3,900, leaves a net surplus of \$13,890.22. The claims against the sick and accident fund for weekly indemnity, medical and surgical attendance and for special treatment and hospital charges during the year have been considerably in excess of its income. The deficit in this fund was found to be increasing so rapidly that the general executive committee found it necessary to order a special assessment of 25 cents per member, and this reduced the deficit very materially. It amounted to \$4,179.78. In view of the state of this fund the executive officers have under consideration the advisability of reducing the allowance made for special treatment and for hospital charges. Ten death claims were paid from the temporary employees' accident fund during the year; 53 death claims were assessed during the year; 45 were due to natural causes, and 12 were due to accidental injuries, and they totalled \$20,750. Fourteen claims for total disability allowance, aggregating \$6,250, were approved by the general executive committee—assessed and paid.

Suggestions for Steam Economy.

By W. McKay, of the Robb Engineering Co.

Almost every engineer and electrician is familiar with the fact that the majority of steam-power plants are not operating under the most economical conditions. In some cases this is due to the plant having been built up piecemeal as the requirements developed and in other cases it has been found difficult to determine the amount of power that would actually be required until after the plant was completed. If the consulting engineer could be informed, or could determine in advance the exact requirements for the present and future, it would be comparatively a simple matter to design the plant with fair accuracy as to the size and number of units, types of engines, boilers, and other details.

Although it is difficult to give any general information on this subject which will be of use or interest in the great variety of particular cases, it may be of some interest, and possibly of assistance to those who are managing or operating power plants, to discuss some of the principles upon which economy in the use of steam depends.

Beginning with the boiler, which is the first step in the production of power from fuel, it may be laid down as a good rule that it is more economical to use boilers of reasonably large size than to subdivide into a larger number of small units. The length and area of grate that can be conveniently fired or kept evenly covered with coal is, perhaps, the limiting feature, if hand firing is to be used. Working from this rule, a grate should not be over 7 ft. long or more than 5 ft. wide, which would give 35 sq. ft. of grate surface. The quantity of coal that may be burned on such a grate varies widely with the kind of fuel and strength of draft. Using bituminous slack coal of fair quality, with good natural draft or moderate-induced draft, it should be possible to burn 25 lbs. of coal per square foot of grate per hour, or 875 lbs. of coal per hour, and if this coal will evaporate say 8 lbs. of water per pound of coal, the boiler, if constructed with heating surface in proper proportion, would evaporate 7,000 lbs. of water per hour, which would be equal to a little over 200 standard boiler horse-power. In order to give good economy, the boiler should have from 2,000 to 2,400 sq. ft. of heating surface to evaporate

this quantity of steam economically. The return tubular boiler, on account of the amount of tube surface in proportion to the direct surface exposed to the fire, should have not less than 12 sq. ft. per horse-power; the water tube type from 10 to 11, and the internally fired type, which has a larger amount of direct heating surface in the furnace and tubes than either of the others, should have 9 to 10. If the grate surface is larger than that described, probably the grate will not be evenly covered with coal, or the fire will be dead in spots, so that too much cold air will pass through.

The economy in burning fuel is a matter requiring great skill and experience, and depends entirely upon the evenness, thickness and condition of the fire, which controls entirely the air supply and, therefore, the perfection or imperfection of the combustion, and I would say just here that there is very little use in splitting hairs over a quarter of a pound of steam consumption of the engine, while the fireman may be losing ten times this quantity of fuel from inefficient boilers or poor firing.

I fear it is too often the case that the demands for increased horse-power are met by grate surface too large in proportion to the heating surface of the boiler or forced draft, and too little attention is given to careful firing, with heating and grate surfaces in proper proportion to give best economy, and frequently a great deal of money is spent in obtaining high-class engines and condensers, whereas the principal loss is in the boiler and fire room.

The question is often asked whether in case of installing a certain horse-power of boilers, say 300 h.p., it would be more economical to have three boilers of 100 h.p. each or two boilers of 150 h.p. each. I would say by all means have the two larger units, as it will always be found that the larger boilers have less radiation, less air leakage and better combustion than a corresponding horse-power in small units. If it is necessary to have a spare unit for cleaning, let there be another one provided of the same size.

In regard to the pressure to be carried. It is well known that a high pressure gives a greater amount of expansion and better economy in proportion to the fuel burned. Even with simple engines in which it is not possible to obtain the full advantage of expansion, the high pressure of steam, which is drier and contains a larger number of heat units in proportion to the volume, gives the best results. I think every boiler should be designed for not less than 150 lbs. pressure per square inch. Even if it is not possible to utilize the full pressure, the boiler will be stronger, last longer and a better investment in the long run. In this respect, the water tube or some form of internally fired boiler in which the shell plates are not exposed to the high temperature of the furnace, are certainly safer than the horizontal return tubular boiler, because for large units intended to carry high pressure, the shell plates and seams must be of considerable thickness, and being directly exposed to the hottest part of the fire, are almost sure to give trouble, especially if there be any scale or sediment in the water which is liable to settle on the bottom directly over the fire.

As to the economy of various types of boilers, experience shows that any of the standard types, horizontal return tubular, water tube, or internally fired, if they are designed with proper proportions of heating and grate surface, give about the same evaporation per pound of coal, provided they are in good condition and clean both on the fire and water surfaces. While the externally fired boilers, either of the return tubular or water tube type, are said to have some advantage in combustion, on account of the heat of the brick furnace, they are subject to losses which are more serious, in the way of air leakage and radiation. Tests made at the Ohio

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State University, by Professor Hitchcock, show that the brick-setting of boilers continues to absorb heat up to 72 hours after being started, and that the average waste of heat in brick furnaces is about 8½%. The repairs and cost of keeping up brick furnaces are considerable, and as a result of deterioration there is more or less air leakage through the brickwork going on constantly. In this respect, the internally fired boiler has a great advantage over return tubular or water-tube boilers with brick furnaces, as it will be just as efficient after continued use as when first started.

In any type of boiler it is of great importance to keep the tubes and other surfaces free of soot and scale. Otherwise, a large loss may be sustained. I think it is a mistake to depend entirely on the steam blower or tube cleaner, which only removes the loose soot, a scraper being necessary for occasional use to free the hard scale, which will in time accumulate on the fire surfaces. It is necessary to point out that scale, or worse still, oil on the inside of a boiler may be a source of great loss, experience having proved that even a thin film of oil will so prevent the transfer of heat that the plates or tubes will be burned in a very short time. Nothing but pure water should be used for making steam, and the practice of making the boiler do duty as a water purifier as well as a steam generator cannot be too strongly condemned. If the owners of steam plants could be made to realize that a very small deposit of soot on the outside and scale on the inside means a loss of from 10 to 20% of the total fuel consumption, costing, perhaps, thousands of dollars a year, they would be convinced that it would be much cheaper to spend money in purifying apparatus, so that the scale or sediment will be removed before the water is fed to the boiler.

The next step to be considered is the heating of the feed water. This may be accomplished in two or three ways: First, by means of the exhaust steam, which, coming from a non-condensing engine, is capable of heating the feed water to 212° and of saving say 12 to 15% as compared with feeding cold water. For large plants where it would pay to use induced draft to make up for the loss in temperature of the chimney gases, which produce the draft, it will undoubtedly pay to use an economizer, but as this apparatus is expensive both in first cost and up-keep, the amount saved in utilizing the waste gases from a small plant would probably not offset the outlay. The closed type of feed-water heater is about as efficient as the open type, provided the water is pure and it avoids trouble from pumping hot water, but the open type is frequently made use of to assist in purifying the water and, if properly managed, may give good service in that respect. For condensing engines, a primary heater of the closed type may be installed between the engine and condenser, which will help to condense the steam and heat the feed water to a low temperature, say 130 to 140° Fahr. A secondary heater, either of the closed or open type, may be used to heat the feed water to a still higher temperature, say 212° by the use of the exhaust from the feed and air pumps, which cannot be used more profitably than in this way, as all the heat is returned to the boiler.

In regard to the type of engine used for the plant: If the size of plant is sufficient, and the work comparatively steady, the highest possible results may be obtained from compound condensing engines using the highest possible pressure of steam, but under other conditions, such as variable load, low pressure of steam, it may be quite possible that the simple engine will give better results and cost less for repairs. With low-steam pressure, non-condensing, there is certainly nothing better or more economical than a single cylinder Corliss engine where it can be

installed to advantage. In the case of direct-driven electric units of small size, it is necessary to use high or medium-speed engines, both on account of the loss in friction that would come in if countershaft and belting have to be used and because the higher speed machines will give the best regulation. For small units up to say 75 or even 100 h.p., there is nothing better than the modern high-speed automatic engine, provided it is of good design, not overloaded and not oversped. A well-designed engine with 12-in. cylinder and 12-in. stroke, which is usually run at 275 to 300 revolutions a minute, and made to develop from 75 to 80 horse-power, if arranged to run at say 225 to 250 revolutions a minute and to carry 50 or 60 h.p., will be as serviceable and give as good results as any type of engine of the same horse-power under ordinary conditions, non-condensing, and if the work is variable, requiring quick, close regulations, such as driving electric generators, where the load is irregular, say for supplying current to electric lights and electric elevators, the short-stroke, single-valve type of engine has great advantages.

As illustrating the small wear of high-speed engines under favorable conditions, a Robb-Armstrong engine of 12-in. stroke, which has been running at 275 revolutions a minute for electric lighting for 12 or 14 years, shows only about two-thousandths of an inch wear of the journals, and six-thousandths of an inch wear in the shaft bearings.

Unfortunately, this class of engine is so frequently overloaded and oversped that it gives poor results and gets a bad name, whereas the Corliss slow-speed type of engine is limited both in the matter of speed and horse-power, because the cut off of the single-eccentric type will not go much beyond half-stroke, and in that way the engine is saved from overloading and abuse, and this is, perhaps, one of its many advantages. A compound engine is not suited to low pressure or irregular loads and the extra cylinder and complication of parts is a great objection under such conditions. When a condenser is used, even with low pressure and somewhat irregular loads, it may be employed to advantage and with high pressure, say from 125 to 150 lbs. or over, the non-condensing compound will give the best results, unless the load is very irregular and running to light loads a large part of the time.

The question is sometimes asked whether it pays to reduce the pressure when the load is light. From my experience, I do not believe it pays to reduce the pressure on the boiler, excepting in very extreme cases, but if it can be done by throttling before the steam reached the cylinder of the engine, it would be an advantage, because this retains the heat units due to the higher pressure in the steam and the throttling has a slight super-heating effect. As a matter of fact, tests made by Willins & Robinson, of England, go to show that for light loads and high pressure, a throttling engine may do even better than automatic cut-off. The ideal arrangement is to throttle the steam for light loads up to say near quarter cut-off, and after that, for heavier loads, allow the variable cut-off to come into play. This practice has been carried into effect by the design of E. J. Armstrong, in which he arranges the shaft governor so that there is negative lead up to nearly one-quarter cut-off, after which the lead becomes positive, and this has the effect of throttling the steam for the earlier loads and undoubtedly gives better economy, in addition to making the engine run more quietly.

Another source of considerable loss in the operation of steam plants, particularly large ones, is the insufficient size of piping, causing the pressure to be reduced between the boiler and engine, and imperfect drainage, which is an enemy both to economy and the life of the engine. In many of the newer plants, it has

been found a great advantage to install large receivers to equalize the pressure and to collect the water before it reaches the engine.

In general, it may be said that the principal causes for loss in steam plants is the use of engines which are overloaded or unsuited to the conditions of work, undersized, or badly-arranged steam and exhaust pipes, and the imperfect condition and poor operation of the boilers. In many plants, exhaust steam, which might be utilized for heating, is wasted, and in others, where the exhaust steam is utilized for heating, power is wasted by excessive back pressure. The most economical use that exhaust steam can be put to is for heating, because all the heat units are made use of, but it should be done without back pressure on the engine, by means of a vacuum system to draw the steam and water through the heating pipes, otherwise there will be a loss both of fuel and power, due to the engine working under imperfect conditions.

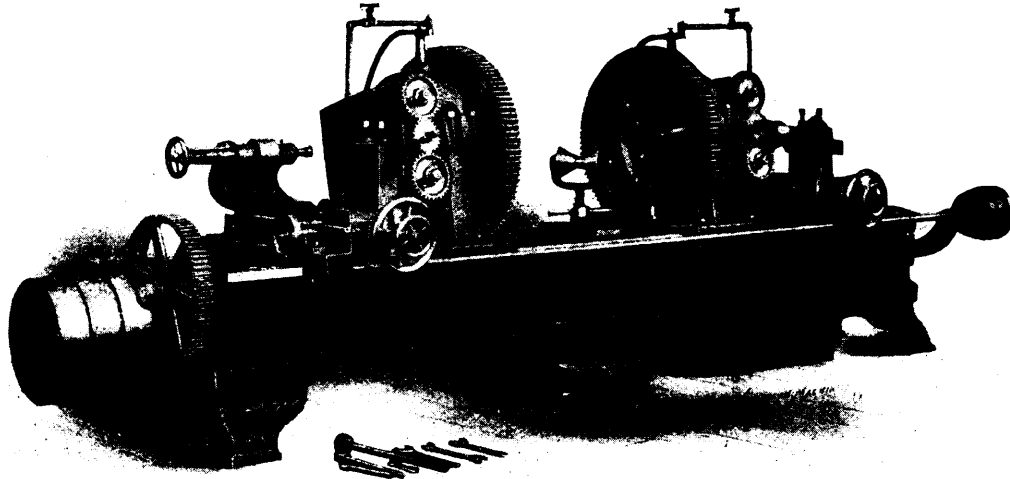
ELECTRIC RAILWAYS.

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Chatham, Wallaceburg and Lake Erie Electric Ry.—A difficulty arose at the end of July between the company and the Chatham, Ont., city council, with respect to the Aberdeen bridge, and after some negotiations an agreement was reached and construction work on the company's electric railway was resumed. (July, pg. 313.)

Chilliwack Power and Light Co.—At the annual meeting held at Chilliwack, B.C., recently, a report was presented by the General Manager showing what had been done by the company in connection with the establishment of an electric power plant and electric railway system in the Fraser Valley. By-laws had been passed by the municipalities of Chilliwack, Sumas, Matsqui and Langley, granting the free use of all public highways for pole lines and electric railway lines with exemption from taxation for 25 years, with an exclusive franchise for 20 years in all but Langley, where the franchise is an exclusive one for 15 years. A similar by-law had been given a second reading in Surrey township, and would doubtless be finally passed. An exclusive franchise for 10 years had been secured for telephone lines in the same townships, but no exclusive contract had been secured for telegraph lines. Application was made to the Provincial Government for a subsidy of \$3,000 a mile, but as the Government does not favor cash bonuses, an alternative proposal for the guarantee of a bond issue of \$750,000 at not exceeding 5%, the company to place 40% of its gross earnings at the disposal of the Government to cover the guarantee. The Government did not do anything in the way of aiding railways last session, but it was confidently expected that the company would receive substantial recognition another year. In regard to stock subscriptions only one-half of the district had been covered, and \$25,580 had been subscribed. It was expected to have \$50,000 subscribed before the cities were reached, and it was hoped to obtain \$100,000 of stock subscribed for in New Westminster and Vancouver, \$50,000 in each. The report of the General Manager was adopted, and the name of the company was changed to the Fraser Valley Electric Ry. and Power Co. Following are the officers for the current year: President, G. R. Ashwell, Chilliwack; First Vice-President, H. W. Vanderhoof, Sumas, B.C.; Second Vice-President, E. C. Ross, Rossland, B.C.; Treasurer, W. L. Macken, Chilliwack; Secretary and General Manager, J. B. Morgan, Chilliwack; Auditor, J. H. Suart, Chilliwack.

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The electric railway which it is proposed to construct will run from Chilliwack through the delta of the Fraser River, to New Westminster, a distance of about 50 miles. The company has secured a water power on the Veda River, about six miles from Chilliwack. J. B. Morgan is the principal promoter of the company.

Fort William Ontario Incline Ry. and Mount McKay Resort Co.—Application will be made next session of the Ontario Legislature for an act incorporating a company with this title to construct an incline railway from Fort William across the Kaministikwia River to Loch Lomond; to generate electrical power for the purpose of operating the line, and for sale; and to establish summer resorts. Watson, Smoke and Smith, Toronto, are solicitors for the promoters.

Glenora Water Power Co.—A company is being formed in Prince Edward County, Ont., to develop a water power and to construct a system of electric railways in the county.

Longueuil Street Ry.—The Longueuil, Que., town council is discussing the application of this company for a 20-year exclusive franchise in the town. In connection with the application it was stated that letters had been received from the Minister of Railways and C. M. Hays, Second Vice-President and General Manager, G.T.R., to the effect that the Montreal and Southern Counties Ry. had practically secured permission to run its projected electric line across the Victoria bridge.

Montreal Street Ry.—A second track has been laid on St. Lawrence St., between Sherbrooke St. and Mount Royal Ave., and a second track is being laid on Notre Dame St. west, Montreal. (July, pg. 315.)

Niagara, St. Catharines and Toronto Ry.—A proposition has been submitted to the St. Catharines, Ont., City Council by F. Nicholls, President, in connection with the electric railway development of the district. The plans provide for the construction of a spur line from the N., St. C. and T. Ry. at Thorold, to connect with the projected Toronto and Hamilton Ry. at Allanburg; and lines from St. Catharines to Welland via Fonthill; and an extension westerly to Stoney Creek to connect with the Toronto and Hamilton Ry. there. The latter extension includes the construction of a high level bridge at St. Catharines, for which the city council is asked to guarantee the interest on \$100,000 of bonds at 4½%. (Aug., pg. 371.)

Peterborough Radial Ry.—We are advised that it had not been decided when construction operations would be started on the proposed extension from Peterboro' to Young's Point, Ont. The survey for the extension is being made by — Heathcoate. (July, pg. 315.)

Southern Light and Power Co.—We are advised that until the company's power plant has been completed it will not be in a position to say anything definite regarding the construction of an electric railway. Press reports recently stated that the company proposed to construct an electric railway from Port Credit to Collingwood, Ont., and had already secured some franchises. (Aug., pg. 371.)

Toronto and York Radial Ry.—Work has been started on the extension of the Mimico Division from the present terminal at Long Branch, to Oakville, Ont., where a junction will be effected with the Hamilton Radial Ry., now nearly completed from Burlington to Oakville. (Aug., pg. 373.)

Vernon to Lumby.—The Vernon-Okanagan Land Co. is developing a water power at Shuswap Falls, B.C., and proposes to construct an electric railway from Vernon to Lumby. D. R. Young is the Manager.

Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Railway earnings for June—Vancouver, \$24,076; Victoria, \$10,795; Westminster, \$11,902; total, \$46,773, against \$40,896 for June, 1904. Gross earnings, railway and lighting, \$71,592, against \$65,932 for June, 1904. Working expenses, \$39,059; renewal funds, \$6,695; net income, \$25,838, against \$39,455 working expenses; renewal fund, \$4,988; net income, \$21,489 for June, 1904. Net earnings for twelve months ended June 30, \$328,680, against \$285,042 for same period, 1903-04.

Guelph Radial Ry.—The Guelph, Ont., city council has passed a by-law subscribing \$48,000 of the capital stock of the G.R. Ry.

The \$48,000 of bonds issued in connection with the street railway ten years ago, have been retired.

Some time ago the City Council sold \$30,000 of street railway debentures, receiving therefor a bonus of \$2,000. The council paid the \$30,000 to the Street Railway Commissioners, and the latter's treasurer is seeking to secure the bonus also.

Halifax Electric Tramway.—Railway receipts for July, \$17,284.44, against \$17,528.42 for July, 1904.

Hamilton Street Ry.—The City Treasurer has received cheque for \$5,790 mileage and percentage on receipts for the quarter ending June 30. For the half year ended June 30 the city's receipts on per centage, etc., were \$10,688 against \$10,707 for same period, 1904.

Kingston, Portsmouth and Cataract Ry.—Following are the officers and directors of the re-organized company:—President, H. W. Richardson; Vice-President, R. V. Rogers; Secretary-Treasurer, W. F. Nickel; other directors: G. Richardson, H. C. Nickel and G. A. McDonald, of Kingston, Ont.; W. D. Ross, Toronto.

Montreal Street Ry.—Passenger earnings for July, \$234,097.34; total earnings, \$257,827.99, against \$223,137.17 and \$226,695.18 for July, 1904. Working expenses, \$136,319.14; fixed charges, \$32,751.80; surplus, \$88,757.05, against \$131,276.13 working expenses, \$25,636.78 fixed charges, and \$69,782.27 surplus for July, 1904. Net earnings for ten months ended July 31, \$786,980.03; fixed charges, \$231,919.73; surplus, \$555,060.30, against \$707,399.64 net earnings, \$201,007.79 fixed charges and \$506,391.85 surplus, for same period 1903-04. Interest on Montreal Park and Island Ry. Co.'s bonds held, not included.

Niagara, St. Catharines and Toronto Ry.—Gross earnings, Jan. 1 to July 31, \$123,875.97; net earnings \$38,329.93, against \$113,778.96 gross and \$35,347.51 net for same period, 1904.

Toronto Ry.—Car receipts for July, \$242,698.60, against \$213,854.20 for July, 1904.

Electric Railway Notes.

H. C. Nickle has been appointed Superintendent of the Kingston, Portsmouth and Cataract Electric Ry.

The second annual picnic of the Montreal Street Ry. Benefit Association was held at Riverside Park, Montreal, Aug. 14 to 20.

Record of Recent Construction, no. 50, of the Baldwin Locomotive Works, Philadelphia, Pa., describes the electric motor and trailer trucks manufactured by it.

The Mayor of Toronto has prepared another plan for the entrance of the radial electric railways into the city, and will submit the same to the Board of Control early in Sept.

The Ottawa Electric Ry. has issued orders to its conductors not to wet their fingers in their mouths before separating strips of tickets for passengers, on the ground that it is

unsanitary. Some of the conductors, on their part, have talked of refusing to take money from passengers who hold it in their mouths.

The question of whether the Metropolitan Ry. has exclusive rights on Yonge St., Toronto, north of the C.P.R. tracks, is likely to be finally settled by the courts. The city solicitor is preparing a case which will be submitted to the courts unless the Metropolitan Ry. and the Toronto Ry. agree as to their respective rights.

The Judicial Committee of the Privy Council, London, Eng., has reserved judgment in the appeal of the Toronto Ry. against the decision of the Court of Appeal in the mileage suit cases. The original action was to recover mileage on the tracks on Queen St., west of Roncesvalles Ave., and the amount which would now be due, should the Privy Council conform the judgment, is \$8,000.

The general dimensions of the Montreal Street Ry.'s new observation car, of which an illustration was given on pg. 371 of our Aug. issue, are: length, over all, 46 ft. 5½ in.; length of car body, 34 ft. 2½ in.; width 8 ft., 4¼ ins.; front platform, for motorman and entrance to car, and rear platform, for conductor and entrance to car, each 5 ft. 3½ in. by 6 ft., 10 ins.; height of car from rail to top of grille, front 5 ft. 11 ins.; at rear, 8 ft. 7½ ins. The seats, of which there are four on each level, are each 3 ft. by 15 ins.

The Toronto branch of the International Street Railway Men's Union has endorsed a recommendation of its business manager to form a voluntary death benefit fund. The proposal is to assess each member \$1 on the death of a member and to turn over the amount to the widow or family. Failure to pay the assessment will not affect the member's standing in the union. The proposal to make an assessment of 50c. a member on the death of a member's wife was laid over for future consideration. The local branch has 1,168 members.

The report of Judge Snider, the referee appointed to take evidence in the penalty suits brought against the Toronto Ry. by the City Council has been filed. The judge found that under the street railway agreement the City Engineer has power to order a time-table determining the speed and service of cars; that the schedule prepared by him was workable and reasonable; that the company did not attempt to comply with its requirements for the busy hours, for a night car service and for the routes to be taken by certain cars, and that, therefore, the company is liable to a fine of \$100 per day for each of the 181 days mentioned in the statement of claim, as provided by the legislation passed at the last session of the Provincial Parliament. The city solicitor will move for judgment, but it is understood that the company will appeal.

Parks and Park Amusements.

By J. McArthur, Superintendent Toronto and York Radial Railway.

In order to make a park a success financially it is essential that the population of a place be large enough to guarantee a sufficient attendance. From a street railway manager's point of view the primary object of a company in obtaining and controlling park property is to make it a source of revenue. The ordinary traffic of a street car is composed largely of working people going to and from their work; of business and professional men going to and from their offices; of people of all classes out to do some shopping, and of people going to visit friends. If in addition to the above mentioned traffic, the company can by offering sufficient attractions, induce the public to patronize its cars, it means that the revenue of the company is increased by just the amount of the extra patronage secured,

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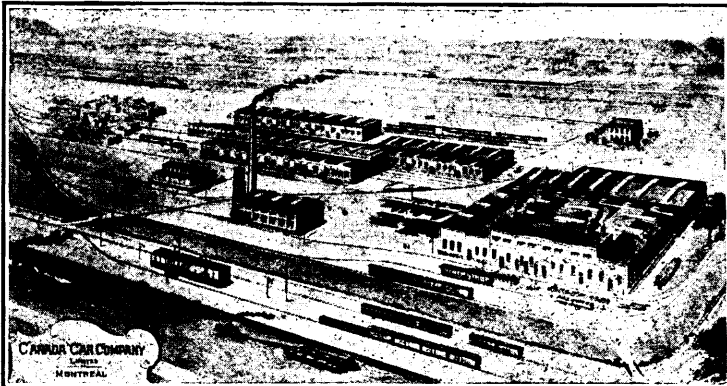
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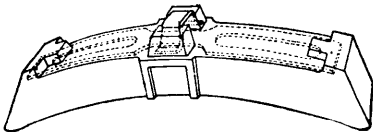
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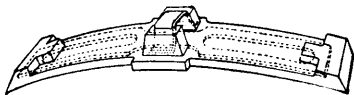
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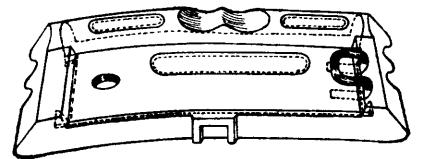
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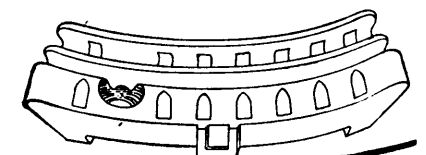
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MISCELLANEOUS IRON AND STEEL CASTINGS

The object of a company in offering parks and park amusements as an inducement to the public to patronize its lines is, or should be, to induce people to use the cars during the parts of the day and evening when they would otherwise be running nearly empty, or at least with very light loads. And the question naturally arises, does it pay a company to invest money in park property? Are the returns sufficient to justify the expenditure? This question can best be answered by stating the fact that only a very few years ago it was a rare thing to find a street railway company owning and operating a park of its own. Now it is a rare thing to find a company operating street cars, which has not some attractions in the way of parks and park amusements to offer the public.

Should a company own and control its own parks, or should it depend on the attractions offered in public parks to secure a sufficient patronage for its line? These are questions on which there is liable to be a great variety of opinion. But so much depends on the local conditions that it would be a difficult matter to lay down a rule that would fit all cases. In some of the large United States cities such as New York, Chicago and Boston, the public parks are sufficiently attractive to induce people to patronize them, not only by thousands, but by tens of thousands. In cases of this kind the railway companies have all they can do to attend to the ordinary traffic, without making any special effort to attract extra patronage to their lines. The conditions on this side of the line are entirely different, there being few, if any railway companies, which are not in a position to do a largely increased business during certain hours of the day when the ordinary traffic is light.

In the selection of land to be used as a pleasure resort, it is desirable that a location be secured having as many natural attractions as possible, as a landscape view in its natural state is more admired and more generally appreciated than when artificial means are used to make it attractive. Although not indispensable, it is very desirable that lands to be used as a pleasure resort and place of amusement should be situated on the edge of a lake or stream, as it adds greatly to the natural attractiveness of the place, besides permitting park frequenters to indulge in the pleasure of boating. A park without water loses one of its best drawing cards as a place of amusement, as invariably one of the first questions asked by parties arranging for picnic excursions is, "What about boats; how many boats have you?" This question has been considered of such importance in Chicago, that in some of the parks away from the lake lagoons have been constructed at great expense to enable the people to enjoy the pleasures of boating.

In selecting land for park purposes, great care should be taken as to the location, as on the distance of the haul depends largely whether the park can be operated at a profit or at a loss. A distinction must be made too between parks on city lines and parks on suburban or interurban lines. Parks on city lines should be at such a distance as will permit of carrying people each way for a five cent fare. If more than the regular fare is asked, the people naturally hesitate, and he who hesitates is lost—at least his nickel is lost to the company. On interurban lines the conditions are different, and parks may be placed at any distance from the terminus, provided that the park can be made sufficiently attractive and the patrons of the road made to believe that the company is giving them good value for their money. It is, however, generally conceded that the lower the fare the greater will be the patronage secured, always supposing that we have the centres of population to draw from. In fixing a tariff of fares to be charged there is a liability on the part of some railway com-

panies to fix the rates so low that they are below the actual cost of operating. This is a matter that should be very carefully considered by every street railway company, as it is often an easy matter when quoting a rate to make it so low that instead of deriving a profit, they are operating their cars at an actual loss.

Should amusements be provided in parks to induce the public to patronize them? The answer to this question will depend largely on the local conditions. If the park is on a city line or in close proximity to a city, the answer of the majority of street car managers would be in the affirmative. On interurban lines having parks 20 or 25 miles from a city there is liable to be a diversity of opinion as to how best to make them a source of revenue to the company. But the experience of companies which have tried it would go to prove that parks on interurban lines can be used to best advantage by utilizing them as picnic grounds. Encourage picnics of every description, church, Sunday school, club, society and picnics of all sorts and conditions. There should be a profit in carrying them to and from the parks; there should also be a profit derived from the park privileges, such as the renting of boats and the selling of refreshments, such as ice cream and peanuts—especially peanuts, and the small boy should be encouraged by every lawful means to consume them in large quantities.

The question may be asked here, should the company lease the park privileges, or should it keep them under its own control? There will no doubt be a diversity of opinion on this question. Some managers say and with some show of reason, that the company should operate and control the park privileges, thereby retaining any profits that may result from them. This reasoning looks fairly well on the surface. The municipal ownership advocate uses the same argument when he claims that the city should own and control its own street car lines, thereby securing to the city any profits that might be derived from it. The reply to this argument is, that the successful operation of park privileges is a business in itself and requires a man having experience and a practical knowledge of how to carry it on successfully. In regard to the leasing of park privileges it is generally conceded that a street railway company has plenty to do in attending to the operating of its cars, without going into the refreshment business.

What kind of amusements should be provided to induce the general public to patronize a park? The answer to this question will depend almost entirely on the locality. In some towns the company finds that more profit is derived from putting on the stage a fairly high-class opera. Of course it must be understood that in order to do this successfully, a suitable building must be provided, and an admission fee charged in proportion to the accommodation provided. In large city parks the varieties and kinds of amusements that may be secured are almost unlimited, and may range in value from the price of a few caddies up to \$50,000 or \$100,000. In parks on interurban lines it will scarcely pay a company to expend too much money in securing park amusements, as it is almost impossible to obtain a sufficient attendance to justify the expenditure that would be required. Parks on interurban car lines can be made much more profitable by simply using them as picnic grounds. By judicious advertising, giving a satisfactory service and by making things generally pleasant, a large amount of this kind of traffic should be secured and should prove to be a source of revenue to the company.

In reference to the handling of park traffic, it will be generally admitted that the ordinary traffic to parks should be handled by the regular cars, the object of securing parks

and supplying amusement being to induce the public to patronize the cars already in operation. If extra cars are required to handle the traffic it means an increase of operating expenses, thereby lessening the profits. The problem of attending to the park traffic on suburban lines is not so easily solved. On account of the long distance of the haul and perhaps of the scarcity of the rolling stock, it is sometimes a difficult matter to know just how to solve the problem. Picnic parties on suburban lines should be sent on special car, and each passenger should (especially on the homeward trip) be supplied with a seat. This is sometimes not so easily accomplished, as a park crowd very often all wish to come home at the same time, and they sometimes feel inclined to grumble at the street car company because they cannot work a miracle and have cars waiting for the people at all times. In sending out special cars on suburban lines they should be sent as double headers or run in sections on the same time as the regular cars; this method of despatching cars being safer on a single track as it gives greater security in the operation of the cars and lessens the risk of accidents.

In order to have a neat and attractive looking park it is necessary that sufficient labor be expended on it to have it clean and tidy at all times. Have the grass properly cut, have plenty of seats. It has been suggested that cushions be provided instead of seats, but I would scarcely go so far as to recommend that.

In regard to the closing of the parks in the fall the mistake is made by some companies of keeping their parks open too late in the season, the weather at that time of the year being often wet and disagreeable.

It may safely be said in conclusion that the majority of street railway companies have found the owning and controlling of parks to be a profitable investment.

Commutation Tickets.

By C. K. Green, Traction Manager, Hamilton Cataract Power, Light and Traction Co.

In discussing the question of commutation tickets, it is of course necessary to deal largely with the class of users. In dealing with this question I purpose giving my personal views on the subject. These views may not be in practice on the roads I represent; they may not be orthodox, and may have faults. But as I said, they are my own personal views. As I understand these discussions, the idea is that we present personal views instead of following well-defined rules, rules which have been adopted by each road from some other, rules which have been in use so long that each new line adopts them regardless of adaptability. Of course there are certain definite rules from which it would be detrimental for any management to depart. These rules mostly refer to the rate per passenger mile at which a passenger can be carried. My personal view can be summed up in a few words: I do not like commuters. You understand this is not a personal dislike. The best personal friends one can have are among commuters. The dislike is the dislike the manager of a road might feel towards a certain class of patrons. The company gives to this class an especially cheap rate—sometimes so low that if all traffic were carried at that rate, expenses could not be paid. In return for this, the company receives the continual patronage of the commuters; also their continual abuse, as to car service, general equipment, management, and, in fact, everything that can be thought of by the travelling public, and what they don't think of and growl about, is not worth mentioning. I believe a good, wholesome criticism is one of the best things in the world to make a management sit up, but

from the average commuter the criticism is a personal thing, based on personal feelings—a one-sided view with the one thought, that the road is nothing but a machine to grind the money from the public, and give as little in return as possible. He can only see the large amount he gives to the company. The fact that he gets value for his money, never enters his mind. The average commuter, in his continual morning and evening trip, soon loses sight of all the pleasures that present themselves to the occasional traveller. His trip is often made early in the morning, which is not liable to put him in the best

frame of mind. Then at night, tired and hungry, he is in little better condition. He therefore does all his travelling in an irritable state of mind, so it is no wonder that small things annoy him. The least delay is remembered and spoken of for days. His fellow passengers, who are in much the same frame of mind, and as nothing better presents itself, never tire of discussing the same topic—nothing is right, the management is rotten, the road no good, train service rank, accommodation disgraceful; in fact he seldom has a good word to say of the road. His advertisement is extremely detrimental. On the

other hand, the occasional traveller, as a general thing, enjoys his trip. The scenery to some extent is new and enjoyable, delays are of no importance. His time is entirely taken up with the view, and his fellow-passengers. He generally thoroughly enjoys his trip and speaks of it afterwards—a splendid advertisement. He cheerfully pays his fare, does not try to avoid the conductor; whereas the commuter sometimes thinks it is his duty to be missed by the conductor, or gives up his ticket with an injured expression. When we consider the benefit to the road of each passenger, we find many points in favor of

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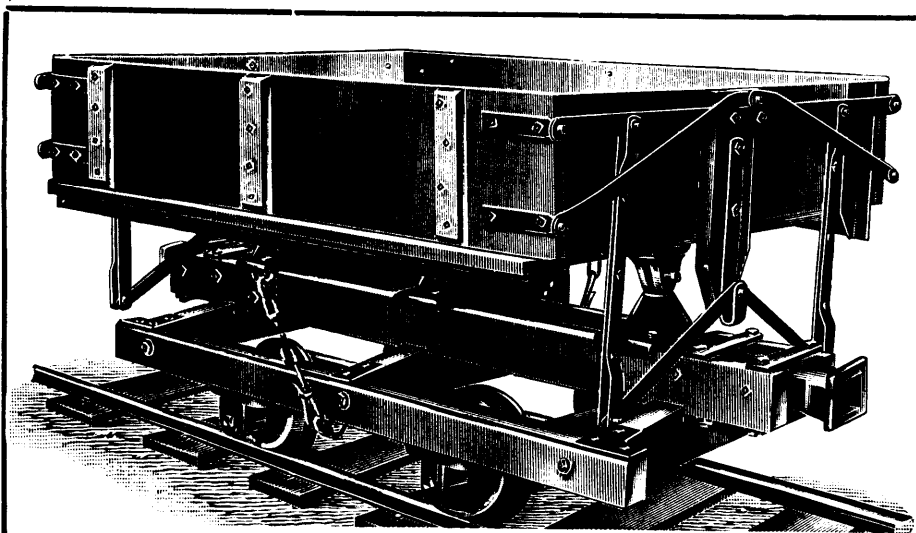
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the occasional traveller, and the faults of the commuter are so many that the difference in fare charged is often unjust. On many roads the difference in rate is considerable. My belief is that there should be little difference. The fare for the occasional traveller should not be lowered, but the rate for the commuter should be raised, so that a road may receive some compensation for the abuse and detrimental advertisement. The commuter, who is usually a workman, is an expensive passenger to handle. With these the car cleaning expenses are extremely high.

To this class of passengers are issued many kinds of commutation tickets. These tickets vary greatly in rates and restrictions. The only requirement may be that a certain number of trips must be purchased at one time, the advantages to the railway company being money in advance, and more frequent travel on account of tickets on hand. The price for tickets of this class should be little lower than the regular rates. A usual commutation ticket is issued for a family limited to a season. This is so easily and frequently abused by allowing friends to use it (the conductor not being able to distinguish) that it is really unrestricted, and has few advantages to the company over the unlimited ticket. Another class of ticket is a personal, limited, no-redemption ticket. This has a few good points, the money in advance, and no-redemption. Since the company furnishes the necessary train services both morning and evening, the fault lies with the commuter if he does not take advantage of it, therefore the company should not redeem unused portions. When these are not redeemed, endless friction is caused by passengers, all kinds of attempts to use the remaining trips are resorted to. The unredeemed portions are no doubt a small source of revenue to the company. Unless the conductor is very strict, the personal and unlimited clauses of the ticket will be abused. There is sometimes a further restriction to this class of ticket, viz.: certain trains. This is often good, and an extra source of revenue to the company when the commuter is required to take other trains. There is one further restriction—the ticket is only issued to a certain class of people. This latter restriction may or may not be legal, especially where it is a condition of the franchise, such as the workpeople's ticket, issued by the Hamilton and Dundas Ry. This may be class legislation. Commutation tickets vary from no restrictions to the greatest. Each have particular advantages, due largely to local conditions. The rates vary according to restrictions. I believe the rates are too greatly reduced as the restrictions are added. It seems to me there is too big a difference in rate at times between the unlimited and the limited. Account seems to be taken only of the limitations, and not of the chances of abuse, and general loss caused to the company thereby.

Two kinds of tickets may be used, tickets in book form from which tickets may be removed by conductor or passenger, or a card ticket which may only be punched by the conductor. Each of these have their advantages and disadvantages. The book form seems to be more frequently used, with positive instructions that the conductor must remove tickets from the book.

Every railway manager knows the difficulty with this order. Daily passengers soon become friends of the conductor, and in order to save time remove the ticket for him. It soon becomes the general manner of handling the ticket. Conductors knowing the passengers accepts the ticket detached from the book. This class of ticket is invariably abused in this way. A family ticket of this description is soon divided among members of the family. This of course cannot occur with a punch ticket. On the other hand conductors have nothing to show with

a punch ticket for fares collected. In case of a book ticket abused, one family ticket at a time supplies the whole family, but with punch tickets, a family generally requires several. Family punch tickets naturally become personal tickets, therefore of more benefit to the company. The ease and safety with which a conductor can pass a friend who is using a punch ticket is one of its greatest disadvantages. This may be overcome by the use of a special punch, which makes a peculiar noise when passing through the special paper used for this class of ticket, and also retains punched portions in a receptacle, punched portions being about half inch square. These punched pieces can be turned in by the conductor and therefore checked.

I would recommend the use of two classes of commutation tickets, viz., a family punch ticket, limited to the season and sold at a reduction of not more than 15% of the regular rates, the minimum charge per car mile being 1¢. As I stated this particular class of ticket would to a large extent be a personal one. The other class of ticket would be a student's, personal, non-redeemable ticket, limited to one month, school days and certain trains, sold at a minimum rate of ½¢ per car mile. I believe all commutation ticket business can be done most satisfactorily with these two tickets.

Grain Elevator Notes.

The Carberry Elevator Co. is erecting an elevator at Pleasant Point, Man.

S. P. Hodgson is having a 100 barrel flour mill and a 30,000 bush. elevator erected at Swan Lake, Man.

The Alberta Grain Co. will build an elevator at Camrose, Alta., as soon as the Canadian Northern Ry. reaches that place.

Two elevators belonging to E. Bewick, Shelburne, Ont., were destroyed by fire July 26. The total loss is \$30,000, the insurance being \$11,000.

The Brackman-Ker Milling Co. is erecting a new grain tank at Strathcona, Alta. It will have a capacity of 85,000 barrels of oats, and will cost \$20,000.

A contract has been let for the construction of a fireproof elevator and flour mill at Keewatin, Ont., to cost \$750,000, for the Keewatin Flour Mills Co.

The Goderich Elevator and Transit Co. has decided to rebuild its elevator at Goderich, Ont. The insurance claims have been satisfactorily settled. A contract for the reconstruction of the elevator have been let; the capacity of the new house will be 500,000 bush.

Speculation in July wheat on the Winnipeg Grain Exchange resulted in a number of "shorts" being caught. In some cases wheat which was at Kingston, Ont., or on the way there for export, was ordered back, and re-delivered into the elevators at Fort William, Ont. This is the first occasion upon which wheat has passed westward through the Sault Ste. Marie canal.

The plans for the flour mill, storage warehouse and elevator at St. Boniface, Man., for the Western Canada Flour Mills Co., have been prepared and tenders asked. The mill will be of brick, 106 ft. high, with a 16 ft. cupola, and covering an area of 152 by 58 ft. The storage warehouse will also be of brick, 216 ft. long, 70 ft. wide and 60 ft. high. The elevator, which will have a capacity of 500,000 bush., will be of the tank type, constructed of solid concrete. The working house will be of corrugated iron, and will be fitted with the most modern grain cleaning and handling machinery, and automatic sprinklers. The entire milling and elevator plant will be operated by electricity.

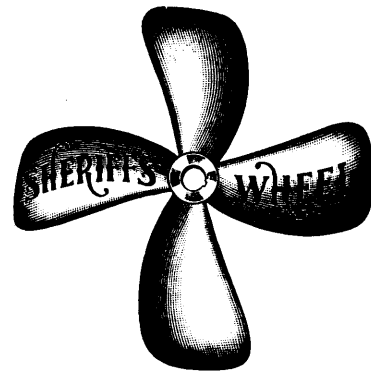
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S.S. Canada, Oct. 14;	S.S. Southwark, Oct. 21;
S.S. Dominion, Oct. 28.	

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SHIPPING MATTERS.

Maritime Provinces and Newfoundland.

The name of the schooner Congo, of Shelburne, N.S., has been changed to Gladys E. Whidden.

Capt. Kennedy, a well-known steamship captain, formerly in the Cunard service, died at Halifax, Aug. 16, aged 67.

Capt. S. Blandford was presented recently with a service of silver plate by Job Bros. & Co., St. John's, Nfld., on retiring from that firm's service.

The French steamer Pro Patria, which was wrecked in May off Fourchu, has been floated and towed to Sydney, N.S., for repairs. The wreck was sold by the underwriters for \$685.

The Dominion Government has renewed its contract with the Pickford and Black Co., Halifax, for a fortnightly service between Halifax, N.S., and the west coast of Newfoundland.

The new str. Ch. Knudsen, under charter to the Black Diamond Line, has been placed on her route carrying coal from Sydney, N.S., to Montreal. On her first trip she carried 6,850 tons of coal.

The Sydney, N.S., City Council has voted a free site for the projected shipbuilding plant there. The promoters of the enterprise are identified with the Cape Breton Coal, Iron and Ry. Co.

The Nova Scotia Government is making application to replace the draw bridge across the navigable channel of the Parrsboro River, Parrsboro, N.S., by a fixed span, and has filed plans at Ottawa and Parrsboro.

W. Richards, President, and A. E. Ings, director, of the Charlottetown Steam Navigation Co., are in England for the purpose of ordering a steamship to run between Point du Chene, N.B., and Summerside, P.E.I., to take the place of the Northumberland, which will be put on the Pictou-Charlottetown route. The str. Princess, now on this route, will probably be offered for sale.

The Department of Marine at present owns four ice-breaking steamers and has decided to construct a fifth, but by whom and where she is to be built has not been definitely decided. The Department has under consideration the construction of an additional steamer for the winter service between Prince Edward Island and the mainland. The ice-breaking steamers and the services in which they are engaged are: Champlain, engaged as a ferry steamer both summer and winter between Murray Bay and the Intercolonial Ry., at Riviere Ouelle, Que.; Montcalm, engaged as an icebreaker on the St. Lawrence River during the winter and as a lighthouse tender and supply boat during the summer; Minto and Stanley, employed keeping up communication between Prince Edward Island and the mainland during the winter.

A London, Eng., press despatch states that the Elder-Dempster Co. is prepared to run a line of steamers from Liverpool to Hudson Bay, on the completion of the Canadian Northern Ry. to a port there.

The Dominion Parliament at its last session passed an act providing that secs. 16 and 18 of the Seamen's Act, chap. 74, of the Revised Statutes, shall not apply to shipping masters and deputy shipping masters in British Columbia. In that province every shipping master, with the approval of the Minister of Marine, may now appoint not more than two deputy shipping masters, who shall receive not more than \$10 for any seaman hired or supplied, unless other terms are fixed by order-in-council. Notwithstanding this the sum to be deducted from the seaman's wages shall not exceed what would be allowed it when sec. 16 of the Seaman's Act was in force.

Province of Quebec Shipping.

E. G. Penny has been appointed a member of the Montreal Harbor Commissioners, to fill the vacancy caused by the resignation of J. Hodgson.

The Dominion Government has decided to complete the work of extending the Quebec breakwater 1300 ft. to the Louise docks; and has given the contract to Dessault and Lemieux.

The Wreck Commissioner's court has fined Pilot M. Labranche \$50 for a "grave error of judgment" in navigating the str. Agnar in the St. Lawrence River, July 17, owing to which she grounded.

The Minister of Marine has under consideration tenders for steel plates and shapes required for the construction of a hopper dredge, which it is proposed to build at the Government dockyard at Sorel, Que.

Shippers and shipowners at Glasgow, Scotland, claim that the dock charges at Montreal are too high, and that facilities for handling cargoes are far from being up-to-date. This latter matter is also being complained of by other shipowners.

By an act passed at the recent session of the Dominion Parliament the Montreal Harbor Commission has been authorized to expend a sum not exceeding \$6,000 upon the erection of a monument, within the limits of the harbor, to the late Hon. John Young.

The bill adding the Saguenay River to the Quebec pilotage district, abrogating the powers of the Quebec Harbor Commissioners as the pilotage authority for the district, and declaring such authority to be vested in the Minister of Marine, was passed at the last session of the Dominion Parliament. A clause in the act prevents the Minister from sitting as a tribunal for the trial of pilots for breaches of the pilotage regulations.

After considerable negotiations between the promoters of the proposed direct line from Quebec to Liverpool, Eng., and the Harbor Commissioners, an agreement has been reached. It was at one time feared that the negotiations would fall through owing to the Commissioners refusing to remove tonnage charges on freight east of the St. Lawrence River, and to extend the term after five years, provided the contract was satisfactorily carried out. A compromise was effected and the agreement finally approved Aug. 11. It is expected that the first steamer will sail from Quebec for Liverpool early in Oct.

Ontario and the Great Lakes.

The name of the Customs port of Rat Portage, Ont., has been changed to Kenora by Order-in-Council.

The new steamer building for the Union Steamship Co., of Hamilton, Ont., was launched at Dundee, Scotland, Aug. 16.

The names of the steamers Osceola of Hamilton, and Wanda of Toronto, have been changed to Golspie and Temagami, respectively.

The str. Turbinia has been chartered for the winter months for two seasons to run between the Florida mainland and Kings-ton, Jamaica.

The Canadian Fairbanks Co., Montreal, has been given the contract for supplying the transmission material to be used in the Cornwall canal repair shops.

The Pere Marquette Rd. is having two new freight steamers built, each having a capacity of 75 cars, to run between Conneaut, Ohio, and Rondeau, and Port Stanley, Ont.

The tonnage passing through the Canadian and U.S. canals at Sault Ste. Marie for July was 6,705,760 tons, of which 830,017 passed through the Canadian canal.

Press reports state that the G.T.R. has practically completed negotiations for the purchase of a controlling interest in the Grand Trunk Car Ferry Co., Milwaukee, Wis.

The U.S. yacht Midget has been seized by Canadian customs officers at Brockville, Ont., on a charge of illegally carrying passengers between Brockville and Morristown, N.Y.

The New Ontario Steamship Co. has entered an action against the Montreal Transportation Co. for damages to its str. Neepawah in a collision in the Welland canal with the str. Westmount, which is alleged to have been at fault.

The str. Turbinia from Hamilton, Ont., and the Toronto Ferry Co.'s str. Primrose collided near Yonge st. wharf, Toronto, Aug. 12, causing considerable damage to the latter. An investigation has been held by Commander Spain, Wreck Commissioner, to decide as to the responsibility for the accident.

The Owen Sound Yacht Club has been incorporated under the Ontario Companies' Act, with a capital of \$3,000 and offices at Owen Sound, Ont., to own and operate pleasure yachts. The provisional directors are: A. G. Mackay, J. E. Keenan, M. Kennedy, F. W. Harrison, J. W. Maitland, A. J. Creighton, of Owen Sound.

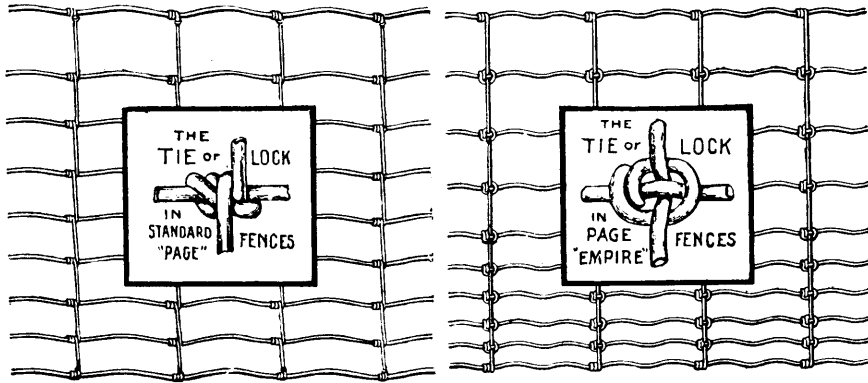
The Toronto Launch and Engine Co. has been incorporated under the Ontario Companies' Act, with a capital of \$40,000 and offices at Toronto, to carry on a boat building business, and to take over the business of J. C. McLachlan, of Toronto. The provisional directors are: J. C. McLachlan, J. G. Robinson, G. E. Buck, G. W. Hambly, R. G. Copeland.

The Toronto Ferry Co. has been incorporated under the Ontario Companies' Act, with a capital of \$600,000 and offices in Toronto, to run a line of ferry and excursion steamboats from Toronto to the Island and the summer resorts in the vicinity, and to establish summer hotels on the Island and at other points. The provisional directors are H. S. Osler, K.C.; W. B. Raymond, D'A. L. McCarthy, B. Osler and F. Ford, all of Toronto. The company proposes to construct two new ferry boats, and representatives of the company recently visited New York to inspect the ferry steamers there.

A difficulty has arisen in connection with the steamship inspection-reciprocity regulations, owing to some differences in the laws of the two countries, which C. F. Gildersleeve, ex-President of the Dominion Marine Association, says will have to be adjusted before the regulations are satisfactory. One unsatisfactory point is that the Canadian law requires all boats carrying passengers, no matter how small, to undergo inspection, but the U.S. laws do not require inspection unless they are over a certain tonnage. As the smaller steamers have no U.S. certificates they cannot obtain Canadian ones.

The U.S. Inspectors granted a certificate to the Thousand Islands Steamboat Co.'s str. New York, but the Canadian Inspector was of opinion that the vessel was not in accordance with the certificate, and declined to give a Canadian certificate under the recently approved inspection reciprocity regulations. H. S. Folger, Manager, took up the matter with the Minister of Marine, with the result that a further inspection was made by Chief Inspector Adams of Ottawa, and Inspector Duch of Quebec, and the certificate granted. In connection with the

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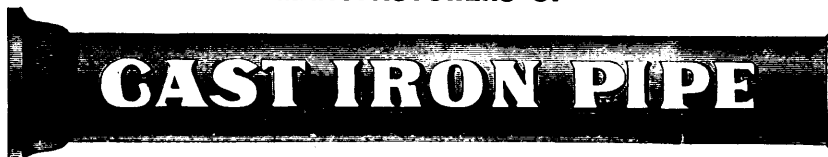
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matter charges were made against Inspector Davis, which were investigated privately, and a report has been made to the Minister of Marine.

The Canadian Towing and Wrecking Co. has been incorporated under the Ontario Companies' Act, with a capital of \$100,000 and offices at Port Arthur, Ont., to carry on a general dredging, towing, wrecking, and salvage company. The provisional directors are: J. Murphy, J. T. Horne, Fort William, Ont.; C. M. Bowman, Southampton, Ont.; J. Whalen, A. J. McComber, Port Arthur, Ont. A tug for the company was recently launched at Toronto. The hull is built of steel, and is specially constructed so as to be used as an ice-breaking steamer during the winter. Her dimensions are: length of keel, 98 ft.; length over all, 110 ft.; breadth, 24 ft.; draught, 12 ft.; and she is fitted with fore and aft compound engines, cylinders 20 and 40 inches by 36 in. stroke. Two barges are also being built at Toronto.

for traffic April 19, 1855. It was not until 1873 that the traffic through the canal exceeded 1,000,000 tons, and not until 1881 that it exceeded 2,000,000 tons. The lock has been enlarged and deepened and in 1896 the present one was completed, it being 800 ft. long, 100 ft. wide, and 20 to 22 ft. over the centre sills. The Canadian lock was completed in 1895, and is 900 ft. long, 60 ft. wide, and 22 ft. deep. The traffic through these locks for the season of 1904 was 31,456,106 tons, and during the present season to July 31 it was 19,837,204 tons.

Manitoba and the Northwest Territories.

The str. Neptune, taking supplies to the Dominion Government stations in Hudson Bay, sailed from Halifax Aug. 17. She will replace the Arctic now on the station, while the latter returns to Halifax for an overhaul and refitting.

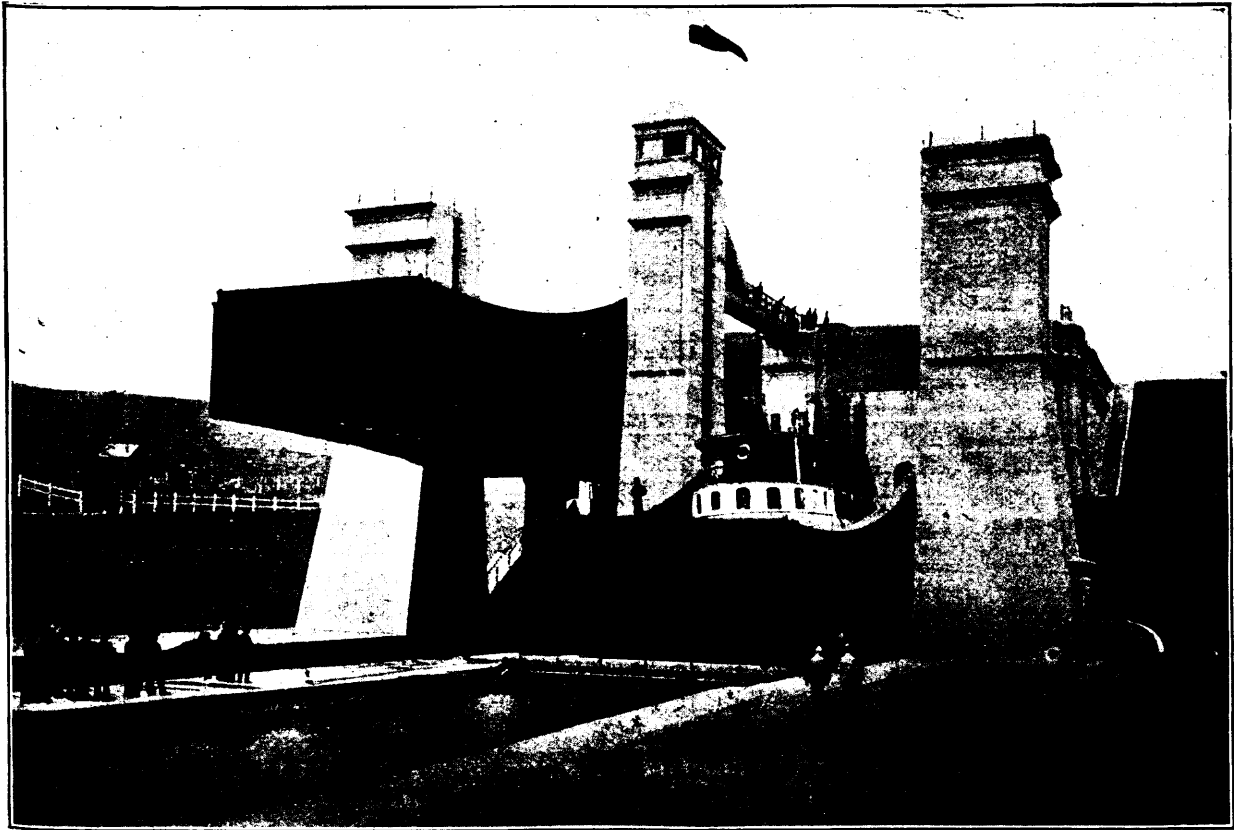
Act, with a capital of \$20,000, to carry on the shipbuilding business established at Vancouver, B.C., by A. Wallace.

The Dominion Government has renewed the contract with the Union Steamship Co., of New Zealand, for another year for the service between Vancouver, B.C., and Sydney, Australia. The subsidy is £37,000.

The new coast steamer for the C.P.R. will, it is reported, be built by the Esquimalt Marine Ry. There will also be built by the same company a steamer for the Dominion Government to engage in hydrographic work on the Pacific coast.

The Everett G. Griggs Ship Co. has been incorporated under the British Columbia Companies' Act, with a capital of \$64,000 and offices at Victoria, to carry on a general navigation business, and in connection therewith to purchase the sailing ship Lord Wolseley, of Victoria.

The Victoria Shipmasters' Association,



THE HYDRAULIC LIFT LOCK ON TRENT CANAL AT PETERBORO', ONT.

[From the report of the Bureau of Mines of Ontario.]

The 50th anniversary of the opening of the U.S. ship canal at Sault Ste. Marie, Mich., was celebrated there Aug. 2 and 3. The Dominion Government made an appropriation in connection with the celebration, J. C. Boyd, superintendent of the Canadian lock, having charge of the ceremonies in Ontario. R. Lemieux, Dominion Attorney-General, and Senator Dandurand were present at the festivities in Michigan to represent Canada. The first canal at Sault Ste. Marie was built on the Ontario side by the Northwest Company, a competitor of the Hudson's Bay Co., in 1797, but was abandoned on the failure of the company. It was only a very small affair, and it is claimed that its remains are used as a flume for the Lake Superior Power Co.'s plant. As a reminder a duplication of this original lock has been constructed at Sault Ste. Marie, Ont. The U.S. Government commenced the construction of a canal and lock in 1853, and it was opened

The Hudson Bay Co.'s str. Strathcona, on a recent trip between Edmonton, Alta., and Prince Albert, Sask., had a number of holes knocked in her hull by rocks in the bed of the river. An improvement of the river is necessary in order to permit its safe navigation for the increasing trade. At the recent session of the Dominion Parliament, \$5,000 was voted for the purpose of having a survey made. It is expected that the survey of the river between Edmonton and Lake Winnipeg will be started in Oct.

B.C. and Pacific Coast Shipping.

One of the torpedo boats sold at Victoria, B.C., by the British Admiralty has been converted into a trading steamer by the Nanaimo Fisheries Co., Nanaimo, B.C., and named Albatross.

The Wallace Shipyards has been incorporated under the British Columbia Companies'

which was started five years ago, has been incorporated under the British Columbia Companies' Act. It has 148 members and the officers for the current year are: President, Capt. Wilbur; Secretary, Capt. M. K. Morris; Treasurer, Capt. J. Newcomb.

General Superintendent Marpole states that the reported sale of the str. Charmer by the C.P.R., to the Pacific Coast Steamship Co., is without foundation. A statement was subsequently made that she would be chartered free to the P. C. S. S. Co. for a year, on this company agreeing to wipe out all claims against her on account of a collision with the str. Willimanette.

The Judicial Committee of the Privy Council, London, Eng., has refused permission to the C.P.R. to appeal against the decision of the courts in the case arising out of the collision between the company's str. Empress of India and a Chinese cruiser.

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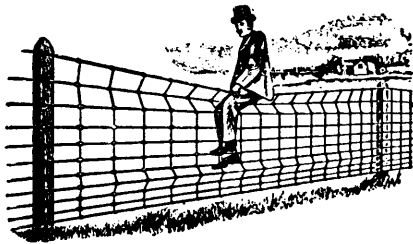
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LIST OF STEAMSHIPS REGISTERED IN CANADA FROM JULY 15 TO AUG. 15.

Name.	No.	When and Where Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Home Port.	Owners.
Admiral Togo	108,973	Port Greville, N.S., 1905	Screw 2 N.H.P.	28.0	9.0	3.6	5	4	Dorchester, N.B.	E. Cole, Dorchester, N.B.
Ariel	121,673	Vancouver, B.C., 1905	" 2 "	40.0	8.2	3.6	12	8	Vancouver, B.C.	G. E. Bower, Vancouver, B.C.
Beaver	117,109	Kingston, Ont., 1901	" 1 "	36.0	9.0	3.0	2	2	Ottawa, Ont.	D. W. O'Connor, Temagami, Ont.
Blanche	117,119	Vancouver, B.C., 1905	" 4 "	46.5	11.0	4.5	20	14	Vancouver, B.C.	A. M. Edwards, Vancouver, B.C.
Dolphin	117,107	Toronto, Ont., 1905	" 1 "	66.0	11.6	5.6	30	18	Ottawa, Ont.	F. W. Hendry, et al., New Liskeard, Ont.
Dorothy	116,304	Charlottetown, P.E.I., 1904	" 1 "	34.2	9.4	3.9	7	7	Charlottetown, P.E.I.	E. S. Kerry, Charlottetown, P.E.I.
Georgia	117,110	Cache Bay, Ont., 1903	" 12 "	48.0	9.0	3.0	12	8	Ottawa, Ont.	Booth & Gordon, Pembroke, Ont.
Grace M.	116,931	Victoria, B.C., 1900	" 10 "	60.0	11.3	5.0	34	24	Victoria, B.C.	Minister of Marine and Fisheries, Ottawa.
Gypsy	121,703	Gravenhurst, Ont., 1905	" 5 "	68.5	14.0	5.1	61	27	Toronto, Ont.	M. Dymond & Son Co., Gravenhurst, Ont.
Helena	117,120	Vancouver, B.C., 1905	" 5 "	46.2	12.5	5.3	27	18	Vancouver, B.C.	B. C. Mills Timber and Trading Co., Vancouver, B.C.
Hiawatha	117,123	Kingston, Ont., 1905	" 5 "	44.5	8.7	3.1	10	7	Kingston, Ont.	J. H. Davis, Kingston, Ont.
Hunter W.	121,704	Port Carling, Ont., 1905	" 2 "	49.0	10.6	3.7	27	18	Toronto, Ont.	T. B. & A. Croucher, Port Carling, Ont.
Island Queen	116,990	Detroit, Mich., 1905	" 16 "	18.8	5.0	2.0	1	1	Kenora, Ont.	R. Wolff, Kenora, Ont.
Jap.	117,078	Toronto, Ont., 1905	" 16 "	97.8	20.3	6.4	129	88	Toronto, Ont.	Toronto Ferry Co. (Ltd.), Toronto.
Lord Wolseley	117,191	Kenora, Ont., 1905	" 1 "	23.0	6.0	2.5	3	2	Kenora, Ont.	Scott & Hudson Bldg. Co., Kenora, Ont.
Mary	116,728	Parrsboro, N.S., 1905	" 16 "	68.8	18.0	8.0	73	50	St. John, N.B.	J. E. Moore, St. John, N.B.
Mineta	117,108	Toronto, Ont., 1902	" 2 "	33.5	8.5	3.0	4	3	Ottawa, Ont.	D. O'Connor, Temagami, Ont.
Osceola	117,027	Mahone Bay, N.S., 1905	" 2 "	52.0	14.3	6.6	19	18	Sydney, N.S.	H. McDonald, Glace Bay, N.S.
R-Tis-3	121,701	Minnet, Ont., 1905	" 4 "	51.0	8.7	3.0	11	7	Toronto, Ont.	H. C. Minnet, Minnet, Ont.
Spry	112,204	Bay City, Mich., 1882	" 69 "	183.5	33.9	13.5	1122	709	Hamilton, Ont.	Wm. Magee, Hamilton, Ont.
Winona	116,305	Charlottetown, P.E.I., 1905	" 5 1/2 "	25.4	7.5	3.4	3	3	Charlottetown, P.E.I.	H. H. Crossman, Charlottetown, P.E.I.
	117,122	U.S.A., 1877	" 1 "	48.8	7.9	3.3	19	13	Kingston, Ont.	J. H. Davis, Kingston, Ont.
	121,706	Toronto, Ont., 1905	" 4 "	47.5	10.0	4.3	20	13	Toronto, Ont.	W. P. Murray, Toronto.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA FROM JULY 15 TO AUG. 15.

Name.	No.	When and Where Built.	Rig.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Home Port.	Owners.
Agnes E.	121,700	Cape Island, N.S., 1904	Sloop	31.0	11.8	6.0	10	10	Yarmouth, N.S.	O. Phillips, Cape Island, N.S.
Argo	121,698	Tusket Wedge, N.S., 1904	"	32.0	11.0	6.0	10	10	"	M. Boudreau, Tusket Wedge, N.S.
Aroma S.	121,695	Pubnico, N.S., 1904	"	34.0	11.4	6.0	10	11	"	L. C. Amiro, Pubnico, N.S.
Augusta	121,685	Tusket Wedge, N.S., 1904	"	34.0	11.0	6.0	11	11	"	L. D. Boudreau, Tusket Wedge, N.S.
Beatrice	117,185	Elm Tree, N.B., 1905	Schr.	65.0	19.0	7.5	51	51	Chatham, N.B.	N. H. Ray, Glen Tree, N.B.
Bella Rose	116,303	Bayfield, P.E.I., 1905	"	41.6	13.6	5.8	21	21	Charlottetown, P.E.I.	M. Rose, Bayfield, P.E.I.
Ben Lomond	117,192	Keewatin, Ont., 1897	Barge	50.0	20.5	4.4	45	45	Kenora, Ont.	H. J. Davis, Kenora, Ont.
Britannia	116,857	Shelburne, N.S., 1905	Schr.	64.4	18.8	7.2	48	48	Shelburne, N.S.	G. B. Ellis, Alberton, P.E.I.
Cap a la Roche	116,604	St. Jean des Chaillons, 1905	Barge	96.0	23.6	7.2	106	98	Montreal	A. Laroche, St. Jean des Chaillons, Que.
Claymore	121,681	Clarke's Harbor, N.S., 1904	Sloop	33.0	11.0	6.0	10	10	Yarmouth, N.S.	D. A. Gardner, Clarke's Harbor, N.S.
Columbia	121,694	Tusket Wedge, N.S., 1905	"	34.0	11.6	6.0	10	10	"	N. S. Boudreau, Tusket Wedge, N.S.
D. E. Nickerson	121,683	Barrington, N.S., 1905	"	33.0	11.3	6.0	10	10	"	J. L. Nickerson, Clarke's Harbor, N.S.
Dora Lee	121,686	Tusket Wedge, N.S., 1904	"	32.0	11.0	6.0	10	10	"	J. P. Cotreau, Tusket Wedge, N.S.
Eddie C.	121,791	Port Clyde, N.S., 1905	"	30.0	11.0	6.0	10	10	"	C. D. Cooke, Port La Tour, N.S.
Ethel May	121,688	Clarke's Harbor, N.S., 1904	"	33.0	11.4	6.0	10	10	"	S. Messinger, Cape Island, N.S.
Freddie M.	121,697	Cape Island, N.S., 1904	"	31.0	11.5	6.0	10	10	"	N. Crowell, Cape Island, N.S.
Josephine	121,692	Cape Island, N.S., 1904	"	33.0	11.0	6.0	10	10	"	F. Newell, Cape Island, N.S.
Little Charley	121,693	Cape Island, N.S., 1904	"	33.0	11.3	6.0	10	10	"	H. Newell, Cape Island, N.S.
Lorain	116,729	Cumberland Bay, N.B., '05	Schr.	60.2	22.4	5.6	53	53	St. John, N.B.	A. Gale, Waterborough, N.B.
Maccabee	121,691	Port Maitland, N.S., 1904	Sloop	34.0	10.3	5.5	10	10	Yarmouth, N.S.	E. Ellis, Port Maitland, N.S.
Monitor	121,687	Tusket Wedge, N.S., 1904	"	32.0	11.0	6.0	10	10	"	A. Doucette, Tusket Wedge, N.S.
Ocean Belle	121,689	Cape Island, N.S., 1904	"	33.0	11.0	6.0	10	10	"	B. J. Newell, Cape Island, N.S.
Premier	116,605	Montreal, 1905	Dr'dge	86.0	31.5	9.2	177	177	Montreal	F. Gilbert, Montreal.
Seatonstep	121,682	Clarke's Harbor, N.S., 1904	Sloop	32.0	10.6	6.0	10	10	Yarmouth, N.S.	C. Maxwell, Clarke's Harbor, N.S.
Seaton L.	121,684	Clarke's Harbor, N.S., 1904	"	33.0	11.4	6.0	12	12	"	W. H. Kenny, Clarke's Harbor, N.S.
Squid	121,672	New Westminster, B.C., '04	Scow	50.0	22.0	5.4	51	51	Vancouver, B.C.	J. A. Croll, New Westminster, B.C.
Temeraire	121,671	New Westminster, B.C., '04	"	50.0	22.0	5.4	51	51	"	J. A. Croll, New Westminster, B.C.
Tethys	121,707	Oakville, Ont., 1905	Sloop	50.0	10.0	6.0	18	18	Toronto	F. Nicholls, Toronto.
Three Brothers	116,964	West Isles, N.B., 1896	Schr.	38.0	14.2	7.6	20	20	St. Andrews, N.B.	G. L. Johnson, West Isles, N.B.
Una	117,184	Shippegan Island, N.B., '05	"	41.7	13.4	5.4	16	16	Chatham, N.B.	D. F. Chiasson, Shippegan Island, N.B.
Winnifrid	121,699	Cape Island, N.S., 1905	"	31.0	11.6	6.0	10	10	Yarmouth, N.S.	W. C. Nickerson, Cape Island, N.S.
W. J. Britcliffe	121,690	Cape Island, N.S., 1904	"	32.0	11.0	6.0	10	10	"	A. Nickerson, Cape Island, N.S.
	121,696	Wood's Harbor, N.S., 1904	"	35.0	11.8	5.5	10	10	"	G. W. Smith, Wood's Harbor, N.S.

NOTE.—The list of vessels given in our Aug. issue included those registered between June 15 and July 15, and the dates mentioned in previous issues should be corrected so as to correspond with these dates.

Marine Votes for 1905-06.

The following sums were voted by the Dominion Parliament at the recent session, for the Public Works, Marine and Fisheries, and Trade and Commerce Departments in aid of the general navigation and marine interests of the country:—

Mail subsidies and steamship subventions.	\$1,222,221.80
OCEAN AND RIVER SERVICE.—	
Maintenance and repairs to government steamers and icebreakers.	475,000.00
New boilers for str. Aberdeen.	17,000.00
Extension of coast service on north and northwestern coasts.	65,000.00
Miscellaneous votes.	168,575.00
HYDROGRAPHIC SERVICE.—	
Surveys.	160,000.00
To purchase steamer for Atlantic coast service.	75,000.00
To purchase steamer for Pacific coast service.	75,000.00
FISHERIES PROTECTION SERVICE.—	
To provide new boiler for str. Petrel	17,000.00
LIGHTHOUSE AND COAST SERVICE.—	
Construction.	1,081,000.00
Maintenance.	675,000.00
Salaries and allowances.	238,000.00
Repairs to str. Scout.	21,000.00
Miscellaneous votes.	255,090.00

INSPECTION SERVICE.—

Steamboat inspection and inspection of Dominion steamers and fog alarms.

37,700.00

QUARANTINE SERVICE.—

New steamer for Grosse Isle.

55,000.00

New steamer for William Head.

20,000.00

MARINE HOSPITALS, ETC.—

Hospitals and shipwrecked mariners, etc.

60,000.00

ST. LAWRENCE CHANNEL.—

General works.

588,000.00

Reducing shoals west of Cornwall, Ont.

5,000.00

Dredge for channel below Quebec.

100,000.00

Permanent piers on Lake St. Peter, Que.

115,000.00

Compensation to heirs of J. Pauls, killed by explosion on dredge J. Israel Tarte.

4,000.00

To complete channel at Galops Rapid

26,500.00

Forming north channel between Galops and Adams Islands.

70,000.00

CANALS.—

Staff and repairs.

803,039.00

Salaries, etc.

55,835.00

Salaries of extra clerks, etc.

1,000.00

Beauharnois canal—repairing weir, etc.

10,600.00

Carillon and Grenville Canal—repairs, etc.

28,900.50

Chambly canal—renewing bridges, etc.

28,300.00

Cornwall canal—rebuilding piers, etc.

49,514.60

Farran's Point canal—acetylene gas apparatus.

300.00

Galops canal—removing shoals.

5,000.00

Galops canal—enlargement, etc.

160,000.00

Lachine canal—machinery, electric installation, etc.

21,300.00

Lachine canal—rebuilding bridges and repairs.

108,705.00

Lachine canal—rebuilding wharves, etc.

95,200.00

Lachine canal—enlargements, etc.

61,560.00

Murray canal—rebuilding piers.

18,000.00

Quebec canals—re-marking boundaries.

2,600.00

Rapide Plat canal—enlargement upper entrance.

4,200.00

Rideau canal—rebuilding and repairs.

13,300.00

Rideau canal—new ferry scow.

300.00

St. Lawrence canals enlargement.

7,000.00

St. Anne's Lock—repairs.

1,900.00

St. Ours canal—new booms, piers, landing wharf.

11,800.00

St. Peters canal—dredging and repairs.

4,000.00

Soulanges canal—general repairs.

16,200.00

Soulanges canal—new construction, workshops, etc.

41,500.00

Soulanges canal—steel bridge at power house.

500.00

Trent canal—construction.

300,000.00

Trent canal—improvements.

17,000.00

Trent canal—extension to Newmarket.

100,000.00

Trent canal—surveys.

53,000.00

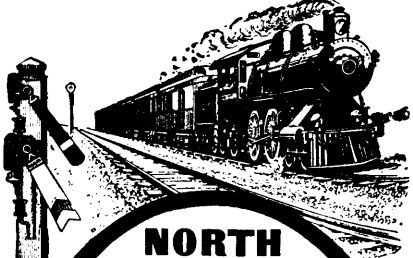
Trent canal—miscellaneous votes.....	9,000.00
Welland canal—electric light and power plant.....	140,000.00
Welland canal—improvements, repairs, etc.....	462,228.66
Williamsburg canal—steam hoist and pump.....	1,500.00
Surveys of projected Georgian Bay-Montreal canal.....	70,000.00
HARBORS AND RIVERS, ETC.—	
Extension of breakwaters, etc., P.E.I. Construction of piers, wharves, breakwaters, etc., dredging of rivers, waterways and harbors, and other works connected with the improvement of navigable waterways in the Dominion, in—	89,000.00
Prince Edward Island at four points	4,350.00
Nova Scotia at 164 points.....	609,500.00
New Brunswick at 35 points.....	507,020.00
Maritime Provinces generally.....	30,000.00
Quebec Harbor improvements.....	50,000.00
Quebec Province at 159 points.....	1,083,631.00
Ontario at 98 points.....	1,230,656.00
Fort William and Port Arthur harbors.....	26,000.00
Manitoba at 11 points.....	33,600.00
Northwest Territories, generally.....	5,000.00
Northwest Territories, survey of the North Saskatchewan river.....	5,000.00
British Columbia at 32 points.....	45,000.00
Yukon Territory.....	15,000.00
Generally.....	8,500.00
DREDGING.—	
Repairs to dredges, etc.....	101,000.00
Prince Edward Island—new plant.....	55,000.00

Maritime Provinces—new plant.....	160,000.00
Maritime Provinces—work.....	155,000.00
Ontario and Quebec—new plant.....	215,000.00
Ontario and Quebec—work.....	220,250.00
Manitoba—new plant.....	40,500.00
Manitoba—work.....	20,000.00
British Columbia—newsnag boat, etc.	30,000.00
British Columbia—work.....	40,000.00
General services.....	5,000.00
New plant generally.....	450,000.00

A proposition has been made favoring the granting of a bounty of \$5 per register ton on steel ships built in Canada.

The Dahomey, the second steamer on the Montreal-Halifax-Mexico route, sailed from Montreal Aug 26, with practically a full cargo. The Angola sailed on her return voyage from Mexico Aug. 27, with a full cargo, and a good number of passengers.

The contract for carrying the mails between Canada and Great Britain expires in Aug., 1906, and a renewal for five years has been given to the Allan Line. It is understood that a decision has been reached that in all future contracts the steamers will have to call at Sydney, N.S., to deliver the mails during that period of the year they run south of Belle Isle.



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The General Railway Signal Company has acquired the American assets and properties of the Taylor Signal Company, of Buffalo, N. Y., and of the Pneumatic Signal Company, of Rochester, N. Y., and is prepared to furnish and install approved forms of mechanical, pneumatic, electro-pneumatic and electric interlocking devices, track circuit appliances, motor signals, railway gates, etc.

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Stranding of the S.S. Argyle.

The str. Argyle ran on a rock in a fog near Oshawa, Ont., July 29, but the passengers were got off without mishap. The steamer was floated three days later by the Donnelly Salvage and Wrecking Co., and was towed to Whitby, and subsequently to Kingston, Ont., where she was repaired, and later on resumed her run between Toronto and Oshawa. An investigation into the cause of the stranding was held by Commander Spain, Wreck Commissioner, assisted by Capt. T. Donnelly, Aug. 8. Commander Spain has given the following judgment:—"The steamer Argyle, of Picton, Ont., left Toronto at 8.20 a.m., on July 29, bound for Oshawa, Ont., with an excursion party of 150 passengers on board. The weather was foggy from the time the Argyle left the eastern gap, outside Toronto, until she struck. The Argyle was commanded by Captain Wm. Manson, who holds a certificate of competency for the inland waters, issued in Toronto in Mar., 1885. From the sworn evidence given during the inquiry by the Inspector of Hulls, the equipment in regard to life belts and life-saving apparatus generally, boats, etc., was sufficient and up-to-date. The mate testified that fire and boat drill had been carried out on board the ship at least once a week. The steering gear was in good order, and no complaints were made about it. The compasses were not correct, and the captain had no idea of the deviation; and so far as the court was able to ascertain, the compasses had not been corrected for a very long time. The court is of opinion that the accident to the Argyle was caused by gross carelessness on the part of the captain in running the vessel at full speed in a dense fog from the time of leaving the eastern gap, Toronto, until she ran ashore near Corbett's Point, near Oshawa. The lead was not used, and apparently the captain had no idea of the correct compass course. The course steered was the usual one, and the reason for steering this course, as given by the captain, was that he had always done so, and the ship had gone clear, and he supposed she would go clear again. Taking all these facts into consideration, the court suspends the certificate of competency for inland waters of Captain Wm. Manson for 12 months, to date from the time of the accident, July 29, 1905. The court also wishes to point out that it is to be hoped that the method of navigation pursued on board the S.S. Argyle is not usual on board passenger steamboats on the lakes; otherwise there is no doubt that some appalling disaster must occur sooner or later."

Notices to Mariners.

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

No. 55. July 8.—Nova Scotia—140. South coast, off Ship harbor, Little Rock, whistling buoy established. 141. Cape Breton Island, east coast, Sydney harbor entrance, sunken wreck.

No. 56. July 8.—Near the boundary line between Ontario and Ohio—142. Lake Erie, uncharted shoals north of Bass Islands.

No. 57. July 10.—British Columbia—147. Vancouver Island, west coast, Barkley Sound, Carolina channel, off Amphitrite, whistling buoy established. 146. Vancouver Island, Juan de Fuca Strait, Port San Juan, whistling buoy established. 147. Strait of Georgia, sandheads at entrance to Fraser River, lightship to be established. 148. Queen Charlotte Sound, Broughton Strait, Malcolm Island, Græme point, light to be established.

No. 58. July 10.—Quebec—150. Lake St. John, Roberval, change in range lights.

No. 59. July 14.—British Columbia—151. Trincomali channel, Atkins reef, change in color of beacon. 152. Trincomali channel, Walker rock, change in color of beacon.

No. 60. July 15.—Ontario—153. Georgian Bay, west side, Cape Croker light station, new fog alarm building, change in fog alarm.

No. 61. July 15.—Quebec—154. Gulf of St. Lawrence, Gaspé bay, entrance to Gaspé basin, Sandy beach point change in character of light. 155. Gulf of St. Lawrence, Magdalen Islands, Bird rocks, character of light.

No. 62. July 20.—New Brunswick—158. South coast, Bay of Fundy, Passamaquoddy bay, St. Andrew's Harbor, eastern entrance, change in character of huoy. Nova Scotia—159. South coast, off Jeddore head, sunken wreck.

No. 63. July 22.—Nova Scotia—164. Cape Breton Island, south coast, Madame Island, Beak point, whistling buoy to be established.

No. 64. July 24.—Ontario—166. Lake Huron, west side, Southampton, fog whistle established.

No. 65. July 25.—Quebec—167. River St. Lawrence, Lake St. Peter, Louiseville range, lighthouse foundation placed.

No. 66.—July 27.—Quebec—168. Gulf of St. Lawrence, north side, off Great Meccatina Island, Flat Island, beacon rebuilt. 169. River St. Lawrence, chart, Longue Pointe to Varennes, issued.

No. 67. July 29.—170. A list of all the lights and fog signals in the Dominion, corrected to April 1, 1905, has been issued by the Department of Marine, and copies can be obtained free on application. Newfoundland—171. East coast, Notre Dame Bay, Great Dinner Island, change in color of light.

No. 68. July 29.—British Columbia—172. Victoria Harbor, Brocton ledge beacon, fog bell established, fog horn discontinued. 173. Millbank Sound, Vancouver rock, whistling buoy established.

No. 69. Aug. 2.—Ontario—174. Detroit River, Amherstburg reach, Elliott point range lights and float lights changed in position.

No. 70.—Aug. 2.—Nova Scotia—175. Bay of Fundy, Lurcher shoal, gas and whistling buoy placed temporarily. 176. South coast, Port Monton, buoys established.

No. 71. Aug. 4.—Quebec—177. River St. Lawrence, Baie St. Paul, Cap-au-Corbeau, light established.

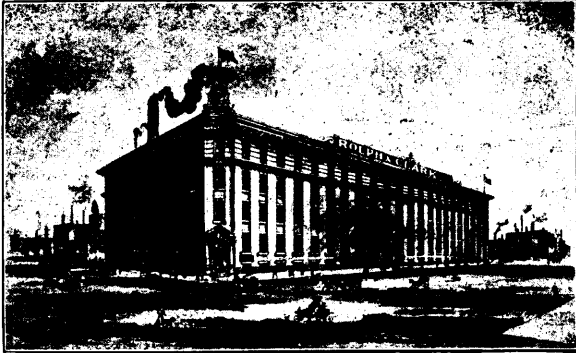
Grain Carriers for the Lakes.

A. A. Wright, of Toronto, recently wrote the Toronto Globe in reference to an interview in which D. McNicoll, Vice-President of the C.P.R., was quoted as saying that more grain carrying vessels would be required on the Great Lakes. Mr. Wright said: "I am afraid your correspondent has misunderstood Mr. McNicoll about requiring more grain carriers on the lakes, as it has been amply demonstrated during the past two years that there are twice as many Canadian-owned grain carriers as the C.P.R. can load promptly at Fort William, to say nothing of the fact that the present fleet of Canadian-owned steamships, if they could be loaded and unloaded with any reasonable despatch, could fill all of the terminal elevators at lower lake ports in two weeks. Possibly Mr. McNicoll had this in view, if he mentioned getting more grain carriers, as he probably expected to require them to store the grain in at lower lake ports, owing to the lack of elevator facilities there. It is

well known in the trade that many first-class steel grain carriers have not carried a bushel of grain this season, and the most fortunate have only carried from two to five cargoes, in practically half of the season of navigation. If anything like the anticipated quantity of wheat is to be moved this fall there will be a complete blockade of grain shipments, not from lack of vessels, but from the annual shortage of cars and lack of terminal facilities at Ontario points, together with the poor system, or lack of system, at present in use at Fort William and Port Arthur for loading vessels. Between the shipper and the railway companies, boats are run backward and forward between the two ports, calling at all the elevators for a portion of their cargo, often at the expense of several hundred dollars to the steamer, merely to save the shippers a few dollars on the expiry of free storage on their grain. Another matter which will seriously affect business in the fall if there is a rush to get out grain is the Government regulations prohibiting the loading of grain after dark, unless the shipper relieves inspectors of responsibility. If it takes from two to four days, as it has done in the past under some conditions, to load approximately 100,000 bush. on a steamer, it can readily be seen what the situation will be if 30 Canadian vessels per week go into Fort William or Port Arthur for cargoes, which would be the case were there business to warrant it, and facilities for prompt loading there and unloading at the other end. If the C.P.R. is thinking of putting on a fleet of grain carriers it is to be hoped Mr. McNicoll will give some of the present owners a chance to unload on them a few of their modern grain carrying vessels. As the railways justify the shortage of cars every fall by saying they cannot be expected to have sufficient cars to take care of these annual rushes, it can readily be seen how they would enjoy having not only enough, but more than enough vessels to take care of twice the business ever offered during the rush seasons, which will last about two weeks in the spring and a month in the fall, and then see them lie idle for five months of winter, and often run at a loss the rest of the season of navigation."

The Lake Freight Situation.

Our Winnipeg correspondent wrote on Aug. 15: "The grain trade, from the vessel standpoint, still continues dull, as about the total stocks of wheat at Port Arthur and Fort William are still in the hands of the crowd who cornered the Winnipeg July option, and while the corner was successful so far as securing all the contract wheat was concerned, the decision of the Winnipeg Exchange Arbitration Committee that \$1.16 should be the settling price instead of the close, \$1.35, has without doubt caused the "longs" to miss the cream of the corner, and will no doubt prevent any future attempt to corner the Winnipeg market. The effect of the corner was to practically stop all shipping during the month, and even yet the trade has not recovered from the effects, and the cornered wheat is still held too high for eastern millers and the export trade, in the face of the splendid crop now growing. Both the grain trade and the railways now figure that the growing crop will average 25 bushels to the acre at least, and are looking for a wheat crop alone of at least 100,000,000 bush., with other grains in proportion. So far as the vessel interests are concerned, a wheat crop of 100,000,000 bush. will mean a steady eastbound business all next season, provided the eastern Canada grain routes can be kept free of blockades, otherwise Buffalo will reap the benefit, as the crop will be an export one and therefore shippers will not be tied down to



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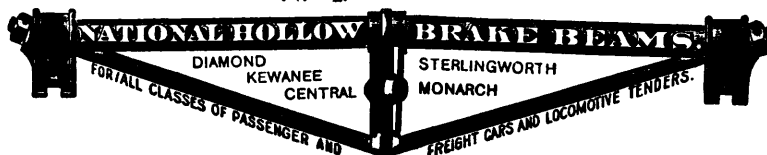
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using Canadian routes on account of the option of using their wheat for domestic trade in Ontario and Quebec. Lake freights for the fall months are bound to be high, as the extremely heavy movement of ore east-bound and coal westbound gives the vessels something to work against the grain trade, and this competition will have the usual effect of putting rates up. Even now 2½ cents is being freely bid by Duluth shippers for tonnage for the first half of Sept., whereas last year at this time 1½ cents was the going rate. While the coal movement so far has been fair, there is still a tremendous amount of coal to come up to supply both the American and Canadian west, but no fear is expressed as to any shortage as the recent addition of several 10,000 ton vessels to the American fleet is somewhat of a guarantee that the present fleets can take care of all business offering. The steel rail movement still continues good and no doubt will continue until the close of navigation, as there are still a number of large orders yet to be filled by the mills. No changes are reported in any of the above commodities for first half Sept so far as Canadian vessels are concerned."

Admiralty Court Jurisdiction.

The judgment of Judge Hodgins, in the Admiralty Court sittings at Toronto, upon the action of the owners of the Monguagon, a sailing vessel, against the str. D. C. Whitney, both United States vessels, for damages arising out of a collision in Sandusky harbor, Ohio, Nov. 28, 1901, deals at considerable length with the question of the jurisdiction of the court. This question was raised by the owners of the D. C. Whitney, and was their principal ground of defence. The steamer was arrested in Canadian waters Nov. 14, 1902. The judgment shows that the Admiralty Court in Canada has the same powers and jurisdiction that the High Court of Admiralty in England has, such being conferred by the Imperial Act of 1890. The High Court of Admiralty has always held that it had jurisdiction in cases of this kind, and a number of cases were cited in proof of this contention. It had also been decided in 1839 that cases of collision were communis juris, and this view was endorsed in 1859, Admiralty Judge Lushington in a judgment at Swansea, Wales, stating: "In cases of collision it has been the practice in this country, and, so far as I know of the European states, and of the United States of America, to allow a party alleging a grievance by a collision, to proceed in rem against the ship wherever found. And this practice, it is manifest, is most conducive to justice, because in many cases a remedy in personam would be impracticable." In 1860 the Canadian Admiralty Court held that it had jurisdiction in a case of collision between French and Norwegian vessels on the high seas; and the U.S. Admiralty Courts have at different times exercised their jurisdiction in such cases. In 1867 the U.S. Admiralty Courts disposed of a case respecting a collision between a Dutch schooner and a Russian barque in the North Sea, and in 1868, the U.S. Supreme Court decided that its Admiralty Courts had jurisdiction to try cases of collision in Canadian waters. The other main defence was "inevitable accident," but it was held that the weight of evidence satisfied the court that the term was not applicable to the case according to the definition given in already decided cases. The owners of the Monguagon were given a decree declaring the str. D. C. Whitney liable for damages caused by the collision and a reference was made to the Deputy Registrar at Windsor, Ont., to assess the damages, and to tax the costs of the action and reference.

Among the Express Companies.

The Dominion Ex. Co. has closed its offices at Doon and Ratz Ont.

The Dominion Ex. Co. has closed its wagon route between Galt and Doon, Ont.

The Dominion Ex. Co. has opened offices at Big Dan, Coe Hill, Dougherty, Johnny Lake, Mud Lake, Mulock, Osborne, Rib Lake, Riddell Creek, Twin Lake, Widdifield and Woodland. With the exception of Coe Hill, all these points are on the Temiskaming and Northern Ontario Ry.

The American Ex. Co. is authorized to waybill shipments of fruit originating at points on the Toronto, Hamilton and Buffalo Ry., destined to common points of the Dominion Ex. Co. with the Canadian Ex. Co., west of and including Peterboro', Ont., through to destination at rates mentioned in circular 35, minimum charge 35 cents.

The Canadian Bankers' Association has decided to give the same rates for money orders as the post office and the express companies. Cheques, under the new rates, will be put through for a charge of 3 cents for amounts under \$5; for 6 cents for amounts from \$5 to \$10; for 10 cents for amounts from \$10 to \$20; and for 15 cents for amounts from \$20 to \$50.

Telegraph and Cable Matters.

The G.N.W. Telegraph Co. has opened offices at Helderleigh, Ont.; Cape Despair Light, Lemieux, Perthuis, Que.

Arrangements are being made for the establishment of Marconi Wireless Telegraph stations at Owen Sound and Sault Ste. Marie, Ont.

The DeForest Wireless Telegraph Co., press reports state, has established telegraphic connection between Montreal and Quebec, and is transacting a commercial business.

The str. Colonia, built to lay the new cable from Great Britain to Canso, N.S., for the Commercial Cable Co., went ashore near Canso, and is reported to be badly injured. She has been floated and will be at once repaired.

The United States Government is arranging to establish a number of wireless telegraph stations on the lower Yukon, between Nome and Gibbon, Alaska. The str. Susan, plying on this section of the river, has been fitted with the wireless apparatus.

The International Telegraph Construction Co. of London, Eng., is investigating the possibilities of establishing wireless telegraphic communication between Australia and New Zealand. It is claimed that messages can be sent between these points at a penny a word by the wireless system, as against 4½d. a word by the cable.

The act passed by the Dominion Parliament at its recent session, for the regulation of wireless telegraphy in Canada, provides that no person shall establish any wireless telegraph on board any Canadian vessel except under a license granted by the Minister of Marine, under such regulations as may be prescribed. The penalty for breach of this act is a fine of not exceeding \$500, or imprisonment for a term not exceeding twelve months, and the forfeiture of the apparatus; proceedings can only be taken by the Minister. The Minister may grant licenses for the installation of apparatus on board vessels for experimental purposes.

A Newfoundland press correspondent, writing about the colony, points out that the new policy of the Government in respect of the telegraph service has been largely determined as the result of the arbitration proceedings

with the Reid Newfoundland Co. The evidence given before the arbitrators, who awarded \$1,500,000 to the company, showed that the company anticipated making large profits from laying a cable across the strait; and also that the business of the Anglo-American Cable Co. in the colony had nearly doubled during the last six or seven years. The first step taken by the Newfoundland Government was to reduce the inland telegraph rate from 50c. to 20c. for ten words, over its lines, which was followed by a similar reduction on the Anglo-American Cable Co.'s lines. The second step taken was to arrange for the laying of a cable from Basque, Nfld., to Canso, N.S. The new cable is expected to be in operation by Sept., 1906, and will be operated by the Commercial Cable Co., which is laying an additional cable from England to Canso. The Government has also determined to extend the wireless telegraph system to the Labrador coast, and negotiations are in progress with the Marconi Wireless Telegraph Co., in respect to the installation of these.

In connection with the recent meeting of the Pacific Cable Congress in London, Eng., the following information, extracted from a return published as a House of Commons paper, will be of interest:—The report of the Cable Board shows that the number of messages and words transmitted during the year 1904-5 were approximately 177,968 and 2,056,953 respectively, of which 106,782 messages and 1,183,929 words were inter-colonial. The audited traffic figures for 1903-4 amounted to 176,824 messages and 2,097,897 words, of which 108,211 messages and 1,232,928 words were inter-colonial. The actual expenditure of the board on the service of the cable during the year ended Mar. 31, 1905, amounted to £50,751 11s. 2d., against £54,824 19s. 8d. in the previous year. The total receipts amounted to £87,446 10s. 8d. (including a special item of £5,118 15s. on account of repair services rendered by the Iris) against £80,118 13s. 3d. last year. The surplus on actual working was, therefore, £36,694 19s. 6d. The board, however, set aside £35,000 for the renewal fund, and they had also to provide a sum of £77,544 18s. for interest and sinking fund. This sinking fund will extinguish in 50 years the entire capital expenditure. Adding these payments to the expenditure, the deficiency on the year's operations amounts to £75,849 18s. 6d., against £87,751 4s. 5d. in the previous year. This deficiency has to be made good by the contributing Governments. Although, in the year 1904-5, the receipts were swelled by the earnings of the Iris, an item which cannot be expected to recur, it is satisfactory to note that the deficiency to be met by the contributing Governments in the second year of the cable's working is less than the annuity due on account of capital. The conference has resulted in the preparation of a report recommending plans for the placing of the cable on a sounder commercial basis. No recommendation has been made to stop operating the cable in order to stop current loss, and the conference agreed that the cable was worth a large Imperial subsidy, taking into consideration the big reduction of cable rates to Australia which the competition has brought about.

General Telephone Matters.

The Nanaimo, B.C., City Council has passed a resolution favoring government ownership of telephones. The city is served by a private company, and there are 175 subscribers.

The taxpayers of Dauphin, Man., have voted in favor of a municipally owned telephone system. The Bell Telephone Co. is at present installing a telephone system in the town.

The Bell Telephone Co.'s new building at Kingston, Ont., has been completed, and the

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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 "	
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fitting up is now in progress. It is expected that the exchange will be formally opened in Oct.

The Attorney-General of Manitoba recently stated that it was the intention of the Government at the next session of the Legislature to introduce a bill providing for the establishment of a government owned and operated system of telephones, commencing with a trunk line and finally developing into branches throughout the province.

Early in the year the Amherstburg, Ont., town council granted a franchise to the Ontario Independent Telephone Co. In June only three instruments had been installed, and later on notice was given by the council that the franchise would be repealed unless its terms were promptly carried out. Nothing has since been done, and it is understood that the necessary steps will be taken to repeal the franchise.

The Bethesda and Stouffville Telephone Co. has been incorporated under the Ontario Companies' Act, with a capital of \$40,000 and offices at Stouffville, Ont., to take over the business of the Bethesda and Stouffville Telephone Association, and to carry on a general telephone business in the townships of Markham, Whitchurch, King, Pickering and Uxbridge. The provisional directors are; J. H. Ratcliffe, F. A. Dales, D. W. Heise, of Stouffville, Ont.; A. D. Bruce, G. Forester and G. A. Brodie.

The Telephone Co. of Prince Edward Island is making a number of improvements in its system. The exchange lines at Montague, Georgetown, Souris and Murray River are being rebuilt, a new switch board is being put in at Montague, the exchange lines at Summerside are being extended and in Charlottetown the common return system is being superseded by metallic circuit and a storage battery plant is being installed. A line is to be built from Wood Island to Little Sands, about eight miles, which will serve as a connecting link, and will give a third trunk line to Murray Harbor district.

The formal judgment of Justice Morrison in the case of the City of Vancouver against the British Columbia Telephone Co., sets forth that the city engineer in appending his signature to the plans of the company gave the consent contemplated by the Legislature, and that the city had not sustained any damages by reason of the company having proceeded with the work. The differences between the city and the company have been adjusted, the latter agreeing to set apart a special conduit in its underground system for the use of the city, with a special wire for fire alarm and patrol purposes, the company laying the conduit, and the city paying for the piping and wiring. It was also decided that each party should pay its own costs in the recent litigation.

The Eastern Telephone Co. held its annual meeting at Sydney, N.S., Aug. 7, when directors were elected and other business transacted. The annual report and statement of accounts has not been published. We are informed that the company expended a large amount of money in preparing overhead and underground cables, extensions of lines, etc., looking to future business, which has not yet materialized, and that the statement is not a satisfactory one. The business however is improving and it is hoped that the payment of dividends will be resumed next year. Following are the directors for the current year: B. W. Chipman, C. F. Fraser, F. B. McCurdy, R. L. Borden, J. Y. Payzant and J. Mackintosh, of Halifax; Dr. Mackeen and H. Donkin, of Glace Bay; B. Archibald, North Sydney; D. Finlayson, Arichat; James MacDonald, West Bay, and Judge Dodd, W. Crowe, J. E. Burchell and A. C. Ross, of Sydney.

Nova Scotia's Telephone Systems.

The evidence given before the House of Commons Select Committee to inquire into the various telephone systems in operation in Canada, by J. H. Winfield, Manager of the Nova Scotia Telephone Co., Halifax, N.S., contained much information of interest not only in regard to his own company, but also in reference to the whole telephone system of the province. The facts which follow are taken from the report of the Select Committee, and are arranged in narrative form, as being more convenient than as published question and answer.

The first telephone business was started in the Maritime Provinces by the Bell Telephone Co. about 1887, and subsequently an opposition company was started locally. After a short fight the Bell Telephone Co. sold out to what is now the Nova Scotia Telephone Co. This local company operated also in New Brunswick as well as in Nova Scotia. A local opposition was started in New Brunswick, and the Nova Scotia Telephone Co. sold out its interests in that province to it, reserving Nova Scotia as its field of operations. Since that time the company had gone on developing and covering the country with a network of telephone lines. At the present time there was in the province one telephone to every 74 inhabitants; two years ago there was one telephone in operation to every 85 inhabitants. The Nova Scotia Telephone Co. operated on the mainland, the Eastern Telephone Co. operated in Cape Breton Island, and there were in addition a number of local companies operating in restricted areas. A list of the several companies, showing the number of instruments operated by each, was put in evidence by Mr. Winfield, as follows:

Nova Scotia Telephone Co.	3,511
Eastern Telephone Co.	923
Valley Telephone Co.	700
Cumberland Telephone Co.	250
Yarmouth Amalgamated Telephone Co.	235
Queens' County Telephone Co.	180
Parrsboro' Shore Telephone Co.	120
Antigonish & Sherbrooke Telephone Co.	60
Central Telephone Co.	25
Barrington Telephone Co.	20
Cheverie Telephone Co.	15
Fox Harbor Telephone Co.	15
Maitland Telephone Co.	15
Westport and Digby Telephone Co.	15
Wallace Bay Telephone Co.	13
Cann's Mills Telephone Co.	12
Yarmouth Telephone Co.	12
Elmsdale, Gore and Rawdon Telephone Co.	10
Maitland and Noel Telephone Co.	10
Wentworth Telephone Co.	10
Economy and Five Islands Telephone Co.	8
Hammond's Plains Telephone Co.	8
Blandford Telephone Co.	6
Bass River Telephone Co.	5
New Ross Telephone Co.	3
Total	6,181

The Nova Scotia Telephone Co. has a line from Halifax to Truro, New Glasgow, Pictou and to the Strait of Canso, where connection is made with the lines of the Eastern Telephone Co.; another line goes through to Amherst, where connection is made with the New Brunswick Telephone Co.'s lines. It also has a line connecting Amherst and Pictou, another from Halifax to Windsor, and still another from Halifax to Bridgewater. Near Bridgewater connection is made with the Queen's County Telephone Co., which operates throughout that county, serving Liverpool, Shelburne and some smaller places. Other independent companies connected Windsor and Digby, Windsor and Truro, Elmsdale and West Gore, Stewiacke and Ship's Harbor, Brookfield and Upper Stewiacke. The various points connected by all the companies were not given, but Mr. Winfield stated that several of these were connected one with another, and most were connected with the Nova Scotia Telephone Co.'s lines. The Eastern Telephone Co. had its headquarters in Sydney, and operated

long distance lines, connecting with the Nova Scotia Telephone Co.'s line at the Strait of Canso. These local lines were promoted by the Nova Scotia Telephone Co., which supplied most of the outfits, as it was essential that there should be something like uniformity to ensure the long distance service. The local lines were kept in repair by the owners, who did most of the work of getting out the poles and stringing the wire. They were put up and maintained therefore much cheaper than they could be by a large company, and the owners would be satisfied with a service on their own line which they would not tolerate as subscribers to a company line. An endeavor was made by the Nova Scotia Telephone Co. to establish rural lines in its own territory and it put up ten miles of line between Pictou and Durham. A canvass was made for subscribers at \$20 a year, and only three subscribers were obtained; the rate was reduced to \$15 a year but no additional subscribers could be induced to take the service. After the line had been in operation for three years an investigation was made and it was found that the service was being given to 60 or 70 people for \$60 a year, the farmers at different points clubbing together to get the benefit of the service. The farmers, said Mr. Winfield, wanted the service, but were not prepared to pay for it. In granting connection to the rural companies the Nova Scotia Telephone Co. made a formal agreement that each should accept business from the other; that they would not overlap each other's territory, that the rural companies shall not extend their lines without permission, and the Nova Scotia Telephone undertook to protect the local companies from competition in their own territory. The rate for the connection varied with circumstances of each case, but the charge for the long distance service was the ordinary rate.

The Nova Scotia Telephone Co. has exchanges at Halifax, with 1,950 instruments; Amherst, Antigonish, Bridgewater, Lunenburg, Mahone Bay, New Glasgow, Oxford, Pictou, Pugwash, Shubenacadie, Truro, Windsor, Wallace, Springhill, and a few smaller places. The company also has about 200 toll stations. The Halifax lines were metallic circuits and central energy switchboard, the rates being \$45 for business instruments and \$30 for those in private houses; in Amherst, where there are 212 telephones, the rates are \$25 for business telephones and \$20 for house telephones; at Bridgewater, where there are 101 instruments, the rates are \$20 for business and \$15 for house telephones; at all places where there are fewer than 30 instruments the rate is \$15 a year all round. Telephone rates are subject to the approval of the Lieutenant-Governor-in-Council, under the terms of a Nova Scotia Act of 1903. The proportion of toll and long distance business was as 90 is to 35. The financial year of the Nova Scotia Telephone Co. ends Jan. 31, and the statement for 1904-05 had not been audited at the time Mr. Winfield gave evidence before the committee. The company has paid dividends at the rate of 6% per annum, and maintained a contingent and depreciation account, an accident reserve and an insurance reserve, the two latter amounted to \$10,000 each, and the contingent and depreciation account at Jan. 31, 1904, was \$73,448.95. The capital stock amounted to \$447,650, of which the Bell Telephone Co. held \$66,450 or about one-fourteenth. The assets of the company included, at Jan. 31, 1904, \$122,530 of stock in other telephone companies.

An independent telephone line is to be constructed from Bancroft to Maynooth, Ont., in connection with the line already existing between Bancroft and Eldorado.

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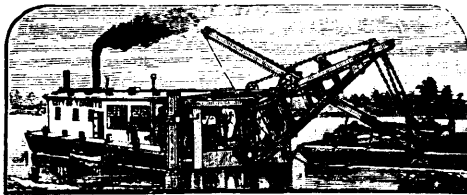
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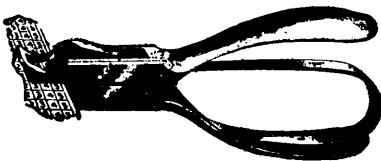
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The Canadian Pacific Railway Company.

Dividends for the half year ended 30th June, 1905, have been declared as follows:

On the Preference Stock two per cent.

On the Common Stock three per cent.

Warrants for the Common Stock dividend will be mailed on or about October 2nd to Shareholders of record at the closing of the books in Montreal, New York and London respectively.

The Preference Stock dividend will be paid on Monday, 2nd October, to Shareholders of record at the closing of the books at the Company's London office, No. 6a Charing Cross, London, S.W.

The Common Stock Transfer Books will close in Montreal, New York and London, at three p.m., on Friday, September 1st. The Preference Stock Books will also close at three p.m. on Friday, September 1st.

All books will be re-opened on Thursday, October 5th.

By order of the Board,

CHARLES DRINKWATER,

Montreal, 14th August, 1905.

Secretary.

The Canadian Pacific Railway Company.

NOTICE TO SHAREHOLDERS.

The Twenty-fourth Annual Meeting of the Shareholders of this Company for the election of the Directors to take the places of the retiring Directors, and the transaction of business generally, will be held on Wednesday, the fourth day of October next, at the principal office of the Company at Montreal, at twelve o'clock noon.

The Common Stock Transfer Books will close in Montreal, New York and London at 3 p.m. on Friday, September 1st. The Preference Stock Books will also close at 3 p.m. on Friday, September 1st.

All books will be re-opened on Thursday, October 5th.

By order of the Board,

CHAS. DRINKWATER,

Montreal, August 25th, 1905.

Secretary.

Special Announcement Hotel and Railroad Employees

An invitation is extended to any Hotel Proprietor, manager or clerk outside of New York, or Railroad official whose name appears in the Pocket List of Officials, or any member of the International Association of Coupon Railway Ticket Agents, to accept the hospitality of our hotel for three days **WITHOUT CHARGE.** This offer is made in order to establish a headquarters for Railroad officials and Hotel men.

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(Continued from third page of cover.)

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Canadian General Electric Co. Toronto.
Montreal Rolling Mills Co. Montreal.
Toronto Bolt and Forging Co. Toronto.

Crossing Gates
General Railway Signal Co. Buffalo, N.Y.
The N. L. Piper Railway Supply Co. Toronto.

Crowbars
Toronto Bolt and Forging Co. Toronto.

Culvert Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co. Hamilton.

Cuts
Acton Burrows Co. Toronto.

Derrick Ropes
Dominion Wire Rope Co. Montreal.
The B. Greening Co. Hamilton, Ont.

Derricks
M. Beatty & Sons. Welland, Ont.
F. H. Hopkins & Co. Montreal.
W. H. C. Mussen & Co. Montreal.

Diaphragms
N. J. Holden & Co. Montreal.

Diving Outfits
W. H. C. Mussen & Co. Montreal.

Door Signs
Acton Burrows Co. Toronto.

Drawing Materials
Eugene Dietzgen Co. New York.
James Foster. Toronto.

Dredges
M. Beatty & Sons. Welland Ont.

Drilling Machines
The John Bertram & Sons Co. Dundas, Ont.

Drills
W. Abbott. Montreal.

Dry Goods
The Hudson's Bay Co. Toronto.

Dump Cars (Contractors')
Toronto Pressed Steel Co. Toronto.

Dynamo and Electric Castings
American Brake Shoe & F'dry Co. Mahwah, N.J.

Economizers
Babcock & Wilcox (Ltd.) Montreal.

Electric Car Fenders
The G. B. Meadows Wire, etc., Co. Toronto.

Electric Car Route Signs
Acton Burrows Co. Toronto.

Electric Car Wire Guards
The G. B. Meadows Wire, etc., Co. Toronto.

Electric Cranes
Canada Foundry Co. Toronto.
Dominion Bridge Co. Montreal.
W. H. C. Mussen & Co. Montreal.

Electric Ry. Brake Shoes
American Brake Shoe & F'dry Co. Mahwah, N.J.

Electric Railway Builders
F. T. Ley & Co. Springfield, Mass.

Electric Ry. Supplies
J. A. Dawson & Co. Montreal.

Electric Supplies
J. A. Dawson & Co. Montreal.

Enameled Iron Signs
Acton Burrows Co. Toronto.

Engineers, Consulting
H. W. Breithaupt. Berlin, Ont.

Engineers' Supplies
Canadian Fairbanks Co. Montreal.
The Canadian Rubber Co. of Montreal.
Williams & Wilson. Montreal.

Engines, Automatic
Robb Engineering Co. Amherst, N.S.

Engines, Corliss
Robb Engineering Co. Amherst, N.S.

Engines, Gasoline
Goold, Shapley & Muir Co. Brantford, Ont.
Ontario Wind Engine and Pump Co. Toronto.

Engines, Hoisting
M. Beatty & Sons. Welland, Ont.

Engines, Stationary and Marine
Canada Foundry Co. Toronto.
H. W. Petrie. Toronto.
Polson Iron Works. Toronto.
Robb Engineering Co. Amherst, N.S.

Engines, Steam
Eric Heating Co. Chicago, Ill.
Williams & Wilson. Montreal.

Engraving
Rolph & Clark (Ltd.) Toronto.
Toronto Engraving Co. Toronto.

Engraving (Copper and Steelplate)
Rolph & Clark (Ltd.) Toronto.

Express Office Signs
Acton Burrows Co. Toronto.

Feedwater Heaters
Canadian Fairbanks Co. Montreal.
H. W. Petrie. Toronto.
Robb Engineering Co. Amherst, N.S.
Williams & Wilson. Montreal.

Fence Staples
New Brunswick Wire Fence Co. Moncton, N.B.

Fencing
Canada Foundry Co. Toronto
Canadian Steel and Wire Co. Hamilton, Ont
New Brunswick Wire Fence Co. Moncton, N.B.
McGregor, Banwell Fence Co. Walkerville, Ont.
Owen Sound Wire Fence Co. Owen Sound, Ont.
Page Wire Fence Co. Walkerville, Ont.

Fire Brick
W. H. C. Mussen & Co. Montreal.

Fire Escapes
The G. B. Meadows Wire, etc., Co. Toronto.

Fire Insurance
Dale & Co. Montreal.

Flags
The Hudson's Bay Co. Toronto.

Flour
The Hudson's Bay Co. Toronto.

Forgings
Crosen Car Mfg. Co. Cobourg, Ont.
General Railway Signal Co. Buffalo, N.Y.
Standard Steel Works. Philadelphia, Pa.

Gasoline Engines
Canadian Fairbanks Co. Montreal.

Gas Pipe (Cast Iron)
Gartshore-Thompson Pipe & F'dry Co., Hamilton.

Gates
Canada Foundry Co. Toronto.
McGregor, Banwell Fence Co. Walkerville, Ont.
New Brunswick Wire Fence Co. Moncton, N.B.
Owen Sound Wire Fence Co. Owen Sound, Ont.
Page Wire Fence Co. Walkerville, Ont.

Gears (Heavy)
W. Kennedy & Sons (Ltd.) Owen Sound Ont.

Grain Elevators
John S. Metcalfe Co. Chicago, Ill.

Groceries
The Hudson's Bay Company. Toronto.

Handcars
Crosen Car Mfg. Co. Cobourg, Ont.
W. H. C. Mussen & Co. Montreal.
Toronto Pressed Steel Co. Toronto.

Hardware
The Hudson's Bay Company. Toronto.

Headlights
N. L. Piper Railway Supply Co. Toronto.

Headlinings
Crosen Car Mfg. Co. Cobourg, Ont.

Heaters
Eric Heating Co. Chicago, Ill.

Heating for Power Plants
Eric Heating Co. Chicago, Ill.

Hose, Air Brake and Steam
The Canadian Rubber Co. of Montreal.

Hose, Fire
The Canadian Rubber Co. of Montreal.

Hose, Suction
The Canadian Rubber Co. of Montreal.

Illustrations
Acton Burrows Co. Toronto.

Hydrants
Kerr Engine Co. Walkerville, Ont.

Inspections
R. W. Hunt & Co. Montreal.
H. Jarvis & Co. Chicago, Ill.

Instruments, Surveying and Engineering
Eugene Dietzgen Co. New York.
James Foster. Toronto.

Insurance (Fire and Marine)
Dale & Co. Montreal.

Interlocking and Signalling
General Railway Signal Co. Buffalo, N.Y.

Interlocking Signals
Montreal Steel Works. Montreal.

Iron Fencing
The G. B. Meadows Wire, etc., Co. Toronto.

Iron and Steel Castings
American Brake Shoe & F'dry Co. Mahwah, N.J.

Iron, Pig
John McDougall & Co. Montreal.

Iron Signs
Acton Burrows Co. Toronto.

Japans
McCaskill, Dougall & Co. Montreal.

Journal Bearings
Canada Foundry Co. Toronto.
Crosen Car Mfg. Co. Cobourg, Ont.
Kerr Engine Co. Walkerville, Ont.
Jas. W. Pyke & Co. Montreal.
St. Thomas Brass Co. St. Thomas, Ont.

Journal Boxes
N. J. Holden & Co. Montreal.

Lager Beer, &c.
E. L. Drewry. Winnipeg.

Lamps, Incandescent
Canadian Westinghouse Co. Hamilton, Ont.

Lamps and Lanterns
The Hudson's Bay Company. Toronto.
N. L. Piper Railway Supply Co. Toronto.

Lathes
The John Bertram Sons Co. Dundas, Ont.
H. W. Petrie. Toronto.
Williams & Wilson. Montreal.

(Continued on page 447.)

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TEMPLE BUILDING ————— TORONTO

PURCHASING AGENTS' GUIDE.

(Continued from page 445.)

Launches
 Polson Iron Works.....Toronto.

Lights, Contractors' and Wrecking
 F. H. Hopkins & Co.....Montreal.
 W. H. C. Mussen & Co.....Montreal.

Lithographing
 Rolph & Clark (Ltd.).....Toronto.

Locomotive Boller Washer, Automatic
 Erie Heating Co.....Chicago, Ill.

Locomotive Driver Brake Shoe
 American Brake Shoe & F'dry Co..Mahwah, N.J.

Locomotive Lagging and Covering
 Canadian Fairbanks Co.....Montreal.

Locomotives (Compressed Air)
 Baldwin Locomotive Works.....Philadelphia, Pa.
 Canadian Locomotive Co.....Kingston, Ont.
 Locomotive and Machine Co. of Montreal.

Locomotives (Electric)
 Baldwin Locomotive Works.....Philadelphia, Pa.
 Canada Foundry Co.....Toronto.
 Locomotive and Machine Co. of Montreal.

Locomotives (Logging)
 Canadian Locomotive Co.....Kingston, Ont.
 Lima Locomotive and Machine Co..Lima, Ohio.

Locomotives (Rack)
 Baldwin Locomotive Works.....Philadelphia, Pa.
 Canadian Locomotive Co.....Kingston, Ont.
 Locomotive and Machine Co. of Montreal.

Locomotives (Steam)
 Baldwin Locomotive Works.....Philadelphia, Pa.
 Canada Foundry Co.....Toronto.
 Canadian Locomotive Co.....Kingston, Ont.
 F. M. Hicks & Co.....Chicago, Ill.
 F. H. Hopkins & Co.....Montreal.
 The W. H. Kelson Co.....Montreal.
 Lima Locomotive and Machine Co..Lima, Ohio.
 Locomotive and Machine Co. of Montreal.

Locomotive Stack Netting
 The G. B. Meadows Wire, etc., Co.....Toronto.

Machine Tools
 W. Abbott.....Montreal.
 Canadian Fairbanks Co.....Montreal.
 H. W. Petrie.....Toronto.
 Williams & Wilson.....Montreal.

Machine Screws, Set Cap and Planer
 John Morrow Machine Screw Co.....Ingersoll.

Machinery, Marine
 Sheriffs Mfg. Co.....Milwaukee, Wis.

Machinery Repairs, Marine
 Sheriffs Mfg. Co.....Milwaukee, Wis.

Manganese Steel Castings
 Montreal Steel Works.....Montreal.

Manhole Frames and Covers
 American Brake Shoe & F'dry Co..Mahwah, N.J.

Maps
 Rolph & Clark (Ltd.).....Toronto.

Marine Insurance
 Dale & Co.....Montreal.

Mats and Matting
 The Canadian Rubber Co. of Montreal.

Milepost Numbers
 Acton Burrows Co.....Toronto.

Milling Cutters
 W. Abbott.....Montreal.
 Williams & Wilson.....Montreal.

Milling Machines
 The John Bertram Sons Co.....Dundas, Ont.
 H. W. Petrie.....Toronto.

Mills, Boring and Turning
 The John Bertram Sons Co.....Dundas, Ont.
 H. W. Petrie.....Toronto.

Mill Tools and Supplies
 J. A. Dawson & Co.....Montreal.

Nickel
 The Orford Copper Co.....New York.
 Nickel for Nickel Steel
 The Orford Copper Co.....New York.

Numbers
 Acton Burrows Co.....Toronto.

Nuts, Cold Pressed
 John Morrow Machine Screw Co.....Ingersoll.

Nuts, Square and Hexagon
 Canada Foundry Co.....Toronto.
 Montreal Rolling Mills Co.....Montreal.
 Toronto Bolt and Forging Co.....Toronto.

Oakum
 The Hudson's Bay Company.....

Office Desks
 Canadian Office & School Furniture Co., Preston, Ont.

Office Fittings
 Canadian Office & School Furniture Co., Preston, Ont.

Office Ballings
 The G. B. Meadows Wire, etc., Co.....Toronto.

Office Signs
 Acton Burrows Co.....Toronto.

Oils
 Galena Signal Oil Co., Franklin, Pa., and Toronto.

Packing
 The N. L. Piper Railway Supply Co.....Toronto.
 Williams & Wilson.....Montreal.

Packing, High Pressure Sheet
 The Canadian Rubber Co. of Montreal.

Packing, Piston
 The Canadian Rubber Co. of Montreal.

Paints, Acid Proof and Anti-rust
 American Asphaltum & Rubber Co..Chicago, Ill.

Paints, Asphaltum
 American Asphaltum & Rubber Co..Chicago, Ill.

Paints, Bridge
 American Asphaltum & Rubber Co..Chicago, Ill.

Paints, Locomotive Front end
 American Asphaltum & Rubber Co..Chicago, Ill.

Paints, Mineral Rubber
 American Asphaltum & Rubber Co..Chicago, Ill.

Paints, Structural Iron
 American Asphaltum & Rubber Co..Chicago, Ill.

Pinch Bars
 The N. L. Piper Railway Supply Co.....Toronto.

Pipe
 Erie Heating Co.....Chicago, Ill.

Pipe and Pipe Coverings
 W. C. Baker.....New York.

Pipe Covering
 Canadian Fairbanks Co.....Montreal.
 Mica Boiler Covering Co.....Montreal.

Planers
 The John Bertram Sons Co.....Dundas, Ont.
 H. W. Petrie.....Toronto.

Ploughs, Contractors'
 W. H. C. Mussen & Co.....Montreal.
 Toronto Pressed Steel Co.....Toronto.

Pneumatic Tools
 N. J. Holden & Co.....Montreal.

Porter
 E. L. Drewry.....Winnipeg.

Portable Bollers
 Babcock & Wilcox (Ltd.).....Montreal.
 Canada Foundry Co.....Toronto.
 Robb Engineering Co.....Amherst, N.S.

Portland Cement
 Thorn Cement Co.....Buffalo, N.Y.

Power Plants, Contractors'
 Erie Heating Co.....Chicago, Ill.

Printing
 The Hunter, Rose Co.....Toronto.
 The Mail Job Printing Company.....Toronto.

Propeller Wheels
 W. Kennedy & Sons (Ltd.).....Owen Sound, Ont.
 Sheriffs Manufacturing Co.....Milwaukee, Wis.

Pumps
 Canadian Fairbanks Co.....Montreal.
 Canada Foundry Co.....Toronto.
 Erie Heating Co.....Chicago, Ill.
 Gould, Shapley & Muir Co.....Brantford, Ont.

Pumps (Centrifugal)
 M. Beatty & Sons.....Welling, Ont.

Punches
 F. J. Myers Mfg. Co.....Hamilton, Ohio.

Punching and Shearing Machines
 The John Bertram Sons Co.....Dundas, Ont.

Rail Benders, Roller
 Montreal Steel Works.....Montreal.

Rails (new)
 Drummond, McCall & Co.....Montreal.
 F. H. Hopkins & Co.....Montreal.
 J. J. Gartshore.....Toronto.

Rails (for relaying)
 F. H. Hopkins & Co.....Montreal.
 J. J. Gartshore.....Toronto.
 T. A. Morrison & Co.....Montreal.
 W. H. C. Mussen & Co.....Montreal.
 Jas. W. Pyke & Co.....Montreal.

Railway Equipment
 F. M. Hicks & Co.....Chicago, Ill.

Railway Interlocking
 General Railway Signal Co.....Buffalo, N.Y.

Rail Joints
 N. J. Holden & Co.....Montreal.

Railway Pile Drivers
 W. H. C. Mussen & Co.....Montreal.

Railway Signalling
 General Railway Signal Co.....Buffalo, N.Y.

Railway Supplies
 J. A. Dawson & Co.....Montreal.
 Canadian Fairbanks Co.....Montreal.
 The W. H. Kelson Co.....Montreal.
 The N. L. Piper Railway Supply Co.....Toronto.

Reamers
 W. Abbott.....Montreal.

Refrigerators
 Geo. R. Prowse.....Montreal.

Rivets, Boller, Bridge and Structural
 Canada Foundry Co.....Toronto.
 Montreal Rolling Mills Co.....Montreal.
 Toronto Bolt and Forging Co.....Toronto.

Rolled Wheels
 Standard Steel Works.....Philadelphia, Pa.

Rolls, Plate Bending
 The John Bertram Sons Co.....Dundas, Ont.

Roof Trusses
 Canada Foundry Co.....Toronto.
 Canadian Bridge Co.....Walkerville, Ont.
 Dominion Bridge Co.....Montreal.

Roofing Composition
 American Asphaltum & Rubber Co..Chicago, Ill.

Roofing Pitch
 American Asphaltum & Rubber Co..Chicago, Ill.

Roofing, Ready
 American Asphaltum & Rubber Co..Chicago, Ill.

Roofs, Car
 American Asphaltum & Rubber Co..Chicago, Ill.

Rope
 The Hudson's Bay Co.....

Rotary Snow Ploughs
 Crossen Car Mfg. Co.....Cobourg, Ont.

Rubber Tiling, Interlocking
 The Canadian Rubber Co. of Montreal.

Saw Steel
 Montreal Steel Works.....Montreal.

Scrapers (Wheel and Drag)
 W. H. C. Mussen & Co.....Montreal.
 Toronto Pressed Steel Co.....Toronto.

Screws, Coach and Lag
 Montreal Rolling Mills Co.....Montreal.
 Toronto Bolt and Forging Co.....Toronto.

Semaphore Arms
 Acton Burrows Co.....Toronto.

Semaphores
 The N. L. Piper Railway Supply Co.....Toronto.

Sewer Pipe (Cast Iron)
 Gartshore-Thompson Pipe & F'dry Co..Hamilton.

Shaking Grates
 Babcock & Wilcox (Ltd.).....Montreal.

Shaping Machines
 The John Bertram Sons Co.....Dundas, Ont.

Ship Lamps
 The N. L. Piper Railway Supply Co.....Toronto.

Ships
 Polson Iron Works.....Toronto.

Shovels
 F. H. Hopkins & Co.....Montreal.
 The Hudson's Bay Co.....

Side Bearings
 Simplex Railway Appliance Co.....Montreal.

Signal House Numbers
 Acton Burrows Co.....Toronto.

Signals
 General Railway Signal Co.....Buffalo, N.Y.
 N. L. Piper Railway Supply Co.....Toronto.

Signs
 Acton Burrows Co.....Toronto.

Slack Adjusters
 Chicago Railway Equipment Co.....Chicago, Ill.

Slotting Machines
 The John Bertram Sons Co.....Dundas, Ont.

Snow Ploughs
 Crossen Mfg. Co.....Cobourg, Ont.
 Rhodes, Curry & Co.....Amherst, N.S.

Specialties in Brass and Iron Wire
 The G. B. Meadows, Wire, etc., Co.....Toronto.

Speedicut High Speed Steel
 Montreal Steel Works.....Montreal.

Spikes, Railway, Ship or Pressed
 Montreal Rolling Mills Co.....Montreal.
 Toronto Bolt and Forging Co.....Toronto.

Springs
 Montreal Steel Works.....Montreal.
 Standard Steel Works.....Philadelphia, Pa.

Station and Tower Heaters
 W. C. Baker.....New York.

Stationery
 Rolph & Clark (Ltd.).....Toronto.

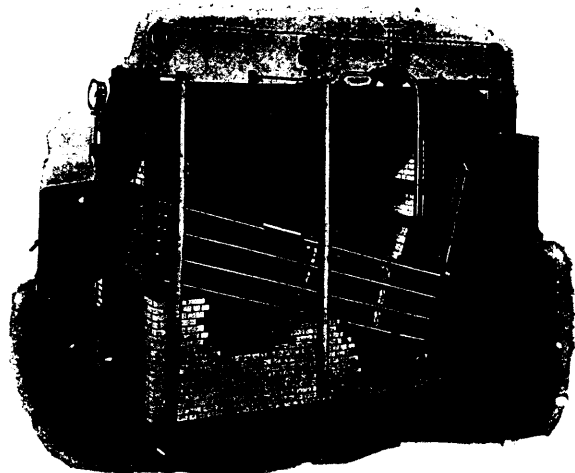
Station Name Signs
 Acton Burrows Co.....Toronto.

Steam Attachments for Car Heating
 W. C. Baker.....New York.

Steam Couplers
 Safety Car Heating and Lighting Co..New York.

Steam Hammers
 The John Bertram Sons Co.....Dundas, Ont.

- Steam Shovels**
M. Beatty & Sons.....Welland, Ont.
F. H. Hopkins & Co.....Montreal.
W. H. C. Mussen & Co.....Montreal.
- Steamship Supplies**
The W. H. Kelson Co.....Montreal.
- Steamships**
Polson Iron Works.....Toronto.
- Steamship Signs**
Acton Burrows Co.....Toronto.
- Steam Steering Engines for Tugs**
Sheriffs Mfg. Co.....Milwaukee, Wis.
- Steel**
W. Abbott.....Montreal.
F. H. Hopkins & Co.....Montreal.
Wm. Jessop & Sons.....Sheffield, Eng.
Williams & Wilson.....Montreal.
- Steel Buildings**
Canada Foundry Co.....Toronto.
Canadian Bridge Co.....Walkerville, Ont.
Dominion Bridge Co.....Montreal.
- Steel for Springs**
James Hutton & Co.....Montreal.
- Steel Plate**
Jas. W. Pyke & Co.....Montreal.
- Steel, Nickel for Nickel**
The Orford Copper Co.....New York.
- Steel Rolling Doors**
W. H. C. Mussen & Co.....Montreal.
- Steel Tyres**
James Hutton & Co.....Montreal.
Jas. W. Pyke & Co.....Montreal.
- Stokers, Mechanical**
Babcock & Wilcox (Ltd.).....Montreal.
- Structural Metal Work**
Canada Foundry Co.....Toronto.
Canadian Bridge Co.....Walkerville, Ont.
Dominion Bridge Co.....Montreal.
Locomotive and Machine Co. of Montreal.
Jas. W. Pyke & Co.....Montreal.
- Superheaters**
Babcock & Wilcox (Ltd.).....Montreal.
- Switches**
Montreal Steel Works.....Montreal.
- Switch Lamps**
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**
Canadian Fairbanks Co.....Montreal.
Canada Foundry Co.....Toronto.
Goold, Shapley & Muir Co.....Brantford, Ont.
Ontario Wind Engine and Pump Co.....Toronto.
- Telegraph and Telephone Office Signs**
Acton Burrows Co.....Toronto.
- Tents**
R. W. Hunt & Co.....Montreal.
H. Jarvis & Co.....Chicago, Ill.
- Ticket Punches**
F. J. Myers Mfg. Co.....Hamilton, Ohio.
- Ticket Wickets**
The G. B. Meadows Wire, etc., Co.....Toronto.
- Tie Plates**
Montreal Rolling Mills Co.....Montreal.
- Time Table Racks**
The G. B. Meadows Wire, etc., Co.....Toronto.
- Tires**
Standard Steel Works.....Philadelphia, Pa.
- Tool Steel**
W. Jessop & Sons.....Sheffield, Eng.
Montreal Steel Works.....Montreal.
- Towers**
Goold, Shapley & Muir Co.....Brantford, Ont.
- Track Jacks**
Canadian Fairbanks Co.....Montreal.
F. H. Hopkins & Co.....Montreal.
Montreal Steel Works.....Montreal.
W. H. C. Mussen & Co.....Montreal.
A. O. Norton.....Coaticook, Que.
- Track Tools**
N. J. Holden & Co.....Montreal.
F. H. Hopkins & Co.....Montreal.
Montreal Steel Works.....Montreal.
W. H. C. Mussen & Co.....Montreal.
- Tracklaying Lorries**
Crossen Car Mfg. Co.....Cobourg, Ont.
- Tramway Equipment**
J. J. Gartshore.....Toronto.
- Trucks (Electric Car)**
Baldwin Locomotive Works.....Philadelphia, Pa.
Canada Foundry Co.....Toronto.
Montreal Steel Works.....Montreal.
- Trucks (Railroad and Warehouse)**
Canadian Fairbanks Co.....Montreal.
Toronto Pressed Steel Co.....Toronto.
- Turbine Waterwheels**
W. Kennedy & Sons (Ltd.).....Owen Sound, Ont.
- Turnbuckles**
Montreal Steel Works.....Montreal.
- Turntables**
Canada Foundry Co.....Toronto.
Canadian Bridge Co.....Walkerville, Ont.
Dominion Bridge Co.....Montreal.
- Underwriters**
Dale & Co.....Montreal.
- Valves, Brass Gate**
Kerr Engine Co.....Walkerville, Ont.
- Valves, Brass Globe**
Kerr Engine Co.....Walkerville, Ont.
- Valves, Iron and Brass**
Canada Foundry Co.....Toronto.
Canadian Fairbanks Co.....Montreal.
- Valves, Iron Gate**
Kerr Engine Co.....Walkerville, Ont.
- Valves, Rubber**
The Canadian Rubber Co. of Montreal.
- Varnishes**
McCaskill, Dougall & Co.....Montreal.
- Vessels**
Polson Iron Works.....Toronto.
- Washers**
Montreal Rolling Mills Co.....Montreal.
- Waste**
N. L. Piper Railway Supply Co.....Toronto.
- Water Filters**
Geo. R. Frowse.....Montreal.
- Water Pipe (Cast Iron)**
Gartshore-Thompson Pipe & F'dry Co., Hamilton.
- Water Softeners**
Babcock & Wilcox (Ltd.).....Montreal.
- Wheelbarrows**
F. H. Hopkins & Co.....Montreal.
Toronto Pressed Steel Co.....Toronto.
- Wheels, Car**
John McDougall & Co.....Montreal.
Jas. W. Pyke & Co.....Montreal.
Rhodes, Curry & Co.....Amherst, N.S.
Standard Steel Works.....Philadelphia, Pa.
- Wheels, Locomotive**
John McDougall & Co.....Montreal.
- Wheels, rolled, solid forged**
Standard Steel Works.....Philadelphia, Pa.
- Wheels, steel tired**
Standard Steel Works.....Philadelphia, Pa.
- Windmills**
Canadian Fairbanks Co.....Montreal.
Ontario Wind Engine and Pump Co.....Toronto.
- Wire and Wire Rope**
Dominion Wire Rope Co.....Montreal.
The B. Greening Co.....Hamilton, Ont.
W. H. C. Mussen & Co.....Montreal.
The Wire and Cable Co.....Montreal.
- Wire Cloth**
The B. Greening Co.....Hamilton, Ont.
F. J. Myers Mfg. Co.....Hamilton, Ohio.
- Wire, Copper**
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co.....Montreal.
- Wire, Electric**
Canadian General Electric Co.....Toronto.
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co.....Montreal.
- Wire, Insulated Copper**
Canadian General Electric Co.....Toronto.
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co.....Montreal.
- Wire Lockers (Employees)**
The G. B. Meadows Wire, etc., Co.....Toronto.
- Wire, Telegraph and Telephone**
E. F. Phillips Electrical Works, Ltd.....Montreal.
The Wire and Cable Co.....Montreal.
- Wire, Transmission and Trolley**
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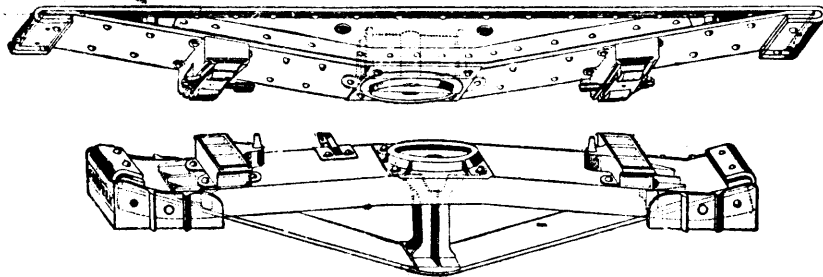
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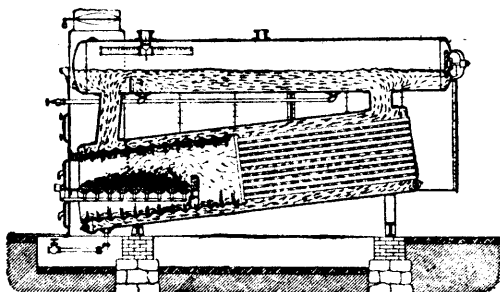
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