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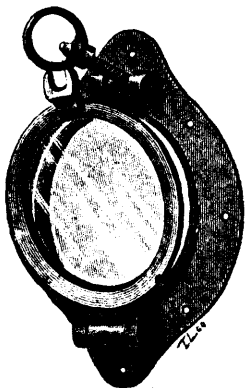
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## The Hon. Thomas Greenway.

The Premier of Manitoba is also Railway Commissioner of the province, & in that capacity has had much to do with the development of its railway system. In a recent speech he dealt with this question, saying: One of the most important planks in the platform of the leader of this government dealt with the construction of an efficient railway system in this province. The introduction of other eastern trunk lines into the country, as well as the construction of branch lines, was one of the questions which received the most serious consideration at the hands of this government. It was felt that if this province was to come to the front as it should, & reach that position in our Dominion which its natural advantages entitle it to occupy, the introduction of a more extended railway system was of paramount importance. No other project could do so much to promote the development & the settlement of the province. Success on the part of the people engaged in agricultural pursuits meant the success of the province. As the chief interest is that of agriculture, then the farmers must be given every encouragement, & proper railway facilities securing a market for the produce was the most important matter. In fact, it is necessary to have a railway within a reasonable distance of every harvest field. With that object in view this government secured the introduction of the Northern Pacific Ry. into the province, thereby providing another outlet to the south & Duluth. This system has been extended until now the N.P.R. Co. has 309 miles of railway in operation in the province. The construction of C.P.R. branches to the extent of 235 miles was secured, affording facilities through new districts that previously lacked railway accommodation, & consisting of the extension of the C.P.R. lines from Hartney to Estevan, from Glenboro to Nesbitt, Deloraine to Napinka, Nesbitt to Souris, & Monteith to Reston. Then through that fine section of territory in the northwestern part of the province, we have secured the construction of 180 miles of railway by the Canadian Northern Ry. with 160 miles more to be constructed this season, which will give us 340 miles in that section. In the southeastern part of the province we have built 50 miles last season, with 90 miles to be completed this season, making 140 miles of what is known as the Southeastern Ry., a road which will shortly give us another outlet to Fort William. The result so far of our railway policy is this, that as soon as the lines under construction are completed (which

will be by the end of this season) we will have as a monument of our enterprise in this direction 1,024 miles of railway.

Why, the province of Manitoba has built more miles of railway in the last 10 years than any other province in the Dominion of Canada. Leaving out Quebec, we have built more lines of railway than all the other provinces put together in the last 10 years. It is not my intention to dwell on the benefits & advantages which the people of this province have & will derive from the lines of railway constructed. Our main idea is to render the settlement & development of the country practicable by se-

loss of these lines. The actual cost to the province in cash for the 1,024 miles of railroads is only \$934,002.50. It is true that in the case of the Canadian Northern & the Southeastern Ry. we have given a guarantee of interest on bonds, taking the railway as security. If these lines should fail to earn their operating expenses & interest on \$8,000 a mile, then we would be obliged to advance the interest until the earnings were sufficient to repay us. Part of the lines have been in operation nearly two years, & have been so successful that they have not cost the province one cent, & I feel convinced that they never will. Whilst Manitoba has built more lines of railway than any other province in the Dominion, the cash bonuses given by Manitoba are much less than the smallest bonus given by any province to any road within its own boundary.

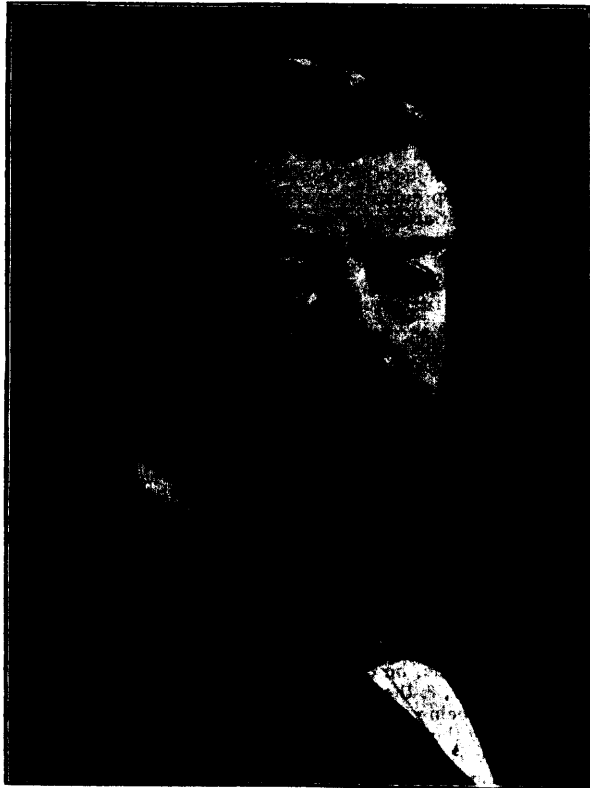
## Manitoba's Railway Policy.

At a Provincial Conservative Convention held in Winnipeg recently, the platform adopted contained these two planks relating to railway matters:

The adoption of the principle of Government ownership of railways, in so far as the circumstances of the Province will admit, & the adoption of the principle that no bonus should be granted to any railway company which does not give the Government of the Province the control of rates over lines used, together with the option of purchase.

That a line of railway be constructed to Hudson's Bay.

Several railway delegations have waited upon Premier Greenway recently, asking for the extension of roads to their respective districts. In the discussion which ensued, the railway policy of the Government was developed to a certain extent. In substance, Mr. Greenway intimated that the policy of the Government heretofore had been to assist in the construction of railways in two cases, 1st, where the lines were competing & concessions in rates were secured as a consideration of the aid, & 2nd, where they were constructed for colonization purposes, or for the purpose of securing an outlet to the markets of the world from districts remote from lines already in operation. Government ownership & operation of railways, from the standpoint of the Province at any rate, was not expedient at the present time. In any event, that question belonged rather to the jurisdiction of the Federal Government, but the question of Government control was another thing, & some solution of that should be reached, so that the rates could not be arbitrarily fixed by the existing railway companies in the Pro-



THE HON. THOMAS GREENWAY, M.P.P.,

Premier and Commissioner of Railways of Manitoba.

curing our people facilities for handling & marketing their grain, but many additional advantages have accrued. The rates on freight have declined as a result of competition. The cost of lumber has been greatly reduced in many parts of the country, as well as fuel being cheaper. The value of the lands along the lines has been increased 100 to 150%. Farmers have been enabled to greatly increase their areas under cultivation. Towns & villages have sprung up along the lines, all contributing to the general prosperity of the country. Certainly many millions of dollars would not compensate the province for the

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vince. He considered the fact that these  
companies have refused to interchange traffic  
except upon onerous terms, & in some cases  
have refused to interchange traffic at all, is a  
strong argument in favor of Government con-  
trol & for the establishment of a railway com-  
mission. The policy of the Government  
would be to aid in railway construction when  
substantial concessions could be secured  
thereby. Next to securing facilities for the  
marketing of grain, the question of rates to  
the lake was the most important of those  
affecting the farmer.

### Historical Sketch of the G.T.R.

(Continued from last issue.)

It will be seen from this that the scheme was  
for a trunk line running from Sarnia to Halifax  
on British territory. New Brunswick, how-  
ever, insisted on a branch being built to Port-  
land, Maine, but the Imperial authorities were  
not disposed to view this with favor & abso-  
lutely refused to give any guarantee if a  
foreign connection was in any way included  
in the proposals, or if the main line through  
New Brunswick was constructed on any other  
survey than that made by Major Robinson in  
1848. At that period the Intercolonial Rail-  
way as a grand highway to a winter seaport  
in British waters was a constant theme of  
discussion among the people of the three  
provinces of Canada, New Brunswick &  
Nova Scotia, &, of course, gave much scope  
for serious consideration to their respective  
governments. A line from Montreal to Port-  
land was already under construction. Hence,  
it was with much disappointment, if not chag-  
rin, that the great majority of the people saw  
their hopes blighted for a time at least. There  
were innumerable conferences between Pro-  
vincial premiers, several missions to London  
& negotiations of a most intricate character,  
which it would be impossible to refer to here,  
even if desirable.

Suffice it to say that whilst in London, on  
one of these missions early in 1852, the late  
Sir Francis Hincks, at that time holding the  
position of Inspector-General—an office analo-  
gous to that of Finance Minister—learned  
that satisfactory financial arrangements for  
the building of that part of the line between  
Montreal & Toronto could be made with the  
firm of Betts & Brassey, railway contractors.  
They had just completed extensive works in  
France, and having a large quantity of un-  
employed plant, were ready to engage in con-  
structing all the railways required in Canada.  
English capital to any amount that might  
be needed would be supplied, provided the  
works were entrusted to contractors who  
were known to and in the confidence of En-  
glish capitalists. On the return of Sir Francis  
to Canada, he consulted his colleagues in the  
cabinet, & the proposals of the contractors,  
after being somewhat enlarged, were accept-  
ed by the Ministry. The lines to be construct-  
ed were those from Montreal to Hamilton, it  
having always been contemplated by the Gov-  
ernment that the Great Western Ry., whose  
terminus was then at Hamilton, should be a  
portion of the Grand Trunk line, to which  
the public aid was limited. When these pro-  
posals were embodied in a bill incorporating  
the G.T.R. Co., & introduced in Parliament  
during the session held in the autumn of 1852,  
they met with considerable opposition from  
the supporters of the Montreal & Kingston Ry.  
Co., but finally carried on a division vote af-  
ter being amended in some important respects.

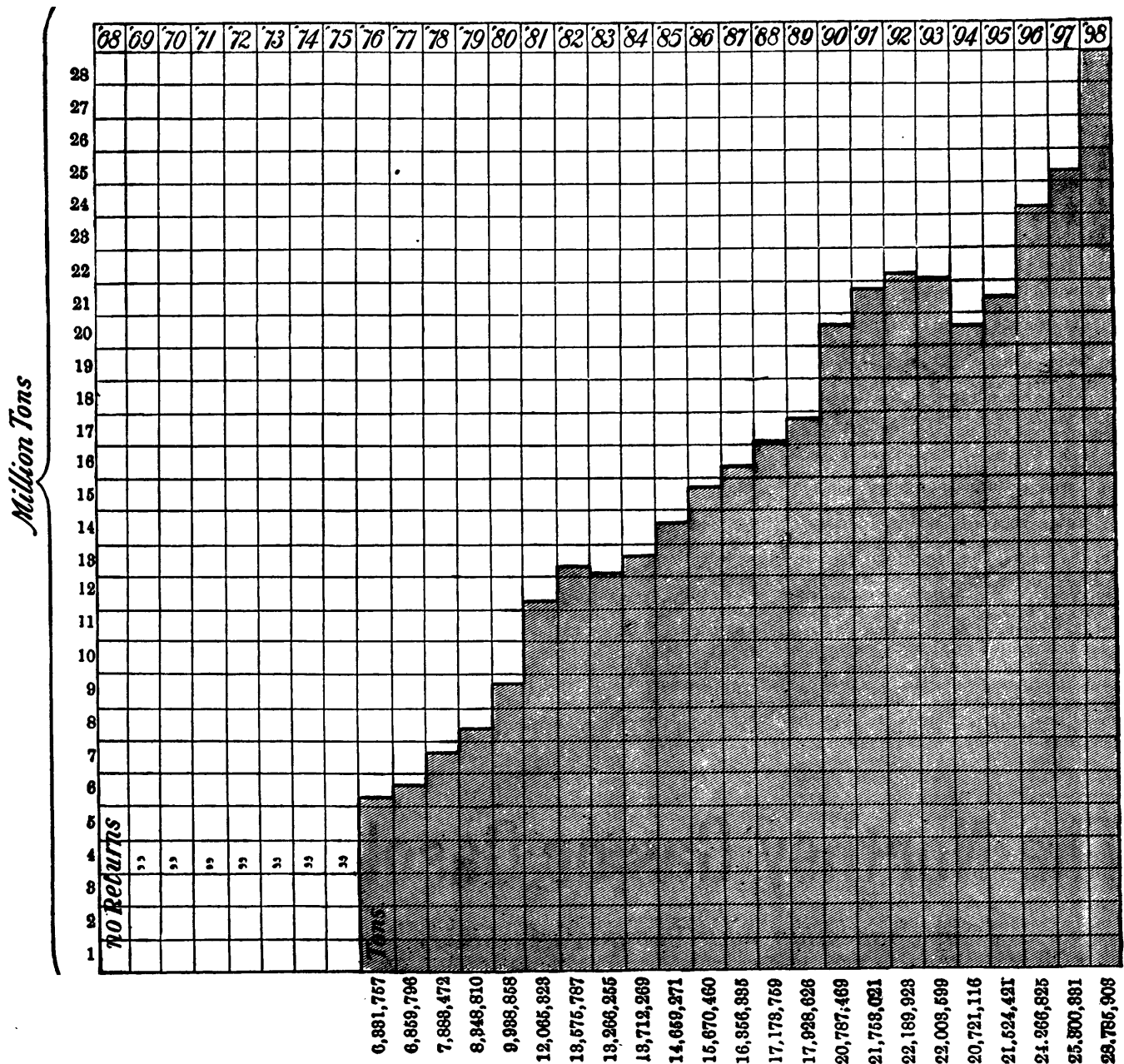
The Provincial Government guarantee, in-  
stead of being for one-half the cost of the  
road, was limited to £3,000 sterling per mile,  
& the contractors, instead of requiring a Can-  
adian subscription of one-tenth of the capital,  
undertook to obtain the whole in England.  
Later in the session a bill was passed authoriz-

ing the amalgamation of the G.T.R. Co. with  
the St. Lawrence & Atlantic, the Toronto &  
Guelph, the G.T.R. Co. of Canada East, &  
the Quebec & Richmond Ry. Co. On Nov. 10,  
1852, it received the Royal assent. It may  
be mentioned that the Toronto & Guelph Co.  
had power to continue its line to Sarnia. By  
a supplementary agreement between the vari-  
ous companies, dated April 12, 1853, the de-  
tails of the amalgamation were completed, a  
contract with Peto, Brassey, & Betts for build-  
ing the Victoria Bridge was made, & the At-  
lantic & St. Lawrence Ry. from Portland,  
Me., to the Canadian boundary line was leased  
for 999 years. The amalgamated lines form-  
ed 964 miles of railway. The capital was  
placed at £9,500,000, & the shares were for  
£25 each. Eighteen directors were appoint-  
ed, 9 of whom were nominated by the Govern-  
ment in consideration of the provincial guaran-  
tee, & with a view of protecting the public in-  
terests, 4 of these Government directors were  
cabinet ministers, 4 were independent gentle-  
men of considerable influence, & the 9th was  
the Hon. John Ross, Solicitor-General, who  
was appointed President in Canada. Six of  
the 18 directors were resident in London,  
England, & T. Baring, M.P., acted for sev-  
eral years as Chairman of the London board.  
The 12 directors resident on this side of the  
Atlantic composed the Canadian board, &  
thus equipped & constituted the G.T.R. start-  
ed upon its career.

With the promises & the probabilities in the  
matter of dividends, set forth in the pro-  
spectus issued by the Co. in 1853, it would be  
manifestly unfair at this late date to deal in a  
critical spirit, & whatever truth there may have  
been in the remark made in 1864 by the late  
T. Sturrow Brown, so well remembered as a  
stubborn opponent of the Co., to the effect  
that "he who would play the part of prophet  
before the fact stands in slippery places, for  
coincidences & contingencies in the world's  
affairs, of which the most far-seeing could  
never dream, often laugh to naught the wisest  
estimates of studious calculations," there  
appears but little reason or sense in the  
statements sometimes made upon this sub-  
ject. The men of 1852 were engaged in  
the task of constructing the longest rail-  
way in the world through a sparsely set-  
tled country, with wages & material much  
higher than they are to-day. They were,  
to a great extent, working in the dark,  
& none but the most captious or critical  
at this date, the experiences of 40 years hav-  
ing taught us all many valuable lessons, will  
wonder that the period of construction of the  
G.T. line, say from 1853 to 1860, was one of  
great anxiety & financial difficulty to all con-  
cerned.

On July 22, 1853, no. 1 pier of the Victoria  
Bridge was commenced, & in the same month  
the road from Longueuil, opposite Montreal,  
to Portland, Me., was opened. Early in Jan.,  
1854, the main line of the Great Western Ry.  
from Hamilton to Sandwich, commenced  
working as a separate concern, & remained  
independent until Aug. 12, 1882. On Nov.  
27, 1854, traffic was started over the line  
from Richmond to Point Levis, opposite Que-  
bec. Early in 1855 the Northern Ry. Co.  
commenced operating its line between To-  
ronto & Collingwood. On Nov. 19 following  
the G.T. began traffic operations between  
Montreal & Brockville, & two weeks after  
that date business began on the piece of line  
from Chaudiere Junction, practically Quebec  
City, to St. Thomas, Que. The next import-  
ant addition to the mileage took place on Oct.  
27, 1856, when the first passenger train ran  
through from Montreal to Toronto, & in 3  
weeks from that date the road was opened  
through to Stratford. In 1857 it was deemed  
expedient to dispense with Government direct-  
ors, & that step was authorized by Act of Par-  
liament. The Board was then re-organized,  
& the number of directors fixed at 15, instead

Tons of Freight Carried by Canadian Railways for the Fiscal Years Ended June 30.



of 18, ten of whom were to be resident in Canada & 5 in England. S. P. Bidder had been appointed General Manager of the Company in 1853, & remained in that position until Sep., 1857, when he was succeeded by T. E. Blackwell as Managing Director, Walter Shanly occupying the position of Chief Engineer & General Manager.

On June 28, 1858, the line from Goderich to Fort Erie was opened, & that from Stratford to St. Mary's on Sep. 27, while the Great Western line from Hamilton to Toronto, with that Co's. Sarnia branch, were ready for traffic in Dec. of the same year. In Nov., 1859, a very important connecting link between the Canadian line & the U. S. roads centering in Detroit was completed from Port Huron to that city, & the Riviere-du-Loup line was almost finished. On Dec. 12, the Victoria bridge was opened for traffic, & on Dec. 17, the first passenger train passed through. So much has been recently written & said about this great undertaking that it would seem superfluous to refer to it here, more especially as it is, at the moment of writing, being reconstructed as an open lattice bridge, the tubular feature of the work being removed. Suffice

it to say that the workmen engaged in removing the stone walls at each of the entrances to the tube are assured beyond a doubt that the builders of the bridge did their work in the most solid & lasting manner.

At the end of the decade in 1859 the Co. had completed a large system of railways, extending literally throughout the whole Province of Canada, from the waters of Lake Huron to Riviere-du-Loup on the St. Lawrence, 125 miles below Quebec, & also to the Atlantic seaboard at Portland, Me., a total of 951 miles. Its authorized capital had increased to £11,462,846. Its receipts for 1859 were a little over £500,000, & expenses £453,000. About this time the Province of Canada postponed its claim to priority of interest on its advance of £3,111,500, thus lifting, for a time, the financial cloud which hung over the operations of the Co. It ought to be mentioned that the entire line was of the 5½ ft. gauge & land was, in all cases, provided for a double track, & in several of the large structures the foundations & the masonry of the abutments were put in for a double line. On May 25, 1860, the Prince of Wales officially opened the Victoria Bridge, & on July 2, the line from

Chaudiere Junction to Riviere-du-Loup was opened for business. The government agreed to waive the condition compelling the Co. to extend the Line from Riviere-du-Loup to Trois Pistoles.

The long-continued commercial depression extending over the U. S. & Canada put a stop to the further construction of railways from 1860 to 1870, & told heavily on the existing lines. When, therefore, Mr. Blackwell retired from the management & C. J. Brydges took charge of the G.T., in 1862, the directors found it necessary to re-arrange the Co.'s finances & staff organization. The legal domicile & seat of management was fixed in London & the number of directors reduced from 15 to 12, seven to reside in England, the 5 in Canada to constitute a committee of the board for local, financial & other purposes. A betterment of the postal service arrangements with the government was secured. An improvement in train service & the renewal & repair of the road were effected & were productive of marked & admitted results.

The Civil War in the U.S. had, at that time, presented features of magnitude forbidding all chance of early peace—a serious obstacle

to the development of trade & traffic, & involving complications, commercial & political, which hampered the operations of the Co. until 1865. At the beginning of 1864 they purchased the Montreal & Champlain lines, running from Montreal in the direction of the New York State line. On June 29 in that year the Co. had its first sad experience in the matter of accidents. An immigrant train passing over the bridge at Belœil, Que., went through an open draw & down into the Richelieu River, causing great loss of life amongst the Polish & German immigrants on board. On Aug. 1, 1864, the line known as the Buffalo & Lake Huron Ry. became part of the G.T. system. This brought it to Fort Erie, opposite Buffalo, N.Y., & the work of building the international bridge between the two places was soon after put in hand. The Co. suffered severely during these years from the loss on U.S. currency, not less than \$2,000,000 being charged off on that account during the 7 years ending Dec. 31, 1868. In 1866 alone, the amount lost in this way was \$380,000, or nearly enough to pay the full year's interest on the 2nd & 3rd preference stocks.

No sooner had the war ended than the Co.'s operations were disturbed at frontier points by Fenian raids, & the abrogation of the Reciprocity Treaty between Canada & the U.S., which totally demoralized the international traffic of the road. The Hon. John Ross resigned the Presidency of the Co. in 1862, & was succeeded by Mr., afterwards Sir, Edward Watkin, who for many years ranked amongst the prominent railway men of England. Sir Edward did good work for the Co. during his term of office, & effected many important improvements. He resigned in 1868, & was succeeded by R. Potter, who had been on the Board for some time. In 1870 the construction of the Intercolonial line to a con-

nection with the G.T. at Riviere-du-Loup was being pushed forward with vigor, & Mr. Brydges was one of the three Commissioners appointed by the Government to control that work. In that year also the sleeping car arrangements were placed in charge of the Pullman Palace Car Co., & have so remained to the present time. The question of a change of gauge from the then existing 5½ ft. width to that of the standard, 4 ft. 8 ins., of the U. S. was raised, & the Board decided to fall into line with the other roads without delay. The G.T. cannot be said to have been exceptional in the matter of gauge, for at that time the Erie Ry. was of a 6 ft. gauge.

On November 18, 1872, the tracks of the G.T. Co. between Sarnia & Fort Erie were narrowed, & on Oct. 4, 1873, the 2nd section between Stratford & Montreal was changed. Some misunderstanding having arisen between the Board & the Managing Director, Mr. Brydges, regarding the estimates for this work, he retired in April, 1874, & was succeeded by the late Sir Jos. Hickson, then Secretary-Treasurer of the Co. in Canada. His first act was to complete the change of gauge, & the 3rd and last section—that between Montreal, Portland & Riviere-du-Loup—was successfully narrowed between Sept. 26 & 28, 1874. The line from Port Huron to Detroit was originally constructed on the standard, or 4 ft. 8½ in. gauge, & the operation just recorded brought the G. T. road into uninterrupted connection with the U.S. lines east & west of the system. Additional cars & locomotives were purchased, & the International bridge at Fort Erie was opened in the summer of 1874.

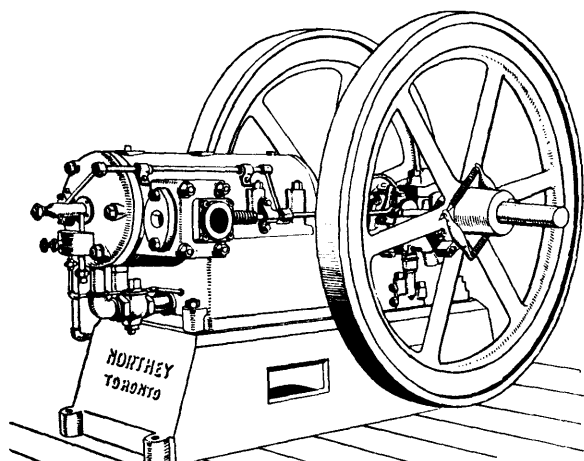
All these advantages secured placed the Co. in a strong position to compete for through all-rail business, & the Michigan Central, then an independent Co., handled all the G. T. traffic between Detroit & Chicago. This,

however, aroused the jealousy of rival U.S. interests, & in 1878, the M.C. was secured by W. H. Vanderbilt. It was at once determined to secure a route to Chicago owned by the G.T., & the first step in that direction was the sale of the branch from Chaudiere Jct. to Riviere-du-Loup, to the Dominion Government, with the proceeds of which several pieces of railway already constructed between Port Huron & Chicago were purchased. After great delay, caused by harassing litigation, as well as by physical obstructions, the line now known as the Chicago & G.T. was opened from Port Huron to Chicago on April 8, 1880, when the first through passenger train in regular service passed over it. The task of securing an entrance into large cities for new lines is one of the difficult problems which railway managers occasionally have to solve, but the solution is not made easier by the additional fact of having to construct or secure over 300 miles of road preparatory to the entrance. The legislative & municipal enactments, decrees, charters, deeds, etc., in this connection fill several volumes in the Co.'s records.

In Jan., 1881, the G.T. commenced the operation of the line running from Lenox to Pontiac, & ultimately extended to Jackson, Mich., with a view of doing business with Toledo, Ohio. During the year it also strengthened its position in the district between Montreal & the New York State Line. In April, 1882, the Midland Co.'s system in central Ontario became incorporated in that of the G.T., & the Great Western Ry. Co. amalgamated with the latter on Aug. 12 following. Both of these amalgamations were considered desirable in view of the fact that the C.P.R. Co., not then long in existence, had determined to depart from its original intention of confining its operations to a line between Eastern Canada & Vancouver, & to en-

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ter the field for a share of the business originating in the western peninsula of Ontario. In taking over the Great Western Line, the G. T. had also to take the Detroit, Grand Haven & Milwaukee Ry., which was one of its affiliations.

The work of crossing trains over the St. Clair river between Point Edward & Fort Gratiot by means of large ferry boats adapted for carrying cars was at times obstructed by the large number of lake boats passing up & down that rapid stream, & in winter the operation of these car-ferry boats was attended with considerable risk, owing to the running ice. The feasibility of a tunnel under the river a short distance below the town of Sarnia was considered & finally decided upon. Evil prophets there were then, just as there are to-day in connection with the reconstruction of the Victoria Bridge, who cried "disaster" & "failure"; but the same skill & good judgment that stilled the voice of jealousy & mistrust in the successful completion of the great submarine tunnel in Sep., 1891, will undoubtedly re-assert itself in the completion of the work over the St. Lawrence River. The Interstate Commerce Act, passed by the U. S. Congress, took effect on April 5, 1887, & to a certain extent hampered the operations of the leading companies in the U. S. The G. T. running, as it does, through seven States of the Union—Maine, New Hampshire, Vermont in the east, New York State at several points, & Michigan, Indiana & Illinois in the west—had to comply with the requirements of the Act.

In Feb., 1888, the Northern & North Western lines were fused in the G. T. system, & in a few months after the Toledo, Saginaw & Muskegon, & the United States & Canada lines were taken over. The last subsidiary road incorporated in the Co.'s system, under Sir Jos. Hickson's management, was that running from Durand to Saginaw, Mich. This took place in Oct., 1890. On Dec. 29 following, that gentleman laid down the cares of office after having piloted the Co. safely through the rocks & shoals of 17 years, & the Board, in accepting his resignation, expressed its sense & appreciation of the eminent services he had rendered, & of his devotion to the interests of the concern during his term of service. He took a warm interest in the Co.'s welfare up to the time of his death in Jan., 1897. He succeeded in the management in Jan., 1891, by L. J. Seargeant, formerly Traffic Manager of the Co. In April, 1893, the consolidation of 14 different lines with the parent company was effected, thus dispensing with that number of Boards of Directors, annual meetings, etc.

Early in 1895 a large number of the shareholders, desiring a change in the policy of the Board, tested the question by a vote in the month of May. The result was the resignation of Sir H. W. Tyler, as President, & the election of a new Board with Sir Chas. Rivers-Wilson as President. In Dec. following, Mr. Seargeant was called to London to take a seat at the Board there, & was succeeded by the present General Manager, C. M. Hays, on Jan. 1, 1896. The policy of the Board of Directors since May, 1895, has been one of friendly intercourse with rival as well as connecting lines, in proof of which it may be stated that various portions of the line have been made with the New York Central, Adirondack, the Canadian Pacific & the Wabash Ry. companies. The Grand Trunk is well equipped with all the accessories such as express, telegraph & telephone services, cartage delivery, elevators, grain warehouses, cattle yards & ice-houses. Traffic can be carried without transshipment from Chicago, or points west, to the wharves at Montreal or Portland, alongside ocean steamers, & the advantage secured in the construction of long stretches of double track, enabling fast times to be made by both

express & freight trains, is apparent. That the line is popular in the Eastern & Western States is evidenced by the fact that when legislation was sought at Washington with the object of cancelling the bonding & sealing privileges of the Canadian companies, the most strenuous protests have been made against any interference with the G. T. by the mercantile communities of Chicago & Boston through their Boards of Trade. It is the desire & aim of the present Board & management to make the road equally popular in Canada, whilst making it remunerative to those financially interested in it, & this object it is hoped will be secured by a continuance of that co-operation so freely given by the Co.'s employes to the Canadian Executive in the past.

That the Co. is not unmindful of the welfare of those who enter its service, is apparent in the existence of insurance & superannuation funds for the benefit of such employes as may become disabled, or the families of those who die, as also for affording a means of support to such as have grown old in its service. A supplemental advantage was secured in the Co.'s Act of Parliament, 1896, by the authority given to the management to grant pensions in cases not covered by the two funds already mentioned. Comfortable reading-rooms are located at the principal stations on the system, for the convenience of its officers & employes.

#### Canadian Freight Association.

The Freight Committee met in Montreal, July 6, when special rates & arrangements nos. 1626 to 1638 were agreed to.

The regular summer meeting of the Association was held at the same place July 7, when J. E. Dalrymple, District Freight Agent, G. T. R., Hamilton; W. R. MacInnes, General Freight Agent, C. P. R., Winnipeg; M. H. Brown, District Freight Agent, C. P. R., Detroit; & M. Overend, Foreign Freight Agent, Canada Atlantic, Montreal, were elected active members. J. Pullen stated he now represents the Central Vermont instead of the G. T. R. It being announced that E. A. Chittenden had severed his connection with the Central Vermont & was out of active railway work, tributes were paid to the very important work he had performed for the Association.

Correspondence was submitted from the Department of Railways stating reasons why the new classification no. 11 had not been approved by the Governor-in-Council & the Chairman was instructed to urge upon the Department the necessity of early approval in the interest of the shippers.

Authority was given for the appointment of 2 freight inspectors at Winnipeg in connection with the C. P. R. & N. P. R. there.

In submitting statistical reports the Car Service Committee reported as follows: It is evident that the number of loaded cars handled is steadily increasing, & that the number of cars detained 7 days & over is also steadily increasing. The principal reasons given by local agents for serious delays in making deliveries are: "Insufficient siding accommodation, both public & private," "insufficient engine power to make the number of shunts required for the volume of business handled," "later arrivals placed first." Attention has been called several times to all these difficulties, & to the necessity of having them remedied as much as possible; but, as the conditions appear to be growing worse instead of better, the Committee again urgently recommend that the attention of superintendents, or other general officers concerned, be specially directed to the consideration of the question as to whether it would not be greatly to the interest of their respective companies to provide sufficient power to perform the yard work & shunting required at important trade centres in order to make reasonably prompt

deliveries more practicable. Consignees doing a comparatively extensive business frequently say: "Give us the cars & we will unload them." Agents reply to the effect that they are unable to place the cars promptly for the reasons given above, & very serious delays consequently occur for which consignees cannot be made to pay. Your Committee are of opinion that promptness in handling cars is of the first consideration, & that all practicable means should be adopted to carry this out.

The Manager reported that he attended the Convention of the National Association of Car Service Managers, Niagara Falls, in June. The discussions at this convention were interesting & profitable, showing in part the practice of the various Associations in connection with subjects discussed, which were:

1. "The private car," owned by individuals or car companies, & used by railroads by hire or for mileage, for general traffic. The consensus of opinion was that such cars should be subject to car service charges same as railway companies' cars.

2. "One man's car delayed on the private tracks of his customer." On this subject opinions were divided—some holding that as the railway companies were responsible for the car until it was returned to the owner it should not be held free. Others held that railway companies were justified in holding such cars free if the owner so directed.

3. "What should be considered warehouse freight?" Upon this question there was also considerable difference of opinion. Quite a number of managers were of opinion that it was the duty of consignees to remove their freight within a reasonable time after arrival, ex cars, or ex warehouse, at the option of the railway companies. That it was not the duty of a railway company to provide large & costly warehouses to store freight, & that large expenditures had often been made by railway companies to build warehouses which would not be necessary if the public were given to understand that when the railway companies carried freight to its consigned destination, their duty had been performed, & it was for the owners of the freight to receive it, or have it sent to public store. This had reference to all freight in carloads not handled through an elevator or through-consigned for export. In other words, that the handling of freight through a warehouse should only be in small miscellaneous lots & for the convenience of the railway companies.

4. "Refunding car service charges caused by errors of other roads." It was considered right that the railway company making the error should assume the charge.

5. "Delays through bills of lading in banks." It was not thought right to make any allowance for this.

6. "Prompt release at terminals more than offset by stop-off privileges." The discussion on this subject was very interesting, showing that very serious delays occurred to cars in transit through stop-over privileges; that in many cases the privileges allowed & authorized would detain a car from 20 to 40 days between Chicago & ultimate delivery at eastern points, in addition to the ordinary running time of the car. This was a matter which it was considered was well worthy the attention of general superintendents & railway managers.

The question of restricting the payment of customs duties by railway companies was discussed, & a special committee was appointed to consider the matter & report at next meeting.

It was reported that agreed rates were not being observed by boat lines, members of this Association. The Secretary-Treasurer was instructed to call a special meeting of the Freight Committee to investigate the matter as soon as possible.

The following changes on committees were ordered: Classification Committee—J. H



Hanna, vice J. Pullen. Freight Inspection Committee—J. E. Dalrymple, vice J. H. Hanna.

At a meeting of the Tariff Committee at Toronto, July 18 special rates & arrangements, 1639-1642, were agreed to.

The Chairman said that the principal object for which the meeting had been called was to consider statements which had been made at the last general meeting of the Association to the effect that some of the boat lines, members of the Association, were not observing rates & arrangements as agreed upon at the meeting held at Montreal, Mar. 3, 1899. He had specially notified the agents of the steamboat lines concerned to be present. Mr. Jaques, of the Merchants Line, Montreal, & Mr. Geddes, of Toronto, had indicated their inability to be present & were not represented. After considerable conversation it was agreed that the representatives of the boat lines, having received ample notice of the meeting called to consider charges made against them of having cut agreed rates, & thereby broken faith with the railway companies, & having failed (with the exception of the R. & O.N. Co.) to attend the meeting, & the charges having been made & not denied (except by the R. & O.N. Co.) or explanations given, the Committee recommend to the traffic managers of the railway companies concerned, that the agreement as to differentials allowed the boat lines be cancelled on due notice, as provided in minutes of meeting of Mar. 3, 1899.

It was recommended that in consequence of shippers at Merritton & St. Catharines being able to ship to Buffalo, & reship thence to North Pacific Coast points, at lower rates than as per tariff from the Canadian points named, the arbitraries to be added to the Pacific Coast Tariff be reduced to the basis of 10c. per 100 lbs., 1st class for all rail traffic, & that lake & rail traffic be at the Buffalo all rail tariff rates.

#### Freight Traffic Matters.

C.P.R. freight cars are now being run over the electric railway between Vancouver & Westminster, B.C.

A consignment of 100,000 lbs. of Montana wool is being sent from Duluth to New York, via the Canada Atlantic, as an experimental shipment.

It is said Manitoba's wheat crop this year will be 40,000,000 bush. against 32,000,000 last year, which means a lot of additional business for the C.P.R. & N.P.R.

When in Nelson, B.C., recently, W. Whyte, Manager C.P.R. Western lines, said an arrangement for the exchange of traffic between the C.P.R. & the Nelson & Fort Sheppard Ry. had been practically completed. This arrangement will be of great convenience to shippers & especially to the coal mines of the Crow's Nest Pass, as coal & coke lose largely in handling.

The Allan & Dominion steamship lines will divide the Liverpool business of the G.T.R. from Portland next winter. The arrangement made between the G.T.R. & the Dominion line is not an exclusive one. It simply provides for the replacing of the Leyland line from Portland by the Dominion line. None of the other connections of the G.T.R. are affected. The Allan line will run from Portland to Halifax next winter.

The Interstate Commerce Commission will hold a meeting at Chicago Aug. 7, to confer on the export problem in freight traffic tariffs. Recent press reports announce a great improvement in the export tariff, effective on Aug. 1, but the tariff schedules have not yet been filed with the Commission. The presidents of the trunk lines comprising the Western territory will hold a session on Aug. 8 to consider the general situation.

Arthur White, Division Freight Agent G.T.R., Toronto, reports wonderful activity in the northern lumber districts, all the mills employing large staffs & working to their full capacity. This change from the unsatisfactory conditions prevailing last year is, he states, generally conceded to be attributable to the new Provincial regulations, providing for the manufacture in Ontario of logs cut on Crown timber lands by Michigan limit-holders.

Having been shut out of New York by being denied a continuation of its arrangements with the Central Vermont, since that road came under the control of the G.T.R., the Ogdensburg Transit Co. has made new connections. It has established a lake & rail line, consisting of the Murray line from New York City to Troy & the Delaware & Hudson to Ogdensburg, where its own steamers take the freight & carry it to Toledo. This makes an additional competitor in lake & rail traffic, & it will claim the usual differential over the all-rail lines.

The wholesale grocers of Victoria met A. Cameron, Assistant General Freight Agent of the C.P.R., recently, urging upon him the desirability of giving merchants in the coast cities

lower transportation rates to enable them to compete on more equal terms with Winnipeg merchants. They contend that the East Kootenay trade is controlled in a large measure by Winnipeg, because of more advantageous rates given by the C.P.R. Mr. Cameron said a new tariff would come into effect on July 1, but this did not satisfy those present, who wish better rates than those in that tariff. The Kamloops Board of Trade has also been interviewing Mr. Cameron, & wants better rates than the coast cities have.

The trunk line presidents have reached an agreement that eastbound rates shall be advanced on Aug. 1 to the basis, Chicago to New York, of 17c. on wheat, oats & flour, & 15c. on corn—an increase of from 4½ to 5½c. For export shipments from Chicago via New York the advance on corn will be from 10½ to 11c., & on oats from 10½ to 13c. For wheat shipped to the European markets the rate will be 17c. per 100 lbs., the same as now. On provisions, both export & domestic, the rates will be 25c., an increase of 5c. on the export rate. Between now & Aug. 1, when the new rates will go into effect, the local agents of the eastbound roads have been instructed to clean up all cut-rate contracts.—Railway Age.

While the discussion over the traffic arrangement between the G.T.R. & Intercolonial was at its height recently, it was announced that the Grand Trunk had cancelled its agreement of last year with the Leyland line, & once more entered into arrangements with the Dominion line to handle its trans-Atlantic freight business out of Portland. This gave rise to the report that the Dominion line might desert St. John, N.B., altogether, & that the C.P.R. might also virtually abandon its short line to St. John, at least as a through route, & would divert its winter carrying trade to Boston. This has been denied by President Shaughnessy, who states that the C.P.R. has no such intention. There are plenty of other steamers besides those of the Dominion line to be got from St. John, Mr. Shaughnessy says, & the C.P.R. will still do business through Canadian channels.

The output of barked cedar railway ties, which constitutes no inconsiderable source of revenue in Gaspe & the Chaleur Bay, is this year likely to be less extensive than usual. It is found that at the price offered for ties, & the export duty of 4c. a tie, there is not enough in the business.

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**Through Canada to the Yukon.**

In discussing the Alaska boundary question in the House of Commons, July 22, Sir Chas. Tupper proposed that the Government should introduce a bill to provide for the construction of a railway from Kitimat Arm, to Dawson, Yukon, & that it should be passed by the unanimous vote of Parliament. He said:— Let that bill provide that it shall only be done on a proclamation by the Governor-in-Council. The moment our Government finds that this unreasonable determination on the part of our great neighbors is persisted in, I have no doubt such a measure would commend itself to the judgment of my hon. friend. It is known that the country from Kitimat Arm in B.C., running up to Telegraph Creek is a very good country. Two charters, I believe, have already been given by the Government of B.C. for building a railway, & I think a subsidy of some \$4,000 a mile has been granted by B.C. to construct a road from Kitimat Arm to Teslin Lake, provided it is found that there are no insuperable engineering difficulties. The very fact that there is water communication from Teslin Lake shows that there is a valley where it would be comparatively easy

he said:—There are only two means of access to the Yukon one by the Lynn Canal, & the other by one of the lower ports which we have in our own territory. It we had the Lynn canal under our control we would have a shorter way of access to the Yukon, but, unfortunately, at the present time it is in the possession of our rivals in business & our opponents in this controversy; it is in the hands of the U.S. Of course, if we had the water stretch of the Lynn Canal we would have the best means of all to enter the Yukon; but we have not, & having it not, we thought the best thing we could do was to make use at once of the Stikine River, which is not ours, but which, under the terms of the treaty, we have a right of access to for commercial purposes. We thought to use that at first as a basis of operation, to put a railway into the Yukon country, & then afterwards extending it to this very Kitimat Harbor, which my hon. friend now proposes as the terminal. If we had been able last year to pass our bill, which provided for the immediate construction of a railway from the Stikine River to the waters of the Yukon, we would have constructed that line last year, & this year we would have been able to prolong it down to Kitimat Harbor.

**Baldwin Locomotive for W. P. & Y. Ry.**

The illustration on this page shows a compound consolidation locomotive recently built by Burnham, Williams & Co., Baldwin Locomotive Works, Philadelphia, for the White Pass & Yukon Ry. The general dimensions are as follows:—

GAUGE.....	3 ft.
CYLINDERS.—Diameter, (high pressure).....	11½ in.
" " (low pressure).....	19 in.
" Stroke.....	20 in.
" Valve.....	Piston Valve
BOILER.—Diameter.....	54 in.
" Thickness of sheets.....	9-16 in.
" Working pressure.....	200 lbs.
" Fuel.....	Coal.
FIREBOX.—Material.....	Steel.
" Length.....	50½ in.
" Width.....	45½ in.
" Depth, front.....	47¾ in.
" " back.....	46¾ in.
" Thickness of sheets, sides.....	¾ in.
" " " back.....	¾ in.
" " " crown.....	½ in.
" " " tube.....	½ in.
TUBES.—Number.....	120
" Diameter.....	2¼ in.
" Length.....	15 ft. 2¾ in.
HEATING SURFACE.—Firebox.....	65.38 sq. ft.
" Tubes.....	1,069.81 sq. ft.
" Total.....	1,135.19 sq. ft.
" Grate area.....	15.70 sq. ft.
DRIVING WHEELS.—Diameter outside.....	38 in.



BALDWIN COMPOUND CONSOLIDATION LOCOMOTIVE FOR WHITE PASS AND YUKON RY.

to run a line of railway down to Dawson. It would only be a light railway that would be required to be constructed; any description of railway, however light, that would give us access from a Canadian port in B.C., about which there can be no question, to Dawson. I am quite certain that if the right hon. gentleman were to call, as he could tentatively, for tenders for the construction of such work for the present position existing, it would involve no very heavy cost. I would have the work constructed & owned by the parties who constructed it, & I would have the rates over the line controlled by the Governor-in-Council. I would put a clause in the bill providing that this act should only be brought into operation by proclamation of the Governor-in-Council. I am quite satisfied that the right hon. gentleman will find, as he will find an early day, if this proposed legislation does not effect a change of attitude, as I hope it may, that public opinion will thoroughly justify him in this course, in so far as it would give ingress and egress to & from the great Canadian gold country to all British subjects, & in fact, to every person who desires to use it. In replying, Sir Wilfred Laurier defended the Canadian Yukon Ry. bill of 1898 & denounced its rejection by the Senate. Continuing

By this time or, at all events, at the end of this season, we would have had a line of railway of our own, extending all the way from Kitimat Harbor to the water system of the Yukon. It would be a longer route, I admit, than a railway which would connect the Lynn Canal with the waters of the Yukon; but one thing is certain, & that is that the railway built last year from Skagway to the waters of the Yukon would not have been built if we had obtained the power to build our own railway. There are other reasons why we should have built a railway along that route, for there is every reason to expect that in that territory we would have found valuable deposits similar to those we have in the Yukon, & it is reasonable to suppose that at no distant date we would have a populous territory extending all the way from Kitimat Harbor to the Yukon. I will not say at present what we shall do with regard to this matter, but I may say at once that I shall take those propositions of the hon. gentleman into very serious consideration.

A combined postal & smoking car has been added to the P.E.I. Ry. equipment. A refrigerator car & two 1st class coaches are being built.

DRIVING WHEELS.—Diameter of centre.....	32 in.
" " Journals.....	6½ x 7 in.
ENGINE TRUCK WHEELS.—Diameter.....	24 in.
" " Journals.....	4½ x 8 in.
WHEEL BASE.—Driving.....	11 ft. 6 in.
" Total engine.....	18 ft. 6 in.
" Total engine & tender.....	43 ft. 8½ in.
WEIGHT.—On drivers.....	80,000 lbs.
" On truck.....	9,500 lbs.
" Total engine.....	89,500 lbs.
" Total engine & tender.....	150,000 lbs.
TENDER.—Diameter of wheels.....	26 in.
" Journals.....	3¾ x 7 in.
" Tank capacity.....	3,000 gals.
" Weight empty.....	26,000 lbs.
SERVICE.—Freight.....	
Grade, 4%.....	
Curves, 16'.....	

**The Joughins Car Truck.**

On page 201 is an illustration of this truck, which was one of the first freight car trucks made up from structural shapes, & was designed with the idea of abandoning the use of the more expensive pressed steel shapes on that style of truck which has the springs placed on the top of the journal boxes. Each side frame is made up of an I beam, & the transom is formed by two I beams, which are connected to the side frames by vertical angle irons & horizontal gusset plates. A special feature of this truck is the open-ended pedes-

tal, which allows the wheels & axles to be removed after jacking up the car only just enough to ease the spring, instead of having to jack it up the entire height of the pedestal legs. This pedestal has its outer leg formed by a hinged or removable piece. In one form of truck the ends of the side frame I beams are split horizontally & opened out, the superfluous metal in the web being cut away, leaving the top & bottom flanges. A bent steel T bar riveted to the web forms the top & inner leg of the pedestal, the outer leg being an L shaped piece of cast steel hinged to the outer end of the top of the pedestal & bolted to the bottom of the inner leg. In another form of the truck the fixed part of the pedestal is a cast steel piece in the form of an inverted L, riveted to the end of the side frame, while another L shaped piece, secured by a bolt at each end, completes the pedestal. By removing the bottom bolt in either form of truck, the loose outer piece of the pedestal can be swung up clear of the axle box, & the wheels can then be run out. The weight of the truck is about 1,200 lbs. (exclusive of wheels, axles, boxes & springs). Some of the trucks have been in experimental use under tenders on the Norfolk & Southern R.R. (U.S.A.) for over two years, & a number of them are in use on the Intercolonial, of which the inventor, G. R. Joughins, is Mechanical Superintendent.

#### Increase in Equipments.

That both the great railway systems anticipate a great increase of business in the near future may be judged by the number of freight cars which have been added to the rolling stock of the C.P.R. & G.T.R. recently. These, in the aggregate, reach into the thousands, & still the capacity is taxed to the utmost. The G.T.R. has more demands for freight cars than it can supply, while it has for years past been a complainant on the part of Northwest farmers that the grain crop could not be moved east by the C.P.R. with sufficient despatch to please them. These new freight cars are of almost double the capacity of the former patterns, which have now become obsolete, & large numbers of which have been broken up into firewood. The new make provides for the haulage of 30 tons, but this is not the last word on the subject either of the capacity of the cars or the locomotives. A

newer type still of the latter is possible—a type which will be as much in advance of the present pattern as the present pattern is in advance of the locomotive of 5 years ago. The first thought of the management of the C.P.R. & G.T.R. is, not so much the making fresh connections or affiliations, as providing facilities for the expeditious handling of the business which offers, in order to make, upon a tremendous increase of carrying power, a small margin of profit. This is the new problem, how—with low rates, which will be kept low, & which the managers of the great systems in the U.S. say will be lower still—to make a profit upon a business quadrupling in volume that which was done 10 years ago. The secret is found to lie in the increased capacity, & it is to provide this increased capacity that the shops of the G.T.R. & C.P.R. are kept busy. With regard to the monster locomotives of the latter, although the order for the present is limited, others will be added in the near future for the general service, & of a still greater power. This type will be employed in the haulage of the grain crops in the Northwest. A great freight train will carry double the quantity, will make better time, & will be able to meet the extra demands of the farmers with the increase of the wheat-growing belt, which increase will be felt in the greatly enlarged output of the next few years.—Witness.

#### Railway Equipment Notes.

Two narrow gauge locomotives have been added to the P.E.I. Ry. equipment.

The Sydney & Louisburg Ry. has ordered twenty 30 ton cars from Rhodes, Curry & Co., Amherst, N.S.

The Great Falls & Canada Ry. is having a narrow gauge passenger car & a narrow gauge sleeping car built in the U.S.

The Canadian Northern & the Manitoba & Southeastern railways have been adding considerably to their equipment recently.

The White Pass & Yukon Ry. is building stock cars 33½ ft. long at its shops at Skagway, Alaska. Two have been completed & 8 are under way.

The Midland Ry. of Nova Scotia has ordered twenty 30-ton flat cars from Rhodes, Curry & Co., Amherst, N.S. They will be

34 ft. long & equipped with Westinghouse air brakes.

The Intercolonial has recently received 30 box cars from Rhodes, Curry & Co., Amherst, N.S., also 6 2nd class passenger cars, & 30 box cars from other works. An order has been given Rhodes, Curry & Co. for 20 Wick's patent refrigerator cars for early delivery. They will be of 30 tons capacity & 36 ft. long.

The Dominion supplementary estimates provide for the Intercolonial railway \$10,000 for changing the draw-bars of cars from the link & pin coupler to the master car-builders' standard coupler, \$13,000 for changing car couplers, \$10,385 for a 1st class passenger coach, & \$30,000 for refrigerator cars. All the foregoing is chargeable to capital account.

The 6 consolidation locomotives for which the C.P.R. recently placed an order, as mentioned in our last issue, will weigh 150,000 lbs. each, & have 21 x 33 in. cylinders. The boilers will be 60¾ ins. diameter, & the working pressure 200 lbs. The fire boxes will be 9 ft. 1¾ long, by 3 ft. 6¾ ins. wide, & will have 255 tubes. The steel tender will have a capacity of 4,000 gals. The specifications call for Westinghouse air brakes. The locomotives are to be delivered by Oct. 1.

The G.T.R. has added a new dining-car to its service between Niagara Falls & Port Huron, in connection with the through fast expresses from the east & west. It is known as no. 828, & will be attached to trains nos. 3, 5, 6 & 8. Palatial in its appointments, & containing all the latest improvements that tend to the comfort as well as convenience of the travelling public, the car, it is claimed, is one of, if not the finest, that ever ran over the tracks of a Canadian railway. The interior woodwork is of quartered oak, & the carpets & curtains are of velvet, in a handsome combination of olive & gold. Scores of small bevelled mirrors, between the wide windows, & cunningly enclosed in little nooks around the doors & corridors, add to the attractions of the interior. Both large & individual tables flank the broad centre aisle, & the chairs are all upholstered in leather. The pantries, sideboard and wine closets are magnificent creations in cabinet work. Everything for the holding of glass & silver is lined throughout with plush.



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

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

**RAILWAY FINANCE, MEETINGS, &c.**

**The Alberta Ry. & Coal Co.** has given \$1,000 to the town of Lethbridge to be expended in tree planting.

**Brockville, Westport & Sault Ste. Marie.**—At the annual meeting at Brockville, July 12, the following were elected: President, E. R. Dick, Philadelphia; Vice-President, Col. W. H. Cole, Brockville; Gen. Manager, S. Hunt, Cincinnati; Supt., G. F. Agt. & Treas.—J. Mooney, Brockville; other directors R. A. Williams, Philadelphia; D. W. Downey, R. Bowie, D. Derbyshire, G. H. Weatherhead, Brockville; R. G. Murphy, Elgin; W. C. Fredenburg, Westport.

**Calgary & Edmonton** net earnings for May \$7,913.16, against \$14,614.27 in May, '98. Notice was recently given that the Dominion Government subsidy for the 6 months ended June 30, together with the net earnings of the Co. to Oct. 31 last, permitted of a distribution of 2% on the 1st mortgage bonds in respect of the interest coupon falling due July 1, & that the payment of such interest would be made on & after that date on presentation of the coupons at the office of Morton, Chaplin & Co., London, Eng. The Co.'s scrip will be given for the unpaid balance of 1%.

**Canada Atlantic.**—On July 14 the House of Commons Railway Committee reported the bill providing for the amalgamation of the Canada Atlantic & Ottawa, Arnprior & Parry Sound railways, under the name of the Canada Atlantic Ry. Co. Both the C.P.R. & the Ottawa & New York Ry. opposed the measure on the ground that as drafted the bill would institute an unfair advantage to the amalgamated companies over all others in connection with the rights of entry to the central station over the canal reserve. Arguments in this direction failed to convince the committee that any injustice would be perpetrated, & no amendment in this connection was allowed.

**The Canada Southern** has declared its regular semi-annual dividend of 1% payable July 17.

**Canadian Yukon Ry.**—An Ottawa despatch of July 9 stated that the Dominion Government had decided on a sum to compensate Mackenzie, Mann & Co. for the failure to carry out this contract, owing to its rejection by the Senate.

**C.P.R. School Taxes in Winnipeg.**—Some time ago a suit was entered on behalf of the city of Winnipeg against the C.P.R. to recover arrears of school taxes from 1890 to 1894. The Co. in its defence set up that it was not liable as under a by-law passed by the city council it was provided that all the Co.'s property within the city of Winnipeg used for railway purposes or in connection therewith should be forever free & exempt from all municipal taxes, rates, levies & assessments of every nature & kind. The city demurred to this, & the matter came before Judge Bain, who decided in favor of the city, holding that the Co. was not exempt from school taxes, & that the council had no authority to pass a by-law exempting it, that tax being handled by an entirely different body, & merely collected with the other taxes as a matter of convenience and to save expenses. The

Co. appealed from this decision to the full court, which held that the appeal should be dismissed with costs, & the decision of Judge Bain upheld.

**Central Counties.**—The employes of this railway, which runs from South Indian to Rockland, & from Glen Robertson to Hawkesbury, have been notified that the Government receiver of the road will cash their claims for wages. The claims are to be paid out of the subsidy voted last session by the Ontario Legislature. This Co. is a subsidiary of the Canada Atlantic.

**Central Ontario.**—Two suits, brought by S. J. Ritchie, of Akron, Ohio, one against the estate of Senator Payne, & the other against Judge Burke, of Cleveland, have reference to C.O.R. bonds of the value of \$875,000. The bonds were pledged to the defendants by Mr. Ritchie, who built the road, for advances made. These advances, he claims, have been repaid, & he now seeks to have the defendants declared his trustees for the securities.

**Dominion Atlantic.**—Earnings for 5 months to 31st May \$204,906, against \$184,894 for corresponding period.

**Great Northern (U.S.A.)** It is rumored in New York that J. J. Hill, President of the G.N.R., has secured an important interest in

ed by the trustees of the 1st mortgage bondholders to make a final distribution of £3 10s. 6d. from the proceeds of the sale of land warrants & rights to lands.

Cheques have been issued for the outstanding working expense claims contracted prior to the appointment of the Receiver in 1893. The claims have been paid in full without interest.

The Manitoba Legislature has authorized an agreement with the Co., by which the Province will take over about 500,000 acres of land in payment of monies advanced to the Co. for interest, etc. The land is to be selected out of 2,700,000 acres mostly in the Province, & will be sold to actual settlers only.

**Minneapolis, St. Paul & Sault Ste. Marie.**—The London Stock Exchange Committee appointed June 29 as a special settling day in this Co.'s scrip of \$3,500,000 second mortgage 4% 50 year gold bonds, & ordered the security to be quoted in the official list.

**New York Central.**—The recent acquisition of the Boston & Albany by the New York Central gave rise to a variety of reports in the U.S. papers affecting Canadian railways. According to one rumor the C.P.R. & the New York Central had entered into a formal alliance, & as part & parcel of their agreement had secured control of the projected Grand Island bridge over the Niagara River, a few miles above Buffalo. That was said to be one part of the deal. The other concerned the working of the two systems in the east, & with the acquisition by the New York Central of the control of the Boston & Albany as a basis, a fantastic web of romance was woven of war between the C.P.R.-New York Central combination & the G. T. R.-Central Vermont system. D. McNicoll, Assistant General Manager of the C. P. R., declared without reserve that there was nothing whatever in the report, so far as the C. P. R.

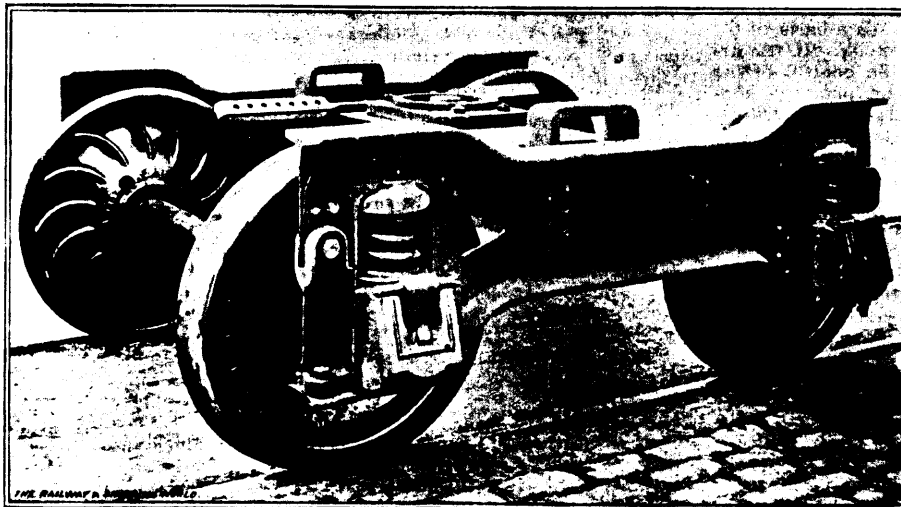
was concerned. The C.P.R. & the New York Central, of course, had worked together for years, the latter being the C.P.R.'s United States connection, & the C.P.R. the Canadian connection of the Central. They would continue to work together on the same basis, but as for any new alliance between them on the lines indicated in the report from Buffalo, or the other report from Boston, there was nothing in it.

**Qu'Appelle, Long Lake & Saskatchewan** net loss for May \$321.29, against net loss of \$1,487.35 in May, '98.

**Quebec Central** net earnings for 5 months to May 31, \$50,816, against \$42,656 for corresponding period.

Traffic receipts for June, \$50,548.78, against \$41,270.41 in June, '98. Traffic receipts for 6 months to June 30, \$219,060.38, against \$199,956.48 for corresponding period.

**The Quebec & Lake St. John Ry. Co.** has defaulted in the interest due July 1 on its £780,000 5% mortgage bonds which were issued in Feb., 1889, through the Railway Share Trust & Agency Co. at 96, being secured by a first mortgage on the main line from Quebec to Roberval. The other capital issues are city of Quebec preferential stock \$450,000, & capital stock \$4,074,000. The Quebec Government guaranteed the payments of interest



THE JOUGHINS CAR TRUCK.

the new Wisconsin Central Co., which will enable him to carry out a plan long attributed to him—that of forming a new transcontinental line that will extend from the Atlantic to the Pacific. This is to be accomplished by means of the Baltimore & Ohio, in which he is an important factor, & the Great Northern, with the Wisconsin Central as the connecting link. Under this combination the Hill transcontinental system would aggregate 7,499.25 miles, or 3,385 miles from New York to Seattle.

**Kootenay Valley Ry. & Navigation Co.**—A mortgage given by this Co. to secure about \$2,400,000 has been filed with the County Auditor at Rathdrum, Idaho. It is given on the portion of the road extending from the southern end of Kootenay Lake to the International Boundary Line, & from the Boundary Line to Bonner's Ferry, Idaho. The mortgage is to the Stock Conversion & Investment Trust, Ltd., of London, Eng., securing a loan of £480,000. The mortgage embraces the road bed & all equipments. The rate of interest is 5%, payable semi-annually in London. This loan will enable the Co. to carry on its proposed plans. The Co. is composed principally of Scotch capitalists, & works in harmony with the G.N.R. of the U.S.A.

**Manitoba & North-Western.**—The Clydesdale Bank, London, Eng., has been instruct-

on the 5% bonds for 10 years from Jan. 1, 1889. The gross earnings of the Co. for the year ended June 30, 1898, were \$258,730.09, & the operating expenses \$217,892.72, so that it would appear that there is not a very inviting prospect for the bondholders, & the bonds have fallen in London to 23-28. It is announced that the Railway Share Trust & Agency Co. has instructed its solicitors in Quebec to apply for a receiver for the Q. & L. St. J. R. Co. The main line of the Co. from Quebec to Roberval is 192 miles, & the eastern extension from Chambord Jct. to Chicoutimi 53.85 miles. The Co. leases the Lower Laurentian Ry. 39.50 miles, making a total operated of 285.35 miles. The gauge is standard, & the rails are 56 & 60 lbs. Inquiry of the management in Quebec has elicited the reply that "the bond issue of the Co. is being readjusted by a friendly agreement between the bondholders & the Co."

**Stewiacke Valley & Lansdowne.**—The trustees for the holders of certified 1st mortgage 6% bonds of this Company, recently gave notice that they would on June 15 be prepared to pay a dividend of 18% on the capital of the bonds.

**Sydney & Louisburg Ry.**—It is proposed to lease the Dominion Coal Co.'s property in Cape Breton to the recently organized Dominion Steel & Iron Co., for a term of years contemporaneous with the existence of the Dominion Coal Co.'s leases, on a basis of 6% dividends on the common stock. If the arrangement is carried out the control of the S. & L. Ry., as well as other plant & equipment of the Coal Co., would pass to the lessee. The charters of all steamers & barges now in existence would also be turned over to the leasing company.

**C.P.R. Earnings & Expenses.**

Gross earnings, working expenses, net profit and increases or decreases over 1898, from Jan. 1, 1899.

	Earnings.	Expenses.	Net Profits.	Increase or decrease.
Jan.	\$1,864,570.36	\$1,247,036.50	\$617,533.86	\$101,906.27+
Feb.	1,753,382.82	1,153,681.34	599,701.48	176,034.12+
Mar.	2,109,667.58	1,280,772.01	828,895.57	75,662.06+
Apr.	2,196,312.40	1,276,008.91	920,303.49	203,212.80+
May	2,402,151.29	1,369,392.68	1,032,758.61	106,096.30+
	\$10,326,084.45	\$6,326,891.44	\$3,999,193.01	\$662,911.55+

Approximate earnings for June, \$2,352,000, against \$2,124,000 in June, 1898; increase, \$228,000.

**SUBSIDIARY LINES.**

**DULUTH, SOUTH SHORE & ATLANTIC.**—Approximate earnings for June, \$213,105; increase over June, 1898, \$38,000.

Net earnings for April, \$61,388, against \$14,185, for corresponding period, making for 4 months to April 30, \$208,190, against \$125,334, for corresponding period.

**MINERAL RANGE, HANCOCK & CALUMET.**—Approximate earnings for June, \$36,233; increase over June, 1898, \$5,007.

**MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE.**—Approximate earnings for June, \$385,630; increase over June, 1898, \$79,730.

Net earnings, for 10 months, to April 30, \$2,232,088, against \$2,218,427, for corresponding period.

**Canadian Pacific Railway Land Sales.**

	Acres.		Amount.	
	1899	1898	1899	1898
Jan.	14,718	22,044	\$46,411.35	\$72,924.83
Feb.	13,747	20,650	43,371.00	66,399.00
Mar.	24,045	33,421	74,430.00	109,010.00
April.	36,626	43,145	116,835.00	140,276.00
May.	39,573	43,148	125,862.00	137,835.00
June.	54,225	49,203	169,234	160,200
	182,934	211,611	\$566,143.35	\$686,644.83

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

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

	1899	1898	Increase	Decrease
Jan.	\$1,956,281	\$1,916,332	.....	\$39,949
Feb.	1,824,434	1,674,453	.....	149,981
Mar.	2,186,359	2,048,970	.....	137,389
April.	1,942,543	1,918,477	.....	24,066
May.	2,039,239	1,940,980	.....	98,259
June.	2,062,137	1,880,402	.....	181,735
	\$12,010,993	\$11,379,614	.....	\$631,379

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

**GRAND TRUNK RAILWAY.**

Revenue statement for May, 1899:

	1899	1898	Increase	Decrease
Gross receipts.	£344,300	£322,932	£21,368	.....
Working expenses.	208,600	197,744	10,856	.....
Net profit.	£135,700	£125,188	£10,512	.....

Aggregate for 5 months, from Jan. 1 to May 31, 1899:

	1899	1898	Increase	Decrease
Gross receipts.	£1,633,200	£1,560,938	£72,262	.....
Working expenses.	1,102,500	1,075,699	26,801	.....
Net profit.	£530,700	£485,239	£45,461	.....

**CHICAGO & GRAND TRUNK RAILWAY.**

Revenue statement for May, 1899:

	1899	1898	Increase	Decrease
Gross receipts.	£59,300	£61,079	.....	£2,379
Working expenses.	59,500	46,669	£3,831	.....
Net profit.	£8,800	£15,010	.....	£6,210

Aggregate for 5 months, from Jan. 1 to May 31, 1899:

	1899	1898	Increase	Decrease
Gross receipts.	£339,000	£317,010	£21,990	.....
Working expenses.	285,300	251,764	33,536	.....
Net profit.	£53,700	£65,246	.....	£11,546

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

Revenue statement for May, 1899.

	1899	1898	Increase	Decrease
Gross receipts.	£15,400	£14,219	£1,181	.....
Working expenses.	14,000	10,753	£3,247	.....
Net profit.	£1,400	£3,466	.....	£2,066

Aggregate for 5 months, from Jan. 1 to May 31, 1899:

	1899	1898	Increase	Decrease
Gross receipts.	£71,800	£73,653	.....	£1,853
Working expenses.	63,500	59,643	£3,857	.....
Net profit.	£8,300	£14,010	.....	£5,710

**DETAILS OF G.T.R. RECEIPTS JAN. 1 TO MAY 31.**

	1899.	1898.	Increase.	Decrease.
Passengers, number	2,244,753	2,396,977	.....	152,224
Immigrants, number	386,583	353,049	33,534	.....
Mails, express, &c.	2,462	2,715	.....	253
Freight, tons	74,590	73,725	865	.....
Miscellaneous receipts.	£1,115,265	£1,095,095	£20,170	.....
Total receipts.	£1,633,350	£1,561,098	£72,252	.....

**TRAFFIC RECEIPTS OF THE SYSTEM.**

Traffic receipts, Jan. 1 to June 30.

	1899.	1898.	Increase.	Decrease.
Grand Trunk.	£1,980,799	£1,870,605	£110,194	.....
Chicago & G.T.	397,436	380,786	16,650	.....
D., G. H. & M.	89,776	86,886	2,890	.....
Total.	£2,468,011	£2,338,277	£129,734	.....

**Mail Subsidies.**—Clarke Wallace, M.P., recently raised in the House of Commons the question of the amounts allowed railway companies for the carriage of mails which aggregate \$1,352,000 a year. In his opinion the companies were very much overpaid. Last session the Postmaster-General had taken a vote for the purpose of investigating the matter, but so far nothing had been done. The Postmaster-General said that the railway companies, especially the G.T.R. & the C. P.R. companies considered they were very much underpaid, & pointed to the prices paid by the U.S. Government which were very much higher. It was true he had taken a vote last session for a commission of enquiry into this matter, but on the representation of the railway companies that the amounts paid them had been sanctioned by long usage & were not as large as the amounts paid for a similar service in other countries, he had not thought it necessary to proceed further.

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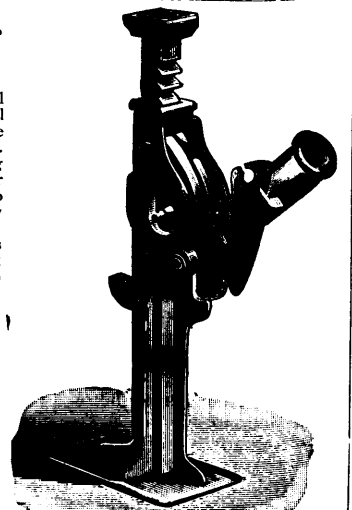
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No. 1 1/2.

**RAILWAY APPOINTMENTS, Etc.**

**Canadian Pacific.**—C. Drinkwater, who has been Secretary of the Co. since its formation in 1881, has been appointed Assistant to the President, & will continue to discharge the duties of Secretary. A. R. G. Heward, for several years Chief Clerk in Sir Wm. Van Horne's office, has been appointed Assistant Secretary of the Co.

There is no truth in a report published in B.C. papers, stating that the offices of the assistant general freight & passenger agents of the Pacific Division were to be removed from Vancouver to Montreal.

L. R. Johnson having been appointed Superintending Engineer of the Co.'s ocean steamships with headquarters at Vancouver, it has been decided that he shall also have charge of the shops at Vancouver reporting to and taking instructions in connection therewith from the General Superintendent of the Pacific Division.

F. E. Hobbs has been appointed Master Mechanic of that Division with headquarters at Revelstoke.

J. Fahey, conductor on the Western Division, has been appointed trainmaster at Winnipeg, H. O'Connor having resumed his former duties as fire inspector for the division.

W. A. Walker, storekeeper at Nelson, B.C., has been transferred to the Montreal stores.

W. O. Miller, heretofore station agent at Kamloops, has been appointed Car Service & Fuel Agent for the Pacific Division.

**Central Vermont.**—J. W. Shanks having resigned, W. P. Elrod has been appointed General Road Master. Office at St. Albans, Vt.

J. O. Olmstead having resigned, D. A. Sheedy has been appointed Superintendent of Bridges & Buildings. He is a brother of J. A. Sheedy, who recently resigned the position of Master of Bridges & Buildings, Middle Division, G.T.R.

**Grand Trunk.**—John Henderson has been appointed Roadmaster, 5th & 6th districts, between Vaudreuil and mileage 175 west of Kingston Jct., vice J. McGovern, resigned. Office: Brockville, Ont.

W. W. Ashald has been appointed Train Master 1st & 3rd districts & 2nd district between Richmond & Island Pond, with headquarters at Island Pond, Vt., vice C. S. Cunningham, resigned. P. J. Lynch has been appointed Train Master 6th & 7th districts, with headquarters at Belleville, Ont., vice W. W. Ashald, transferred. D. J. O'Connor, Train Dispatcher at Stratford, has been appointed acting Train Master of the 22nd, 23rd & 24th districts, with headquarters at Stratford, vice P. J. Lynch, transferred.

G. T. Bell, Assistant General Passenger Agent at Montreal, has been appointed 1st Assistant General Passenger & Ticket Agent, with headquarters at Chicago, vice E. H. Hughes assigned to other duties. G. W. Vaux, heretofore Chief Clerk in the Passenger Department at Montreal, has been appointed Assistant General Passenger & Ticket Agent, with headquarters at Montreal, vice G. T. Bell promoted. Both appointments date from Aug. 1.

**Intercolonial.**—Hitherto W. B. Mackenzie has been Chief Engineer, with T. C. Burpee as Assistant Engineer, Mr. Mackenzie having control over both construction & maintenance. In accordance with the practice prevailing on the C.P.R. & G.T.R., the duties of the engineering department have been divided. Mr. Mackenzie remains as Chief Engineer, but with supervision of construction only. The maintenance of ways and works has been transferred to General Supt. Price's department, with T. C. Burpee as Engineer.

**Minneapolis, St. Paul & Sault Ste. Marie.**—G. R. Huntington has been appointed Superintendent at Minneapolis, Minn., succeeding F. C. Batchelder, resigned.

**Ottawa & New York Ry. & New York & Ottawa R.R.**—W. Chance, having resigned as Sec. & Treas. of these companies, A. Nicholls has been elected Sec. & Treas. Office: 27 Pine Street, New York. G. B. Colpas has been elected 1st Assistant Treasurer. Office: Ottawa, Ont.

**Death of C. J. Pusey.**

C. J. Pusey, President & Manager of the Irondale, Bancroft & Ottawa Railway, died July 16 at the residence of his son-in-law, R. G. Kingan, Peterboro', Ont., where he had been suffering from an organic affection of the heart since the middle of June. For many years Mr. Pusey had been a prominent figure in railway circles in the north. He was a native of Chester, Pa., & early in life developed the aptitude for railway work that distinguished him all his life. In 1870 he became President of the Hudson Suspension & New England Ry., & later General Manager of the Sodus Point & Southern Ry. From 1873 to 1878 he was interested in mining in the Madoc District, & noting the heavy handicap to mining operations imposed by the absence of railway facilities, he turned his attention to railway development. In 1886 he purchased the nucleus of the present I.B. & O. Ry., 6 miles of line, extending eastward from the junction with the Victoria branch of the G.T.R. His object was to extend the line to Brockville, with connections to Ottawa, to give a U.S. outlet to mining products, & to extend the line westward & north to the Georgian Bay. His idea was the establishment of large smelting works in Hastings County. By his own almost entirely unaided exertions he secured Ontario & Dominion charters, & in the face of great difficulties extended his railway eastward by ten-mile sections, till now 47 miles are in operation, with 5 additional miles to be completed this fall. Mr. Pusey leaves four daughters, Mrs. F. C. Jones, Toronto; Mrs. L. B. Howland, Irondale; Mrs. R. G. Kingan, Peterboro', & Miss Pusey. The funeral took place to Greenwood Cemetery, Brooklyn, N.Y.

**Mainly About People.**

S. J. Stratton, Chief Clerk Ontario Department Bell Telephone Co., died in Hamilton June 9.

J. A. Ashe, ex-Train Dispatcher of the I.C. R. at Truro, is now on the New York Central at Oswego, N.Y.

C.P.R. President Shaughnessy was indisposed early in July for a few days & was confined to his house.

Lyman Dwight, Superintendent of the G. N.W. Telegraph Co., & Mrs. Dwight are visiting Banff, Alta.

C. R. Hosmer, Manager C.P.R. Co.'s Telegraph, left New York for England July 12, accompanied by his son.

At the monthly meeting of C.P.R. Directors July 10 Sir Wm. Van Horne presided for the first time as Chairman of the Board.

Mrs. W. T. Payne, wife of the C.P.R.'s General Traffic Agent for Japan at Yokohama, is spending the summer at St. Andrews, N.B.

W. A. Kittermaster, General Agent Freight Department C.P.R., Chicago, is posted for membership in the Chicago Board of Trade.

Lady & the Misses Van Horne are spending the summer at Sir William's seaside residence, Minister's Island, St. Andrew's, N.B.

H. P. Bell, C.E., of Victoria, B.C., has gone north to act as inspector of the portion of the White Pass & Yukon Ry. within British Columbia.

The engagement is announced of Miss Blair, second daughter of Hon. A. G. Blair,

Minister of Railways, & W. C. Clarke, of St. John, N.B.

Mrs. G. H. Webster, wife of the Land Commissioner of the M. & N. W. Ry., & her children are spending the summer at Portage la Prairie.

Mrs. W. R. Baker, wife of the General Manager of the M. & N. W. Ry., & her children are spending a few weeks at the Lake of the Woods.

J. McGovern, Roadmaster of the G.T.R. at Kingston for 20 years, & for 30 years in the service of the Co., has resigned to become a railway contractor.

Superintendent J. Wilson, of the Pacific division of the C.P.R. Co.'s Telegraph, is still in California for his health. Mr. Fletcher is acting as Superintendent.

Geo. E. Macdonald, of the C.P.R. traffic department at Vancouver, has been appointed General Agent on the B.C. Mainland for the Union & Wellington collieries.

Manager Whyte, of the C.P.R. Western lines, has been making an inspection of the Pacific Division, including the new lines in Kootenay & Kettle River districts.

Senator Proctor, who represented President McKinley during the presence of the Grand Army of the Republic in Montreal recently, was the guest of Sir Wm. Van Horne.

W. G. Reid, of Montreal, contractor & part owner of the Midland Ry. of Nova Scotia, was, on July 16, reported as confined to his house in Truro, N.S., threatened with typhoid.

After making an inspection of the G.T.R. system, President Sir C. Rivers Wilson & the Hon. Lady Rivers Wilson sailed from New York July 1, and are in town at 1 Point St., London, for the season.

Prior to leaving Winnipeg early in July for Montreal, C.P.R. Passenger Traffic Manager Kerr was tendered a dinner at the Manitoba Club, & was presented with a dinner set by the Traffic Department staff.

T. Tait, Manager C.P.R. eastern lines, returned in the middle of July from a two months' trip to Europe. Mrs. Tait is visiting her parents, G. R. R. & Mrs. Cockburn, at their summer place at Birch Point, Muskoka.

The engagement is announced of C. A. McGrath, Land Commissioner Alberta Ry. & Coal Co., at Lethbridge, to Miss Mabel Galt, daughter of the late Sir A. T. Galt, & sister of E. T. Galt, President of the A.R. & C. Co.

Capt. C. Goodall, senior member of the firm of Goodall, Perkins & Co., of San Francisco, who control the Pacific Coast Steamship Co. operating between San Francisco, British Columbia & Alaska, died suddenly in England recently.

W. E. Mullins, formerly chief clerk to Superintendent Fitzhugh, of the Middle Division of the G.T.R., & now occupying a similar position with Mr. Fitzhugh on the Central Vermont, was presented with a purse & a travelling bag on leaving Toronto recently for St. Albans, Vt.

The receivership of the Baltimore & Ohio Ry. terminated June 30, a reorganization having been effected without foreclosure. F. D. Underwood, formerly of the Minneapolis, St. Paul & Sault Ste. Marie, was appointed 2nd Vice-President, in addition to the position of General Manager he previously held.

W. R. MacInnes, recently appointed General Freight Agent of the C.P.R. western lines at Winnipeg, is but 32 years of age. He entered the service of the C.P. in June, 1885, as clerk in the Purchasing Department, & in Nov. of the same year was transferred to the solicitor's office. In Sept., 1886, he was again transferred to the office of General Traffic Manager Olds, & was appointed chief clerk to him in May, 1887. He remained in

that position until Mar., 1896, when he went to Chicago as General Agent of the Freight Department of the Canadian Pacific "Soo" Line & Duluth South Shore & Atlantic, & also as agent of the Canadian Pacific Dispatch.

D. D. Mann, of Mackenzie, Mann & Co., left Montreal July 25 for Vancouver, to sail by the R.M.S. Empress of India for Shanghai. Before starting he said to a Star reporter:—"I shall look over the ground, while in China, & if there happens to be an opening, it is quite probable we will take a hand in, & build a few railways in that country. We have, however, received no concessions, nor have we had anything to do with the schemes which certain New Yorkers desire to carry through. There is a very wide field for railways in China, & if possible we intend to do our share in constructing them." Mrs. Mann & family accompanied Mr. Mann as far as Banff, where they will spend the remainder of the summer.

By a unanimous vote Eben E. McLeod, Assistant General Passenger & Ticket Agent of the Chicago, Rock Island & Pacific Ry., has been selected Chairman of the Western Passenger Association, to succeed Mr. Caldwell. The selection is hailed as an admirable one from all quarters, & probably the most surprised man of all is the young "dark horse" himself. Mr. McLeod has made an enviable record in the railway service. He is only 33 years of age. He was born in Newport, Nova Scotia, from where his father moved to Charlottetown, Prince Edward Island, when he was a child. He was graduated from Prince of Wales College & went to Boston as a clerk in the G.T.R. offices in 1885, & into the Boston & Albany ticket office in 1887. Dec. 1, 1889, he was made Travelling Passenger Agent in New England for the Chicago, Rock Island & Pacific Ry., & in 1892 he was given the Canadian territory in the same position, & afterward the Pittsburg territory. In Jan., 1898, he was made Assistant General Passenger Agent at Topeka, Kan., & was promoted to First Assistant at Chicago, Dec. 1 last. He is the son of the Rev. J. M. McLeod, of Vancouver, B.C.

#### Immigrant Traffic Conference.

The Special or Advisory Committee of the Western Passenger Association in charge of immigrant traffic, headed by Chairman McLeod, held extended sessions in New York in the middle of July for the purpose of rendering effective the agreement regulating that class of business through the port of New York. The committee held conferences with representatives of the transatlantic, trunk

lines & others, including the Canadian Pacific & Southern Pacific. There was a general disposition to co-operate on the part of the two transcontinental lines, & the outlook is regarded as extremely bright for the new compact. The new compact which is to govern the Western Passenger Association lines in the matter of immigrant traffic, provides for the management of the bureau by an advisory committee, which also has the general supervision of the carrying out of the agreement. The advisory committee is to promptly provide for European supervision of the business, & is to arrange with the steamship lines for the handling in Europe of bureau orders, upon which is to be shown the names of each line in the bureau, under the terms of a contract heretofore made with the steamship companies. Split orders are prohibited, & the committee has full authority to arrange for the through ticketing of the business subject to the bureau, from seaboard to destination. The officers of each line, it is declared in the agreement, "are bounden to do all they can to aid the Chairman to locate & properly describe the tickets used by any immigrants, to the end that such passengers may be properly charged to the roads that carry them, provided that no road shall be bounden to furnish any record or information for the purpose of making such charge against other roads." Withdrawals may be made from this agreement upon 30 days' notice to the Chairman of the advisory committee.

These rules are supplemented by a memorandum which provides that in the event of failure to arrange satisfactorily with the steamship companies in regard to European supervision of the business, the advisory committee may, within 90 days from July 1, establish an agency or agencies, for the sale of bureau orders, in Great Britain & on the continent of Europe, in order to secure the business for the lines; if, however, for any reason it proves impossible to place these immigrant orders on sale in Europe, or for any reason the orders have to be withdrawn, & the advisory committee fails to promptly accomplish European supervision in some other manner, then, in order to meet the competition of the Southern Pacific, the Canadian Pacific or other roads, any line or group of lines may exercise the right to place orders of their own in Europe for sale through any agency that may be deemed best, provided that the business subject to the agreement thus secured on such orders shall be subject to the rules & regulations of the agreement in the same as they apply to the business handled by the steamship lines & the Southern Pacific.

Negotiations are to be opened with the

Southern Pacific by the advisory committee to at once secure its co-operation with its connections via Ogden & its participation with them in the division of rates & commissions on current or agreed ticket divisions when normal rates are reduced, or normal commissions increased. The arrangements heretofore in force between the bureau & A. E. Johnson, an outside immigrant agent, are to be discontinued. In the revision of percentages for the division of any or all of the business, if the advisory committee is unable to reach a unanimous conclusion, the subject may be submitted to arbitration. If the bureau cannot, by unanimous action, agree upon a single arbitrator, there are to be 3 arbitrators—1 chosen by the applicant for revision, 1 by the bureau without the vote of the applicant, & these 2 to select a 3rd. The decision of the sole arbitrator, or a majority of the 3, is to be final.

The most important features of this agreement are the provisions relative to European supervision & requiring steamship companies to use the bureau immigrant orders, together with the independent action allowed the lines if this is not accomplished in 90 days; the settlement of percentages by arbitration, if not otherwise agreed upon, restriction of authority to be exercised by the Chairman, & the discontinuance of all arrangements with all outside immigrant agents. These agents will, of course, continue to do business abroad, but if the agreement can & is carried out to the fullest extent of its provisions, especially with reference to control the traffic in Europe, they are likely to suffer big losses. In this much depends upon what the steamship companies do. They have always insisted that they could control the traffic, & they now have the best opportunity ever accorded them to prove this.—Leonard's Railway News.

#### Passenger Traffic Matters.

The Passenger Department of the Dominion Atlantic Ry. has issued *The Story of Acadia*, by Dr. Hannay, in book form.

Think of being able to go from Victoria to Dawson in 10 days; 14 days from Montreal, if you please, & on a pinch 20 days from London. These are assuredly days of progress.—Victoria, B.C., Colonist.

A San Francisco telegram says the C.P.R. has withdrawn from the California Passenger Association on the ground that the purposes of the Association were in conflict with the provisions of the Interstate commerce law.

W. D. Reid, General Manager of the Newfoundland Ry., predicts that Newfoundland as

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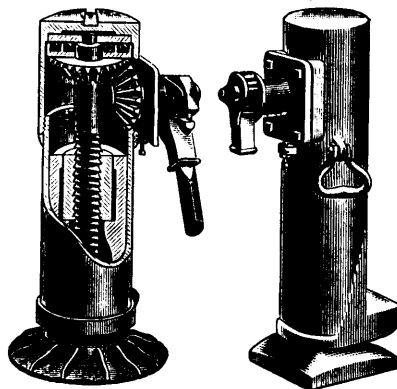
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a summer resort will see more visitors this year than ever before. Its beauties are only just beginning to be known, & it will attract in constantly growing numbers the tourist travel of not only Canada & the U.S., but of Europe as well.

The G.T.R. has announced positively that it will not withdraw its summer tourist rates to Boston so long as the Vanderbilt lines make summer tourist rates via Albany & Boston to New England points. At the meeting of the Central Passenger Association all the lines except the G.T.R. assented to a resolution that tourist rates to Boston be withdrawn.

Central Passenger Association lines have agreed to adopt a form of ticket on all east-bound business from Chicago to trunk line territory requiring the holder to travel on a particular train, the leaving & arrival times of which will be specified in the margin of the ticket. This action was taken upon the recommendation of the trunk lines, & is designed to prevent the scalping of through tickets to the East by brokers at Pittsburg & Buffalo. The change went into effect July 1. Many of the roads previously used such a ticket, & its general adoption is expected to prove a great benefit.

H. R. Charlton, Advertising Agent of the G.T.R., states that the results of the exhibition of Canadian pictures by the G.T.R. throughout the U.S. are showing themselves in a marked degree. Down South, where the Muskoka lakes & the highlands of Ontario were unknown, people are talking about them, & in a recent trip to St. Louis, Mo., he met lots of people either going up or about to take a trip to the northern country. He also states that owing to the vigorous policy of the G.T.R. in advertising Canada, & the playgrounds that are reached by the system in Ontario, applications are being received from the continent of Europe, including Italy, France, Germany, & even Russia.

The fight between Eastern U.S. roads over passenger rates may be said to be fairly on. The Wabash & the Nickel Plate gave notice at the end of June that they would meet the \$5 reduction in round-trip tickets between Chicago & Boston made by the Erie. The Michigan Central practically has announced that it will cut its fares \$5, although no official notice has yet been given. The Erie's cut was made to preserve its differential, & if it is fighting for principle its only course is to make another cut below the standard lines. The Michigan Central's policy all along has been that no competitor is entitled to make lower rates than itself for summer tourist business. Hence, if it is fighting for principle it may be expected to meet any reductions made by the differential lines. - RailwayWorld, July 7.

Summer travel on the railways & steamboats is now in full blast, & officials are up to their ears in the rush of business that began with the opening of July. Officials of all lines say that the volume of travel has been greater than at the same period of any other year within memory. Almost every car in the possession of the several roads has been in service, & as for the steamboats they have been filled practically to the limit of their capacity. The summer travel by the St. Lawrence route from Niagara Falls & Ontario points began much earlier this year than last, & every boat arriving in Montreal from the west is crowded. The tourist travel on the railways is especially heavy, & of course, the Christian Endeavor Convention at Detroit & the Educational Convention at San Francisco have added to the numbers of the travellers.

**The Tramway Incorporation Amendment Act** passed by the British Columbia Legislature in 1898 has been disallowed by the Governor-General-in-Council, as it prohibits Chinese and Japanese being employed on any undertaking authorized by the act.

### The C.P.R.'s Train Service.

The Winnipeg Commercial says: "The train service which recently went into effect on the C. P. Railway main line & numerous branches, is a source of unbounded satisfaction throughout the West. It is simply far beyond expectations. We have now from ocean to ocean, through Canada, by all odds the best transcontinental train service on the continent. The Imperial Limited, as the new C. P. R. transcontinental service is called, is something which this country has reason to be proud of. It is sure to result in a large increase in transcontinental travel of the better class. Tourists & others who travel for pleasure, will hardly fail to avail themselves of the superb service afforded by the C.P.R. when selecting a route for such a trip. Add to this the grandest trip on the continent in point of scenery, & there is nothing left that could be desired for the Canadian route. With a splendid trans-Pacific steamship service in connection with the railway, & equal advantages compared with any other route for connection with Atlantic steamships, the C.P.R. should be right in the field for a large share of around the world travel.

"The residents of the West who were here during the early days of the railways in this country, will feel specially gratified at the wonderful growth of travel here. It is not a great many years to look back to the opening of the C.P.R. through to the Pacific coast. During the few years following the opening of the road, those who had occasion to travel much will well remember how the transcontinental trains jogged along over open prairie or through the mountains, with often scarcely half a dozen passengers. The writer once travelled some distance on one of these trains, with only one other passenger as a companion in the first-class coach. This one passenger, it transpired, was riding on a second class ticket. As he was the only other passenger on the train, he was allowed to invade the first class carriage. How things have changed in these few brief years. The lonely prairie now has a line of prosperous towns & villages along the railway, while comfortable rural residences abound. Evidences of advancement & civilization are to be seen on every hand. Now the transcontinental trains speed along with a full complement of passengers, local & through. While the splendid train service now provided is to some extent due to the favor with which the Canadian route is now regarded by tourist travellers, the great improvement is mainly due to the development of the country served by the road. It is but an indication of the general progress of the country. This is shown by the fact that the service on the branch roads, where tourist travel is not a factor, has been improved in keeping with the main line. As it is now, an excellent train service has been established on the branch lines as well as on the main line."

### Piece Work on the I.C.R.

Mechanical Superintendent Joughins recently issued the following circular to foremen in the Moncton shops:—"The management of the Intercolonial wish you to assure all those who will adopt the piece work system, that their desire is to have the work so done & prices so made as to be of mutual advantage, that it be more of a profit sharing than a piece work system, believing that the men have an interest in the prosperity of the road & of the town in which they live. With this end in view each man on piece work will have the full benefit for 6 months of all improved methods he may use to turn out work, no matter how much wages he may earn within reason.

"On Jan. 1 & July 1 each year prices will be revised to a usual fair & just basis as be-

tween the men & the railway by mutual agreement. The expectation & object of the management is to see every able-bodied man in its employ busy, prosperous & contented, doing a fair day's work for a fair day's pay or wages. This is not piece work on the ordinary plan, but on a co-operative mutual benefit plan. There will be no unfair crowding to get a lot of work done at cheapest possible rate. No one will be compelled to accept piece work, & any one may drop it whenever he sees fit to do so, while those who are old & feeble will not be expected to undertake it. There may, of course, be exceptions to the above where there appears to be any glaring mistake. The prices will then be raised on behalf of the workmen, or lowered on behalf of the railway, or cancelled as may be necessary; the idea being to share the profits of any improved method which may be introduced by the foremen or the men, so as to make it really an industrial partnership."

### Railway Operating Matters.

The C.P.R. is said to be contemplating a change in its operating department by which the B.C. branch lines will be despatched from Nelson instead of from Nakusp & Trail as at present.

On July 25, G. T. R. Superintendent of Motive Power Morse announced that the negotiations which have been going on for some time now between the locomotive drivers & the G.T.R. management were proceeding to a satisfactory conclusion. Mr. Morse added it was quite possible that the terms of the new agreement might be made public in the course of a few days thereafter.

The C.P.R. has brought a number of machinists from Great Britain recently, principally from Liverpool, & has distributed them among its shops. The new arrivals say the Co. is advertising extensively for this class of skilled labor in the press of Great Britain, & it is probable more will follow. A Winnipeg paper says the old sodders received a cordial welcome from their fellow craftsmen there, as it is felt there is work enough for all.

At the convention of the Train Dispatchers Association of America at Milwaukee recently, W. M. Goodwin, of the G.T.R. at London, Ont., who has been instructor on the standard code on that road for the past year, brought up a number of points of difference between the recently adopted revision of the standard code, & that which it superseded, & animated discussion of the various questions followed, which was participated in by many members. Mr. Goodwin was elected a member of the Executive Committee.

The Wabash has advanced wages as follows: Freight enginemen will receive \$3.90 per 100 miles, in place of \$3.75; freight firemen \$2.90, instead of \$2.79; freight conductors \$2.90, instead of \$2.80; brakemen \$1.17, instead of \$1.10; passenger conductors running from 3,000 to 4,000 miles monthly will receive \$90; 4,000 to 5,000 miles, \$100; 5,000 to 6,000 miles, \$105; 6,000 to 6,500 miles, \$110; over 6,500 miles, \$115. Baggage men get 55 & brakemen 30% of their conductors' pay. Passenger engineers receive \$3.35 per 100 miles' run; firemen \$1.90 per 100 miles. - Railroad Gazette.

The Whitney syndicate which controls the coal fields at Glace Bay, N.S., is making a big effort to introduce coke for firing purposes on the railways of the New England States. Heavy shipments of coal for gas manufacture at Boston will give an almost unlimited supply of coke. Experiments made with coke on the Dartmouth branch of the Intercolonial Ry. are said to have been so satisfactory that an extension of the trials will be extended to U.S. roads. The syndicate has sent C. Wilson of the Intercolonial to make tests on the Boston



& Albany, the Maine Central & other roads. Should the results be to the satisfaction of those interested Mr. Whitney will have solved the problem of securing a market for a big output.

The employes of the Canada Atlantic have renewed the negotiations which were commenced last fall in order to procure if possible a higher scale of wages & a 10-hour day. The officials last year told the members of the deputation which waited upon them that the road was not in a position to grant the request, but that negotiations might be renewed this spring. The trainmen claim that taken all around the wages paid them average about a-third less than on the C.P.R., & that as the Co. now operates about 700 miles of road it is in a position to pay a higher schedule. There are about 300 train hands on the line. It is expected that increases will be given the trainmen & that the matter will be settled without any difficulty.

A Winnipeg despatch of July 25, said: The C.P.R. drivers, firemen & trainmen are in consultation with General Superintendent Osborne in connection with proposed changes in the schedule. There are three principal points in dispute, the men claiming as follows: 1st, since the big engines have been introduced the trains have been longer & slower, owing to the heavier loads & delays; as the men are paid by the mileage they do not get so much & want an increase. 2nd, trainmen want more brakemen with their long trains; & 3rd, is the complaint against reduction of the number of baggagemen & the requirement of express messengers to do the work, as the express messengers are tied to their trains & cannot give the necessary assistance in case of mishap. It is likely everything will be amicably settled.

#### G.T.R. Train Rules.

The new train rules for the G.T.R. based on the standard code of the American Railway Association, which were approved of by the Government last year, & in which the men have been instructed & examined for some time past, went into effect on the lines of the system west of the Detroit & St. Clair Rivers on July 10, & will very soon be put in force on the whole of the rest of the system. In a recent interview General Superintendent McGuigan said: "It will only be a short time now when we will have the new rules in operation. The men seem to understand them pretty well now. They are to-day in force on the western district of the G.T., that is the Chicago & G.T. line, as it is known. While in Canada we have not put the rules into effect, you can easily see that it is necessary to have

the one system of train-running over the entire line of the G.T. These rules are the ones adopted by the American Railway Association representing the principal roads in the U.S. There are 180,000 miles of railway in the U.S., & roads representing 162,000 miles have adopted these rules. At sea, ocean steamships, no matter what country they hail from, have the same rule of the road, & this is the system that should obtain on the railways. There is no question that the new rules will, within a few weeks, be enforced all over the G.T. system."

#### Railway Committee of Privy Council.

A number of cases were heard at a meeting in Ottawa July 4.

**Bedlington & Nelson Ry.**—In the application of this Co. for power to run over a portion of the C.P.R.'s Crow's Nest Pass Ry., the parties being unable to agree, the committee fixed the rent to be paid by applicants at \$475 a mile per year, with conditions as to renewal, etc.

**Toronto Matters.**—A deputation from Toronto City Council was heard in reference to the crossing of the C.P.R. & G.T.R. tracks at Lansdowne Avenue, Parkdale, which the city wants to be declared a public crossing. The Postmaster General said, after examining the site, he had come to the conclusion a subway was necessary. It was contended that this would cost \$80,000 & the city wanted to avoid the expense. It having been pointed out that in Jan. 1898, the committee had given instructions that a subway, a foot bridge or an overhead bridge be constructed by the City, the Minister of Railways said the order should have been obeyed. Counsel for the City asked to have the matter reopened. The Minister of Railways said the Chief Engineer of the Department had reported that a level crossing would be dangerous. Decision was reserved.

A request of the city that gates & watchmen be placed at the G.T.R. crossings of Dunn, Jamieson & Dowling Avenues, was left over till the next meeting so that counsel for the City & for the G.T.R. could confer with a view of arriving at an arrangement.

A similar request was made by the City in regard to the crossings of Cherry street by the G.T.R. & C.P.R. The Co.'s claim is that the street was only opened up by law in 1890, & that the City should therefore foot the bill. The City Surveyor said that Cherry street had been opened at the point in question as far back as 1855. Counsel took issue on this point, & the committee decided to defer the consideration of the question until its next sitting.

The City of Toronto applied for the extension of the Toronto Ry. Co.'s Bloor St. line west of Lansdowne Avenue to Dundas Street. The City Council had ordered the Ry. Co. to extend the line, but the Co. declined to do so. The Council contended that a population of about 3,000 would be served by the extension. Manager Keating, of the Ry. Co., stated that there was no public call for the new line, & that if completed it would not pay. He saw no probability that the line could be utilized in the future as part of a belt line. Mr. Bicknell, on behalf of the Co., claimed that the act provided that applications for permission for electric lines to cross steam lines must come from the former, & not from municipalities. He gave notice that in case the Committee granted the city's request he would call into question the Committee's jurisdiction. Counsel for the C.P.R. said another set of gates would have to be placed at the C.P.R. & G.T.R. crossings at Bloor St. It cost the two companies \$1,000 a year to guard these crossings. He hoped that if the city's request were granted the railway companies would be enabled to continue the arrangement at the same annual charge. He thought a level crossing would be undesirable. The Committee reserved decision.

**G.T.R. Crossings in Frontenac.**—Frontenac County Council asked the Committee to compel the G.T.R. to place electric alarms or other protection at the crossings at Collins Bay, Catarqui & Perth Roads. The petition was allowed to stand, the Committee deciding to send a Government Engineer to inspect these crossings.

**The Portage & Northwestern,** a subsidiary of the Northern Pacific, had 3 applications, the 1st for permission to run its line along Pacific Avenue, Portage la Prairie, & to cross the C.P.R. on the Avenue; the 2nd to secure approval of the place & mode of junction of its railway with the Manitoba & Northwestern Ry., near Portage la Prairie, & the 3rd for leave to cross the tracks of the Manitoba & Northwestern Ry., near the same town. All the applications stood over after argument had been heard, the parties represented agreeing to appear on a week's notice.

**The Toronto, Hamilton & Buffalo Ry.** applied for permission to run a branch along Trolley Avenue, Barton Township, crossing the G.T.R. Counsel for the G.T.R. offered to allow shunting privileges on the G.T. tracks along Trolley Avenue to the T., H. & B. on payment of a reasonable wheelage. Counsel for the T., H. & B. said that the G.T. had refused to allow this two years ago, the figure then mentioned being \$5 a car. Counsel for the G.T. replied that the G.T. would agree to whatever the Committee

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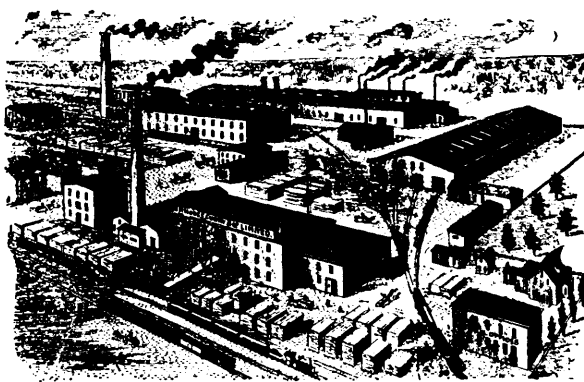
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Car Wheels, Castings, Forgings, &c.  
AMHERST, NOVA SCOTIA.

thought fair. The question of the 7 ft. clear headway above freight cars under bridges was involved in this case, & Counsel for the T., H. & B. asked for a ruling as to whether the exception made in the case of trains of cars under air-brake control applied to trains of cars some of which were not so equipped. Mr. Blair replied this was a question to be considered. Decision was reserved. Judgment on another application of the T., H. & B. Ry. for authority to build a branch from a point in the 3rd concession of Barton to Wellington St., Hamilton, north of the G.T.R., was also reserved.

**Allandale Crossing, G.T.R.**—An agreement was filed between the G.T.R. & the Township of Innisfil, in relation to the Allandale crossing, this matter having been enlarged for the agreement of the parties. The agreement calls for a slight deviation of a highway. The Committee sanctioned the arrangement.

**Canada Atlantic Crossing.**—In reference to the complaint of G. M. Loy, of Valleyfield, that the C.A. crossing on Grand Ile Line road, Valleyfield, was in a dangerous condition, Messrs. Bethune & Mountain, on behalf of the railway, stated that the cause of complaint would be removed.

**G.T.R. Crossing at Richmond.**—Strong opposition was made to the application of the Town of Richmond, Que., for permission to open Stanley Avenue across the G.T.R. track. The Co.'s Counsel stated that a land-booming scheme was the cause of the application. Decision was reserved.

#### G.T.R. Trackmen's Wages.

The G.T.R. management has announced that, effective July 24, it has raised the minimum pay of the trackmen on its main lines of heavy traffic from \$1 to \$1.10 a day. The increase affects the following lines:—Portland, Me., to Sarnia Tunnel; Rouse's Point, N.Y., to Montreal; Toronto to Hamilton; Niagara Falls to Sarnia Tunnel; Niagara Falls & Fort Erie to Stratford; Fort Erie to Kingscourt Jct., via St. Thomas & Glencoe; Kamoka to Windsor. The men on the branch & other lines do not receive any advance. In an interview on the subject General Superintendent McGuigan said:—"I have been authorized to state that the trackmen on the main lines have had their salaries advanced to \$1.10 a day, & that is as far as the Co. is prepared to go. The reason why no increases have been granted on the branch lines is that the cost of living is much less on those branches. The increase, of course, only affects those who have been receiving \$1 a day. Those whose wages are more than that are not affected. We have on the main lines some 486 men receiving \$1.25 a day & about 200 receiving \$1.20 a day. There are from 1,200 to 1,500 who are working on the main lines & who will benefit by the increase, while the trackmen on the branch lines number from 600 to 800."

The demand made by the men when they struck on May 22 will be found in full in our June issue, pg. 171.

#### The Chilcoot Pass Tramway.

It is said this concern has been sold to the White Pass & Yukon Ry. A Tacoma, Wash., paper, referring to the return there of H. C. Wallace, one of the originators & a heavy stockholder in the enterprise, says the aerial tramway operates between Canyon City & Crater Lake. Canyon City is 6 miles distance from Dyea, & prior to the completion & operation of the railway to the summit, this short pack was considered as next to nothing by the traders & prospectors who had endured the fearful toil & hardships incident to getting their outfits & goods over the en-

tire length of the trail from Dyea to Lake Bennett. With the inception of the railway, however, transportation affairs on the Chilcoot Pass assumed a different phase. With the railway, the necessity of making the pack to Canyon City was obviated. The matter finally resolved itself into the tramway people extending their line on to Lake Bennett or selling out to the White Pass Ry. The tramway had cost \$200,000 to build. To make a terminus at Lake Bennett would cost \$300,000 more. But with this extension added the tramway would be enabled to carry freight at a cost of about 12% of what the railway tariff must be to make the road profitable. The railway people, so it is rumored, offered \$150,000 for the tramway plant with other minor concessions added. It became a question with the tramway stockholders whether to go to the further expenditure of \$300,000, build on to Lake Bennett & control the freight business over the Chilcoot Pass or sell out to the White Pass railway. To arrange a settlement of these matters is the errand on which Mr. Wallace left for the north, & from which he has just returned.

#### Grand Trunk Betterments, Etc.

An up-to-date station is to be built at Point St. Charles, Que.

A passenger station is to be built at Queen St. East, Toronto.

A track is being built along Goderich harbor front to the beach.

It is said an improved round-house is to be erected at Fort Erie, Ont., & that work will be started at an early date.

On July 16, General Traffic Manager Reeve & party drove across the Victoria Jubilee Bridge, in the first vehicle to pass over it. The bridge is not yet, however, completed for vehicular & pedestrian traffic.

Work is in progress to complete the double track between Montreal & Toronto. What is being done includes four miles between St. Anne & Vaudreuil, & 3½ miles between Sidney & Murray Hill, Ont. A mile & a half is also being double tracked between St. Lambert & St. Hubert, Que.

A recent press despatch stated that the management was considering the advisability of double tracking the Midland branch, owing to the expected increase in grain carrying & the erection of a smelter at Midland. We are officially advised that at present no action of that character is contemplated.

A recent press report stated that a joint passenger station would be built at Durand, Mich., for the G.T.R. & the Ann Arbor railways, that the work would probably be begun so as to enclose the structure before Jan., 1900, & that the building would probably cost \$30,000. On July 21 we were officially informed that nothing definite had been concluded in regard to the matter.

In regard to the International Bridge between Fort Erie, Ont., & Buffalo, we are officially informed that it is the intention to replace the present structure, which is too light for modern rolling stock, with one that will meet all present requirements & provide a reasonable margin of strength for future increase of weights of rolling stock. There will be no change made in the piers & abutments. The work will not be completed until next summer, but the draw spans will be built during the coming winter as that work cannot be well done during the navigation season.

Owing to the difficulty in procuring iron girders & columns, work on the general office building, McGill st., Montreal, has been postponed until next year. In a recent interview on the subject the architect said: "The demand for iron is far greater than the supply. We practically cannot get it for love or money. Carnegie's mills are working 7 days a week, & 24 hours a day, & yet they find it

impossible to keep pace with the demand. They are probably turning out \$1,000,000 worth of iron work a day, & from these figures you may be able to form some idea of the nature & dimensions of the present demand. The railways of Canada find it absolutely impossible to secure rails for their tracks. At the present moment they want 64,000 tons, & can't get a pound. The English & French foundries can hardly provide enough iron for their local markets, so that the question of importation cannot be entertained. Within the past year the Russian government has ordered 1,800,000 tons of rails for its great Siberian railway; the French Exposition has utilized another 1,000,000 tons in the construction of the exhibition buildings in Paris, & an additional 500,000 tons will yet be used before these structures are completed. The Russian government has ordered from U. S. locomotive manufacturers upwards of 482 engines for the railway to which I have already alluded. Then there are the bridges & public works in Canada & the U.S. to be taken into consideration. When you add to these the recent order of the British Government for 500,000 tons of armor plate, you will gain some idea of the tremendous proportions which the demand for iron has assumed during the present year. The scarcity of the material has enhanced its value, & this is another feature which has caused us to postpone the erection of the walls of the offices until next year. You will scarcely believe me when I say that the British government is paying \$500 a ton for its armor plate, & yet such is the case. As Canadian nickel enters largely into the construction of such, you will see how valuable this industry will yet become to the Dominion. With regard to the future I do not know what we are going to do. Every modern public building is constructed in the main of iron, & with the increase in the number of such will come a proportionate increase in the demand for iron. What to do under the circumstances is a question hard to solve."—Star.

#### Canadian Pacific Betterments, &c.

**Mattawamkeag to Princeton.**—With reference to the unconfirmed report mentioned in our last issue to the effect that surveys are being made for a connecting line from the Co.'s main line at Mattawamkeag, Me., some 50 miles southeast to Princeton, Me., to connect with the St. Croix & Penobscot, we are officially informed that there is no foundation for the report. (June, pg. 172.)

**Windsor St. Station, Montreal.**—Work is rapidly proceeding upon the extension of the station. All the houses on the south side, which have been acquired for the purpose, have been raised, & the foundations will soon be ready to be placed. The new plans provide for a double entrance & a great extension of the frontage from the original design. Internally, the changes will be radical. The present suites of offices will be altered to suit the more pressing need of space & facility for the expeditious conduct of business. At present there is great overcrowding. In the new building the President will have a handsome suite of offices. Arrangements will be made not merely for the better carrying on of the clerical labor, but for the general business of the station, which has overtaken the space originally allotted to it.

**Arnprior.**—The new station is to be completed by September. A large freight shed is being erected, & the yards are being extended & improved.

**Fort William.**—Extensive improvements are to be made in the Kaministiquia hotel, including a stone foundation. A number of improvements will also be made to elevator B.

**Rat Portage.**—Arrangements have been completed between the Co. & the town coun-

cil, & the contemplated improvements are to be gone on with. They include a station building, a 20 stall round house with turn table, & large extension of track & yard accommodation. (May, pg. 139.)

**Fort William to Winnipeg.**—Engineers H. D. Lumsden & F. P. Busted are still at work on surveys for the proposed double track between these points. (May, pg. 139.)

**Winnipeg Terminals.**—The Co.'s solicitor has served notice on a number of owners of property near the Winnipeg station, that their land will be required for the Co.'s purposes. This is in connection with the station & hotel, the erection of which has been decided on. It has not been announced how Main st. will be crossed, whether by a level crossing or a subway. It is said an overhead bridge is impracticable. (June, pg. 172.)

**Snowflake Branch.**—It is understood this branch will run from the 1st siding west of La Riviere, on the Pembina Mountain branch, to Snowflake. An act empowering the Co. to construct it was passed at the recent session of the Manitoba Legislature. (June, pg. 172.)

**Deloraine to Waskada.**—It now appears as if the C.P.R. had forestalled the Northern Pacific in regard to the construction of a branch to the Waskada district. A charter given by the Manitoba Legislature for the construction of a line in that direction is held by a resident of Waskada in the interest of the N.P.R., but at the recent session of the Legislature also granted a charter to the C.P.R. to construct a line from or near Deloraine, southwesterly & westerly in townships 1, 2 & 3 to the western boundary of the Province. The life of the charter is limited to one year,

& the Co. is required to permit the loading of grain in cars from farmers' vehicles or flat warehouses. (June, pg. 172.)

**Pipstone Branch.**—A Winnipeg telegram says G. H. Strevel has been given a contract for building some 40 miles west of Reston, into the Moose Mountain district. (May, pg. 139.)

**Crow's Nest Pass Ry.**—It is rumored that a preliminary survey will be run immediately from the Crow's Nest line to the Windermere mining district following the Kootenay River to Canal Flats, thence down the west side of the Columbia lakes, tapping the principal creeks, to connect with the Arrowhead branch via Toby Creek, from the Lardo-Duncan-Trout Lake country.

A Vancouver despatch says:—"On July 20 the first sod was turned for the Cranbrook-North Star mine branch. The road will be 20 miles in length. The work of construction is being done by the C.P.R. itself. Tenders were called for, & several contractors figured on the job, but when the tenders were opened the management decided they were too high."

The Nelson Miner says that the western portion of the Crow's Nest line between Nelson & Balfour, on Kootenay Lake, is likely to be built this year, & that the line is required to overcome the difficulty experienced last winter in taking barges to Nelson through the ice from Balfour. Beyond that point no trouble was met with. The same paper says the C.P.R. may try & get running powers over the Nelson & Fort Sheppard Ry., between Nelson & Five Mile Point, which is the heaviest part of the line between Nelson & Balfour. We were officially informed on July

28 that nothing had been decided as to building between Nelson & Balfour this year. (June, pg. 172.)

**Vancouver Terminals.**—Coal bunkers are being built & additional tracks laid at False Creek.

**Kaslo Wharf.**—Pending hearing, the Co. has been restrained from building a wharf at Kaslo, on ground claimed by one Foster.

**Arrowhead to Kootenay.**—Poupore & McVeigh, contractors, have some 600 men at work on this line. The engineer in charge is A. E. Doucet, not H. B. Walkem, as stated in our last issue. (June, pg. 174.)

**Columbia & Kootenay.**—Work is progressing satisfactorily on the improvement of the alignment, etc., of this branch between Nelson & Robson. (May, pg. 139.)

**Columbia & Western.**—The narrow gauge rails are being taken up between Trail & Rossland. The short ties will be used at the Trail smelter as fuel. The narrow gauge rolling stock and rails are for sale. The road-bed is in splendid condition, for a new line, & passenger trains are making the runs on excellent time. (June, pg. 173.)

The station on Second Avenue, Rossland, is completed. Track has been extended up to the Le Roi shipping point at Rossland, so that supplies for the mines on Red mountain can be unloaded at the crossing above the Centre Star hoist.

Rapid progress is being made with the extension from West Robson to Midway. Twenty-six miles of track were laid in June. The track is expected to reach Cascade during the 1st week in August & Grand Forks 10

## C. P. R. LANDS.

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

Lands in the Province of Manitoba average \$3 to \$6 an acre.

Lands in Assiniboia, east of the 3rd meridian, average \$3 to \$4 an acre.

Lands west of the 3rd meridian, including the Calgary District, generally \$3 per acre.

Lands in Northern Alberta and the Lake Dauphin District, \$3 per acre.

### TERMS OF PAYMENT.

The aggregate amount of purchase money and interest is divided into ten instalments, as shown in the table below; the first to be paid at the time of purchase, the second two years from the date of purchase, the third in three years, and so on.

Interest on the outstanding purchase money is payable in one year, except in case of an actual settler who breaks up at least one-sixteenth of the land within that time. No rebate of interest is allowed on hay or grazing lands.

The following table shows the amount of the annual instalments on a quarter section of 160 acres at different prices under the new conditions:

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

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

Purchasers paying any instalment, or more, one full year before the date of maturity, will be allowed a discount on the amount of the instalment or instalments so paid at the rate of six per cent. per annum.

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

Write for maps and full particulars.

**L. A. HAMILTON,** Land Commissioner,  
**F. T. CRIFFIN,** - Asst. Land Commissioner,  
**WINNIPEG.**

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Ladies' Waiting Room	Baggage Room	Ticket Office	Smoking Room
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days later. The completion of the balance of the line will be rapid, as few impediments will stand in the way of continuous track-laying. McLean Bros., contractors for the big tunnel, gave up the work, which is now in the hands of O. Olson, who has 120 men at work. They are piercing through the rock 3,100 ft. Working from both ends, they are now in over 1,200 ft. A compressor plant is in operation. Recently 11 ft. of rock in the tunnel was blown out at one shot. Pending the completion of this big undertaking, trains overcome the mountain by a switchback, there being 6 legs on each side. The grades are 4%, with curves of 22 degrees without compensation. The Co. is now receiving freight for Cascade, Grand Forks, Greenwood & Midway, via West Robson, taking it in by construction trains. (June, pg. 174.)

**Duluth, South Shore & Atlantic.**—Press reports say that surveys are being made for an extension from Houghton, Mich., southwest some 45 miles to Ontonagon, along the lake shore.

**Minneapolis, St. Paul & Sault Ste. Marie Ry.**—It is said a contract has been let for the construction of a branch from Rapid River, near Gladstone, north-west some 30 miles through agricultural & timber lands.

The Bradley-Watkins Lumber Company is said to be building a spur from a point on the main line east of Hermansville to Spaulding, Mich., about 8 miles.

### Surveys, Construction, Betterment, &c.

**The Algoma Central Ry.** is projected to connect Sault Ste. Marie with the main line of the C.P.R. at Missanabie, with a branch line from Missanabie to Michipocoten harbor. We are officially informed that the Michipocoten branch is now under construction & that about 10 miles of it will be built this year. Tenders were recently advertised for for cutting ties, grubbing & clearing right of way, grading road & rock cutting. It is also intended to build 40 miles on the main line from Sault Ste. Marie northward. The branch line is intended to develop a most important mining district, the ores of which are of a very low grade, & many of which could not be worked at a profit unless they could be taken out at Michipocoten Harbor, on Lake Superior. The main line will run through a hitherto inaccessible wilderness, which, topographically speaking, consists of rough formation, making the road expensive to build, but, nevertheless, much of the soil is said to be most excellent for the cultivation of grain and root crops. There is a vast area of timber lands, suitable for the manufacture of pulp and other purposes, & the region abounds in mineral wealth, especially in sulphate of copper, sulphate of iron & sulphate of nickel. F. H. Clergue, the President of the Co., who is also President of the Sault Ste. Marie Pulp Mills, proposes to erect reduction works for refining copper & other ores, & for the production of nickel steel. (June, pg. 175.)

**The Canada Atlantic** will this fall commence the erection of large car shops at Ottawa in addition to those already put up. The new shops will be located near the Rideau roundhouse, where the machine shops & repair works are situated. The buildings put up this spring at the foot of Elgin st., & which are now being used, will be discarded after the proposed structure at Ottawa East is up. They will then be used by the Co. for storage, or may be available for manufacturing purposes. When the new car shops, which will be erected & equipped at a heavy cost, are completed, all the works of the Co. will be adjacent to each other, instead of being ½ a mile apart, as at present. They will consist of erecting, woodworking, drying & painting shops, & will run by electricity. In order to make a foundation a great deal of filling in

will have to be done, & work on this will commence in the near future in time for the erection of the shops to start in Nov. & be completed early in the spring.—Ottawa Citizen.

**Canadian Northern.**—When in Winnipeg recently, on his way to China, D. D. Mann was asked if it was true that this Co. had in view a transcontinental line running through the Saskatchewan valley to the Pacific coast. In reply he said that no such scheme had yet become a feature of the plans, though he could not say what might ultimately occur in that respect. In the meantime all talk of a transcontinental line was visionary. The Co., however, intended to build into the Saskatchewan valley, its objective point being Prince Albert, beyond which it had no charter. (June, pg. 157.)

**Cassiar Central.**—A commencement is said to have been made on this line within the last month. However, recent arrivals at Vancouver from Glenora say that a disagreement has occurred between the employes & the Co. in regard to a demand for higher wages, which the management declined to accede to, as the men were fully aware of the pay offered at the time of their entering into the contract either at Victoria or Vancouver where most of them were engaged. (Jan., pg. 11.)

**Central Ontario.**—A contract has been let to R. Weddell, Trenton, for the extension of this line from Ormsby, 5 miles from its northern terminus at Coe Hill to Bancroft, about 21 miles. Work will be proceeded with at once. (June, pg. 175.)

**The Coast Ry. of Nova Scotia** has been extended this year from East Pubnico to Lower East Pubnico, 5 miles, & the grading & masonry are about completed to Barrington, 15 miles further, to which point it is expected to have the line completed by Sep. (June, pg. 175.)

**Edmonton to the Stikine.**—The Government survey party, in charge of C. F. K. Dibble, C.E., which left Edmonton July 12, 1898, to survey a route for a railway through the Rockies to the head waters of the Stikine, returned to Edmonton on July 15. Mr. Dibble commenced his survey on the Peace River where the Parsnip & Finlay join & empty into the Peace. He then followed the Finlay for about 15 miles to the Omineca, & up the Omineca to Black Canyon. He reached Black Canyon Oct. 22 & put up winter quarters, but on Jan. 22 determined to push on in winter & if possible reach the Stikine before spring. The party started on snow shoes & sleds, each man hauling about 200 lbs., & making a survey as they went. After two unsuccessful attempts, they discovered a very easy pass through the Rockies & reached the head waters of the Stikine Mar. 3, a distance from the head of Omineca of about 225 miles. They found the country very heavily timbered, most of the way with balsam & spruce, but a very easy & most practicable route for a railway, in all probability the easiest & cheapest route for construction yet discovered through the Rockies, there not being a single serious obstacle from Black Canyon to the Stikine. They also discovered that the maps are in error in regard to the head waters of the Stikine & Skeena & discovered that both rivers take their source in the same muskeg about 3 miles apart.

**Great Northern.**—A correspondent at Lachute, Que., writes that the final survey has been completed & a definite line decided upon. It was first thought that the road would pass to the south of Lachute town, crossing the C.P.R. tracks at the eastern end of the town, following the high land & crossing the North River just south of the paper mills. This line has been abandoned on account of the heavy grade on both sides of the river & the cost of constructing a bridge at that point. The road as now decided upon will follow the bank of

the North River from the eastern end of the town, crossing it at Barron's Point, where the river is comparatively narrow, & crossing the West River at the western end of the exhibition grounds. A. S. McKown, of Cornwall, & J. E. Valois, N.P., of Lachute, have purchased the right of way from Grenville East as far as Lachute. (June, pg. 175.)

**Intercolonial.**—Detailed particulars of the amounts provided in the Dominion supplementary estimates for betterments, &c., will be found on pg. 216.

In regard to the Government elevator to be built at Montreal the unanimous opinion on the Corn Exchange there is that it should be of at least 1,000,000 bus. capacity, & so constructed as to admit of enlargement to 2,000,000.

**Inverness & Richmond.**—Contractors Ryan & Macdonald are vigorously pushing work on the first 30 miles from the Strait of Canso, & have about 1,000 men & a large number of teams at work. A. Sinclair is in charge of the Co. (June, pg. 175.)

**Kootenay Valley Ry. & Navigation Co.**—On July 12 it was stated that the grading for this Co.'s subsidiary line, the Bedlington & Nelson, was completed from the International Boundary north & ready for track-laying.

On July 19 we were officially informed that this Co.'s other subsidiary, the Kaslo & Lardou-Duncan Ry., was under construction from Kootenay Lake to Howser Lake, a distance of about 12 miles. Construction had only recently commenced, & no decision had been reached as to further construction this year on that line. The character of the work is light for a mountain country. C. O'Donnell, purchasing agent for G. A. Carlson & Co., contractors, reports that the clearing of the right-of-way has been practically completed from Argenta to the canyon beyond Duncan City. The construction camp is situated above the canyon, & men are grading both above & below the canyon.

**Lake Erie & Detroit River.**—On June 20 a by-law to grant this Co. \$20,000 towards an extension from Ridgetown to St. Thomas was defeated in St. Thomas by 207 votes. This is the 3rd time the by-law has been voted upon. It carried last fall, but was quashed on a technicality. The township of Aldboro' has voted a bonus of \$7,000 for the same purpose. (June, pg. 175.)

**Manitoba & Northwestern.**—About 150 men are at work improving the roadbed, etc. An improved station & a section house are being built at Millwood & the stock shipping facilities at Yorkton, Russell & Shoal Lake are being improved.

**Manitoba & Southeastern.**—The portion of the line built last year has been ballasted this season & a passenger service has been inaugurated. (June, pg. 176.)

**The Midland Ry. of Nova Scotia,** now under construction, has been connected with the I.C.R. at Windsor, N.S. (May, pg. 134.)

**Northern Pacific.**—The remains of the Manitoba hotel at Winnipeg have been cleared away. The station & division offices are being rebuilt. (June, pg. 176.)

The main line between Winnipeg & Morris is being ballasted & the Morris yard is being enlarged. The Winnipeg yard has been considerably extended.

**Nova Scotia Southern.**—It is said H. G. Harvey, promoter of this line, expects to have it opened this fall from Shelburne to New Germany, via Caledonia, to connect with the Nova Scotia Central, which connects with the Dominion Atlantic at Middleton. (May, pg. 136.)

**Ontario & Rainy River.**—It is expected that E. F. Fauquier's contract for the first 20 miles will be completed early in Aug. It was recently stated in the daily press that a con-

tract had been given A. B. Mann for grading 10 miles in the neighborhood of Lake Shebandowan. We are informed that the contract is for 4 miles only & work is already proceeding on it. The same report stated that Mr. Johnstone, of Parry Sound, had been awarded a contract for clearing the right of way. On July 22 we were informed that no contract had been signed with Mr. Johnstone, but that one was in contemplation. Chief Engineer White is reported to have stated in Winnipeg recently that 80 miles will be completed this year. (June, pg. 176).

A temporary pile trestle, strong enough to carry a train & to be used as false work in erecting the permanent bridge, has been built over the Kaministiquia River. The crossing is only 250 ft. wide & it will probably be spanned by two 135 ft. steel trusses just clear of high water.

It is said the Co. has bought no. 5 dock at Port Arthur, from T. Marks & Co.

A recent despatch from Fort William gives information of a pending sale of iron ore land in the Atikokan range. The parcel under negotiation has an area of 1,200 acres, embracing 15 locations. The Atikokan range lies to the south-west of Lake Shebandowan, nearly 100 miles west of Fort William. It is to be tapped by the O. & R. R. Ry., & is only 32 miles from the line of the C.P.R. It rises 60 to 125 feet above the level of the plain, it runs in two veins—the one 30, the other 60 ft. wide—is described as from 300 to 400 ft. in thickness, & can be traced 4 or 5 miles. This body of high-grade iron belongs to the magnetite variety. Fifty miles nearer the lake shore are the famous hematite deposits on the Mattawin River.

The Ottawa & New York Ry. has two gangs of men at work on the bridge over the St. Lawrence at Cornwall, & it is expected the structure will be completed by Nov., when the road will be in a position to run through trains between Ottawa & New York. Most of the rolling stock is south of the river & will not be brought into service until the bridge is completed. (May, pg. 136.)

Pontiac & Pacific Jet.—On July 25, nine men started work a short distance west of

Deschene on the extension of this line from Aylmer to Hull. It is said the force will be increased shortly. The City of Hull is likely to give the Co. a bonus towards the cost of its terminals. (May, pg. 137.)

**Prince Edward Island.**—The Dominion supplementary estimates provide \$250,000 towards the construction of a branch from Charlottetown to Murray Harbor, including a bridge over the Hillsborough River. The Provincial Government has agreed to pay \$12,000 a year towards the interest on the cost of the bridge. Murray Harbor is on the s. e. coast of the Island. The estimated cost of a combined railway & traffic bridge over the Hillsborough River is estimated at \$800,000. The length of the branch would be about 50 miles, its estimated cost, narrow gauge as is the rest of the line, being from \$7,500 to \$8,000 a mile. The branch would pass through one of the best & most prosperous districts of the Province, & the Hillsboro' River bridge would be a great convenience to people living east of the river, who now have difficulty in reaching Charlottetown when the ferry traffic is interrupted by ice. A preliminary survey of the proposed line was made for the Department of Railways some 5 or 6 years ago, & a more complete one was made in 1897 by H. J. Mackenzie, C.E. (July, '98, pg. 130, May, '99, pg. 137.)

The Rutland-Canada Ry. Co. is building a line from Rouse's Point to Burlington. There are 600 men employed on the work, which, it is expected, will be completed by Sept. 1, after which date the Co. will run through trains from Montreal to Burlington, & also from Sorel, Que., to New England points. The company will also construct a line from Lacolle to connect with the Richelieu Valley Ry., giving a through service from Sorel to New England points. Besides this it is almost decided to construct a line from St. Lambert, opposite Montreal, direct to Rouse's Point, to connect there with the Rutland Co.'s system; that also includes the railway from Burlington, Vt., to Bellow's Falls. —Railway World (June, pg. 176).

White Pass & Yukon.—On July 6 the first train reached Bennett from Skagway, the

event being fittingly celebrated. The last spike, of gold, was driven by Mrs. E. C. Hawkins, wife of the Chief Engineer, & was withdrawn & presented to her. With rail from the ocean to the head of navigation on the Yukon, the problem of Northern transportation is vastly simplified. It is said to be the intention of the Co. to extend the road as rapidly as possible, the objective point being Fort Selkirk, at the mouth of Pelly River. It is hoped that before navigation opens next year the line will be built as far as White Horse Rapids, which will render the transfer of freight from small to large steamers unnecessary. There are no serious difficulties in the way of construction beyond Lake Bennett. There is doubtless the usual amount of heavy work, but it is of such a character that a large force of men can be used to advantage.

A press report says H. B. LeFevre, of the Co.'s engineering department, has reached Skagway after a hard trip up the Watson river & along the foothills to the Fifty-Mile, below White Horse Rapids. Most of the country through which he passed is entirely new to map-makers, & no signs of trails, mess debris, chopping or other evidence of previous visitation could be found. As a consequence a number of important streams, lakes & prairies were discovered & named. Some of the lakes are quite large & teeming with trout. The lower lands of the country explored are almost entirely devoid of rock, & show no signs of mineral. On the Fifty-Mile river declivity the country is cut up with large potholes. Many of these contain lakes of the purest water. A curious peculiarity lies in the fact that their outlets & inlets are altogether subterranean. They receive their supply from the bottoms of lakes above, & their overflow percolates through their lower banks to lakes below.

The Canada Ry. News Co. gives notice that it will apply to the Governor-General-in-Council for supplementary letters patent extending its powers so as to enable it to carry on the business of catering & keeping restaurants & hotels. The Co.'s head office has been removed from Montreal to Toronto.

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**Dominion Railway & Bridge Subsidies.**

The resolutions introduced in the House of Commons towards the end of July provide for subsidies to the amount of \$6,590,295, as follows :

Revotes, 499½ miles at \$3,200.....	\$1,597,120
New votes, 878¾ miles at \$3,200..	2,812,000
Ontario & Rainy River Ry., 140 miles at \$6,400.....	896,000
Quebec Bridge.....	1,000,000
Other bridges, Quebec.....	201,425
Bridges, Nova Scotia.....	33,750
Revotes for bridges.....	50,000

Total.....\$6,590,295

The resolutions as usual provide for a subsidy of \$3,200 a mile for the railways mentioned, not exceeding the number of miles stated in each case, which shall not cost more on the average than \$15,000 a mile. Where the average cost exceeds \$15,000 a mile there is granted a further subsidy of 50 per cent. on so much of the average cost of the mileage subsidised as shall be in excess of \$15,000 a mile, the subsidy not to exceed in the whole \$6,400 a mile. The expression "cost" is declared to mean the actual, necessary & reasonable cost & shall include the amount expended upon any bridge, not exceeding \$25,000, forming part of the railway subsidised not otherwise receiving any bonus, but shall not include the cost of equipping the railway nor the cost of terminals & right of way in any city or incorporated town; and such cost shall be determined upon the report of the Chief Engineer of Government Railways. In arranging the list of lines aided, as follows, we have classified them by Provinces, which will be found much more convenient for reference than as they are given in the resolutions.

**NOVA SCOTIA.**

From Port Hawkesbury to St. Peter's, 30 miles. Revote.

From Windsor to Truro, via Township of Clifton, 58 miles, in lieu of subsidy granted by 57-58 Vic., chap. 4. Revote.

From or near Brookfield Station, I.C.R., to Eastville, 25 miles, in lieu of subsidy granted by 60-61 Vic., chap. 4. Revote.

From a point on Central Ry. in County of Lunenburg, to Liverpool via Caledonia, or to Caledonia, via Liverpool, or for any part thereof, the whole not exceeding 62 miles. Revote.

From Indian Garden to Shelburne, 35 miles. Revote.

Port Hawkesbury to Caribou Cove, 10 miles.

From Sunnybrae to Country Harbor, and from Country Harbor Cross Roads to Guysboro', to make up deficiency in mileage between points mentioned and subsidised by 60-61 Vic., chap. 4, 15 miles.

Port Clyde to Lockeport, 20 miles.

From I.C.R. at or near Halifax to Central Ry. in County of Lunenburg, 20 miles.

**NEW BRUNSWICK.**

St. John Valley & Riviere du Loup Ry. from Fredericton to Woodstock, 59 miles. Revote.

From Cross Creek Station, Canada Eastern Ry., to Stanley Village, 6 miles. Revote.

Central Ry. of N.B., extension from Newcastle coal fields to Gibson, 30 miles.

Extension of St. Francis Branch of Temiscouata Ry. to mouth of St. Francis River, 3 miles.

Canada Eastern Ry. from Nelson, to connect with main line running into Chatham, to complete connection from Nelson to main line, 2½ miles.

Restigouche and Western Ry., in addition to 20 miles granted by 60-61 Vic., chap. 4, & in continuation from westerly end of the 20 miles towards St. John River, further distance not exceeding 15 miles, and for the line from a point on the St John River, at or near or be-

tween Grand Falls or St. Leonards, easterly towards Campbellton, such point to be approved by the Governor in Council, 12 miles, in all 27 miles.

**QUEBEC.**

Great Northern Ry., between Montcalm & St. Tite Jct., on Lower Laurentian Ry 53½ miles; & for branch from main line to Shawenegan Falls, 6½ miles. 53½ miles revote.

Philipsburg Ry. & Quarry Co, shortage in extension of railway from a point on the line at or near end of subsidised section, to Government Wharf, Philipsburg, 66-100 of a mile. Revote.

From village St. Remi to Stottsville or some point on the Delaware & Hudson Ry. (G.T. R.), in the parish of St. Valentine, 19 miles, of which 12 miles is a revote.

Pontiac Pacific Jct. Ry., from Aylmer to Hull, in lieu of subsidy granted by 60-61 Vic., chap. 4, 9 miles. Revote.

Portage du Fort & Bristol Branch Ry., branch from Pontiac Pacific Jct. Ry. at or near Quyon toward Portage du Fort, 15 miles, in lieu of subsidy granted by 60-61 Vic., chap. 4. Revote.

Orford Mountain Ry., branch from between Lawrenceville & Eastman to Waterloo, 30 miles. 4½ miles revote.

Atlantic & Lake Superior Ry., extension from Caplin to Paspebiac, 30 miles. Revote.

From Paspebiac to Gaspé, 32 miles.

United Counties Ry. from St. Robert Jct. to Sorel, 6½ miles, & from Mount Johnson to St. Gregoire Station, 1 mile. Revote.

Quebec & Lake St. John Ry., for 12 miles from end of line at deep water on Chicoutimi branch to Ha! Ha! Bay, in lieu of subsidy for 12 miles granted by chap. 4 of 1894. Revote.

South Shore Ry. from Sorel Jct. along South Shore to Lotbiniere, 82 miles.

Massawippi Valley Ry., for extension to Stanstead Plain, 2½ miles.

From Labelle, north-westerly to Nominique, via Notre Dame de l'Annoncation, 22 miles.

Ottawa & Gatineau Ry. line in & through City of Hull, 4 miles.

**ONTARIO.**

Central Ontario Ry. extension from or near Coe Hill or Rathbun station, to or near Bancroft, 21 miles, in lieu of subsidy granted by 55-56 Vic., chap. 2. Revote.

Strathroy & Western Counties Ry., from Strathroy via Adelaide & Arkona, to either Forest, Tedford or Park Hill, 24 miles, in lieu of subsidy granted by 57-58 Vic., chap 4. Partly revote.

Between Pontypool & Bobcaygeon, via Lindsay, 40 miles. 32 miles Revote.

Bay of Quinté Ry., for such extensions, branches or additions as will enable it to connect its lines or connecting lines with iron or other mines or mineral or wood lands in the counties of Peterboro', Northumberland, Hastings, Lennox & Addington, Frontenac or Leeds, payable in instalments regulated by the length of each of the extensions, &c., in lieu of part of the balance remaining unpaid of the subsidy granted to the Kingston, Napanee & Western Ry. by 55-56 Vic., chap 5, but not exceeding \$3,200 a mile for 10 miles, not exceeding in the whole \$32,000. Revote.

Bay of Quinté Ry. extension westerly from Deseronto 2 miles; also extension from Tweed northerly 5 miles, in all 7 miles.

From Hawkesbury to South Indian, 35 miles.

From Sault Ste. Marie towards Michipicoten River & harbor & to main line of C.P.R., 40 miles.

From main line of Ottawa, Arnprior & Parry Sound Ry. to town of Parry Sound, 5 miles.

From Haliburton village via Whitney, towards Mattawa, 20 miles.

Extension of Tilsonburg, Lake Erie & Pacific Ry. from Tilsonburg to Ingersoll or Woodstock, 28 miles.

Fort Francis, westerly to or near mouth of Rainy River, 70 miles.

From Owen Sound to Meaford, 21 miles.

Ontario, Belmont & Northern Ry. extension, from Iron Mines north-westerly 5 miles; also extension southerly from present southern terminus to Central Ontario Jct. of the C.P.R. 2 miles, but the aid for the 2 miles shall not be granted in case the Railway Committee of the Privy Council finds that adequate running powers on fair terms can be secured to the Co. over that portion of the line of the Central Ontario Ry. between the present southerly end of the Ontario, Belmont & Northern Ry. & the C.P.R. line at Central Ontario Jct.

From the Pembroke Southern Ry. at or near Golden Lake, towards the Irondale, Bancroft & Ottawa Ry. at or near Bancroft, 20 miles.

Lake Erie & Detroit River Ry. from Ridgetown to St. Thomas, 44 miles; to be payable only in the event of adequate running rights over the Canada Southern Ry. between the points mentioned not being granted to the L. E. & D. R. Co. on terms to be approved by the Railway Committee of the Privy Council.

Kingston & Pembroke Ry., branches from main line to iron mine at Bluff Point & to the Martele Mine in the County of Renfrew, 5 miles.

From the Village of Parry Sound northerly towards Sudbury, 20 miles.

The subsidy which the Ontario & Rainy River Ry. is entitled to receive under 60-61 Vic., Chap. 4, for 80 miles from the Port Arthur, Duluth & Western Ry. to Rainy Lake, shall be \$6,400 a mile.

Ontario & Rainy River Ry. Co., for a railway from Stanley Station, on P. A., D. & W. Ry., to Fort Francis, for a distance of 140 miles, at \$6,400 a mile, not exceeding in the whole \$896,000.00.

**NORTHWEST TERRITORIES.**

Canadian Northern Ry., from present line of Winnipeg Great Northern Ry. north of Swan River to Prince Albert, 100 miles.

From near Antler Station to south of Moose Mountain, 50 miles.

Western Alberta Ry., from U.S. boundary, west of range 27, north-westerly towards Anthracite, Alta., 50 miles.

Edmonton, Yukon & Pacific Ry., from South Edmonton to North Edmonton, thence westerly towards Yellow Head Pass, 50 miles.

There are no subsidies for lines in Manitoba or British Columbia. Prince Edward Island gets a vote of \$250,000 for a branch line from Charlottetown to Murray Harbor, as will be seen by reference to pg. 250.

The following provisions are embodied in the resolutions. They contain a number of important new stipulations:—The subsidies granted to the Ontario & Rainy River Ry., the Canadian Northern Ry. & the Edmonton, Yukon & Pacific Ry., are granted upon the condition, & shall be received upon the condition, that those companies shall not, nor shall any of them, at any time amalgamate with any other railway company, or lease its line to any railway company; nor shall any of those railways be leased to or operated by any other company; nor shall any of those companies make an agreement for a common fund or for pooling its receipts with any other railway company, & any such lease, amalgamation or agreement shall be absolutely void, excepting in so far as it may extend to traffic or running arrangements which have been approved by the Governor in Council.

The subsidies hereinbefore mentioned as to be granted to companies named for that purpose shall, if granted by the Governor in Council, be granted to such companies respectively; the other subsidies may be granted to such companies as shall be approved by the Governor in Council as having established to

his satisfaction their ability to construct & complete the said railways respectively; all the lines for the construction of which subsidies are granted, unless they are already commenced, shall be commenced within 2 years from Aug. 1, 1899, & completed within a reasonable time, not to exceed 4 years from Aug. 1, 1899, to be fixed by Order in Council, & shall also be constructed according to descriptions & specifications, & upon conditions to be approved by the Governor in Council, on the report of the Minister of Railways & Canals & specified in an agreement to be made in each case by the company with the Government; the location also of every such line of railway shall be subject to the approval of the Governor in Council.

The granting of such subsidies, & the receipt thereof by the respective companies, shall be subject to the condition that the Governor in Council may at all times provide & secure to other companies running powers, traffic arrangements & all other rights as will afford to all railways connecting with those subsidised reasonable & proper facilities in exercising such running powers, fair & reasonable traffic arrangements with connecting companies, & equal mileage rates between all such connecting railways, & the Governor in Council shall have absolute control at all times over the rates & tolls to be levied & imposed by any of the companies or upon any of the railways hereby subsidised.

The subsidies shall be payable out of the Consolidated Revenue Fund by instalments, on the completion of each section of the railway of not less than 10 miles, proportionate to the value of the portion so completed in comparison with that of the whole work undertaken, to be established by the report of the Minister, or upon the completion of the work subsidised—except as to subsidies with respect to which it is otherwise provided.

Every company receiving a subsidy under this act shall each year furnish to the Government transportation for men, supplies, material & mails over the portion of its line in respect of which it may have received such subsidy, & whenever required shall furnish mail cars, properly equipped, for such mail service, & such transportation & service shall be per-

formed at such rates as may be agreed upon between the Minister of the Department of the Government for which such service is being rendered & the company performing the same, & in case of disagreement, then at such rates as may be approved by the Governor in Council, & in or toward payment for such charges the Government of Canada shall be credited by the company with a sum equal to 3% per annum on the amount of subsidy received by the company under this act.

It is reckoned that 3% per annum, which is a new condition in the contract, amounts to \$96 a mile per year; whilst the 8c. a mile reckoned for mail dues comes to about \$35 a year.

BRIDGES.

To Quebec Bridge Co., towards construction of bridge over St. Lawrence River, at Chaudiere Basin, near Quebec, \$1,000,000, payable 40% on monthly progress estimates, approved by Government engineers, of materials delivered & work done.

South Shore Ry., towards restoration & renewal of railway bridge over Yamaska River at Yamaska, Que., (Revote) \$50,000.

For the other bridges 15% of the amount expended thereon is granted not to exceed the sums mentioned.

Towards construction of bridge over Richelieu River at Sorel, Que., (Revote) \$35,000.

Towards construction of bridge across St. Francis River, \$50,000.

Towards construction of bridge across Nicolet River, \$15,000.

Midland Ry., towards construction of bridge across Shubenacadie River, \$33,750.

Great Northern Ry., towards construction of bridge across St. Maurice River, \$16,425.

Towards construction of bridge across the Rivière du Loup, \$15,000.

Towards construction of bridge across Lac River, \$15,000.

Great Northwest Central Transfer.—Chier Justice Killam has issued an order at Winnipeg for the payment over of \$27,000 to Mr. Delap, on behalf of the bondholders of the G. N.C.R. Co. This is one of the preliminaries

to the transfer of the road to T. G. Shaughnessy & others who have purchased it in the C.P.R. interest. The order of the court stipulates that the receiver can be dismissed on three days' notice.

Government Ownership of Railways.—At a meeting at Neepawa, Man., Hon. H. J. Macdonald, leader of the Manitoba opposition, was asked as to the plank in the opposition platform respecting Government ownership of railways. He said he was strongly in favor of it. It was impossible, however, to apply it to railways now in operation. They could not be forced to sell out to the Government. His policy would only have reference to future projects. When bonuses are asked for, aid should only be given on condition that the Government gets control of the freight rates over the line.

W. Shanks, Roadmaster at Carleton Jct., having resigned, has been succeeded by J. Jelly, on division 4, between Brockville & Chalk River.

Land Commissioner Hamilton, of the C.P.R., says that the Boundary Creek district town sites in B.C. are being quickly purchased, & that the influx of people into the country is little short of remarkable.

J. E. Parker, C.P.R. ticket agent in Ottawa for the past 15 years, & previously in the G.T. office, died July 27, aged 44. He had been in poor health for the past few years, although he was able to hold his position until a couple of months ago. He leaves a widow & 6 children. He was a major in the 43rd Battalion, & came from St. Andrew's, Que.

At Neepawa, Man., recently, Hon. H. J. Macdonald, in speaking of his relations with the C.P.R., said he would resign his solicitorship as soon as the writs were issued for the Provincial elections. He would also sever his connection with his firm. He did not think any man present would be unreasonable enough to have him throw away the salary in connection with it until it was necessary for him to do so. If he did not draw it some other would.

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## SHIPPING MATTERS.

## Prince Edward Island Winter Steamer.

The str. Minto, illustrated & described in our June issue, pg. 185, was launched at Dundee, Scotland, July 13, & was then towed to the fitting out berth. A Dundee paper says:—"The vessel, beautifully modelled & built of steel throughout, has been specially designed for the winter mail & passenger service between P.E.I. & the mainland. She is of the flush deck type, with a long citadel deckhouse, & has been constructed to the highest class in Lloyd's Registry & under their surveyor's special survey, as well as to the Board of Trade requirements. The principal dimensions are:—Length, 225 ft.; breadth, 32½ ft.; depth, 20½ ft.; gross tonnage, 1,100 tons. As she will encounter immense quantities of ice, the ship's form & scantling have been specially arranged to meet this, the stem being boldly cut away from the water-line, & the shape of stern designed to prevent jamming in the ice fields. The hull is flush, plated & heavily belted all fore & aft in wake of the water-line, & there are seven transverse bulkheads. Water ballast is carried in a cellular double bottom, & there are large trimming tanks aft for the purpose of sinking the stern & lifting the fore foot to get on top of ice. Accommodation is provided for about 30 passengers in the fore end of the deck-house on the upper deck, the saloon being extended right across the house, panelled in polished oak & handsomely upholstered. The officers are also berthed in the deckhouse, the seamen forward on the lower deck, & firemen aft, convenient to the engine-room. The mail-room is situated in the 'tweendecks, & a complete system of steam heating is supplied in all the accommodation, besides an installation of electric light throughout the vessel. The deck machinery consists of steam windlass, winch, & capstan, & steam & hand steering gears. The ship will be available in time of war for a fast unarmored cruiser, as four 6 pr. Q.F. Hotchkiss guns will be mounted, 2 forward & 2 aft. With her smart schooner rig & gunboat stern, the Minto has quite a warlike appearance. As she is expected to attain a high rate of speed, she should be a useful auxiliary to the North Atlantic Squadron."

The Minto will be commanded by Capt. Finlayson, now in command of the Stanley.

## Maritime Provinces Shipping.

The Nova Scotia Steel Co. is having a steam launch built for its iron mines at Belle Isle, Nfld.

The Manhattan S.S. Co. is said to have gone into bankruptcy, but a new company will take its place & push business.

Capt. E. Kenney has been appointed in command of the Dominion Atlantic Ry's new steamer Prince Arthur. F. Ross is Chief Engineer.

The Steamship Pydna Co., Ltd., has been incorporated under the New Brunswick Companies Act, capital \$160,000; head office, Rothesay, N.B.

The Government str. Newfield left Halifax July 18, on her regular supply trip to the light-houses at Sable Island, & other points in the Maritime Provinces.

The Tidal Survey Branch of the Department of Marine & Fisheries has issued, in pamphlet form, the tide tables for Charlottetown, P.E.I., Pictou, N.S., & St. Paul Island, C.B., for 1899.

The office of Canadian Agent of the Plant Line has been abolished. H. L. Chipman, who has heretofore held that position, is appointed Superintendent, with office at Halifax & with full charge of all operations, reporting to the President and Manager.

At a recent meeting of directors of the Star Line Co., in place of electing a manager, J. Manchester was elected President, T. P. Taylor Vice-President, & R. Orchard Secretary-Treasurer. The resignation of R. C. Elkin as a director was accepted, & Capt. C. C. Taylor was elected in his place.

The Halifax Board of Trade has asked the Minister of Marine that a whistling buoy be immediately placed 5 miles s. w. of Pennant, at the entrance to Halifax harbor, & that the bombs now discharged every 20 minutes on Sambro Island during foggy weather be discharged every 5 minutes. The Government will also be asked to place a lightship off Sambro Island, equipped with a powerful steam whistle.

Arrangements have been made by the Imperial & Dominion Governments with Pickford & Black, of Halifax, for increased service between Halifax, St. John, N.B., the British West Indies & British Guiana, for 5 years. The vessels are to be of not less than 1,000 tons burden, & accommodation is to be provided for at least 40 cabin passengers. They are prohibited from calling at any U.S. port. The Imperial & Canadian Governments will each pay an annual subsidy of \$65,000. At present the steamers make 13 trips, receiving \$5,000 a trip, and this service is to be doubled. There will be 26 trips, & the governments are to pay \$5,000 subsidy each trip, the Dominion Government paying the same amount as at present, and the Imperial Government a like amount, thus giving a double service. The Taymouth & Duart Castle, the present steamers on the route, are to have their speed increased, have new boilers, & to be thoroughly overhauled, fitted with increased passenger accommodation, & one or two other boats will be secured. The boats will have a speed of about 12 knots. They will run on regular scheduled time; the date of arrival & departure at & from each place will be rigidly adhered to, as far as practicable, and the service will be most complete in every respect.

## Ontario &amp; The Great Lakes.

E. C. Walker, Walkerville, & others have been incorporated as the Lake Erie Navigation Co., capital \$40,000.

The Calvin Co's. new str. India had a trial trip at Kingston, July 27, & afterwards cleared for Cleveland, to load coal for Fort William, whence she will go to Serpent River, Wis., to load iron ore for Deseronto.

Capt. Noonan, of the str. James Swift, has decided to build another steamer for the Rideau route, at Kingston. Work will be begun in Oct., & she will be ready for business next spring. The two boats will make four round trips each week.

Lieut. Stewart, who is in charge of the hydrographic survey on the south shore of Manitoulin Island, reports that the work has been greatly hampered by unfavorable weather, & that this season is the worst for hydrographic work that he remembers.

The new schooner John Smeaton, owned by the Bessemer Co., sailed from Duluth July 21, with her maiden cargo. She carried 7,372 gross tons of iron ore & a draft of 18 ft. 1 in., forward & aft. This is the largest cargo ever carried by a lake boat, breaking the record made by the Manila by 145 tons.

Steamboat travel on the Ottawa River is decidedly cheap, in consequence of the rate war between the Ottawa River Navigation Co. & the smaller companies. A trip from Ottawa to Thurso & return, 60 miles, may be made for 5c. The str. Princess Louise, owned by a rival concern, charges 25c. for the return trip from Ottawa to Thurso.

At a recent meeting of the New York Legislature's Committee to investigate the decline of the commerce of the port of New York, G. E. Macy, representing P. D. Armour, Chicago, said that his firm exported grain via Montreal & Philadelphia. Montreal is now the cheapest route from Chicago & the Northwest. The Montreal competition had a tendency to lower rates. Last year there was a pool at Buffalo & rates were cut to meet Montreal's rate, but this year there is no competition here. If the New York elevating rates were lowered, there would be no trouble at that port. Mr. Macy said that recently, on a shipment of 500,000 bus. of grain to Montreal, he saved five-eighths of a cent a bushel by using that route. He said the Montreal people usually watch the Buffalo rate very closely & frequently make a cut of ½c. a bushel in order to get the business.

Capt. Symes of the str. Seguin, which was driven ashore near Ashtabula in the recent gale on Lake Erie, displayed rare judgment in everything pertaining to the accident to his vessel. When he found he could neither weather the gale nor get her into port, he put her on to a sand beach with her head pointing directly to the shore. With the storm over & his vessel apparently not injured in the least, he found that she rested on a sand bar aft but was entirely free forward. Then he secured the assistance of a steam lighter. The Seguin's boiler was blown off to lighten her aft, and some water let into a forward compartment (she is a small steel vessel). In addition to the water taken in forward, quite a large quantity of coal was also taken aboard from the steam lighter. The coal was readily transferred to the stranded vessel, as the lighter is equipped with a derrick for this purpose, & it was of sufficient weight, with the water, to put the vessel down forward. When sufficiently weighted at the head, the Seguin was released aft, & she was afloat a few hours after the job was begun.—Marine Review.

## B. C. Dry Dock Charges.

The Boards of Trade of Victoria & Vancouver have protested against a recent reduction of charges for the use of Esquimalt dry dock made by the Dominion Government, on the ground that it is unfair to private concerns. The News Advertiser gives the following statement showing dock charges in the competing ports of San Francisco & Tacoma, the dock charges at Hong Kong on the other side of the Pacific, the charges on the Atlantic coast & the present charges at Esquimalt. A 2,000-ton vessel is taken as an illustration, the first day & one lay day being shown:

San Francisco—2,000 ton vessel, gross tonnage, 1st day 40c. a ton, \$800; lay day 20c. a ton, \$400—\$1,200.

Tacoma—1st day 30c. a ton, \$600; lay day \$400—\$1,000.

Hong Kong—Empresses, \$850 1st 2 days, after that \$250.

Esquimalt—Empresses, \$520 1st 2 days, after that \$120.

Quebec (Government dock)—1st day \$350; lay, 4½c. a ton, \$90—\$440.

Halifax—1st day, 20c a ton, \$400; lay, 12½c. a ton, \$250—\$650.

Kingston—1st day, \$250; lay, 7c. a ton, \$140—\$390.

Esquimalt—Old rate: 1st day \$350; lay, 4½c. a ton, \$90—\$440.

Esquimalt—Cut rate: 1st day, \$200; lay, \$50—\$250.

From this it will be seen that the old rate charged at Esquimalt dry dock was considerably less than half the rate charged at San Francisco & Tacoma, less than in Halifax & the same as in Quebec.



### British Columbia Shipping.

The E. & N. Ry. Co.'s str. City of Nanaimo has been overhauled & greatly improved.

The C.P.N. Co. has put the str. Transfer on the Vancouver & Steveston run for the summer.

The C.P.R. str. Athenian reached Vancouver July 18 from the Orient, after her second trip across the Pacific.

The Upper Columbia River Navigation Co.'s str. Duchess has been a good deal impeded lately by logs in the river.

The Union Canneries, Ltd., has been incorporated under the B.C. Companies Act, capital \$5,000, head office, Vancouver, to acquire & operate the str. Lapwing.

The freight steamer Clansman has been completed for McKenzie Bros., Vancouver, to operate in connection with the str. Fingal & Staffa. She is about 100 ft. long over all.

The ferry service between New Westminster & South Westminster has been resumed by the str. Surrey, which has had her hull reconstructed & her machinery & fire pumps overhauled.

It is said the following lights will be erected this year:—Lighthouses on (1) Start Point, Laura Pass, Fitzhugh Sound; (2) Lawyer's Island, Chatham Sound, or Green Top Island, Chatham Sound; (3) Ballanac Islands; Pole Light on Turn Point, Seaforth Channel.

The str. Glenora, which was built in Tacoma for the Stikine River route, has been bought by New Westminster parties to ply between there & Chilliwack & other points. She is an up-to-date river boat, 126 ft. long, with a 28-ft. beam, & draught of 5 ft. She is fitted with powerful engines with a 6-ft. stroke, the steam being generated in 2 boilers, each of which gives a pressure of 175 lbs. The Glenora replaces the Gladys, which was burned at her wharf in the great fire.

The coal supply service between Union, Vancouver Island, & Vancouver is now being performed by the big barge transfer no. 1 & the tug Czar. They carry coal principally for the G.P.R., which has built large bunkers near the roundhouse on False Creek. The transfer carries 12 cars of coal across the Gulf each trip. The cars are run along the C.P.R. tracks, from the slip at the western end of the docks, to the roundhouse, dumped into the bunkers & brought back to go back on the barge again on the return trip.

Seal fishing in the north Pacific is picking up, according to reports from Japan. A few years ago the business became so bad that Canadian vessels were no longer fitted out for the seal trade, & the Japanese became prac-

tically the only sealers in the far northwest. This year their catches are said to be something wonderful, breaking all previous records for the country, & so it is likely that next season the Canadian fleets will again be in evidence. One Japanese vessel came to harbor recently with 840 skins, another with 375, while three others had about 600 between them. Recently it was rare for 200 to be caught during a season, but this number is now the rule rather than the exception.—Victoria Times.

The Canadian Pacific Navigation Co. has offered to have built & place upon the line between Victoria & Vancouver a steamer with all modern appliances, & first-class in every respect, which will be capable of making the trip between Victoria & Vancouver, either way, under ordinary circumstances, in 4 hours or under. This the Co. states would require a steamer costing not less than \$400,000, & the time required to procure such a vessel under existing circumstances would be 18 months, at least. The Co. cannot undertake this expense unless it receives financial assistance, & proposes that the city of Victoria give a bonus of \$25,000 a year for 10 years. It is proposed to build the steamer in Great Britain. She will be a side wheeler, somewhat similar to the English Channel boats.

Early on the morning of July 12 a fire broke out in the river steamer Nahleen, on Turples' ways at Victoria, & rapidly spreading to the adjacent str. Louise and the tug Badger, destroyed the three. The fire started in the engine-room of the Nahleen. She was 356 tons register, 143 ft. long & 23 feet beam. She was built in Victoria last year, being intended for the Stikine River route, but after making one trip was laid up for lack of business. She had recently been thoroughly overhauled, renovated & strengthened, & was to have started at once for Dawson via St. Michael, under her own steam, convoyed by the Amur. The intention was to run the Nahleen between Dawson & White Horse Rapids in conjunction with the boats of the Bennett Lake & Klondike Navigation Co. The Louise ran on the Stikine last year & was an old boat. The burned vessels were partially insured, the loss to the Klondike Mining, Trading & Transportation Co. over & above the insurance being estimated at \$15,000.

### Dominion Notices to Mariners.

The Department of Marine has issued the following notices:—

No. 38, June 19, Quebec.—Change in buoyage between Lake St. Peter & Varennes.

No. 39, June 23, Ontario.—1. New buoy in western approach to Kingston. 2. Proposed change in position of Snake Island shoal light-

house. 3. Amended description of Corunna range light buildings. 4. Hand fog-horn at Port Arthur.

No. 41, June 21, Ontario.—Platform buoy south of Bear's Rump Island, Georgian Bay.

No. 42, June 23, Quebec.—1. Semaphore at St. Jean des Chailions blown down. 2. Period of occultation St. Thomas bank gas buoy.

No. 43, July 1, Quebec.—List of ship channel buoys.

No. 44, July 3, New Brunswick.—Improvements in Green Head & Sand Point lights, St. John River.

No. 45, July 7, Quebec.—Upper Traverse pier

No. 46, July 12, Prince Edward Island.—Change in Cascumpec harbor lights, Newfoundland, Channel head & Port-aux-Basques.

### The S.S. Baltic Insurance Case.

As this case has been finally decided, it may be of interest to review it. The S.S. Baltic, originally the Frances Smith, was owned by the Great Northern Transit Co., of Collingwood. There were originally seven insurance companies which had issued policies on the Baltic; but one of these, the Guardian, paid the amount of its policy before action was brought, and another, the Alliance, made a settlement which was satisfactory to the plaintiff after judgment had been given in the Court of Appeal. The companies which continued the contest were the Commercial Union, the London Assurance, the Atlas, the Waterloo Mutual, the National of Ireland, & the Keystone. The Baltic had been running on the Upper Lakes for a number of years, & was always in commission until the close of the season of navigation in 1893, having been employed during the latter part of that season in running to Chicago during the World's Fair. By the following year the G. N. T. Co. had completed another steamer, the Majestic, to compete with the City of Collingwood, which had been built by the rival line. It was found, therefore, unnecessary to use the Baltic, nor did the traffic in subsequent years justify her being put into commission again, although, as was said by Judge MacLennan in the Court of Appeal, she was a vessel capable of being put in use as a passenger & freight steamer whenever required. These facts must have been well

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known to the insurance companies, for they appeared in the Inland Lloyds Vessels Register constantly referred to by companies. The agent for the Alliance was also Secretary of the Inland Lloyds. No application & no representations were ever made by the G. N. T. Co. to any of the insurance companies, nor did the latter attempt to prove this at the trial. Each of the policies contained the same description, namely, "On the hull of the s.s. Baltic, including engines, boilers, &c., on board said steamer whilst running on the inland lakes, rivers & canals during the season of navigation. To be laid up in a place of safety during the winter months from any extra hazardous building." It was never disputed that the Baltic was laid up in a place of safety, or that she was a boat running on the inland lakes, rivers & canals, & that when running she ran only during the season of navigation. The defendants, however, based their resistance to the claim of the plaintiff on the ground that the words "whilst running" contained a condition that the boat must be running. The defendants did not attempt to prove at the trial that there was any greater danger from fire when the boat was laid up than when she was running, nor did they ask the jury to find that it was material that the boat should be running all the time. The policy of the Commercial Union was issued as far back as May 1, 1893, when the Baltic was actually running, & the first policy of the London Assurance on this boat had been issued on Jan. 24, 1893, though the amount of its policy had been subsequently reduced. The policies of the other companies had also been in force for some time, & it is to be noted that the policy of the Atlas was issued on Feb. 1, 1895, at a period of the year when the Baltic was laid up, as would be necessary in the winter. In brief, the plaintiff contended that the defendant companies knew very well what they were insuring, & that it is not equitable that they should seek to insert into the policy by the words "whilst running," a hidden condition, which should have been properly inserted as a variation of the statutory conditions, if it was to bear the meaning which the defendants endeavored to force into it. As was said by one of the Judges of the Court of Appeal, the ship was "a valuable property, & insurable on some terms," & the policies were all time policies for one year, & the defendants had received full premiums for the year, so that this time limit ought not to be cut down by words of very dubious meaning. The meaning attributed by the plaintiff to the words of the policy is an equally satisfactory one, namely, that it was intended to stipulate not that the Baltic must run, but that whilst running she must run "on the inland lakes, rivers & canals," i.e., that she should not go out to the ocean, & that whilst running she must run "during the season of navigation," & not at other periods of the year.

The case was argued before the Supreme Court in March by B. B. Osler, Q.C., & W. M. Douglass for the G.N.T. Co., & by W. Nesbitt, for the insurance companies, & judgment was recently delivered by Judge Sedgwick, no other judgments being delivered, the other judges simply concurring. Judge Sedgwick gave his reasons for judgment as follows:

On Sep. 5, 1896, the steamer Baltic, owned by the Great Northern Transit Co., Ltd., the present respondents, was burned while in the dock at Collingwood, Georgian Bay. At the time of the fire she was insured against fire to the amount of \$11,000, in 7 companies, all of them, except the Alliance Assurance Co., being the present appellants. The companies having disputed their liability, actions were brought, & one of these cases was tried before Armour, C.J., with a jury at Toronto in Sep., 1897. Judgment was there given in favor of plaintiffs, which judgment was sus-

tained upon appeal by an equally divided court, Maclellan and Moss, J.J., being of opinion that judgment should stand, the Chief Justice & Osler, J., dissenting. The appeal is from that judgment to this Court. It is an admitted fact that the last trip of the Baltic was made in the season of 1893. In Sep. of 1893 she was laid up at Collingwood, & from that date she never again went to sea. It also appeared that during 1894, 1895 & 1896 she never obtained a certificate of inspection provided by the Dominion Act, without which she could not have been run; that her planking, her frames and her engine bed were in such a condition that it would have been impossible for her to have been moved from her position by her own motive power; that her electric light plant & certain portions of her furniture had been removed, & that she was in such a condition that she could not in any sense be described as a running boat. Only two questions are raised; 1st, as to whether, at the time of the fire, the vessel insured came within the risk described in the policy; & 2nd, as to whether the provisions of the Ontario Fire Insurance Act in regard to conditions had been or should have been complied with.

The wording of the description of the risk in each of the policies is identical & is as follows: "On the hull of the s.s. Baltic, including engines, boilers & appurtenances thereto, anchors, chains, masts, spars, rigging, sails, cabin & office furniture, beds, bedding, linen, silverware & plateware, cutlery, china, glassware & earthenware, looking-glasses, mirrors, wheelbarrows, trucks, clocks & apparel on board said steamer whilst running on the inland lakes, rivers & canals during the season of navigation. To be laid up in a place of safety during winter months from any extra hazardous building. Ordinary outfit to be allowed in winter & spring. It is understood & agreed that the steamer insured under this policy has permission to carry merchandise, hazardous & non-hazardous, as freight from port to port, with one barrel of coal oil for steamer's use."

And the controversy mainly turns upon the interpretation to be given to the words "whilst running on the inland lakes, rivers & canals during the season of navigation." Three contentions have been put forward. The 1st (& it is that upon which the judgment of the trial Judge is based, & is followed by Mr. Justice Maclellan in the Court of Appeal) is that the clause was intended to confine the risk to fire whilst the vessel was inland, whether on the lakes, rivers or canals during the season of navigation, & not upon the ocean, the emphatic word being inland as distinguished from ocean. In other words, that the clause might read "whilst being (whether running or laid up) in the inland lakes, rivers & canals during the season of navigation, but not on the ocean or in any ocean port." Another interpretation is that the phrase "whilst running, etc.," applies to & qualifies not the s.s. Baltic itself, but only some of the property & articles intended to be included in the risk. The 3rd interpretation is that by the words in question the companies undertook to insure, not a vessel laid up during the season of navigation, but a vessel actively engaged or employed during that period upon the inland lakes, rivers or canals; that during the season of navigation she must be a vessel in use, or as they say, "in commission" (a term only applicable to national ships of war), with the necessary ship's papers & properly provided with master, crew & everything requisite for the ordinary prosecution of the business of a merchant vessel.

I am not able to agree with the view of the learned Chief Justice of the Queen's Bench Division. It is true that the word "inland" is an emphatic word confining the risk so far as locality is concerned to inland lakes, rivers & canals, so that, if a loss should occur while the vessel happened to be, say at Halifax, or

any other Atlantic port or on the high seas, she would not be covered. But there are, it seems to me, other equally emphatic words, & one of these words is "running." The learned Chief Justice's interpretation gives no effect to it. But not only that; it necessarily introduces into the clause an idea which is opposed to the idea conveyed by the word "running," namely, the idea that whether the ship was "running," that is, in active employment or use, or whether she was laid up either at anchor or in dock, or upon dry land, she was still within the words of the policy.

This, I think, is not interpreting the contract, but enlarging it, making a contract not contemplated by the parties. I have not been able to appreciate the second interpretation given to this clause to which I have referred. It is a clause qualifying either the word "Baltic" or the word "steamer." It contemplates not engines, anchors, office furniture, etc., running, but a steamer running—nothing more, nothing less. The 3rd interpretation is, I think, the correct one. It is an element of importance that this is a fire policy, not a marine policy. Two elements much more important in a fire policy than in a marine policy are those of locality & mode of use. The risk of a thing being burned depends not so much upon the thing itself as upon its location & the uses to which it is put. A wooden building used for the manufacture of dynamite in a crowded city surrounded by factories continually emitting sparks from their chimneys or smokestacks, may be absolutely uninsurable. The same structure removed for farming purposes to the open prairie might be insured at almost a nominal sum. Now this is not a "time" policy. A time policy is a phrase used only in marine insurance to distinguish it from a voyage policy. It in no material respect differs from a policy upon a building or upon anything else capable of insurance against fire. Neither is it a policy insuring the subject matter from one definite period to another. It is rather a policy insuring it during such periods within two defined points of time as she may happen to come within the description & terms of the risk. In the present case, she is insured, 1st, whilst running upon the inland lakes, rivers & canals during the season of navigation, & 2nd whilst she is laid up in a place of safety during winter months (removed) from any extra hazardous building. There may be within the year many periods, longer or shorter, in which she is not covered at all. She may, during the season of navigation, be running on the high seas. Whilst so occupied she is not insured. So likewise, during the winter months, she may be running either on the high seas or upon the unfrozen waters of the inland lakes, or, as at the City of Quebec, engaged as a ferry boat from one side of the St. Lawrence to the other. Still she is not insured. I do not know, & it is not material to determine, to what extent the element of locality influenced the insurance companies in making these policies. I do not know whether navigation upon salt water is carried on at a greater risk than on fresh water, or why the operations of this steamer were confined to the latter; but, admitting that the parties, in limiting the operations of the vessel to inland waters, had in view the prohibition of navigation in ocean waters, it is perfectly clear that they had also in contemplation two distinct classes of risk, namely, the risk of fire whilst she was in actual use during the season of navigation, & likewise the risk of fire whilst she was not in use, but laid up in a place of safety during the winter months. The mode of use in both cases was material to the risk. In the summer months no special provision was made for her safety. Then she would be running. She would have her masts & crew; she would have her life-saving and fire-saving apparatus; she would be under constant supervision & the danger of fire would be reduced to a minimum. In the winter months, how-

ever, she must be laid up. She may be laid up anywhere, whether in an inland port or an ocean port—but, wherever laid up, it must be in a place of safety, & removed from an extra hazardous building. Looking at the whole clause, it seems to me that the words "running during the season of navigation" are mainly used in contrast with the words "laid up during the winter months." She is only covered by the clause whilst, during the season of navigation, she is running, & whilst, during the winter months, she is laid up in a place of safety. This it seems to me, is the true construction of the clause. It gives a natural & reasonable meaning to each of its words, & it does not necessitate, as the 1st interpretation does, the insertion of the additional stipulation to which I have referred in order to give effect to it. If the view I take is incorrect, & the 1st interpretation is the right one, if it is not necessary that during the season of navigation the vessel should be in actual use, if all that was contemplated by the parties was that during that season the vessel should exist in situ whether running or laid up, then she might be laid up anywhere, whether in a place of safety or not; she might be anchored or even let run adrift upon the open lakes; she might be moored or hauled up high & dry in immediate proximity to any factory or building, no matter how dangerous such proximity might be. Surely as I view it, this consideration alone shows the untenable character of the ground upon which the judgment below is based.

One other point remains. It is contended that the stipulation contained in the words "whilst running, etc.," is a condition within the meaning of the Ontario Insurance Act; & inasmuch as it varies from or is in addition to the conditions by that Act made statutory, the policy should comply with sec. 115 of the Act, which provides that such variations or additions should be printed in conspicuous type & in ink of different color. So far as this point is concerned, I entirely agree with the view taken by the learned Chief Justice of the Court of Appeal & Mr. Justice Osler. The stipulation in question is in no sense a condition, but rather a description of the subject matter insured. It is & is descriptive of & has reference solely to the risk covered by the policy & not to the happening of an event which by the statutory conditions would render the policy void. The statute therefore does not apply. On the whole, I am of opinion that the appeal should be allowed & the action dismissed, all costs to follow in the usual course.

The Chief Justice & Gwynne, King & Girouard, J. J., concurred.

The G.N.T. Co. has since been refused special leave to appeal to the Judicial Committee of the Privy Council, though we do not know on what ground. In perusing Judge Sedgwick's judgment it will be noticed that nearly the whole of it deals with the construction of the clause under the policy "whilst running, etc.," while what appears to be one of the most important points in the case is

disposed of in the two concluding paragraphs. Plaintiff's counsel contended that the stipulations contained in the words "whilst running," if of sufficient force to override the fixed time limit of one year mentioned in the Act, must be a condition, & that, being a condition, it was a variation or addition of the statutory conditions & should, therefore, have been endorsed in accordance with the provisions of the Insurance Act. The Supreme Court disposes of this by saying that though these words have this very powerful effect they are nevertheless merely a description of the subject matter insured. Plaintiff's answer to this has always been that if these words have the force of a condition they must be treated as a condition. It would seem that if stipulations of this nature are binding when inserted as a description, it would be possible to get round the Insurance Act in a great many cases, & logically it would be possible to insert a stipulation as to incumbrances in a similar manner, & so the Baltic might have been described as "while unincumbered & while running, etc." The point has, however, in spite of full argument, received such scant attention both from the Supreme Court & from the Chief Justice of the Court of Appeal & Mr. Justice Osler, who took the same view, that it is a very great question whether the decision will carry much weight in this respect in future.

**Dominion Supplementary Estimates.**

The supplementary estimates recently submitted in the House of Commons contain a large number of items especially relating to the transportation & allied interests, which are extracted as follows:—

**ADMINISTRATION OF JUSTICE.**

Counsel & solicitor's fees before Privy Council, Madden vs. Nelson & Fort Sheppard Ry. Co.; intervention of Attorney-General of Canada .....\$ 2,000 00

**INTERCOLONIAL RY.—CAPITAL ACCOUNT.**

Increased siding accommodation ..... \$90,000 00  
 Increased station accommodation ..... 15,000 00  
 Sea wall & cribwork protection to banks on line of Cape Breton Ry. .... 10,000 00  
 Increased accommodation at Levis (revote \$34,000) ..... 80,000 00  
 Elevator at St. John, N.B. (revote \$40,000) ..... 114,000 00  
 Increased accommodation at St. John, N.B. (revote) ..... 49,600 00  
 Indian town Branch, to pay amount of award of W. Shanly of \$34,675.23 & interest from Dec. 1, 1886, to July 1, 1899, to Hon. J. Snowball ..... 52,148 44  
 Changing drawbars of freight cars from link & pin coupler to master car builder's standard couplers ..... 10,000 00  
 Improvements at Mulgrave ..... 15,000 00  
 Providing larger & stronger turntables & strengthening some old ones to meet requirements of modern heavy engines, at various points ..... 12,425 00  
 Improvements at Point Tupper ..... 8,500 00  
 To improve water service for fire protection at Moncton ..... 9,000 00  
 Improving telegraph service ..... 13,000 00  
 New engine houses & enlarging others ..... 40,000 00  
 One 1st class passenger coach ..... 10,385 00  
 Extension to deep water at North Sydney (revote) ..... 9,500 00  
 Rest houses at 9 engine stations ..... 4,360 00  
 Appliances & apparatus in connection with the installation of gas car lighting system. 4,350 00

Refrigerator cars ..... 30,000 00  
 Track scales at Pictou, Drummondville & North Sydney ..... 2,700 00  
 Subway under tracks at Christie's Crossing, Amherst ..... 4,200 00  
 Dredging at Pictou wharf ..... 1,300 00  
 " landing wharf (revote) ..... 2,250 00  
 Increased accommodation at Halifax (revote) ..... 20,000 00  
 Elevator at Halifax (revote) ..... 77,000 00  
 Finishing upper flat, general offices, Moncton ..... 2,000 00  
 Changing car couplers ..... 13,000 00  
 McDonald & Moffatt, contractors for terminal wharf, Sydney, in settlement claim for extra work ..... 300 00

**PRINCE EDWARD ISLAND RAILWAY.**

Towards construction of branch line from Charlottetown to Murray Harbour, including bridge over the Hillsborough River. .... 250,000 00

**CANALS—CAPITAL ACCOUNT.**

Sault Ste. Marie—H. Ryan & Co., award on claims in connection with contract for the construction of canal & lift lock at Sault Ste. Marie, referred to W. Shanly, C.E., as arbitrator ..... \$211,505 00  
 Dredging at lower entrance channel to canal. Trent—Towards rebuilding Cowan's bridge over Pigeon Creek in the Township of Emily ..... 1,500 00  
 Rideau—Damages to L. Gemmill caused by cutting off water supply by construction of Tay Branch ..... 2,750 00  
 W. Davis & Sons interest at 6% per annum on amounts due as per monthly estimates issued ..... 10,371 28  
 Lachine—Deepening, etc., River St. Pierre. Enlargement (revote) ..... 9,000 00  
 " Heney & Borthwick, extras in connection with contract for drainage works, reported in their favor by W. Shanly ..... 8,932 86  
 Welland—Swing bridge across canal at 4th Con., Humberstone ..... 37,000 00  
 Rainy River—Lock & dam ..... 25,000 00  
 St. Andrew's Rapids—Red River, Man. .... 150,000 00

**CANALS—INCOME.**

Welland—To remove slides at Deep Cut—Revote ..... 4,000 00  
 Lachine—Rebuilding portion of south wall of canal at Atwater Avenue ..... 15,000 00  
 Chambly—Drainage works at St. Johns, Que. (revote \$2,300.00) ..... 3,500 00  
 Chambly—Protection wall around head of Ste. Therese Island ..... 1,000 00

**MISCELLANEOUS.**


Salary & expenses of experts to gather information & prepare uniform code of rules & regulations for railways ..... 2,000 00  
 Witnesses in inquiries before Railway Committee of Privy Council into charges of discrimination in rates by railway companies. Ottawa River—Survey in view of improvement to navigation. .... 2,000 00  
 10,000 00

**PUBLIC WORKS AND BUILDINGS CHARGEABLE TO CAPITAL.**

Port Colborne—Harbor improvements ..... 150,000 00  
 Montreal Harbor—Improvements below St. Mary's current ..... 500,000 00  
 Montreal Harbor—Grain elevator & storage. 250,000 00  
 River St. Lawrence—Ship channel, additional work ..... 78,000 00  
 Enlarging Levis Graving dock ..... 117,000 00  
 Halifax—Quarantine station on Lawler's Island ..... 5,000 00  
 St. John—Quarantine station improvements. 25,000 00  
 Toronto Post Office—Fitting up rooms rented at Union Station ..... 1,000 00  
 Winnipeg Immigrant Buildings—Hospital revote of \$4,213.08, lapsed June 30, 1898. .... 7,000 00  
 Edmonton North—Immigrant building ..... 3,000 00  
 Southern Alberta District—Immigrant building ..... 1,500 00  
 Immigrant building on Canadian Northern Ry. in Swan River district. .... 2,500 00

**HARBORS AND RIVERS—NOVA SCOTIA.**

Yarmouth Bar—To complete breakwater. .... 1,000 00  
 Arcadia—Removal of obstructions, Chebogue River ..... 1,000 00

**BURN**  
  
**E. B. EDDY'S**  
**MATCHES**

**Q. & W. TIE PLATES**  
  
**SAVES EXPENSE**  
**MAINTENANCE**  
**STANDARD ON MAJORITY**  
**U.S. RAILROADS**  
 SEE ROADMASTER'S CONVENTION TIE PLATE REPORT  
**F. E. CAME,** 17 Place d'Armes Hill, **Montreal**

Cheggoggin—Extension to breakwater.....	600 00
Lockport—Breakwater.....	3,000 00
Gunning Cove—Wharf.....	1,600 00
East Ragged Island—Wharf (revote).....	1,000 00
North River, St. Ann's—Wharf at Seymour Point (revote).....	1,000 00
Clifton—Wharf repairs.....	350 00
Black Rock, Victoria Co.—boat harbor.....	500 00
Meat Cove—Boat harbor.....	500 00
L'Ardoise Repairs to breakwater—to complete.....	1,000 00
Gabarus Bay—Breakwater.....	8,000 00
Porter's Lake—Dredging and breakwater at entrance of channel.....	9,000 00
Salmon River, Halifax Co.—Freight shed on wharf.....	500 00
Young's Landing—Wharf.....	900 00
Saw Pit—Wharf.....	900 00
Jordan Bay East—To complete repairs to breakwater.....	1,200 00
Newellton, Cape Island—Wharf.....	2,000 00
Shag Harbor—Wharf.....	2,000 00
Upper Woods Harbor—To complete wharf (revote \$600).....	1,600 00
Cheboque River Town Point Wharf—Repairs.....	1,000 00
Beaver River—Wharf repairs.....	1,000 00
Belliveau—Repairs to breakwater.....	2,000 00
Trout Cove—Breakwater new block.....	700 00
Meteghan—Breakwater repairs.....	2,000 00
Salmon River, Digby Co.—Wharf.....	2,400 00
Hunt's Point—Wharf.....	2,000 00
Port Mouton—Wharf.....	2,000 00
Port Medway—Repairs to breakwater.....	500 00
West Berlin—Beach protection works.....	1,500 00
Red Head, Roseway—Breakwater.....	2,000 00
Parker's Cove—Extension of wharf.....	3,000 00
Charbonville Harbor improvement.....	2,500 00
Chipman's Brook—Breakwater repairs.....	1,000 00
Wolfville—Harbor improvement.....	4,000 00
Mill Creek—Extension of wharf.....	2,000 00
Hall's Harbor—To restore destroyed portion of breakwater (revote).....	2,500 00
Cheverie—Wharf repairs.....	1,000 00
Summersville—Wharf repairs.....	600 00
Parraboro—Dredging.....	5,000 00
Spencer's Island—Wharf repairs.....	1,000 00
Eatonville—Wharf repairs.....	1,000 00
Brule—Wharf repairs.....	1,200 00
Tatamagouche—Wharf repairs.....	350 00
Merigomish Big Island—Wharf (revote).....	950 00
Harbor—Extension of wharf (revote).....	900 00
Malignant Cove—Breakwater.....	5,000 00
St. Mary's River—Dredging (revote).....	5,000 00
Bridgewater—Dredging.....	5,000 00
Upper Port Latour—Wharf to complete.....	300 00
Brooklyn—Wharf.....	2,500 00
River John—Wharf.....	2,000 00
Cribbon's Point—Repairs to breakwater.....	1,000 00
East Chezzetcook—Wharf.....	3,000 00
Margaree Island—Wharf.....	2,000 00
Whycomagh—Wharf to complete.....	500 00

PRINCE EDWARD ISLAND.

Pier or breakwater at Rocky Point, Lot 15 ..	1,500 00
West Point Pier—Extension.....	4,000 00
Canoe Cove—Breakwater.....	10,000 00
North Cardigan—Repairs to pier.....	300 00
Souris—Reconstruction of breakwater at Knight's Point, balance due contractors ..	337 50

NEW BRUNSWICK.

Dalhousie—Ballast wharf.....	1,000 00
St. Nicholas River—Wharf.....	1,500 00
La Tete-St. George—New wharf.....	500 00
L'Etang—Extension to wharf.....	400 00
Campobello (Wilson's Beach)—Breakwater—Repairs and extension.....	10,000 00
Hopewell Cape—Wharf.....	6,000 00
Repairs to wharf.....	500 00
St. John River and Bellisle Bay—New wharfs Cape Tormentine—Repairs to breakwater (revote \$2,500).....	7,500 00
Main River—Wharf.....	3,800 00
Burnt Church—Wharf (revote).....	6,500 00
Bay du Vin—Wharf repairs.....	1,100 00
Shippegan—Wharf.....	5,000 00
Campbellton—Repairs to ballast wharf, further amount required to complete (revote).....	1,000 00
Mtpec—Repairs to breakwater.....	250 00
Edgett's Landing—Repairs to wharf.....	500 00
Black Brook—Wharf.....	2,500 00

QUEBEC.

New Carlisle—Repairs to wharf.....	2,000 00
Carleton—Extension of landing pier.....	8,400 00
Newport—Breakwater.....	3,000 00
Perce—Wharf, North Cove.....	5,000 00
Riviere au Renard—Pier.....	4,000 00
Be—Addition & improvement to wharf.....	1,500 00
Rimouski—Wharf—Repairs & shed.....	2,500 00
Pointe aux Esquimaux—Wharf (revote).....	1,000 00
Chicoutimi—To increase the height of wharf.....	5,000 00
Caouanna—Extension to wharf—To complete.....	5,000 00
Les Eboulements—Repairs to wharf—To complete.....	800 00
Cap a L'Aigle—Addition to wharf & general repairs, including revote of lapsed amount, \$1,245.00.....	1,500 00
St. Irene—Completion of wharf to shore, including revote of balance 1898-1899, \$776.50.....	1,200 00
Kamouraska—Construction of an L (revote).....	2,300 00
Riviere Ouelle (St. Denis)—Wharf repairs.....	900 00
St. Andre de Kamouraska wharf.....	7,000 00
St. Anne de la Pocatiere—Wharf repairs.....	1,000 00
L'Islet—Wharf (revote).....	1,500 00
Ile aux Grues, north shore—Construction of wharf & purchase of land.....	6,200 00

St. Jerome (Lake St. John)—Wharf.....	5,000 00
St. Gedeon.....	3,000 00
Baie de Honfleur (Lake St. John)—Wharf.....	500 00
Cap Sante wharf.....	4,000 00
Les Ecureuils—wharf repairs.....	900 00
Knowlton Landing—Repairs.....	750 00
Magog—Repairs to wharf.....	500 00
Lanoraie—Repairs to wharf & construction of ice breaker.....	5,000 00
Sabrevois—Wharf.....	5,500 00
Cote Ste. Catherine—Wharf.....	3,200 00
Longueuil—Reconstruction of upper face of the pier & general repairs, &c.—To complete (revote).....	2,500 00
Verdun—Wharf.....	2,400 00
Pointe Clair wharf—Shed.....	600 00
St. Timothee—Repairs to wharf.....	800 00
Riviere du Lievre—Lock & dam, extraordinary repairs.....	1,600 00
Lake Temiskamingue, Baie des Peres—Dredging.....	2,000 00
Beauport—Wharf.....	4,000 00
Ste. Anne de Bellevue—Extension to wharf.....	2,500 00
Coteau Landing—Dredging (revote \$2,500.00).....	6,000 00
St. Roche des Aulnaies—Wharf repairs (revote).....	3,400 00

ONTARIO.

Portsmouth—Repairs to wharf.....	2,000 00
Kingston graving dock—Repairs, shop & stores.....	2,000 00
Scugog River—Dredging channel.....	5,900 00
Otonabee River—Improvement of navigation Keene (head of Indian River)—New wharf.....	2,500 00
Indian River—Dredging a cut across the Devil's Elbow & also a shoal at Sandy's Landing.....	600 00
Toronto Harbor—Diversion of Don & dredging in the harbor.....	2,000 00
Port Dover—U.S. & Ontario Steam Navigation Co. for dredging carried out by them for further improvement of the harbor, as per agreement.....	50,000 00
Rondeau Harbor—Dredging bar at entrance & basin, & to complete repairs to piers (revote \$2,500.00).....	25,000 00
Point Pelee Island—Wharf.....	10,500 00
Bayfield—Closing gap in pile work on north side of harbor with cribwork, etc. (revote of lapsed amount)—To complete.....	5,000 00
Kincardine Harbor—Dredging.....	5,300 00
Hawkestone—New wharf.....	6,000 00
Port Findlay—Wharf.....	2,000 00
Providence Bay—Wharf.....	4,000 00
Sheguiandah—Landing pier.....	5,000 00
Dawson's Point—Wharf—Lake Temiskamingue.....	3,300 00
	1,000 00

MANITOBA.

Lake Manitoba—Opening of additional outlets to prevent overflow of lake, & maintenance of same at proper level for navigation purposes (revote).....	5,000 00
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BRITISH COLUMBIA.

Columbia River—Protection of bank at Revelstoke, Government of B. C. contributing like amount—Revote.....	10,500 00
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DREDGING.

New plant—Maritime Provinces.....	50,000 00
British Columbia.....	25,000 00

SLIDES AND BOOMS.

Riviere Coulonge, Ottawa District—Final settlement of claims for past & prospective damages to riparian properties by back water, due to construction of dam at High Falls (revote of amount lapsed June 30, 1897).....	800 00
St. Maurice District—Improvement to booms between Pointe Marchesseault & Pointe a Bernard, in the St. Maurice River.....	4,500 00

TELEGRAPHS.

Land & Cable Line—Gulf of St. Lawrence & the Maritime Provinces—Cheticamp & Meat Cove telegraph line.....	5,200 00
Telegraph line between Mabou & Margaree—Repoling (revote).....	1,000 00
Anticosti Island—Removal of line wire between Becsie River & English Bay.....	1,200 00
To connect Nicola Lake, B.C., with C.P.R. telegraph system (revote).....	2,550 00
For change of route of part of Comox line from woods to new roadway between Qualicum River & Union Bay, B.C.....	1,200 00

MAIL SUBSIDIES & STEAMSHIP SUBVENTIONS.

Balance due for services between Port Mulgrave, Cheticamp, etc., during 1898 (partial revote).....	250 00
Balance due for services between Quebec & Gaspe, April to June 30, 1898 (revote).....	2,000 00
Steam communication during 1899, from opening to closing of navigation between Gaspe Basin & Dalhousie, & continuation of service after close of navigation at Dalhousie to Dec. 31, 1899, between New Carlisle & Gaspe Basin.....	1,000 00
Steam communication during 1899, from opening to closing of navigation between Pictou & Cheticamp.....	2,000 00
Steam communication from April 1, 1899, to March 31, 1900, daily between Port Mulgrave, Arichat & Canso; 3 times a week between Port Mulgrave & Guysboro', & from opening of	

navigation in 1899 to Nov. 30, 1899; twice a week between Port Mulgrave & Port Hood, such trips to be extended once a week to Margaree & Cheticamp..... 8,000 00

Steam communication from July 1, 1899, to June 30, 1900, between Quebec & Gaspe Basin, touching at intermediate ports..... 2,500 00

Steam communication between Halifax, N.S., and the island of Porto Rico..... 8,000 00

Steam communication between Murray Bay & River Ouelle..... 5,000 00

OCEAN AND RIVER SERVICE.

Additional amount required for maintenance of Dominion steamers, owing to addition of new steamer..... 15,000 00

Revote, being part of construction cost to pay fifth instalment on new str. Minto \$36,456.93; further amount required to complete contract \$5,543.07..... 42,000 00

Removal of old piers in Bear River, Digby Co., N.S..... 1,000 00

LIGHTHOUSE AND COAST SERVICE.

Further amount required for construction of permanent pier & lighthouse at the Traverse, to replace lightship..... 20,000 00

MISCELLANEOUS.

Wharf at Lake Minnewanka, Rocky Mountains Park..... 600 00

Expenses of Elevator & Warehouse Commission..... 5,000 00

PUBLIC WORKS CAPITAL.

Telegraph lines in British Columbia & Yukon District, from Bennett to Dawson & branch to Atlin City..... 147,500 00

Quesnelle to Atlin, British Columbia, via Stikine River & Teslia Lake, about 900 miles of telegraph lines..... 225,000 00

ELECTRIC RAILWAYS.

The Lines in Western Canada.

British Columbia Electric Ry.—Earnings & expenses for May :

	1898.	1899.	Increase or Decrease.
GROSS EARNINGS.			
Railway—Vancouver branch	\$6,212	\$7,050	\$ 838+
Victoria "	7,974	7,463	511-
Westminster "	6,820	7,113	293+
Lighting—Vancouver "	5,811	6,726	915+
Victoria "	3,929	4,088	159+
Total gross earnings.....	\$30,746	\$32,440	\$1,694+
Working expenses.....	\$18,830	\$18,849	\$19+
Net profits.....	\$11,916	\$13,591	\$1,675+
Gross earnings April 1 to May 31.....	\$59,427	\$62,148	\$2,721+
Net profit April 1 to May 31..	\$21,270	\$24,187	\$2,917+
			+ Increase. - Decrease.

At the annual meeting in London, Eng., June 19, the report published in our last issue was unanimously adopted. The chairman R. M. Horne-Payne, who presided, referred with satisfaction to the fact that the first dividend was being paid, & that the Co. had had a very satisfactory year. The preference shares had been sold at a very good price, at 10% premium. With the proceeds the extensions & improvements announced had been gone on with. The smaller items such as could be bought have already been completed. The terminal buildings at New Westminster & Vancouver have been built, & are now used, the sites being in very central positions. In Vancouver connection has been made with the main line of the C.P.R. Water-power installation at Victoria has been completed, & all the difficulties have now practically been mastered. On this point the Chairman said—

“Although there is at present a somewhat larger use of water than was estimated for, we are now fairly deriving the benefit from the plant which we anticipated, and we are considering the best steps to be taken for limiting the consumption of water. Under our lease we have the right to use 4,000,000 gals. of water daily for a certain minimum rental from the Goldstream Falls, but we are not at present quite able to carry our load with the 4,000,000 gals. The directors are, therefore, taking expert advice as to the installation of a storage battery, the immediate effect of which will be to enable us to work not only below the mini-

mum, but to have a substantial balance of power to be used when our business increases."

Continuing, the Chairman said: "There has been some complaint amongst our shareholders that the dividend should only have been 4%, & that we should only have distributed £8,000, the earnings having amounted, after paying the preference dividend, to £15,000 odd; but what appears to be a very substantial & fine profit in any other undertaking, is not so satisfactory in an electrical enterprise, because of the fact that electrical machinery needs renewing so early. After 10 years an electrical plant requires to be renewed & replaced, & we have to see that, as the time comes round for renewing our machinery, we have saved sufficient from the profits to replace that machinery. For this reason we have to transfer a larger percentage of our earnings to the reserve fund for the purpose of renewals than is necessary, probably, in any other class of enterprise. We have adopted a system, upon the advice of some of the most competent & experienced men in electrical matters in the City, which will, we think, satisfactorily provide for the maintenance of capital year by year; and if the resolution which will be submitted is adopted, the reserve fund will be increased to £12,000. By the adoption of this system the Co. will have at all times a sufficient capital in hand to account for any depreciation which may take place in the value of the plant, etc., from year to year."

In regard to the construction of the proposed Sapperton branch, the Chairman said: "We have not done that because our organization was not large enough, but we hope to take it up before long."

The resident director in British Columbia, F. S. Barnard, in seconding a resolution for the adoption of the report, testified to the efficiency of the local management. On the subject of operating expenses, he said: "The cost of labour is very much higher in B.C. than in the Eastern States, & the cost of material & fuel is very much higher; & it is very satisfactory to learn that we are providing light in Vancouver & Victoria at a rate on an average with that of the Eastern States, that we are carrying passengers at rates quite as low as in the larger Eastern cities, & that both our railway fares & lights are supplied at less cost, probably, than that at which similar undertakings here supply the people of London."

The Co. is spending about \$400,000 this year in extending & improving its local lines. Extensive work is being done on the inter-urban line to fit the road for the heavy traffic that the trade between Vancouver & New Westminster involves. The officials have under consideration a scheme for enabling the trip to be covered in 30 minutes instead of 45. The Denman St. extensions alone figure up about \$40,000. In addition the Co. is having a car-barn & power-house built; several switches are being improved by the laying of a heavier type of rail, & at the same time the Co. is bestowing a great boon upon cyclists

by filling in between its rails with cinders. Two large open motor cars have been added to the equipment. The wages of the trackmen have been voluntarily raised from \$1.75 to \$2 a day.

**Nelson, B.C.**—The British Electric Traction Co. having completed arrangements with the City Council, construction work is to be proceeded with at once. At the date of our last advices, June 30, the route had not been definitely announced, but it was expected a line would be built between the Government wharf & the C.P.R. station, by way of Baker Street, & between Baker St. & the rink at the top of Stanley St., with a probable extension to the mountain station of the N. & F.S. Ry. The greatest difficulty the Co. will have to encounter will be the heavy gradients. It is expected 2 miles of line will be built at once within the city limits, & probably a mile outside. Rails, fastenings & other material have been ordered. (June, pg. 188.)

**Winnipeg Electric St. Ry.**—A line is to be built on Sherbrook St. this year. A short line of second track has been built recently on Portage Avenue, between Main St. & Notre Dame Avenue, so as to make the Portage Avenue & Belt lines independent of each other. Six motor cars have been added to the equipment.

#### Ontario Electric Railways.

**Barrie.**—It is said that the Royal Electric Co. has made application to the town council for a franchise for an electric railway between Barrie & Allandale, a distance of about a mile, with the privilege of extending.

**Berlin & Waterloo St. Railway.**—W. H. Breithaupt, on behalf of this Co., has made a proposition to Berlin town council to extend the line to Galt via German Mills, Doon & Blair, if the town of Berlin will guarantee \$100,000 of bonds.

**Cornwall Electric St. Ry.**—The Ontario Divisional Court has dismissed the appeal of this Co. from the judgment of Chief Justice Armour, authorizing foreclosure of a mortgage made by the Co. to J. T. Kirkpatrick & D. B. McLennan in June, 1896, securing debenture-holders of the railway to the amount of \$100,000. A reasonable time is, however, allowed in which to meet the liability.

**Hamilton, Ancaster & Brantford Electric Co.**—A meeting of shareholders called for June 21 was postponed pending definite information as to New York capital which it is said will be put into the enterprise.

**Hamilton, Grimsby & Beamsville Electric Ry.**—Government Engineer McCallum is to give instructions as to the repairs necessary to be done on the line in accordance with Judge Street's decision in the action of Saltfleet township against the Co.

**Kingston, Portsmouth & Cataraqui Electric St. Ry.**—Ontario Park is to be divided, one part for recreation with free admission, the other for baseball, lacrosse, horse races, etc. A race track will be made & a grand stand erected.

**London St. Ry.**—The earnings for June were only \$1,042.17 & the operating expenses \$4,666.62, a deficit of \$3,624.45. In June, 1898, the earnings were \$9,790.86 & the expenses \$4,177.94, a profit of \$4,177.94. The strike still continues, the details of which, including the calling out of the military, have been fully given in the daily papers.

**London to Goderich.**—A proposal has been made to connect these points by an electric line about 66 miles long, running through Lucan, Crediton & Bayfield.

**The Metropolitan Electric Ry.'s extension to Newmarket** has been completed.

**The Niagara Falls Park & River Ry. Co.** recently sued the Town of Niarara Falls to recover \$120.42 for taxes for 1898 levied upon a part of the Co.'s roadbed, & paid under protest. The part in question is upon the 66-ft. strip of reserve running along the bank of the Niagara river, & is vested in the commissioners for the Queen Victoria Niagara Falls Park, or in the Crown, & the Junior Judge of the York County Court held it is not liable to the defendants for municipal taxes. On appeal by defendants to the Divisional Court, it was held that in every aspect of the case the assessment as made in the first instance, & confirmed by the Court of Revision & the Judge of the County Court of Welland, was right, & should not have been disturbed by the County Court of York in this action. The taxes paid under protest were well paid, & should be retained by the municipality. The appeal was allowed with costs, & the action dismissed with costs.

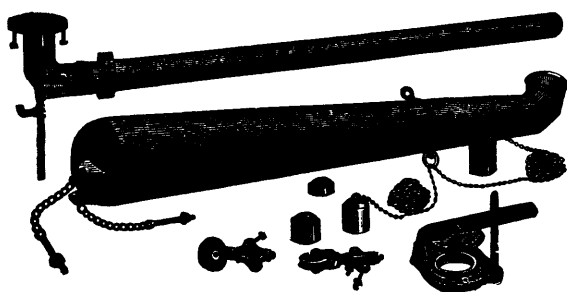
**Ottawa Electric Ry. Co.**—It is rumored the Co. will soon take the preliminary steps to secure entrance to Aylmer. Park property will, it is said, be secured at the summer resort, a large hotel will be erected, & various attractions will be provided. Right of way from Ottawa, it is understood, will be secured over the Pontiac & Pacific Jct. Ry. It is likely that, should an understanding be arrived at between the two companies, the construction work on the railway & interprovincial bridge will be hastened to completion.

The City Council has given the Co. power to run on Sunday on the same terms as heretofore existing between the City & the Co., on condition that the Co. pays the City in addition to the sum heretofore paid per mile, a proportionate amount for each Sunday & issues tickets for use on Sundays only at the reduced rate of 28 for \$1, or 7 for 25c., & children's tickets at 40 for \$1 & 10 for 25c. The Sunday service was inaugurated July 23, when the cars were largely patronized.

**Preston & Berlin.**—The Berlin town council has extended the franchise for the electric railway between these points till Jan. 15 next. The Co. has the power to enter the town from the south via King St., & to build to a point near the Market Square.

**St. Thomas Street Ry. Co.**—At the annual meeting, July 11, the following were re-elected: President, J. H. Still; Sec.-Treas., Col. Stacey; other directors, C. D. Hunt, J. Farley, M. A. Gilbert.

### Improved Halladay Outlet Pipe, Spout and Fixtures



Outlet Valves,  
Tanks, Windmills,  
Steel Towers,  
Pumps and General  
Water Supply  
Material.

The ONTARIO WIND ENGINE  
and PUMP CO., (Limited)  
TORONTO, ONT.

### Spokane Falls & Northern System. Nelson & Ft. Sheppard R'y Co. Red Mountain R'y Co.

THE DIRECT AND ONLY ALL RAIL ROUTE  
BETWEEN THE

### KOOTENAI DISTRICT

And all British Columbia Points, Pacific Coast  
Points, Puget Sound Points, Eastern Canada and  
the United States.

Connects at Spokane with Great Northern Rail-  
way, Northern Pacific Railway, O.R.R. & Nav. Co.  
Maps furnished. Tickets sold and information  
given by local and connecting line ticket agents.

C. G. DIXON, G.P. & T.A., Spokane, Wash.

**Toronto Railway.**—The gross earnings are:

	1899.	1898.	Increase.
Jan.	\$95,690.12	\$86,502.36	\$9,187.76
Feb.	91,860.30	82,402.19	9,458.11
Mar.	103,234.88	92,318.42	10,916.46
April	95,212.37	86,898.83	8,313.54
May	104,806.62	92,670.35	12,136.27
June	109,063.18	94,119.32	14,943.86
	\$599,867.47	\$534,911.47	\$64,956.00

**Toronto Suburban St. Ry. Co.**—The Town Council of Toronto Jct. is negotiating with the Co. for the relinquishment of its franchise on Dundas St., between Keele St. & Humber-side Av., in order that the privilege to run cars over that route may be granted to the Toronto Ry. Co.

**Quebec Electric Railways.**

**Canadian Electric Light Co.**—At the annual meeting in Quebec, June 27, the directors' report stated that \$200,000 capital had been subscribed, that the Chaudiere Falls water power would be acquired immediately, that the directors were in negotiation with the council of the town of Levis for furnishing light & power, that R. Girouard, of Cumberland, Me., had been secured as Manager, & that A. R. Henry, M. E., of Quebec, would probably be appointed electrical engineer. The directors have plans under consideration for the development of the water power of the Chaudiere Falls, according to which a minimum of 5000 h.p. is obtainable. Arrangements are said to have been made with the Chaudiere Valley Ry. Co. to construct & operate electric railways in the counties of Levis, Bellechasse, Dorchester and Lotbiniere, obtaining power from the Canadian Electric Light Co. The following were elected: President, J. Breaky; Vice-President, Hon. L. P. Pelletier; other directors H. M. Price, G. Lemoyne, J. King, R. Audette, R. Wilson-Smith, H. S. Holt and H. T. Machin.

**Hull Electric Co.**—The following directors have been elected: A. Fraser, D. McLaren, W. J. Conroy, J. B. Fraser, R. H. Conroy and T. Viau. The Co's equipment in the power house at Deschenes is now said to be among the best in Canada, enabling the road to give an excellent service. The traffic this year has been satisfactory and considerably exceeds that of the corresponding periods of previous years.

**Montreal Mountain.**—A proposition is before the Westmount town council for the construction of an electric railway up the Montreal Mountain.

**Montreal St. Ry.**—The gross earnings are:

	1898-9.	1897-8.	Increase.
Oct.	\$133,419.69	\$116,093.09	\$17,326.60
Nov.	125,126.10	110,668.98	14,457.12
Dec.	127,678.00	113,029.33	14,648.67
Jan.	125,276.04	110,155.96	15,120.08
Feb.	113,838.02	102,425.99	11,412.03
Mar.	123,754.11	114,476.98	9,277.13
April	130,405.96	110,619.27	19,786.69
May	145,466.38	123,308.08	22,158.30
June	156,858.34	132,964.61	23,893.73
	\$1,181,822.64	\$1,033,772.29	\$148,050.35

It is said the Co. will build three large car barns on St. Denis St.

The City Council has refused an application from the Co. to be allowed to build a line up Beaver Hall Hill, because the Co. will not build up Cote des Neiges Hill, and will not put down tracks on Frontenac & Amherst sts.

The Co. has adopted a life-saving fender, which has been approved by the City Surveyor.

It is proposed by the City Council to have cars stop at the near side of streets, instead of at the far side as at present, to prohibit cyclists crossing streets, except at their intersections, & to make bicycle riding on the devil-strip an offence punishable by imprisonment without the option of a fine.

In the House of Commons recently the Postmaster General said the privilege of letter carriers to ride on the Montreal street cars had been taken away owing to a difficulty be-

tween the Government & the Ry. Co. as to the price paid for the privilege. Until last year \$2,400 a year was given the Co. for allowing the letter carriers to ride on the cars, but when the contract terminated last winter the Co. refused to renew it at the old figure & asked \$800 a month. The department did not deem it in the public interest to pay this amount & an arrangement had been made with the Co. for special tickets for letter carriers at a low rate. Under this system there was a slight saving on the old contract price of \$2,400 a year.

**West India Electric Co.**

The U.S. Consul at Kingston, Jamaica, reports as follows: "For some years there has been a mule railway in Kingston, but an electric road covering the lines of the old cars, & other thoroughfares as well, has just been completed. This line has about 25 miles of track in & around Kingston, divided into three districts, viz., the lines north of the city, those east of the city, & those in the city. It is a private enterprise, started by Canadian capital, & is called the West India Electric Co. The government license is for a period of 30 years, & renewable for further periods at the pleasure of the Governor. The Co. pays 4% of its gross earnings to the government, & assumes the maintenance of the roads & streets occupied by it to the extent of 18 ins. on each side of the tracks. The rates of fare are 4c. for each passenger from any point within a district to another point in the same district by most direct route; that is, the fare is practically 4c. for each section of the line, & from the end of the line to the east, through the city to the end of the line north, would be 3 fares, or 12c. In addition, the Co. reserves 3 front benches on each car, on which a 1st class fare—6c.—is charged. The tickets are sold as follows: Seven 4c. tickets for 24c., five 6c. tickets for 24c., & ten children's tickets, for under 12 years, for 24c. Passengers are allowed to stand. There are no restrictions as to number of passengers carried, & the same complaints of overcrowding are heard. Cars run every 15 minutes in the city. In addition to regular motors, the Co. runs market cars before 9 a.m. & after 5 p.m. for country people who carry produce. These are trailers, & the fare on them is 3c."

The Kingston, Ja., Gleaner recently published a long description of this line from which the following is extracted: The license for a system of electrical trolley tramways in Kingston was granted to the W.I.E. Co. on Mar. 10, 1898. The Co. started construction on May 2, beginning with the erection of poles to carry the trolley wires. On June 23 track-laying was commenced on the Constant Spring line. It was the original intention to work the line by electrical power generated by steam. But it was suggested that possibly water power could be used as the prime motor, & Mr. Holgate was sent to Jamaica in Jan., 1898, to inquire into the feasibility of this. Shortly after his arrival he was joined by N. L. Cooper, hydraulic expert, & together they investigated the question & recommended the use of the waters of the Rio Cobre for the development of the necessary power. Property rights were at once secured, & the work upon the plans commenced. It is conceded that whenever water power can be obtained at a reasonable capital outlay, it is superior to steam power, inasmuch as its greater reliability and consistency give it a decided advantage, while from a financial point of view its advantages over steam are very great, especially in a country situated like Jamaica, where the cost of importing coal is a most serious consideration.

The question of the hydraulic development was by no means a simple one. In ordinary

cases of this kind the dam is built with probably a short head race & a power house situated close to the dam. This description would apply to 99 out of every 100 applications of water-power. But in the valley of the Rio Cobre, though there is a succession of rapids, there is no place where a dam of this character could be built to be of commercial utility, without raising the water to such a height as would flood enormous districts of cultivated land & render the highways at times impassable. To overcome this difficulty a scheme was evolved by which the available fall of the river was utilized without in any way interfering with private or public property. The dam has been built across the river immediately opposite the mouth of the long tunnel on the railway near Bog Walk station. For such an immense development of power this dam seems very insignificant. It is only 9 ft. high, but it can, if necessary, be raised 3 ft. higher by the placing of flash boards between steel posts built in the concrete dam for the purpose. On the left bank of the river, at the dam, a skimming basin has been formed, into which the waters of the river pour, entering thence into the steel conduit on their way to the power house. This steel conduit, or pipe, forms the head race for the power house. It is 10 ft. in diameter at the dam & its entrance is protected by a double screen which effectually prevents the entrance of weeds & debris with the water. The distance from the dam to the power house is 6,200 ft. & along the whole of the distance extends this huge pipe 8 ft. in diameter. It is entirely built of steel & for the greater part of its length is embedded in rock or compact earth, well protected from the river even in its highest stage during the May and Oct. floods. At places the pipe is supported on concrete piers, & every possible precaution has been taken to make it of the most substantial construction. It is said to be the largest pipe in the world. It weighs 1,742,894 lbs. of solid steel, held together by 259,102 rivets. The pipe arrived in Jamaica in the shape of curved plates, was transported to Bog Walk by railway, & taken to the site by teams. The plates were assembled, placed in position, erected, & riveted entirely by native workmen, under the supervision of M. Peppard. The capacity of the pipe is 2,205 galls. of water per second. This flows into the power house by passing through 2 pairs of twin horizontal turbine wheels, each pair being enclosed in steel casings. The water, after passing through the wheels, flows back to the river into the tail race through draught tubes. The turbine wheels work on horizontal shafts at a speed of 400 revolutions a minute. These shafts are coupled direct to the shafts of the electric generators, which therefore revolve at the same speed. At present there are two generators, each of which is capable of developing 500 h.p. There are also 2 smaller water wheels, each developing 25 h.p., which are used to drive the direct current generators, whose purpose is to excite the larger generators connected with the turbine wheels. The generators are of the latest type, known as the three-phase alternators, & develop current at the comparatively low pressure of about 500 volts. If these generators were near the point where the current is consumed it would not be necessary to raise the voltage or pressure, but, owing to the distance—the 22 miles between Bog Walk to Kingston—it is a commercial necessity & raise the pressure so that as little loss as possible may be sustained in the transmission of the current. The means used at the power house for effecting this object are what are technically known as step-up transformers. The current goes into them at a pressure of about 500 volts, & comes out to enter the transmission wire at a pressure of about 14,000. The poles carrying these wires are all made of steel, & are set 2 chains apart along the highway. The wires are of almost pure

copper, secured to the cross-arms on porcelain insulators. When the lines reach Kingston, they are conducted to the Tramway Company's station in Orange st., & are led through a similar set of transformers to those at the power house at Bog Walk, but with an opposite effect. The current enters them at the high pressure of the transmission line, & leaves them at the low pressure of about 350 volts. Passing through & being controlled by the apparatus on the switch-board, the power enters the rotary converters, by whose action the 3-phase alternating current is converted into a direct current flowing in one continuous stream. From the rotary converters the current passes to the feeder cable on the system of tramways throughout the city, from the feeder cables to the overhead trolley wires, & thence to the cars & motors.

The system of tramways in Kingston needs very little description, as it is already familiar to everyone. But this may be said for it—that in the point of substantial construction, improved appliances & general adaptability to its purpose, there is nothing of the kind to excel it, or even equal it, in America or elsewhere. The Co. has throughout prosecuted its work in the most liberal spirit. Expense has not been spared where necessary, with the result that to-day we see the practical completion of an admirably constructed & useful system of tramways.

#### Mechanical Traction by Electricity.

G. C. Cunningham, formerly Manager of the Montreal St. Ry., & now Manager of the Birmingham, Eng., Tramway Co., recently read a paper on this subject before the Institution of Civil Engineers, in which he gives his preferences in power house equipment & summarizes the results obtained in the plants

under his management. It is pointed out that the financial superiority of electric traction all lies in the saving in power, & for this reason the power house is the point on an electric system to which the skill & intelligence of the engineer should be mainly devoted.

Horse traction—by which is meant the cost of horse-keep, wages of grooms, shoeing, veterinary expenses, but excluding drivers' wages—is 3½d. per car-mile in Glasgow & 5d. in Liverpool. Glasgow is level & the annual car mileage is 7,000,000; Liverpool is hilly & the annual car mileage 4,000,000. As opposed to these figures the cost for fuel, wages, oil & maintenance of the plant is placed at a little less than ½d. per car-mile for a level city & a little more than ½d. for a hilly city. Mr. Cunningham continues: "But in order to insure this low cost of working, every care must be taken in the power house. In choosing its site, it should be placed close to a plentiful supply of water, where all that is requisite for condensing purposes may be had at a nominal charge, or merely for the cost of pumping. A river, canal, pond or the sea, would afford what is needed. It should be conveniently situated for the supply of coal from railway line, canal, or wharf, so as to save the charges of handling fuel. One shilling a ton saved in cartage would amount to a very considerable sum in a year in a large traction station. But, needless to say, the most important matter is the type of engines, boilers & heat-savers to be used. The writer favors low-speed (70 revolutions) compound condensing engines, such as are built by numerous firms; boilers of the Lancashire or Galloway type, with Green's economizers. A plant of this character was constructed & worked under my charge on the Montreal Electric St. Ry., with the result that the cost of producing current was a little under our farthing per kilowatt-hour, & the cost per car-

mile less than a half-penny in the open months of the year, when coal could be obtained for 9s. a ton. The consumption of coal was 3.38 per kw. h., or 2.60 lb. per e. h.p.h., & this was maintained during months of working. The average for a whole year was only 2.75 lb. per e. h.p.h. It is not pretended that this is a phenomenally low rate of consumption. On board many of the large ocean-going steamers as low as 1.50 lb. of coal per h.p. has been reached with triple-expansion engines, but I believe that few electrical power-houses have been able to show better results than those mentioned. Nor is the result to be attributed to a very large output; precisely similar results can be obtained by using similar appliances on a smaller scale. In the Montreal house there were six 800-h.p. engines, & the daily output of current averaged 43,000 units. But I have recently obtained similar results with a small cable plant on the Birmingham cable system. In 1897 this plant consisted of a pair of single-cylinder engines running at 53 revolutions of 287 maximum horse-power, with Galloway boilers, & no special heat-saving appliances. It was necessary to increase the engine power to meet increased traffic. I put in a pair of superposed compound condensing engines of 400 h.p., running at the same speed as before, & obtained condensing water from a well in conjunction with a tank & cooling tower. The result was that the consumption of fuel was reduced from about 325 tons a month, or 8.9 lb. a car-mile, to 6.5 lb. a car-mile; & the introduction of Green's economizers has further reduced the consumption to 4.7 lb. per car-mile, or to about 3 lb. per h.p.h. On the Birmingham small cable system, the saving does not amount in money to a large sum, but on a great electric system running, say, 7,000,000 car-miles in the year, 4 lb. of coal saved per car-mile, at 9s. a ton, amounts to £5,625 a year, & it is this

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consideration that gives emphasis to the plea for an economical power-house plant.

"To return to the previous line of argument. Note what a large saving is effected when a cost of 3d. a car-mile for power is substituted for 5d.; on a car-mileage of 7,000,000 it means no less than £131,250 a year! & indicates the source whence the increase of net earnings may be obtained to pay for the heavy cost of electrical installation. The whole cost of working a large electric system, including working charges of all kinds, should be under 5d. a car-mile, but this can only be obtained with a carefully constructed power house, where the works-cost of the current is cut down to a minimum.

"The limits to which this note had to be confined prevent the introduction of any more elaborate figures or statistics than those given, but enough has been said to indicate that, in my judgment, it is to the power house that the chief attention should be directed in order to insure the financial success of an electric system. Other parts of the system claim attention, but it is on this that success or failure mainly turns. More money can be lost on the one item of power than would pay all the other working charges, & whether the high potential system with transformers, or the multiple unit system be adopted, the successful working ultimately depends upon having engines & boilers that will do their work with a low consumption of fuel."

### The Hamilton Consolidations.

When the Cataract Power Co., through J. Paterson, began to try & secure control of the Hamilton St. Ry. stock, a number of shareholders formed a syndicate to protect their interests, being afraid that if the Cataract Co. got a majority of the shares without them they might have to accept less than par for their stock. Enough combined to prevent the Cataract Co. getting control, & forced it to pay them a shade over par for their stock. For some of the other stock bought previously the Cataract Co. paid as high as 110. Before there was any talk of the Cataract Co. endeavoring to get control, some of the holders of the stock held it at 60 or 70. J. Paterson recently stated it was too early to say just what changes would be made, but in time the system would be greatly improved.

The acquiring of the street railway franchise is only one of a number of enterprises that the capitalists of the Cataract Co. are going to carry out. The syndicate has completed arrangements for the control of the Hamilton & Dundas Ry. & also has control of the Hamilton Radial Ry. The Radial Ry. will in the near future be extended to Oakville. Considerable money will also be spent in beautifying the Beach, the plan being to build a big hotel.

It is said the Cataract Co. will not negotiate for the Hamilton, Grimsby & Beamsville Ry., it being the intention to build a fast electric line parallel with the G.T.R. to Niagara Falls. This line is wanted for the nickel steel plant which will be established if the government can be induced to put a duty on nickel.

Plans have been completed for lines from Hamilton to Guelph & Waterloo. The York St. line will be used to the cemetery, from where it will run along the high level road to a point beyond the old canal. Then the line will be carried over on a big bridge, & will run to Rock Chapel. It will be double track to Rock Chapel, from where the Waterloo & Guelph lines will diverge. The Guelph line will run through Freulton, Aberfoyle & Morris-ton. The other line will run through Greensville, Galt & Preston to Waterloo & Berlin. It may be that a spur will be built from the Guelph line to Waterdown. It is expected that the grading of these lines will be commenced this year, but as it is impossible to

get rails until next year, the construction cannot be completed until then. It is proposed to make the run from Hamilton to Guelph in 45 minutes, & from Waterloo in an hour.

The Cataract people have been asked to take over the proposed Hamilton, Ancaster & Brantford Electric Ry., but nothing definite has been decided on.—Hamilton Spectator.

**Moncton, N.B., St. Ry.**—It is said negotiations for the transfer of this property are progressing favorably.

**Passenger Traffic.**—The Dominion Statistician states that the number of passengers carried by the electric railways of Canada last year reached the 100,000,000 mark.

**Lewiston & Youngstown Frontler R.R.Co.**—F. G. Lott has succeeded W. A. Heller as Superintendent. He was formerly with the Buffalo & Niagara Falls Electric Light & Power Co. in a similar capacity.

**The International Traction Co.** hopes to have connection made between its Falls St. tracks at Niagara Falls, N.Y., & the upper steel arch bridge at Niagara Falls before Aug. 1. Plans have been submitted to the Commissioners of the New York State Reservation covering the proposed track on the river way from Falls to Niagara St., & as soon as the Commissioners approve the plans the work of track-laying will commence. The Suspension bridge between Queenston, Ont., & Lewiston, N.Y., having been completed, an electric car service across it will be started almost at once.

**Niagara Gorge R.R.**—The Niagara Falls & Lewiston Electric R.R. Co., which built & for 4 years operated the electric railway through the Niagara gorge along the N.Y. bank, has passed out of existence & been succeeded by the Niagara Gorge Railroad Co. as the result of a sale of the road by the sheriff of Niagara County. The purchaser was H. P. Bissell, of Buffalo, the chief promoter of the new company, & the only one of the old company remaining in the new one. The capital of the new company is \$1,000,000, whereas the old company was capitalized at \$1,400,000. During May & June large forces of men were employed in the reconstruction of the roadbed, removing fallen rock, & putting in new trestles & bridges. New retaining walls were built at several points. The roadbed was re-ballasted & the overhead construction repaired. The incorporators of the new company are: Gen. F. V. Greene & A. D. Andrews, New York; H. P. Bissell, J. H. Metcalf, J. T. Jones, W. C. Cornwell, C. M. Bushnell, E. W. Eames, J. A. Kennedy, G. A. Ricker, A. C. Coffey, H. H. Hewitt, G. C. Riley, G. V. Turner & B. L. Jones, Buffalo. The board of directors includes all of the incorporators mentioned excepting Messrs. Kennedy, Ricker, Coffey & Riley. The officers of the Co. are: President, Gen. F. V. Greene; Vice-President, H. P. Bissell; Secretary, H. H. Hewitt; Treasurer, B. L. Jones; General Manager, G. Morgan; Chief Engineer, G. A. Ricker. W. A. Heller, who recently resigned the superintendency of the Lewiston & Youngstown Electric Ry., has been appointed Superintendent. The line commenced running under the new management on July 1.

### Great North-Western Telegraph Co.

The improvements to the Co.'s building, at the corner of St. Sacramento and St. Francois Xavier Sts., Montreal, which have been going on for the past 10 or 12 months, are completed. The building, which was constructed by the Montreal Telegraph Co. in 1873, is of Ohio sandstone, 5 storeys, covering an area of 7,200 sq. ft., was considered one of the most substantial & imposing business structures in Montreal, until recent years, the advent of

the sky-scrapers with their modern conveniences & elegant interior appointments having put the building in the shade, in this respect. All this, however, has been changed. About a year ago the management believing that there was something to be gained thereby, resolved to remodel and refit the structure in a manner that would put it abreast of the times. A glance at the tenant list, & from the increased activity about the place, gives the impression that the expectations have been realized. The work has been done most thoroughly. Necessarily the progress has been slow, owing to the fact that the Co.'s business could not be interfered with, & care had to be taken that this was adhered to. Entirely new systems of drainage, plumbing, lighting & heating of the latest approved kind have been introduced throughout. An electric passenger elevator of the most recent design has been installed, much to the joy of the toilers on the upper flats. The main entrance is in inlaid mosaic & marble wainscoting, the interior fitting being quartered antique oak, chipped plate being used in the partition work. The transformation has not only brought the building up to date, providing for all requirements of the G. N. W. T. Co. which have been put in more conveniently than ever before, but also provided room for a number of tenants, including some of the great steamship lines. The telegraph receiving office is on the main floor, also the offices & board room of the Montreal Telegraph Co., the rest of the space being rented as offices. On the 2nd floor, east side, is the main operating room, pronounced to be one of the finest for that purpose in America. The basement, not before utilized to any extent, has been transformed into airy, light offices. A stock broker occupies the St. Sacramento st. front, & the G. N. W. stores are at the rear.

### Dominion Telegraph Company.

At the 30th annual meeting at Toronto, July 5, the following statement was presented:

ASSETS.	
Capital expenditure .....	\$1,287,819 47
Toronto Grey & Bruce Ry. Co. 1983 bonds, & interest thereon.....	1,596 24
Cash in bank & on hand.....	30,142 23
	<u>\$1,313,557 94</u>
LIABILITIES.	
Capital stock paid up.....	\$1,000,000 00
Dividends unclaimed.....	912 70
Dividend 92, payable July 15, 1899.....	15,000 00
	<u>\$1,015,912 70</u>
Balance at credit of profit & loss.....	297,645 24
	<u>\$1,313,557 94</u>

The directors reported the payment to the Co. by the lessees—the Western Union Telegraph Co.—of the guaranteed interest of 6% per annum on the capital stock of the Co., up to & including June 30, 1899, the proceeds of which have been promptly distributed quarterly to the shareholders.

The following were re-elected:—President, T. Swinyard; Vice-President, Sir Frank Smith; other directors, Genl. T. T. Eckert, C. A. Tinker, A. G. Ramsay, H. Pellatt, H. Mackenzie, T. F. Clark, T. R. Wood.

### C.P.R. Company's Telegraph.

The Co. has established communication between Rossland & Spokane, Wash.

J. Kent, Superintendent of the Eastern Division, is acting manager during C. R. Hosmer's absence in England.

The Acton Burrows Co., Toronto, are getting out large enamelled iron signs, lettered on both sides, with flange, for this department. They will be different from those heretofore used & will be very striking, plain & easily read.

A building for commercial telegraph purposes is to be built by the Co. on Hastings



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Medical Examination fee.....	1 50
Total minimum cost.....	\$4 50

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

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- 1.—Social and Fraternal Privileges of the Court Room.
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- 4.—A Total and Permanent Disability Benefit of one-half of face value of policy, with exemption from further payment of premiums or Court Dues.
- 5.—An Old Age Benefit consisting of exemption from payment of premiums and Court dues after age 70.
- 6.—An Old Age Disability Benefit of one-tenth of face value of policy payable yearly for ten years, on being declared totally and permanently disabled by infirmities of age after the seventieth birthday.
- 7.—An Old Age Pension payable during disability, which may be taken as a substitute for the Old Age Disability Benefit.
- 8.—A Burial Benefit of \$100 at death of a Pensioner.
- 9.—A Funeral Benefit of \$50 at death of a member enrolled in Sick and Funeral Benefit Department.
- 10.—The Mortuary Benefit of \$500, \$1,000, \$2,000, \$3,000, \$4,000 or \$5,000.

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Year.	Total Membership.	Benefits Paid.	Total Surplus.	Surplus per Capita.	Death Rate per 1,000.
1881	1,019	\$ 1,300 00	\$ 4,568 55	\$ 4 48	4.50
1882	1,134	12,058 86	2,967 93	2 61	11.00
1883	2,210	9,493 68	10,857 65	4 91	4.73
1884	2,558	13,914 31	23,081 85	9 01	4.23
1885	3,642	26,576 99	29,802 42	8 18	7.76
1886	5,804	28,499 82	53,981 28	9 30	4.85
1887	7,811	59,014 67	81,384 41	10 44	5.78
1888	11,800	89,018 16	117,821 96	9 98	6.43
1889	17,349	116,787 82	188,130 36	10 84	5.85
1890	24,604	181,846 79	283,967 20	11 54	5.18
1891	32,303	261,436 21	408,798 20	12 65	6.40
1892	43,024	344,748 82	580,597 85	13 49	6.25
1893	54,484	392,185 93	858,857 89	15 76	5.47
1894	70,055	511,162 30	1,187,225 11	16 94	5.47
1895	86,521	685,000 18	1,560,733 46	18 03	5.67
1896	102,838	820,941 91	2,015,484 38	19 60	5.30
1897	124,685	992,225 60	2,558,832 78	20 52	5.56
1898	144,000	1,176,125 14	3,186,370 36	22 12	5.67

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The Cornwall, Ont., Standard, speaking of an examination recently held by the County Judge there, says: "The Dundas Telephone Co. was organized nearly 6 years ago, & quickly spread over nearly the whole of Dundas county, extending into several adjoining counties. The organizers were enthusiastic, & the people were excited over the prospects of opposition in the telephone business. But the end came quickly, & the whole concern collapsed like a bubble, in Aug., 1895. Since that time the members of the Co. have been before the courts to settle who shall finally bear the liabilities of the concern, amounting to away up in the thousands of dollars. The result has been more than one law suit without final issue. The present examination has been on for over a year, & it is not considered likely that this will bring the matter near a completion. The costs are heavy & the whole affair is a significant object lesson."

A correspondent asks: "In telephonic communication is it the machine & not the actual voice that is heard? Or is it not the voice itself that is heard through the medium of the machine?" In telephonic communication, the sound waves produced by the voice of the speaker cause the diaphragm of the transmitter to vibrate. These vibrations have the same period as the waves of the voice. The vibrations of the diaphragm cause the electric current through the line to vary in the same periods. The variation of the electric current sets the diaphragm of the receiver into vibration, and this vibration is received by the ear of the listener as sound. The voice is not transmitted. A current of electricity is transmitted through the line. A voice could not be heard from Chicago to New York. It is, however, very wonderful that the vibrations of the diaphragm of the receiver reproduce the qualities of the voice of the person speaking so perfectly that the person can be recognized by the reproduced tones.

The Wire & Cable Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$500,000 & headquarters in Montreal, the incorporators being C.

F. Sise, R. Mackay, C. Cassils, R. Archer, H. Paton, L. B. McFarlane & C. P. Sclater, all of Montreal, nearly all of whom are connected with the Bell Telephone Co. The primary object of the Co. is to manufacture & deal in apparatus, etc., for telephone, telegraph, light, power, railway, cable, hydraulic or compressed air companies, but it is given very extensive powers to engage in other branches of business.

#### Among the Express Companies.

The U.S. Ex. Co. has located a soliciting agent in Toronto.

The Western Ex. Co. has reopened its summer route to Mackinac Island.

The Canadian Ex. Co. has opened offices at Edwards, Ont., Jonquiere, Que., & Whitebread, Ont.

The Canadian & Dominion Co's have both recently placed large orders for enameled iron signs for their general as well as their money order business with the Acton Burrows Co., Toronto.

In the Dominion Ex. Co. R. Helme has succeeded A. Devitt as Route Agent, with headquarters at Nelson, B.C. F. H. McKay has been appointed Route Agent at London, Ont., succeeding Mr. Helme.

The following changes have been made in the Canadian Ex. Co.: W. T. Anderson, Superintendent of Money Order Department, is appointed Assistant Treasurer, vice A. Maxwell assigned to other duties. W. H. Bryce, Assistant Auditor of Money Order Department, is appointed Superintendent of the same, vice W. T. Anderson transferred.

The White Pass & Yukon Ex. Co., Ltd., has been incorporated under the B. C. Companies Act, with a capital of \$100,000 and head office at Victoria. The Directors are A. C. Flumerfelt, W. Wilson, H. M. Hills, & J. H. Greer. The primary object of the Co. is to do an express business over the White Pass & Yukon Ry., but it has very general powers to extend in any direction.

Since June 19, the Canadian Ex. Co. has been running a special train 6 days a week between Niagara Falls & Montreal, which it calls its special fruit flyer. Niagara Falls is left at 1.30 p.m., 12 stops are made at fruit points and Toronto is reached at 8 p.m. After a stop of 10 minutes the train leaves for Montreal arriving there between 5 and 6 on the following morning, so that early delivery of the fruit is made. During the strawberry season the Dominion Ex. Co. ran a special train between Toronto & Montreal, leaving Toronto in the evening & reaching Montreal early the following morning before the passenger train. The putting on of these special trains has been caused by the impossibility of handling the largely increased fruit shipments on the regular passenger trains without delaying the latter, and shows how largely the fruit traffic has grown.

Assistant Secretary Spaulding of the U.S. Treasury, has made a ruling on the application of I. M. Clarke, of Port Huron, Mich., representing the American Ex. Co., for the privilege of consolidating consignments of goods intended for transportation to Canada, for the purpose of making a single entry & giving a single bond on all such shipments made within one week. Such a practice, if allowed, would greatly reduce the expense to the express companies, but the Department believes that it would be detrimental to the interests of the Government. Mr. Spaulding is willing, however, to make a concession from the letter of the regulations heretofore in force, & has forwarded the following instructions to the Collector: "After inquiry into the practice at other ports on the frontier, and careful consideration of the matter, the Department declines to authorize the consolidation in one entry of consignments covering a period of several days, as proposed by the applicant; but perceives no objection to the inclusion in one entry & bond, for immediate transportation & exportation to Canada via a common port, of all merchandise arriving on the same date & train, or other conveyance, consigned to one party, but destined for two or more places in Canada."—Express Gazette.

THE HUNTER, ROSE CO.,  
All kinds of... Limited.  
PRINTING, BOOKBINDING,  
OFFICE STATIONERY  
AND ACCOUNT BOOKS  
Temple Building, • • Toronto.

**STEEL**  
**LaBelle Steel Co.**  
Pittsburgh, Pa.

MANUFACTURERS OF  
**FINE TOOL STEEL**  
For Railway Purposes  
Track Tools,  
Punches, Dies,  
Drills, Magnets, etc.

And all purposes where requirements are exacting.  
Steel Forgings. Case Hardening Steel.

**W. G. BLYTH,**  
Agent for Canada,

29 Melinda St., - Toronto

## ADVERTISING

ON THE

## CANADIAN PACIFIC RAILWAY.

The exclusive privilege of advertising in the Stations, Ticket Agencies and Hotels of the CANADIAN PACIFIC RAILWAY, and on that Company's buildings, premises, telegraph poles and fences, is controlled by THE ACTON BURROWS COMPANY.

The franchise embraces the whole of the C. P. R. System, including all branches and leased lines, comprising 7,178 miles of railway, 690 stations, and a number of ticket agencies and hotels.

Advertising on the C. P. R. is like every department of that Company's service, modern, up-to-date and reliable.

FOR RATES AND FURTHER PARTICULARS APPLY TO

**The Acton Burrows Company,**  
29 Melinda St., Toronto, Canada

BRANCH OFFICE:

197 Lombard Street, Winnipeg—S. A. Erskine, Resident Agent.

# The Purchasing Agents' Guide

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

<b>Accident Insurance</b>		<b>Foghorns</b>		<b>Shipbuilders' Supplies</b>	
Travelers' Insurance Co.....	Montreal.	Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.
<b>Aerated Waters</b>		<b>Forgings</b>		<b>Ship Carpenters' Tools</b>	
E. L. Drewry.....	Winnipeg.	Rhodes, Curry & Co.....	Amherst, N.S.	Rice Lewis & Son.....	Toronto.
<b>Air Brakes &amp; Fittings</b>		<b>Gas &amp; Gasoline Engines</b>		<b>Ships</b>	
Westinghouse Mfg. Co.....	Hamilton, Ont.	Northey Manufacturing Co.....	Toronto.	Polson Iron Works.....	Toronto.
<b>Ales</b>		<b>General Supplies</b>		<b>Shovels</b>	
E. L. Drewry.....	Winnipeg.	The Hudson's Bay Company.....		Rice Lewis & Son.....	Toronto.
<b>Aluminum</b>		<b>Grease</b>		The Hudson's Bay Company.....	
Rice Lewis & Son.....	Toronto.	Eureka Min. Wool & Asbestos Co.....	Toronto.	<b>Signal House Numbers</b>	
<b>Anchors</b>		<b>Groceries</b>		Acton Burrows Co.....	Toronto.
Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....		<b>Signals</b>	
<b>Asbestos</b>		<b>Half Tones</b>		Noah L. Piper & Sons.....	Toronto.
Eureka Min. Wool & Asbestos Co.....	Toronto.	Acton Burrows Co.....	Toronto.	<b>Signs</b>	
<b>Axles</b>		<b>Hardware</b>		Acton Burrows Co.....	Toronto.
Rhodes, Curry & Co.....	Amherst, N.S.	Rice Lewis & Son.....	Toronto.	<b>Snow Ploughs</b>	
<b>Babbit</b>		The Hudson's Bay Company.....		Rhodes, Curry & Co.....	Amherst, N.S.
Rice Lewis & Son.....	Toronto.	<b>Headlights</b>		<b>Speed Indicators</b>	
<b>Badges</b>		Noah L. Piper & Sons.....	Toronto.	Rice Lewis & Son.....	Toronto.
John Martin, Sons & Co.....	Montreal.	<b>Hose</b>		<b>Spikes</b>	
<b>Beams</b>		Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.
Rice Lewis & Son.....	Toronto.	<b>Illustrations</b>		<b>Springs</b>	
<b>Bellows</b>		Acton Burrows Co.....	Toronto.	Rhodes, Curry & Co.....	Amherst, N.S.
Rice Lewis & Son.....	Toronto.	<b>Iron</b>		<b>Station Name Signs</b>	
<b>Bells</b>		Rice Lewis & Son.....	Toronto.	Acton Burrows Co.....	Toronto.
Rice Lewis & Son.....	Toronto.	<b>Iron Signs</b>		<b>Steamboats</b>	
<b>Belting</b>		Acton Burrows Co.....	Toronto.	Polson Iron Works.....	Toronto.
Eureka Min. Wool & Asbestos Co.....	Toronto.	<b>Japans</b>		<b>Steamboat Signs</b>	
Rice Lewis & Son.....	Toronto.	McCaskill, Dougall & Co.....	Montreal.	Acton Burrows Co.....	Toronto.
<b>Blankets and Bedding</b>		<b>Lager Beer, &amp;c.</b>		<b>Steam Whistles</b>	
The Hudson's Bay Company.....		E. L. Drewry.....	Winnipeg.	Rice Lewis & Son.....	Toronto.
<b>Block &amp; Tackle</b>		<b>Lamps</b>		<b>Steel</b>	
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.	W. G. Blyth.....	Toronto.
<b>Blocks</b>		Noah L. Piper & Sons.....	Toronto.	Rice Lewis & Son.....	Toronto.
Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....		<b>Switch Targets</b>	
<b>Boat Fittings &amp; Hardware</b>		<b>Lanterns</b>		Acton Burrows Co.....	Toronto.
Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.	<b>Tanks and Tank Fixtures</b>	
<b>Boiler Covering</b>		<b>Launches</b>		Ontario Wind Engine & Pump Co.....	Toronto.
Eureka Min. Wool & Asbestos Co.....	Toronto.	Polson Iron Works.....	Toronto.	<b>Telegraph Office Signs</b>	
Mica Boiler Covering Co.....	Toronto.	<b>Life Insurance</b>		Acton Burrows Co.....	Toronto.
<b>Bollers</b>		Independent Order of Foresters.....	Toronto.	<b>Telegraph Spoons</b>	
Polson Iron Works.....	Toronto.	Travelers' Insurance Co.....	Montreal.	Rice Lewis & Son.....	Toronto.
<b>Boiler Tubes</b>		<b>Linoleum and Floor Coverings</b>		<b>Telephone Office Signs</b>	
Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....		Acton Burrows Co.....	Toronto.
<b>Bolts</b>		<b>Locomotives</b>		<b>Tie Plates</b>	
Rice Lewis & Son.....	Toronto.	Baldwin Locomotive Works.....	Philadelphia.	F. E. Came.....	Montreal.
<b>Bridge Numbers</b>		<b>Lubricators</b>		<b>Tobacco and Cigars</b>	
Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....	
<b>Buckets</b>		<b>Matches</b>		<b>Toilet Paper</b>	
Rice Lewis & Son.....	Toronto.	E. B. Eddy Co.....	Hull, Que.	Rice Lewis & Son.....	Toronto.
<b>Bunting</b>		The Hudson's Bay Company.....		The Hudson's Bay Company.....	
Rice Lewis & Son.....	Toronto.	<b>Milepost Numbers</b>		<b>Tools</b>	
The Hudson's Bay Company.....		Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.
<b>Carpets</b>		<b>Mohair</b>		<b>Track Jacks</b>	
The Hudson's Bay Company.....		The Hudson's Bay Company.....		Duff Manufacturing Co.....	Allegheny, Pa.
<b>Cars</b>		<b>Numbers</b>		A. O. Norton.....	Coaticook, Que.
Rhodes, Curry & Co.....	Amherst, N.S.	Acton Burrows Co.....	Toronto.	<b>Track Tools</b>	
<b>Car Wheels</b>		<b>Oakum</b>		Rice Lewis & Son.....	Toronto.
Rhodes, Curry & Co.....	Amherst, N.S.	Rice Lewis & Son.....	Toronto.	<b>Trucks</b>	
<b>Castings</b>		The Hudson's Bay Company.....		Rice Lewis & Son.....	Toronto.
Rhodes, Curry & Co.....	Amherst, N.S.	<b>Oils</b>		<b>Typewriters</b>	
<b>Chains</b>		Eureka Min. Wool & Asbestos Co.....	Toronto.	Creelman Bros. Typewriter Co.....	Toronto.
Rice Lewis & Son.....	Toronto.	Galena Oil Co.....	Franklin, Pa.	<b>Uniforms</b>	
<b>Cross Arms, Top Pins &amp; Side Blocks</b>		<b>Office Signs</b>		John Martin, Sons & Co.....	Montreal.
The Firstbrook Box Co.....	Toronto.	Acton Burrows Co.....	Toronto.	<b>Uniform Caps</b>	
<b>Curtains</b>		<b>Packing</b>		W. H. Coddington.....	Hamilton, Ont.
The Hudson's Bay Company.....		Eureka Min. Wool & Asbestos Co.....	Toronto.	John Martin, Sons & Co.....	Montreal.
<b>Cuts</b>		<b>Pipe</b>		<b>Valves</b>	
Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.	Rice Lewis & Son.....	Toronto.
<b>Door Signs</b>		<b>Pipe Covering</b>		<b>Varnishes</b>	
Acton Burrows Co.....	Toronto.	Eureka Min. Wool & Asbestos Co.....	Toronto.	McCaskill, Dougall & Co.....	Montreal.
<b>Dry Goods</b>		Mica Boiler Covering Co.....	Toronto.	<b>Vessels</b>	
The Hudson's Bay Company.....		<b>Plushes</b>		Polson Iron Works.....	Toronto.
<b>Electric Car Route Signs</b>		The Hudson's Bay Company.....		<b>Waste</b>	
Acton Burrows Co.....	Toronto.	<b>Porter</b>		Eureka Min. Wool & Asbestos Co.....	Toronto.
<b>Electric Car Trucks</b>		E. L. Drewry.....	Winnipeg.	Rice Lewis & Son.....	Toronto.
Baldwin Locomotive Works.....	Philadelphia	<b>Portland Cement</b>		Noah L. Piper & Sons.....	Toronto.
<b>Enameled Iron Signs</b>		Rice Lewis & Son.....	Toronto.	<b>Water Meters</b>	
Acton Burrows Co.....	Toronto.	<b>Printing</b>		Westinghouse Mfg. Co.....	Hamilton, Ont.
Rice Lewis & Son.....	Toronto.	The Hunter, Rose Co.....	Toronto.	<b>Water Supply Material</b>	
<b>Engines, Stationary &amp; Marine</b>		Mail Job Printing Co.....	Toronto.	Ontario Wind Engine & Pump Co.....	Toronto.
Polson Iron Works.....	Toronto.	<b>Pumps</b>		<b>Wheelbarrows</b>	
<b>Engraving</b>		Ontario Wind Engine & Pump Co.....	Toronto.	Rice Lewis & Son.....	Toronto.
Acton Burrows Co.....	Toronto.	Rice Lewis & Son.....	Toronto.	<b>Windmills</b>	
Toronto Engraving Co.....	Toronto.	<b>Rails</b>		Ontario Wind Engine & Pump Co.....	Toronto.
<b>Express Office Signs</b>		Rice Lewis & Son.....	Toronto.	<b>Window Blinds</b>	
Acton Burrows Co.....	Toronto.	<b>Rivets</b>		The Hudson's Bay Company.....	
<b>Ferry Signs</b>		Rice Lewis & Son.....	Toronto.	<b>Wines and Liquors</b>	
Acton Burrows Co.....	Toronto.	<b>Rope</b>		The Hudson's Bay Company.....	
<b>Flags</b>		Rice Lewis & Son.....	Toronto.	<b>Wire &amp; Wire Rope</b>	
Rice Lewis & Son.....	Toronto.	The Hudson's Bay Company.....		Rice Lewis & Son.....	Toronto.
The Hudson's Bay Company.....		<b>Semaphore Arms</b>		<b>Yachts</b>	
		Acton Burrows Co.....	Toronto.	Polson Iron Works.....	Toronto.
		<b>Shafting</b>			
		Rice Lewis & Son.....	Toronto.		

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# The Hudson's Bay Company

HAS GENERAL STORES

In Manitoba, the Northwest Territories,  
and British Columbia, where the best  
goods can be obtained at the Lowest  
Prices.



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# The Hudson's Bay Company

HAS LANDS FOR SALE

Farming and Grazing Lands on Easy  
Terms of Payment and without any  
conditions of Settlement.



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# The Hudson's Bay Company

MAKES THE BEST FLOUR

Highest Awards at the Winnipeg Indus-  
trial Exhibitions. Mills at Winnipeg and  
Prince Albert.