

THE Railway and Marine World

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The Railway and Shipping World, Established 1890

Devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph,
Telephone and Contractors' interests

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See page 727.

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Regulating the Common Carrier.

By William Whyte, Second Vice-President
C.P.R.

It is a self-evident truth that the development and prosperity of any new country depends upon its transportation facilities. Production without transportation is often impossible, and always unprofitable; consequently the fertile Canadian prairies lay untilled, and the lead, the copper, the coal of the West remained undisturbed where a generous Providence placed them. The forests were choked, and the fish multiplied in the myriad of lakes and rivers; and the great silence was broken only by shouts of sportsmen, the snapping of steel traps set by the Hudson's Bay traders and the creaking of Red River carts. The Canadian West was a sealed empire waiting the touch of steel rails to open its doors to the world. One would naturally suppose, therefore, that the Canadian Government, fearful of discouraging railroad construction at a time when it was sorely needed, would have moved slowly in the matter of enacting a railway regulation measure which, in the United States, at least, would have been considered drastic. But the Government saw clearly that, while additional transportation facilities were of vital importance, yet, at the same time, efficient railway regulation was an absolute necessity to the development of the West, and, instead of resorting to dilatory tactics, it met the situation squarely, adopted the Railway Act; and, when the bill had gone into effect, the wisdom of the course which it had taken at once became apparent to all. Although it is not generally known, it is, nevertheless, an established fact that no country in the world has so great a mileage per capita as Canada now has. Then, add to this the fact that contracts have been let for hundreds of miles of additional railway, consisting in part of feeders which will suck up and bring to the main lines the crops from the newly developed wheat regions—and you will understand that Government regulation is not necessarily a fatal drag on a nation's railway prosperity.

Canadian railways are regulated by a board of three Commissioners, who are appointed for life. The chairman of the Board receives an annual salary of \$10,000, and associate members \$8,000. This board is authorized to employ the services of experienced railway men as experts in the different branches of railway work. The Commission is endowed with powers that would make a citizen of the United States, accustomed to the weak and ineffectual efforts of the Interstate Commerce Commission, gasp with astonishment.

The publicity recently accorded the affairs

of several large railways in the United States, as a result of the proceedings of the Interstate Commerce Commission, has been the means of arousing considerable interest in all parts of Canada, and, as a natural consequence, Canadians, ever on the outlook for improvements in all things, have compared their Dominion Railway Act and the powers of their Railway Commission with the Interstate Commerce Commission. The



C. B. FOSTER,

Assistant General Passenger Agent, Canadian Pacific Railway,
Pacific Division.

result of the comparison is interesting indeed. Whenever railway regulation, considered necessary for the public good in Canada, is adopted, there is no cry of "confiscation" on the part of the railway companies; no much-mooted abstract questions as to the constitutionality of the Act are raised, and no protracted and expensive legislation ensues. The authority of the Board's members is plenary within its jurisdiction, and its decisions and orders may be made rules of any Superior Court. There is no appeal from their decision, unless the Board itself grants an appeal, except on questions of jurisdiction or to the Governor in Council. It is to be noted in this connection that when the statute authorizing this Board of Commissioners and defining their immense powers in railway regulation was enacted,

it was with the approval and co-operation of most of the Canadian roads. This statement will be pregnant with interest to a citizen of the States who is familiar with the railway situation in his own country. It is, nevertheless, true in every particular. The Canadian's characteristic respect for the law is primarily responsible for this most satisfactory result. All classes seem to agree in the sentiment: "It is the law; it must be obeyed." The railways realized at once that such action on the part of the Dominion Government could not fail to operate to the mutual benefit of the Canadian people and, in the end, to their own benefit.

In one step Canada has accomplished what the United States has not been able to do in years of effort. The powers of the Railway Commission under the Railway Act are infinitely greater and more clearly defined than are those of the Interstate Commerce Commission under the Interstate Commerce Act, and, in comparison, the latter seems ridiculously weak and ineffectual. The power of the Railway Commission within its jurisdiction over the railways in Canada is absolute, and its duties and powers are set forth in the Railway Act. Such is not the case with the Interstate Commerce Commission. It might be well to mention a few of the more important powers extended to the Railway Commission which the Interstate Commerce Commission does not seem to possess.

It possesses jurisdiction over telegraph or telephone lines operated by railway companies, and all matters pertaining thereto. It can order the abolition of grade crossings where it considers them too dangerous to the community to be permitted, and can order the railways to construct subways or overhead crossings, or the installation of safety appliances at level crossings. It has the power to regulate the running and operation of trains, and can order changes in schedules or operation of additional trains to give better service for the accommodation of business. Railway companies must report to the Board all cases of fatal or serious injury. All agreements for the sale, lease, or amalgamation of railways must be approved by the Board. The Board may order the allotment or distribution of cars where there may be question of discrimination. Railway companies must submit to the Board plans of all branch lines, spurs, sidings, or railways of any description whatever, and the approval of the Board must be secured before the work can be commenced. This applies, also, to all works, bridges, etc., which the railways may desire to construct. The Board may order the construction of bridges over navigable waters, and the regulations respecting the construction of such bridges are included in the Railway Act. The Board may exercise jurisdiction

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CHARLES MILLER,
PRESIDENT.

over claims against railway companies; at the same time, it protects the railway companies from unjust claims. The Board may determine what lands the railway companies may take without owner's consent for right-of-way, etc., and its authority extends to expropriation proceedings of every description. No railway may cross or join another railway without the consent of the Board. The Railway Act defines the duties and powers of directors of railways. It can fix either maximum or absolute rates. All freight tariffs have to be filed with, and receive the approval of the Commission, which has the power to order changes in them. No toll can be charged which unjustly discriminates between different localities. No greater toll can be charged for a shorter than for a longer haul unless, in the judgment of the Commission, special conditions make it necessary. Freight tariffs are governed by a classification which must receive the approval of the Board. This insures uniformity of classification.

The effect of this beneficent rate regulation on the commercial development of Canada cannot be over-estimated. Consider for one moment what this protection means: 1.—Equal rates for all. A guarantee that one section of the country will not be exploited to the detriment of another region equally endowed with natural resources. 2.—No secret rebates. An exemplification of the "live and let live" policy. The small producer is zealously protected, and is afforded an equal chance on the same basis with a wealthy corporation. 3.—Government regulation of train schedules. An absolute assurance to the shipper that he can fulfil his contracts. In short, it may be said that the Board of Railway Commissioners has absolute control over all matters pertaining to the construction, operation and maintenance of railways, and, in comparison, the powers of the Interstate Commerce Commission seem dwarfed almost to insignificance. It may be said, also, that not only does the Dominion Railway Act, which gave to the Board of Railway Commissioners its life, protect the public, but it also protects the railway companies. For instance, a town where one railway is already located may desire the entrance into the town of another railway, and may wish to grant a location to the entering road which might prove injurious to the first road. In such a case, the first road may appeal to the Commission against this injustice, and the Board has the power to compel the second road to enter the town by another route.

Previous to 1881, the country lying west of Winnipeg had never heard the whistle of a locomotive. Now, there are over 5,000 miles of track in operation through a region which in 1906 produced nearly 100,000,000 bushels of wheat, and which shipped—for export alone—some 80,000 head of cattle.

The Canadian Pacific Ry. was, of course, the real pioneer, throwing open to the world its last Great West, carrying on its work of construction and development in the face of obstacles which, in any other country, would have spelled failure for any enterprise; but this railway has won an empire from a wilderness and has turned defeat into a tremendous success. To-day, in a desperate effort to meet the requirements of the region through which it runs, this railway is building eight new branches. Its orders for rolling stock equipment amounted last year to \$11,808,751, and it spent in the West alone in the neighborhood of \$20,000,000 in improvements and new works. The railway is indeed moving fast, but the incoming settlers are moving faster.

In all that the road has done for upbuilding Western Canada, it has had in mind the permanent prosperity of the settler. The plan has been to create every possible

element of success in the way of transportation auxiliaries to successful cultivation of the soil, harvesting of the crop and converting it into cash. From colonization of the empty prairies to cultivation of profitable crops and converting them into cash, the policy of the road has been to co-operate with the incoming population to the best of its ability. It has gone far beyond the usual sphere of a transportation company.

Every possible co-operation is given to enable the settler to get the most possible out of the soil. The Dominion Government, the Provincial Governments, and the railways each endeavor to bring to the cultivator of the soil definite information of seeds, methods of cultivation, care of crops, etc., etc. Seeds are sought which are best for the soil and climate. These are brought in and given to the farmer almost without financial consideration. He is shown how to plant the seed and how to care for the ground. Special trains have been sent through the country with seeds and with instructions. Nothing is left to chance. Organized effort eliminates risk as nearly as the enormous resources at the disposal of the Government and of the railway can accomplish it. The aim is to make profitable crops a certainty in Western Canada. How enormous is the crop which the Canadian railways are working like beavers to handle may be realized when it is said that more than once last year the daily receipts of wheat at Winnipeg exceeded the combined daily receipts at Duluth, Minneapolis and Chicago. Next year the acreage under crop will be greatly increased, and so the total yield. Each year the golden stream of wheat flows wider and swifter and deeper down to the lakes, and, by the time the railways now under construction are completed, there will be need of more; for, with all of this wonderful progress, the development of the Canadian West has just begun. Is it any wonder, then, that thousands of men are being employed, and millions of money being expended in the construction of new lines which will be needed to assist in the movement of the crop of 1908?

With the tremendous undeveloped natural resources of Canada and the blessings incident to railway regulations such as these, there can be found no better field for capital seeking investment. Perhaps the fairest indication of hearty co-operation with the Government by the railways, and likewise of a firm belief in Canada's present and future prosperity, is the tremendous amount of railway construction going on to-day.

The foregoing article, which was published in Canada West, and copyrighted, is reproduced by the publisher's permission. It should be noted that since the article was written the Board of Railway Commissioners has been increased in membership from three to six.

Report on Car Efficiency.—The committee on car efficiency of the American Railway Association has issued its report on car surpluses and shortages to Sept. 2. The total of surplus cars for the date of the report is 222,632, a decrease of 30,371 since the previous report. Of this decrease 21,723 are box cars, 7,253 coal and gondola cars. Shop reports indicate a decrease of 7,662 in the number of bad order cars. The figures for group H, which covers Canadian lines, show four lines reporting, with the following surpluses: 5,846 box cars, 282 flat cars, 134 coal, gondola and hopper cars, and 2,412 other cars, a total of 8,674 cars against a surplus of 8,627 cars on Aug. 19.

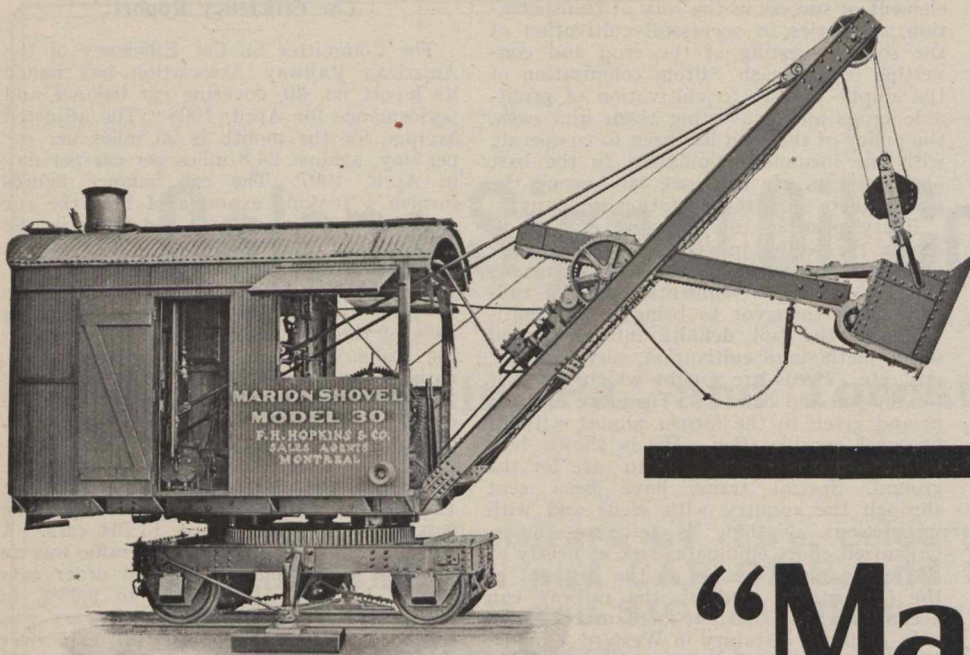
The Temiskaming and Northern Ontario Ry. Commission is reported to be about to establish a department to deal with the lands adjacent to its railway.

Car Efficiency Report.

The Committee on Car Efficiency of the American Railway Association has issued its report no. 30, covering car balance and performance for April, 1908. The adjusted average for the month is 25 miles per car per day, against 24.8 miles per car per day in April, 1907. The car balance figures furnish a striking example of how the car situation is affected by a reduction in the demand for cars. In April, 1907, with a shortage of approximately 100,000 cars, there were but 1,014,539 cars on the tracks of their owners, this number comprising 54% of the total number owned by reporting roads. In April of the current year, with a surplus of 365,627 cars, there were 1,620,203 cars at home, or 78% of the total owned. In April, 1907, there were six groups reporting as holding a total of 96,975 cars in excess of their ownership, while in April of the current year there were but two groups holding an excess of cars, the total of such excess being 13,764 cars. A further result of the decreased traffic was an increase in the number of bad order cars from 5.14% in April, 1907, to 9.93% in April, 1908. The total of such cars was 214,537, an increase of 103,487 cars over April, 1907. Loaded car mileage was 66.5% in April of the current year, against 70.6% in April, 1907. Compared with Mar., 1908, the April performance was unsatisfactory, the car mileage, tonnage and earnings falling off. The actual miles per car per day averaged 19.6, the lowest of which the committee has any record. The elimination of the surplus available and excess bad order cars, however, gives an average of 25 miles per day, which, while slightly lower than the adjusted average for Mar., compares favorably with actual averages during periods when cars were in demand. Applying the same adjustment to the earnings, an average of \$2.38 per day for each car actually in use is shown. Although there was an increase in the number of cars on home lines, indicating a resumption of the return of foreign cars temporarily checked in Mar., this change in balance was not accompanied by an increase in the percentage of empty mileage, the proportion being unchanged from Feb. and Mar. figures. The tons per loaded car, which had steadily fallen off from Jan., shows a further decrease, the loading for April averaging 20 tons per car.

The statistics are based on reports submitted by 154 railways, having a total of 219,990 miles of railway. For classification purposes, these lines are divided into 11 groups, Canadian lines forming group 11. In this group there are four railways having 16,463 miles of railway in operation. The tables show that the four railways reporting are the C.P.R., G.T.R., Intercolonial and Toronto, Hamilton and Buffalo, and that no reports had been received from the Algoma Central and Hudson Bay Ry., Canadian Northern Ry., Quebec Central Ry., and Temiskaming and Northern Ontario Ry. The statistics gathered by the committee show the following totals for this group:

Revenue freight cars owned, 96,501; average number of system cars on line, 76,923; average foreign railway cars on line, 15,636; private cars on line, 3,751; total cars on line, 96,310; per cent. of cars in shops, 6.36; number of freight engines owned, 2,076; average cars on line per freight engine owned, 46; total freight car mileage, 69,431,487; average miles per car per day, 24.2; per cent. loaded car mileage, 71.7; ton miles of freight (including company freight), 916,828,386; average ton miles—per car mile, 13.1; per loaded car mile, 18.3; per car per day, 317; gross earnings, \$5,895,109; average daily earnings—per car owned, \$2.04; per car on line, \$2.12; all cars, \$2.04.



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Built along the same lines in point of material and workmanship as the Marion large size shovels. These Revolving Shovels are built in two sizes, viz., $\frac{3}{4}$ and $1\frac{1}{4}$ cubic yard dippers, and will stand up under the hardest work. The body of shovel revolves around a pivotal journal and is carried by five broad face conical steel rollers.

For a small, handy, quick acting, powerful steam shovel, there is nothing to approach either our Model 30 or Model 35.

CAN WE NOT SEND YOU COMPLETE SPECIFICATION AND BLUEPRINT?

Marion Standard Steam Shovels

All Capacities
Immediate Shipment

CANADIAN SALES AGENTS

F. H. Hopkins & Co

SUCCESSORS TO LATE JAMES COOPER

Montreal

C.P.R. ANNUAL REPORT.

Following is the 27th annual report addressed to the shareholders over the signature of the President, Sir Thos. G. Shaughnessy.

The accounts of the company for the year ended June 30, 1908, show the following results:

Gross earnings.....	\$71,384,173 72
Working expenses.....	49,591,807 70
Net earnings.....	\$21,792,366 02
Net earnings of steamships in excess of amount included in monthly reports.....	1,112,759 24
Interest on deposits and loans, \$484,560 64	
Interest from Minneapolis, St. Paul & Sault Ste. Marie Ry. on bonds held by the Co.	159,720 00
Interest from Mineral Range Railroad Co. on bonds held by the Co.....	50,160 00
Interest from Montreal & Atlantic Ry. and on other bonds held by the Co.....	58,962 89
Dividend on St. John Bridge & Ry. Extension Co. stock	50,000 00
Dividends on Minneapolis, St. Paul & Sault Ste. Marie Ry. preferred and ordinary stocks held by the Co	738,470 50
	<u>1,541,874 03</u>
	\$24,446,999 29
Deduct fixed charges.....	8,770,076 71
Surplus.....	\$15,676,922 58
Deduct amount transferred to steamship replacement acct	\$800,000 00
Contribution to pension fund	80,000 00
	<u>880,000 00</u>
	\$14,796,922 58
From this there has been charged a 1/2-yearly dividend on preference stock of 2%, paid April 1, 1908.....	\$ 940,340 45
And a 1/2-yearly dividend on ordinary stock of 3%, paid April 1, 1908.....	3,650,400 00
	<u>4,590,740 45</u>
	\$10,206,182 13
From this there has been declared a second 1/2-yearly dividend on preference stock of 2%, payable Oct. 1, 1908.....	\$976,066 65
And a second 1/2-yearly dividend on ordinary stock of 3%, payable Oct 1, 1908.....	3,650,400 00
	<u>4,626,466 65</u>
Leaving net surplus for the year....	\$ 5,579,715 48

In addition to the above dividends on ordinary stock, 1% was declared from interest on land funds.

The working expenses for the year amounted to 69.47% of the gross earnings, and the net earnings to 30.53%, as compared with 64.96 and 35.04% respectively in 1907.

Four per cent. consolidated debenture stock to the amount of £1,975,000 was created and sold, and of the proceeds £1,321,594 were applied towards the construction of branch lines in Ontario, Manitoba, Saskatchewan, Alberta and British Columbia; £175,152 towards the completion of two new lake steamers; and the balance, £478,254, was used for acquiring the bonds of other railway companies, whose lines constitute a portion of your system, the interest on which had, with your authority, been guaranteed by the company. Preference stock to the amount of £1,000,000 was created and sold for the purpose of meeting expenditures you had sanctioned. Your guarantee of interest was endorsed on 4% consolidated mortgage bonds of the Minneapolis, St. Paul and Sault Ste. Marie Ry. Co. to the amount of \$1,680,000 issued and sold to meet the cost of constructing 84 miles of railway added to that company's system.

There was a decided falling off in the sales of agricultural lands, the total area disposed of in the year being 164,450 acres, as against 994,840 acres in the previous year. The average price realized, however, was much better, being \$9.54 an acre.

The contract with the Imperial Government for the carriage of the mails between Liverpool and Hong Kong was renewed for a further period of three years, but the rate of compensation per annum was reduced by £15,000.

The Alberta Ry. and Irrigation Co., owning 113 miles of railway in Southern Alberta, as well as an important colliery,

and about 425,000 acres of land, part of which is served by irrigation ditches, was operated by its owners as a close friendly connection of your company, yielding to your lines a large revenue from traffic interchanged, and furnishing the company and settlers along the railway a supply of coal. To ensure a continuance of this desirable connection your directors deem it prudent for the company to secure such an interest in the property as will constitute a substantial control, and they have arranged to do this at an approximate cost of \$2,000,000. Apart from the traffic advantages thereby safeguarded the investment itself will prove a profitable one.

The increase for the year in the item "Railway and Equipment" was abnormal, being in round figures \$31,377,000, exclusive of an appropriation from surplus earnings of \$3,800,000. Of this expenditure \$7,500,000 was for new lines under construction; \$10,400,000 for additional rolling stock, shops and machinery; \$7,800,000 for double tracks and reduction of grades; and \$9,500,000 for additional yards, buildings, sidings, and for general improvements to your property. Notwithstanding this outlay for improvements, and the falling off in traffic, the charges against the year's income for the upkeep of the property were continued on a liberal basis.

Pursuant to the authority given at the special general meeting of shareholders held Dec. 30, 1907, the directors offered to the shareholders at par \$24,336,000 of the ordinary capital stock of the company. Practically the whole amount was taken and payments were made in anticipation of the dates mentioned in the circular. This leaves \$3,984,000 still unissued, but in order that you may be in a position to provide additional money from this source, if and when necessary, your directors thought it wise to ask the consent of the Governor-General in Council to a further increase in the ordinary capital stock from \$150,000,000 to \$200,000,000. This consent has been formally given, and you will be asked at the special general meeting of the shareholders, to be held Oct. 7, to sanction and approve the increase in the authorized ordinary capital stock, and to take such other measures as will enable your directors to utilize it in such amounts from time to time as may be desirable in connection with the company's capital requirements. While recommending this increase as a precautionary measure, there is no immediate necessity for issuing any portion of the additional amount, as you have ample funds in hand, but with your vast property in a growing country, the demands for works, and more particularly for rolling stock, involving large outlay, are sure to continue, and your directors should be in a position to meet these promptly when they arise.

In order to conform to a practice that is becoming quite general, more particularly in Europe, your directors have had the balance sheet and accounts examined and certified by a firm of well-known chartered accountants, and it is their intention to pursue the same course in future years.

Your directors regret to report the death on June 4 of Sir Robert G. Reid, who joined the Board in 1903, and was a most esteemed and useful member. In April last you met with another serious loss in the death of Charles Drinkwater, who had been Secretary of the company since its incorporation, and who during the last nine years had also been Assistant to the President. Your directors desire to record their high appreciation of his devotion to the company's interests during his long term of service. During the year Hon. James Dunsmuir, of Victoria, B.C., and R. Meighen, of Montreal, were elected directors of the company to fill vacancies caused by the retirement

of C. H. Mackay and the death of Sir Robert G. Reid. The undermentioned directors will retire from office at the approaching annual meeting. They are eligible for re-election. Hon. Sir George A. Drummond, Sir Sandford Fleming, W. D. Matthews, R. Meighen.

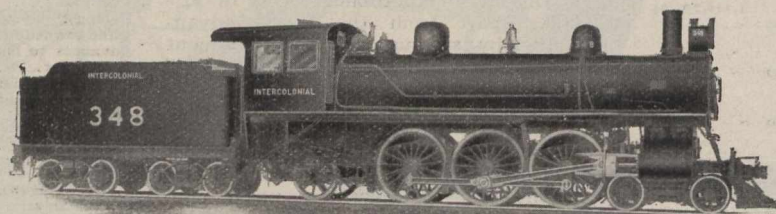
CONDENSED BALANCE SHEET.

Railway and equipment.....	\$285,088,099 41
Ocean, lake and river steamships.....	17,826,983 16
Acquired securities (cost).....	57,418,368 83
Properties held in trust for the company	4,656,079 96
Deferred payments on land and townsite sales.....	14,022,665 79
Advances to lines under construction.....	3,523,720 01
Advances and investments.....	6,023,727 77
Material and supplies on hand	11,110,842 58
Current Assets:	
Agents' and conductors' balances.....	\$1,424,255 15
Net traffic balances.....	191,439 99
Miscellaneous accounts receivable.....	3,960,818 37
Cash in hand.....	5,576,513 51
	<u>18,821,630 21</u>
	\$424,068,631 23
In addition to above assets, the company owns 8,777-825 acres of land in Manitoba, Saskatchewan and Alberta (average sales past year \$9.54 per acre) and 4,490,542 acres in British Columbia.	
Capital stock.....	\$121,680,000 00
Payments on subscriptions to new issue	
Capital stock (\$24,336,000.00).....	19,854,436 00
4% preference stock.....	48,803,332 38
4% consolidated debenture stock.....	115,657,077 88
Mortgage bonds—	
First mortgage bonds, 5%.....	\$34,998,633 33
Canada Central Ry., 6%.....	973,333 33
Algoma branch, 1st mortgage.....	3,650,000 00
	<u>39,621,966 66</u>
Current liabilities—	
Audited vouchers.....	\$5,634,881 97
Pay rolls.....	3,032,606 65
Miscellaneous accounts payable.....	2,722,029 58
	<u>11,389,518 20</u>
Interest on funded debt and rental of leased lines:	
Coupons due July 1, 1908, and including coupons overdue, not presented.....	\$1,134,185 19
Accrued fixed charges.....	201,816 36
	<u>1,336,001 55</u>
Equipment obligations.....	1,912,987 26
Equipment replacement fund	870,283 00
Steamship replacement fund	2,340,666 67
Appropriation for additions and improvements	6,489,655 68
Reserve fund for contingencies	1,320,974 28
Land grant—	
Sales of land and townsites.	22,401,529 67
Surplus.....	30,390,202 00
	<u>\$424,068,631 23</u>

FIXED CHARGES FOR YEAR ENDED JUNE 30, 1908.

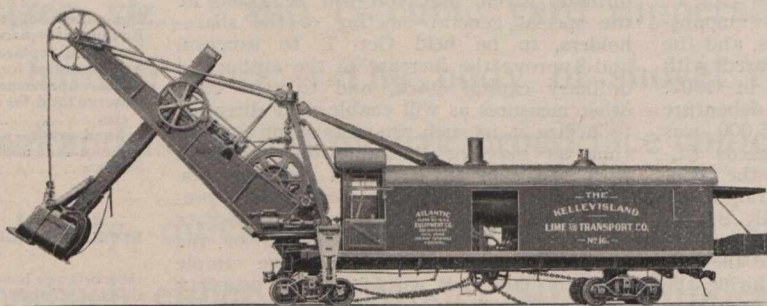
1st mortgage bonds 5%.....	\$ 1,749,931 66
Canada Central Ry. and mortgage 6% bonds	58,400 00
St. Lawrence & Ottawa Ry. 4% 1st mortgage bonds.....	38,933 34
Man. Southwestern Colonization Ry. 1st mortgage 5% bonds.....	127,200 00
Toronto, Grey & Bruce Ry. rental.....	140,000 00
Ontario & Quebec Ry. debenture stock, 5%	975,129 56
Ontario & Quebec Ry. ordinary stock, 6%	120,000 00
Atlantic & North-West Ry. 1st mortgage bonds (less Government proportion)....	136,333 34
Algoma Branch 5% 1st mortgage bonds	182,500 00
Rental, Calgary & Edmonton Ry.....	138,357 60
" Farnham to Brigham Jct.	1,400 00
" Mattawankeag to Vanceboro.....	23,800 00
" New Brunswick Ry. System.....	372,829 74
" Terminals at Toronto.....	29,570 20
" Terminals at Hamilton.....	33,884 32
" Hamilton Jct. to Toronto.....	42,070 66
" St. Stephen and Milltown Ry.....	2,050 00
" Lindsay, Bobcaygeon & Pontypool Ry.	3,049 09
" Joliette and Brandon Ry.....	5,000 00
" Lachine Canal branch.....	854 16
Interest on Montreal & Western Ry. purchase.....	17,761 67
Interest on equipment obligations.....	129,889 98
4% CONSOLIDATED DEBENTURE STOCK.	
Interest from July 1, 1907.....	\$4,323,576 45
Interest from Jan. 1, 1908.....	125,554 94
	<u>\$4,449,131 39</u>
Less received from subsidy Northern Colonization Ry.....	8,000 00
	<u>\$4,441,131 39</u>
	\$8,770,076 71

LOCOMOTIVES



Pacific Type Passenger Locomotive built for the Intercolonial Railway. Total weight of engine, 194,500 pounds. Weight on driving wheels, 132,000 pounds; diameter of driving wheels, 72 inches. Boiler pressure, 200 pounds. Maximum tractive power, 29,200 pounds.

STEAM SHOVELS



A high-class and powerful machine, absolutely reliable under all conditions of service.

MONTREAL LOCOMOTIVE WORKS, LTD.

BANK OF OTTAWA BUILDING, MONTREAL, CANADA.

RECEIPTS AND EXPENDITURES.

Cash in hand June 30, 1907....	\$21,394,951 93	
Receipts—		
Surplus revenue as per statement.....	14,796,922 58	
Land department—		
Lands and townsites		
Net proceeds of sales.....	\$1,869,907 22	
Less amounts remaining in deferred payments..	1,738,458 71	
	\$ 131,448 51	
Collection of deferred payments on previous years' sales.....	3,570,405 69	3,701,854 20
Subscription to \$24,336,000 additional ordinary stock—		
Payments on instalments... 4% preference stock—	19,854,436 00	
Amount realized from issue of £1,000,000.....	4,890,670 65	
Consolidated debenture stock—		
Amount realized from issue of £1,975,000.....	9,719,771 07	
Add—		
Advances to lines under construction.....	\$3,523,720 01	
Advances and investments.....	6,023,727 77	
Current assets.....	5,576,513 51	
	\$15,123,961 29	
Amount at June 30, 1907	15,664,018 52	540,057 23
		<u>\$74,898,663 66</u>

EXPENDITURES.

Dividends on preference stock—		
2% paid Oct. 1, 1907.....	\$878,733 31	
2% paid April 1, 1908.....	940,349 45	
		\$1,819,073 76
Dividends on ordinary stock—		
3½% paid Oct. 1, 1907.....	\$4,258,800 00	
3½% paid April 1, 1908.....	4,258,800 00	
		8,517,600 00
Properties held in trust for the company.....	1,241,820 88	
Construction of acquired and branch lines.....	7,565,714 55	
Additions and improvements, main line and branches.....	14,130,303 21	
Additions and improvements, leased and acquired lines.....	3,177,606 87	
Rolling stock, shops and machinery.....	10,433,024 76	
Ocean, lake and river steamships—		
Fitting Atlantic steamships for passenger service and providing cold storage facilities at Liverpool.....	169,350 21	
Additional steamships and appurtenances for Pacific coast service.....	482,030 85	
Additional river steamers and barges.....	76,958 08	
Payments balance account two new steamers.....	731,226 13	
Payment balance purchase tug Cruiser.....	7,640 41	
	\$1,467,205 68	
Less sale of Steamships Athenian and Tartar.....	56,917 96	
		1,410,287 72
SECURITIES ACQUIRED:		
British Columbia Southern Ry. 5% 1st mortgage bonds.....	207,500 00	
Guelph & Goderich Ry. 1st mortgage bonds.....	412,500 00	
Nicola, Kamloops & Similkameen Coal & Ry. Co., 1st mortgage bonds.....	1,175,000 00	
Walkerton & Lucknow Ry., 1st mortgage bonds.....	740,000 00	
Minneapolis, St. Paul & Sault Ste. Marie Ry.: Ordinary stock.....	1,413,400 00	
Preferred stock.....	706,700 00	
	\$4,655,100 00	
Less amount received from Canada North West Land Co. on 5,625 shares ordinary stock.....	42,187 83	
		4,612,912 17
(During the year North Shore Ry. Bonds which had been carried in acquired securities and also included in funded debt, were retired and cancelled, amounting to \$616,110 67.		
Increase in material and supplies on hand.....	1,685,220 70	
Payments of equipment obligations.....	327,049 41	
Decrease in current liabilities.....	1,156,410 42	
	\$56,077,033 45	
Cash in hand.....	18,821,630 21	
	<u>\$74,898,663 66</u>	

CONSTRUCTION—BRANCH AND ACQUIRED LINES

Pheasant Hills branch....	\$4,166,217 09	
Wolseley-Reston branch.....	119,472 34	
Lachine canal branch.....	16,729 74	
Moose Jaw branch.....	194,467 01	
Bulyea branch.....	42,091 41	
Virden branch.....	1,537 02	
Stonewall branch—Teulon extension.....	25,584 05	
Stonewall branch—Iceclandic River extension.....	5,940 43	
Selkirk branch—Gimli extension.....	133,057 68	
Lauder branch.....	22,879 04	
Weyburn branch.....	220,253 18	
Nicola, Kamloops and Similkameen Ry.....	6,086 42	
Surveys of projected lines.....	39,851 60	
	\$4,995,967 91	
Toronto-Sudbury line.....	2,569,746 64	
	<u>\$7,565,714 55</u>	

EXPENDITURE ON ADDITIONS AND IMPROVEMENTS JULY 1, 1907, TO JUNE 30, 1908.

MAIN LINE		
QUEBEC TO BONFIELD:		
Additional sidings, buildings, stations and yards.....	\$ 192,758 55	
Permanent bridges and improvements of line.....	508,317 18	
Wharves, docks and warehouses.....	14 00	
	\$ 701,089 73	
MONTREAL TERMINALS.....	591,665 89	
NEWPORT FLOUR SHED.....	101,794 95	
BONFIELD TO PORT ARTHUR:		
Additional sidings, buildings, stations and yards.....	\$ 603,695 98	
Permanent bridges and improvements of line.....	209,399 47	
	813,095 45	

PORT ARTHUR TO LAGGAN:		
Additional sidings, buildings, stations and yards.....	\$1,059 547 27	
Permanent bridges and improvements of line.....	1,024,419 91	
Winnipeg station and hotel.....	90,023 83	
Winnipeg shops.....	269,276 14	
Winnipeg terminals.....	78,227 67	
Wharves, docks and warehouses.....	98,001 81	
Double-tracking.....	5,205,067 51	
Right of way.....	3,367 46	
	7,827,931 60	

LAGGAN TO VANCOUVER:		
Additional sidings, buildings, stations and yards.....	\$ 346,629 73	
Permanent bridges and improvements of line.....	934,172 88	
Wharves, docks and warehouses.....	197,038 00	
	1,477,840 61	
VICTORIA HOTEL.....	315,497 14	
LAKE LOUISE HOTEL.....	183,858 05	
Total main line.....	\$12,012,773 42	

BRANCH LINES:		
Southwestern branch.....	\$ 19,825 91	
Stonewall branch.....	2,436 56	
Selkirk branch.....	59,150 12	
Emerson branch.....	130,729 35	
Nakusp and Slovan branch.....	14,424 65	
Revelstoke and Arrow Lake branch.....	4,023 41	
Snowflake branch.....	1,590 78	
Waskada branch.....	2,402 50	
St. Lin branch.....	889 69	
Lake Temiskaming branch.....	21 00	
McGregor branch.....	1,617 93	
Varcoe extension.....	1,416 27	
Mission branch.....	37,429 99	
Arcoa—Regina branch.....	58,039 62	
Pheasant Hills branch.....	1,769 90	

SOURIS BRANCH:		
Additional sidings, buildings, stations and yards.....	137,056 17	
Permanent bridges and improvements of line.....	217,182 04	
ALGOMA BRANCH:		
Additional sidings, buildings, stations and yards.....	23,696 59	
Permanent bridges and improvements of line.....	2,642 59	
CROW'S NEST PASS BRANCH		
Additional sidings, buildings, stations and yards.....	\$178,840 02	
Permanent bridges and improvements of line.....	238,705 10	
Right of way.....	111 00	
	417,656 12	

CROW'S NEST PASS BRANCH:		
McLeod—Lethbridge deviation.....	432,896 89	
BRITISH COLUMBIA SOUTHERN RY.:		
Additional sidings, buildings, stations and yards.....	\$67,945 71	
Permanent bridges and improvements of line.....	91,368 54	
Wharves, docks and warehouses.....	666 79	
Right of way.....	24,356 73	
Balfour extension.....	2,323 79	
Yahk branch.....	34,788 58	\$221,450 14
		\$1,779,348 22

Brought forward.....	\$13,792,121 64
Telegraph extensions and additions.....	102,219 35
Office building, London, England.....	26,668 74
Rented and temporary sidings.....	149,293 48
Total, main line and branches.....	<u>\$14,130,303 21</u>

EXPENDITURE ON LEASED AND ACQUIRED LINES, JULY 1, 1907, TO JUNE 30, 1908.

ONTARIO AND QUEBEC RY:		
Additional sidings, buildings, stations and yards.....	\$ 489,219 65	
Permanent bridges and improvements of line.....	200,166 11	
Double track, St. Anne's to Smith's Falls.....	752,927 74	
Grade revision.....	149,723 15	
	\$ 1,592,036 65	

ATLANTIC AND NORTH-WEST RY.:		
Additional sidings, buildings, stations and yards.....	\$ 34,119 54	
Permanent bridges and improvements of line.....	113,374 45	
Right of way.....	200 00	
	147,693 99	

NEW BRUNSWICK RY.:		
Additional sidings, buildings, stations and yards.....	\$ 47,019 22	
Permanent bridges and improvements of line.....	268,276 38	
Wharves, docks and warehouses.....	661 26	
Right of way.....	807 75	
	316,764 61	

MONTREAL AND WESTERN RY.:		
Additional sidings, buildings, stations and yards.....	\$ 4,261 59	
Permanent bridges and improvements of line.....	35,256 01	
Account purchase of road.....	10,062 22	
	49,579 82	

MANITOBA SOUTH-WESTERN COLONIZATION RY.:		
Additional sidings, buildings, stations and yards.....	\$ 25,265 47	
Permanent bridges and improvements of line.....	57,078 78	
	82,344 25	

COLUMBIA AND KOOTENAY RY.:		
Additional sidings, buildings, stations and yards.....	\$ 4,978 49	
Permanent bridges and improvements of line.....	884 18	
	5,862 67	

MANITOBA AND NORTH-WESTERN RY.:		
Additional sidings, buildings, stations and yards.....	\$ 36,324 80	
Permanent bridges and improvements of line.....	18,816 82	
Right of way.....	162 50	
	55,304 12	

GREAT NORTH-WEST CENTRAL RY.:		
Additional sidings, buildings, stations and yards.....	\$ 3,162 21	
Permanent bridges and improvements of line.....	8,636 07	
Right of way and completion of line.....	6,196 76	
	18,015 04	

CALGARY AND EDMONTON RY.:		
Additional sidings, buildings, stations and yards.....	\$ 284,070 67	
Permanent bridges and improvements of line.....	198,823 39	
	482,894 06	

COLUMBIA AND WESTERN RY.:		
Additional sidings, buildings, stations and yards.....	\$ 21,658 16	
Permanent bridges and improvements of line.....	215,648 84	
Right of way and completion of line.....	93,481 80	
	330,788 80	

MONTREAL AND OTTAWA RY.:		
Additional sidings, buildings, stations and yards.....	\$ 3,915 57	
Permanent bridges and improvements of line.....	13,678 90	
Right of way and completion of line.....	52,695 34	
	70,289 81	

JOLIETTE AND BRANDON RY.....	1,861 89
LINDSAY, BOBCAYGEON AND PONTYPOOL RY.....	24,171 16
	<u>\$3,177,606 87</u>

EARNINGS, YEAR ENDED JUNE 30, 1908

Passengers.....	\$ 19,900,432 07
Freight.....	44,037,597 97
Mails.....	739,755 59
Sleeping cars, express, elevators, telegraph and miscellaneous.....	6,706,388 09
Total.....	<u>\$71,384,173 72</u>

WORKING EXPENSES YEAR ENDED JUNE 30, 1908.

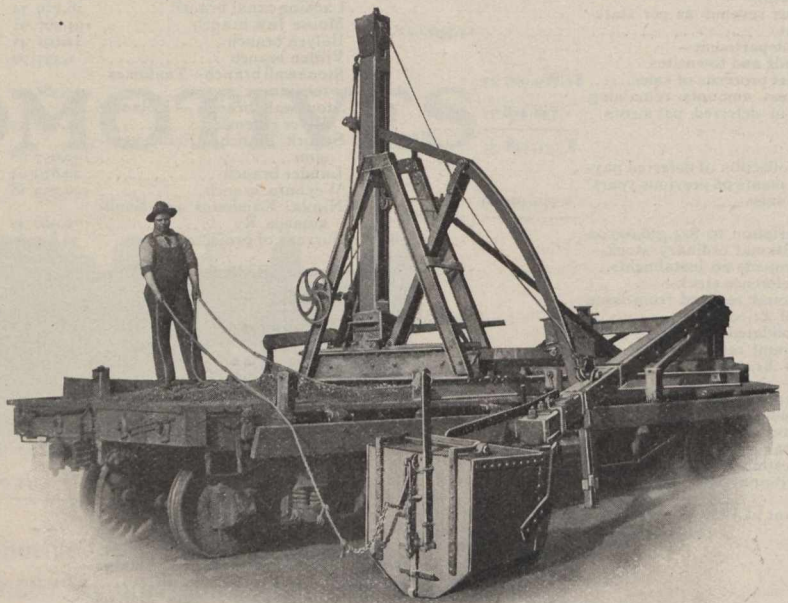
Transportation expenses.....	\$24,112,713 82
Maintenance of way and structures.....	10,410,751 61
Maintenance of equipment.....	9,358,138 48
Traffic expenses.....	1,734,086 57
Parlor and sleeping car expenses.....	395,628 72
Expenses of lake and river steamers.....	750,197 84
General expenses.....	1,042,756 25
Commercial telegraph.....	887,534 41
Total.....	<u>\$49,591,807 70</u>

The Mahoney Railroad Ditching Machine

Is designed to reduce the cost of roadbed ditching.

Makes a perfect standard ditch.

Does the work better, quicker and cheaper than can be done by hand.



Does work that cannot be done by hand.

Never strikes and is always ready for work.

Will do the work of 75 to 150 men.

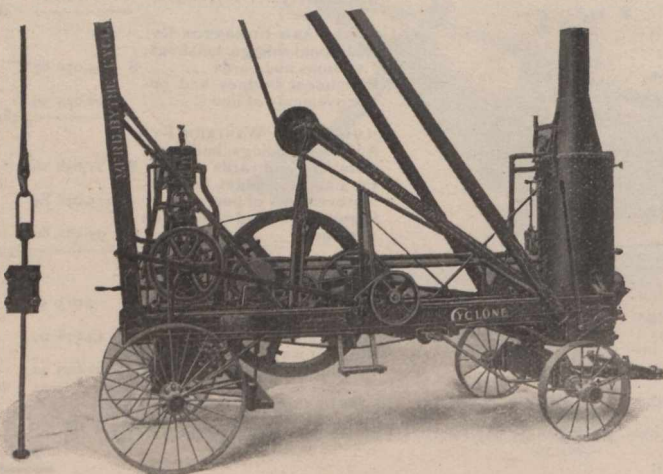
Is one of the greatest labour-saving devices of modern times.

Has been tried and tested and not found wanting.

Is constructed to withstand the very roughest use.

Is built of the very best materials only.

CATALOGUE WITH FULL DESCRIPTION MAILED ON APPLICATION.



Cyclone Blast Hole Drills

Are especially designed for Railroad Contractors, Quarries, etc., and represent the outcome of exhaustive experimental work and practical trials on rock work in connection with steam shovels. The result has fully justified their taking a leading place amongst the Railroad Contractor's

equipment, and during the last few years they have come into prominence, and are now recognized as effecting an immense saving for drilling deep blast holes in any kind of rock. Several in use on the Grand Trunk Pacific.

WRITE FOR PRICES

MUSSENS LIMITED

Montreal

Toronto

Cobalt

Winnipeg

Vancouver

EQUIPMENT AT JUNE 30, 1908.

Locomotives.....	1,399
First and second-class passenger cars, baggage cars, and colonist sleeping cars.....	1,382
First-class sleeping, dining and cafe cars.....	245
Parlor cars, official and paymasters' cars.....	57
Freight and cattle cars (all kinds).....	44,692
Conductors' vans.....	777
Board, tool and auxiliary cars and steam shovels.....	2,720

OCEAN, LAKE AND RIVER STEAMERS.

ATLANTIC SERVICE—Empress of Britain, Empress of Ireland, Lake Manitoba, Lake Champlain, Lake Michigan, Mount Temple, Montcalm, Montfort, Lake Erie, Montrose, Montreal, Milwaukee, Mount Royal, Montezuma, Monmouth, Cruiser.

PACIFIC SERVICE—Empress of India, Empress of Japan, Empress of China, Montegale.

PACIFIC COAST SERVICE—Amur, Beaver, Charmer, Otter, Princess Beatrice, Transfer, Princess Charlotte, Princess Royal, Princess May, Princess Victoria, Queen City, R. P. Rithet, Tees, Princess Ena.

UPPER LAKE SERVICE—Manitoba, Athabasca, Alberta, Keewatin, Assiniboia.

BRITISH COLUMBIA LAKE AND RIVER SERVICE—Aberdeen, Kokanee, Minto, Moyie, Nelson, Rossland, Kuskanook, Columbia, Okanagan, Proctor, Sandon, Slocan, York, Kootenay, Valhalla, Ymir.

FERRY SERVICE—Michigan, Ontario.

DESCRIPTION OF FREIGHT FORWARDED.

	1906-7	1907-8
Flour, brls.....	6,256,702	5,843,988
Grain, bush.....	93,207,009	88,345,234
Live stock, head.....	1,537,467	1,349,771
Lumber, ft.....	1,989,444,728	1,764,445,495
Firewood, cords.....	274,629	249,605
Manufactured articles, tons.....	4,385,854	3,981,888
All other articles, tons.....	4,794,295	5,102,116

FREIGHT TRAFFIC.

	1906-7	1907-8
No. of tons carried.....	15,733,306	15,040,325
No. of tons carried one mile.....	5,946,779,961	5,865,089,008
Earnings per ton per mile.....	0.77 cts.	0.75 cts.

PASSENGER TRAFFIC.

	1906-7	1907-8
No. of passengers carried.....	8,779,620	9,463,179
No. of passengers carried one mile.....	1,064,564,999	1,052,010,356
Earnings per passenger per mile.....	1.83 cts.	1.89 cts.

TRAIN TRAFFIC STATISTICS.

TRAIN MILEAGE.

	1907-8	1906-7
Passenger trains.....	13,106,093	12,413,638
Freight.....	17,788,649	18,187,263
Mixed.....	1,798,673	1,411,870
Total trains.....	32,783,415	32,012,771

CAR MILEAGE.

	1906-7	1907-8
Coaches and P.D. and S. cars.....	63,744,049	63,025,195
Combination cars.....	2,875,441	2,437,214
Baggage, mail and express cars.....	26,689,471	22,938,884
Total passenger cars.....	93,308,961	88,401,293

	1906-7	1907-8
Loaded.....	327,888,310	347,181,189
Empty.....	94,125,570	83,131,642
Caboose.....	18,735,988	19,646,800
Total freight cars.....	440,249,868	449,959,631

	1906-7	1907-8
Passenger cars per traffic train mile.....	6.22	6.39
Freight cars per traffic train mile.....	22.48	22.96

PASSENGER TRAFFIC.

	1906-7	1907-8
Passengers carried (earning revenue).....	9,334,811	8,671,438
Passengers carried (earning revenue) one mile.....	1,038,393,535	1,052,286,316
Passengers carried (earning revenue) one mile per mile of road.....	112.716	117.330
Average journey per passenger..... miles.....	111.24	121.35
Average amount received per passenger..... \$.....	2.08	2.17
Average amount received per passenger mile..... cts.....	1.87	1.79
Average number of passengers per train mile.....	69.25	76.10
Average number of passengers per car mile.....	15.58	16.38
Revenue from passengers per passenger car mile..... cts.....	29.15	29.35
Total passenger train earnings per train mile..... \$.....	1.56	1.63
Total passenger train earnings per mile of road..... \$.....	2,537.42	2,519.17

FREIGHT TRAFFIC.

	1906-7	1907-8
Tons of revenue freight carried one mile.....	5,699,092,014	5,789,191,940
Tons non-revenue freight carried one mile.....	984,489,076	870,757,856
Total tons (all classes) freight carried one mile.....	6,683,581,090	6,659,949,796
Tons of revenue freight carried one mile per mile of road.....	618,626	645,532
Tons of non-revenue freight carried one mile per mile of road.....	106,864	97,095
Total tons (all classes) freight carried one mile per mile of road.....	725,490	742,627
Average amount received per ton per mile of revenue freight. cts.....	0.755	0.776
Average no. of tons of revenue freight per train mile.....	290.96	295.38
Average no. of tons of non-rev. freight per train mile.....	50.26	44.46
Average no. of tons of (all classes) freight per train mile.....	341.22	339.84
Average no. of tons of revenue freight per loaded car mile.....	17.41	16.67
Average no. of tons of non-rev. freight per loaded car mile.....	3.01	2.51
Average no. of tons of (all classes) freight per loaded car mile.....	20.42	19.18
Freight train earnings per loaded car mile..... cts.....	13.14	12.94
Freight train earnings per train mile..... \$.....	2.20	2.29
Freight train earnings per mile of road..... \$.....	4,671.13	5,009.18

The earnings of lake and river steamers are not included in this statement.

STATEMENT OF PENSION DEPARTMENT TO JUNE 30, 1908.

Balance at June 30, 1907.....	\$ 592,882.15
Contributed by company for year.....	80,000.00
Received as interest.....	35,158.42
Payment of pension allowances for year.....	\$ 708,040.57
Balance in cash and investments.....	\$ 657,345.60

NUMBER ON PENSION ROLL AT JUNE 30, 1908.

Under 60 years of age.....	23
Between 60 and 70 years of age.....	148
Over 70 years of age.....	105
Total.....	276

Canadian Northern Ry. Earnings, etc.

Gross earnings, working expenses, net profits, increases or decreases over 1907-08, from July 1, 1908:			
	Earnings.	Expenses.	Net Increase
July..	\$728,500	\$525,600	\$202,900
Inc. or Dec.	\$295,700-	\$136,700-	\$159,000-

Approximate earnings for Aug., \$747,400, against \$779,300 for Aug., 1907; and for 2 weeks ended Sept. 14, \$378,100, against \$376,600 for same period 1907. Mileage operated, 2,874.

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

Gross earnings, working expenses, net profits, increases or decreases over 1907-8, from July 1, 1908:			
	Earnings.	Expenses.	Net Increase
July	\$6,292,880.82	\$4,018,307.57	\$2,274,573.25
Inc. or Dec.	\$715,393.64-	\$483,114.23-	\$232,279.41-

Approximate earnings for Aug., \$6,254,000 against \$6,900,000 for Aug., 1907; and for 2 weeks ended Sept. 14, \$2,732,000 against \$2,904,000 for same period 1907.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for July, \$238,818.77; total expenses, \$256,366.56; deficit, \$17,777.79; against \$338,423.57 gross earnings; \$320,396.53 total expenses; and \$18,027.04 surplus for July, 1907. Approximate earnings for Aug., \$234,773, against \$348,511 for Aug., 1907.

MINERAL RANGE RD.—Gross earnings for July, \$73,826.80; total expenses, \$73,675.83; surplus, \$150.97; against \$73,682.41 gross earnings; \$69,892.73 total expenses; and \$3,789.68, surplus for July, 1907. Approximate earnings for Aug., \$70,437; against \$75,273 for Aug., 1907.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for July, \$50,108.98; expenses, \$56,808.02; net earnings, \$393,300.96; against \$1,094,889.88 gross earnings; \$688,455.33 expenses; \$406,434.55 net earnings for July 1907. Approximate earnings for Aug., \$994,983, against \$994,354 for Aug., 1907.

Grand Trunk Ry. Earnings, Expenses, etc.

The following figures give the earnings of the G. T. R., the C. A. R., the G. T. Western Ry., and the D. G. H. & M. Ry., separately, for July, as compared with July, 1907:

GRAND TRUNK RAILWAY.		
	1908	1907
Earnings.....	\$2,562,200	\$3,069,500
Expenses.....	1,818,100	2,231,150
Net earnings.....	\$ 744,100	\$ 865,350

CANADA ATLANTIC RAILWAY.

Earnings.....	\$ 183,900	\$ 199,000
Expenses.....	159,600	183,000
Net earnings.....	\$ 24,300	\$ 16,000

GRAND TRUNK WESTERN RAILWAY.

Earnings.....	\$ 468,800	\$ 539,500
Expenses.....	424,400	483,300
Net earnings.....	\$ 44,400	\$ 56,200

DETROIT, GRAND HAVEN & MILWAUKEE RY.

Earnings.....	\$ 148,900	\$ 166,240
Expenses.....	106,300	145,420
Net earnings.....	\$ 42,600	\$ 20,820

Approximate earnings for Aug., \$3,483,778, and for 2 weeks ended Sept. 14, \$1,646,462; against \$4,097,888 and \$1,931,834 for similar periods respectively in 1907.

TRAFFIC RECEIPTS OF THE SYSTEM.

Aggregate from July 1 to Aug. 31:			
	1908.	1907.	Increase. Decrease.
Grand Trunk.....	£1,056,915	£1,282,773	£225,858
Canada Atlantic.....	76,916	83,897	6,981
G. T. Western.....	202,573	233,122	30,549
D. G. H. & M.....	61,656	73,594	11,938
Total.....	£1,398,060	£1,673,386	£275,326

Mileage operated 4,523.

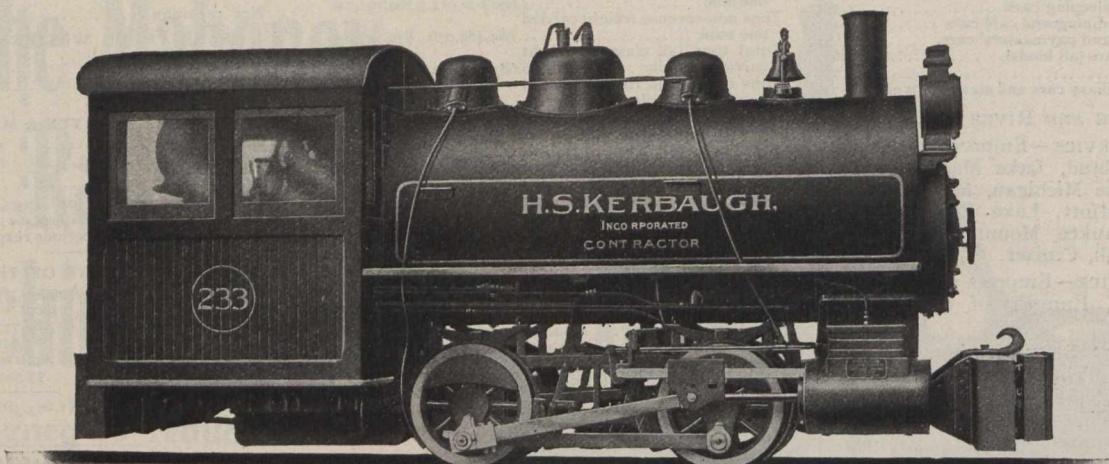
The C.P.R. and the Y.M.C.A.

Buildings have been opened at Schreiber and Chapleau, and another is under construction at Kenora, Ont., on the C.P.R. Transcontinental line, in connection with the Railway Y.M.C.A. The buildings recently opened at Schreiber and Chapleau each provide for 44 men in the dormitories, and have a dining-room seating 48; three bowling alleys in the basement, two billiard tables, reception room with large open fireplaces made of rough stones, bathrooms, reading rooms, smoking rooms, lockers, etc. The building in course of construction at Kenora, which is to cost about \$30,000, is expected to be ready for use about Jan. 1, 1909.

The general plan on which these buildings are operated is as follows: The railway company makes a monthly appropriation sufficient to cover the salary of the Secretary, in addition to providing light, heat, repairs, etc. The men pay a fee of \$5, which covers use of baths, reading room and general social privileges of the building. They pay \$1.25 a week for a room and \$4.50 a week for board. The operation of the building is in the hands of a local committee, composed for the most part of railway men. When these two buildings were formally opened, H. H. Vaughan, Assistant to the Vice-President, stated that they were given to the Y.M.C.A. to operate because of its unselfish purpose to be of service to railway men without financial gain. Boarding houses had been erected by the company and given over to individuals, who made out of them what they could. This had not been altogether satisfactory, and now the company is trying an experiment with the Railway Department of the Y.M.C.A. The satisfactory working of one building at Revelstoke, B.C., during the past two years had induced the company to increase the number of points at which these buildings were established.

Government Ownership of Railways.

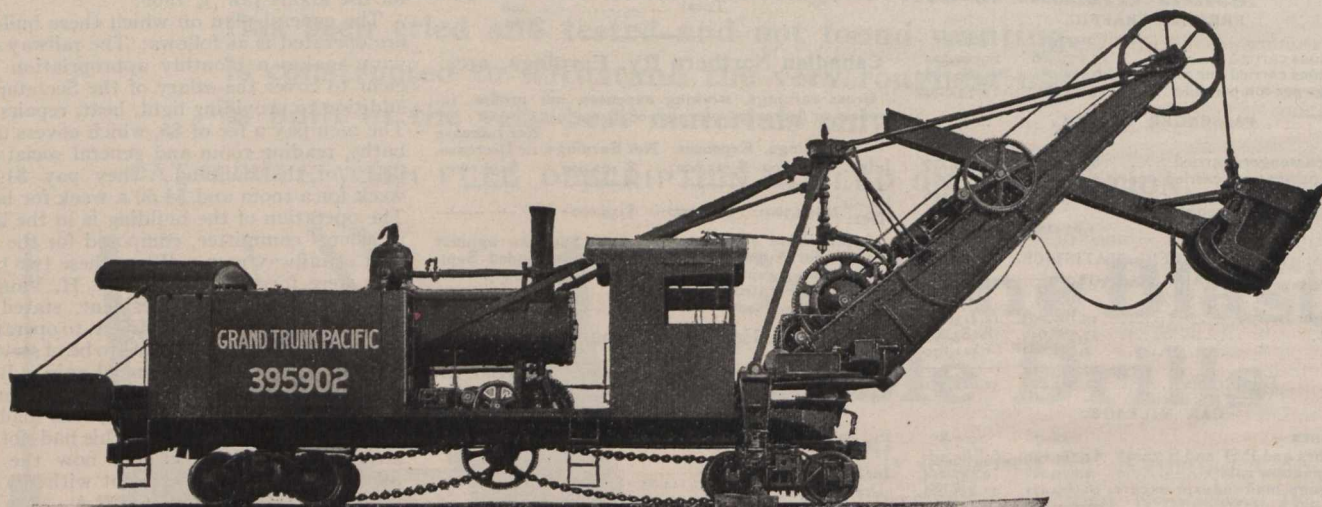
Speaking at Niagara Falls, Ont., Sept. 15, Sir Wilfred Laurier said: "Men there are in the country who believe that the Government should own and develop all the railways. This is not my view. I do not think that we should operate the railways which carry the traffic of Ontario, the Grand Trunk and the Canadian Pacific, but I believe that we should take measures, and we are taking measures, to have railway transportation supervised and controlled, not by the companies, but by an authority appointed by the Government, and this is the purpose for which we established the Railway Commission. You know the benefit which you have already received from that Commission. If you have a railway crossing or a difficulty with a railway, or if they are overcharging your freight, you have a Commission which will come on the spot and give you the relief to which you are entitled."



AMERICAN LOCOMOTIVE COMPANY

LIGHT LOCOMOTIVES

Suitable for Contractors, Mines, Lumber Companies, etc., and for a wide range of service where light rails, uneven roadbeds and sharp curves require a short, rigid wheel base and all weight to be carried on driving wheels.



ATLANTIC STEAM SHOVELS

All Capacities, Immediate Shipment

SELLING AGENTS

THE CANADIAN FAIRBANKS CO., LIMITED

MONTREAL

TORONTO

WINNIPEG

VANCOUVER

ST. JOHN

CALGARY

Intercolonial Railway Connecting Lines.

Press reports stated recently that a commission had been appointed to enquire into the equipment, conditions and business outlook on the branch, or rather connecting lines of the I.C.R. in Nova Scotia, New Brunswick and Quebec, and that the investigation to be made was preliminary to the acquisition by lease or purchase of lines which could produce a profit to the I.C.R. We are officially advised that the use of the word "commission" is a mistake, as no commission has been appointed. During the last session of the Dominion Parliament, the question of the advisability of securing for the I.C.R. at least some of the lines connecting with it as feeders was discussed, and it was urged that if the I.C.R. was not a Government road, some of these feeding lines would become part of the system as a business proposition. The Minister of Railways promised in a speech in the House that during recess he would have an investigation made as to the possibilities of the connecting lines, and as a consequence E. Tiffin, General Traffic Manager I.C.R.; D. A. Storey, General Freight Agent I.C.R., and W. A. Bowden, Engineer of the Department of Railways and Canals, have been authorized to make an investigation so that the Minister and the Government may be in a position to consider the whole matter intelligently.

A resolution was unanimously passed by the Nova Scotia Legislature at its last session calling upon the Dominion Government to acquire the various short independent lines in that province on a basis of their original cost and present earning capacity, and operate them in connection with the I.C.R. as branch lines. The late Government of New Brunswick had previously made application to the Dominion Government to take over the short lines in that province for operation as I.C.R. branches. The matter was brought before the notice of the House of Commons last session by the ex-Minister of Railways, Mr. Emmerson.

In the fall of 1907 the then Government of New Brunswick appointed G. Brown, C.E., and T. M. L. Burns, M.L.A., to inspect and report upon the lines connecting with the I.C.R. in the province, and a report dealing with them was subsequently presented. The report states that: "The Commissioners travelled over each of the lines, inspected thoroughly bridges, stations and all conditions connected therewith. In general they found all the properties noticeably improved during recent years. Considerable amounts have been expended in rails, bridges, rolling stock, etc., and all properties have been brought up to a better standard. Wooden bridges and trestles are the curse of most of these branch lines. On most of the roads there are a great many such structures, some

of them of great length, and they are all a constant source of annoyance, expense and danger. The Kent Northern, the Beersville, and the York and Carleton have no bridges, and this fact contributes largely to the excellent financial showing made by the Kent Northern in particular. A great many of the Howe truss bridges of the different lines are old and nearly worn out, and it will be necessary to rebuild these in a very short time. Nearly all the lines are poorly equipped with snow-fighting appliances, and so a number close down when deep snow comes. The Kent Northern is an exception. There is a scarcity of ballast on all branches. In some cases this is excusable. Another big factor in maintenance of good track is plenty of ties. In this lumber country, where ties may be bought comparatively cheap, it is inexcusable that they are not better sleepers. A large percentage of the rails laid on the branches are excellent, and quite heavy enough for the uses and in good condition. The locomotives as a rule are in working order. They are light and well adapted to the light traffic. The rest of the rolling stock is only in fair condition. The passenger cars are all old and not in particularly good order. The St. Martins Ry. has two splendid passenger cars, however. Practically all of the freight is handled by the trunk lines. Both passenger and freight traffic have increased remarkably in the last few years, and the present year will probably show a still further increase. The number of passengers carried has increased in the last five years from 22% to 158%, and freight has increased 18%. The Kent Northern and the York and Carleton show an unusual increase. The gross earnings show an increase of 21% over 1901. Operating expenses on all lines except two have increased considerably in five years. This has kept net earnings down, but still there is a gratifying increase. In 1901 six out of the nine lines showed a deficit. In 1906, the condition was reversed. In 1901 deficits of the nine lines were \$3,764. In 1906 the surpluses were \$10,650. From 1901 to 1906 inclusive, 419,893 passengers were carried on the nine connecting lines. Not one of these was killed and only two injured. Six of the nine lines had no accidents. From 1901 to 1906 there were 1,097,218 tons of freight carried by these connecting railways."

Information with respect to the lines in Nova Scotia which it is suggested should be acquired is contained in the report of the Provincial Engineer, a summary of which appeared in our September issue.

Of the lines connecting with the I.C.R., there are a number that can be at once eliminated from further consideration, notably the Quebec, Montreal and Southern Ry., owned by the Delaware and Hudson Co., a

United States corporation; the Quebec Central Ry., and the Temiscouata Ry., owned or controlled by the same interests in Great Britain, which contemplates connecting the two lines and amalgamating them into one system: the Halifax and South Western Ry., and the Inverness Ry. and Coal Co.'s line, owned by Mackenzie, Mann & Co. interests, and destined to form part of the Canadian Northern Ry.'s completed system, and the Dominion Atlantic Ry., operated in connection with a steamship line to Boston, Mass., by a British company. There are also some other lines owned by coal mining companies, which are connected with the I.C.R. In this category are the Sydney and Louisburg Ry., owned by the Dominion Coal Co., the Nova Scotia Steel and Coal Co.'s railway, the Cumberland Ry. and Coal Co.'s line, and a number of smaller lines in Nova Scotia and New Brunswick. Apart from these lines there are in the three provinces of Nova Scotia, New Brunswick and Quebec, a number of lines carrying on a general railway business which can be classed strictly as branch or connecting lines of the I.C.R. The lines in Quebec are the Lotbiniere and Megantic Ry., and the Atlantic and Lake Superior Ry. Both lines, however, are at present in the position of extension, and if these plans materialize to any considerable extent, the usefulness of the lines as branches of the I.C.R. will be destroyed, as the apparent object of the new construction is to effect connection with lines at or near the United States boundary. The duty of the investigating officials will, therefore, practically resolve itself into an examination of the traffic possibilities of one railway in Nova Scotia and nine branches, representing 12 lines in New Brunswick. Statistics showing the earnings and expenses, etc., of these several companies—the latest at present available—were published on pg. 105 of our Feb. issue, and pg. 237 of our April issue. The additional information showing capitalization, subsidy aid and rolling stock owned, is given in the table on this page.

Train Service at Omeme.

The Board of Railway Commissioners issued order 5260 Sept. 1 as follows: In the matter of the Municipal Council of the Corporation of the County of Victoria and the Township of Emily, Ontario, complaining that by reason of the location of the G.T.R. station at the Village of Omeme, Ont., the inhabitants of the village are subjected to great inconvenience, expense, and loss; that the railway conditions existing at Omeme are unreasonable and not in the interests of the community; and asking for such relief as justice to complainants may demand. Upon hearing the representatives for the complainants and counsel for the G.T.R., and what was alleged, and the consent of the Board of Trade and Council of Omeme and the G.T.R. filed—the Board orders that the G.T.R. train service be as follows, namely: That all trains each way stop at the outer or junction station, as at present. That at the inner, or new downtown platform, the following trains stop: The noon mail train leaving Toronto at 7.50 a.m., via Lindsay and Peterboro. Either the evening mail train leaving Toronto at 5 p.m., or the evening flyer, leaving Toronto later. The morning flyer from Peterboro to Toronto. The evening mail train, leaving Peterboro at 5 p.m. for Lindsay and Toronto. The alternate proposal to be determined by the Omeme Council. The Board further orders that the train service herein provided for be brought into operation not later than Sept. 15. And that the platform be placed from the sidewalk on Sturgeon St. westward.

Railway	Mileage	CAPITAL.			SUBSIDIES.			ROLLING STOCK		
		Stock	Bonds	Misc.	Dom.	Prov.	Municipal	Loco.	Pass. cars	Fr'ght cars
NOVA SCOTIA										
Cape Breton.....	31.00	\$1,000,000						3	4	50
NEW BRUNSWICK										
Buctouche and Moncton.....	32.00	250,000		\$60,000	\$101,600	\$94,500		2	4	42
Caraget.....	68.00	950,000	\$500,000	19,279				3	2	30
Gulf Shore.....	16.78	6,250								
Elgin and Havelock Hampton and St. Martins.....	28.00	44,900	50,000					2	2	8
Kent Northern.....	30.00	99,000	90,000		83,612	145,600		1	2	7
St. Louis and Richibucto.....	27.00	75,000	50,000		58,334	135,000		2	2	1
N.B. Coal and Ry. Co.....	7.00	20,000			22,400	21,000				
N.B. and P.E.I.....	58.00				190,400	139,000		5	3	72
Salisbury and Harvey.....	36.00	214,845	73,500		113,000	97,708		3	3	45
Albert Southern.....	50.00	150,000			29,391	455,000	\$70,000	3	3	34
Harvey branch.....	19.00	125,920			54,460	48,680				
York and Carleton.....	5.75	32,500			5,553	9,000				
		34,320			18,336	18,997		2	1	3
Total.....	409.53	\$3,002,735	\$763,500	\$79,279	\$677,086	\$1,164,485	\$70,000	26	26	292



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General Counsel—J. C. WALSH, Esq., M.P. (of Walsh & Walsh)

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Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings.

Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

5194. Aug. 18.—Approving local mileage freight tariff C.R.C. 1 of Brantford and Hamilton Electric Ry., to be designated as the "Standard Freight Mileage Tariff."
5195. Aug. 18.—Approving local passenger tariff of the Brantford and Hamilton Electric Ry. with following exceptions: That the toll between stations 5 and 11 read 5 instead of 10c., and that the toll between stations 5 and 13 read 10 instead of 15c.
5196. Aug. 18.—Extending until Sept 15, time within which the Q.M. & S. Ry. may cross the G.T.R. track, at rail level, near St. Gregoire Station, Que.
5197. Aug. 19.—Extending until Sept. 1, time within which the C.P.R. may install bell at railway crossing Dorchester St., Quebec.
5198. Aug. 19.—Authorizing Bell Telephone Co. to cross with its wires the P.M.R. one mile north of Port Stanley station, Ont.
5199. Aug. 19.—Authorizing Bell Tel. Co. to cross with its wires the C.N.O.R. at Parry Sound, Ont.
5200. Aug. 19.—Authorizing C.P.R. to cross certain streets in Calgary, Alta., with spur to Fairchild Co. and Wm. Gray & Sons' premises.
5201. Aug. 19.—Authorizing C.P.R. to construct spurs to Fairchild Co. and Wm. Gray & Sons' premises, Calgary, Alta.
5202. June 24.—Authorizing C.P.R. to construct spurs at Terrebonne, Que.
5203. Aug. 22.—Extending for 12 months from Aug. 22, 1908, order authorizing G.T.R. to complete the passenger station and passenger station yards at Toronto, authorized by order dated Feb. 23, 1905.
5204. Aug. 20.—Authorizing Essex Terminal Ry. to cross the C.P.R. on gravel road, Sandwich West tsp., Ont.
5205. Aug. 20.—Authorizing C.P.R. to construct bridge 87.37 over Hamilton Creek, on Alberni extension of Esquimalt & Nanaimo Ry., B.C.
5206. Aug. 20.—Authorizing Yellow Grass Rural Telephone Co. to erect wires across C.P.R. at five different points Saskatchewan.
5207. Aug. 20.—Authorizing C.P.R. to construct bridge 87.12 over Harry Creek, on Alberni extension of Esquimalt & Nanaimo Ry., B.C.
5208. Aug. 20.—Authorizing C.P.R. to construct a spur line at Calgary, Alta., from end of spur already constructed for R. C. Thomas, to the Canadian Port Huron Co.'s premises.
5209. Aug. 20.—Authorizing Ontario Pipe Line Co. to lay gas pipe under G.T.R. at Victoria Ave., Hamilton, Ont.
5210. Aug. 20.—Authorizing C.P.R. to construct spur to the Detonite Explosive Co.'s premises, Vaudreuil County, Que.
5211. Aug. 18.—Authorizing Milestone Southwestern Telephone Co. to erect wires across C.P.R. on Carrington St., Milestone, Sask.
5212. Aug. 25.—Authorizing G. Poulin to erect electric light wires across C.P.R. at Farnham, Que.
5213. Aug. 25.—Authorizing Barton & Binbrook Telephone Co. to erect wires across G.T.R. near Rymal station, Ont.
5214. Aug. 23.—Authorizing C.N.O.R. to construct its railway across highways in

Clarence tsp., at mileage 29, 30, 31, 32 and 33, and across Mill St., Rockland, Ont.

5215. Aug. 23.—Authorizing C.P.R. to divert public road from lot 15, Brighton parish, N.B., to lot 11, Northampton parish, also in part of lot 10, and from lot 9 to lot 8, Northampton parish.

5216. Aug. 25.—Authorizing Wilbur Iron Ore Co. to erect wires across K. & P. Ry. at Lavant, Ont.

5217. June 23.—Authorizing C.P.R. to construct road from proposed new station location at mile post 22 to the road that runs to Bolton Village, Ont., from the 6th line.

5218. Aug. 25.—Authorizing the Bell Telephone Co. to erect aerial wires across the C.P.R. at highway at Nipissing Jct., Ont.

5219. Aug. 25.—Authorizing town of Kenora to erect transmission wires across C.P.R. at Hamilton St.

5220. Aug. 21.—Authorizing Northern Pipe Line Co. to lay pipe under C.P.R. in Raleigh tsp., Ont.

5221. Aug. 15.—Dismissing application of C.P.R. to fix compensation to be paid by G.T.R. for use of C.P.R. right-of-way and tracks between Nipissing Jct. and North Bay, Ont., and the C.P.R. terminal stations and station grounds at North Bay, and allowing appeal to Supreme Court of Canada.

5222. Aug. 26.—Authorizing City of Winnipeg to erect electric wires across C.P.R. to reach pumping station 6.

5223. Aug. 26.—Approving G.T.R. by-laws authorizing freight and passenger traffic officers to prepare and issue tariffs of tolls to be charged for carriage of freight and passenger traffic.

5224. Aug. 25.—Interswitching at St. Thomas, Ont. This order is given in full on another page.

5225. Aug. 26.—Authorizing T.H. & B. Ry. to reduce headway of subway or undercrossing of its branch line under the G.T.R. in Barton tsp., Ont., from 17½ ft. to 16 ft. 10 ins.

5226. Aug. 27.—Authorizing Lakefield Portland Cement Co. to lay iron pipe line under C.N. Quebec Ry.'s tracks, where same intersect the Lakefield Portland Cement Co.'s land easterly three acres of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5227. Aug. 27.—Authorizing Lakefield Portland Cement Co. to erect power and telephone lines across C.N. Quebec Ry.'s tracks where same intersect the Lakefield Portland Cement Co.'s land easterly three acres of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5228. Aug. 27.—Authorizing the Saskatchewan Public Works Department to construct a highway across C.P.R. tracks in the s.w. ¼ of sec. 2, tp. 18, range 14, w. 2nd mer., being about ½ a mile east of Qu'Appelle station, Sask.

5229 to 5237. Sept. 1.—Authorizing Bell Telephone Co. to cross G.T.R. and C.P.R. tracks at nine different points in Ontario and Quebec.

5238. Sept. 1.—Authorizing Caledon Telephone Co. to erect its wires across C.P.R. tracks at a point 4½ miles east of Caledon station, Ont.

5239 to 5241. Sept. 1.—Authorizing Caledon Telephone Co. to erect its wires across C.P.R. tracks near Caledon station, Ont.

5242 to 5245.—Sept. 1. Authorizing Bell Telephone Co. to erect its wires across G.T.R. tracks at four different points in Ontario.

5246. Sept. 1.—Authorizing the Northern Pipe Line Co. to lay gas pipe or main under G.T.R. tracks, where same cross lot 4, 2nd concession, Raleigh tp., Kent Co., Ont.

5247. Sept. 1.—Authorizing Norfolk County Telephone Co. to erect its wires across G.T.R. track at the intersection of the Centre Town line, at Renton, Ont.

5248. Sept. 1.—Authorizing Bell Telephone Co. to erect aerial wires across C.P.R. tracks at public crossing 100 yds. south of Snelgrove station, Ont.

5249. Sept. 1.—Authorizing Princeton & Drumbo Telephone Co. to erect its wires across G.T.R. tracks at Governor's Road crossing two miles east of Eastwood, Ont.

5250. Sept. 1.—Authorizing Bell Telephone Co. to cross with its wires C.P.R. tracks at public crossing one mile east of Conception station, Que.

5251. Sept. 2.—Authorizing C.P.R. to construct its branch line across certain streets to W. McPherson's premises, Abbotsford, B.C.

5252. Sept. 2.—Authorizing C.P.R. to construct, maintain, and operate a spur to and into W. McPherson's premises, Abbotsford, B.C.

5253. Sept. 2.—Authorizing the Ontario Power Co. of Niagara Falls to erect its wires across P.M. Rd. tracks at Welland, Ont.

5254. Aug. 27.—Authorizing Lakefield Portland Cement Co. to lay water pipe under Montreal Terminal Ry. tracks, three acres east of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5255. Aug. 27.—Authorizing Lakefield Portland Cement Co. to erect its power and telephone lines across Montreal Terminal Ry. tracks, three acres east of lot 74, Pointe aux Trembles parish, Hochelaga Co., Que.

5256. Sept. 2.—Approving location of the C.N.R. through tps. 13, 15, ranges 12, 27, west of the principal meridian, Man.

5257. Sept. 1.—Authorizing Canada Atlantic Ry. Co. to construct, maintain and operate spur to and into W. J. Campbell's premises, Ottawa, Ont.

5258. Sept. 1.—Authorizing Burnt River Telephone Co. to erect its wires across G.T.R. tracks between Graig & Austin's mill and the G.T.R. office, and Crego St., at the corner of Main St., Kinmount village, Ont.

5259. Sept. 1.—Authorizing C.P.R. to construct, maintain and operate spur to and into W. J. Campbell's premises, Ottawa, Ont.

5260. Sept. 1.—Directing the arrival and departure of trains of the G.T.R. at Omeme station, Ont. This order is given in full on another page.

5261. Sept. 2.—Approving C.P.R. Crow's Nest Branch between Peigan and Crow's Nest, Alta.

5262. Sept. 2.—Authorizing the C.P.R. to open for traffic the double track of that portion of its Smith's Falls section between Kemptville Jct. and Mountain, and the second track of that portion of its line from Mountain to Finch, Ont.

5263. Sept. 1.—Authorizing the G.T.R. to cross the Canada Southern Ry. tracks near the G.T.R. south yard at Fort Erie, Ont.

5264. Sept. 1.—Authorizing the Napierville Jct. Ry. to connect its track with the G.T.R. tracks near Lacolle, Que.

5265. Sept. 1.—Authorizing the Hagar Municipal Council to construct a suitable crossing over C.P.R. tracks where the railway intersects road between lots 12 and 13, con. 3, Hagar tp., Ont.

5266. Sept. 17.—Authorizing the National Transcontinental Ry. to cross C.P.R. tracks at grade, at a point near St. Basile station, Portneuf Co., Que.

5267. Sept. 17.—Authorizing G.T.R. to construct, maintain, and operate a branch line or siding from its Lakefield branch on Rabbit St., south of Church St., Lakefield



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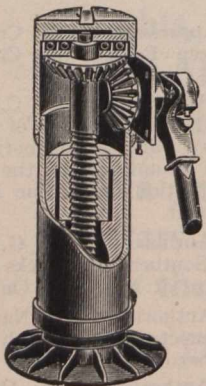
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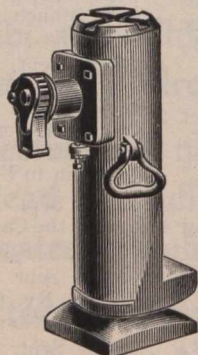
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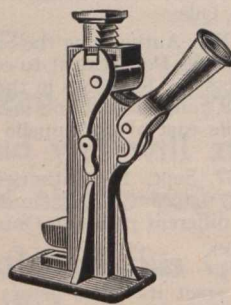
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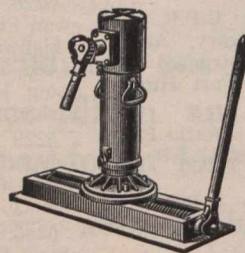
Sectional View



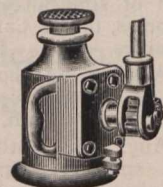
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village, Ont., thence northerly along and across the northern boundary of lot 26 on the east side of Rabbit St.

5268. Sept. 17.—Authorizing G.T. Pacific Ry. to construct its railway across certain highways in Manitoba, from mileage 112.801 to mileage 124.00.

5269. Sept. 3.—Authorizing the British Yukon Ry. to open for traffic that portion of its branch line extending from mile post 106 on its line as now constructed and operated south of White Horse, and thence in a northwesterly direction to the Best Chance mine in the Yukon Territory, a distance of about eight miles.

5270. Aug. 26.—Authorizing Manitoba Public Works Department to construct a highway across the C.P.R. Arcola branch; being an extension southerly of Main St., Arcola, Sask.

5271. Sept. 8.—Authorizing North American Telegraph Co. to erect its wires across G.T.R. tracks, Campbellford, Ont.

5272. Sept. 9.—Authorizing Mills Telephone Co. to erect its wires across C.P.R. tracks at a point east of Thamesford, Ont.

5273. Sept. 9.—Authorizing C.P.R. to operate its trains over the crossing of the Souris Branch by the G.T. Pacific Ry. main line, Headingly, Man., without stopping.

5274, 5275. Sept. 8.—Authorizing North American Telegraph Co. to erect its wires across G.T.R. tracks, at 2 points at Paper Mill Siding, Campbellford, Ont.

5276. May 26.—Authorizing G.T. Pacific Ry. to construct its railway across certain highways in Manitoba, from mileage 84.543 to mileage 112.801.

5277. Aug. 14.—Approving and sanctioning alterations in grade and other changes necessitated by the building and reconstruction of the second track of the 20th District of the G.T.R. line between the eastern limits of Brantford and the western limits of Paris, Ont.

5278, 5279. Sept. 15.—Authorizing the Pipestone municipality, Man., to erect telephone line across C.P.R. tracks at two points west of Reston, Man.

5280. Sept. 15.—Authorizing G.T. Pacific Ry. to transport on construction trains, or by special service if necessary, over that portion of its line from Winnipeg, Man., to Battle River, Alta., prospectors, harvesters, and settlers, with their effects, and to be relieved from liability to penalty for contravening any of the provisions of the Railway Act in that behalf.

5281, 5282. Sept. 15.—Authorizing Pipestone municipality, Man., to erect telephone lines across C.P.R. tracks at two points west of Reston, Man.

5283. Sept. 15.—Authorizing A. A. Grange, Montreal, to lay a water pipe under C.P.R. tracks at Epiphanie, Que.

5284, 5285. Sept. 15.—Authorizing Consumers' Gas Co., Toronto, to lay a 20" gas pipe under G.T.R. tracks on Eastern Avenue, and a 36" gas pipe under G.T.R. tracks at Tecumseh St., Toronto.

5286. Sept. 15.—Authorizing the City of Toronto to lay a 20" water main across G.T.R. and the C.P.R. lands and tracks between the westerly boundary of a road 66 ft. wide and running westerly from Dufferin St., and the easterly boundary of Earnbridge Ave., Toronto.

5287. Sept. 16.—Authorizing Harrietsville Telephone Co. to erect its wires across G.T.R. tracks where same intersect cross road between lots 10 and 11, con. 4, North Dorchester tp., north of the River Thames, about 1/2 mile west of the G.T.R. depot, Dorchester, Ont.

5288. Sept. 16.—Authorizing C.P.R. to construct two additional tracks across Dun-

dan St., south of the existing tracks, and to construct one additional track across the southerly end of Vickers St., on the southerly side of the four tracks already constructed across the said street, Fort William, Ont.

5289. Sept. 16.—Authorizing Guelph and Goderich Ry. to construct a branch line 1,803 ft. long in Milverton, Ont.

5290. Sept. 16.—Authorizing the Sarnia Street Ry. to erect power, trolley, and feeder wires across G.T.R. tracks between Sarnia tunnel station and Point Edward, where they cross Christina St., Sarnia, Ont.

5291. Sept. 15.—Authorizing the Bell Telephone Co. to place its telephone wires under C.P.R. tracks at Notre Dame de Grace road, Montreal.

5292. Sept. 15.—Authorizing Manitoba Government Telephone Commission to erect its wires across C.P.R. tracks 3/4 mile west of McDonald station, Man.

5293. Sept. 15.—Authorizing Sidney-Bell Telephone Co. to erect its wires across G.T.R. tracks in Sidney tp., Hastings Co., Ont., about 2 miles west of Belleville station.

5294. Sept. 15.—Authorizing C.P.R. as lessee of the Vancouver and Lulu Island Ry. to construct, maintain, and operate a branch line from a point on the centre line of the Lulu Island branch, at station 68 plus 76, thence in a northerly direction to and into the Vancouver Lumber Co.'s premises, lot 526, Vancouver, B.C., a distance of 1,152 ft.; also another spur commencing from a point on the centre line of the said branch at station 69 plus 52, and extending in a northeasterly direction to and into the said company's premises, to a point on the westerly limit of Bridge St., a distance of 560 ft.

5295. Sept. 15.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.P.R. tracks at Methven, Man.

5296. Sept. 15.—Authorizing G.T.R. to construct, maintain and operate a branch line from a point on its railway west of the Chaudiere Jet., and east of the Chaudiere River, Charny parish, Que., thence in a southeasterly direction through the Charny parish and St. Jean Chrysostome parish to the Chaudiere Lumber Co.'s premises, with two spur tracks running westerly from the southeasterly end of the said branch line.

5297 to 5299. Sept. 16.—Authorizing Consumers' Gas Co. to lay a 20" and 8" gas mains under C.P.R. tracks on Eastern Ave. and Christie St., and a 20" gas main under G.T.R. tracks on Eastern Ave., Toronto.

5300. Sept. 16.—Authorizing Lumsden Radial Telephone Co. to erect its wires across C.N.R. tracks at Lumsden, Sask.

5301, 5302. Sept. 16.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.N.R. tracks at Mariapolis and 2 miles east of Swan Lake, Man.

5303. Sept. 17.—Authorizing the Quebec, Montreal and Southern Ry. to cross with its track at rail level the G.T.R. tracks (Three Rivers Branch) near St. Gregoire station, Que.

5304 to 5308. Sept. 17.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.N.R. tracks 1 mile east of Altamount; 1 1/2 miles north-east of Mariapolis; 2 miles west of Somerset; 3 miles west of Miami; and at Main St., Somerset, Man.

5309. Sept. 17.—Authorizing the C.P.R. to open for traffic that portion of the double track of its main line between Fort William and Winnipeg, extending from Linke to Savanne, mile 59.6 to 71.9; from Carlstadt to Niblock, mileage 89.9 to 97.5; from mileage 106.2, Shiba, to 112.6, English; from mileage 124.7, Tamarac, to Bonheur, all on the Fort

William section; and from mileage 38.5 to mileage 15.1, Scovil, on the Ignace section, Ontario.

5310. Sept. 17.—Authorizing Consumers' Gas Co. to lay a main under C.N.R. tracks on Eastern Ave., Toronto.

5311. Sept. 17.—Authorizing the Wallace Rural Municipality to erect wires across C.N.R. tracks between sec. 21 and 22, 26, 10, Virden, Man.

5312. Amending order 5269, dated Sept. 3, 1908, by striking out clause 2.

5314. Sept. 17.—Authorizing Lumsden Radial Telephone Co. to erect its wires across C.N.R. tracks on River St., Lumsden, Sask.

5315. Sept. 17.—Approving by-law of the Quebec, Montreal and Southern Ry. authorizing its General Passenger and Freight Agent, D. I. Roberts, to prepare and issue tariffs of tolls to be charged on all traffic carried by the company.

5316. Sept. 17.—Approving by-law of the Wabash Rd., authorizing the Chief of the Tariff Bureau, F. A. Barber, to prepare and issue tariffs of tolls to be charged for all traffic carried by the company.

5317. Sept. 17.—Authorizing the G.T.R. to operate its trains over the crossing of its railway by the C.P.R., near the asylum, London, Ont., without being brought to a stop.

5318. Aug. 26.—Authorizing Hon. M. E. Bernier, Deputy Chief Commissioner, to hear and take evidence in the application of the G.T.R. to take some six or seven pieces of land at St. Hilaire, Que., required in connection with the double-tracking of its line.

5319 to 5323. Sept. 18.—Authorizing the Pipestone municipality, Man., to erect wires across C.N.R. tracks at 5 points in Manitoba.

5324. Sept. 18.—Authorizing the Manitoba Government Telephone Commission to erect its wires across C.N.R. tracks near Griswold, Man.

5325. Sept. 18.—Authorizing the Vancouver, Victoria and Eastern Ry and Navigation Co. to construct, maintain and operate a branch line to the Vermillion Forks Mining and Developing Co.'s coal mine, on lot 1822, group 1, Princeton, B.C.

5326. Sept. 18.—Authorizing J. A. Moquin, Eastman, Que., to lay a 1 1/2" water pipe under C.P.R. tracks, lot 1, con. 9th range, Bolton tp., Brome Co., Que.

Railway Track and Track Work.—A new and enlarged edition of the recognized standard work bearing the above title, by E. E. R. Tratman, Associate Member of the American Society of Civil Engineers, has been issued by the Engineering News Publishing Co., 220 Broadway, New York City. This work has been recognized as the standard authority on the subject of track work since the first edition was issued in the autumn of 1897. The present edition is the third and includes some 50 pages more than the second edition, which was issued in 1901. It has been entirely re-written, and there has been added, for the illumination of the text, a large number of new illustrations. The volume not only deals with the general principles underlying track design and maintenance, and the systems of practice which are everywhere applicable, but includes, also, numerous details as to equipment, materials, appliances and methods as used by individual railways in different sections of the country. The treatment of the different subjects is comprehensive, and as thorough as is possible within the limits which the author allows himself, while the method of treatment is clear, concise and critical. To the man in charge of the track work, as well as to the engineering student, the work is invaluable.

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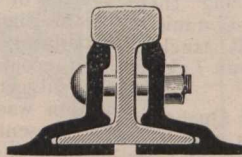
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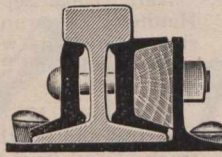
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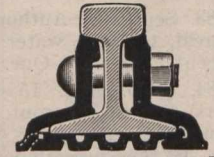
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Canadian vs. U.S. Eastbound Rates.

In replying to the memorial of the U.S. Trans-Atlantic Associated Freight Conference, regarding the grain rates levied by the various railway companies on grain from lake ports to the seaboard, given in our Sept. issue, C. C. McCain, Chairman of the Trunk Lines Association, of which the G.T.R. is a member, says:

"... Since the conference very full consideration has been given the subject and the views of the railways, together with their conclusions, will here follow, which I am directed to transmit at somewhat greater length than would ordinarily be necessary were it not evident that the publicity which has been given the petition, and the question generally, has laid upon the railways a measure of responsibility for the decline in exports at New York and Boston, as well as an implied indifference to the welfare of the commercial and steamship interests engaged therein. Reviewing the petitions the following statements are observed:

Attention is directed 'to the unreasonable rates demanded by the railways on export grain from lake ports to the seaboard as compared with the rates that are being accepted by the railway companies from the lake ports to Montreal.'

The present situation is a deplorable one, for which the railways are responsible, and is killing the steamship business from the four ports named.

Montreal is not only loading its regular tonnage, but the favorable grain rates from that port are attracting tramp steamers in addition to the regular lines.

Comparison is presented of the rate of 5½c. from Buffalo to New York versus the rate from Georgian Bay ports to Montreal of 3½c., which condition, it is stated, has benefited Montreal and deprived U.S. ports of practically any grain during the corresponding period; it is noticed that no reference is made to the low rates of the all-water routes from Chicago, Duluth, and Fort William to Montreal. In other respects it is felt that these statements do not accurately present the competitive conditions and are unjust in their intimations of apathy and implied neglect on the part of the railways to afford all reasonable protection to the export business of the ports which they serve. Exception must be taken to these assertions, as they wholly misrepresent the position of the railways upon a matter which is manifestly quite as important to them as to the steamship interests. The facts are that the situation at Montreal since the opening of the present season of navigation has had constant attention and been repeatedly considered, with a view to determining what appropriate action might be taken and what changes in rates could be consistently made in order to retain to the U.S. routes and ports their equitable share of the traffic in question.

It is proper to state for your information, that when considering a proposed revision of rates on important traffic, attention must be given to the established rate relations as between various points in order that intended changes will not disturb the usual parity in rates as between such points. It is a fundamental principle in rate construction that certain different relations in charges between localities commercially competitive, as well as between charges on analogous or dependent articles, shall be maintained. Under this principle grain exercises a more extended influence than any other one commodity transported. The rate on grain from Buffalo to New York is applied as a basis for rates to other Atlantic ports and prescribes the rates from other lake ports. A certain parity must be observed as between domestic and export rates. The rate from the lake ports employed in connection with the water rates from Chicago, Duluth, etc., produces

a through charge from the latter points which govern the rates which may be charged by the all-rail routes from Chicago. The latter in turn, is applied as a basis for rates from the Mississippi River, St. Louis and points throughout Illinois, Indiana and Ohio to the Atlantic seaboard. It will, therefore, appear that any material reduction in the rates at and east of Buffalo on export grain would, at once, create new rail-and-water rates from Chicago and enforce a revision in the rate of the all-rail routes from the territory indicated. If such changes were made with respect to export grain, the rates on domestic grain may become involved and require adjustment in order to retain the normal parity.

The relation as between the rates on grain and dependent commodities must also receive attention. Established custom, as well as certain legal requirements, makes necessary the observance of definite relations as between the rates on grain and grain products. The rates on flour from Buffalo, St. Louis, Chicago and Minneapolis are arranged with regard to the grain rates therefrom. Rates on cereals from Ohio and Indiana points are dependent upon the grain and grain products rates from Chicago. Minneapolis and other north-western milling points find their flour rates to the seaboard based upon the flour rates from Chicago and Duluth, each of the latter being established with regard to the grain rate from Chicago. The foregoing is a brief recital of the ramifications of the grain rate structure and its influences, with most of which your interests are no doubt quite familiar. All may be summarized by the statement that a material change in the rates on export grain from Buffalo to New York will necessitate reductions in the rates on all export shipments of grain, flour and other articles which are governed by these rates, and such changes would affect the extended territory indicated herein throughout which this traffic originates. The rates on domestic traffic would be similarly involved. Formerly the at and east export grain rates from Buffalo were from time to time changed independently of other rates. The necessity of observance of regulative requirements and the prevention of possible discriminatory conditions with respect to the relation in charges as between various localities, as well as between competitive commodities, renders necessary a closer adherence to the application of the principles of rate construction described herein.

The competition of the Montreal routes as ascertained and understood by the railways is as follows: Under normal conditions the rates from Georgian Bay ports to Montreal on export traffic bear a specified relation to the rates charged from Buffalo to the Atlantic ports. These, combined with the charges for lake transportation from Chicago, Duluth, etc., produce certain through rates to Montreal and New York, which approximate a recognized relation in the through rates to those ports. This season these normal conditions have been disturbed by the low rates charged by the all-water routes operating from Chicago, Duluth and Fort William to Montreal. This service has been greatly increased, competition has been keen, and the rates have been demoralized. The charge of 3½c. a bushel from western lake ports to Montreal is quite out of proportion to the rates these carriers would receive when engaged in the service from Chicago, Duluth, or Fort William to the Georgian Bay ports, and about half the rate which ordinarily prevails for the through water and rail service from Chicago via the Georgian Bay ports to Montreal. The general depression in lake traffic has diverted independently operated lake vessels from their customary service between upper lake ports to the longer routes to points of trans-shipment on the St. Lawrence or to Montreal direct. With the expected in-

creased fall movement of grain, many of these vessels will find it more profitable to confine their service to and from Chicago, Duluth, and Fort William and Georgian Bay ports.

The rail lines operating from Georgian Bay ports to Montreal have not shared in the business since the introduction of low all-water rates. They are suffering from this competition, as well as competition on westbound traffic, which is being carried by the water routes in greater quantities than heretofore and at exceedingly low rates. Both kinds of competition are seriously felt by the U.S. routes. The lake and rail routes via Georgian Bay ports having been obliged to retire from the grain business, are arranging their rates in anticipation of an increased movement of the new crop, and have announced that, effective Aug. 28, their rates on wheat will be 5½c. a bushel from Georgian Bay ports to Montreal. It is ascertained that there is no increase in the regular ocean fleet operating from Montreal because of this increased movement of grain to be exported, the usual fleet carrying all the grain offering and at lower charges than were in effect at the same time last year. There have been two or three sailings from Montreal by tramp vessels, but this is not regarded as unusual. The tonnage of wheat exported for May, June and July, 1907 and 1908, from the various ports is as follows:

	1907 Bush.	1908 Bush.
New York.....	5,843,244	3,248,035
Philadelphia.....	1,590,086	2,557,225
Baltimore.....	412,000	2,486,799
Boston.....	562,186	434,207
	8,407,516	8,726,266
Montreal.....	7,767,045	10,891,303
Total.....	16,174,561	19,617,569

The foregoing shows that the increase of exports via Montreal was equivalent to the total increase. It is also noted that the U.S. ports, as a whole, have not lost traffic—the decline at New York and Boston being more than equalled by the increases at Philadelphia and Baltimore.

The direct matters to be determined by the railways in this connection are as follows: Shall they reduce their present reasonable and lawfully related rates on export grain to meet the competition of all-water routes to Montreal, which are uncontrolled by any regulative authority, at liberty to charge what they please, and prepare to carry grain traffic at little or no profit, in order to secure return cargoes which offer some slight margin of profit? Would a reduction in such rates under all the circumstances divert a substantial quantity of traffic to the Lake Erie gateways? Is a reduction justified in view of the influence of the export grain rate upon the rates of other important traffic? As a result of the very thorough consideration which has been given the entire matter, the interested railways do not find that the conditions justify a reduction in the export grain rates at this time. The principal controlling reasons leading to this conclusion may be stated as follows: A reduction in the rates east of Buffalo necessary to equalize the rates of the competitive all-water routes leading to Montreal would result in rates wholly unremunerative. The railways are without evidence or assurance that a reduction to the extent proposed will result in an increased movement through the Lake Erie gateways. That such a reduction would not add to the volume of this traffic is in accordance with the views of representatives of the New York Produce Exchange, expressed at a recent conference with the officers of the railroads, when it was stated that no assurance in this connection could be given, but it was assumed that somewhat lower rates, together with the more convenient business facilities at New York, would, no doubt, result in an increased tonnage through that port. The effect of the proposed reduction upon other rates and traffic, as indicated above, would result in

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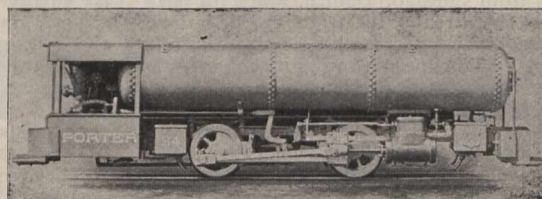
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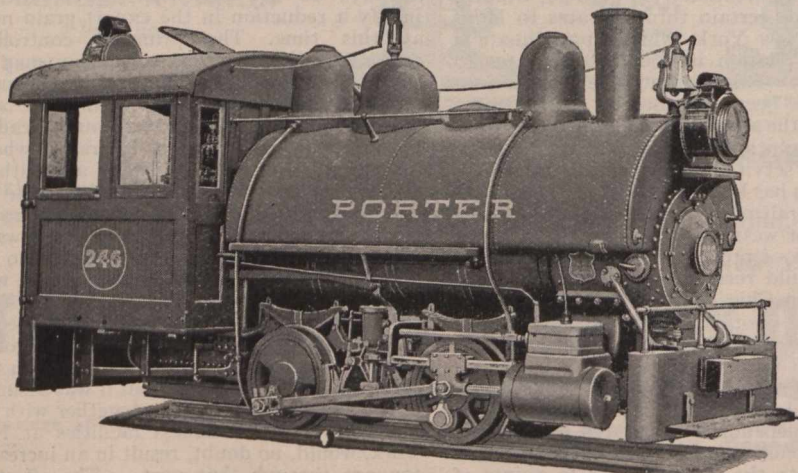
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serious loss of revenue, which could not be regained by any probable increase in export grain shipments. The conditions under which the increased movement to Montreal has taken place are regarded as abnormal and temporary, and it is believed the normal status will be resumed with the beginning of the movement of the new grain crop, when shipments by lake will be more distributed between the various lake ports and less concentrated on Montreal, and the U.S. Atlantic ports will again receive their customary quota.

The present ocean rates may be regarded as low as could be reasonably made, yet, it is observed that the rates from Montreal are lower than last year, while advances have been made from New York to foreign ports not served from Montreal. A lower inland rate to New York would afford opportunity for further advances to such points and this suggests, as has been noticed in the past, that reduced inland rates and slightly increased tonnage offerings are conducive to higher ocean rates. It would, therefore, appear that the reduction now desired is expected to be borne entirely by the railways, permitting them to be the sole benefactors in relief of the conditions complained of. The railways cannot refrain from observing that the petitions have evidently, and very naturally, had origin in the thought of self-preservation and quite overlooked the consequences to the railways, and did not emanate from the broader view of co-operative action for the joint interest of the ocean lines, railways and the U.S. ports. This leads to a further and more general observation suggested by the proposition, as well as other constantly increasing demands upon the transportation interests. There is a widespread matter-of-course belief that there are no business ailments which are not in some manner attributable to the practices or charges of the railways and they, therefore, must furnish the remedy. This, in the majority of instances, they ultimately do, either from a semi-compulsory business expediency or as a result of being haled before commission or court—the facilities for such procedure being now most convenient and inexpensive. No corresponding tribunal is available to the carriers for relief from any affliction which may befall them. They are confronted with innumerable demands for cheaper transportation, and encumbered with an enormous expense to meet the regulative requirements of the various laws and commissions. These, and other newly imposed expenses, together with the great increase in cost of direct operation, have brought upon these interests an exceedingly burdensome situation.

Under existing conditions the railways feel that they must approach any proposition looking to a reduction in rates with the greatest deliberation. It has been their experience in recent years where rates were reduced to meet commercial or other emergencies, and were thereby made lower than an amount which could have been justified as reasonable, that such lower figure has come to be regarded by the shipping public as the measure of remunerative charge, and has similarly influenced the minds of regulative bodies, and it has been with the greatest difficulty that they were advanced to the former higher and entirely reasonable amount. In fact there are many instances where low rates brought about by the conditions indicated are still in effect. The railways must, therefore, proceed cautiously with these questions if they are to secure earnings commensurate with improved service and increased cost of operation.

These views are stated in order to apprise your interest of the conditions that at present confront the management of the railways, but should in no measure be assumed to indicate an indifference on their part to cooperate to the fullest extent with the com-

mercial and steamship interests in any reasonable undertaking which the exigencies of business may demand, looking to the preservation of the export traffic to the U.S. ports, provided this can be accomplished without impairment of existing necessary rate adjustment.

Great Northern Ry. Lines in Canada.

A railway is projected under Great Northern Ry. auspices from Browning, Mont., to the International boundary, and thence to Pincher Creek, Alta., under one of the charters in Alberta owned by G.N.R. interests. Local reports state that construction is to be started in the spring, the route to be through the South Peigan Indians' reserve, which the U.S. Government is about to throw open for settlement.

Vancouver, Victoria and Eastern Ry. and Navigation Co.—The company's new line from Cloverdale, B.C., to Blaine, Wash., and the branch from Cloverdale to Huntingdon are reported to be completed. With the completion of the Cloverdale-Blaine line the old line from New Westminster to Blaine.—New Westminster Southern Ry.—is to be abandoned by the company, and it is reported that it is to be transferred to the British Columbia Ry. for electrification. In May last we were advised that the B.C. Electric Ry. Co. had no intention of acquiring this line.

Plans have been approved for the proposed terminals at Vancouver. The work projected includes the construction of wharves on Burrard Inlet at a cost of about \$500,000. (Aug., pg. 565).

Accuracy Respecting Appointments.

The inaccuracy of information in regard to railway matters published by a great portion of the daily press is proverbial, and even some technical papers are very often not more careful. The following reproductions from a Toronto technical paper are typical examples:

"Mr. H. H. Brewer has been appointed to the position of general superintendent of the C.P.R. at Winnipeg, Man.

"Mr. W. G. Brownlee, General Superintendent of Transportation for the Grand Trunk Railway, has been Pacific Railway. Mr. Brownlee's new headquarters will be at Winnipeg."

In regard to the first paragraph above quoted, it may be mentioned that H. H. Brewer has been appointed General Superintendent of the Grand Trunk Pacific Ry., as announced in our September issue, not of the C.P.R.

The second paragraph is quoted verbatim as published by our contemporary, which evidently omitted something. W. G. Brownlee is not General Superintendent of Transportation of the G.T.R. He is General Transportation Manager. Towards the end of August press despatches said he had been appointed Assistant General Manager of the G.T. Pacific Ry. with headquarters at Winnipeg, and that he would be succeeded on the G.T.R. by L. J. Ferritor, at present in the Wabash Rd. service. Having no official advice of such changes, we made enquiries, which failed to confirm the reports, consequently we did not publish them.

The moral is that those who want to keep posted on railway appointments, as well as other transportation matters, should depend on the RAILWAY AND MARINE WORLD, on the accuracy and fullness of the information contained in which we are continually in receipt of appreciative testimony.

We go to a great deal of trouble and spend much time in verifying information before publishing, and are amply repaid for this by the dependence our readers place on the matter we provide for them.

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

Guelph and Goderich Ry.—It is reported in Stratford, Ont., that the C.P.R. has abandoned its projected route along the north side of Victoria Lake in that city, for the line to connect the G. and G. Ry., and the St. Mary's and Western Ontario Ry. The plans for the route have been approved by the Board of Railway Commissioners, and it is said that application will be made for the cancellation of the plans so that owners can proceed with the improvement of their properties.

St. Mary's and Western Ontario Ry.—The plans showing the proposed location of a spur line from the main line at the road allowance between concessions 17 and 18, Blanchard tp., to another point in that township, both points being within the town of St. Mary's, Ont., have been deposited in the Registry Office at St. Mary's. Application will be made, Oct. 3, to the Board of Railway Commissioners for permission to construct the line.

The Ontario Railway and Municipal Board issued an order, Sept. 9, validating the by-law passed by the St. Mary's Town Council to raise \$40,000 by debentures to be paid to the St. M. and W.O.R. by way of loan.

Lake Superior Division.—Traffic on the transcontinental line was suspended for several days by the burning of the 600-ft. trestle bridge near Hemlo, between White River and Schreiber, Ont., Sept. 3.

Manitoba and Northwestern Ry.—Grading operations are being carried on from Arden, Man., westerly for the purpose of improving the roadbed.

Regina Northerly.—Plans have been filed at Saskatoon, Sask., showing the revised location of this projected line for 25 miles from Saskatoon. The route as shown by the plans is from Regina northwesterly on the west side of Lost Mountain Lake, and about midway between that lake and Regina-Prince Albert branch of the Canadian Northern Ry., as far as Saskatoon. At that point the C.N.R. is closed and the new line parallels it to Prince Albert.

Bulyea Branch.—Plans have been filed at Saskatoon, Sask., showing the location of the branch line projected from Bulyea, on the company's Kirkella branch, to a junction with the projected Regina-Prince Albert line.

Weyburn-Stoughton Line.—Tracklaying was resumed, Sept. 4, on the line to connect Weyburn and Stoughton, Sask., and was expected to be completed by the end of the month. The completion of this line will give a connection between the line from Portal, connecting the Minneapolis, St. Paul and Sault Ste. Marie Ry. with Moose Jaw, and the company's Brandon-Regina line.

Moose Jaw-Lacombe Line.—A train service was put in operation, Sept. 14, on the first section of this line. The section of the line completed is from Moose Jaw to Tugaska, about 56 miles. The stations on the new line are Bellreck, Tuxford; Marquis, Keeler, Brownlee, Eyebrow, Tugaska. Track has been laid for a short distance further to Benson's pit.

Royal Collieries Spur.—A spur line is under construction from the C.P.R. at Lethbridge, Alta., northerly to the Royal collieries, 5.50 miles. It is expected that the line will be completed by Oct. 15.

Crow's Nest Pass Diversion.—Satisfactory progress is being made upon the grading for the cut-off on the Crow's Nest Pass branch in the vicinity of Macleod, Alta. The construction of the cut-off will reduce the distance between Lethbridge and Macleod by about five miles, and will give a gradient of not exceeding 1% against gradients running up to 5% on the present line. The deepest

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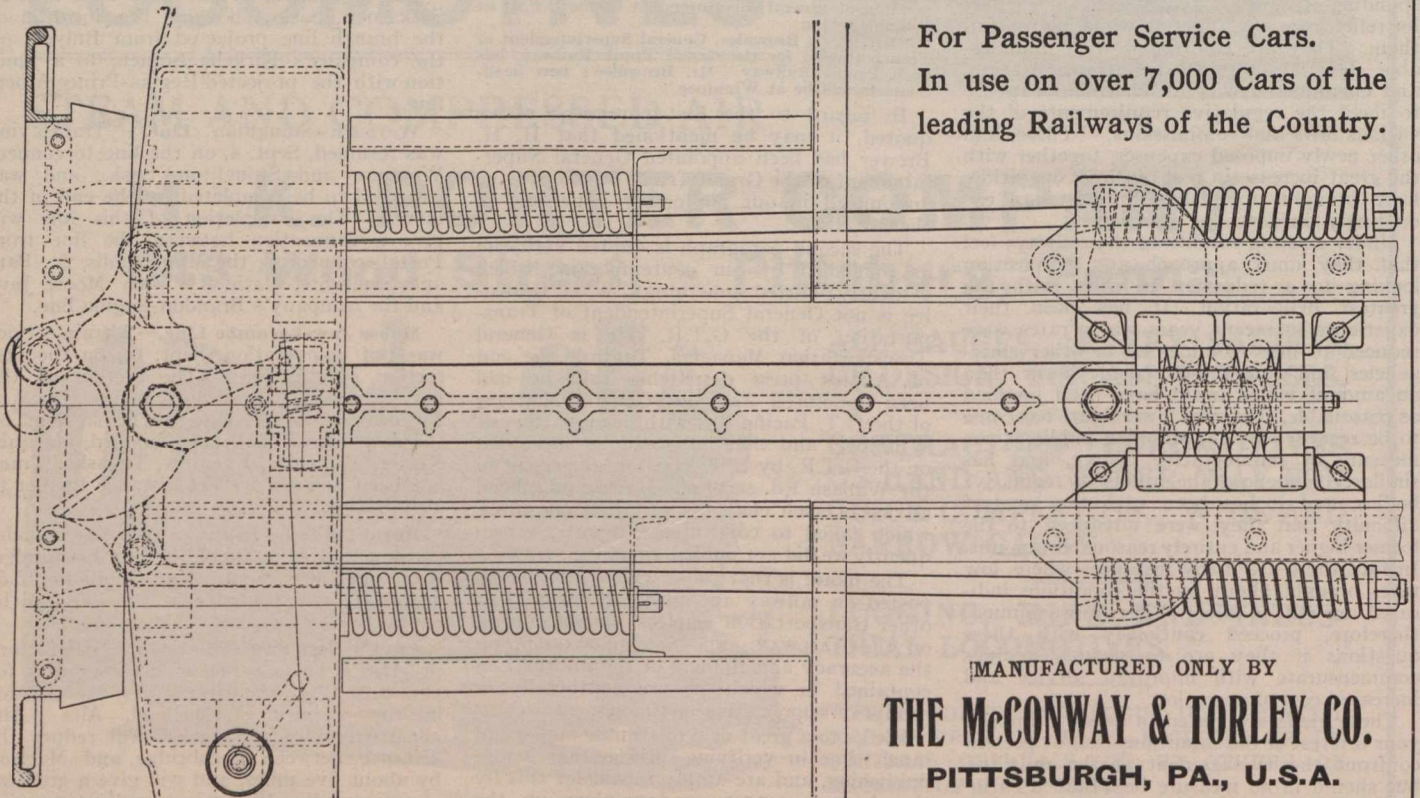
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cut on the new line is 29 ft., and at the Old Man River there is a fall of 50 ft. The contractors expect to have the grading completed and ready for tracklaying by the end of the year.

Edmonton Northerly.—Two C.P.R. survey parties have been working between Edmonton and the Peace River during the summer. One party, under —. Hyslop, worked through the Grand Prairie country towards Pine Pass and the other, under W. Pearce, worked through the Lesser Slave Lake country to the Peace River. The latter party returned to Edmonton Sept 9, having, it is understood, completed its field work.

Minneapolis, St. Paul and Sault Ste. Marie Ry.—Press reports state that surveys are being made for the construction of a line from Thief River Falls, Minn., via Killarney, and Cartwright, Man., to Brandon. (Sept., pg. 625).

Railway Rolling Stock Notes.

The Canadian Northern Ry. has ordered 2 snow-plows from the Crossen Car Mfg. Co., Cobourg, Ont.

The T. and N.O. Ry. has received two 60-ft. mail and express cars from the Preston Car and Coach Co., Preston, Ont.

The Corbett-Floesch Co., Moncton, N.B., has received one Rodger double plow distributing car from the Hart-Otis Car Co., Montreal.

The Canada Foundry Co., Toronto, between July 14 and Sept. 14, delivered 10 eight-wheeled locomotives to the G.T. Pacific Ry.

The Moncton and Buctouche Ry. has recently added 8 flat cars to its equipment. The trucks were bought from the I.C.R. and the platforms built at Buctouche, N.B.

Rhodes, Curry & Co., Ltd., Amherst, N.S., between Aug. 1 and Sept. 15 delivered 300 box cars and 6 baggage cars to the G.T. Pacific Ry., and received an order for 12 baggage cars.

The G.T.R., between May 1 and Aug. 31, received the following additions to rolling stock, apart from locomotives, details of which we have already published: 2 dining cars, 3 mail cars, and 25 first-class cars, all but the last-mentioned being built at the G.T.R. shops, Point St. Charles.

The C.P.R., between July 21 and Sept. 20, received the following additions to rolling stock: 1,032 box cars, 13 baggage cars, 9 sleeping cars, 2 colonist cars, 3 Pacific type locomotives from its Angus, Montreal, shops; 4 vans from its Farnham, Que., shops, and 5 locomotives from the Montreal Locomotive Works.

The C.P.R., between July 21 and Sept. 20, ordered the following rolling stock: 186 box cars, 25 stock cars, 52 flat cars, 3 freight refrigerator cars, 2 wing snow-plows, 2 flangers, 1 steel coal car, 1 tourist car, from its Angus, Montreal, shops; 5 vans from its Farnham, Que., shops; 2 steel ore cars, 3 Hart-Otis ballast cars, from the Dominion Car and Foundry Co., Montreal.

The names chosen for the sleeping cars are England, Ireland, Scotland, Newfoundland, New Zealand, Queensland. Further orders have been placed for 12 baggage cars, nos. 412 to 423; 5 colonist cars, nos. 3,000 to 3,004; 5 tourist cars, nos. 3,400 to 3,404; and orders for next year's delivery consist of 2,900 freight cars and 50 passenger cars, in addition to those already quoted above.

The Intercolonial Ry., between July 14 and Aug. 29, received the following additions to rolling stock: 50 box cars, 60,000 lbs. capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.; 93 box cars, 80,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S., and 53 other box cars, 60,000 lbs.

capacity; also 8 consolidation locomotives from the Canadian Locomotive Co., Kingston, Ont.; and since Aug. 29, the Canadian Locomotive Co. has delivered 4 more consolidation locomotives.

The Canadian Northern Ry., between July 15 and Sept. 15, received the following additions to rolling stock: 150 box cars from Rhodes, Curry & Co., Amherst, N.S.; 5 passenger coaches, 12 cabooses, and 10 refrigerator cars from the Crossen Car Mfg. Co., Cobourg, Ont.; one consolidation locomotive from the Canadian Locomotive Co., Kingston, Ont.; 4 consolidation locomotives and 6 ten-wheeled locomotives from the Montreal Locomotive Works, and one consolidation locomotive from the Canada Foundry Co., Toronto.

With further reference to G.T. Pacific Ry. rolling stock, a list of orders for which we gave in our Sept. issue, following is a tabulated list of the orders placed, the numbers given to each class, quantities ordered, and quantities received up to Sept. 11:

Description.	Numbers.	Nos. Ord'rd	Nos. Rec'd
Mail and express coaches.....	100 to 105	6	—
Baggage cars.....	400 to 411	12	6
2nd-class smoking and baggage coaches.....	850 to 867	18	16
2nd-class coaches.....	1,000 to 1,009	10	10
1st-class coaches.....	2,000 to 2,017	18	10
Sleeping cars.....	.....	6	6
Box cars.....	300,000 to 307,424	7,425	6,330
Flat cars.....	360,000 to 360,999	1,000	1,000
Ballast cars.....	392,000 to 392,044	45	45
Mogul passenger locomotives.....	51 to 100	50	40
Construction locomotives.....	1 to 26	37	37
Steam shovels.....	300 and 500 to 509	10	10
Miscellaneous cars.....	395,900 to 395,909	659	659

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

Ottawa Terminal Ry.—It is expected that the demolition of the old station buildings at Ottawa will be completed, and the baggage room, which is to be used as a temporary station, erected by the end of the year. Excavation operations are to be resumed early in Oct. It is expected that tenders will be asked for very shortly, the plans having been completed.

Cobourg Improvements.—E. H. Fitzhugh, Third Vice-President, accompanied by other officers, was in Cobourg, Ont., Sept. 16, looking over the improvements being carried out in connection with the car ferry docks. Good progress has been made during the summer with the dredging both outside and inside the harbor. A channel about 200 ft. wide has been dug and the dredge will continue work so long as the weather will permit. The work of fixing the breakwater and slip is to be undertaken at once. In the spring the extension of the piers will be taken in hand by the contractors, the Randolph Macdonald Co.

Omeme Station.—The Board of Railway Commissioners has made an order directing the G.T.R. to establish a station at Omeme, Ont., in accordance with an agreement made between the company and the town when the line was constructed.

Toronto Union Station.—The arbitration proceedings in connection with the Eckardt property, expropriated in connection with the projected new union station, have been completed. The award was taken by the Eckardt Co. to the Court of Appeal, but finally an agreement was reached by which the appeals were withdrawn, and the majority award of \$16,000 was accepted.

Middle Division Improvements.—The new station at Walkerville, Ont., is nearly completed. On the line between Guelph and Palmerston, Ont., it is proposed to rebuild and reinforce the present bridges, to strengthen them so as to permit the use of heavier

locomotives. It is also proposed to raise the track between the north side of the London bridge, St. Mary's, Ont., and the freight yards south of the old G.T.R. town site, thus cutting out a heavy gradient.

Port Huron Shops.—The city council of Port Huron, Mich., has granted the company a portion of Riverview St. for shop purposes. Master Car Builder Hodgson told the council that he was instructed to have erected a wood mill, 117 by 78 ft., and to add new machinery in the other shops. The additional space given by the portion of the street taken in will be used for lumber storage. (Sept., pg. 631.)

Telephone Dispatching on the C.P.R.

A trial telephone dispatching circuit was equipped on the C.P.R. between Montreal and Farnham, Que., 44 miles, and put into operation on June 23, since which time no dispatching has been done by telegraph between those points with the exception of two occasions when some of the instruments were injured by lightning. Special hard-drawn copper wires, weighing 210 lbs. a mile, were strung between Montreal and Montreal Jct.; these wires are transposed every quarter of a mile; from Montreal Jct. to Farnham, every half mile. The circuit is now being extended from Farnham to Newport, Vt., 64 miles further. It is the intention to transpose every half mile between Farnham and Newport, with the exception of a few miles where a high tension power line is paralleled. Along this portion the wires will be transposed every quarter of a mile. The double transposition insulator is not used, the two wires being usually strung on the end pins of two cross-arms, one wire above the other. Where transposition takes place an extra pin is inserted in the upper arm to carry the wire that would otherwise be on the bottom arm; the upper wire then drops to the bottom arm on the next pole. By following this method there is no part of the line where the two wires are nearer each other than seven inches and we avoid leakage across from wet weather, wet snow, etc., and also liability of crosses resulting from a transposition insulator being broken. The transposition insulator being larger than the remainder on the same pole, the small boy and others are likely to use it as an objective when throwing stones.

The telephone system has been found very satisfactory and, as above stated, the circuit is being extended from Farnham to Newport. Estimates have been prepared for two other circuits on western lines, where it will probably be introduced next year. It was at first presumed that while the telephone would likely be found very advantageous in working double track, it would not be nearly so good for single track service, but actual experience has shown that the advantages of the telephone over the telegraph are far greater for single track work than for double track.

Not only is there a very great saving of time in handling traffic, but there are many additional advantages—for instance—the dispatcher is able to call the conductor or engineer to the telephone at any station and converse with him directly about any difficulty that may have arisen. He can also get far more definite information in a much shorter time from the operators or agents regarding any matter connected with the dispatcher's department. In addition to these advantages each train can be equipped with an instrument and a jointed pole by which, in case of a train being stalled between stations, the conductor can in one or two minutes get into direct communication with the dispatcher. The trains on the Montreal-Farnham section have not yet been equipped, but they probably will be in the near future.

We are indebted to W. J. Camp, C.P.R. Electrical Engineer, for the foregoing information.

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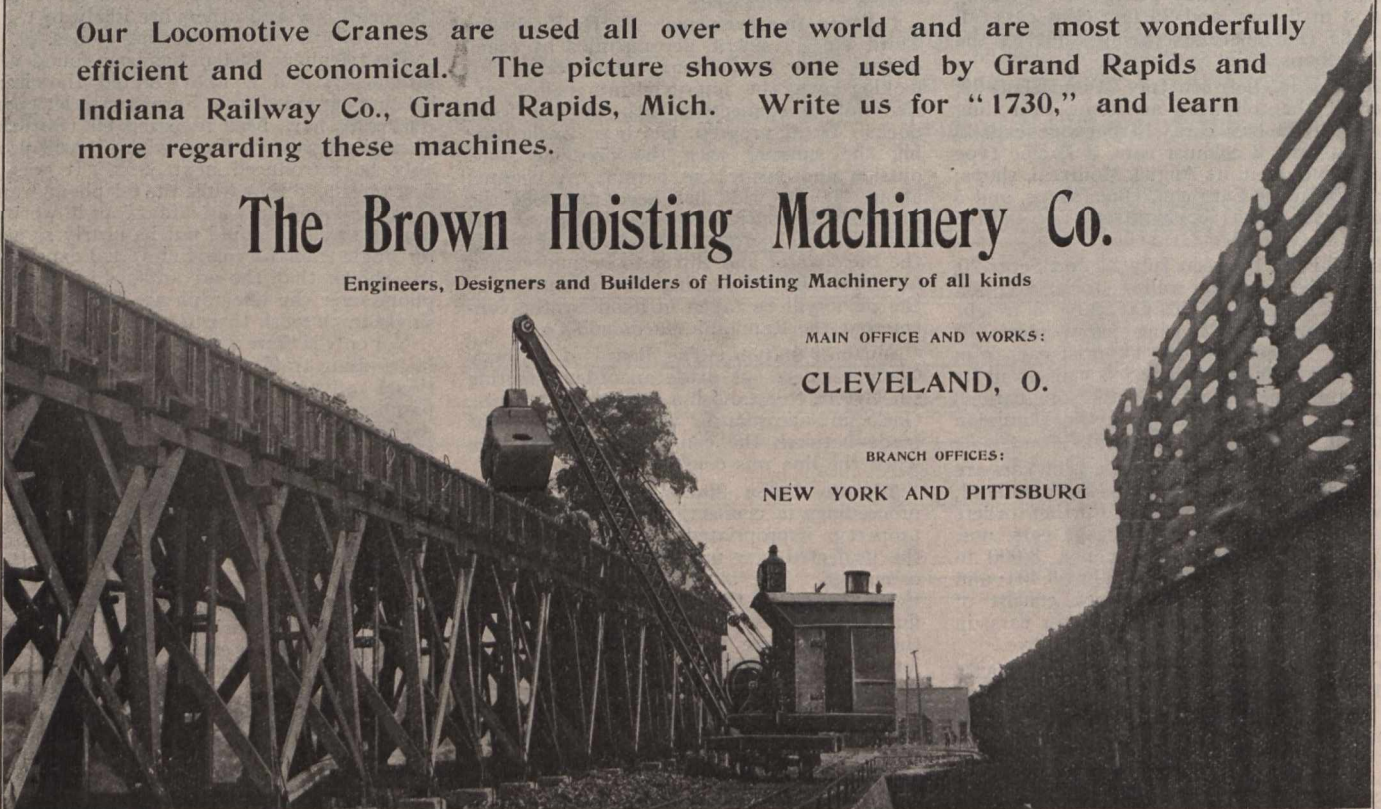
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RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Alberta North-Western Ry.—The Alberta Legislature has incorporated a company with this title to construct a railway from Edmonton to the provincial boundary at Peace River, touching Athabasca Landing, Lesser Slave Lake, Peace River Crossing, Dunvegan, or some one of them, and from Edmonton to Medicine Hat, thence southerly to the International boundary. The company's offices are at Edmonton; its capital is fixed at \$500,000; it may issue bonds to the extent of \$15,000 a mile, and enter into agreements of various kinds with other railway companies. The provisional directors are: D. MacArthur, Reaburn, Man.; E. F. Getchell, Chicago, Ill.; F. G. Foster, Medicine Hat, Alta.; N. D. Beck, E. G. Emery, Edmonton, Alta. (Mar., pg. 179.)

Alberta Oil, Coal and Wheat Ry.—In 1906 the Alberta Legislature incorporated a company with this title, to construct a railway from near Oil Creek, near the eastern boundary of British Columbia, along the valley of the creek to the Waterton Lakes, thence to the village of Pincher Creek, and then to the C.P.R. Crow's Nest Pass Line, near Pincher station, with branch lines not exceeding in any one case 40 miles in length. The capital of the company is fixed at \$1,000,000, and bonds to the extent of \$15,000 a mile of line constructed may be issued. Telephone and telegraph lines may be constructed, and the company is authorized to develop electrical power and utilize the same for its railway if desirable. The head office is at Pincher Creek, and the provisional directors are: J. E. Woods, T. Lebel, H. E. Hyde, J. H. Schofield, W. R. Dobbie, E. J. Mitchell, A. C. Kemmis, Pincher Creek, and J. J. Hentot, Trout, Alta. (Feb., pg. 97.)

Alberta Railways.—A project is being agitated in Alberta for the construction by the Provincial Government of a railway from the International boundary, northerly, at a distance of from 30 to 40 miles east of the Calgary and Edmonton Ry., to the Peace River country. The line, it is proposed, should be operated by the Government.

Alberta Southern Ry.—The Alberta Legislature has incorporated a company with this title to construct a railway from Lethbridge, through the Crow's Nest Pass to the boundary of British Columbia; from Lethbridge to Calgary, and from Macleod to a point on the Lethbridge-Calgary line, and thence easterly to Medicine Hat, with branch lines. The offices are to be at Calgary; its capital is fixed at \$500,000; it may issue bonds to the extent of \$15,000 a mile of line constructed, and may enter into agreements of various kinds with other railway companies. The provisional directors are: I. S. G. VanWart, R. J. Hutchings, A. M. Grogan, Calgary.

Alesek and Yukon Ry.—The railway which this company has been given power to construct by the Dominion Parliament will extend from the International boundary near Pleasant Camp, B.C., where the Klithini River crosses, north easterly along the Klithini, Tatsenshini, Shakwak and Alesek River valleys; northwesterly along the shores of Kluane Lake, and the Donjek and White River valleys, to the International boundary between the Yukon Territory and Alaska, between the 62nd and the 64th parallels of latitude. The provisional directors are: G. A. McDougal, J. P. Smith, Dawson, Yukon; F. Joslin, Fairbanks, Alaska; C. E. Winn-Johnson, B. L. Allan, New York City. (Feb., 1907, pg. 87.)

Calgary and Knee Hill Ry.—A company with this title was incorporated by the Alberta Legislature in 1907, to construct a railway from Calgary northerly through tps. 24 and 25 in range one, west of the fifth meridian, then northerly and easterly through tps. 26, 27 and 28 in ranges 28, 27, 26, 25 and 24, west of the fourth meridian, to or near tp. 29, range 23, west of the fourth meridian on Kneehill's Creek. The capital is fixed at \$1,000,000, and the company is authorized to issue bonds to the extent of \$20,000 a mile. It may enter into agreements for selling, leasing or operating its line with other companies, and may also construct telephone and telegraph lines. The offices are at Edmonton, and the provisional directors are: F. Aylwin, Ottawa; P. Roy, J. E. Laurencelle, Edmonton, Alta.

Chicago, Milwaukee and St. Paul Rd.—Reports from Winnipeg state that this company has secured options on a large area of property there for use as a terminal station and yards. The company is negotiating for running rights over the Duluth, Rainy Lake and Winnipeg Ry. to Fort Frances, Ont., and over the Canadian Northern Ry. between Fort Frances and Winnipeg, and if these rights are secured, it is claimed the company will be able to give a route between Chicago and Winnipeg 40 miles shorter than any existing line.

Collingwood Southern Ry.—The railway which this company has been authorized by the Dominion Parliament to construct, will extend from Collingwood, Ont., to near Baxter, on the Toronto-Sudbury branch of the C.P.R., and from near Collingwood to or near Orillia, joining the C.P.R. line there. At present the C.P.R. has no line passing through Orillia, but there is projected the Georgian Bay and Seaboard Ry., of which the C.P.R. has already constructed a section between Coldwater on the Toronto-Sudbury branch and Victoria Harbor. The provisional directors are: F. W. Bryan, H. Y. Telfer, F. W. Churchill, Collingwood, and L. A. Hamilton, Toronto. F. W. Churchill is C.P.R. ticket agent at Collingwood, and L. A. Hamilton was formerly C.P.R. Land Commissioner. (Mar., 1907, pg. 159.)

Detroit River Tunnel.—Five of the ten double tubes of the tunnel between Detroit, Mich., and Windsor, Ont., have been laid, completing one-half of the work. It is expected that two more sections of the double-tube will be placed in position before work is suspended for the year, and that the river portion of the tunnel will be completed by June, 1909. The work on the shore approaches is being rapidly pushed forward. (July, pg. 471.)

The Diamond Ry. Co., Limited, has been incorporated by the Alberta Legislature to construct a railway from the collieries in tp. 10, range 21, west of the fourth meridian, westerly to join the proposed revision of the C.P.R. Crow's Nest Pass line, in or near tp. 9 or 10, in ranges 32, 23 or 24 west of the fourth meridian. The capital is fixed at \$60,000, and the company is empowered to issue bonds to the extent of \$15,000 a mile. It is authorized to enter into agreements for the sale, lease or operation of its railways or mines with other companies. The provisional directors are: C. W. Clarke, G. F. Stephens, Winnipeg, and T. Underwood, Calgary, Alta., and the company's offices are at Calgary, Alta. (See Diamond Coal Co., Feb., 1907, pg. 87.)

Eastern British Columbia Ry.—The Corbin Coal and Coke Co. has been incorporated in Spokane, Wash., with a capital of \$1,000,000, for the purpose of developing an area of 10,880 acres of coal lands in the Crow's Nest Pass district of British Columbia. The articles of association state that

the objects of the company are not only to engage in coal mining, but to transact all kinds of business, including the construction and operation of railways, dealing in lumber, developing water and electrical powers, and in fact any enterprise which it might be desired to engage in at any time in the future. It is also proposed to apply to the Provincial Legislature, or the Dominion Parliament, or both, for acts to enable the company to carry out any of its objects, and to oppose any proceedings which may seem calculated, directly or indirectly, to prejudice the company's interests. The incorporators, who are also trustees for the company, are: D. C. Corbin, A. Corbin, A. H. Sperry, A. Wardner, Ida Roberts, G. R. Martin, Spokane, Wash.; J. K. O. Sherwood, New York City. (Sept., pg. 615.)

The Edmonton and Athabasca Ry. Co. was incorporated by the Alberta Legislature in 1907 to construct a railway from Edmonton along the north bank of the North Saskatchewan River to Lac la Biche, thence to Fort Chipewyan, on Lake Athabasca, with branches southwards from Clearwater to Fort McMurray, and the Grand Rapids of the Athabasca River. The company's offices are at Edmonton; its capital is \$500,000; it has power to issue bonds to the extent of \$15,000 a mile of line constructed, and may enter into agreements with other companies for various purposes. The provisional directors are: J. M. Robinson, Summerland, B.C.; T. J. Smith, Vancouver, B.C.; J. Bennette, T. R. Webb, and J. T. Huggard, Winnipeg, Man. (See Edmonton to Fort McMurray, Aug., 1907, pg. 577.)

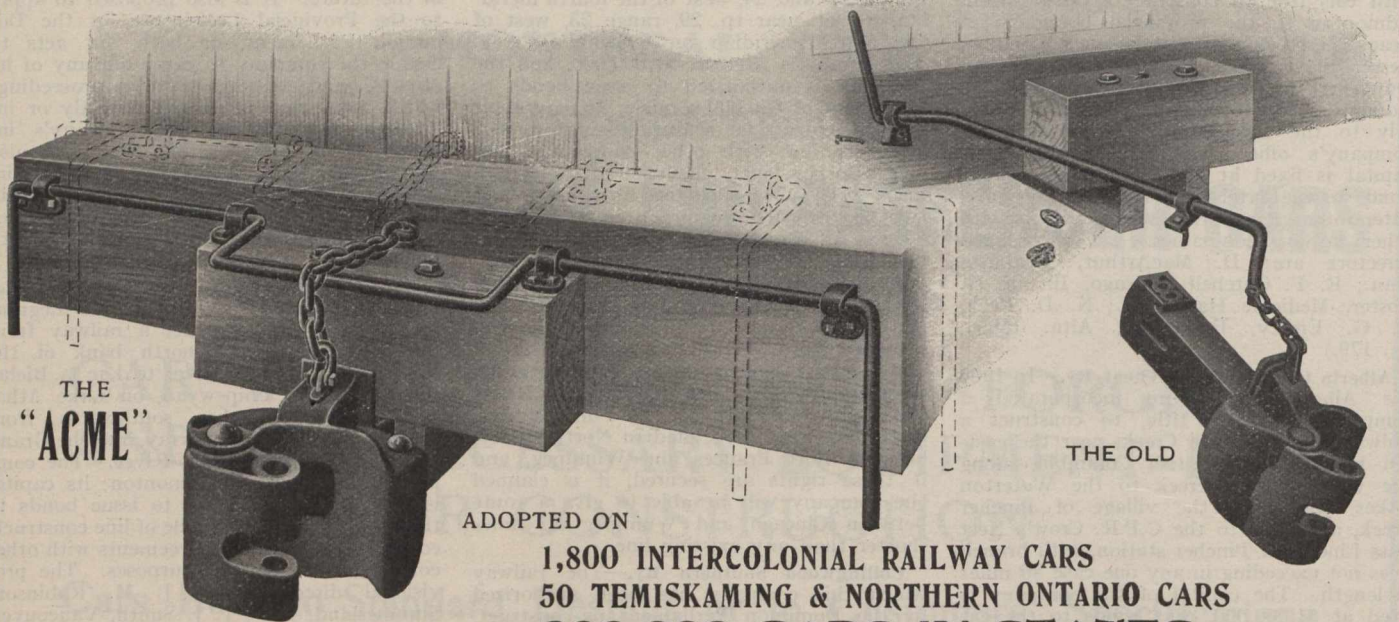
Erie, Tillsonburg and London Ry.—J. L. Thomas, C.E., London, Ont., stated Sept. 6, that an early start would be made upon the construction of this projected railway. The route, as surveyed, is from Port Burwell, on Lake Erie, through Aylmer and Belmont, to London, a distance of 35 miles. The steepest gradients on the line will be on the first eight miles from Port Burwell; the remaining distance will be practically level. The estimated cost of the line is over \$1,000,000. (Sept., pg. 615.)

Ha Ha Bay Ry.—The development of a deep water harbor, available for ocean-going steamers, at the head of the Saguenay River, has been looked forward to for years. When the Quebec and Lake St. John Ry. was extended to Chicoutimi, it was thought that a harbor might be developed there. A considerable amount of dredging was done, but it has been found impossible to secure a sufficient depth of water and suitable approaches. The Quebec Legislature passed an act authorizing the construction of a railway from Jonquieres, on the Q. and L. St. J. Ry., to St. Alphonse, on Ha Ha Bay, and subsidies in aid of its construction have been voted by the Provincial Legislature and by the Dominion Parliament. The promoters of the railway include J. G. Scott, J. E. A. Dubee and B. A. Scott, who were associated with the construction of the Q. and L. St. J. Ry., and the development of the industries in the Lake St. John country. Proposals for the construction of the line have been under consideration for some time, and it is said that a contract has been arranged. A meeting of shareholders was called to be held Sept. 2, when various matters in connection with the organization of the company, and the letting of a contract, were under consideration. (Sept., pg. 615.)

Halifax and Guysboro Ry.—Negotiations are in progress between the Nova Scotia Government and a company in which G. N. Boak, of Halifax, is interested. This railway project has been under consideration for a number of years under the various titles of the Musquodoboit Valley Ry. the

ACME RAILWAY EQUIPMENT CO.

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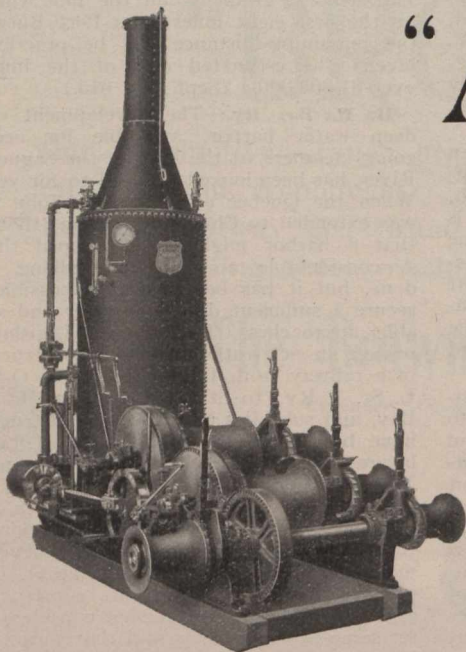
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THE OLD

ADOPTED ON

1,800 INTERCOLONIAL RAILWAY CARS
50 TEMISKAMING & NORTHERN ONTARIO CARS
300,000 CARS IN STATES

DOUBLE HANDLE CALLED FOR "Where a coupler couples by impact, but cannot be uncoupled unless the brakeman or switchman goes between, or over, or under the cars, or around the end of the train, IN ORDER TO REACH THE APPLIANCE ON THE CONNECTING CAR, such a coupling is **DEFECTIVE AND PROHIBITED BY LAW.**"—Judge McPherson, Des Moines, Iowa.



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Nova Scotia Eastern Ry., the Halifax and Northeastern Ry., and while considerable work has been done in the way of surveys, no construction has been entered upon. The Provincial Legislature has passed an act authorizing the Government to enter into a contract with any company prepared to undertake its construction, very liberal terms being offered, and the Dominion Parliament has voted subsidies upon the usual terms and conditions. Location surveys have been made for the line from Halifax to Guysboro via Cole Harbor, Lawrence-town, Chezzetcook, Musquodoboit Harbor, Meagher's Grant, Little River, and Upper Musquodoboit, a distance of 165 miles, with a branch from Country Harbor Cross Roads to Country Harbor mouth, a distance of 12 miles, and for a line from the Intercolonial Ry. near New Glasgow, via St. Mary's River, to a junction with the Halifax-Guysboro line near Melrose, a distance of about 41 miles. We were advised recently that nothing definite had come of the negotiations, and that it was impossible to say anything as to the prospects of construction. (See Halifax and Northeastern Ry., Sept., pg. 615.)

Howe Sound, Pemberton and Northern Ry.—A press despatch from Howe Sound, B.C., Sept. 13, stated that plans for this projected railway had been filed and that the promoters were negotiating for a right-of-way. Surveys made were for a line from Squamish, at the head of Howe Sound via Pemberton Meadows, to Anderson's Lake, a distance of 92 miles. Squamish is at present reached by stage from New Westminster, and Pemberton Meadows is reached through Lillooet, to which point a stage runs from Ashcroft on the C.P.R. transcontinental line. (Jan., pg. 21.)

Hudson Bay Pacific Ry.—Wharves have been under construction during the summer on Work Canal, just opposite Port Simpson, B.C., the proposed terminus of this projected line. Negotiations are reported to be in progress with the B.C. Government for the purchase of an area of about 3,000 acres of land adjoining the property now held by the company, for the purpose of laying out a townsite. The interest of Col. May in the project is reported to have been sold to a company in the U.S., and Dr. Benson recently arrived in Vancouver as its representative. (April, pg. 245.)

Intercolonial Ry.—The new station at Amherst, N.S., which, with its approaches, etc., has cost about \$50,000, was formally opened Aug. 31.

It is reported that surveys will be undertaken as soon as possible for the construction of a second track between Halifax and Moncton. The second track has been constructed for some distance out from Halifax, N.S., and is practically completed between Moncton and Painsec Junction, N.B. Surveys are being made between Moncton and Truro, N.S., with the object of ascertaining whether it would be better to abandon the present route over the Cobequid Mountains, and to construct a new line in that vicinity, or to construct a new single-track line round the mountains, retaining the present line for the less important traffic.

The Railway and Engineering Review said recently: "The Dominion Government has voted \$400,000 for the diversion of the Intercolonial Ry. from Georges River to Sydney Mines by way of Little Bras d'Or, from Sydney Mines to North Sydney by the existing line, and from North Sydney to Leitch's Creek by way of Upper North Sydney." The only votes for new construction in the vicinity of Sydney, passed last session of the Dominion Parliament, were \$25,000 for a diversion of the line Sydney Mines to River George, and \$2,437.50 on account of the extension from North

Sydney to Sydney Mines, 2.7 miles, which the Minister of Railways stated April 27 had then cost \$136,479.02, with \$9,015 of claims in process of settlement. The line at present runs along the Little Bras d'Or Lake from the Grand Narrows, 46.15 miles from Point Tupper to Sydney, and includes, among others, the following stations: Georges River, mileage 74.84; North Sydney Jct., mileage 78.64; Leitch's Creek, mileage 81.07; Jefferson's, mileage 85.58; Sydney, mileage 91.48. Parliament did, however, vote a subsidy on the usual terms for the construction of a line from St. Peters, via the south shore of Bras d'Or Lake to Sydney, not exceeding 60 miles, which subsidy is available for any company having a charter covering the distance. Such a charter is held by the Cape Breton Ry., at present operating a line from Point Tupper to St. Peters. (Sept., pg. 615.)

The Kneehill Ry. Co. was incorporated by the Alberta Legislature in 1907 to construct a railway from sec. 13, tp. 29, range 23, west of the fourth meridian, to either tps. 28, 29 or 30, ranges 23, 24, 25 west of the fourth meridian, and "to join, tap or cross any railway that may be constructed through or to the said townships or any of them." The company has a capital of \$500,000, and is authorized to issue bonds to the amount of \$15,000 a mile. It is given power for the purposes of its undertaking to construct a telephone and a telegraph line, and to enter into agreements with other companies for various purposes. Sec. 68 of the Provincial Railway Act, it is provided, shall not apply to the company's railway until some other railway is constructed through or to any of the townships named. The company's offices are at Calgary, and its provisional directors are: C. McPherson, Carbon, Alta.; A. J. McArthur, N. J. Christie, E. McBride, Calgary, Alta.; C. Hiebert, T. Gaddes, A. C. Walsh, Didsbury, Alta.; E. C. Morris, Indianapolis, Ind.; A. Finlayson, Bottineau, N.D. (Feb., 1907, pg. 89.)

The Kootenay, Alberta and Athabasca Ry. Co. was incorporated by the Alberta Legislature in 1907 to construct a railway from at or near the westerly boundary of Alberta in South Kootenay Pass, in tp. 1, range 1, west of the fifth meridian, thence easterly to Fishburn, thence southerly to the International boundary west of range 22, west of the fourth meridian, and then northerly through Edmonton to near Peace River crossing; and from at or near the westerly boundary of Alberta in the Crow's Nest Pass to the eastern boundary of Alberta at or near the junction of Red Deer River with the South Saskatchewan River, touching on the route, if deemed advisable, the city of Medicine Hat. The company is given power to enter into agreements with other companies; to construct telegraph and telephone lines; to issue \$1,000,000 of common stock, and bonds to the extent of \$15,000 a mile of line constructed. The company's offices are at Pincher Creek, and the provisional directors are: J. Hendry, I. B. Ferguson, A. E. Woods, G. E. MacDonald, J. R. Seymour, Jas. Jeffrey, Vancouver, B.C.

London and Port Stanley Ry.—An officer of the Pere Marquette Rd. is quoted as saying: "We intend to turn all our trade from the Western States across the lake from Toledo, Ohio, to Port Stanley, Ont. We are planning to invade the east for the carrying of all general merchandise for Western Ontario by boat from Montreal and Hamilton, as well as Buffalo and Cleveland." The carrying out of such plans as these would necessitate considerable works of betterment not only on the waterfront at Port Stanley, but also along the line to London. The L. and P.S.R. is operated under lease by

the Lake Erie and Detroit River Ry., which is the Canadian end of the Pere Marquette Rd. The L. and P.S.R. is owned practically by the city council of London, Ont. (Aug, pg. 547.)

Matane and Gaspé Ry.—An office has been opened at St. Flavie station, on the Intercolonial Ry., by the H. J. Beemer Co., contractors for the construction of this projected railway. Preliminary work has been started on the first section. The contract is reported to cover the completion of 35 miles of line with sidings. R. E. Hunter is Chief Engineer and Superintendent of construction. (Sept., pg. 617.)

Niagara Peninsular Ry.—The Ontario Legislature has incorporated a company with this title to construct a railway in the townships of Humberstone and Wainfleet, and the village of Port Colborne, Ont. The railway is projected for the purpose of conveying freight to and from the premises of the Canadian Portland Cement Co., and subsidiary companies, from the western bank of the Welland Canal in Port Colborne, westerly through the townships of Humberstone and Wainfleet, with a branch for 2.75 miles northeasterly in Humberstone tp. The provisional directors are: W. D. Matthews, M. J. Haney, R. O'C. Miller, F. G. B. Allan and T. Gibson, Toronto. The capital is \$50,000, and the company's offices are in Toronto. (Feb., 1907, pg. 89.)

Ottawa, Brockville and St. Lawrence Ry.—A call of 3% upon all the shares of the company, being a third call, was made by the directors at a meeting held Aug. 24, and was payable at the company's offices, 38 Sparks St., Ottawa, Sept. 24. (Aug., pg. 547.)

Quebec Bridge and Ry. Co.—The various arrangements in connection with the taking over of the bridge works by the Dominion Government are going forward. In the meantime the board of engineers appointed by the Government to consider plans for the reconstruction of the bridge have started work. The commission, of which H. E. Vautelet is chairman, met for the first time Aug. 31, and on Sept. 2 its members went to Quebec for the purpose of examining the wrecked bridge. They were met by E. A. Hoare, Chief Engineer of the Bridge Co., and M. P. Davis, the contractor for the substructure. The Commissioners spent nearly the whole of Sept. 3 in going over the piers making measurements, etc., and on returning to Quebec, inspected the plans of the substructure at the company's offices. Later on the Commissioners went to New York, where they had a conference with T. Cooper, the consulting engineer of the company, and then went on to Phoenixville, Pa., for a consultation with the company which had the contract for the superstructure. A press report states that the wreck of the bridge will be sold for scrap, the old plans destroyed, and the work begun entirely anew. The cost of the new structure is estimated at \$10,000,000. This is, of course, entirely conjecture, as nothing will be done until the engineers have made some recommendations, and the Government has had time to consider them. (Sept., pg. 619.)

Temiskaming and Northern Ontario Ry.—Steel was laid to 273 miles north of North Bay, Ont., Sept. 9, and it was expected that the remaining mileage to the junction with the route of the National Transcontinental Ry. will be laid early in Oct. The townsite at the junction is to be named Cochrane, and is being surveyed and laid out. An area of 1,000 acres has been reserved for the townsite, and the lots will be put in the market in Oct. There are three small lakes adjoining the site, one of which is to be reserved to provide a water supply for the new town. A train service will be put on as soon as the track is completed to the junction, so as to enable supplies to be got in for the National Trans-

THE ELECTRIC HEADLIGHT

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

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

PYLE-NATIONAL ELECTRIC HEADLIGHT CO.
MONADNOCK, CHICAGO

POLSON IRON WORKS

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Steel Shipbuilders, Engineers
— and Boilermakers —

Hydraulic and Dipper Dredges, Steel and
Composite Steamers and Yachts, Marine
and Stationary Engines and Boilers

— OFFICE AND WORKS —

ESPLANADE STREET EAST, TORONTO

continental Ry. construction work. The ballasting of the line will be taken in hand and completed in the spring.

The question of the construction of a spur line to the wharf at Haileybury is before the courts, an application having been made for an injunction to prevent the Commission constructing the spur on the route chosen. A resolution has been passed by the Haileybury Town Council approving of the route selected by the Commissioners.

An extension of the Charleton branch into James township, on the Montreal River, is being advocated, but no surveys have yet been made. (Sept., pg. 619.)

Toronto Yonge St. Bridge.—The Toronto City Engineer has been asked by the Board of Control to report as to the cost of a temporary bridge over the railway tracks at the foot of Yonge St., pending the settlement of the viaduct question. An estimate for a bridge 30 ft. wide, with room for one street car track, places the cost at \$36,000. (Oct., 1907, pg. 757.)

Vancouver and Nicola Valley Ry. Co.—The provisional directors of this company, which was incorporated at the last session of the British Columbia Legislature are: W. H. Armstrong, J. Hendry, L. A. MacKechnie, R. P. McLennan, F. R. Stewart, and F. H. Lantz, Vancouver. (April, pg 247.)

The Vermillion and Cold Lake Ry. Co. was incorporated by the Alberta Legislature in 1906, to construct a line from Vermillion, on the Canadian Northern Ry., northeasterly to the North Saskatchewan River between ranges three and five, west of the fourth meridian, thence to Frog Lake and on to Cold Lake, with a branch from Vegreville as nearly south as possible, to connect with the G.T. Pacific Ry. Power is also given to construct other branch lines where necessary, not exceeding in any one case six miles in length. The provisional directors are: A. B. Moor, R. W. Gunn, Lloydminster, Alta.; M. W. Hopkins, Saddle Lake, Alta. In the following session the company's powers were amended by Lloydminster being named as the starting point of the line, the new route being described from Lloydminster, northwesterly to its authorized line on the south side of the North Saskatchewan River.

Railway Commissioners' Traffic Orders.

5224. Aug. 25.—In the matter of the application of the Michigan Central Railroad Co., under section 29 of the Railway Act, for an order to vary or rescind order 4796, dated May 20, 1908, directing that the toll to be charged by the applicant company from or to its point of interchange with the Pere Marquette Rd., for the switching of cars delivered to the P.M.R. by the G.T.R. Co., in St. Thomas, Ont., or by the P.M.R. to the G.T.R., in St. Thomas, be \$3 per carload, so as to make the provisions of the said order harmonize with the provisions of the Board's general switching order no. 4988, dated July 8; whereas order 4796, dated May 20, 1908, provided that it should be without prejudice to variation or rescission upon the application of any of the parties interested, or upon the Board's motion if it did not harmonize with the conclusions arrived at by the Board when disposing of the general interswitching matter. The Board orders that paragraph 1 of order 4796 be amended by striking out the word "three" in the last line of the said paragraph and substituting therefor "the charges authorized and provided in paragraph 4 of the general interswitching order 4988."

TARIFF ASSOCIATIONS' POWER OF ATTORNEY.

The Secretary of the Board issued the following circular Sept. 10:

Referring to order 5117, covering power of

attorney for tariff associations. In view of the question that has arisen as to whom the powers of attorney for tariff bureaux, etc., should be signed by, it has been decided that the same officers as were specified in the order re the official classification are the proper persons, and the last part of the order should read as follows:

The.....
(Name of carrier)
By.....
(Its — President)
Attest:.....
(Secretary).

Order 5117 was published in our Sept. issue.

October Birthdays.

Many happy returns of the day to R. C. F. Alexander, Resident Engineer C.P.R., Farnham, Que., born at Guelph, Ont., Oct. 20, 1875.

R. A. Burford, cashier C.P.R. ticket office, New York City, born at Brooklyn, N.Y., Oct. 4, 1878.

G. E. Burns, Freight Claims Agent C.P.R. Eastern Lines, born at St. Thomas, Ont., Oct. 6, 1863.

T. C. Burgess, Commercial Agent G.T.R., Minneapolis, Minn., born at New York City, Oct. 2, 1853.

F. F. Busted, General Superintendent Pacific Division C.P.R., Vancouver, B.C., born at Battery Point, Que., Oct. 10, 1858.

C. E. Cartwright, Division Engineer C.P.R., Vancouver, B.C., born at Toronto, Ont., Oct. 13, 1864.

G. L. Courtney, ex-General Agent C.P.R., Victoria, B.C., born at Chatham, Ont., Oct. 7, 1868.

W. D. Cunneyworth, Freight and Passenger Agent Temiskaming and Northern Ontario Ry., born at Bronte, Ont., Oct. 22, 1865.

L. V. Druce, Commercial Agent G.T.R., Seattle, Wash., born at London, Eng., Oct. 20, 1873.

J. Earls, ex-Secretary and Treasurer Canadian Freight Association at Toronto, Ont., born in Ireland, Oct. 30, 1838.

A. H. Harris, C.P.R. Special Traffic Representative, Montreal, Que., born in Devonshire, Eng., Oct. 15, 1855.

B. W. Greer, ex-General Freight Agent C.P.R., Vancouver, B.C., born at Aldboro, Ont., Oct. 4, 1867.

W. S. Rollo, joint agent G.T.R. and Central Vermont Ry., St. John's Que., born at Dundee, Scotland, Oct. 8, 1852.

J. W. N. Johnstone, General Passenger Agent Reid Newfoundland Co., St. John's, Nfld., born at Campobello, N.B., Oct. 4, 1878.

W. M. Kirkpatrick, General Freight Agent Ontario Division through traffic, C.P.R., Toronto, born at Kingston, Ont., Oct. 8, 1874.

W. B. Lanigan, Assistant Freight Traffic Manager C.P.R., Winnipeg, born at Three Rivers, Que., Oct. 12, 1861.

J. W. Leonard, General Manager C.P.R. Eastern Lines, Montreal, born at Epsom, Ont., Oct., 1858.

W. T. Marlow, Import Freight Agent C.P.R., Montreal, born at Limerick, Ireland, Oct. 25, 1872.

R. Marpole, General Executive Assistant C.P.R., Vancouver, B.C., born in Montgomeryshire, Wales, Oct. 9, 1850.

F. G. Martyn, Assistant Superintendent C.P.R., London, Ont., born at Bury, Que., Oct. 7, 1848.

H. Paton, President Shedden Forwarding Co., director Bell Telephone Co., Montreal, born at Johnstown, Renfrew, Scotland, Oct. 5, 1852.

D. Pottinger, General Manager Canadian Government Rys., Moncton, N.B., born at Pictou, N.S., Oct. 7, 1843.

N. L. Rand, Master Mechanic I.C.R., Moncton, N.B., born at Shediac, N.B., Oct. 28, 1843.

G. B. Reeve, ex-Second Vice-President and General Manager G.T.R., La Mirada, Cal., born in Surrey, Eng., Oct. 23, 1840.

Sir Thomas G. Shaughnessy, President C.P.R., Montreal, born at Milwaukee, Wis., Oct. 6, 1853.

C. W. Spencer, ex-General Manager Mackenzie, Mann & Co.'s Railway Lines east of Port Arthur, Montreal, born at Kemptville, Ont., Oct. 31, 1857.

W. S. Taylor, ex-Treasurer C.P.R., born at Dornoch, Sutherlandshire, Scotland, Oct. 18, 1839.

L. H. Wheaton, Engineer Maintenance of Way and Structures, Halifax and Southwestern Ry., Bridgewater, N.S., born at Sackville, N.B., Oct. 5, 1866.

Index to The Railway and Marine World.

A complete index to the matter contained in the RAILWAY AND MARINE WORLD for 1908, Jan. to Dec. both inclusive, is in course of preparation, and will be printed and ready for distribution early in Jan., 1909. The index for 1907, issued in Jan. last, met with much favor, and we have no doubt the one for the current year will be equally appreciated. A large portion of the matter we publish from month to month is of great permanent value for reference, and of course this value is much enhanced by a complete classified index. We were much gratified when we issued our index for 1907 to find that a large number of subscribers file and bind the paper.

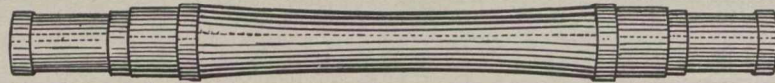
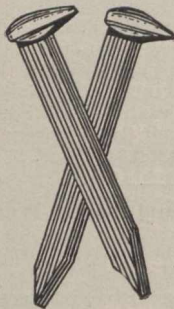
It is not the intention to make a general distribution of the current year's index, but a copy will be sent to each subscriber who desires one, and who will notify us to that effect. A letter or post card, simply stating that the index is desired, and giving the subscriber's name and address, will be sufficient. Early application is requested, and subscribers who wish a copy are asked to write us at once. "Do it now." The number of copies to be printed will be governed by the number of applications received.

A Western Railway Map.

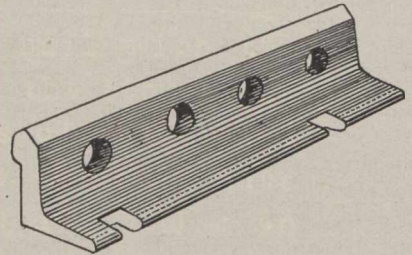
The Stovel Co., Winnipeg, has issued a railway commercial routing and shippers' map of Western Canada, which is undoubtedly the best and most complete map of the railway systems west of Port Arthur that has been got out. The map, covering the territory from Port Arthur to the Rocky Mountains, is 80 by 26 inches, and shows in clear, legible, uniform black lettering on a white background, every railway station from Lake Superior to the Rockies, with the principal cities, towns and divisional points well displayed. Another and smaller map covers British Columbia, and can be mounted with the larger one. The most valuable feature of the maps is that each railway system is shown in a separate color, so that a reference to the map not only locates any given place, but at the same time tells on what railway it is located, thus avoiding searching for railway names. In addition to this each division or branch line is plainly indicated by its local name. A well-arranged index gives every town on the map, and shows at a glance whether it is a post office, public telegraph office, prepaid freight station, prepaid express office or one from which money orders are issued. The maps are of great value to transportation officials and to shippers and business men generally.

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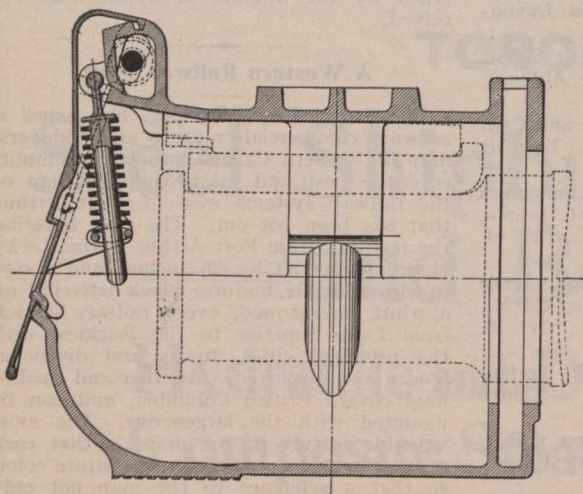
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ANGLE BARS AND
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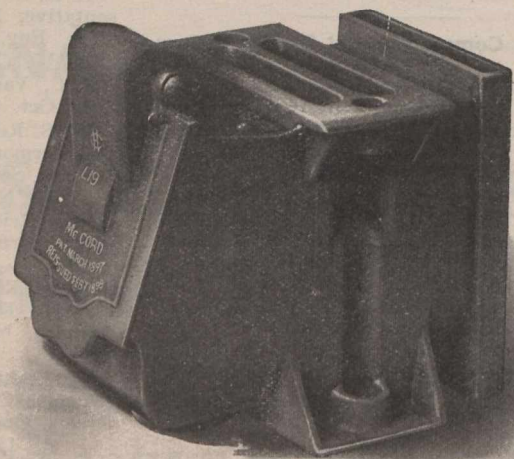
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New Brunswick Tan Bark Rates.

In our last issue we gave the Board of Railway Commissioners' order 5119, dismissing the complaint of F. A. Cutting against the C.P.R. The order was based on the report of the Chief Traffic Officer, J. Hardwell, which on account of its importance we now give in full as follows:

F. A. Cutting, of Boston, Mass., a dealer in tan bark on an extensive scale, presented his own case at the hearing at Ottawa, Mar. 12, 1908, in a complaint that while the C.P.R. carries tan bark to Boston and other New England points at lumber rates from points in Quebec and Ontario, it charges higher than lumber rates from points in New Brunswick. The company received permission to file a written answer, which it did on April 16, and the applicant's reply was filed May 12. The statement that lumber rates are applied on bark from the company's stations in Quebec and Ontario to Boston, etc., is correct, and was admitted. There was some confusion of dates at the hearing; but so far back as the records of the Commission go, taking Bristol, the only C.P.R. station where the applicant has any bark for shipment, as an illustrative point, the rates from New Brunswick points, on the C.P.R. Atlantic Division, have been as follows, viz.:

From May 21, 1904, to May 11, 1906, bark 17½c., or 4½c. higher than lumber.

From May 12, 1906, to July 27, 1906, bark 15c., or 2c. higher than lumber.

From July 28, 1906, to Mar. 3, 1907, bark 13c., or the same as lumber.

From Mar. 4, 1907, to date, bark 15c., or 2c. higher than lumber.

Mr. Carvell, K.C., appeared for J. D. Dickinson & Sons, tanners of Woodstock, N.B. Aside from any small local firms, this firm shares the tanning industry of New Brunswick with Peters & Sons, of St. John. What was then the largest tannery in the province, the Hyman tannery of Benton, was closed a few years ago at a time when the bark rate was higher than the lumber rate. Although Mr. Cutting did not claim to represent them, he insisted that his case was that of the bark producers also, whose interest it was that they should not be confined to the provincial market. It was admitted that the supply of bark in New Brunswick is running short, and that in 15 or 20 years it will be exhausted. Mr. Carvell contended, and so does the C.P.R. in its written answer, that a lower rate than the present to New England points would divert the bark from the provincial tanners, who, it was stated, are willing to pay the market prices, but would be unable to continue their operations without a continuous supply. Mr. Cutting stated that the C.P.R.'s Fourth Vice-President had told him that the higher rate to New England was charged on bark for the purpose of protecting the tanner, and that if the difference was not sufficient he would protect him still further.

Broadly stated, the complainant's contention is that the company is guilty of discrimination in charging higher than lumber rates from New Brunswick while it charges lumber rates from Quebec and Ontario; the defence is that this discrimination is not unjust, and that the reduction in the bark rates would put the New Brunswick tanners out of business.

Sec. 315 of the Railway Act, s.s. 1, provides that tolls shall always, under substantially similar circumstances and conditions, in respect of all traffic of the same description and carried in or upon the like kind of cars, passing over the same portion of the line of railway, be charged equally to all persons, and at the same rate. I do not consider that the company's tariff which is questioned is at variance with this clause of the Act in any particular.

Lumber and bark are not traffic of the same description. The applicant admits that a box car which would carry 60,000 lbs. of lumber, could not contain over 30,000 lbs. of bark. The two commodities are put to totally different uses and the prices are not similarly based.

The two commodities are not usually carried in the like kind of cars. Box cars are preferred and are principally used for the carriage of lumber; and these are generally available, when released, for reloading home or elsewhere. Bark, on the contrary, is so light compared with bulk, that it has to be loaded high on racked open cars, which, as a rule, can be loaded one way only. Mr. Cutting has a considerable number of private cars fitted with permanent racks which have to be returned light in all cases, and on which the railway companies pay him mileage.

Shipments from New Brunswick and Quebec (or Ontario) do not pass over the same portion of the company's railway.

Sub-section 4 of the same section of the Act provides that no toll shall be charged which discriminates between different localities. It is on this provision that the applicant rests his case. It does not seem to me that because lumber and bark are carried at the same rates to New England points from Quebec and Ontario, that the principle is sound, or that it should necessarily be uniform throughout widely separated territories. The true standard of relativeness is the classification, which makes a distinction between bark and lumber, the former being in the 7th, the latter in the 10th class. The bark shippers of New Brunswick and Quebec may be competing in the same New England markets; but it must be the amount of the rate in itself that interests them, not as it compares with that on lumber or lath or shingles. The bark rates from the C.P.R. line between McAdam Jct. and Edmundston, where the bark shipments are made, to Boston, run from 12½ to 13¾c.; those from the company's lines in Quebec south of the St. Lawrence from 12½ to 14c. per 100 lbs. The distance from Newport, Vt., where the C.P.R. Quebec lines connect with the U.S. system, to Boston, is 251 miles; from Vanceboro, Me., the junction between the New Brunswick and U.S. systems, it is 366 miles. The New Brunswick bark rates compare favorably with those from Quebec, notwithstanding that they are not lumber rates. If the New Brunswick rates were equalized by levelling up the lumber rates, instead of levelling down the bark rates, the applicant's objection would, inferentially, be removed. The C.P.R. in the St. John Valley runs near and approximately parallel to the International boundary, and on the other side of the boundary, the Bangor and Aroostook Rd. also charges higher rates on bark than on lumber to the Boston market, and Mr. Cutting ships from this B. and A. territory, yet he has no fault to find with that company, for the reason that it has no other section on which it charges the same rates on bark as on lumber. As there is no duty on bark going into the U.S., it seems to me that the adjoining shipping territories of Maine and New Brunswick are more analogous than are the widely separated provinces of New Brunswick and Quebec, with the State of Maine between them.

As to the reasonableness of the present bark rates from New Brunswick; for at least two years down to May, 1906, they were 4½c. over the lumber rates; they are now 2c. higher. They were the same as lumber for about seven months, the reduction, according to the evidence, having been made to help clear away some accumulations of bark following the close of the Hyman tannery at Boston. The applicant admitted that he had bought New Brunswick bark when the rate was on the higher basis (and it is to be

assumed that he would not have done so unless he saw a profit), and had shipped when the rate was low, but he did not buy when the rate was low. The 250 cords which he still has at Bristol were what was left when the rate went back from 13 to 15c. from that point.

The C.P.R. proportion to Vanceboro, Me., of the through rate from Bristol to Boston is lower than the local rates from the same distance to the Woodstock or St. John tanneries and against these there is no complaint. It is 6½c. to Vanceboro, as against 8½c. to Woodstock or St. John. If the lumber rate were applied the proportion to Vanceboro would be further reduced to 5½c. The joint rate from Bristol to Boston, 450 miles, is only two-thirds of a cent per ton per mile for division between three companies—a not unreasonable rate for this distance over the rails of a single company.

I cannot find that by the conditions complained of the applicant is subjected to any undue or unreasonable prejudice or disadvantage.

A Railway to Hudson Bay.

Speaking at Niagara Falls, Ont., Sept. 16, Sir Wilfrid Laurier said the Dominion Government had undertaken the construction of another railway—the Hudson Bay railway. It was a line that concerned principally the people of the west, but he hoped the people of Ontario would agree with him that what concerned one portion of the community concerned every part of it. He then proceeded: "We have provided that this railway is to be constructed out of the price of land which is set apart for this very purpose. We have come to the conclusion that this railway is a necessity, owing to the conditions in which our fellow-citizens in the west are placed. It will give them an alternative or optional route. At present all the wheat as soon as it is tracked is sent over to Lake Superior. We want to provide another railway by Hudson's Bay. There will then be the present route and the Hudson Bay route, and the man who raises wheat and cattle will have two outlets for his production. We have been asked: 'Are you not going to hurt the trade of the St. Lawrence if you do that?' Oh, ye of little faith, the trade of Canada is too great even for these two outlets. What we see coming will be more than sufficient for both the St. Lawrence and the Hudson Bay routes. We have come to the conclusion that the time to build it is now; not to-morrow, but now, and now we have surveyors in the field looking at the condition of the country—and preparing plans for us, which we shall be prepared to put into execution as soon as we receive them. The Government will build the railway, or rather somebody will be entrusted with the building, but whatever we do all the terminals and all the elevators shall be built by the Government and retained under all circumstances by the Government, so as to insure the largest measure of benefit possible to the Canadian people in the Northwest Provinces."

The second survey party sent out by the Dominion Government to make a survey for the route for this projected railway left Winnipeg for Sifton, Man., Sept. 1. At that point the party were to take to boats and work along the water route. Two other parties were expected to be sent out by Sept. 30. (Sept., pg. 629.)

The railway now forming part of the G.T.R. between Montreal and Rouse's Point, N.Y., was opened for traffic Aug. 26, 1851.

The old offices of the G.T.R. on St. Etienne St., Montreal, which have been unoccupied for the past six years, are to be torn down and the ground cleared.

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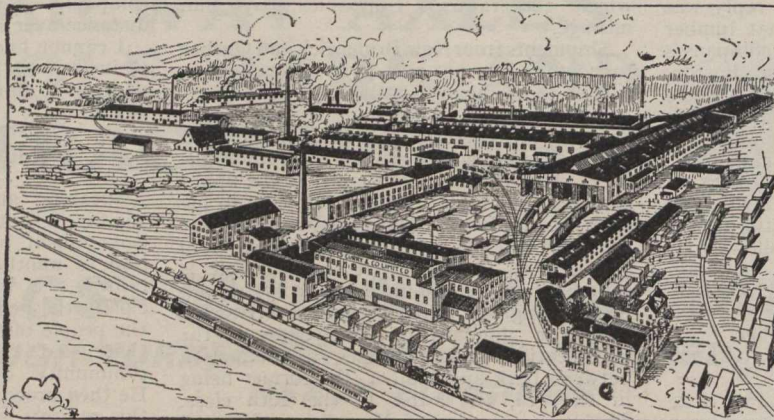
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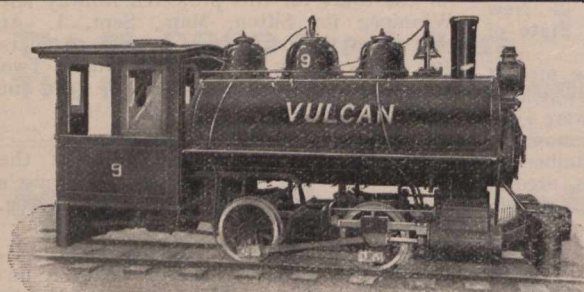
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MAINLY ABOUT PEOPLE.

T. O'Brien, K.C., of Golden, B.C., who died at Spokane, Wash., Sept. 4, was local solicitor for the C.P.R.

Mrs. Kelliher, wife of B. B. Kelliher, Chief Engineer G.T. Pacific Ry., died somewhat suddenly at Montreal, Sept. 1.

H. Roy, a draughtsman in the engineering offices of the Transcontinental Railway Commission, Ottawa, died there Sept. 1.

Lady Shaughnessy sailed on the Empress of Ireland, Sept. 18, for England, with two of her daughters, returning to school there.

Miss K. Mackenzie, daughter of W. Mackenzie, President Canadian Northern Ry., was married at Toronto Sept. 23 to W. W. Beardmore.

W. C. Matheson, C.E., of the Canadian Northern Quebec Ry., was married in Montreal August 29 to Miss C. W. Rowe of Lucan, Ont.

A. H. Harris, Special Traffic Representative C.P.R., was a passenger on the s.s. Empress of Ireland, which sailed from Quebec Sept. 18.

Sir Thomas and Miss Shaughnessy, Sir H. Montagu Allan, with Lady Allan, attended the Ontario Jockey Club meeting at Toronto at the end of September.

R. Marpole, General Executive Assistant C.P.R., and Mrs. Marpole, have returned to Vancouver, B.C., from a three months' holiday trip to Great Britain.

The marriage of Miss A. Tiffin, daughter of E. Tiffin, General Traffic Manager I.C.R., to E. Schleuter, Preston Springs, Ont., took place in Montreal Sept. 9.

E. Dent, President, and A. Bremner, director, Quebec Central Ry., who have been visiting Canada, returned to England, Sept. 18, on the C.P.R. Empress of Ireland.

Lord Strathcona, who was to have sailed from Liverpool, Eng., for Canada, Sept. 9, was compelled to cancel the visit, having been ordered a period of rest by his physician.

Lady Van Horne and Miss Van Horne are not expected to return to Montreal from Sir Wm. Van Horne's summer residence at St. Andrew's, N.B., until the end of Oct.

W. A. Quibell, stipendiary magistrate at Winnipeg for the territory through which the National Transcontinental Ry. passes, was married there, Sept. 16, to Miss B. McWain.

J. Fenwick, foreman blacksmith C.P.R. locomotive shops Montreal, died Sept. 17. He was for a time in the G.T.R. employ, leaving it to engage with the C.P.R. in 1883.

Guy Tombs, General Freight and Passenger Agent Canadian Northern Quebec Ry., returned to Montreal, Sept. 1, from a month's trip over the railways in Western Canada.

Mrs. MacTier, wife of A. D. MacTier, Assistant to the Vice-President C.P.R., who, accompanied by her family, spent the summer in Great Britain, returned to Montreal Sept. 10.

Wm. Harty, son of Hon. W. Harty, M.P., President of the Canadian Locomotive Co., Kingston, Ont., was married at Toronto, Sept. 3, to Miss Evelyn Kerr, daughter of Senator Kerr.

A. Piers, Manager C.P.R. Steamships, accompanied by Mrs. and Miss Piers, sailed by the s.s. Empress of Britain Sept. 4 for Liverpool, Eng., where he has leased a house and will reside in future.

Jas. Somerville, Second Vice-President International Association of Machinists, Ottawa, was fined \$3 and costs for applying the term "scab" to a machinist named Caldwell in the employ of the C.P.R.

Joseph Wallace, who died at Red Deer, Alta., recently, retired from active service

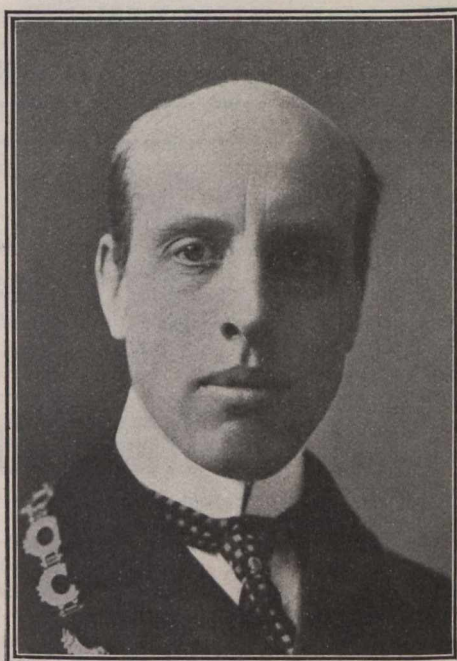
in 1907, after having been connected with the old Great Western Ry., and its successor the G.T.R., for about 35 years.

E. A. Lancey, chief clerk to the C.P.R. Freight Traffic Manager, Montreal, was presented recently with a silver tea service and leather suit case, by the office staff, on the occasion of his marriage on Sept. 16.

F. Barlow Cumberland, of Port Hope, Ont., Vice-President Niagara Navigation Co., was re-elected President of the Ontario Historical Society at the annual meetings, which closed at London, Ont., Sept. 11.

A warrant has been issued for the arrest of John Hyde, chief clerk in the Roadmaster's Department of the Toronto, Hamilton and Buffalo Ry., on a charge of defrauding the company by means of stuffed pay sheets.

The engagement is announced of H. A. K. Drury, Assistant Engineer Board of Rail-



D'ARCY SCOTT

Assistant Chief Railway Commissioner for Canada.

way Commissioners, Winnipeg, to Miss Helen Richardson, daughter of Archdeacon Richardson. The marriage is to take place next spring.

Josiah Holmes, who died recently at St. Catharines, Ont., aged 90, was father of W. H. Holmes, now of Truro, N.S., the inventor of the corridor railway carriage now in general use in Great Britain and on the continent of Europe.

A. Milton, chief accountant of the Paymaster's Office, C.P.R., Winnipeg, was killed by being run over by a train at Eagle River, Ont., while paying section men recently. Two of the section men were also killed at the same time.

V. Pelletier was presented with a gold watch by the passenger staff of the Intercolonial Ry at Montreal, on his leaving the service to take up his duties as aide-de-camp to his uncle, the newly appointed Lieut.-Governor of Quebec.

T. Lowry, President Minneapolis, St. Paul and Sault Ste. Marie Ry., has been seriously ill with a complication of diseases, at his Minneapolis, Minn., residence, and for some time his life was despaired of. He is reported to be recovering.

Mrs. Maharg, wife of C. S. Maharg, Superintendent C.P.R. at Saskatoon, Sask.,

died there Sept. 12. She had been ailing for some time, and had only returned home from a trip to California shortly before her death. She was buried in Toronto.

E. Dent, President, and A. Bremner, a director of the Quebec Central Ry., arrived in Quebec from London, Eng., Aug. 30, for the purpose of inspecting that company's railway, and consulting with the Vice-President, F. Grundy, and the officials.

D. O. Ives, on retiring from the position of General Traffic Manager Wabash Rd recently, was presented with a silver service by the staff, and entertained at dinner by the principal traffic officials of the line at the Mercantile Club, St. Louis, Mo., Aug. 29.

O. O. Winter, who has retired from the position of General Superintendent G.T. Pacific Ry., was presented with a diamond ring by the company's employes at Winnipeg, at a dinner given in his honor, Sept. 1. A pearl necklace was presented to Mrs. Winter at the same time.

W. Hatley, who has been appointed accountant in the office of the Superintendent Middle Division, G.T.R. Toronto, was, Sept. 2, presented with a gold watch by the members of the G.T.R. divisional freight office staff at Hamilton, Ont., with which he had been for some time connected.

Mrs. J. Dunsmuir has entered an action against her son, Hon. Jas. Dunsmuir, Lieut.-Governor of British Columbia, to secure an accounting of the Dunsmuir estates since 1889. The property includes coal mines, colliery railways, steam and sailing vessels, and until recently the Esquimalt and Nanaimo Ry.

G. G. Hare, Chief Engineer, and J. Erwin, Roadmaster Kingston and Pembroke Ry., accompanied by W. F. Nickle, M.L.A., were going over the line on a gasoline car Sept. 2, and when near Mississippi, Ont., collided with a handcar which had been left on the track. All three were thrown off the car, but Mr. Nickle only was injured, and that slightly.

W. H. Ardley, who has been appointed acting General Auditor G.T.R. and G.T. Pacific Ry., Montreal, was born in London, Eng., April 24, 1858, and entered G.T.R. service Nov. 1, 1882, since when he has been, to Nov. 1, 1894, clerk in the Chief Accountant's office; Nov. 1, 1894, to Jan. 1, 1908, chief clerk and general book-keeper in General Auditor's office; Jan. 1, 1908, to Sept. 1, 1908, Auditor of Disbursements.

John Hendry, of Vancouver, B.C., was elected First Vice-President of the Canadian Manufacturers' Association at the annual meeting in Montreal, Sept. 17. Among other things, he is President of the Vancouver, Westminster and Yukon Ry., which recently sold the line it constructed between New Westminster and Vancouver to the Great Northern Ry. Co., but which still possesses power to construct a line from Vancouver to Dawson, Yukon.

J. W. Wallace, Travelling Auditor I.C.R., Moncton, N.B., who died Sept. 17, was born at Hillsboro, N.B., Dec., 1847; entered I.C.R. service in 1869, and was to 1874, agent, first at Penobsquis, and later at Salisbury, and from 1874 to 1879 Assistant Auditor at Moncton. When a section of the C.P.R. was owned by the Dominion Government in 1879, he was appointed instructor in the clerical department of that road. He returned to I.C.R. service in 1899, as Travelling Auditor, which position he held until his death.

R. L. Thompson, who has been appointed District Passenger Agent C.P.R., Toronto, was born at Montreal, Aug. 17, 1873, and entered C.P.R. service Aug., 1888, in the General Passenger Department, occupying positions as stenographer, advertising, accounts,

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claims, and rate clerk, to July, 1904, since when he has been, to Nov., 1905, assistant chief clerk and Nov., 1905, to Jan., 1907, chief clerk to Passenger Traffic Manager, Montreal; Jan., 1907, to Sept. 8, 1908, General Agent, Passenger Department, C.P.R., Cincinnati, O.

J. T. Hallisey, who was recently appointed acting District Superintendent of the Halifax and St. John districts, Intercolonial Ry., was born at Beaver Bank, N.S., Dec. 29, 1862, and entered the Intercolonial Ry. service Dec. 12, 1879, as telegraph operator, since when he has been successively: April, 1882, to Nov., 1890, train dispatcher, Truro, N.S.; Nov., 1890, to Apr., 1903, Chief Dispatcher Sydney and Oxford Districts, New Glasgow, N.S.; Apr., 1903, to June 4, 1908, Chief Dispatcher, Truro, N.S., all service with the I.C.R.

Frederick Passmore Gutelius, who has been appointed General Superintendent Lake Superior Division, C.P.R., was born at Mifflinburg, Pa., Dec. 21, 1864. Graduated from Lafayette College as civil engineer 1887. Entered railway service 1888, since when he has been consecutively to 1892 assistant engineer and assistant supervisor Pennsylvania Co., at Pittsburg, Pa.; 1885 to 1898, General Superintendent Columbia and Western Ry.; 1898 to 1900, Superintendent C.P.R. at Nelson, B.C.; 1900 to 1902, various positions in engineering department same line; 1902 to March, 1906, Engineer Maintenance of Way, and March, 1906, to Sept. 15, 1908, Assistant Chief Engineer Eastern Lines C.P.R., Montreal.

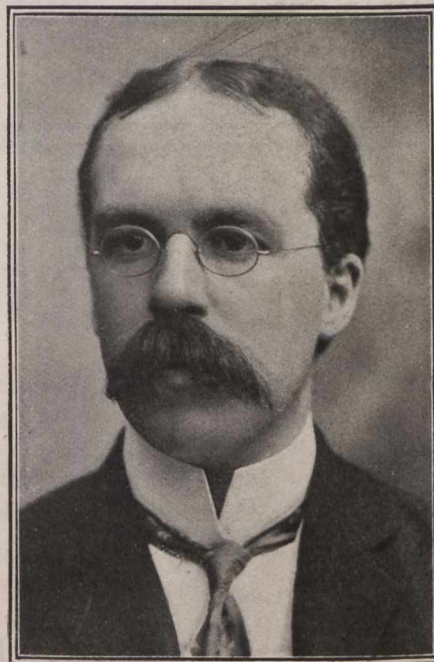
C. B. Foster, who has been appointed Assistant General Passenger Agent C.P.R., Vancouver, and whose portrait appears on the first page of this issue, was born at Kingston, Kings County, N.B., Sept. 30, 1871, and entered railway service in 1891, since when he has been successively: April, 1891, to Oct., 1892, stenographer, passenger department, St. John, N.B.; Oct., 1892, to Sept., 1893, senior clerk, passenger department, St. John; Sept., 1893, to July, 1899, Travelling Passenger Agent, St. John; July, 1899, to Feb. 8, 1902, chief clerk, passenger department, St. John; Feb. 8, 1902, to Nov. 22, 1904, District Passenger Agent, St. John; Nov. 22, 1904, to Sept. 8, 1908, District Passenger Agent, Toronto; entire service with C.P.R.

W. E. Davis, Passenger Traffic Manager G.T.R., who has also been appointed to a similar position G.T. Pacific Ry., was born in Niagara Co., N.Y., in 1850. He entered railway service in 1868, as office boy on the Hannibal and St. Joseph Rd., now a part of the Burlington Rd. In Aug., 1877, he was appointed Passenger Agent, Chicago and Lake Huron Rd., Chicago, Ill., which later included the Detroit, Grand Haven and Milwaukee Ry., the Toledo, Saginaw and Muskegon Ry., and the Cincinnati, Saginaw and Mackinaw Rd., remaining in that capacity until the consolidation of the G.T.R. subsidiary companies under the present management, April 1, 1896, when he was appointed General Passenger Agent G.T.R., with headquarters at Montreal, and May 1, 1900, Passenger Traffic Manager.

E. J. Coyle, who has recently resigned the position of Assistant General Passenger Agent C.P.R., at Vancouver, B.C., was born July 23, 1870, and entered railway service in 1889, since when he has been consecutively, to July, 1892, secretary to General Freight and Passenger Agent, Winnipeg; July, 1892, to Sept. 1, 1896, chief clerk General Passenger Department, Vancouver, B.C.; Sept. 1, 1896, to June 1, 1897, Freight and Passenger Agent, Portland, Ore.; June 1, 1897, to June 19, 1899, District Passenger Agent, Pacific Division; June 19, 1899, to Sept. 8, 1908, Assistant General Passenger Agent, Vancouver, B.C.; entire service with C.P.R.

A press report from Vancouver states that he is about to join the steamship company being promoted by J. H. and B. W. Greer, and G. L. Courtenay, the latter two of whom recently resigned from C.P.R. service for that purpose.

D'Arcy Scott, who has been appointed to the Board of Railway Commissioners for Canada, was born Mar. 8, 1872, and was educated at the Ottawa University, subsequently taking a law course at Osgoode Hall, Toronto, and was called to the bar June 7, 1895. In 1896, on his father, Hon. R. W. Scott, giving up practice to enter the Dominion Government, Mr. Scott was appointed C.P.R. solicitor at Ottawa, and was later also appointed solicitor for the Ottawa and New York Ry., and has continued to act in that capacity for the New York Central since that company took over the line. He has had considerable railway practice. He has served two years as a member of the Ottawa City Council, and was elected Mayor



S. J. McLEAN

Member of the Board of Railway Commissioners.

Jan. 1, 1908. Among other offices held by him are those of Vice-President of the Union of Canadian Municipalities, and Vice-President of the Ontario Municipal Association.

F. P. Brady, who resigned the position of General Superintendent C.P.R. Lake Superior Division, Sept. 16, was born at Haverhill, N.H., June 22, 1853, and entered railway service 1869, as station baggagemaster Passumpsic Ry., since which he has been consecutively: 1873 to 1880, train dispatcher Northern Rd., at Concord, N.H.; 1880 to 1888, Chief Train Dispatcher Southeastern Ry., at Richford, Vt.; 1888 to 1889, Trainmaster C.P.R.; 1889 to 1898, Assistant Superintendent same road; 1898 to May, 1901, Superintendent same road at Smith's Falls, Ont.; May, 1901, to Sept., 1902, Superintendent districts 10 and 11 same road at Toronto; Sept., 1902, to May, 1903, Superintendent district 19 same road at Fort William, Ont.; June 1, 1903, to Feb., 1904, Assistant General Superintendent Central Division, Winnipeg, Man.; Feb., 1904, to Sept. 16, 1908, General Superintendent Lake Superior Division, C.P.R., North Bay, Ont.

Thomas Greenway, who has been appointed to the Board of Railway Commissioners for Canada, was born in Cornwall, Eng., Mar. 25, 1838, and after coming to Canada at an

early age, was educated at the public schools in Stephen tp., Ont. Having served from 1867 as Reeve of Centralia, Ont., he entered political life and unsuccessfully contested South Huron on two occasions, but was subsequently elected to the House of Commons in Feb., 1875, on the unseating of the then member. He declined re-nomination in 1878, when he removed to Manitoba, and was elected to the Manitoba Legislature in 1879. In 1887 he became leader of the Opposition, and on the resignation of the Government in 1888, was entrusted with the formation of a new administration, which remained in power until 1900. He was elected to the House of Commons for Lisgar, Man., in 1904. Under Mr. Greenway's premiership, the Manitoba Government passed various measures in connection with transportation interests, among them being an act respecting the Northern Pacific and Manitoba Ry., and an act providing for the extension of the C.P.R. to the Souris coal fields.

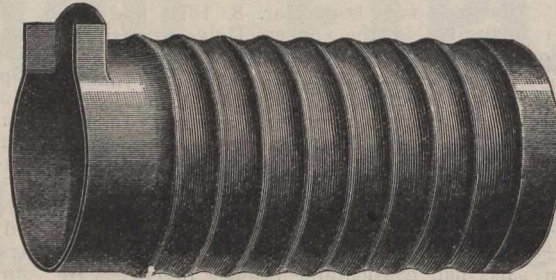
J. G. Sullivan, who has been appointed Assistant Chief Engineer C.P.R. Eastern Lines, Montreal, was born at Bushnell's Basin, N.Y., Jan. 11, 1863, and graduated C.E. at Cornell University, June, 1888. He entered railway service in 1888, his record being: July, 1888, to Mar., 1889, rodman, Great Northern Ry., U.S.; April, 1889, to Aug., 1890, rodman, instrumentman and assistant engineer, Spokane Falls and Northern Ry.; Aug., 1890, to May, 1893, assistant engineer, Great Northern Ry. (U.S.) coast lines; July, 1893, to Feb., 1894, assistant engineer, Alberta Ry. and Coal Co.; July, 1894, to Oct., 1894, section foreman, Northern Pacific Ry.; Oct., 1894, to April, 1895, locating engineer, Butte, Anaconda and Pacific Ry.; April, 1895, to Dec., 1895, division engineer, Kaslo and Slocan Ry.; April, 1895, to Feb., 1901, locating and reconnaissance engineer and engineer in charge construction, Columbia and Western Ry.; Feb., 1901, to Sept., 1905, division engineer, construction department, Western Lines, C.P.R.; Sept., 1905, to Feb., 1907, assistant chief engineer Panama Canal; Feb., 1907, to Sept. 15, 1908, Manager of Construction C.P.R. Eastern Lines, Toronto. He was elected a member of the American Society of Civil Engineers in 1899, and is also a member of the Canadian Society of Civil Engineers.

S. J. McLean, who has been appointed to the Board of Railway Commissioners, was born in Quebec, June 14, 1871, and was educated at private and public schools there, and at Cumberland, Ont., and later, at the Ottawa Collegiate Institute, and from 1890 to 1894 was a student in the Department of Political Science in the University of Toronto. Among the academic positions held by him at various times, are 1894-5, Mackenzie Fellow, University of Toronto; 1895-6, University Fellow in Economics, Columbia University, New York; 1896-7, University Fellow in Economics, Chicago University; 1897-1902, Professor of Economics, and Sociology, University of Arkansas; 1902-06, Associate Professor of Economics Leland-Stanford Jr. University, California; 1906-08, Associate Professor of Political Economy, University of Toronto. He is a B.A. and LL.B. of Toronto University; M.A. of Columbia University, and Ph.D. of Chicago University. He has made a special study of transportation problems in various parts of the world, and has an intimate knowledge of transportation matters, both legislative and administrative, and has had a wide experience in direct contact with business men, railway and labor representatives, both in Canada and the U.S. As a tribute to his insight into such matters he was elected to the chairmanship of the transportation section of the Commonwealth Club of San Francisco. He has been a prolific writer on

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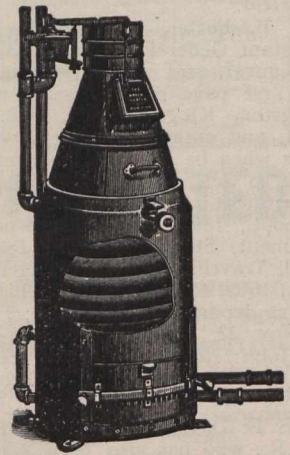
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transportation subjects, having contributed largely to technical periodicals, reviews, etc. From 1898 to 1901 he acted in an advisory capacity to the Department of Railways and Canals, and prepared a special report which was subsequently published by that Department. In 1901 he was appointed special commissioner on Railway Rate Grievances for Canada, and conducted investigations in leading towns throughout the Dominion. The findings of this investigation were embodied in a report which recommended that a Railway Commission be organized for Canada, with power over rates and classification, and that it should have transferred to it the functions hitherto exercised by the Railway Committee of the Privy Council. These recommendations were adopted by the Government, and embodied in the Railway Act of 1903. From 1904 to 1905 he was expert agent of the U.S. Bureau of the Census, and of the Interstate Commerce Commission, and conducted investigations to determine the valuation of railway property in the Western States, and in 1908 he has acted as chairman of conciliation boards to investigate disputes in two mining cases.

Canadian Northern Ry. Construction, Etc.

Canadian Northern Quebec Ry.—W. H. Moore, a director and secretary of the Quebec and Lake St. John Ry., which is worked in connection with the C.N.Q. Ry., returned to Quebec Sept. 4, after having made an inspection of the route of the proposed extension from Roberval, the present terminus on Lake St. John to St. Felicien. He was accompanied on his trip by F. M. Spaidal, General Superintendent; H. K. Wicksteed, Chief Locating Engineer, and Col. Talbot, M.P. In an interview, Mr. Moore said orders would be given immediately to the company's engineering staff to make a survey and prepare plans for the construction of the extension, and that construction would be undertaken and pushed to completion next year.

Canadian Northern Ontario Ry.—Plans were filed with the Department of Railways at Ottawa, Sept. 16, showing the projected new route for the entrance of the railway into the city. The new plans provide for crossing the Rideau River at the back of the Isolation Hospital, and running across the Stewart property to a junction with the G.T.R., near Gladstone Ave. W. H. Moore, Secretary of the company, who was in Ottawa in connection with the filing of the plans, said the only matter to be settled was the entrance to the city. The new plans overcome many of the objections that were previously urged, and if they were approved immediately, there would be no obstacle in the way of having the company's trains running into the city this year. The grading of the line was practically completed from Hawkesbury to the suburbs and tracklaying was well advanced. This would give a direct line from Ottawa to Quebec, with a branch to Montreal.

D. D. Mann, Vice-President, referring to the reports that the company would start construction on its projected line from Toronto to Buffalo, N.Y., during the winter of the present year, is reported to have said recently: "We have the right-of-way and we intend to construct the line some day. It would, however, be premature to make the definite statement that operations would commence in the very near future." The reports with respect to the new line stated that it would have a length of about 100 miles, and would cost about \$30,000 a mile. The line would start from a point to the north of Toronto, paralleling the lines of the Power Co., which Mackenzie, Mann & Co. interests own. It is proposed to cross Burlington Beach, and run along the lake shore as near as may be to Port Dalhousie, thence through St. Catharines to or near Niagara Falls.

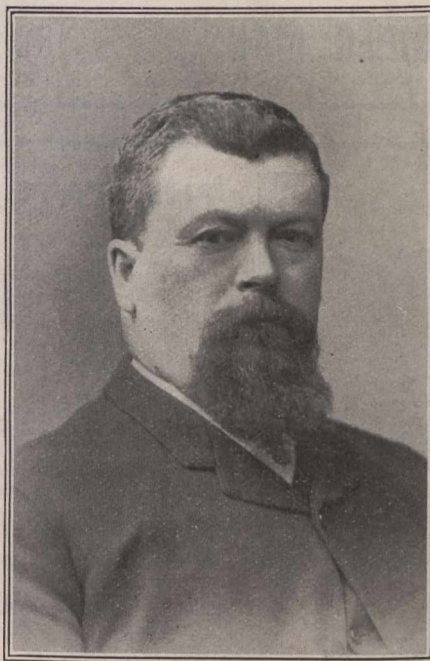
Canadian Northern Ry.—W. Mackenzie, President C.N.R., recently met some of the chief officers of the G. T. Pacific Ry. at Winnipeg, with a view of discussing the proposal to establish a joint stock yard at St. Boniface.

A contract has been awarded to the Northern Construction Co., Winnipeg, for the construction of a branch through the Viola Dale district to Rapid City.

The company has sent out 25 men from the Pas Mission to carry on the survey of the route to Hudson Bay.

On the company's Goose Lake branch track has been laid for 35 miles, and ties, etc., are being collected at Delisle, preparatory to the resumption of tracklaying.

Ballasting on the line into Regina, Sask., which will give a direct connection to Brandon, Man., is reported to be completed, and a regular service of trains put in operation. The completion of this line will enable the company to run a through service from Winnipeg



THOMAS GREENWAY,
Member of the Board of Railway Commissioners.

via Brandon and Regina to Prince Albert, over the old Qu'Appelle, Long Lake and Saskatchewan Ry. On this line between Regina and Lumsden, a distance of 20 miles, a considerable quantity of ballast is being put on in order to bring it up to the requirements of the heavier traffic which will be operated over it. At Lumsden a branch of about eight miles has been completed westerly. On the projected line to connect the old Qu'A., L.L. and S. Ry. with Calgary it is reported that 30 miles have been graded and W. Mackenzie, President, stated, Sept. 4, that he expected 100 miles of track would be laid this year. It is stated that the line to Prince Albert will be followed for about 50 miles with a view of obviating the necessity of opening new branches. Mr. Mackenzie also stated that the C.N.R. was not worrying about a union station at Regina, having already secured rights in the present C.P.R. station, which will eventually be turned into a union station and enlarged as demands arise. The line when constructed will, it is claimed, give a more direct route between Winnipeg and Calgary than the C.P.R. route. Negotiations are said to be in progress between the C.N.R. and the G.T. Pacific Ry., having for their object the provision of a joint station in Saskatoon. It is reported that work on this station will be commenced in the spring. (Sept., pg. 643).

TRADE AND SUPPLY NOTES.

The matter which appears under this heading is compiled, in most cases, from information supplied by the manufacturers of, or dealers in, the articles referred to, and in publishing the same we accept no responsibility. At the same time we wish our readers to distinctly understand that we are not paid for the publication of any of this matter, and that we will not consider any proposition to insert reading matter in our columns for pay or its equivalent. Advertising contracts will not be taken with any condition that accepting them will oblige us to publish reading notices. In other words, our reading columns are not for sale, either to advertisers or others.

The Canadian Westinghouse Co. has issued Instruction Pamphlet T. 5037, containing a description of 12 E.L. locomotive brake equipment

Saxby & Farmer, Ltd., manufacturers of railway signals, safety appliances, etc., whose head office is in London, Eng., with works at Chippenham, Eng., has opened a Canadian branch office at 611 Canadian Express Building, Montreal, in charge of W. M. Punter as Canadian Manager.

The Goldschmidt Thermit Co. is building a machine shop and foundry at the back of its present factory in Jersey City. The building occupies a site, 34 by 90 ft., and will be fitted up for the purpose of handling to better advantage the extensive repair work now being carried on at these works.

F. T. Hyndman, formerly Mechanical Superintendent of the New York, New Haven and Hartford Rd., has been appointed eastern railroad representative of S. F. Bowser & Co., Inc., of Fort Wayne, Ind., manufacturers of oil storage systems. He takes the place of W. A. Pitcher, who met his death in May last, in the Aveline Hotel fire at Fort Wayne.

The Falls Hollow Staybolt Co., Cuyahoga Falls, Ohio, reports having made a large shipment of staybolt iron to the Great Southern of Spain Rd., also to the Australian Government Railways, Brisbane, Australia; the Payta-Piura Ry., Payta, Peru, and the Western Ry. of Havana, Cuba. The company has a nice order on hand for a large tonnage of Falls Hollow iron for the Ferro Carril de Entre Rios Ry., of Argentine, also for the North Brabant German Ry., Gennep, Holland. The 10 locomotives recently ordered by the International and Great Northern Rd. from the American Locomotive Co. are to be equipped throughout with Falls Hollow bolts, also the six locomotives ordered from the Baldwin Locomotive Works by the Iowa Central Ry., and one locomotive ordered by the Mexican Central Ry.

The Continental Iron Works, Brooklyn, New York, has issued the seventh edition of "Morison Suspension Furnaces for Internal Furnace Boilers." The book deals with the use of the Morison suspension furnaces, of which the Continental Iron Works is the sole manufacturer in the U.S., in connection with land boilers only, in contradistinction to the application of Morison suspension furnaces for marine purposes. It is a finely compiled and printed volume of nearly 70 pages, bound in a serviceable cover. There is a fund of valuable data, with numerous illustrations, including a number of boilers using Morison suspension furnaces, together with details of design and construction, tables of pressure and thickness and rules for calculating same. The designs shown are for land boilers ranging from 50 to 300 h.p., and are intended to meet general requirements, it being explained that where boilers are designed to work under other than normal conditions, the designs are offered by way of suggestion only. A form of specification for internal furnace tubular boilers, which accompanies the designs, should prove an important aid. In the latter part of the book is a partial list of installations of internal furnace boilers

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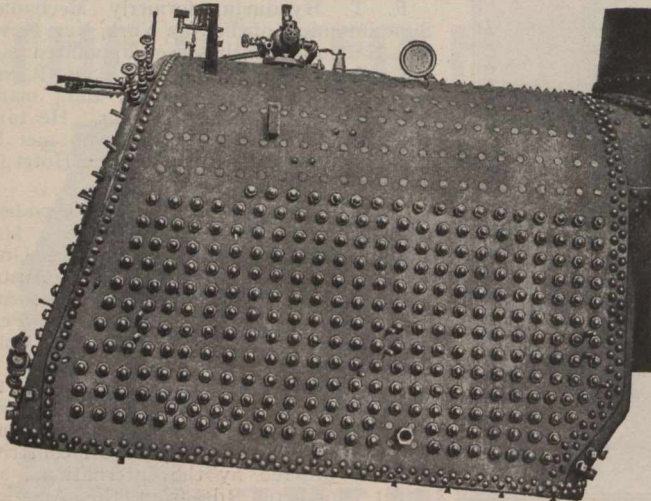
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fitted with Morison suspension furnaces, many of which are repeat orders. This is followed by illustrations and full information regarding the Morison patent furnace fronts and doors for economical and rapid firing, and which are also made only by the Continental Iron Works. Engineers, architects and boiler manufacturers will find this book of great assistance to them in the design and lay out of steam power plants.

National Transcontinental Railway.

Construction is being proceeded with rapidly on the sections of the line in New Brunswick. The Corbet-Floesch Co., which has the contract under the G.T. Pacific Ry. Co. for the line from Moncton to within six miles of Chipman, a distance of 50 miles, at the end of Aug. had 18 miles graded at the Moncton end and also a branch of six miles to a ballast pit. Track has been laid on this branch, which runs from the main line of the Intercolonial Ry. and crosses the N.T. Ry. to get to the ballast pit. The company started to lay track on the main line at Catamount, 11 miles west of Moncton, towards Canaan River, and started early in Sept. to lay track easterly from Catamount towards Moncton. It is expected that 27 miles of main line track would be laid on this 50-mile contract this fall. On the eastern end of their section the contractors have at work two standard gauge locomotives, 12 narrow gauge locomotives, five steam shovels, 20 Hart convertible cars and 10 flat cars, and at the Chipman end there are three steam shovels, one standard gauge locomotive, 10 narrow gauge locomotives, six Rodger ballast cars, and five flat cars. At the Chipman end of the line five miles of grading has been completed. Altogether there are about 700 men at work, and the contractors expect to have the whole of the grading completed during 1909.

The G.T. Pacific Ry., which secured the contract for the construction of 150 miles of the line known as the Abitibi section, is said to be taking steps to cancel the sub-contract made with the Reynolds Construction Co. The contractors have done a good deal of preliminary work, but it is said they have failed to make adequate progress, and it is reported that the G.T. P.R. Co. will either secure another sub-contractor, or go ahead with the work itself.

The Commissioners have awarded contracts for the construction of line as follows:

District C, from Weymontachene, Que., 196.38 miles west of the north abutment of the Quebec bridge, westerly for about 107 miles; and from a point 107 miles west of Weymontachene, Que., westerly to the end of the G.T. Pacific Ry. Co.'s contract, about 114.97 miles; to be completed by Dec. 31, 1910; to Macdonell and O'Brien, Montreal; and:

Districts E and F, from a point at the western end of Fauquier Bros.' contract north of Lake Nipigon, Ont., westerly to Dog Lake, about 126 miles, to be completed by Sept. 1, 1910; and,

District F, from Dog Lake, Ont., to a point west of what is known as Peninsula Crossing, by alternative routes, about 23.76 miles by the northerly route and 24.13 miles by the southerly route, the selection of the route to be at the option of the Commissioners; to be completed by Sept. 1, 1909; to O'Brien and McDougall, Ottawa.

The Commissioners received tenders to Sept. 28, for the remaining two sections of the Eastern Division of the line. These are: Districts D and E.—From the western end of the Abitibi contract of Fauquier Bros., westerly 104.24 miles. District E.—From about 60 miles west of the easterly boundary of District E easterly to the end of Fauquier Bros.' contract north of Lake

Nipigon, a distance of about 100 miles. The work is to be completed by Dec. 31, 1910. The Commissioners are also asking for tenders, to be sent in by Oct. 8, for the construction of locomotive shops at Winnipeg, and for the filling required for the preparation of the site for the shops.

The shops, for the construction of which tenders will be received Oct. 8, are to be located in Springfield municipality, 6 miles east of Winnipeg, and close to the C.P.R. Molson cut-off and a C.N.R. branch line. The site is an admirable one and is on open and level ground. The plans are so arranged as to secure the most rapid and economical handling of trains, thus obtaining the maximum efficiency from rolling stock and motive power. The specifications divide the work into sections, comprising the preparation of the site, levelling the ground to raise it to track level, foundation and concrete work, steel work, carpenter work, sheet metal, painting, glazing and plumbing. The locomotive shop will be the first structure to be undertaken, and will be divided into three departments. The tank shop for the construction of the parts of locomotives or cars, made of sheet iron or steel, will be 184 by 95 ft.; the boiler shop, 184 by 110 ft., and the machine tool and erecting shop, 615 by 174 ft. In the erecting shop there will be 26 engine pits, and these will be served by two transverse tracks, one of which will be continued through the boiler and tank shops. The total dimensions of the building will be 823 by 174 ft. The frame of the building will be of the self-supporting steel type on solid concrete foundation, the main flooring being also of concrete, while walls will be of best quality brick. The roof will be on the "saw-tooth" design, with all skylights and ventilators of copper, planned to ensure a maximum of light and ventilation. The erecting shop will be equipped with one girder crane of 120 tons capacity, and one of 10 tons capacity. A press report says that the total cost of the construction and equipment of the shops and yards will be \$5,000,000, of which the National Transcontinental Ry. Commissioners pay about \$1,500,000, the G.T. Pacific Ry. being responsible for the remainder.

GRAND TRUNK PACIFIC RY.

A regular train service was placed in operation Sept. 21 from Winnipeg to Wainwright, Sask., at the crossing of the Battle River, a distance of 666 miles. Several general officers of the company from Montreal and A. W. Smithers, Vice-President G.T.R., London, Eng., were present on the occasion. The party left Montreal Sept. 11 on a special train, travelling to Winnipeg, via Chicago. After travelling over the completed line, the party went over the line under construction to Edmonton, Alta., and a portion of the route westerly. They subsequently went to Prince Rupert to inspect the work in progress there. A press report states that the resignation of officials at Winnipeg is due "to the deplorable condition of the new system which has been rushed through for political reasons. In many places the track sinks as rapidly as constructed for want of ballast and proper construction." This item appears only in the newspapers of one political party, and no doubt exaggerates for political reasons the difficulties of getting a newly constructed line into operation. At Wainwright a 12-stall roundhouse is under construction, and a large force of men has been at work since Sept. 1, grading and laying out the yards.

In regard to the progress of construction west of Edmonton, it is reported that the contractors have over 3,500 men at work, the larger number being engaged between Edmonton and the Pembina River, a distance of 65 miles. It is expected that this portion of the line will be graded and ready for tracklaying by winter. The construction

gangs, as they are closing up the work on the sections between Battle River and Edmonton, are moving west of the Pembina River. Only a short stretch of 15 miles in the Beaver Hills was reported Sept. 15 to be unfinished. This is expected to be finished by Oct. 15.

At the Prince Rupert end, the contractors state good progress is being made. Grading on the first 50 miles is reported to be well under way, and work is being opened out on the second 50 miles as fast as supplies can be got in. It is expected that a further section of 100 miles easterly from the summit of the Yellowhead Pass, will be let shortly. This would leave a further distance of about 400 miles to be let.

Collingwood Schreiber, Consulting Engineer to the Department of Railways, accompanied by B. B. Kelliher, Chief Engineer G.T.P.R., was at Prince Rupert Sept. 5, and inspected the route as far as Hazleton. Some difficulties, it appears, have arisen in the way of securing the right-of-way, and the straightening of these out was one of the reasons for Mr. Schreiber's inspection. (Sept., pg. 637.)

Proposed Regulations for Railways.

Following is a draft of regulations which the Board of Railway Commissioners propose to adopt, and which has been sent to railway companies under its jurisdiction. The matter will be discussed at the meeting of the Board which opens at Ottawa Oct. 6.

Every freight car of railway companies operating a railway by steam power, built after Dec. 1, 1908, shall be equipped with operating levers on both sides of the ends of every such car, and every such car shall be equipped with air brakes.

No freight train shall be made up or allowed to proceed upon its journey unless at least three-quarters of the cars composing such train have air brakes in good working order.

The number of cars to be drawn in freight trains shall be left entirely to the judgment of the operating officials of such railway companies; in all cases, however, in which it may be found necessary to double-head, the leading engine shall control the train.

Every road locomotive of such railway companies shall be equipped with steps and hand-holds on both sides of and at the rear ends of tenders, such steps to conform to the same distance from the top of the rail as those on the front end of the tender; foot-rests shall be provided on the pilots of every such road locomotive, sufficiently wide for a man to stand on; every switching or yard locomotive shall be equipped with foot-boards and headlights on the front and rear ends of the engine and tender, such foot-boards to be not less than ten inches wide; where such foot-boards are cut in the centre, the space so cut off shall be covered with an arched iron belt, and foot-boards and headlights shall be placed on the rear end of the tender of every road locomotive used for switching services temporarily or otherwise.

The number that shall comprise the switching engine crews of such railway companies shall be left entirely to the judgment of the operating officials of such companies; on the main lines of such companies light engines shall not be run a distance greater than 25 miles in any one direction without a conductor, in addition to the engineer and the fireman, and on the branch lines, the operating officials of such companies shall determine the necessity of requiring conductors on the light engines.

The passenger trains of such companies shall carry at least one brakeman of not

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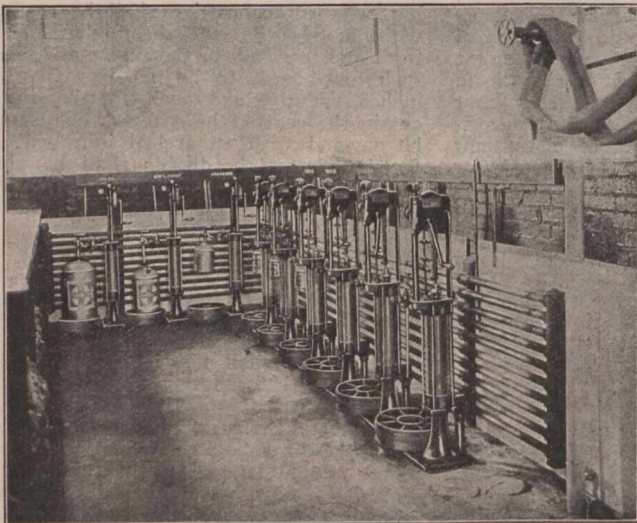
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An order for the winding up of the Atikokan Iron Co. of Port Arthur, Ont., has been granted on the petition of Mackenzie, Mann & Co., J. D. Fraser, Port Arthur, being appointed provisional liquidator.

A board of conciliation is investigating questions affecting the conditions of employment of carmen on the Quebec and Lake St. John Ry. E. A. Evans, General Manager Quebec Ry., Light and Power Co., is representing the company and A. Chartresin the men. A similar board is investigating the conditions of employment of locomotive engineers on the Canadian Northern Ontario Ry., the Canadian Northern Quebec Ry., and the Quebec and Lake St. John Ry., with Judge Gunn, Ottawa, chairman; F. H. Richardson, Toronto, representing the companies, and J. H. Hall, on behalf of the engineers. The first sitting of the board was held at Ottawa Sept. 17.

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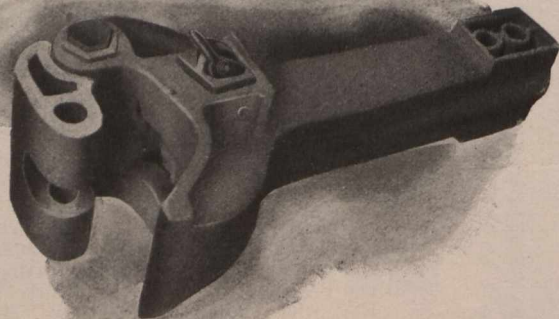
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Proposed Regulations for Railways.*(Continued from page 725)*

less than one year's experience as a brakeman, and shall also carry a baggageman; provided that passenger trains consisting of eight or more cars be supplied with at least one additional brakeman.

Every locomotive engineer of such companies must have at least one year's continuous experience as a fireman, pass a satisfactory examination in regard to the proper care of locomotives, the handling of air brakes, and train rules and regulations; be at least 21 years of age, and undergo an eye and ear test, before a competent operating railway official, before being eligible for appointment as such engineer.

Every conductor of such companies must have at least one year's experience as brakeman, and be at least 21 years of age before being eligible for appointment as such.

The telegraph operators of such companies shall be at least 18 years of age, able to write a legible hand, and to send and receive messages at the rate of not less than 20 words a minute, and also be thoroughly familiar with and required to pass an examination upon train rules and the practical working of telegraph offices, before a competent operating railway official, before being put in charge of telegraph offices.

Every employe of such railway companies engaged in operating trains shall be required to undergo a color test before a competent operating railway official, before being employed by the company for such purpose.

Such railway companies shall strictly conform to the rules and regulations approved by the Master Car Builders' Association, governing the loading of lumber, logs, and stone in open cars, and the loading and carrying of structural material, plates, rails, and girders. No material of any kind shall be carried upon the tops of cars.

All open drains crossing the yards of such companies shall be covered; semaphore and signal wires shall be carried above the ground in pipes; semaphores and switches, except switch stands, and any new buildings erected, shall be placed 6 ft. from the rail; and water stand supply pipes shall be fastened parallel with the main line, and enginemen required to see that this is done when through using such pipes.

Crippled cars shall not be allowed behind the van in freight trains, cars containing perishable freight or live stock, crippled in minor respects, as for example, by a broken coupler, a coupler pulled out entirely or pulled out so as to destroy its usefulness to draw cars, draft timbers which allow the coupler to fall below the standard position, making it impracticable to couple with the freight cars without chaining, shall be chained up ahead of the car and taken to the first terminal for repairs, when, in the opinion of the conductors of such trains, it is safe to haul such cars on chains. In no case are more than two such cars to be handled in any one train, except where more of such disabled cars have been damaged through wrecks or such causes, a special pick-up train is sent out to bring them in; crippled cars to be cleared from the main line at the earliest possible moment.

A crippled car shall include one with any of the following defects, namely: A broken coupler. A coupler pulled out entirely, or so pulled out as to destroy its usefulness in drawing a car. Draft timbers, that is, where the draft timbers have so spread or fallen down as to permit the coupler to fall below the standard position, rendering it impracticable to be coupled with other cars unless chained, besides making it unsafe to handle. A cracked wheel. A chipped flange over $2\frac{1}{2}$ inches. A broken wheel

flange. A bent axle or journal. A broken arch bar or truck straps.

Such railway companies or their officers, agents, or employes, or any of them, disobeying or failing to comply with the provisions of these regulations, shall be liable to a penalty of \$50 for every such disobedience or failure or breach.

Railway Finance, Meetings, etc.

Alberta Ry. and Irrigation Co.—Approximate net profits, exclusive of land sales for July, \$26,721, against \$31,301 for July, 1907. Approximate traffic receipts for Aug., \$24,645, against \$18,745 for Aug., 1907.

Atlantic and Lake Superior—Baie des Chaleurs Ry.—The Exchequer Court received tenders for the purchase of these lines Sept. 10, and accepted the only one offered, viz., that of the Royal Trust Co. of Montreal, \$1,050,000, for the Baie des Chaleurs Ry., and \$350,000 for the Atlantic and Lake Superior Ry. The latter company took over the former, and constructed an extension, so that in order to comply with all legal requirements and to prevent future complications the line was sold in two separate sections. The order of court accepting the tenders requires the Royal Trust Co. to give a bond for \$600,000 as a protection against a claim by the Northern Banking Co. of England, which has a claim that will come up for hearing on appeal at the next sitting of the Supreme Court of Canada.

Canada Atlantic Ry.—The appeal of H. L. Sprague against the judgment of the Ontario High Court, dismissing his action against J. R. Booth, whereby he claimed \$2,250,000 on a contract made Jan., 1902, in connection with the transfer of J. R. Booth's interest in the C.A.R. for \$10,000,000, was commenced in the Court of Appeal Sept. 21. The claim is for \$250,000 paid as deposit, and \$2,000,000 as damages for non-completion of contract.

Canadian Pacific Ry.—After the annual meeting of shareholders, which will be held at Montreal Oct. 7, a special meeting will be held to approve an increase of the present ordinary capital stock of the company by an amount not exceeding \$50,000,000, such increase of stock to be issued from time to time according to the requirements of the company as may be determined by the directors.

Caracquet Ry.—The annual meeting of the company was held recently at Bathurst, N.B. The report showed an increase of earnings over any previous year. The lease of the Gulf Shore Ry. was confirmed, and the following directors re-elected for the current year: R. H. Bowes, W. D. Northgrave, A. G. Ross, E. D. Stockdall, J. J. Warren, J. Webster and J. H. Whitehead.

Cuba Ry.—This company, of which Sir Wm. Van Horne is President, shows gross earnings for the year ended June 30 of \$2,039,467, against \$1,953,309 for 1906-7, and \$1,619,081 for 1905-6. The net income is \$355,424, against \$332,424 in 1906-7, and \$287,860 in 1905-6. The President in his report says the year was an unfavorable one in Cuba owing to the serious shortage in the sugar crop, resulting from the drought of a year ago. There was a shortage of more than 300,000 tons as compared with the preceding crop.

Dominion Atlantic Ry.—Gross earnings for July, \$143,700, against \$159,426 for July, 1907. Total earnings for 7 months ended July 31, \$612,400, against \$617,187 for same period 1907.

Grand Trunk Ry.—The half-yearly meeting of shareholders will be held in London, Eng., Oct. 8.

Grand Trunk Pacific Ry.—The annual meeting of shareholders, called to be held

at Montreal Sept. 15, was adjourned to a future and unfixed date. The company does not make its annual report public as the line is under construction only.

Klondike Mines Ry.—The annual meeting was held at Ottawa Sept. 7. Following are officers and directors for the current year: President, H. B. McGiverin; Vice-President, W. C. Greig; Secretary, A. Haydon; other directors: C. G. Kekewich, J. Latta.

London and Port Stanley Ry.—The earnings of this line, operated under lease by the Pere Marquette Rd., are reported to show a falling off for the year ended June 30, and the estimate of the percentage payable to the London, Ont., city council, is placed by the finance committee at considerably less than for the year 1906-07.

Massawippi Valley Ry.—The annual meeting of shareholders was held Sept. 2. Following are officers and directors for the current year: President, J. G. Foster, Derby Line, Vt.; Vice-President, C. W. Case, Sherbrooke, Que.; Secretary, S. Stevens, Rock Island, Que.; Treasurer, John H. Williams, Rock Island, Que.; directors: J. W. Dunklee, Boston, Mass.; Jas. H. Williams, Belkows Falls, Vt.; C. H. Kathan, Rock Island, Que.; C. D. White, F. Grundy, F. N. McCrea, Sherbrooke, Que.; H. N. Turner, St. Johnsbury, Vt.

The North Shore Ry. Co., which was organized last year to take over the Beersville Ry. in New Brunswick, is controlled in New York, the directors being: H. Von Hagen, President; I. Purdy; W. G. Kennedy, Secretary; Marvin Seelye, Treasurer, all of New York, and Dr. M. L. Keith, of Moncton, N.B., who is also General Manager. The North Shore Ry. Co. is operating the Beersville Ry., which runs from Adamsville Jct., about 30 miles west of Moncton, to the Northern Coal Co.'s mine, about 8 miles, with a 3 mile spur to Mount Carlyle, where another coal mine is to be reopened. Practically the same interests control the Bay of Fundy Mining Co., which is carrying on copper mining at Mount Vernon, Albert County, N.B.

Quebec and Lake St. John Ry.—Gross receipts for Aug., \$68,860.76, against \$68,753.23 for Aug., 1907. Total receipts for 8 months ended Aug. 31, \$328,996.78, against \$336,862.87 for the same period 1907. The mileage operated during Aug. was 286.5, against 240 miles in Aug., 1907.

Quebec Bridge and Ry. Co.—The annual general meeting of the shareholders was called for Sept. 1, but the meeting did not take place, as it was expected that the Dominion Government would take possession of the assets, franchises, etc., of the company on that date.

Rolling Stock Reports.—The Secretary of the Board of Railway Commissioners has issued a circular stating that the board has decided to only require from the railway companies subject to its jurisdiction a half-yearly statement of locomotive and car equipment, such statement to be sent on June 30 and Dec. 31 of each year to J. Ogilvie, Inspector of Railway Equipment and Safety Appliances, Ottawa. This will not interfere with the monthly report giving the number of cars held for repairs on each company's lines.

Speaking at Niagara Falls, Ont., Sept. 15, Sir Wilfrid Laurier said: "There are some people who think we should have a two-cent fare by legislation. We think that is not possible yet, because the conditions of Canada differ materially from those in the Province of Ontario and other Provinces, and we have given control of all those affairs to the Railway Commission. That Commission has taken steps measurably towards giving a two-cent fare."

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TRANSPORTATION APPOINTMENTS.

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

Algoma Central and Hudson Bay Ry.—W. Mills, heretofore car foreman in charge of the company's car shops, has been appointed Master Car Builder, which position has been vacant since 1903, when W. Hacking left to become general car foreman of the Chicago Great Western Ry. at Oelwein, Iowa. Office, Sault Ste. Marie, Ont.

Canadian Northern Ontario Ry.—See Canadian Northern Ry.

Canadian Northern Quebec Ry.—I. L. Boomer, Trainmaster, Montreal, having resigned, the position will not be filled, at least for the present.

See Canadian Northern Ry.

Canadian Northern Ry.—W. J. Pace, who was formerly in the company's service, but resigned to become Commissioner of Works for the City of Edmonton, has been appointed Trainmaster, division 3. Office, Dauphin, Man.

I. L. Boomer, heretofore Trainmaster, C.N.Q. Ry., has been appointed train dispatcher, C.N.R., at Rainy River, Ont.

J. D. Morton, chief accountant, has also been appointed General Auditor, Canadian Northern Ontario Ry., Canadian Northern Quebec Ry., Quebec and Lake St. John Ry., and Halifax and Southwestern Ry. Office, Toronto.

Canadian Pacific Ry.—The title of W. A. Cooper, heretofore Superintendent Sleeping, Dining and Parlor Cars and News Service, has been changed to General Superintendent Sleeping, Dining and Parlor Cars and News Service. Office, Montreal.

The sleeping, dining and parlor car service on the Eastern Lines has been divided as follows: District 1, lines east of Toronto and Sudbury; district 2, lines Toronto to Windsor, Sault Ste. Marie and Port Arthur, inclusive. H. F. Matthews, heretofore Assistant Superintendent, Eastern Lines, has been appointed Assistant General Superintendent districts 1 and 2. Office, Montreal. S. Wertheim, heretofore agent, Toronto, has been appointed Superintendent, district 2. Office, Toronto.

The sleeping, dining and parlor car service on Western Lines has been divided as follows: District 3, Central Division lines. District 4, Western Division lines, including Spokane, Wash. District 5, Pacific Division lines, including Seattle, Wash. W. Bell, heretofore Assistant Superintendent Western Lines, has been appointed Assistant General Superintendent districts 3, 4 and 5. Office, Winnipeg. N. F. Paterson, heretofore agent, Winnipeg, has been appointed Superintendent district 3. Office, Winnipeg. S. C. Sykes, heretofore District Superintendent, Pacific Division, Vancouver, B.C., has been appointed Superintendent, district 4. Office, Calgary, Alta. H. R. Bain, heretofore agent, Calgary, Alta., has been appointed Superintendent, district 5. Office, Vancouver, B.C.

J. G. Sullivan, heretofore Manager of Construction, Eastern Lines, Toronto, has been appointed Assistant Chief Engineer, Eastern Lines, with headquarters at Montreal, succeeding F. P. Gutelius. Mr. Sullivan will also continue to perform the duties of Manager of Construction, his Toronto staff having been removed to Montreal.

J. Doig, heretofore Assistant Paymaster, Montreal, has been appointed Paymaster there, vice H. W. Sweeny, promoted.

H. Esdaile has been appointed Assistant Paymaster at Montreal, vice J. Doig, promoted.

J. S. Ewart, K.C., has been temporarily appointed local solicitor at Ottawa, succeed-

ing D'Arcy Scott, appointed Assistant Chief Railway Commissioner.

R. L. Thompson, heretofore General Agent, Passenger Department, Cincinnati, Ohio, has been appointed District Passenger Agent, Ontario Division, vice C. B. Foster, promoted. Office, Toronto.

A. Binns, heretofore locomotive engineer, has been appointed acting road foreman, district 2, Ontario Division, during the absence on leave of L. G. Roblin, road foreman.

F. P. Gutelius, heretofore Assistant Chief Engineer, Eastern Lines, Montreal, has been appointed General Superintendent, Lake Superior Division, North Bay, Ont., vice F. P. Brady, resigned.

H. W. Sweeny, heretofore Paymaster at Montreal, has been appointed Local Treasurer at Winnipeg, vice H. B. Bridges, who has retired from the service.

In our July issue we announced the appointment of R. W. Drew as District Freight Agent at Saskatoon, Sask., which went into effect Aug. 1. The circular, which was delayed in reaching us, states that he has been appointed District and Travelling Freight Agent. His territory consists of the Last Mountain, Lanigan and Saskatoon sections, also of freight traffic to and from stations on connecting lines in Saskatchewan and Alberta, north of C.P.R. main line and east of Edmonton.

C. B. Foster, heretofore District Passenger Agent Ontario Division, Toronto, has been appointed Assistant General Passenger Agent, Pacific Division, vice E. J. Coyle, resigned. Office, Vancouver, B.C.

F. H. Clendenning has been appointed City Freight Agent, Victoria, B.C., vice G. L. Courtney, resigned. He has also been appointed District Freight Agent, Esquimalt and Nanaimo Ry.

T. F. Madden, heretofore cashier at New York City, has been appointed Travelling Passenger Agent for the Atlantic seaboard States south of New York, vice G. H. Griffin, transferred. Headquarters, New York.

R. A. Burford, heretofore City Passenger Agent, Buffalo, N.Y., has been appointed cashier at New York City office, vice T. F. Madden, transferred.

G. H. Griffin, heretofore Travelling Passenger Agent, Atlantic seaboard States south of New York, has been appointed City Passenger Agent, Buffalo, N.Y., vice R. A. Burford, transferred.

A. J. Blaisdell, heretofore City Passenger Agent, St. Louis, Mo., has been appointed General Agent, Passenger Department, Cincinnati, O., vice R. L. Thompson, promoted. His territory includes the States of Ohio (except the portion south from Sandusky to Bucyrus, thence east through Mansfield, Canton, Alliance and Youngstown, to the Pennsylvania State line and north thereof), Indiana, Kentucky, Tennessee, Alabama, Mississippi and Louisiana.

T. J. Barnes, Jr., heretofore Travelling Passenger Agent, Atlantic Steamship Line, Chicago, Ill., has been appointed City Passenger and Ticket Agent, St. Louis, Mo., vice A. J. Blaisdell, promoted.

Esquimalt and Nanaimo Ry.—F. H. Clendenning has been appointed District Freight Agent, Victoria, B.C., vice G. L. Courtney, resigned. He has also been appointed C.P.R. City Freight Agent at Victoria.

Grand Trunk Pacific Ry.—G. C. Dunn, who has been appointed District Engineer at St. John, N.B., as announced in our last issue, has under his jurisdiction all the territory east of the Quebec Provincial boundary. His work is of an inspecting character on the line being built by the National Transcontinental Ry. Commission from Moncton westward, and which is to be operated by the G.T.P.R. Co.

W. H. Ardley, acting General Auditor, G.T.R., has also been appointed acting General Auditor, G.T. Pacific Ry., N. J. Power

having been granted leave of absence. Office, Montreal.

In announcing the appointment of D. W. Steeper as acting Trainmaster, Lake Superior Division, in our Sept. issue, the headquarters were stated as Westport instead of Westfort.

A. E. Duff, heretofore General Agent, G.T.R. Passenger Department, Winnipeg, has also been appointed District Passenger Agent for G.T.P.R. lines west of Lake Superior. Office at 260 Portage Ave., Winnipeg.

In our last issue it was mentioned that a press report stated that S. Smith had been appointed Superintendent of Construction at Portage la Prairie, Man., succeeding Otis Weeks, resigned. Just after the issue had gone to press we were officially advised that the report was incorrect, as no successor to Mr. Weeks had been appointed. The latter's position was Track Engineer.

Grand Trunk Ry.—W. H. Ardley, heretofore Auditor of Disbursements, has been appointed acting General Auditor, N. J. Power having been granted leave of absence. Office, Montreal.

J. M. Rosevear, heretofore chief clerk, General Auditor's office, has been appointed Auditor of Disbursements, vice W. H. Ardley, promoted. Office, Montreal.

The following agents have been appointed: Actonvale, Que., J. O. Laroche, 2nd; Britannia Mills, Que., H. M. Houde, 2nd; Aston, Que., J. H. Deshaies, 3rd; Kinmount, Ont., J. M. Rutherford, acting, 10th; Trout Creek, Ont., W. J. Cole, 12th; Renton, Ont., E. Y. King, 19th; Greenfield, Ont., W. A. Knowles, 30th; Casselman, Ont., F. O. Parent, 30th; Caldwell, Ont., A. Hughes, 31st; Barry's Bay, Ont., W. A. Graham, 31st; Rainy Lake, Ont., W. H. Armour, 32nd; Ravenworth, Ont., L. G. LaBatt, 32nd.

Halifax and Southwestern Ry.—See Canadian Northern Ry.

Intercolonial Ry.—M. McLearn, one of the train dispatchers at Truro, N.S., is acting as Chief Dispatcher there in place of J. T. Hallisey, who has been appointed acting Superintendent.

We are officially advised that the position of Inspector of Locomotives and Cars, which J. Stewart resigned recently, "is not being filled."

A. H. Somers has been appointed acting Trackmaster, Point du Chene to St. John, N.B., in place of G. Seaman, who is on leave of absence owing to illness. Office, Moncton, N.B.

Lake Superior Corporation.—In consequence of the appointment of W. C. Franz as General Manager, as announced in our last issue, the position of acting Manager has been abolished, and J. S. Wynn, who has occupied that position, has resumed his duties as General Auditor. Among the subsidiary companies of the Lake Superior Corporation are the Algoma Central Ry. and Steamship Line, The Manitoulin and North Shore Ry., The International Transit Co., The Trans-St. Mary's Traction Co., and The Algoma Steel Co.

New Brunswick Coal and Ry. Co.—A. Sherwood, General Manager Salisbury and Harvey Ry., has also been appointed Manager, N.B.C. and R. Co., vice W. C. Hunter, resigned. Office, Norton, N.B.

Quebec and Lake St. John Ry.—See Canadian Northern Ry.

Canadian Express Co.—P. A. Paterson has been appointed Superintendent of Central and Eastern Divisions, at Montreal, vice N. J. Ross, who has been appointed Superintendent of territory covered by the company on the G.T. Pacific Ry. in the Northwest Provinces, with headquarters at Winnipeg.

W. P. Stericker has been appointed Claims Agent at Montreal, vice P. A. Paterson, acting Claims Agent, transferred.

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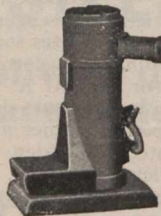


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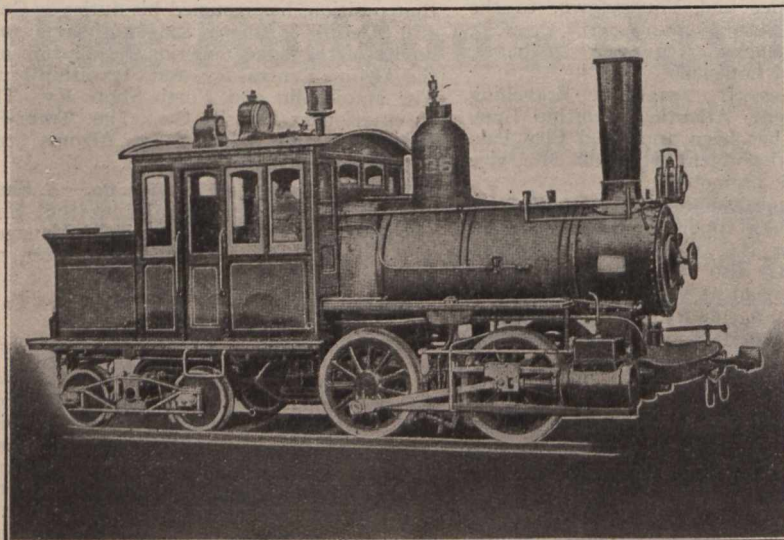


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General Passenger Agents' Association.

The 53rd annual convention of the American Association of General Passenger and Ticket Agents was held in Toronto Sept. 22 and 23, some 150 members, with a large number of ladies, being present. The President of the Association, O. H. Taylor, Passenger Traffic Manager of the Metropolitan Steamship Co., New York, occupying the chair. At the opening session Hon. G. P. Graham, Minister of Railways and Canals; Hon. J. J. Foy, Attorney-General of Ontario, and the Mayor of Toronto, spoke, welcoming the members.

Considerable time was devoted to matters connected with the use of the Association's new ticket paper, on which there was a report from the standing committee and also a report from the President, outlining the embarrassments which had been encountered since the Washington meeting. It was finally decided that the rules governing the handling of the safety paper by licensed printers be adhered to.

The following reports were received: Of lines that have discontinued or will discontinue the practice of bulletining tickets lost by passengers; Of lines that have adopted or will adopt the form of printed matter on coupons of interline tickets. Of lines that have adopted or will adopt the practice of numbering tickets on the reverse side. From standing joint committee of the American Association of General Passenger and Ticket Agents and the Association of American Railway Accounting Officers. From committee on standard ticket contracts.

A proposition to place the Association's star trademark on the back instead of on the face of Association ticket paper was agreed to and it was decided to adopt drab Association ticket paper for round trip tickets. The question of age limits for children entitled to half fares was dropped.

S. Moody, General Passenger Agent Pennsylvania Lines west of Pittsburgh, read a paper in which, in view of the 2c. fare legislation in many of the States, he opposed the granting of reduced fares for meetings of societies, organizations, etc. C. F. Bielman, Traffic Manager White Star Line, Detroit, Mich., read a paper on "Passenger-carrying lake and river lines of North America."

Reports were received from co-operating associations, including the Association of American Railway Accounting Officers, American Association of General Baggage Agents, American Association of Travelling Passenger Agents, International Association of Ticket Agents, and the

CANADIAN TICKET AGENTS' ASSOCIATION.

W. Jackson, C.P.R. ticket agent, Clinton, Ont., representing the Canadian Ticket Agents' Association, addressed the meeting, his remarks being very warmly welcomed. He said:

I am called upon to-day to appear before you as a representative of the Canadian Ticket Agents' Association, to extend to you our compliments and best wishes, and to thank you for the honor and privilege of being present upon this occasion. I am quite sure that I voice the sentiments, not only of the members of our own Association, but of every one connected with the transportation interests of this province, when I say that we all appreciate to the fullest extent your visit to this country, and more especially your convening in the city of Toronto—a city of which we are proud, and a city which stands at the head of the great railway systems of Western Ontario.

It is also a great pleasure to have you with us upon this occasion, because it gives us all an opportunity of demonstrating to you the great progress that is going on in this country at the present time, a progress in which you are all more or less directly interested. We are on the eve of one of the greatest develop-

ments that any country has ever seen, a development that means a great deal to many transportation companies on this continent. Twenty-five years ago our country was at a standstill, and making no progress. We were looked upon as a nation of agriculturists. Of course all our provinces are more or less agricultural. With the development of our farms we have built railways, established banks and opened up trading houses, all of which are most necessary. After a few years we discovered that we were lacking in big cities in consuming centres. We found out that our sons and daughters, born on the farm, would not all be farmers. Some would not because it did not suit them, others would not because they saw greater opportunities elsewhere. The result was that Canadians went to the United States by the thousand. Most of them went to the cities where they had all kinds of opportunities to engage in business. This continued for some years. In 1904 there were 1,200,000 persons of Canadian birth living in your country, most of these people being lost to us because we had not the towns or factories; in other words, the inducements and the opportunities. But to-day the tide has turned. We have toed the mark and taken stock of ourselves. What do we find? Not only that nature has fitted us to be a great agricultural nation, but that our mines, our forests, our streams and our waterfalls destine us to stand in the front ranks of the manufacturing countries of the world; that here, within our own borders, we have all the raw material for the world's greatest industries; the necessary industrial opportunities for our own people. The American people recognized this state of affairs even before we did, and for the past two or three years they have been sending us thousands of settlers to help fill up our great Northwest. One of our leading statesmen has said that the 20th century belongs to Canada, and this statement appears to be coming true. In 1900 we received about 24,000 settlers; in 1905, 147,000, and in 1907, 250,000. An eminent railway authority, in the person of J. J. Hill, has predicted that in 25 years there will be 40,000,000 people settled west of Lake Superior.

Take again the commerce between our two countries. Last year we purchased from the United States \$222,000,000 of goods, out of total imports amounting to \$372,000,000. Your imports from this country amounted to \$80,000,000; all of which shows a great development. Then again to get a little nearer home, take our wonderful progress in connection with our railway and steamship systems. A few years ago a steamship taking 12 days to cross the Atlantic was quite satisfactory to many people, but to-day the change has come, and the swiftest and best are none too good. A few years ago our railways could carry a large proportion of their passengers in coaches attached to freight trains, but to-day we require to have the best, and even our branch lines are supplied with parlor and café cars. All this is in keeping with our progress and will give you some idea of what to expect in the future.

I have to-day the honor of representing the Canadian Ticket Agents' Association, an association which was formed 22 years ago. During that length of time I have had the pleasure and satisfaction of attending every meeting, forming friendships and associations which I hope will not be severed for many years to come. We have grown from small beginnings to a large organization and a vast amount of good has been the result of our gatherings. Thanks to many railways in your country, we have had some splendid opportunities of visiting a great many points of interest, and the result has been most beneficial to our members. The stock in trade of a ticket agent's business is his knowledge of the geography of the railway world, a knowledge

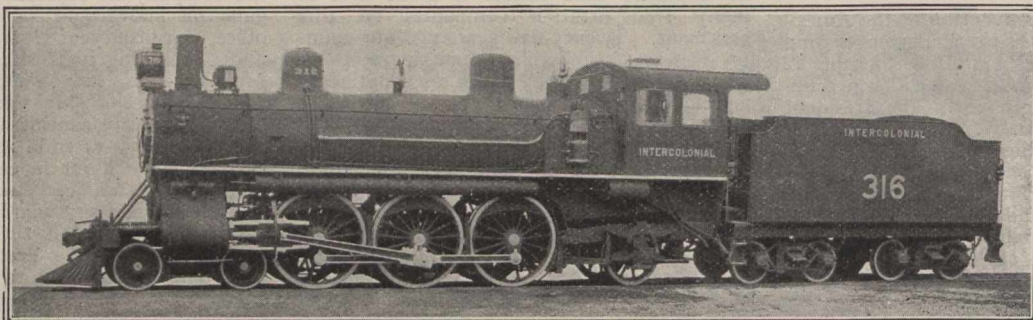
which is of vast importance to himself and the company he represents. How is he to gain this knowledge? Not by sitting in his office year after year trusting to time-tables and advertising matter for his information, but by getting out on the road as often as possible; keeping in touch with all the changes you are continually making in your terminals, in your train service; and a hundred and one items in connection with the handling of traffic. Knowledge is power, and the ticket agent who is able to talk from the book usually gets the business. Unfortunately there have been passed by your Government some laws which prohibit many members of our association from taking advantage of transportation, which we feel quite sure you would like to extend to us. From our side of the house we think this is a great mistake. There are a great many ticket agents in our country who are not wholly engaged in transportation, but who make the very best kind of agents. They are men of influence and power and are just the class of agents who are in a position to promote and encourage travel. We feel quite sure that you want our tourist travel, which is getting bigger every year, and we want to give it to you, but we want to do so in an intelligent and satisfactory manner. There is a vast difference to-day in the handling of passengers compared to 20 years ago, and an agent must be thoroughly posted when it comes to the question of giving information. If he gets no opportunity of educating himself by travel, he loses interest in his work, and very often will send a passenger to the first junction point and then let him shift for himself. We feel that the railway companies of your country should have sufficient influence with the Government to amend the law so that any Canadian ticket agent holding a license to sell tickets, should be allowed the privileges that they have always enjoyed. We all hope that you can see your way clear to take up this matter and that in a very short time we will be able to accept courtesies which we know you would like to extend to us.

I will detain you no longer, but will close by saying that, living as we do under the flags of the two greatest nations in the world, living as cousins and neighbors, and associated in a social and commercial way, I think that gatherings of this kind do not come often enough, and I hope the time is not far distant when we will again have the pleasure of welcoming you to our country, to extend to you our hospitality, and to renew friendships which will be made upon this occasion.

The election of officers for the current year resulted as follows: President, G. T. Bell, General Passenger and Ticket Agent, G.T.R.; Vice-President, S. G. Hatch, General Passenger Agent, Illinois Central Rd.; Secretary, C. M. Burt, General Passenger Agent, Boston and Maine Rd. Toledo, Ohio, was selected as the place of meeting in 1909.

The social features of the meeting, which were in charge of a committee of which B. W. Folger, Manager of the Niagara Navigation Co. was chairman, included automobile and street car rides around the city, two theatre parties, a sail around the harbor, and tea at the Royal Canadian Yacht Club. The members of the Association and a number of other guests were entertained at a magnificent dinner by the Canadian National Exhibition Association.

The G.T.R. Co. ran two special trains to carry members to Toronto for the meeting, one from New York coming over the G.T.R. from Suspension Bridge, N.Y.; the other from Chicago. On the night of Sept. 23, two special G.T.R. trains conveyed the members, their ladies and several guests, to the Lake of Bays and Temagami districts, where a couple of days were spent most enjoyably.



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Third Quarter Just Out

THE Quarterly Publication "REACTIONS" will be mailed free of charge to anybody in the United States, Canada or Mexico. The Third Quarter of this paper contains a number of very interesting articles and is profusely illustrated. Subjects treated of are the following: Welding Locomotive Frames and Driving Wheel Spokes, A New Development in Rail Welding, New Thermit Reactions, Welding Two Large Anchors, Quick Repair to a Rudder Frame, Welding Propeller Strut of German Warship, Hard Spots in Steel Castings and Improving Cast Iron.

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Board of Railway Commissioners.

The Canada Gazette contains the following official announcement of the appointment of the Board of Railway Commissioners, dated Sept. 17: "JAMES PITT MABEE, of the City of Toronto, in the Province of Ontario, Esquire; The Honourable MICHEL ESDRAS BERNIER, a Member of the King's Privy Council for Canada; JAMES MILLS, of the City of Guelph, in the Province of Ontario, Esquire; D'ARCY SCOTT, of the City of Ottawa, in the Province of Ontario, Esquire, Barrister-at-law; THOMAS GREENWAY, of the City of Winnipeg, in the Province of Manitoba, Esquire; and Professor S. J. McLEAN, of the City of Toronto, in the Province of Ontario; to be Members of the Board of Railway Commissioners for Canada, under the provisions of chapter 62, 7-8 Edward VII, intituled An Act to amend the Railway Act. The said James Pitt Mabee to be Chief Commissioner on the Board, and the said D'Arcy Scott to be Assistant Chief Commissioner thereof."

Messrs. Mabee, Bernier and Mills were members of the old Board of three; Messrs. Scott, Greenway and McLean are new appointees, increasing the membership of the Board from three to six. Under the Act of last session, authorizing the increasing of the number of commissioners, it is provided that the Assistant Chief Commissioner shall have all the powers of the Chief Commissioner, but such powers shall not be exercised by him except in the absence of the Chief Commissioner. The salary of the Chief Commissioner is \$10,000 a year, of the Assistant Chief Commissioner \$9,000, and of the other Commissioners \$8,000. Biographical information respecting the new appointees will be found under Mainly About People on another page.

Although not so stated in the Gazette notice reproduced above, it is understood that Hon. Mr. Bernier retains the title of Deputy Chief Commissioner, which he has had since the formation of the first Board, and that he has power to discharge their duties in the absence of both of them, or in consequence of their inability to act.

The work of the Board, an Ottawa dispatch states, is increasing in volume year by year. For the year ended June 30, the number of applications and its general business increased by 35% in comparison with the preceding twelve months.

The Commission sat at Ottawa Sept. 1 and following days, and took up the consideration of a number of cases, the most important being the application of the G.T.R. for a definition of necessary work as applied to railways under the Lord's Day Act. After hearing lengthy arguments the Commissioners reserved judgment, but it is understood that an order will be made modifying to some extent the regulation that no trains can be broken up, and no cars of perishable freight forwarded to their destinations on Sundays. In the same connection the Pere Marquette Rd. asked for permission to operate a car ferry across Lake Erie, in connection with the operation of through trains.

Chief Commissioner Mabee and Commissioner Mills opened sittings in Winnipeg Sept. 13, for the purpose of hearing a number of western cases. The principal case is that of freight rates, which was brought forward at the request of the Winnipeg Board of Trade, which alleged that the rates were framed in the interests of the shippers in the eastern cities.

The October sittings of the Board will open at Ottawa Oct. 6.

THE CHIEF COMMISSIONER'S DESIGNATION.

One of our subscribers has written us asking how the Chief Commissioner should be addressed, whether with the prefix "The

Hon." or with the affix "Esq." The proper address is undoubtedly "J. P. Mabee, Esq." When Mr. Mabee was on the Ontario bench he had the courtesy title of "the Hon. Mr. Justice." On his resignation from the bench he ceased to be entitled to the prefix of "Hon." and it is incorrect and in bad form to so address him now. We have noticed recently that in the copies of the Board's orders issued by the Secretary. Mr. Mabee is spoken of as "The Hon. J. P. Mabee," and in a report of a hearing before the Board recently, the official reporter designated him as "The Hon. Mr. Justice Mabee." Both forms are wrong. When Mr. Killam, who had prior to his appointment to the Board been one of the judges of the Dominion Supreme Court, was Chief Commissioner, he was never spoken of as "Hon." in the official records. It will be noted that in the Canada Gazette's official announcement of the appointment of the Board, which is reproduced above, the Chief Commissioner is spoken of as "J. P. Mabee, Esq." This announcement was prepared in the Secretary of State's office, and may therefore be considered as authoritative and conclusive. Mr. Mabee is, we feel sure, too broad-minded a man to desire to be addressed by any fictitious title, and he would, we think, rather resent the use of it. In the United States, with all its boasted democracy, the tendency is to give everyone titles, even the mayor of a town being styled "Hon." In Canada we should steer clear of such snobbery. In connection with the foregoing it may be mentioned that another member of the Board, Mr. Bernier, is entitled to be addressed as "The Hon." as it is laid down in the well-known dispatch of the Duke of Buckingham and Chandos, then Secretary of State for the Colonies, to the Governor-General of Canada, dated July 24, 1868, that Privy Councillors of Canada shall be styled "Honourable," and for life. Mr. Bernier is the only member of the Board entitled to the prefix "Hon." Mr. Greenway is an ex-member of the Manitoba Government, but the dispatch already quoted says that executive councillors of the Provinces shall be styled "Honourable," but only during office, and the title not to be continued afterwards. In the official Canada Gazette Mr. Greenway is designated as "T. Greenway, Esq."

Railways Outside Dominion Jurisdiction.

The Senate passed a resolution at last session asking for a statement giving a list of all railways in Canada which are not under the control or jurisdiction of the Board of Railway Commissioners, and stating in each case the reason why the railway is not controlled by the Commission. In response the Secretary of the Board has furnished the following list, stating that the railways mentioned have not been declared to be works for the general benefit of the Dominion, and are not therefore subject to the Board's jurisdiction:

Beersville Coal and Ry. Co.
 Bracebridge and Trading Lake Ry.
 Brandon Transfer Ry.
 Brantford and Erie Ry.
 Buctouche and Moncton Ry.
 Burk's Falls and French River Ry.
 Campbellford, Lake Ontario and Western Ry.
 Cape Breton Ry.
 Caraqueet Ry.
 Carillon and Grenville Ry.
 Central Ry. of Canada.
 Central Marmora Ry. and Mining Co.
 Crow's Nest Southern Ry.
 Edmonton, Yukon and Pacific Ry.
 Halifax and South-Western Ry.
 Hereford Ry.
 Hillcrest Ry. and Coal Co.
 Huron and Ontario Ry.
 Inverness Ry. and Coal Co.
 Irondale, Bancroft and Ottawa Ry.
 International Ry. of New Brunswick.
 Indian River Ry.
 International Coal and Mining Co.

Kaslo and Slocan Ry.
 Kent Northern Ry.
 Liverpool and Milton Ry.
 Lotbiniere and Megantic Ry.
 Magnetawan Ry.
 Massawippi Valley Ry.
 Midland Ry. of Manitoba.
 Montreal and Atlantic Ry.
 Montreal and Province Line.
 Montreal and Vermont Jct. Ry.
 Morrissey, Fernie and Michel Ry.
 New Westminster Southern Ry.
 Nosbonsing and Nipissing Ry.
 Nova Scotia Steel and Coal Co.'s Ry.
 Pacific Northern America Ry.
 Phillipsburg Ry. and Quarry Co.
 Princeton Branch Washington Co. Ry.
 Quebec Central Ry.
 Quebec and Lake St. John Ry.
 Stanstead, Shefford and Chambly Ry.
 St. Clair Tunnel.
 Sydney and Louisburg Ry.
 Temiskaming and Northern Ontario Ry.
 Vancouver Copper Co.'s Ry.
 Victoria and Sidney Ry.
 Victoria Terminal Ry. and Ferry Co.
 Wellington Colliery Co.'s Ry.
 York and Carleton Ry.

The Superior Court, on the application of the liquidators of McRae, Chandler and McNeill, Ltd., made an order Sept. 24, calling on J. L. Englehart chairman; F. Dane, D. Murphy, Commissioners; A. J. M'Gee, Secretary; G. A. McCarthy, C. B. Smith, J. M. Bourk, Engineers; and T. S. Scott, Superintendent, all of the Temiskaming and Northern Ontario Ry., to appear before the court for the purpose of being examined in connection with the construction of the railway and to produce all books, papers and records in connection therewith.

ELECTRIC RAILWAYS.

Height of Street Car Steps.

On Sept. 9, Helen MacMurchy, a Toronto physician, filed with the Ontario Railway and Municipal Board a complaint against the Toronto Ry. Co. and all other street and electric railways under the Board's jurisdiction, setting forth that the Board has power under the act respecting the Board passed in 1906, as amended in 1908, to make regulations with respect to car steps, so as to provide for the public's due protection, comfort and convenience, and that the Toronto Ry. and other railways in other Ontario cities and towns "are operating cars the steps of which are so high from the ground that the same are not only a menace to the safety of, but are exceedingly uncomfortable and inconvenient for the public." The complainant asked that the Board order that the first step of street and electric cars be from 9 to 12 ins. from the ground, and that the other steps have a rise of from 7 to 9 ins. The Board fixed a hearing of the application for Sept. 24, at 2.30 p.m., and notified the electric railways and municipalities interested.

At the hearing a number of witnesses were examined on Miss MacMurchy's behalf, for the purpose of showing that some of the steps on the Toronto Ry. Co.'s cars are too high for convenience and safety. Evidence was given by Doctors McPhedran, Reeve, Burnham, C. L. Starr, F. N. G. Starr, MacMurchy and Marlow. In their examination they all said that the single track car steps were satisfactory, but that they considered the steps on the double-track cars too high for comfort, and difficult for old and infirm people. In cross-examination it was shown that several of the doctors examined were not general practitioners, but eye and ear specialists, etc. Only one of them could remember any specific case in his practice where any injury had resulted from the height of the steps, and in that instance a man who had had his back injured previously by some other cause, had had it strained, and stated that the strain was caused by getting off a car. Some of the medical men said the height of some of the

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steps might be injurious to women in certain conditions of health, especially if they got off backwards, which Dr. F. N. G. Starr remarked most of them did. All of the medical witnesses expressed the opinion that 12 inches should be the maximum height of the first step from the ground. Three ladies, a school master and a merchant were examined on behalf of the applicant, all of them expressing the opinion that many of the Toronto car steps were too high. Another witness who had measured the steps of a number of cars produced a list of measurements showing heights of from 10½ to 17 inches.

The City Solicitor of St. Thomas, Ont., where a municipally-owned line is run, said there were no complaints against the height of the steps there, and contended that the case should be dismissed as against that road. Counsel for the Niagara Falls Park and River Ry., the International Transit Co., and the Kingston, Portsmouth and Catarqui Electric Ry., took similar ground and showed that it would be practically impossible to lower the steps on their lines. The Board was also addressed by J. E. Hutcheson, Superintendent Ottawa Electric Ry., and President Canadian Street Ry. Association; Acton Burrows, Secretary Canadian Street Ry. Association; N. P. Baker, Assistant to the General Manager, International Ry. Co., and C. B. King, Manager London St. Ry. The Solicitor for West Toronto said the Council had instructed him to support Dr. MacMurchy's application, and a letter was read from the City Engineer of London, Ont., giving his opinion that 12 inches should be the maximum height.

After conferring with the other members of the Board, Chairman Leitch said that every municipality interested had been notified of the hearing, but that no municipality had sent in any complaint. Evidence had been submitted against the Toronto Ry., the City Solicitor of West Toronto appeared to support the application and a letter had been received from the City Engineer of London, stating that, in his opinion, the maximum height should be 12 inches. As far as the companies operating in Toronto, West Toronto and London were concerned, it was only fair that they should have ample time to produce evidence and the further hearing as against them would therefore be adjourned until Oct. 28, at 2.30 p.m. It might then be found necessary by the Board to have an investigation made by its engineer or some expert. As far as the other companies operating in the Province were concerned, no evidence had been adduced against them, there were no complaints from the municipalities, and the application would therefore be dismissed as far as they were concerned.

A considerable number of women were present at the hearing as spectators, and commenced applauding one of the first witnesses. The chairman firmly stated that there must be no applause, and that they must remember they were before a court of justice and not attending a town meeting.

Projects, Construction and Betterments.

Belleville Radial Ry.—Application will be made next session of the Ontario Legislature for an act incorporating a company with this title, for the purpose of constructing a railway to be operated by electricity or other motive power in Belleville, and from the city easterly through Thurlow tp., and through the southerly part of Thurlow tp., known as Point Anne, also through Tyendinega tp. to Shannonville. It is proposed to ask for authority to use steam as a motive power during the period of construction. W. S. Morden, Belleville, is solicitor for applicants.

British Columbia Electric Ry.—The contract for the grading of the second section of the line under construction from New Westminster to Chilliwack has been awarded to Ironsides, Rannie and Campbell. The sec-

tion includes the 26-mile stretch between Cloverdale and Abbotsford. The line will pass through the towns of Surrey, Delta, Langley and Matsqui, and is to be completed by June 1, 1909. At Vancouver a freight shed is to be constructed for handling the freight on the company's New Westminster interurban line and the Vancouver and Lulu Island Ry. A central passenger station and office building is also to be built at Carroll and Hastings Streets.

In connection with the undertaking of the Vancouver Power Co., which is owned by the B.C.E.R. Co., a contract has been let to John McDougall, Caledonian Iron Works Co., Montreal, for the installation of an 11,000 h.p. turbine at Lake Buntzen, which, with other improvements there, is estimated to cost \$300,000.

The appropriations for the current year's work at Victoria include, in addition to amounts for rolling stock, \$35,000 for an extension of the line to the cemetery; \$15,000 for feeders to existing lines; \$12,000 for new buildings; \$10,000 for relaying tracks; \$10,000 for improvements at Gorge Park, and \$30,000 for extensions to the company's lighting system. (Sept., pg. 665.)

Calgary, Alta.—After several meetings, at which the offer of the Montreal Engineering Co. to construct an electric railway system in the city was discussed, the special committee appointed by the Calgary City Council Sept. 10, appointed a sub-committee to draft an agreement for submission to the company. The sub-committee suggest, as a basis of the agreement, a franchise for 20 years; the control by the city of extensions, and time-tables; the fixing of the fares at the same rates as in Toronto, and the division of receipts as follows: First five years, all to the company; sixth year, 5% of the receipts to be paid to the city, the percentage increasing annually until the 15th year, when 15% is to be paid, the percentage to remain at that amount until the termination of the franchise. (Aug., pg. 583.)

Chatham, Wallaceburg and Lake Erie Electric Ry.—The through service on this line between Wallaceburg and Lake Erie points was inaugurated Aug. 26, the subway under the Michigan Central Rd. tracks at Charing Cross, Chatham, Ont., having been completed. (Dec., 1907, pg. 927.)

Edmonton, Alta.—It is expected that the formal opening of the electric car lines in Edmonton will take place early in Nov. The grading has been completed on Ninth St. from Jasper Ave. to Saskatchewan Ave., and the tracks are being laid. Practically all the poles for the overhead work on the entire route have been placed in position, including the extension into Strathcona, and north through Norwood. Grading operations are in progress on Namayo St., and when this is finished all the roadbed on the Edmonton side of the river will have been prepared for track-laying. Car barns are to be erected in the north end of the city. (Sept., pg. 665.)

Hull Electric Co.—At a meeting of the Hull, Que., City Council, Sept. 9, the C.P.R., owning the H.E. Co., was granted leave to run a double track from the Interprovincial bridge via Youville St. This matter has been a point of considerable negotiation between the company and the council. (Aug., pg. 583.)

Hamilton, Waterloo and Guelph Ry.—The principal promoter of this railway, Jno. Patterson, of Hamilton, Ont., reached London, Eng., Sept. 9, for the purpose of making financial arrangements with a view to the early construction of the line. (July, pg. 509.)

Montreal and Southern Counties Ry.—It is reported that construction will shortly be started on the first section of this line, which will extend from Grey Nun St., Montreal, along Common St., Black's Bridge and the

Victoria Bridge to St. Lambert. However, there is no definite information on the subject. (Sept., pg. 665.)

Montreal Street Ry.—At a meeting of the ratepayers of Montreal West, held Sept. 10, the company's proposals for the construction of a new line of about a mile through that town were rejected. A counter proposal for a 25-year franchise, the cost of the removal of the snow to be borne equally by the town and the company, was made. (Aug., pg. 583.)

Niagara, St. Catharines and Toronto Ry.—Construction of the wooden trestle bridge, 260 ft. in length, across the Welland River, is being proceeded with, and W. R. Robertson, Superintendent of the line, is quoted as saying that it would be completed by the end of Oct. The completion of this bridge will give the company an entrance right into the town of Welland, Ont. (Aug., pg. 583.)

North Midland Ry.—A. E. Welch, on the occasion of his recent return to London, Ont., from London, Eng., said he had been successful in his mission of securing the necessary financial backing for the carrying out of the company's undertaking. Nothing, however, has been decided with regard to the commencement of construction. (Aug., pg. 583.)

Ontario West Shore Electric Ry.—J. W. Moyes, President, visited Owen Sound, Ont., recently, with a view of looking over the ground for an extension of this projected line. He said he expected to be in a position to lay a proposal before the town council at an early date. The company has under construction at present the section of the line between Goderich and Kincardine. It is reported that construction will be proceeded with throughout the winter, and Mr. Moyes says that, as far as possible, local men will be employed on the work. The number of men and teams available for the work had not, to Sept. 15, been what was desired, but it was hoped that when the harvest work was done a larger number would be available. The Maitland River power development, Mr. Moyes said, was a necessary feature in the success of the railway, and he hoped shortly to be able to announce definitely the commencement of operations on that. (Sept., pg. 665.)

The Ottawa Electric Ry. has put in new cedar ties, 24 in. centres, on the whole 5 miles of its Britannia branch.

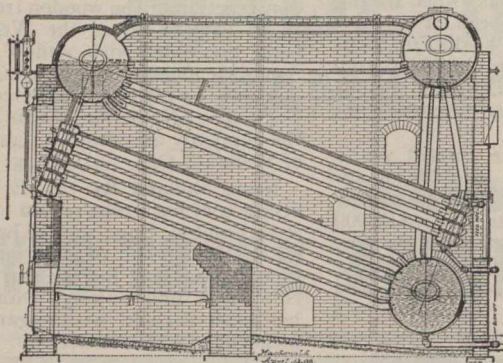
The company is building an extension to the Dominion Government Experimental Farm. Starting from the existing line at Victoria Park, Holland Avenue, the new line, which is double-track, crosses a road and enters the farm grounds, through which it runs for about 1¼ miles to the offices and buildings, where a loop is being built. Centre iron pole tracked construction is being used, cedar ties, 28 in. centres, steel rails 80 lbs., A.S.C.E. section, with continuous rail joints. The distance between tracks is 9 ft.

Good progress is being made with the construction of the extension from Holland Ave. to the Experimental Farm, and it is expected that the branch will be ready for opening early in Nov. The company is negotiating with the city council for permission to construct a loop at the south end of Elgin St., for convenience of operating the Experimental Farm extension. (Sept., pg. 665.)

South-Western Traction Co.—As a result of the investigations of the Ontario Railway and Municipal Board into construction matters in dispute between the company and the authorities of the village of Port Stanley, Ont., J. A. Bell, C.E., has been appointed to supervise the construction, both parties offering to accept his decisions on the disputed points. (Aug., pg. 585.)

Stratford and St. Joseph Radial Ry.—J. L. Thomas, C.E., London, Ont., stated, Sept. 6, that a section of the projected electric railway from Stratford to St. Joseph, Ont., had

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been pegged out ready for the contractors to start work. The line as surveyed will run from Stratford to Exeter, Hensall and St. Joseph.

N. M. Cantin, of St. Joseph, Ont., and M. Vosburg, of Boston, Mass., were in Stratford recently, and went over the route of the proposed line. Mr. Cantin said, "When Mr. Vosburg has inspected the route, and consulted his friends, there will be more to say in connection with the project. (July, pg. 509.)

Toronto and York Radial Ry.—A proposition is said to be ready for laying before the municipalities involved for the construction of a branch line from near Langstaffe, on the Metropolitan Division, to Markham Village, thence to Locust Hill, and on to Port Perry, Ont. An alternative plan is for a route diverging from the Scarboro Division, near the Markham Road, to Markham Village, and then on to Port Perry. (June, pg. 431.)

Toronto Suburban Ry.—The West Toronto City Council informed G. E. Royce, Manager T.S.R., Sept. 8, that the council was utterly opposed to the laying of tracks on Annette St., for the projected line to Swansea, and suggested a route via Humberside Ave. Mr. Royce said, if the company could not get the Annette St. route it would not construct the line at all. An appeal will probably be made to the Ontario Railway and Municipal Board to approve of the Annette St. route. (Sept., pg. 665.)

Winnipeg Street Ry.—Application has been made to the Board of Works for permission to double-track the line from McPhillips St. to the C.P.R. crossing, and to lay some additional lines. The locations were approved, subject to certain conditions as to the operation of cars. The company has a large force of men employed enlarging the channel at Lac du Bonnet, with a view of increasing the water power at its electrical development plant.

At the meeting of the Winnipeg City Council, Sept. 14, the company's Secretary wrote, offering to supply the council with 10,000 h.p. of electrical energy, at \$18.40 per h.p. per year for ten years. The council ordered the letter to be filed. (April, pg. 283.)

Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Gross earnings for July, \$174,410; operating expenses, \$92,172; net earnings, \$82,238; other income, \$13,550; less renewal funds, \$13,816; net income, \$81,972; against \$151,340 gross earnings; \$77,878 operating expenses; \$73,462 net earnings; \$11,036 other income; less \$11,030 renewal funds; \$73,468 net income, for July, 1907.

Edmonton-Strathcona.—By a practically unanimous vote, Aug. 28, the taxpayers authorized the Edmonton City Council to raise \$125,000 by means of debentures to put the entire street railway system in operation, and to purchase the charter of the Strathcona Radial Ry. The vote was 710 for the by-law and seven against.

Galt, Preston and Hespeler Street Ry.—The conveyances of this line and of its connection, the Preston and Berlin Street Ry., to the Berlin, Waterloo, Wellesley and Lake Huron Ry., have been deposited with the Dominion Secretary of State, as also has the lease of the B., W., W. and L.H. Ry. to the C.P.R.

Halifax Electric Tramway Co.—The usual quarterly dividend of 1½% has been declared payable Oct. 1.

Receipts for Aug., \$20,052.81, against \$19,611.41 for Aug., 1907. Receipts for 3 weeks ended Sept. 21, \$16,144.77, against \$11,391.06 for same period 1907. Total receipts for 8 months ended Aug. 31, \$119,818.26, against \$115,262.51 for same period 1907.

Hamilton Street Ry.—By a majority of 20 votes the taxpayers of Hamilton, Ont., decided Sept. 16 to sanction the making of a new bargain with the Street Ry. Co. It provides that the company instal a new system with a number of extensions in return for a reduction in the percentage payable to the city from 8% to 6% on all earnings over \$316,000. It is said the company will not accept the proposed arrangement.

London St. Ry.—Gross earnings for July, \$22,062.63; operating expenses, \$14,556.24; net earnings, \$7,506.39; fixed charges, \$2,350.77; surplus, \$5,155.62, against \$23,272.07 gross earnings; \$15,436.91 operating expenses; \$7,835.16 net earnings; \$2,291.94 fixed charges; \$5,543.22 surplus for July, 1907. Gross earnings for 7 months ended July 31, \$129,054.05; operating expenses, \$95,616.26; net earnings, \$33,437.79; fixed charges, \$16,224.59; surplus, \$17,213.20; against \$130,704.43 gross earnings; \$96,685.62 operating expenses; \$34,018.81 net earnings; \$15,676.98 fixed charges; \$18,341.83 surplus for same period, 1907.

Montreal Street Ry.—Two actions have been entered against the company by the city council, one of them being directly against the company, and the other against it as owner of the Montreal Terminal Ry., to recover the balance of accounts for now clearing during the winter of 1907-08. The amounts in dispute are \$20,598.21 and \$1,091.73 respectively, and the company refuses to pay, alleging fraud and extravagance.

Gross earnings for Aug., \$329,772.05; operating expenses, \$164,261.92; net earnings, \$165,510.13; city percentage on earnings, \$36,137.89; interest on bonds and loans, \$17,530.22; contingent for renewals, \$15,965.00; rent leased lines, \$444.43; surplus, \$95,432.59; against \$329,755.11 gross earnings; \$184,844.15 operating expenses; \$144,910.96 net earnings; \$32,906.56 city percentage on earnings; \$17,851.27 interest on bonds and loans; \$16,110.23 contingent for renewals; \$339.96 rent leased lines; and \$77,702.94 surplus for Aug., 1907. Total earnings for 11 months ended Aug. 31, \$3,329,059.97; operating expenses, \$1,978,659.18; fixed charges, \$585,966.29; surplus, \$764,434.50; against \$3,164,399.46 total earnings; \$1,946,389.33 operating expenses; \$524,555.10 fixed charges; and \$693,455.03 surplus for same period 1907.

Quebec Ry., Light and Power Co.—The annual general meeting of shareholders was held at Quebec Sept. 8. Following are the officers and directors for the current year: President, G. H. Thomson; Vice-President, F. Ross; other directors: Hon. J. Sharples, F. W. Ross, W. Price, L. C. Marcoux, W. Shaw, R. Forget, W. Hanson.

Toronto Ry.—A quarterly dividend at the regular rate of 1½% has been declared payable to shareholders of record Sept. 15, on Oct. 1.

Car earnings for Aug., \$299,532.97, against \$319,797.64 for Aug., 1907. Total earnings for 8 months ended Aug. 31, \$2,271,926.58, against \$2,196,668.54 for same period 1907.

Electric Railway Notes.

The Hamilton, Ont., Street Ry. Co. started operating its cars at eight instead of ten o'clock on Sundays, on Sunday, Sept. 13.

As the result of a petition from the residents of the district the Niagara, St. Catharines and Toronto Ry. resumed the Sunday operation of cars over its Welland division, Sunday, Sept. 13.

A petition signed by 80 merchants and manufacturers of Montreal was presented to the city council Sept. 14, asking that permission be given the Montreal Street Ry. to haul freight along its lines during certain

hours. The question has been under discussion for over a year.

An explosion of natural gas, which is used for generating electricity at the Chatham, Ont., power house of the Chatham, Wallaceburg and Lake Erie Electric Ry., occurred Aug. 31, causing considerable damage. The engineer, who was at the furnace door at the time of the explosion, escaped without injury.

A Board of Conciliation has been appointed to adjust certain matters in dispute between the employees of the Quebec Ry., Light and Power Co., and the company. W. H. Moore, General Manager Toronto and York Radial Ry., has been appointed to represent the company, and Alderman Brunet of Quebec will represent the men.

Jas. Milne, General Superintendent of the British Columbia Electric Ry., and formerly of Toronto, was arrested in Vancouver Sept. 23 charged with falsifying the company's pay rolls. Two of the company's minor officials were arrested on similar charges recently. One was sent to jail for three months, the other fled to the United States while on bail.

Col. J. M. Gibson, Hamilton, who has been appointed Lieut.-Governor of Ontario, has resigned his position as President of the Dominion Power and Transmission Co., owning or controlling the Hamilton St. Ry., the Hamilton and Dundas Ry., the Hamilton Radial Ry., the Hamilton, Grimsby and Beamsville Electric Ry., and the Hamilton and Brantford Ry.

N. P. Baker, heretofore Superintendent, Niagara Falls Division, International Ry., with office at Niagara Falls, N.Y., has been appointed Assistant to the General Manager, with office at Buffalo, N.Y. M. Sheehan, heretofore Superintendent Buffalo, Lockport and Olcott Division, has had his jurisdiction extended over the Niagara Falls Division. Office, Niagara Falls, N.Y.

W. C. Franz, who has been appointed General Manager of the Lake Superior Corporation, thereby became also General Manager of its subsidiary, the International Transit Co., which operates the electric railways at Sault Ste. Marie, Ont., and Mich. The position of acting Manager has been abolished, and J. S. Wynn, who filled it, has resumed his duties as General Auditor of the Lake Superior Corporation.

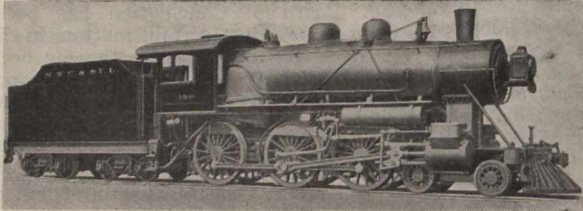
The Interurban Electric Co. has been incorporated under the Ontario Companies Act, with a capital of \$400,000, to take over the assets and franchises of the Stark Telephone, Light and Power Co., and to operate steam and electric railways, telephone systems, and to generate electricity for light, heat and motor purposes, in the cities of Toronto and West Toronto, and the townships of York, Toronto and Etobicoke. The provisional directors are: E. S. Adamson, F. Grundy, A. N. Morine, M. McDonald, C. H. Porter, G. D. Lewis and G. T. Turnbull.

Judge H. O'Leary was, Sept. 17, appointed the fifth Commissioner for the Port Arthur and Fort William Railway Commission. The four Commissioners appointed could not agree upon a fifth, and an application was made to the Ontario Railway and Municipal Board to name a man. On Sept. 14 Judge O'Leary granted an application for an injunction to restrain the Board from making such an appointment. Subsequently the mayors of the two cities telegraphed their agreement to the appointment of Judge O'Leary. The matter, however, is likely to come before the courts in another way, as certain ratepayers object to the appointment of a commission until a by-law has been submitted respecting the same. This matter is set down for hearing before Chancellor Boyd at the November sittings in Toronto.

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BURNHAM, WILLIAMS & COMPANY

PHILADELPHIA, PA., U.S.A.

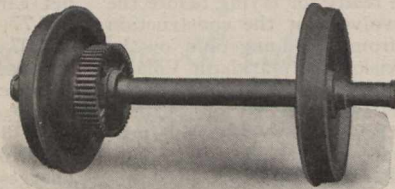
Cable Address:—"Baldwin," Philadelphia

Standard Steel Works Co.

HARRISON BLDG., PHILA., PA., U.S.A.

THE BRYDGES ENGINEERING & SUPPLY CO.

WINNIPEG, MAN. Limited REPRESENTATIVES

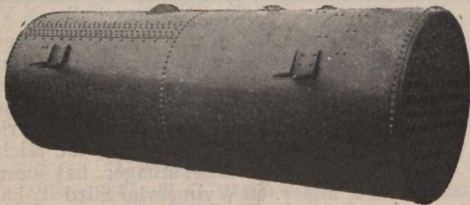


Wheels mounted on axles fitted with motor gear
ready for application to equipment

Standard

SOLID FORGED AND ROLLED STEEL WHEELS
STEEL TIRED WHEELS STEEL AND IRON AXLES
ELLIPTIC AND HELICAL SPRINGS

THE JOHN McDOUGALL CALEDONIAN IRON WORKS CO. MONTREAL, P.Q. LIMITED



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Return Tubular, McDougall Water Tube, etc.

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Water Tanks, Penstocks, Filters.

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Complete Power Plants designed and installed.

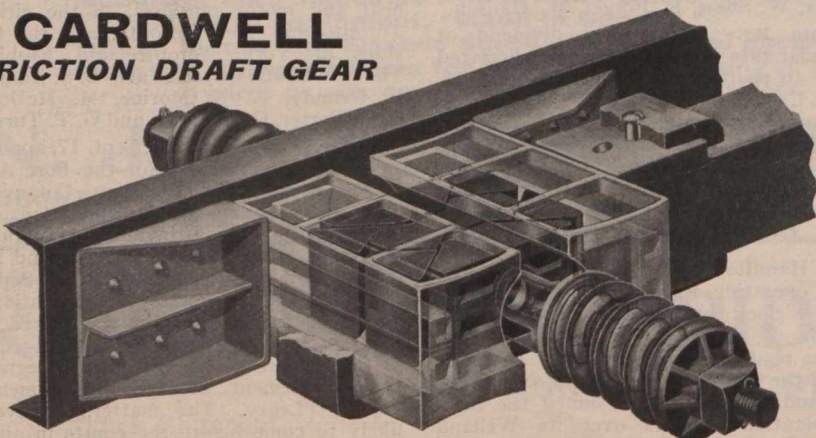
Sole Manufacturers in Canada for Worthington Turbine
Pumps and Doble Impulse Water Wheels.

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MONTREAL—82 Sovereign Bank Building.
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CARDWELL FRICTION DRAFT GEAR



Furnishes greatest protection to cars and locomotives.

CARDWELL MFG. COMPANY, CHICAGO, ILL.

Manufacturers of CARDWELL ROCKER SIDE BEARINGS.

OCEAN STEAMSHIP OFFICES

AMERICAN LINE

Plymouth—Cherbourg—Southampton
Sailing from New York Saturdays.

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Sailing from Philadelphia Saturdays.

ATLANTIC TRANSPORT LINE

New York—London
Sailing from New York Saturdays.

DOMINION LINE

Portland to Liverpool—Winter
Montreal—Quebec—Liverpool

Montreal to Avonmouth Docks
(Bristol and Antwerp)

LEYLAND LINE

Boston—Liverpool
Sailing from Boston Wednesdays.

RED STAR LINE

New York—London-via-Dover—
Antwerp

Sailing from New York Saturdays.

WHITE STAR LINE

New York—Liverpool—Queenstown—
Sailing from New York Thursdays.

N.Y.—Plymouth—Cherbourg—South-
ampton

Sailing from New York Wednesdays.

Boston—Queenstown—Liverpool

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Sub-agents at all principal points in Ontario,
where accommodation can be reserved and
tickets secured.

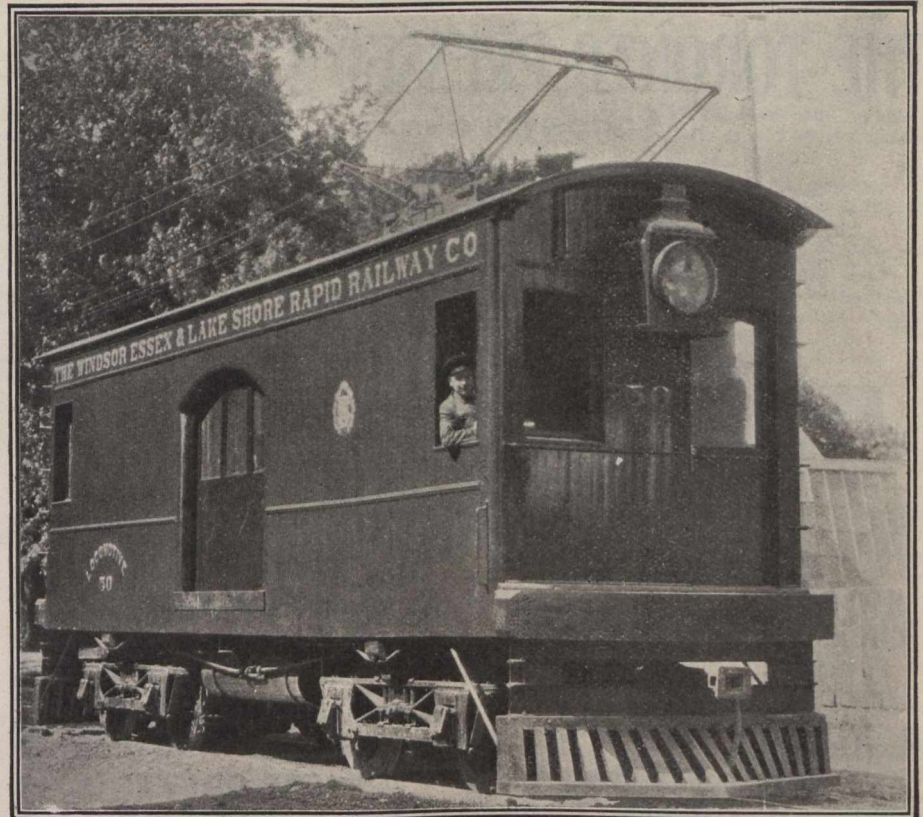
H. G. THORLEY,
PASSENGER AGENT FOR ONTARIO,
41 KING ST. EAST, TORONTO.

W. E. & L. S. R. Railway Locomotive.

The Windsor, Essex and Lake Shore Rapid Ry., with headquarters at Kingsville, Ont., has completed recently an interesting locomotive which is illustrated on this page. In designing this locomotive special attention was paid to having motors, wheels, gears and axles interchangeable with those on the motor cars. The latter are equipped with two Westinghouse no. 132 100-h.p. motors in parallel, while in the locomotive there are four motors of the same type, the two motors on each truck being in series and the two sets in parallel.

The locomotive was built for pulling gravel cars for ballasting, hauling general freight and for handling trains on excursion days. The general data of the locomotive are as follows: Approximate weight, 35 tons; length, 37 ft.; width, 8 ft.; distance between centres of trucks, 20 ft. 3 in., and weight of each motor, 4,900 lbs. The main part of the frame consists of two longitudinal sills of 12-in. I-beams placed 13 in. apart, with white oak fillers and bolted together. The outside sills are 8 x 12 in. oak, and the end sills 12 x 12 in. oak. The car bolsters are 12 x 12 in., the centre cross sill 8 x 12 in., with an intermediate sill of 6 x 12 in., all of oak. At every cross piece, including the bolsters, the two outside longitudinal sills are held together by two 1-in. bolts, one placed on each side of the cross timber. The washers and nuts are recessed in the side of the sills and covered by the V-matched siding, which forms the outside finish of the car. Additional strength was given by putting in 6 x 12 in. oak diagonal braces, as shown in the plan. The end sills are held in place by the two 1 1/4-in. truss rods, each of which is just inside the outside sills, and two straight 1 1/4-in. bolts which run the whole length of the car, one on each side of each of the 12-in. I-beams. The bumpers were constructed of 12 x 12 in. oak rounded on the outside and bolted to the end sills. These were faced with 12 x 1/4 in. steel.

On the elevation it will be seen that the vertical supports forming the truss structure of the locomotive do not come immediately over the bolsters and needle beams. Owing to the length of the locomotive it was difficult to place the vertical supports in exactly these positions, and the floor frame was considered strong enough to afford rigidity under any conditions to which the locomotive is likely to be subjected. There are three 6-in. needle beams, as shown on the elevation, the truss rods



WINDSOR, ESSEX AND LAKE SHORE RAPID RAILWAY ELECTRIC LOCOMOTIVE

passing immediately beneath two of them, while the centre needle beam has a strut through which the rod passes.

Sliding doors are placed on the sides of the car so that it can carry a certain amount of freight. As the locomotive is to be run in both directions, a motorman's cab is built at each end. The flooring is of 2-in. pine, and space has been left under the apparatus in the car to lay a floor of steel rails if it is found that the weight of the locomotive has to be increased. The roof is of 1-in. pine boards, covered with painted canvas of good quality. Swinging draw heads are used.

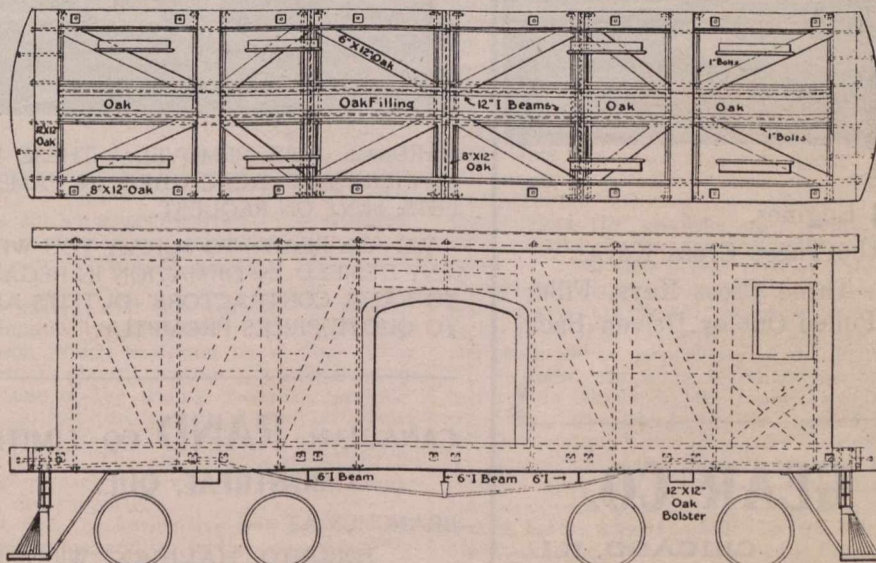
The framing of the car and the general layout of the apparatus were designed by H. T. Gibbs, who represented the Canadian Westinghouse Co. in the installation of the electrical machinery at the plant.

The locomotive is equipped with two trucks. The wheels are 36 in. in diameter. The distance between centres of wheels is 6 1/2 ft. The axles are 6 in. in diameter, and are the same as used on the company's interurban cars. The motors and all other electric as well as air apparatus is of Westinghouse manufacture. There is one 100-h.p. motor on each axle, making a total of 400 h.p. The weight of the truck with wheels and without motors is 9,750 lbs.

The locomotive is provided with the unit switch system of control, shown in the accompanying schematic diagram. The 104-volt lead shown on this sketch is used for the lights, the compressor motor and the motor-generator set for charging the storage batteries. From the table giving the sequence of switches, it will be seen that the first position of the master controller closes the four motor switches and nos. 1, 2, 3 and 4 of the switch group. On a trial of the locomotive it was found that it started up too rapidly, which made coupling dangerous, besides starting the train with a jerk. To remedy this a single-throw switch was installed in each of the cabs, and in series with one of the interlocking wires, so that the sequence of switches could be interrupted as soon as unit switch no. 2 was closed. When either of these single-throw switches was opened, only units nos. 1 and 2 could close, and after the locomotive had taken the strain of the cars the single-throw switch could be closed with the left hand and the unit switches in the group would follow in their proper order. By cutting out the switch group at switch no. 2 instead of at no. 4, the two sets of motors are operated in series at 296 volts instead of at 413 volts. This arrangement is very satisfactory.

The voltages, which are controlled by the eight unit switches, are as follows:

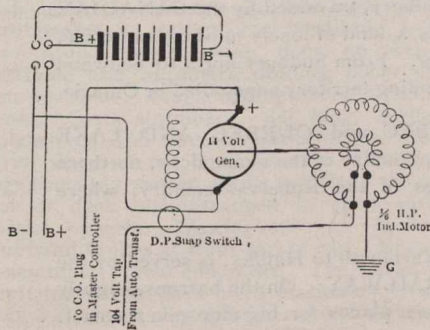
Unit Switch.	Volts.
No. 1.....	251
" 2.....	296
" 3.....	355
" 4.....	413
" 5.....	458



W. E. AND L. S. R. R.—PLAN AND ELEVATION OF LOCOMOTIVE FRAMING.

Unit Switch.	Volts.
" 6.....	517
" 7.....	561
" 8.....	620

A detailed diagram is presented of the connections to the motor generator and the storage battery, from which it will be noted that the double-pole snap switch breaks the motor as well as the generator circuit. All of the electrical apparatus, except the car motors, is placed inside the locomotive. The storage battery, motor generator, reverser, preventive coils and the switch group are secured to a structure made of 4 x 4 in. angle iron placed in one corner of the locomotive. It was intended to use 1,100 volts in Windsor and 6,600 volts over the rest of the line, and the car

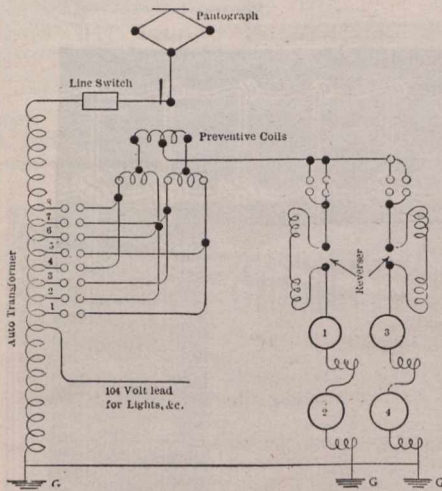


W.E. & L.S.R.R. LOCOMOTIVE.—SCHEMATIC DIAGRAM.

equipment was so planned that a change to the lower voltage may be made without altering the equipment.

The auto transformer, which is oil-cooled and of 200-k.w. capacity, is placed in a diagonally opposite corner from the switch group. The line switch is placed immediately above the auto transformer, and is just below the pantograph collector. All the control wiring is in iron-armored conduit.

All the central apparatus of the car, which includes the switch group, reverser,



W.E. & L.S.R.R. LOCOMOTIVE.—CONNECTIONS TO MOTOR GENERATOR AND STORAGE BATTERY

line switch and pantograph, is electro-pneumatically operated. The air compressor, which is driven by a single-phase motor, is placed between the switch group and one of the sliding doors on the side. The car is piped for straight and automatic air, and there are two valves in each motorman's cab. The air governor is bolted to the same rack from which the switch group, etc., are supported.

At first the locomotive was used to pull gravel trains, and up to the time of writing not more than six loaded flat cars have been hauled at one time. From the ease with

which these cars are handled it is probable that 12 flat cars loaded with gravel will make a fair load for the machine. The motors are geared to run the locomotive at a maximum speed of about 35 m.p.h., but it is found to run about 40 m.p.h. on level tangents. The single-phase equipment on this road is giving satisfaction, and as the characteristics of this apparatus are becoming more familiar, keeping up the equipment becomes easier than at first. Some minor troubles, of course, have been experienced, but none of them is an inherent fault in the system, but rather of a mechanical nature and easily remedied.

The Canadian Westinghouse Company has spared no pains in making the operation of the road a success, and as the men are now well drilled in the maintenance of the equipment and inspection is systematically followed, troubles are as few as could be expected on any new system.—S. C. Dewitt, in Electric Railway Journal.

Step	Switches.											
	1								9	10	11	12
1	1	2							9	10	11	12
	1	2	3						9	10	11	12
	1	2	3	4					9	10	11	12
2		2	3	4	5				9	10	11	12
3			3	4	5	6			9	10	11	12
4				4	5	6	7		9	10	11	12
5					5	6	7	8	9	10	11	12

W.E. & L.S.R.R.—Sequence of switches for single-phase locomotive.

Quebec Railway, Light and Power Co.

The 10th annual report for the year ended June 30, 1908, shows the net profits were \$87,066.43. Of this \$20,000 has been placed to the credit of Accident Insurance account, and the balance, \$67,066.43 credited to Surplus account, which now stands at \$414,886.15. Considering the financial stringency existing during the year, and the fact that the completion of the new power house and transmission lines was unavoidably delayed, and that no income was received from this source, the directors feel that the results are satisfactory. The new power house, transformer houses and transmission lines, etc., are now practically completed and have been in operation since the close of the year, with very gratifying results, and the directors look forward with confidence to increased profits from this source during the current year.

At a special general meeting of shareholders Nov. 7, 1907, a resolution was unanimously passed authorizing the directors to apply to Parliament for power to issue additional preferred stock to the extent of 5,000 shares of \$100 each. A bill in accordance with the resolution was passed by Parliament in June last. Acting under this authority the directors have offered to all shareholders the privilege until Sept. 15, 1908, to subscribe for any portion they may desire of 2,500 shares new preferred stock, at par; the shares to be allotted to the subscribers pro rata should the issue be oversubscribed. The proceeds from the sale of this stock will be used to pay off the floating indebtedness, the whole of which has been incurred in developing the resources of the company. The company's operations during the Tercentenary celebration were successfully carried out, and notwithstanding the crowded state of the streets and the large number of passengers carried, no accident of a serious nature was reported. As the festivities took place after the close of the financial year, the benefits accruing to the company do not appear in the figures of the present

statement. The directors learned with great regret that Mr. Methot was unable, owing to ill-health, to continue to act as a member of the board, and were fortunate in securing the services of Mr. Marcoux, to fill the vacancy.

E. A. Evans, Chief Engineer and General Manager, reports on the year's operations as follows:

Citadel Division.—The total number of passengers carried was 6,049,203, an increase of 534,075 over the previous year. The average fare per passenger was 4.22c., as against 4.24c. the previous year, but the income per capita of the population increased from \$3.24 to \$3.55, still an exceptionally low figure as compared with other cities. The operating expenses of this division have increased from 12.86c. per car mile to 13.64c.; this is principally accounted for by the increased cost of labor and material, representing an increase of nearly 1/2c. per car mile, and the increased cost of the removal of snow, representing nearly another 1/4c. per car mile; the exceptionally unfavorable climatic conditions last winter brought the total cost of snow removal up to \$17,380—the highest record since the inception of the road. Six open cars and five closed cars, also five double electrical equipments, have been added to the rolling stock of this division during the year. It having been decided to build a new roof to the car barn of this division, plans were prepared for a steel and concrete roof, so as to render the building more secure from the risk of fire; this work is progressing satisfactorily and will be completed by the end of October. The increased revenue arising from the celebration of Quebec's Tercentenary does not come into this year's operations; during the Tercentenary, viz., from July 21 to 31, both days inclusive, this division carried 679,000 passengers, an increase of 412,000 over the corresponding period last year, the largest number carried in any one day being 74,000. During the year no fatal or serious accidents happened upon this division.

Montmorency Division.—The total number of passengers carried upon this division was 1,398,345, an increase of 163,085 over the previous year. The average fare per passenger was 10.10c. as against 10.40c. last year. Upon the elevator at Montmorency, 239,910 passengers were carried, as against 226,213. The freight business represents 111,001 tons, or 5,826 carloads, an increase of 84,897 tons. The operating expenses have considerably increased, due to a variety of causes, but have certainly, for some considerable time, reached the maximum. The principal causes are: increased cost of labor and material, Government taxes (increased from \$10 to \$30 a mile) and the running of late trains to and from St. Anne and Quebec during the winter months. There was also a considerable expenditure for the use of foreign freight cars, owing to the company not having sufficient cars of its own; since, however, the division has been provided with 30 additional flat cars received just before the close of the financial year, this expenditure will be very much reduced. During the summer, commencing July 6, a special tourist car, in charge of an efficient guide, has been run between Quebec and St. Anne church, stopping only at Montmorency upon its return, this car has been extremely well patronized, and as a special fare is charged, it has so far proved very remunerative, but the results do not appear in the present statement. It is pleasing to again have to report that there has been no injury of any kind to passengers upon this division, and although there have been a few accidents to employes, the account for injuries and damages is nil. During the Tercentenary, on this division, 98,843 passengers were carried, an increase of 29,342 over the same period of last year; this, as before mentioned, does not appear in the present returns.

Power Division.—The lighting and power division continues to show progress, although the same remarks must apply to this as to the other divisions, viz., that the increased cost of labor and material has had a marked effect upon the operating expenses. The total lighting and power business on June 30, 1908, represented 69,552 incandescent lamps, 1,976 h.p. in motors, 57 k.w. in heating apparatus and 228 arc lamps, exclusive of the power supplied to the other divisions. A contract has been entered into for the supply of 250 electrical h.p. to the Dominion Textile Co. at favorable rates, of which amount 100 h.p. has recently been supplied. The storage battery plant has continued to give every satisfaction and proved of immense value in the successful supply of current to the Citadel division. Good progress has been made in the re-arrangement of the operating of the plant, and the paralleling of the machines is practically completed, only awaiting changes to be made to the street railway generators to fully complete this work. The fireproofing of the buildings belonging to this division will also be fully completed before the end of this year. The new power house and dam at the Natural Steps is now practically completed, and has been handed over to the operating department, but not in time for the revenues to be derived from it to show in the present statement; during the Tercentenary, the generator in this new addition to the company's plant supplied to the city 134,500 k.w. hours of current, to assist the other generators in supplying the large call for current during the illuminations; and the increased revenue due to this division from the celebration will amount to approximately \$14,000.

General.—During the year, the buildings, stations, tracks, locomotives and rolling stock, as well as electrical equipment, have been kept in a thorough state of efficiency and repair.

ASSETS.

Road and equipment, real estate, buildings, etc., including Kent House	\$6,111,025.81
Cash on hand	4,988.11
Power division—operating account, including accounts due, stores for operating equipment, etc.	64,737.22
Kent House—operating account	11,197.37
Citadel division—operating account, represented by stores on hand	14,311.56
Montmorency division—operating account, stores on hand, cash assets, etc.	58,529.53
Accounts receivable	27,331.42
	<u>\$6,292,121.02</u>

LIABILITIES.

Capital stock	\$2,500,000.00
Bonds	2,500,000.00
Preferred capital stock	500,000.00
Bills payable	192,501.28
Accrued interest account	28,998.03
Accounts payable and other liabilities	95,735.56
Contingent account	40,000.00
Surplus account	414,886.15
Accident Insurance Fund account	20,000.00
	<u>\$6,292,121.02</u>

PROFIT AND LOSS ACCOUNT.

Net earnings for year, June 30, 1908	\$238,461.05
Less: Interest on bonds	\$125,000.00
Dividend on preferred stock, interest, etc., paid and accrued	\$44,371.45
Interest charged to new dam construction	17,976.83
	<u>26,394.62</u>
	151,394.62
Net profit 1907-08	<u>\$87,066.43</u>
Transferred to Accident Insurance Fund account	\$20,000.00
Transferred to Surplus account	67,066.43
	<u>\$87,066.43</u>

The following officers of the Dominion Power and Transmission Co. have been elected for the current year: President, J. R. Moodie; Vice-Presidents, J. Dixon, G. B. Blanchard; Secretary and General Manager W. C. Hawkins; Treasurer, J. Knox.

New Trails to the Canadian Game Lands

Before the six railways of the Canadian Northern System followed the old fur trails into the Canadian game lands, only a hardy few dared to go in. But now, the back places of the woods—wealthy in moose, caribou, deer and bear—may be quickly and easily reached. The Canadian Northern system serves a wide range of undisturbed territories. Here are a few suggestions:

The country between Parry Sound and Sudbury, traversed by the CANADIAN NORTHERN ONTARIO RAILWAY, is a land of lonely muskeg and brûlé, the native country of the white-tailed deer. From Sudbury north to Sellwood this same line goes in through a moose hunting territory unequalled in Ontario.

The CANADIAN NORTHERN QUEBEC and QUEBEC AND LAKE ST. JOHN RAILWAYS span the native country of the ouananiche, northern brook trout, and the spruce-shored lakes of the Roberval country, where moose and caribou abound.

The eastern shore of Nova Scotia, from Yarmouth to Halifax, is served by the HALIFAX AND SOUTH WESTERN RAILWAY. On the barrens, slightly inland from the railway, are some of the best places for big moose in the east.

THE CANADIAN NORTHERN RAILWAY from Port Arthur to Edmonton, with many branches, griddles almost undisturbed haunts of moose, caribou, deer, wolves, bear, and all species of four-footed and feathered game.

For Information, General and Special, Address the Information Bureau, Canadian Northern Railway, Toronto

IDEAL RAILWAY FENCING

MADE TO LAST

Large gauge (No. 9) hard steel wire is used throughout, decreasing cost of maintenance, insuring durability and serviceability.

IDEAL FENCE has been adopted as a standard by all the leading Railways in Canada. More IDEAL is used by Railways this year than all other makes combined.

Write for Prices and Catalogue

The McGregor Banwell Fence Co.

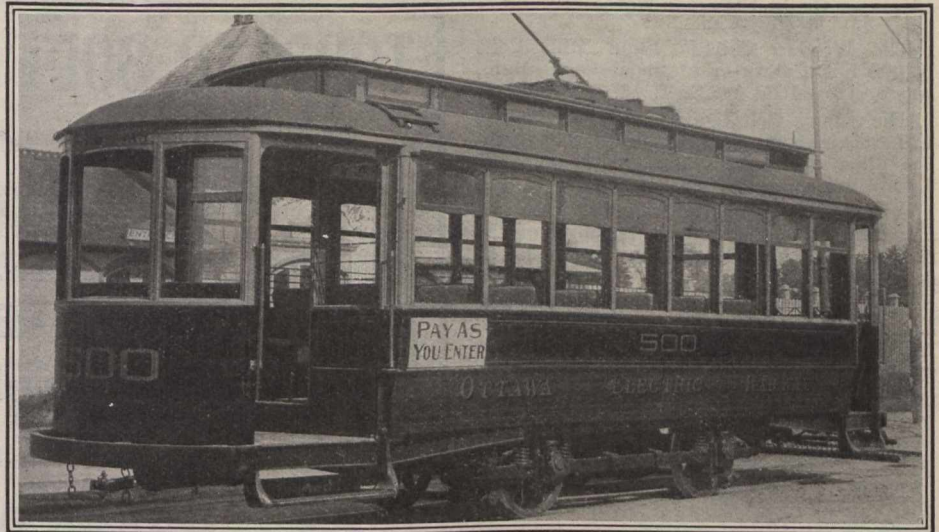
WALKERVILLE, ONTARIO LIMITED

Ottawa Electric Railway Cars.

The Ottawa Electric Ry. has had built two semi-convertible pay-as-you-enter cars, of which the following is a general description:

Length of car body.....	21' 0"
Length of front vestibule.....	4' 0"
Length of rear vestibule.....	5' 0"
Projection of bumpers.....	0' 6"
Length of car over bumpers.....	31' 0"
Width of car body at bottom.....	7' 7 3/4"
Width of car body at beltrail.....	8' 1 3/4"
Width of car body, inside.....	7' 4"
Length of seat.....	34"
Width of aisle.....	20"
Seating capacity.....	30 persons.

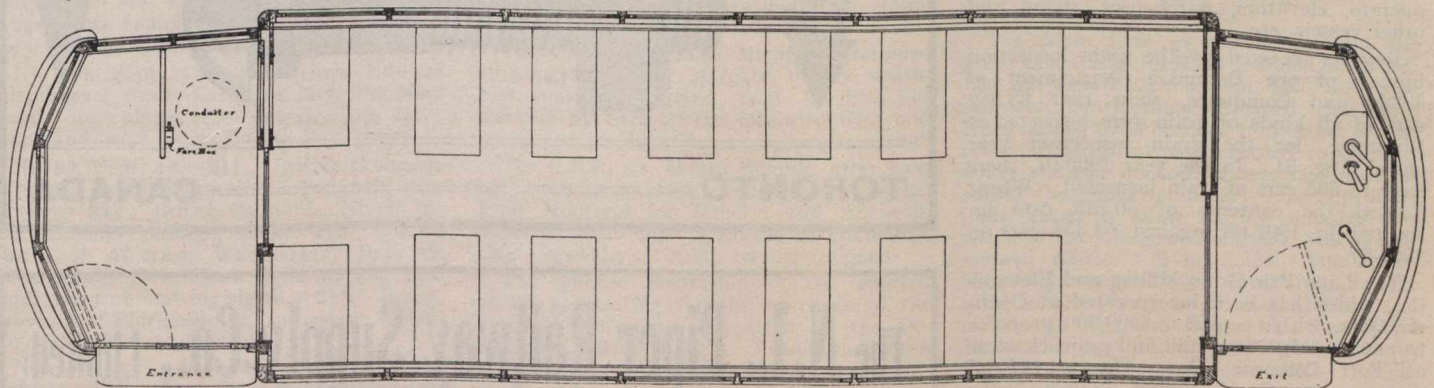
Omnibus sides, monitor roof, drop platforms and vestibules; eight double-sash windows in each side of car body with top sash made stationary. Bottom sash drop into pocket in wall of car; vestibule sash also drop. Single swing door on front vestibule and automatic folding doors on rear vestibule. Single sliding doors in bulkheads. Seats stationary, 34" long, spring upholstered and covered with rattan. Interior finish of car body, cherry. Headlinings three-ply veneer, bird's eye face. Monitor or deck sash arranged to open with special openers. Westinghouse air brakes and hand brakes at front end of car. Emergency brake at rear end of car. The seats are the Ottawa Car Co.'s no. 1 stationary cross seat, 34" long, spring upholstered and covered



OTTAWA ELECTRIC RAILWAY PAY-AS-YOU-ENTER CAR.

with Ottawa Car Co.'s standard fixture. Each car is equipped with an electrical signal bell system, bell in front vestibule with a push button on each side post and one in

vided with curtains, morocco embossed and mounted on 1 1/4" tin barrel shade rollers. Roller top pinch handle curtain fixtures at bottom of side curtains. Curtain rollers are



OTTAWA ELECTRIC RAILWAY PAY-AS-YOU-ENTER CAR, FLOOR PLAN.

with unlined twill weave rattan seating. A polished bronze handle to be provided on each seat back. All side windows are pro-

concealed in suitable housings. Front bulkhead window and door are provided with similar curtains to the side ones but fitted

rear vestibule. Batteries are protected by suitable boxes. Each car is heated with eight cross-seat heaters, complete with three degree intensity switch and cutout. A single truck is used, and the electrical equipment consists of two 30 h.p. Westinghouse 12 A. motors, k. 10 controllers.

The rear vestibule is large and will accommodate 12 persons. The door in the rear is in the centre of bulkhead. The conductor stands on the rear platform and collects fares before passengers enter. The front or exit door is on the right side of bulkhead, and passengers are requested to leave by this door.

The double gates at the front of the cars are all steel, and prevent passengers from getting off until car has been stopped. The gates are opened by the motorman, who has entire control of same. When closed, they bar the front bulkhead door, thus preventing passengers going into the vestibule and interfering with or crowding the motorman; they also bar the steps and prevent the attempt of anyone trying to get on by way of front door while car is in motion or when stopped. When opened, which is done by the motorman pressing a pedal with his foot, they swing into the vestibule to an angle, making a roomy passage for persons getting off car and still not far enough to interfere with the motorman and his duties. To close the gates the motorman simply pushes them back to place with his hand before starting car.

The cars, which were put in service towards the end of Aug., are giving satisfaction to the company and the public.



OTTAWA ELECTRIC RAILWAY PAY-AS-YOU-ENTER CAR.

Grain Elevator Notes.

The Western Canada Flour Mills Co.'s 35,000 bush. elevator at Shoal Lake, Man., was destroyed by fire Sept. 15.

The Sunny Belt Grain and Elevator Co., Ltd., has been incorporated under the Northwest Territories Ordinance, with office at Lethbridge, Alta.

A grain elevator is under construction at Tugaske, Alta., the present terminus of the new C.P.R. branch running from Moose Jaw northwesterly.

The Weyburn Farmers' Elevator Co., Ltd., has been incorporated under the Northwest Territories Ordinance, with office at Weyburn, Sask.

A press report states that the building of a short line of railway to the Port Colborne elevator is contemplated by the Department of Railways.

The Frontenac Cereal Co., Kingston, Ont., has taken over Moore's elevator there, having a capacity of 500,000 bush., and has organized an independent company to operate it.

The Charles R. Cousins Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$45,000 and office at St. John's, Que., to carry on a general grain business, and in connection therewith to construct or purchase, and operate, elevators, warehouses, steam and other vessels, etc.

Reports received by the grain inspection branch of the Dominion Department of Trade and Commerce, show that 63,882 cars of all kinds of grain were inspected at Winnipeg, for the grain inspection year ended Aug. 31. In the year 1906-07, there were 81,505 cars of grain inspected. Wheat formed the contents of 50,845 cars inspected in 1907-08, against 63,354 cars in 1906-07.

The Lake Erie Grain Milling and Elevator Co., which has been incorporated at Guthrie, Okla., with a capital of \$500,000, proposes to erect a large flour mill and grain elevator at Port Colborne, Ont. The provisional directors are: G. M. Kellog, Buffalo, N.Y.; S. T. Patterson, Guthrie; S. T. McColl, and A. C. Mitchell, Port Colborne, Ont. The two latter are at present associated with the Port Colborne Milling Co.

The Canadian Elevator Co. is erecting elevators, each of 30,000 bush. capacity, at Vann, Watrous, Young, Nokomis, Landis, Quinly, Redford and Scott, along the G.T. Pacific Ry., and, it is said, purposes erecting ten more elevators at other points on the line, when suitable locations have been decided upon. It is intended to have the whole number ready to handle this year's crop.

Among elevators which are being erected at various points in the western provinces are: N. Cameron & Co., at Basswood; A. S. Arnold, at Shoal Lake; Northern Elevator Co., at McIntosh's Siding, Man.; Medicine Hat Milling Co., at Grassy Lake; one at Chamberlain; T. S. Matheson and the Northern Elevator Co., at Griffin; W. Stead and Co., at Govan, Sask.; Winson-Leslie Co., at Cory; and the Alberta Pacific Elevator Co., at Gleichen, Alta.

The Atlas Elevator Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$500,000 and office at Winnipeg, to carry on the business of owning and operating grain elevators and warehouses, with power, among other things, to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks, etc. The provisional directors are: T. L. Metcalfe, W. J. Smith, L. J. Elliott, J. S. Cameron, G. A. Metcalfe, Winnipeg.

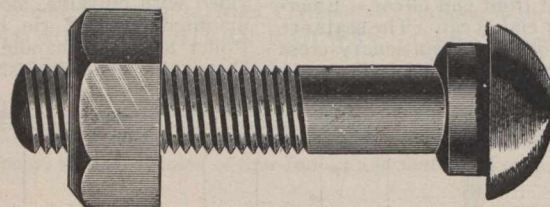
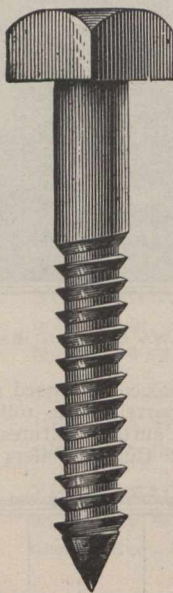
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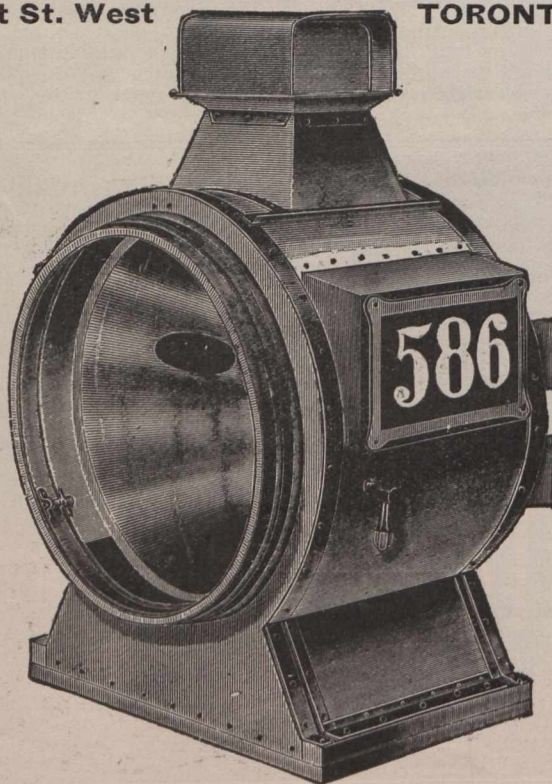
The N.L. Piper Railway Supply Co., Limited

314 Front St. West

TORONTO, Canada

RAILWAY SUPPLIES

LAMPS AND SIGNALS



LOCOMOTIVE HEADLIGHT

MARINE DEPARTMENT.

Notices to Mariners.

The following have been issued by the Dominion Department of Marine:

No. 78. Aug. 26.—197. British Columbia, Chatham Sound, approach to Prince Rupert, hydrographic notes. 198. British Columbia, North Skeena passage, hydrographic notes.

No. 79. Aug. 27.—199. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Lake St. Peter, curve no. 2, range lights in operation.

No. 80. Sept. 4.—200. Ontario, Lake Ontario, Kingston, light shown from pole on city hall. 201. Ontario, Lake Erie, Pelee Island, removal of wreck Armenia. 202. Ontario, Georgian Bay, Hope Island light station, fog alarm established. 203. Ontario, Lake Superior, east end, Coppermine Point, new tower.

No. 81. Sept. 9.—204. Quebec, Gulf of St. Lawrence, Anticosti, Ellis Bay, range lights only in operation occasionally, caution. 205. Quebec, River St. Lawrence, Ile à la Bague, lighthouse rebuilt. 206. Quebec, River St. Lawrence, ship channel between Quebec and Montreal, Ile Deslauriers back range lighthouse rebuilt. 207. Quebec, River St. Lawrence, chart, Portneuf to Cap Santé, issued.

No. 82. Sept. 10.—208. Ontario, River St. Mary, Sault Ste. Marie canal, upper entrance range lights temporarily extinguished, temporary range lights in operation.

No. 83. Sept. 11.—209. Prince Edward Island, east coast, Cardigan Bay, Panmure Head, fog alarm established. 210. Newfoundland, west coast, Hawke Bay, rocks.

No. 84. Sept. 14.—211. British Columbia Canadian list of lights and fog signals, new edition. 212. British Columbia, Rivers Inlet, schooner passage, rock. 213. United States of America, Washington, Juan de Fuca Strait, Ediz Hook light station, new light structure and fog signal. 214. Japan, Province of Shiribeshi, Otaru harbor, Otaru-Ko, lighthouse established.

No. 85. Sept. 18.—215. Ontario, Lake Ontario, Weller Bay, back range light discontinued. 216. Ontario, Georgian Bay, Meaford, permanent light on breakwater in operation.

No. 86. Sept. 21.—217. British Columbia, Vancouver Island, west coast, Kyuquot Sound, Halibut Channel, Lookout Island, Wigham light replaced by gas-lighted beacon. 218. British Columbia, Vancouver Island, west coast, Kyuquot Sound, Halibut Channel, rock northwestward of Table Island. 219. British Columbia, Strait of Georgia, off Gabriola reefs beacon, rock reported.

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

No. 32. Aug. 8.—1336. Lake St. Clair, Anchor Bay, Clinton River entrance, range lights to be established.

No. 33. Aug. 15.—1387. Lake Huron, Poe Reef light vessel withdrawn from station, gas buoy established.

No. 35. Aug. 29.—1477. St. Mary's River, West Neebish channel opened to navigation.

A. Booth & Co. in Receiver's Hands.

A receiver was appointed Sept. 10 to take charge of the affairs of A. Booth & Co., Chicago, Ill., and subsequently the company filed a petition in bankruptcy. The capital stock of the company is \$5,000,000, and it is largely interested in fishery companies operating in Lake of the Woods, Lakes Huron, Superior, Winnipeg, Manitoba and Winnipegosis. Capt. W. Robinson, of Winnipeg, the Managing Director of the allied Canadian company, the Dominion Fish Co., was in Chicago recently in connection with the matter, and it is said that this

company will not be affected to any considerable extent, as it is claimed that valuable fishing concessions owned by it will clear any liability which may attach as a result of the failure. The United States and Dominion Transportation Co., operating vessels between Duluth, Port Arthur and Isle Royale, Duluth and the Copper Country, Sault Ste. Marie and Owen Sound, and Sault Ste. Marie and Michipicoten Harbor, is also connected with the Booth Co., but we are informed that its business will not be affected to any extent.

Atlantic and Pacific Ocean Marine.

Capt. Watt, of the Cunard Line s.s. Lusitania, has retired from the service.

The Canadian-Mexican Steamship Line has given notice of a reduction in lumber freight rates to Mexican ports.

The captain of the P. & B. s.s. Sokoto was fined \$1,000 at North Sydney, N.S., Sept. 8, owing to two of a cargo of 25 Chinese having escaped from bond.

The Donaldson Steamship Line s.s. Marina ran ashore near Varennes, Que., Sept. 17, and was refloated, after unloading part of her cargo, with practically no damage.

T. Cairns, M.P., founder of the shipping firm of Cairns and Noble, Newcastle, Eng., which recently amalgamated with the Thomson Steamship Line, operating to St. John, N.B., died at Newcastle recently.

The C.P.R. s.s. Lake Michigan grounded at Longstead, near Margate, on the southeast coast of England, Sept. 9. She was released by tugs on the following day, and proceeded to Millwall dock for examination.

The C.P.R. s.s. Mount Temple, after having been practically reconstructed, sailed from Montreal for London and Antwerp, Sept. 2, with Capt. Griffiths in command, Capt. Boothby, R.N.R., having resigned.

The Quebec Steamship Co. is reported to be negotiating for the purchase of the s.s. Prince George, at present on the Dominion Atlantic Ry.'s Yarmouth-Boston route, with a view to placing her on the Bermuda run.

The Dominion Line s.s. Southwark, which grounded in Belle Isle Straits, Aug. 10, and after being released continued her voyage to Liverpool, Eng., has been replaced by the Vancouver while the necessary repairs are undertaken.

The Cunard Line s.s. Mauretania, en route to New York, broke one of her propeller blades Sept. 16. Temporary repairs were undertaken at sea, and she proceeded on her voyage with comparatively little loss of time, arriving at her dock Sept. 19.

The Canadian-Mexican Steamship Co., of British Columbia, announces that by the completion of the Tehuantepec Rd., from Salina Cruz to Puerto Mexico, it is now prepared to accept freight for Great Britain, by that route, connecting with the various Atlantic steamship lines trading from Puerto Mexico.

Representatives of the various steamship companies operating in the trans-Pacific service are reported to have agreed on a new schedule of rates, at a conference held at Seattle, Wash., Sept. 10. It is stated that the rates agreed on are much higher than hitherto, but that the benefit will accrue to the connecting railway lines rather than to the steamship companies.

Manchester Liners Ltd. has announced that from Sept. 5 to the close of navigation, a weekly service will be run between Montreal and Manchester, Eng., and if the results justify it, weekly sailings will be continued next season. Three new vessels are to be introduced to the service, named respectively Manchester Exchange, Manchester Inventor and Manchester Engineer.

H. C. Walrond, of the Canadian-Mexican Steamship Line, was in Victoria recently for the purpose of dealing with the local complaints against the service, and was in consultation with the Board of Trade council and various shippers on the subject. It is understood that the grievances have been removed, and arrangements made for the general betterment of the service.

The Imperial Fruit Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$49,000, and office in Montreal, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels in Canada, the Bahamas and West Indies. The provisional directors are: D. W. Campbell, F. Fowler, I. Hibbert, J. Wallace, R. C. Barry, Montreal.

The steamship companies carrying passengers into Canada are complaining as to the regulations respecting immigrants, claiming that considerable inroads have been made in their businesses. During the past season a regulation providing that each immigrant be in possession of \$25 was put into force, and this it is claimed prevented a large number of passages from being booked. It is now announced by the Immigration Department, that the amount each immigrant must have on landing shall be \$50 during Jan. and Feb., generally the two busiest months of the year.

The Allan Line s.s. Corinthian and the Head Line s.s. Malin Head collided off Grosse Isle, during a dense fog, Sept. 12. Both vessels were considerably damaged, the Malin Head having to be beached to save her foundering. The Corinthian returned to Quebec, where she was docked for repairs; but it is stated that only temporary repairs will be undertaken to allow of her crossing the Atlantic to Glasgow, Scotland, where permanent repairs will be made. The Corinthian's passengers were transferred to the same company's s.s. Corsican at Quebec, and sailed for England Sept. 18. The Malin Head will, it is understood, be taken to the U.S. as soon as possible for repairs. An enquiry into the causes of the collision was opened at Quebec, Sept. 25, before Commander O. G. V. Spain, R.N.

The Usher Steamship Co.'s s.s. Usher has recently completed what is purported to be the longest single voyage and the greatest distance which coal has been transported for bunker purposes. She sailed from Newport News, Va., June 11, for Auckland, N.Z., with coal for the U.S. fleet, arriving there Aug. 21, and having missed it there, followed it to Melbourne, Australia, arriving there Sept. 2, when it was found that the vessels were not then requiring coal, and she was ordered to take the coal to Manila, Philippine Islands. The s.s. Usher, which has recently been placed on the Canadian register, was built at Glasgow, Scotland, in 1901. She is a screw-driven vessel with engines of 310 n.h.p., her dimensions being: Length, 340 ft.; breadth, 46.5 ft.; depth, 25.7 ft.; tonnage, 3,594 gross, 2,350 register. The headquarters of the company are at Chegoggin, and the vessel's port of registry, Yarmouth, N.S.

Maritime Provinces and Newfoundland.

The Public Works Department will receive tenders, Oct. 5, for the construction of an extension to the wharf in West St. John harbor, N.B.

A schooner named Archie Crowell, of 2,000 tons, was launched at Shelburne, N.S., Sept. 9. Her dimensions are: Length, 118 ft.; breadth, 27 ft., with 86-ft. keel.

The Dominion Coal Co.'s s.s. Pors, which was stranded near Port Hastings, N.S., early in Sept., was subsequently refloated and taken to Halifax and docked for repairs.

SUBMARINE SIGNALS

Captain Watt, of the LUSITANIA, in an official report on Submarine Signals, says :

"Nearly all my sea life I have been looking forward to getting the assistance of a reliable sound signal. Now I feel that we have got it, and all that is required, in my opinion, is its universal application."

Full Particulars on
Application to the

**Submarine Signal
COMPANY**

BOSTON, MASS.

THE INTERNATIONAL MARINE SIGNAL CO.

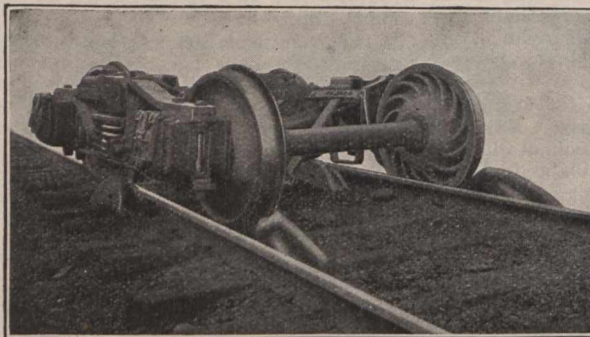
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Automatic Acetylene Gas Buoys, Beacons and Fog Signals.

Mariners describe our lighted buoys as "floating lighthouses."

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**60,000 PAIRS
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**Montreal, Que., and
Scranton, Pa.,**
of Pressed Steel Plate,
and guaranteed to re-rail
heaviest equipment.

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Greening's Steel Wire Chain



If you are interested in Chains examine carefully perfect mechanical construction of Greening's. It is the most perfect Chain made. We make it in 13 sizes. Correspondence solicited. We send out with table of breaking strain, samples, etc., upon request.

**THE B. GREENING WIRE CO., LIMITED
HAMILTON, ONT. MONTREAL, QUE.**

The Inverness Ry. and Coal Co. is reported to have laid off the steamships Bloomfield and Kilkeel on account of the scarcity of miners and laborers due to harvesting operations.

The Red Cross Line's s.s. Venetia has been withdrawn from the St. John's, Nfld., Halifax and New York route, and the service reduced from a weekly to a fortnightly one, the s.s. Rosalind being utilized for that purpose.

The Lunenburg, N.S., schooner H. R. Silver arrived at Halifax, N.S., Sept. 18, after a long voyage, during which the crew deserted on two occasions. She was brought into port by a temporary crew shipped in the West Indies.

Capt. P. McMahon, of Charlottetown, P.E.I., died at Oakville, Ont., Aug. 26, from injuries received while superintending the erection of a wharf for the Port Credit Brick Co. (Haney & Miller). The body was taken to Charlottetown for interment.

The following are the officers of the Canada Atlantic and Plant Steamship Co. (Plant Line), for the current year: President, A. W. Perry; Vice-President, McC. Grant; Treasurer, H. G. Perry; Secretary and Eastern Manager, H. L. Chipman; Auditor, R. C. Verner.

The Minister of Public Works announced at St. John, N.B., Sept. 3, that it had been decided to send representatives to New York for the purpose of securing floating grain elevators for use in St. John harbor. The Public Works Department has agreed to pay the cost of towage.

The Public Works Department has awarded the contract for the construction of a wharf and warehouse at Port Hastings, N.S., to W. J. Landry, Antigonish, for \$10,550, and for the construction of a wharf at Macpherson's Cove, N.S., to Reid and Archibald, Halifax, for \$3,973.

The Newfoundland s.s. Regulus and the s.s. Ocland collided near Sydney, N.S., Sept. 18, the Ocland having a large hole cut in her port side, while the Regulus was considerably damaged in the bows. A press report states that the owners of the Ocland have commenced proceedings to recover \$25,000 damages from the owners of the Regulus.

The borings in Courtney Bay, St. John, N.B., undertaken to ascertain the condition of the sub-strata, preparatory to arriving at a decision to construct wharves in connection with the proposed National Transcontinental Ry. terminal there, have been completed by the Public Works Department's engineers, who will report in due course.

Referring to a recent complaint to the Government by schooner owners, as to the delay to which they are subjected at coal shipping ports, the Dominion Coal Co. states that it has during the present shipping season loaded 433 schooners with 53,000 tons; the average detention being less than 2 days, while in some cases it was only 3 hours.

Announcement was made Sept. 18, that the C.P.R. Atlantic Steamship Line and the Donaldson Steamship Line had entered into an agreement with the St. John, N.B., Longshoremen's Association, as to the pay for unloading and loading their steamships at that port. The rate is fixed at 30c. an hour for the winter, and 35c. an hour in the summer, with double pay for work on Sundays and public holidays.

K. & V. Nordin, Ltd., has been incorporated under the New Brunswick Joint Stock Companies Act, with a capital of \$20,000, and office at Campbellton, to carry on a general lumbering business, and in connection therewith to own and operate vessels of all descriptions, wharves, etc. The provisional directors are: L. W. Just, Montreal; K.

Nordin, J. Ander, Newcastle; A. R. Wilkinson, Ashburnham, Mass., U.S.; V. Nordin, Helsingborg, Sweden.

The Department of Trade and Commerce will receive tenders until Jan. 2, 1909, for a steamship service between Pictou, N.S., and the Magdalen Islands, for the carriage of mails, freight and passengers, calling on each trip each way at Souris, P.E.I., and ports in the Magdalen Islands as follows: on all trips at Amherst Island, Point Bosse and Grindstone Island; and at Etang du Nord and Grand Entry once each week; such weekly calls to be made on alternate trips, and once each month during June, July, Aug., and Sept., during each year of the contract, at Bryan Island, and at Etang du Nord when weather permits. The service is to begin April 8, 1909.

Province of Quebec Marine.

The s.s. Gustav Adolf, which ran ashore on Goose Island Sept. 6, was released Sept. 9, and proceeded to Levis under her own steam. The damage was very slight.

The north and south ferry boats between Quebec and Levis were in collision during a dense fog Sept. 22, the latter vessel sustaining considerable damage to her bows above the water line.

The contract for the construction of a breakwater up to the Louise embankment in the St. Charles River, Quebec, has been awarded to E. Dussault and Sons, Quebec, for \$750,800.19.

The Richelieu and Ontario Navigation Co.'s steamboat Murray Bay broke a piston in the Saguenay River, Aug. 30, necessitating the transfer of her passengers to another vessel. She was subsequently towed to Sorel and the necessary repairs effected.

Several ocean-going vessels were detained at Montreal and Quebec, Sept. 18, owing to the dense smoke and fog which overhung the river and harbors. A general clearing of the air, however, allowed them to depart on Sept. 19. A similar condition prevailed again Sept. 22, and the various vessels on the Montreal-Quebec route were detained in their respective ports.

The St. Lawrence Stevedoring Co., Ltd., has been incorporated under the Quebec Companies Act, with a capital of \$100,000 and office at Quebec, to take over the stevedoring, discharging, loading and unloading plant for vessels, of the Canadian Import Co., and to carry on such business, with power to own and operate steam and other vessels. The provisional directors are: L. C., A. D., and M. T. Webster, W. Q. Stobo, H. Aird, Quebec.

A company is reported to be organizing for the purpose of constructing dry docks at Montreal, St. John, N.B., and at other ports in Canada. It is said that a site for a repair dry dock has been selected in Montreal. The names of R. Bickerdike, Montreal, and J. F. Stephens, New York, are mentioned in connection with the proposed company, the name of which is given as the National Dry Dock and Shipbuilding Co., and the capital stock as \$50,000,000.

The Department of Public Works is considering tenders for dredging work on the Richelieu River between St. John's and Lake Champlain, Que. The work to be done will provide a clear navigable channel, and regulate the levels between the two points named. The dredging is estimated to cost about \$90,000, and the construction of a stop-log dam 1,350 ft. long is estimated to cost \$110,000. The result of this work will be to lower the crest of the rapids at St. John's by almost five feet, to raise the level of the water in the Chambly canal, and incidentally to prevent flooding along the valley of the Richelieu River. (See The Lake Champlain Route, Sept., pg. 681.)

Members of the Canadian Manufacturers' Association, at the invitation of the Commissioners, inspected the Montreal harbor and works Sept. 16, when G. W. Stephens, Chairman of the Commission, in placing statistics, etc., before them, pointed out that Montreal does more business than any other port in North America, and more than any in Great Britain, with the exception of London and Liverpool. Referring to the lighting and buoying of the St. Lawrence channel, he remarked that owing to the improvements that had taken place, the insurance rates on cargoes and hulls had been reduced 100% in 5 years. We presume that what he meant to convey was that 5 years ago the insurance rate was 100% higher than at present. If so, the reduction which has taken place from the rate then existing is 50%. A reduction of 100% would wipe out the rate entirely.

Ontario and the Great Lakes.

J. C. Parsons, a well-known lakes captain, died at Goderich recently.

P. Deslaurier, tug owner, Port Arthur, Ont., was found drowned in Thunder Bay, off that city, Sept. 7.

The Hamilton Steamboat Co. will, it is said, build a steamboat to add to its fleet for next season's traffic.

The contract for the permanent repairs to the Cornwall Canal has been awarded to T. A. Nicholson, St. Catharines, Ont.

The Hamilton City Harbor Committee has recommended the granting of a 10-years' lease of the city dock to the Mutual Steamship Co.

The contract for the construction of two breakwaters in Cobourg harbor has been awarded to the Randolph Macdonald Co., Toronto.

The Dominion Transport Co.'s steamboat Telegram is undergoing repairs at Collingwood, after grounding on Jackson's shoal early in Sept.

The construction work on the wharf at Lakefield, Ont., was announced to start towards the end of Sept., and it is hoped to have it completed this fall.

The Kingston schooner Acacia, which ran ashore at Sackett's Harbor, N.Y., July 8, has been floated and towed to Kingston, where she will probably be repaired.

The Detroit and Cleveland, and the Detroit and Buffalo Navigation Cos., announce that their Detroit and Mackinac vessels will make Goderich a port of call next season.

The s.s. City of Chatham, which has been operating on the Chatham-Detroit route, was changed Sept. 16, and placed on the run between Kingsville and Pelee Island.

R. Goldring, captain of a Whitby schooner, was presented with the Royal Canadian Humane Society's medal recently, for the rescue of two men in Lake Ontario, July 1.

The contract for the widening of the deep water channel along the west pier of the Port Colborne entrance of the Welland Canal has been awarded to M. J. Hogan, Port Colborne.

The Mutual Steamship Co.'s s.s. Acadian, and the Montreal Transportation Co.'s s.s. Westmount, have had their repairs completed and are again in service between Fort William and Montreal.

The Otonabee Navigation Co. will probably add two vessels to its fleet next season. The frame of an 85-ft. vessel has been purchased, also an engine, and construction is in progress at Peterboro.

The Marine Department has issued a notice cautioning up-bound vessels to slacken speed in passing Stag Island in the St. Clair River, owing to the Government lighthouse work in progress there.

Capt. Dunn, commander of the Dominion Government cruiser Vigilant, has retired from

the service, and is succeeded by Capt. P. C. Robinson, formerly first officer of the Government cruiser Curlew.

Capt Roys, of the steamboat Aletha, was charged at Belleville, Sept. 14, with carrying more than the legal number of passengers on three occasions. The case was adjourned owing to the absence of witnesses.

Haney and Miller's steam barge Resolute, which was wrecked about two years ago off Toronto, and which was recently raised and overhauled, has again been put into service, and her name changed to J. Ralph.

A press report states that a marine railway and repair shops are to be constructed at Midland shortly, capable of dealing with the larger lake vessels. R. Morrill, Collingwood, is said to be interested in the matter.

A rumor is current in Toronto to the effect that negotiations are in progress for the amalgamation of the Turbine Steamship Co. and the Hamilton Steamboat Co., but officials of both companies have stated that there is no foundation for it.

The Algoma Central Steamship Co.'s steamboat King Edward ran on a reef at Chantry Island, Sept. 5, and was released Sept. 13, and taken to Collingwood, where she will be repaired. She was built at Glasgow, Scotland, in 1891.

The Montreal Transportation Co.'s s.s. Westmount, which recently grounded in the Sault River, arrived at Collingwood early in Sept., and went into dock for repairs. The damage sustained to the bottom of the vessel was more serious than anticipated.

The sloop Viking, owned by Capt. F. H. Mitchell, Oakville, Ont., and registered at Port Dover, has been sold to D. McLeod, Newcastle, and will be used between north shore ports and Toronto. Capt. Mitchell is reported to have bought the schooner Katie Eccles, registered at Napanee.

The s.s. Argyle has been sold by the liquidator of the Lake Ontario Navigation Co. to Hutchison and Son, Toronto, for \$12,500. She was built at Picton, Ont., in 1899, and is a paddle-wheel steamer, with engine of 274 n.h.p. Her dimensions are: Length, 185.1 ft.; breadth, 26 ft.; depth, 9.7 ft; tonnage, 700 gross, 374 register.

Capt. W. J. Bassett has returned to Canada from Great Britain, after seeing the Western Steamship Co.'s s.s. J. A. McKee sail on her trip across the Atlantic, with a cargo of coal for St. John's, Nfld. After unloading there, she will proceed to Sydney, N.S., to load steel rails for Fort William. We have already published a description of this vessel.

The Lake Superior Gold and Copper Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$8,000,000 and office in Toronto, and power among other things to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks and elevators, etc., and to carry on a general elevator, navigation and transportation business.

The Inland Navigation Co.'s s.s. Neepawah, which grounded on a shoal near Otter Head, in Lake Superior, recently, has been released and was taken to the Ecorse dry dock, where after a survey had been made and matters between the owners and underwriters adjusted, repairs were commenced. A number of plates and frames will be removed and it is expected that repairs will be completed early in Oct.

A case came up at Osgoode Hall, Toronto, Sept. 11, in which the Turbine Steamship Co. claimed damages, as the result of a collision with the once famous Knapp roller boat, which broke from its moorings at the Polson Iron Works yards last fall, during a storm. The defence then filed raised the question as to whether the Knapp roller boat was a ship

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Arriving on Grand Trunk Railway or Wabash Rd., at Niagara Falls, Ont. Hotel bus meets all trains or take trolley to hotel—7 minutes.

Arriving on Michigan Central Rd., Canadian Pacific Railway, at Victoria Park station—Hotel bus meets all trains, only three minutes' walk from station to hotel.

International Railway (trolleys), connecting with Niagara Navigation Co. steamers at Queenston, to or from Toronto, pass the door.

IMPORTANT

Guests coming to the Hotel should see to it that they are taken to The Clifton Hotel, CANADIAN SIDE, and also that their mail is addressed "Care of The Clifton Hotel, Niagara Falls, CANADA." To insure prompt delivery, don't forget to make CANADA plain in the address.

C.P.R. LANDS

THE CANADIAN PACIFIC RAILWAY COMPANY have 9,000,000 acres of selected lands for sale in Manitoba, Saskatchewan and Alberta.

Maps, as enumerated below, showing these lands in detail, will be sent free on application.

Map No. 1—Winnipeg to Second Meridian	\$ 8.00 to \$15.00 per acre.
Map No. 2—South-Eastern Saskatchewan, 2nd to 3rd Meridians	10.00 to 25.00 per acre.
Map No. 3—Main Line, 3rd Meridian to Range 10 W., 4th Meridian (generally)	8.00 " "
Map No. 5—South-Western Alberta	8.00 to 15.00 per acre.
Map No. 6—Part of Alberta—Edmonton, Battle and Saskatchewan Rivers Districts—4th Meridian to Range 7, West 5th Meridian	10.00 to 25.00 per acre.
Map No. 7—Part of Western Saskatchewan, 3rd to 4th Meridians	10.00 to 25.00 per acre.

All prices are subject to change without notice.

TERMS OF PAYMENT

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

160 Acres at \$ 8.00 per acre, cash payment	\$191.70	first year's interest	\$65.28	and nine instalments of	\$160.00
" " 9.00 " " "	215.70	" " "	73.46	" " "	180.00
" " 10.00 " " "	239.70	" " "	81.62	" " "	200.00
" " 11.00 " " "	263.60	" " "	89.78	" " "	220.00
" " 12.00 " " "	287.60	" " "	97.96	" " "	240.00
" " 13.00 " " "	311.55	" " "	106.10	" " "	260.00
" " 14.00 " " "	335.60	" " "	114.32	" " "	280.00
" " 15.00 " " "	359.50	" " "	122.44	" " "	300.00

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

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

F. T. GRIFFIN, Land Commissioner, Winnipeg.

CANADA NORTH-WEST LAND CO.

This Company has 525,000 acres of selected lands in Manitoba and Saskatchewan which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

F. T. GRIFFIN, Land Commissioner, Winnipeg.

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within the meaning of the Act. The trial was fixed to take place at the end of Sept.

The Calvin Co.'s steamboat Simla is unique in being the first Canadian owned vessel to convey freight between U.S. ports without being liable to the penalty of seizure under the U.S. coasting regulations. She was bound to Deseronto with ore, and while en route, the smelter, for which the ore was intended, was destroyed by fire. Permission was obtained from Washington to unload her at Buffalo, to save her returning to Sault Ste. Marie, Mich.

Press reports state that the Turbine Steamship Co. purposes building another turbine steamer for the Toronto-Hamilton route, and that the order will be placed in Canada, the turbines being imported from Great Britain. It is said that tenders have been submitted to the company for the construction of a similar vessel to the Turbinia, but 65 ft. shorter and 8 ft. less in width, with accommodation for 1,000 passengers. The name of the proposed vessel is given as Eatonia, and the approximate cost is placed at \$150,000.

In our Sept. issue we announced that the Northern Navigation Co.'s steamship, now under construction, was to be named Pacific. On application to the Marine Department for the registration of this name the company was informed that as there were already two vessels on the register bearing that name, and as a regulation had recently been passed respecting the duplication of names, that name could not be registered. The company has, therefore, decided to name the vessel Hamonic, in honor of its President, H. C. Hammond.

The lake survey reports for August show the levels to have been as follows, in feet above tidewater: Superior, 602.98; Michigan and Huron, 581.70; Erie, 573.13; Ontario, 247.95. The level of Lake Superior is about the same as the average August stage for the past ten years, while Michigan and Huron are $7\frac{1}{2}$ inches above, Erie $6\frac{1}{2}$ inches above, and Ontario 21 inches above, which is the highest August stage since 1870, when it was $\frac{1}{4}$ -inch higher. The estimated fall during September was: Michigan and Huron, $1\frac{3}{4}$ ins.; Erie, $3\frac{1}{4}$ ins.; Ontario, $4\frac{1}{2}$ ins.; while Superior, it was estimated, showed rise $1\frac{1}{2}$ ins.

The Great Lakes Steamships Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of \$250,000 and offices at Toronto, to build or otherwise acquire and operate vessels of every description, wharves, docks, warehouses, dry docks, elevators, etc., and to carry on a general transportation business by land and water. The provisional directors are: R. L. D. Taylor, H. L. Dunn, A. R. Cochrane, M. E. Cherrier, E. L. Bradley, Toronto. We are informed that the company is negotiating for the construction of three vessels at Tyne shipbuilding yards, England, orders for which will probably be placed next spring.

The Montreal Transportation Co.'s s.s. Kinmount, which was launched at Glasgow, Scotland, recently, is of the customary lake type and full Welland Canal size. She has triple-expansion engines with cylinders 18, 30 and 48 ins. diam., by 33 ins. stroke, supplied with steam from two single-ended boilers, 12 ft. 6 ins. by 11 ft. 4 ins., at 185 lbs. working pressure. She is built to the British Board of Trade Classification, with all the most recent improvements for vessels of her class. Her dimensions are: Length, 256 ft.; breadth, 43 ft.; depth, moulded, 25 ft. She has sailed for Canada, with a cargo of ingot moulds for the Dominion Iron and Steel Co., Sydney, N.S., where she will load rails for Fort William, Ont., and is expected to arrive early in October. The remainder of the season will be filled on the Fort William-Montreal route, and after the close of the river season, she will probably make a few trips to Georgian Bay ports.

Manitoba, Saskatchewan, Alberta, Etc.

A deputation recently waited on the Saskatchewan Premier to urge the necessity of establishing a ferry across the Saskatchewan River at Fielding. The Premier is reported to have said that such a ferry would be arranged for at an early date.

The contract for the construction of the movable dam, steel service and highway bridge, etc., across the St. Andrew's Rapids, near Winnipeg, has been awarded by the Dominion Public Works Department to the Canada Foundry Co., Toronto.

An unconfirmed press report says that the Dominion Government has sent an engineer to supervise the work of straightening the channel of the Assiniboine River, and that it is proposed to eliminate as far as possible the sharp bends between Winnipeg and Portage la Prairie, Man.

An enquiry into the causes of the wreck and burning of the s.s. Premier on Lake Winnipeg, Aug. 5, was opened before Commander O. G. V. Spain, R.N., and Commissioner Perry of the Royal Northwest Mounted Police, at Winnipeg, Sept. 1, and closed Sept. 9. Judgment had not been delivered at the time of going to press.

B.C. and Pacific Coast Marine.

Capt. Murray Thain, at one time harbor-master at Vancouver, died there Sept. 10.

The name of the s.s. Volga, recently acquired by the B.C. Government, has been changed by order-in-council to Shuswap, and will be registered at Vancouver.

N. Thompson & Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$10,000, with power among other things to build, lease, control and operate dry docks, shipyards and ships.

The old stern-wheel steamboat Strathcona, which it was recently intended to use on the Skeena River to convey blasting powder to G.T.P. Ry. contractors, has been overhauled and is being run as a pleasure boat, the original idea having been abandoned.

The paddle-wheel steamboat Caledonia, being utilized on the Skeena River by Foley Welch and Stewart, in their G.T. Pacific Ry. contract work, struck on a rock in the Skeena River recently and sank. She was subsequently floated and beached for repairs.

The B.C. Ferro-Concrete Pile Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$100,000, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks, etc., for its business.

The Capilano Timber Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$300,000, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels, or to acquire shares therein, and to let out same on hire.

The John Murray Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$50,000 and power, among other things, to own and operate steam and other vessels, wharves, docks, etc., and to act as warehousemen and carriers of goods and passengers.

The Vancouver-Wyoming Oil Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$150,000, with power among other things to build, purchase or otherwise acquire and operate steam and other vessels, and to act as common carriers by land and water.

The White Pass and Yukon Ry. officials stated recently that the last boat from White

Horse, on the Yukon route, would probably leave there Sept. 30, and that freight leaving B.C. ports after Sept. 15, might be detained at White Horse during the winter owing to the closing of navigation.

Rear-Admiral Kingsmill visited Esquimalt early in Sept., on a trip of inspection, with the view, it is said, of an arrangement being arrived at between the Imperial and Dominion Governments, for the utilizing of the port by the latter as the Canadian fleet's headquarters on the Pacific coast.

An order-in-council has been issued revoking the license granted to C. W. R. Clemenson, Nov. 29, 1907, to operate a ferry across the Okanagan Lake, between Summerland and East Summerland; and the B.C. Government received, up to Sept. 26, applications for a charter for a ferry to ply between the points named, about $2\frac{3}{4}$ miles, up to June 30, 1910.

The Prince Rupert Transfer and Storage Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$10,000, to carry on the business of transferring and storing of goods by any means, and to construct, lease or otherwise acquire tramways, ferries, wharves, docks, elevators, and all or any means of transportation expedient in the company's interests.

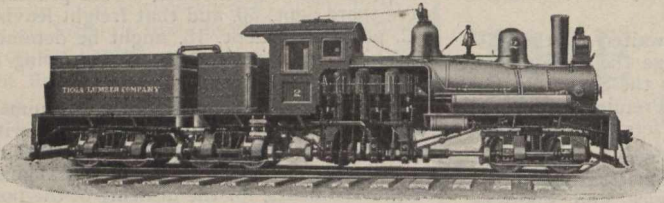
The Dominion Public Works Department's plans for the improvement of New Westminster harbor and the ship channel to the Fraser River, provide for expenditure during 1909 approximately as follows: Construction of a deep water dredge, \$300,000; building of a jetty about 3 miles long, \$200,000; and dredging, \$110,000. Dredging work will be undertaken to make the channel and harbor suitable for vessels having 25-ft. draught, and several sharp curves will be straightened out. It is estimated that the total cost of the work will be \$1,250,000.

The C.P.R. steamboat Transfer, registered at Victoria, which is reported to have been sold to the G.T. Pacific Ry. for use as a supply boat on the Skeena River, was built at New Westminster in 1893. She is a paddle-wheel steamer with engine of 18 n.h.p., her dimensions being: Length, 122 ft.; breadth, 24.5 ft.; depth, 5.6 ft.; tonnage, 264 gross, 98 register. Since the foregoing was put in type, we have been officially advised that there is no foundation for the report that the G.T. Pacific Ry. has purchased a steamer from the C.P.R., for operation on the Skeena River.

The Kingston-Titania Collision.

Capt. F. L. R. Pope and J. G. Schumacher, Local Inspectors at Buffalo, N.Y., of the U.S. Steamboat Inspection Service, have given the following decision: "After carefully reviewing the testimony taken in the investigation of the collision between the steamers Titania (American) and Kingston (Canadian) at the entrance to Charlotte, N.Y., harbor on the night of Aug. 11, 1908, at about 10.30 o'clock, we find that both steamers were approaching the harbor of Charlotte, the Titania from Sea Breeze, N.Y., and the Kingston from Kingston, Ont., the Titania bearing from the Kingston about four points on the port bow, and the Kingston bearing from the Titania about three points on the starboard bow. The signal lights of each steamer were plainly visible to the pilot of the other when three or four miles apart, with plenty of room in which to manoeuvre, and with nothing in the condition of wind or weather to render navigation difficult. No signals were given by the pilot of either steamer, covering a situation of this kind, as required by Rule X of the Government Pilot Rules, which reads:

"When two steamers are approaching each other at right angles or obliquely so as to involve risk of



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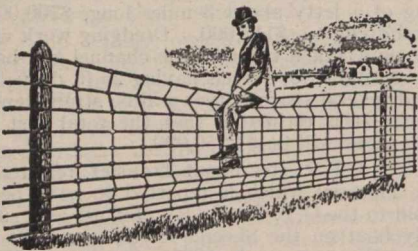
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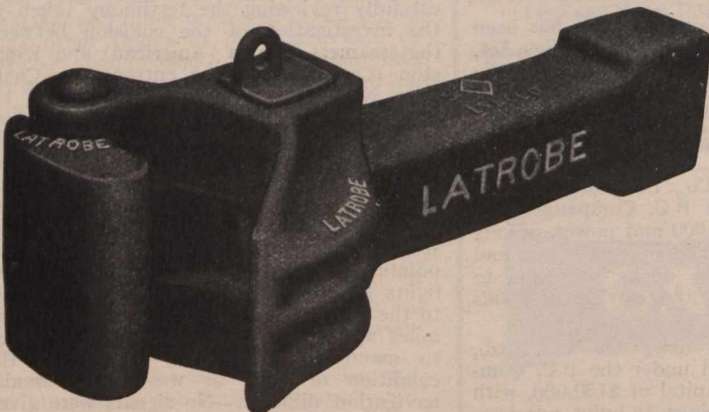
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collision, other than when one steamer is overtaking another, the steamer which has the other on her port side shall hold her course and speed; and the steamer which has the other on her starboard side shall keep out of the way of the other by directing her course to starboard so as to cross the stern of the other steamer, or, if necessary to do so, slacken her speed or stop or reverse. The steamer having the other on her own port bow shall blow one blast of her whistle as a signal of her intention to cross the bow of the other, holding her course and speed, which signal shall be promptly answered by the other steamer by one short blast of her whistle as a signal of her intention to direct her course to starboard so as to cross the stern of the other steamer or otherwise keep clear of her.

"If from any cause whatever the conditions covered by this situation are such as to prevent immediate compliance with each other's signals, the misunderstanding or objection shall be at once made apparent by blowing the danger signal, and both steamers shall be stopped, and backed if necessary, until signals for passing with safety are made and understood."

"The preservation of life and property depends largely upon a strict observance of the rules for the government of pilots, and those entrusted with the care of ships should understand that they must be enforced with uniform and absolute certainty. It also appears from the testimony that both these steamers entered the harbor at a rate of speed estimated at from 12 to 15 miles an hour, which was reckless and unskillful navigation in the circumstances and conditions surrounding this particular situation, and much in excess of the rate of speed allowed in harbors by the government regulations.

"In view of the facts set forth in the testimony, we find that the pilots of both steamers were at fault in not observing the pilot rules; and under the authority conferred upon us by sec. 4,450, revised statutes, we hereby suspend the license of Patrick Thorpe, master and pilot of the steamer Titania, for six months, beginning Sept. 5, 1908.

"The master and pilot of the steamer Kingston, being a British subject, he does not come under the jurisdiction of the disciplinary power conferred upon local inspectors by the United States laws."

St. Lawrence Insurance Reductions.

The Minister of Marine, in addressing a political meeting at Sorel, Que., recently, spoke of the work done on the St. Lawrence channel, referring particularly to the dredging and lighting. Speaking of the reductions in insurance he said: The following are the figures from 1900 to 1907:

	Provisions and Merchandise.	Grain.
1900	84 1/2 c.	99 c.
1901	63 1/2 c.	78 c.
1902	55 1/2 c.	78 c.
1903	49 c.	56 c.
1904	43 c.	50 c.
1905	37 c.	41 c.
1906	45 c.	45 c.
1907	38 c.	38 c.

These figures constitute a reduction of 54 1/2 % on the produce in the first category and of 60 % on that of the second. The tonnage of the vessels amounts to 386,837 tons, giving a total value, calculated at \$60 a ton, of \$23,210,220. The average rate of insurance is about 4 % of a total of \$928,408. Seven years ago, the average rate being then 5 %, would have represented on these boats \$232,000 more than to-day. During the last fiscal year the total amount of goods carried by the St. Lawrence route was more than \$150,000,000. Insuring these on the lowest rates of 1900, the result would be a total in insurance of \$1,260,000. Insured at last year's rate—that is to say, at 38c. per \$100—the result would be \$570,000,

or a saving in the cost of insurance of \$690,000. To this saving add the saving effected on the boats, and we have a total reduction in the cost of insurance of \$922,000. Hence it will be seen that the advantages which have been accorded to trade by the improvements to the route cover and exceed in the one item of insurance the interest on the cost of the improvements to the channel. Now, the amount spent on the St. Lawrence ship channel is \$10,107,038.28, which, calculated at 4 %, would give an interest of \$404,280. Hence it will be seen that the advantages which have been accorded to trade by the improvements to the route cover and exceed in the one item of insurance the interest on the cost of improvements to the channel by \$517,720.

The reports of Mr. Brodeur's speech in the daily press were so evidently erroneous that we asked him to favor us with a verbatim report of what he said, which he kindly did as above given.

Vessels Removed from the Register.—The following vessels were removed from the Canadian register during Aug. for the reasons assigned: steam, Arcola, St. John, N.B., 1,651 tons, stranded; Mizpah, Toronto, 12 tons, broken up; Victorian, Victoria, B.C., 809 tons, sold to foreigners; sailing: Bessie, Sydney, N.S., 20 tons, wrecked; Drummuir, Victoria, B.C., 1,798 tons, sold to foreigners; Ella B., Halifax, N.S., 62 tons, broken up; Foam, Chatham, N.B., 10 tons, broken up; G. S. Troop, Lunenburg, N.S., 98 tons, sold to foreigners; Hiawatha, Shelburne, N.S., 66 tons, lost at sea in 1885; Inga, Lunenburg, N.S., 161 tons, transferred to Barbados; Stella Matutina, Quebec, 75 tons, out of existence; Windsor Packet, Windsor, N.S., 66 tons, broken up

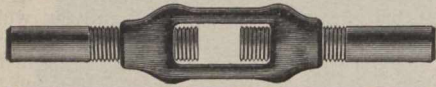
LIST OF STEAM VESSELS REGISTERED IN CANADA DURING AUG., 1908.

Name.	No.	Where and When Built.	Engines, etc.	Length	B'dth.	Depth.	Gross tons.	Reg. tons.	Port of Registry	Owners.
Bayette.....	126,207	Vancouver, B.C., 1908.....	Screw 1 N.H.P.....	24.0	7.5	....	53	2	Vancouver, B.C.....	C. A. R. Pryce and J. Morris, Vancouver, B.C.
Cowichan.....	126,210	Ayr, Scotland, 1908.....	" 151 "	157.1	32.1	13.5	962	520	"	Union Steamship Co., Ltd., Vancouver, B.C.
Farquhar.....	126,205	Vancouver, B.C., 1908.....	" 16 "	63.3	16.8	8.0	72	49	"	Rat Portage Lumber Co., Ltd., St. Boniface, Man.
Francis W....	126,051	Collingwood, Ont., 1908....	" 9 "	59.0	16.0	8.0	43	41	Owen Sound, Ont....	Owen Sound Dredge and Construction Co. Owen Sound, Ont.
Kitimac.....	126,260	Vancouver, B.C., 1908.....	" 2 "	43.0	9.3	4.8	18	12	Vancouver, B.C.....	J. W. Chappell, M.O., Vancouver, B.C.
Le Flottant..	126,158	Bout de l'Ile, Que., 1908....	" 1 "	49.4	10.3	6.7	22	15	Montreal.....	A. Archambault, Bout de l'Ile, Que
Limit.....	126,209	Vancouver, B.C., 1908.....	" 6 "	46.0	10.2	4.8	24	16	Vancouver, B.C.....	E. L. Kinman, Vancouver, B.C.
Leola.....	126,176	N. Westminster, B.C., 1908	" 9 "	24.8	6.6	2.7	3	2	N. Westminster, B.C.	D. Murchie, New Westminster, B.C.
Nanoose.....	122,397	Victoria, B.C., 1908.....	" 63 "	116.0	24.6	14.0	305	166	Victoria, B.C.....	Esquimalt & Nanaimo Ry., Victoria, B.C.
Pukwana.....	112,145	Kingston, Ont., 1903.....	" 13 "	54.3	8.9	3.9	14	9	Toronto.....	J. D. McMurrich, Toronto, Ont.
Tseekwa.....	126,208	Vancouver, B.C., 1908.....	" 2 "	27.5	8.2	4.3	8	5	Vancouver, B.C.....	K. Walkem, Vancouver, B.C.
Usher.....	114,053	Glasgow, Scotland, 1901....	" 310 "	340.0	46.5	25.7	3594	2350	Yarmouth, N.S.....	Usher Steamship Co., Ltd., Chegoggin, N.S.
Wampanoag..	125,997	.....	" 13 "	57.3	12.0	8.4	38	22	Quebec, Que.....	J. Doran, Levis, Que.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING AUG., 1908.

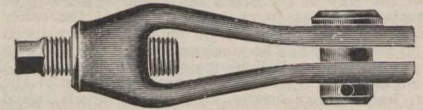
Name.	No.	Where and When Built.	Rig	Length	B'dth.	Depth	Gross Tons	Reg. tons.	Port of Registry.	Owners.
C. D. Pickels...	126,011	Bridgetown, N.S., 1908....	Schr.	172.0	33.4	12.5	.....	400	Annap. Royal, N.S	F. W. Pickels, M.O., Annapolis Royal, N.S.
Elia.....	126,251	.....	"	32.3	10.8	5.0	.....	11	Chatham, N.B.....	P. Richard, Escuminac, N.B.
Frankie King..	126,062	Miminigash, P.E.I., 1908....	"	54.4	14.0	5.6	.....	27	Charlottet'n P.E.I.	P. Kennedy, M.O., Palmer Road, P.E.I.
Hattie Maud...	122,430	Tanook, N.S., 1908.....	"	44.7	12.4	5.4	.....	16	Halifax, N.S.....	J. J. Berrigan, Canso, N.S.
Inga.....	126,110	La Have, N.S., 1908.....	"	100.2	27.0	10.3	.....	161	Lunenburg, N.S.....	J. N. Rafuse, M.O., La Have, N.S.
J. I. L. No. 1..	126,178	Ladner, B.C., 1908.....	Barge	59.7	20.0	4.7	.....	48	N. Westminster, BC	Jervis Inlet Lumber Co., Ltd., Ladner, B.C.
King Josiah...	125,965	Port Greville, N.B., 1908....	Schr.	98.1	28.7	8.9	.....	147	Parrsboro, N.S.....	J. & N. Solely, Lower Economy, N.S.
Le Voilier.....	126,156	St. J. des Chaillons, Q., 1908	Sloop	97.2	22.5	7.4	.....	94	Montreal.....	F. Lalibert, St. Jean des Chaillons, Que.
The Main.....	126,052	Welland, Ont., 1908.....	Dred.	100.0	36.0	7.4	.....	348	Owen Sound, Ont..	Owen Sound Dredge and Construction Co., Ltd., Owen Sound, Ont.
Marion C.....	126,184	Shelburne, N.S., 1908.....	Sloop	31.0	11.3	6.3	.....	11	Shelburne, N.S.....	W. J. Crowe, Sand Point, N.S.
Mathalia.....	126,183	Clark's Harbor, N.S., 1900..	"	31.0	11.6	6.4	.....	11	"	W. Watts & E. Holmes, Sand Point, N.S.
Plum.....	116,688	Richibucto, N.B., 1903.....	Schr.	36.0	11.0	5.0	.....	11	Richibucto, N.S....	G. H. Long, Richibucto, N.S.
Prince Willie..	126,159	Sorel, Que., 1908.....	Dred.	11.6	35.3	7.1	.....	258	Montreal.....	J. W. Poupore Co., Ltd., Montreal.
Sault au Mouton	126,157	Les Escoumains, Q., 1907....	Schr.	102.5	26.7	6.3	.....	71	.....	J. A. N. Mercier, Sault au Mouton, Que.
Rosie G.....	111,799	Little Lorraine, N.S., 1908....	"	38.7	12.4	6.2	.....	16	P. Hawkesbury, N.S	J. Gallant, Little Lorraine, N.S.
Three Swallows.	126,022	Glance Bay, N.S., 1897.....	"	30.2	12.0	5.0	.....	7	Sydney, N.S.....	B. Gracie, Little Bras d'Or, N.S.
Uncas.....	122,429	Sambro, N.S., 1908.....	"	35.2	11.4	5.0	.....	11	Halifax, N.S.....	A. W. Nickerson, Sambro, N.S.
Venturer.....	92,315	Brooklyn, N.S., 1886.....	"	115.0	29.4	9.3	.....	257	Liverpool, N.S.....	D. A. McDonald, Halifax, N.S.
White Cap.....	126,252	Point Sapin, N.B., 1908....	"	34.4	10.0	5.0	.....	11	Chatham, N.B.....	N. Mazerolle, Point Sapin, N.B.
Willena Gert'de.	125,967	Parrsboro, N.S., 1908.....	"	132.1	32.4	11.2	271	Parrsboro, N.S.....	H. E. Mosher, M.O., Parrsboro, N.S.

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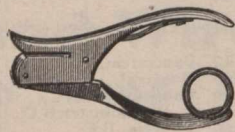
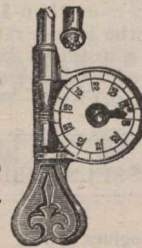
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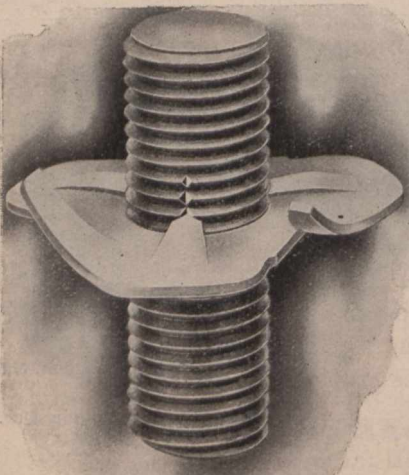
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on application**

A New United States Canal.

The Association of Commerce of Chicago, Ill., has under discussion a proposal for the construction of a canal from that city to Toledo, Ohio. The construction of such a canal would, it is claimed, reduce the distance between Chicago and Buffalo, N. Y., by about 500 miles, as compared with the present route via Lakes Michigan, Huron and Erie, with the connecting water between the last two lakes. The matter is in the hands of E. S. Conway, as chairman of the Association's Deep Waterways Commission. This commission has already taken up and is directing an agitation for the construction of a deep waterway from Chicago to the Gulf of Mexico, by means of the enlargement of existing river and lake waterways, and the construction of connecting links. In a letter recently written to the Mayor of Toledo, Mr. Conway says that as soon as the Great Lakes to the Gulf waterway is well in hand the energies of the Association will be devoted to the promotion of the Chicago-Toledo direct waterway. The canal, as proposed, would be 244 miles long, and have a depth of 20 ft. It would start from below South Chicago, cut across Michigan, and strike Lake Erie about the entrance of the Maumee River, 10 miles from Toledo. From this point traffic could be diverted up the river to the great elevators at or above Toledo, or a straightaway run for Buffalo and Lake Ontario would be open.

Lake Grain Shipments 1905-1907.

The following comparative statement, prepared by F. E. Gibbs, Grain Inspector, Fort William, Ont., shows the total shipments of grain in bushels from Fort William and Port Arthur of the crops of 1905, 1906, and 1907, from Sept. 1 of each year to Aug. 31 of the following year:

	1905 bush.	1906 bush.	1907 bush.
Wheat....	55,509,720.50	54,849,649.40	47,521,490.50
Oats....	5,721,815.30	12,744,736.02	11,096,405.24
Barley....	959,546.42	1,839,177.42	1,971,938.41
Flax....	456,928.16	753,307.26	1,514,644.40
Rye.....		9,010.00	3,036.00
Totals.	62,648,010.38	70,195,880.10	62,107,514.55

The figures given, include rail as well as vessel shipments.

Lake Grain Shipments, 1907 Crop.

The following statement, prepared by F. E. Gibbs, Grain Inspector, Fort William, Ont., shows the shipments of grain by vessels from the different elevators at Fort William and Port Arthur, of the crop of 1907, from Sept. 1, 1907, to Aug. 31, 1908, inclusive, with ports of destination.

	Wheat		Oats		Barley		Flax	
	Canadian Vessels	Foreign Vessels	Canadian Vessels	Foreign Vessels	Canadian Vessels	Foreign Vessels	Canadian Vessels	Foreign Vessels
Canadian Ports								
Owen Sound....	1,661,159.10		2,268,628.16		233,542.36			
Midland.....	3,386,382.30		34,493.24		24,139.02			
Tiffin.....	1,357,126.10		424,520.08		77,240.22			
Collingwood....	423,878.30		40,415.20					
Pt. Edward....	1,866,762.50		292,059.02		47,867.04		23,079.05	
Depot Harbor..	3,657,130.50		272,962.22		44,701.40			
Meaford.....	783,982.40		232,884.30		41,637.28			
Goderich.....	3,597,301.10		1,337,909.16		41,830.26		301,072.54	
Pt. Colborne...	291,063.00						31,701.44	
Thorold.....	468,391.20							
Kingston.....	6,307,026.40		548,213.26		352,747.38		171,574.05	
Prescott.....	576,964.40				17,921.32			
Montreal.....	5,865,056.00		824,155.12		311,988.17		560,496.01	
Totals.....	30,242,225.30		6,276,243.06		1,193,617.45		1,087,923.53	
Foreign Ports...								
Port Huron....	106,093.50	194,603.10		6,334.02				
Erie.....	300,181.00	519,144.10						
Chicago.....		183,383.00						
Ogdensburg....	63,042.50							
Buffalo.....	1,723,805.10	4,593,517.40	746,153.20	269,079.06	51,471.20	40,273.44	104,242.01	42,000
Totals.....	32,435,348.20	5,490,648.00	7,022,396.26	275,413.08	1,245,089.17	40,273.44	1,192,165.54	42,000

White Star Line ss. Laurentic.

The s.s. Laurentic, the first of the two vessels with which the White Star Line purposes inaugurating its Canadian service, was launched at Belfast, Ireland, Sept. 9. When it was decided last year to build an additional two vessels for the Canadian trade, the intention was that they were to be run under the management of the Dominion Line, another of the constituent companies of the International Mercantile Marine Co., but it was later arranged for the White Star Line to manage them as the White Star-Dominion Service, and the names selected for the vessels, viz., Alberta and Albany, were changed to Laurentic and Megantic.

Particular interest will be attached to this vessel on account of the adoption of a combination of reciprocating engines with a low pressure turbine, the Laurentic being the first passenger steamer designed with such arrangement. It has been generally assumed that the adoption of this system is an indication of an intention with regard to the machinery of other steamers in contemplation. The arrangement of machinery constitutes the vessel a triple-screw steamer, each of the wing propellers being driven by four-crank, triple-balanced engines, and the central propeller by a turbine. The object is to retain the advantages of the highly perfected balanced reciprocating engines and at the same time get the benefit of the further expansion of steam in a low pressure turbine. From an engineer's point of view, this is a combination of well-established practice and experience with the latest theory, and it may prove to be one of the soundest commercial developments of the present time—at any rate, the arrangement seems to be conceived on safe lines, and to have every prospect of success. The reciprocating engines will use steam of 215 lbs. pressure per sq. in. After the steam has done its work in these engines the exhaust steam from the four low pressure cylinders will pass into the turbine, in which it will be expanded down to 2 lbs. absolute pressure before exhausting into the condensers. It will thus be seen that the steam will be utilized to the utmost extent by means of this combination. The necessity for an astern turbine, which is essential in steamers fitted with turbines only, is avoided, as in this vessel, both for going astern and manoeuvring in and out of port, the reciprocating engines will be more than sufficient, as they will develop over three-fourths of the total combined horse-power.

The Laurentic will be the largest vessel in the Canadian trade, her dimensions being: Length, 565 ft.; breadth, 67.4 ft.; and tonnage, 14,500 gross. There will be accommodation for 235 first-class, 430 second-class, and 1,000 third-class passengers, in addition to a large cargo capacity. She is being constructed throughout on the most approved principles, nothing that long experience and practical knowledge can suggest being wanting to make her as perfect as possible in all particulars, and has been designed with cellular double-bottom extending the whole length, and is especially strengthened under the engines to give greater rigidity in the vicinity of the machinery. The vessel has 9 watertight bulkheads, dividing her into 10 watertight compartments. The double-bottom, in addition to being an element of strength and security, provides space for water ballast, which is also carried in the fore and after peaks.

The passenger accommodation has been carefully arranged, a feature of the entrances and public rooms being their height and general roominess, the staterooms having the same characteristics. The decorations throughout will be of a most attractive nature. The staterooms will be situated on the lower promenade deck, and on the shelter deck, and will include a number of cabins en suite, with private lavatories and bathrooms adjoining. An electric passenger elevator, serving four decks, will also be installed.

The second-class passenger accommodation consists of dining saloon, on the middle deck, extending the full width of the ship, seating 262 passengers; the library, on the lower promenade deck, and smoke-room on the upper promenade deck; also beautiful apartments, tastefully decorated in polished hardwood, and spacious staterooms.

The third-class quarters will compare favorably with similar accommodation on the steamer. The dining-room, situated aft on the upper deck, is exceptionally fine, extending the whole width of the ship.

There are six cargo holds and the derricks and other appliances for working the ship and cargo are of the latest pattern, special attention being paid in the design to the requirements of shippers in the Canadian trade. There will also be large refrigeration chambers for provisions and cargo. The Marconi system of wireless telegraphy will be installed and also a submarine signalling apparatus, the value of each being universally recognized.

It is hoped to have the Laurentic completed by the end of the year, when she will be placed on the Liverpool-New York route, and transferred to the Canadian service as soon as the St. Lawrence opens for navigation in 1909, sailing in conjunction with the Dominion Line steamships Canada and Dominion.

The Megantic will shortly be launched, also, at Belfast, but will be propelled by reciprocating engines alone.

P. C. Robinson, Port Stanley, Ont., has been appointed a fishery officer in the Fisheries Protection Service of Canada, with the rank of Master Mariner.

The Department of Railways and Canals received tenders Sept. 28 for closing the gap in the Carillon Canal dam, and for trimming slopes on the Cornwall Canal.

An order-in-council of Sept. 9 prohibits the use or operation of vessels known as steam trawlers using beam, otter or other trawls for the purpose of catching fish within the 3-mile limit, and in the bays and harbors of Canada.

The Canada Gazette, Sept. 26, announces that the name of the steamer Marion has been changed to Owen. There are three steamers named Marion on the Canadian register, at Halifax, N.S.; Toronto and Kenora, Ont., respectively, but no indication is given as to which one the change of name applies.

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The Quebec-Imperial Collision.

Commander Spain, Dominion Wreck Commissioner, has given the following judgment in the case of the collision between the Richelieu and Ontario Navigation Co.'s steamboat Quebec and the Canadian St. Lawrence Navigation Co.'s steamboat Imperial on the St. Lawrence River, near Varrennes, Que., on July 5, at about 5.55 a.m. The judgment is concurred in by Capt. Arch. Reid, Port Warden of Montreal, and Capt. Francis Nash, who acted as assessors.

"The steamboats Quebec and Imperial are engaged in the same trade, more or less in competition, that is, carrying passengers and cargo from Montreal to Quebec, and vice versa, calling at various intermediate ports. On the morning of July 5, both vessels were bound from Quebec to Montreal in close proximity, the Imperial somewhat ahead of the Quebec, proceeding at a speed of about 13 miles an hour, whereas the speed of the Quebec was 16 or 17 miles, the Quebec therefore overhauling the Imperial. The C.P.R. steamship Montrose was met proceeding down the river, and in order to clear this vessel, the helm of the Imperial was ported, and after the Montrose had passed, starboarded, to bring her back again into the channel, but before the starboard helm had taken effect, the collision between the two ships had occurred, the Imperial striking the Quebec on the forepart of the paddle-wheel box with the bluff of her starboard bow, sustaining slight damage herself, and injuring the Quebec's paddle-wheel considerably, so that this vessel had to anchor, and apply for tugs to take her to her destination. The Court considers that an unnecessary amount of port helm was given to the Imperial when she ported to clear the Montrose. It is a well-known fact that if an overtaken ship is compelled to alter her course in order to avoid another ship, she must not alter more than is necessary, otherwise she will fail to justify her alteration under article 27.

"From all the evidence adduced it appears from the time the Imperial left Sorel up to and at the time of the collision, the navigation of the vessel, and the charge of the deck, was left entirely in control of Jos. Myrand, apprentice pilot, who was actually a wheelsman, and was not a proper member of the crew, as he had not signed the ship's articles, and was simply taking

the place of Oscar Charpentier, who signed the report of the casualty which was produced in court, but was not present at the time of the accident. There was no lookout man, and the master and mate, who both hold the necessary certificates, were in their cabins, no properly certificated officer of any kind or description was on deck, and the ship, although carrying a number of passengers, was navigated in a most haphazard manner. Myrand, after porting the Imperial's helm to clear the Montrose, no doubt suddenly realized the close proximity of the Quebec, for he immediately put the helm hard to starboard, calling to his assistance a passenger named L. Plante, who happened to be in the wheelhouse at the time, but the alteration of the helm took place too late, and the collision occurred with the resultant damage. The court is of the opinion that if a competent officer had been in charge of the Imperial's deck, and had he properly looked after the safe navigation of the vessel, it is probable the collision would have been averted. The court therefore considers that in great measure the casualty was caused by the contributive negligence of those in charge of the Imperial.

"As far as the Quebec is concerned, it is proved by the evidence that this vessel was well officered and well manned; the captain and first mate both hold master's certificates of competency; the first mate was in charge of the deck, the second pilot and wheelsman were in the wheelhouse, and a man was on the lookout at the time of the collision. She was, as before stated, proceeding up the river on a parallel course, following and overhauling the Imperial, evidently intending to pass that vessel, but gave no intimation to the ship ahead of her that she meant to carry out this manoeuvre, by giving "one prolonged blast on the steam whistle," in accordance with by-law 80 of the Harbor Commissioners of Montreal, and she also contravened article 24 of the International Rules of the Road. The court is therefore of the opinion that both vessels are responsible for the collision, the Imperial for improper and neglectful navigation, and the Quebec for contravention of the Rules of the Road and the Harbor Commissioners' By-Laws.

"It was established during the investigation that rule 80 of the Harbor Commissioners' By-Laws is seldom or never carried out, except by ocean steamships; this, however, in the opinion of the court does

not exonerate the Quebec's officers, and first mate Lafrance, who was in charge of the deck of this vessel at the time of the casualty, is severely reprimanded for not attending to the well-known rules of the road. The court wishes it to be emphatically understood that for the future more severe measures than this will be taken in regard to officers who have been proven to be careless in carrying out the rules for safe navigation.

"The court considers that Capt. Jean of the Imperial was guilty of gross neglect in allowing his ship, with a number of passengers on board, to be in charge of a young apprentice pilot. Not only was his vessel a menace to navigation by not having any certificated officer on deck, but also the lives of passengers were endangered, and therefore suspends the certificate of a master in the minor inland waters held by this officer for twelve months from July 5, the date of the accident."

Lake Grain Rates to Montreal.

A Montreal daily paper recently charged the Dominion Marine Association with being a trust, and with acting in restraint of trade. It said: "If during the navigation season of 1900 grain could be carried from Port Arthur to Montreal at 3½c. a bushel at a profit, why should it have cost 7c. in preceding years? The answer to this important question may tend to explain why this is the first year during which the St. Lawrence route has received a fair share of the grain business originating at upper lake ports. A revelation has been made of the existence of a Canadian organization which, so far as the grain trade is concerned, appears to operate as surely and emphatically to the disadvantage of Montreal as if it were specially created for that purpose. The existence of this organization has been well known but its methods and their results have only come to light as the fruit of a patient and prolonged investigation by a high authority here, who, in order to ascertain the truth, made a special trip to the west and put himself directly in touch with those familiar with the conditions. The documentary evidence concerning this association is of a startling character. Its primary function, apparently, is to manipulate the rates for the transportation of grain in the Great Lakes, and this it has succeeded in doing in such a manner that out of 47,000,000 bush. last year no less than 16,000,000 went to U.S. ports instead of coming by the Canadian route to be sent to Great Britain through the Canadian ports. Not all of this 16,000,000 bush. were sent via Buffalo owing to the operations of the organization in question, but when it is learned that the organization charged a 7c. rate to Montreal when this year but 3½c. is charged, it is fair to debit it with much of the result. The organization is quiescent this year, for the reason that there has been very little grain to ship. The consequence of this quiescence is that although this is the leanest year of a decade, more grain has come to Montreal than any of the fat years that have gone before. The reason is simple and easy to understand. The organization in other years had fixed the rate for transportation of wheat to Montreal at 7c. a bushel. This year, through its practically enforced inactivity, the rate has found its level at 3½c. a bushel, and so the grain comes here because this is the most economic route. Now, the trouble is that this association, although quiescent now, is not dead, and there is much ground to fear that as soon as the products of what we all believe will prove a most bountiful harvest begin to find their way eastward, its operations will be renewed to the detriment of Montreal and other Canadian ports."

SAULT STE. MARIE CANALS TRAFFIC.

The following commerce passed through the Sault Ste. Marie canals in August:

ARTICLES.	CANADIAN CANAL	U.S. CANAL	TOTAL
Copper..... Eastbound..... Net tons	1,548	14,331	15,879
Grain..... "..... Bushels	877,361	799,356	1,676,717
Building stone..... "..... Net tons	442	442	442
Flour..... "..... Barrels	159,811	290,310	450,121
Iron ore..... "..... Net tons	1,282,803	3,378,749	4,661,552
Pig iron..... "..... ".....	5,080	5,080	5,080
Lumber..... "..... M. ft. B.M.	4,869	74,178	79,047
Wheat..... "..... Bushels	2,480,423	1,038,620	3,519,043
General merchandise..... "..... Net tons	5,668	8,499	14,167
Passengers..... "..... Number	4,655	3,471	8,126
Coal, hard..... Westbound..... Net tons	29,015	228,687	257,702
Coal, soft..... "..... ".....	427,973	1,341,750	1,769,723
Flour..... "..... Barrels	400	20	420
Grain..... "..... Bushels	19,972	10,168	30,140
Manufactured iron..... "..... ".....	8,181	68,897	77,078
Iron ore..... "..... Barrels	38,251	55,348	93,599
Salt..... "..... Net tons	4,472	4,282	8,754
General merchandise..... "..... ".....	808	1,684	2,492
Passengers..... "..... Number	1,467,340	3,818,729	5,286,069
Registered tonnage..... "..... Net	1,407,967	3,610,752	5,018,719
Freight—Eastbound..... "..... Net tons	516,421	1,646,290	2,162,711
Westbound..... "..... ".....	1,924,388	5,257,042	7,181,430
Total freight..... "..... ".....			

The Montreal Witness in referring to the same matter said:

"Grain merchants are of the opinion that the time has come when an investigation into the alleged combine of certain shipping interests, which is said to exist on the Great Lakes, should be made. It is notorious, they assert, that since the opening of navigation rates have advanced from 3½c. to 7c. a bushel on grain from lake ports to Montreal, and this, they claim, is detrimental to the development of the St. Lawrence route as a grain shipping centre, as it goes far to nullify the splendid work which has been accomplished during recent years by the Government in developing the national waterway. Last fall, when business was brisk on the lakes, the navigation companies charged 7c. a bushel on grain from the lake ports to the seaboard, but early this season, owing to a scarcity of cargo, prices were considerably lower, until at one period 3¼c. was accepted. This, however, did not last long, for with the increase of traffic the rates were gradually increased until they have reached the unwarranted figure of 7c. a bushel, and indeed it is claimed that as high as 7½c. has been asked. This, grain exporters state, is going too far, and nothing short of a Government investigation will satisfy the trade."

The Dominion Minister of Marine in an interview on the subject is reported to have said: "The St. Lawrence route now appears to be suffering under a certain disadvantage, and although I have had no official report to that effect, I understand there is a combination of both Canadian and U.S. shipping interests which have fixed excessive prices for carrying grain from the lakes to Atlantic ports. If that is true, then I can only say that it is a matter which ought to have the strictest investigation, for it is palpably unjust to Canada that our superior natural advantages should be placed under such artificial disability. Public opinion ought to be awakened on this point, and I repeat that the strictest investigation ought to be made into the operations of this alleged combine."

A DENIAL OF THE CHARGES.

A. A. Wright, President Dominion Marine Association, has written the Toronto Globe in reference to the foregoing as follows: "I do not propose to carry on any newspaper controversy with people who are not manly enough to ask openly for the investigation which they write so much about, and which I have repeatedly stated would be welcomed by the lake vessel owners, as we would very soon show where the discrimination comes in. For the information of the public I would again state:

"That the statement that there is any organization on the great lakes for controlling freight rates on grain in the U.S. and Canada is absolutely false, and this is well known to all grain shippers.


"The present rates on grain from Fort William and Duluth to Montreal vary from 4½c. to 6c. per bushel.

"I am informed by exporters that it

costs 6.40c. per bushel to take grain from Buffalo and put on board an ocean steamer in New York. The rate from Duluth to Buffalo at present varies from 1¼c. to 1½c. per bushel, according to the size of the cargo, making a total, even taking the lowest possible rate from Duluth to Buffalo of 7.65c. per bushel, Duluth to f.o.b. New York, as against the highest present rate from

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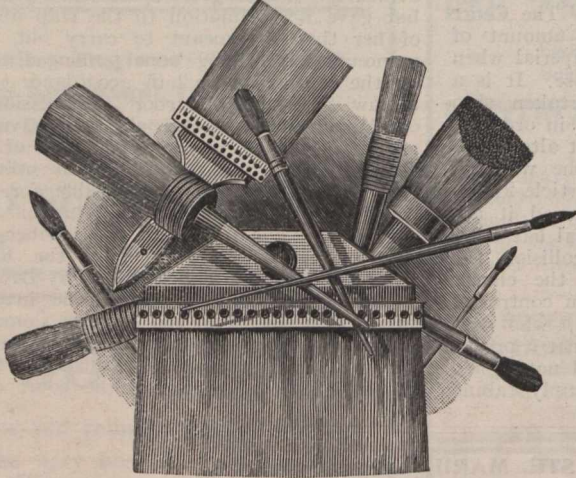
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Duluth or Fort William of 6c. per bushel f.o.b. Montreal, or a difference which the lake vessel men are giving in favor of Montreal of 2.65c. per bushel, taking the highest present Canadian rate, or 4.15c. per bushel, taking the lowest present rate, and yet I am informed by exporters that it is possible to ship from Fort William via Buffalo and New York to Liverpool at the present time as cheap or cheaper than via Montreal, as the ocean rates out of Montreal are double the rates out of New York, and the history of this grain shipping business has been that whatever reduction is made on the lake end of the route is immediately added to the ocean rate out of Montreal, to keep the cost of shipping from Duluth or Fort William to Liverpool almost as high by Montreal as by New York.

"When Mr. Brodeur holds the investigation, of which we hear so much, lake vessel men will show where combines exist, if any do exist."

Among the Express Companies.

The Canadian Northern Ex. Co. has closed its office at Foote's Bay, Ont.

The Canadian Ex. Co. has opened offices at Burnt River, Ont., and Memramcook, N.B.

The Canadian Northern Ex. Co. has opened offices at La Vallee, Ont., and Ruddell, Sask.

E. Rendell, Dominion Ex. Co.'s agent at Strathcona, Alta., who recently absconded with some express orders and cash, has been sentenced to six months' imprisonment.

E. Allen, heretofore Assistant Superintendent western, northern and southern divisions, Canadian Ex. Co., has been appointed Superintendent same divisions, with headquarters at Toronto.

The Canadian Northern Ex. Co. announces the closing of its offices at Sparrow Lake and Royal Muskoka, Ont., and the opening of offices at Mattawin, Ont.; Myrtle and Vassar, Man., and Borden, Sask.

The Canadian Ex. Co.'s lease of its present offices on South James St., Hamilton, expiring in Nov., it is reported to have secured

the premises at one time occupied by the Landed Banking Co. on the same street.

The Canadian Ex. Co., which has hitherto operated in conjunction with the Canadian Northern Ex. Co. over the Quebec and Lake St. John Ry., has retired therefrom, the Canadian Northern Ex. Co. being now exclusive on that line.

The Canadian Ex. Co. announces the recent appointment to its European offices as follows: F. C. Salter, European Traffic Manager, W. Cuthbertson, General Agent, with offices at Liverpool, Eng.; T. S. Jones, Agent, London, Eng.; and J. M. Walker, Agent, Glasgow, Scotland.

Telegraph and Cable Matters.

The Marconi Wireless Telegraph Co. has opened a public telegraph station at Liverpool, Eng.

The G.T. Pacific Ry. telegraph line was completed as far as Saskatoon, Sask., Sept. 15, and a commercial business will be done as soon as all the arrangements are completed.

S. Edwards, formerly Superintendent C.P.R. Telegraphs at Calgary, Alta., and since Mar., 1907, Superintendent Alberta Government Telephone system, has resigned on account of ill-health.

The installation of the wireless telegraph station at the Driard Hotel, Victoria, B.C. was expected to have been completed at the end of Sept. The work is being done by the United Wireless Telegraph Co.

Owing to the promotion of a colored operator, who has been in the employ of the C.P.R. Telegraph Department for 20 years, four other operators at Montreal declined to continue work, and were subsequently dismissed.

The receipts of the Pacific Cable Board for the year recently concluded were £109,637, a decrease of £2,852 from the previous year. The deficiency on the year's working is payable by the countries interested, as follows: Great Britain, £17,322; Canada, £17,322; Australia, £20,787; New Zealand, £6,929.

G. Marconi arrived in Canada early in Sept., in company with one of the directors of the Marconi Wireless Telegraph Co. of

Canada, and it is understood that several changes in the local management of the company will be made during their visit. As announced in our Aug. issue, J. D. Oppe, Manager of the company at Montreal, has resigned.

E. J. Haughton, formerly employed in the C.P.R. Telegraph Department, and latterly in charge of the Dominion Government's wireless telegraph station at Gonzales Hill, B.C., has been appointed superintendent of all the Dominion Government's wireless telegraph stations on Vancouver Island. At present there are five stations, situated at Gonzales Hill, Point Grey, Cape Lazo, Estevan and Pachena.

The annual joint reunion of the Old Time Telegraphers' and Historical Association, and the Society of the U.S. Military Telegraph Corps, which was omitted last year on account of the general unrest among telegraphers, was held at Niagara Falls, N.Y., Sept. 16,

THE CANADIAN PACIFIC RY. COMPANY.

NOTICE TO SHAREHOLDERS.

The Twenty-seventh Annual General Meeting of the Shareholders of this company, for the election of Directors to take the places of the retiring Directors, and the transaction of business generally, will be held on Wednesday, the 7th day of October next, at the principal office of the Company, at Montreal, at Twelve o'clock noon.

SPECIAL MEETING.

The meeting will be made special for the purpose of considering and, if approved, of authorizing an increase of the present Ordinary Capital Stock of the Company by an amount not exceeding \$50,000,000, for the purposes of the Company, such increase of stock to be issued from time to time according to the requirements of the Company, and as may be determined by the Directors, and of adopting such resolution or By-law as may be deemed necessary in connection therewith in order to enable the Directors to give effect thereto.

The Common Stock Transfer Books will close in Montreal, New York and London, at 3.00 p.m. on Tuesday, the first day of September; the Preference Stock Books will be closed in London at the same time.

All books will be re-opened on Thursday, the eighth day of October.

By Order of the Board,
WALTER R. BAKER,
Secretary.

Montreal, August 31st, 1908.

GRAND TRUNK RY. COMPANY OF CANADA.

NOTICE is hereby given that the Ordinary General Half-Yearly Meeting of the Grand Trunk Railway Company of Canada will be held at the City Terminus Hotel, Cannon Street, London, E.C., on Thursday, the 8th day of October, 1908, at 12 o'clock noon, precisely, for the purpose of receiving a Report from the Directors and for the transaction of other business of the Company.

Notice is also given that the Transfer Books of the Company will be closed from Monday, the 7th day of September, to the day of Meeting, both days inclusive.

By Order,
C. RIVERS WILSON, President.
H. H. NORMAN, Secretary.

Dashwood House, 9 New Broad Street,
London, E.C., 28th August, 1908.

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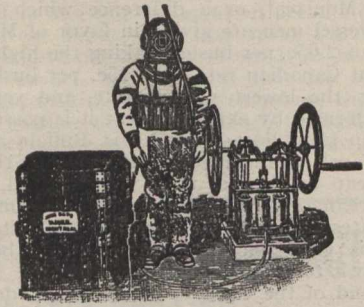
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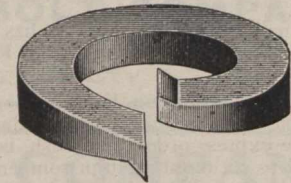


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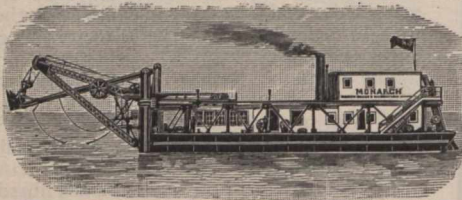
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17 and 18. I. McMichael, Vice-President and General Manager G.N.W. Telegraph Co., Toronto, and G. F. Macdonald, Ottawa, were re-elected Vice-Presidents of the Old Time Telegraphers' and Historical Association for the current year.

A Canadian Associated Press despatch from London, Eng., Aug. 24, said: "V. Poulsens has started new and interesting experiments with his wireless system in connection with the forthcoming opening of the service between the west of Ireland and Canada. Poulsens thinks he can easily send 150 words a minute by his new apparatus." It is not quite clear what is meant by "the forthcoming opening of the service between the west of Ireland and Canada," as such a service has been in constant use for several months. The speed indicated may also be taken with a grain of salt.

The appeal of the Reid Newfoundland Co. against the judgment of the Newfoundland Supreme Court, delivered in July, 1907, when it was ordered, at the instance of the Anglo-American Telegraph Co., Ltd., that an account be taken of the messages transmitted over a special wire by the Reid Newfoundland Co., other than messages connected with, or for purposes incidental to, the management,

operation and control of the line of railway between St. John's and Harbor Grace, via Whitbourne, and between Harbor Grace and Carbonear, was recently dismissed, with costs, by the Judicial Committee of the Privy Council, in London, Eng.

The Northern Commercial Telegraph Co., which has opened an office on St. Francois Xavier St., Montreal, is reported to have recently purchased all the Canadian rights of the Dominion De Forest Wireless Telegraph Co., paying for same with 200,000 fully paid-up shares, and to have also made an offer to the shareholders of that company, which is being wound up, to exchange their shares for shares of equal face value in the new company. The N.C.T. Co. was incorporated in 1906, with a capital of £750,000 and office in Montreal, to take over the original charter and property of the Northern Commercial Co., which was incorporated in 1898, with a capital of £100,000 and office in London, Eng. The objects of the original charter were to construct and operate telegraph and telephone lines by means of cables through the waters on the west coast of British Columbia, with the necessary land connections at each end, from Vancouver to Dawson, Yukon, and to connect with the lines of any company in

Canada, or in the U.S., near the boundary between B.C., or the Yukon Territory, and the U.S. In 1899 the capital stock of the company was authorized to be increased to £300,000, and in 1900 it was further increased to £500,000, and the clause in the original charter providing that the powers granted be void if the construction of one of the lines authorized be not commenced, and 15% of the amount of the capital stock be not spent on it within two years from the passing of the act, was repealed. A short stretch of line was subsequently erected in the Yukon Territory, and further short lines in Northern Ontario, and these, together with the property of the Dominion De Forest Wireless Telegraph Co., have been taken over by the present company. It is claimed that the stock has been underwritten, and that the construction of telegraph lines in Quebec and Ontario will be undertaken shortly. The officers and directors of the company are: President, E. W. Humphrey, Montreal; Vice-President, W. C. Sherwood, New York; E. K. Stallo, A. Macdonald, C. W. MacKay, G. H. Watson, of the United States; J. A. Ouimet and T. Berthiaume, of Montreal. E. W. Humphrey was the promoter of the Dominion De Forest Wireless Telegraph Co.

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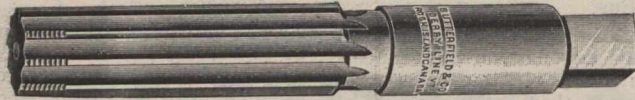
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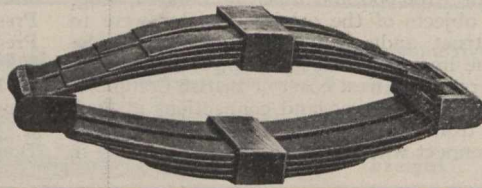


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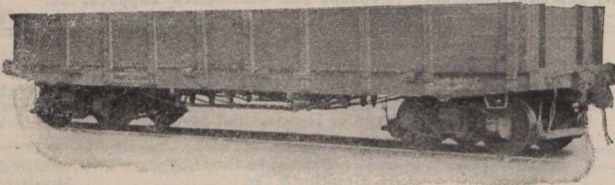
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Owen Sound Wire Fence Co.Owen Sound, Ont.

Glue Brushes
Wolfe Brush Co.Pittsburg, Pa.

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

Groceries
The Hudson's Bay Company.

Hammers
James Smart Mfg. Co.Brockville, Ont.

Handcars
Canadian Fairbanks Co., Ltd.Montreal.
Crosen Car Mfg. Co.Cobourg, Ont.
F. H. Hopkins & Co.Montreal.
Mussens Limited.Montreal.
Rice Lewis & Son.Toronto.
Toronto Pressed Steel C.Toronto.

Hardware
The Hudson's Bay Co.
Rice Lewis & Son.Toronto.

Headlights
The N. L. Piper Railway Supply Co.Toronto.
Pyle National Electric Headlight Co. .Chicago, Ill.

Headlinings
Crosen Car Mfg. Co.Cobourg, Ont.

Hoisting Machinery
American Hoist and Derrick Co.St. Paul, Minn.
Brown Hoisting Machinery Co.Cleveland, Ohio.
Canadian Fairbanks Co., Ltd.Montreal.

Hoists, Electric
American Hoist and Derrick Co.St. Paul, Minn.

Hoists (Pneumatic)
Taylor & Arnold.Montreal.

Hollow Staybolt Iron and Steel Bars
Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Hoppers, Car (Wet or Dry)
Duner Co.Chicago, Ill.

Hydrants
Canadian Fairbanks Co., Ltd.Montreal.
Kerr Engine Co.Walkerville, Ont.

Illustrations
Acton Burrows Limited.Toronto.

Inspections
R. W. Hunt & Co.Montreal.

Instruments, Surveying and Engineering
James FosterToronto.

Interlocking Plant and Signals
Montreal Steel Works.Montreal.
Saxby and Farmer Ltd.Montreal.

Iron and Steel Bars
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.

Iron, Pig
Hamilton Steel & Iron Co., Ltd. .Hamilton, Ont.

Iron Signs
Acton Burrows Limited.Toronto.

Iron Staybolt Bars
Falls Hollow Staybolt Co. .Cuyahoga Falls, Ohio.

Jacks
H and E Lifting Jack Co.Waterville, Que.
A. O. Norton.Coaticook, Que.
James Smart Mfg. Co.Brockville, Ont.

Japans
McCaskill, Dougall & Co.Montreal.

Journal Bearings
Canadian Bronze Co.Montreal.
Crosen Car Mfg. Co.Cobourg, Ont.
Kerr Engine Co.Walkerville, Ont.
Jas. W. Pyke & Co.Montreal.

Journal Boxes
N. J. Holden Co., Ltd.Montreal.
McCord & Co.Chicago, Ill.

Kalsomine Brushes
Wolfe Brush Co.Pittsburg, Pa.

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

Lamps, Incandescent
Canadian Westinghouse Co.Hamilton, Ont.

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

Launches
Polson Iron Works.Toronto.

Lights, Contractors' and Wrecking
Canadian Fairbanks Co., Ltd.Montreal.
F. H. Hopkins & Co.Montreal.
Mussens Limited.Montreal.

Locomotive Cranes
American Hoist and Derrick Co.St. Paul, Minn.

Locomotive Driver Brake Shoe
American Brake & Shoe F'dry Co. .Mahwah, N.J.
Canadian Iron and Foundry Co.Montreal.

Locomotive Gauges
Taylor & Arnold.Montreal.

Locomotive Lagging and Covering
Taylor & Arnold.Montreal.

Locomotive Pop Valves
Taylor & Arnold.Montreal.

Locomotives (Compressed Air)
Burnham, Williams & Co.Philadelphia, Pa.
Canadian Locomotive Co.Kingston, Ont.
Montreal Locomotive Works (Ltd.)Montreal.
H. K. Porter Co.Pittsburg, Pa.

Locomotives (Geared)
Lima Locomotive Co.Lima, O.

Locomotives (Electric)
Burnham, Williams & Co.Philadelphia, Pa.
Canada Foundry Co.Toronto.
Montreal Locomotive Works (Ltd.)Montreal.

Locomotives (Logging)
Burnham, Williams & Co.Philadelphia, Pa.
Canadian Locomotive Co.Kingston, Ont.

Locomotives (Rack)
Burnham, Williams & Co.Philadelphia, Pa.
Canadian Locomotive Co.Kingston, Ont.
Montreal Locomotive Works (Ltd.)Montreal.

Locomotives (Steam)

American Car and Equipment Co. Chicago, Ill.
 Burnham, Williams & Co. Philadelphia, Pa.
 Canada Foundry Co. Toronto.
 Canadian Fairbanks Co., Ltd. Montreal.
 Canadian Locomotive Co. Kingston, Ont.
 J. T. Gardner Chicago, Ill.
 Hotchkiss, Blue & Co. Chicago, Ill.
 The W. H. Kelson Co. Montreal.
 Lima Locomotive Co. Lima, O.
 Montreal Locomotive Works (Ltd.) Montreal.
 H. K. Porter Co. Pittsburg, Pa.
 Vulcan Iron Works. Wilkesbarre, Pa.

Locomotive Staybolts

Falls Hollow Staybolt Co. . Cuyahoga Falls, Ohio.
 Flannery Bolt Co. Pittsburg, Pa.

Lubricators

McCord & Co. Chicago, Ill.
 Taylor & Arnold. Montreal.

Lumber

Parry Sound Lumber Co. Toronto.

Machine Tools

W. Abbott. Montreal.
 Canadian Fairbanks Co. Montreal.

Machinery, Power

Jno. McDougall, Caledonian Iron Works Co. Montreal

Machinery Special

Miller Bros. & Toms. Montreal.

Machinery, Transmission

Canadian Fairbanks Co., Ltd. Montreal.
 Miller Bros. & Toms. Montreal.

Manganese Steel Castings

Montreal Steel Works. Montreal.

Manhole Frames and Covers

American Brake Shoe & F'dry Co. . Mahwah, N.J.
 Canadian Iron and Foundry Co. Montreal.

Marine Repairs

Goldschmidt Thermit Co. Toronto.

Marine Supplies

Rice Lewis & Son. Toronto.

Measuring Tapes

Lufkin Rule Co. Saginaw, Mich.

Metals

Goldschmidt Thermit Co. Toronto.

Milepost Numbers

Acton Burrows Limited. Toronto.

Milling Cutters

W. Abbott. Montreal.

Motors

McCord & Co. Chicago, Ill.

Nickel

The Orford Copper Co. New York.

Nickel for Nickel Steel

The Orford Copper Co. New York.

Numbers

Acton Burrows Limited. Toronto.

Nut Locks

Dinning & Eckenstein Montreal.
 Positive Lock Washer Co. Newark, N.J.

Nuts, Square and Hexagon

Canada Foundry Co. Toronto.
 Toronto Bolt and Forging Co. Toronto.

Oakum

The Hudson's Bay Company.

Office Fittings

Canadian Office & School Furniture Co. Preston, Ont.

Office Signs

Acton Burrows Limited. Toronto.

Oil Furnaces

Railway Materials Co. New York City.

Oil Tanks

S. F. Bowser & Co., Limited. Toronto.

Oils

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

Packing

Canadian Fairbanks Co., Ltd. Montreal.
 The N. L. Piper Railway Supply Co. . . . Toronto.

Paint Brushes

Wolfe Brush Co. Pittsburg, Pa.

Painters' Dusters

Wolfe Brush Co. Pittsburg, Pa.

Painters' Scrubs

Wolfe Brush Co. Pittsburg, Pa.

Painters' Wall Brushes

Wolfe Brush Co. Pittsburg, Pa.

Paints

Canadian Oil Co. Toronto.

Pinch Bars

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

Pipe and Pipe Coverings

Wm. C. Baker Heating & Supply Co. . New York.

Pipe Stocks

Butterfield & Co. Rock Island, Que.

Platforms, Steel

Standard Coupler Co. New York City.

Ploughs, Contractors'

Mussens Limited. Montreal.
 Toronto Pressed Steel Co. Toronto.

Pneumatic Tools

N. J. Holden Co., Ltd. Montreal.

Porter

E. L. Drewry. Winnipeg.

Portable Boilers

Babcock & Wilcox (Ltd.) Montreal.

Printing

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

Pumps

S. F. Bowser & Co., Limited. Toronto.
 Canadian Fairbanks Co. Montreal.
 Canada Foundry Co. Toronto.
 Ontario Wind Engine and Pump Co. . . . Toronto.
 James Smart Mfg. Co. Brockville, Ont.

Pumps (Centrifugal)

M. Beatty & Sons. Welland, Ont.

Rail Benders, Roller

F. H. Hopkins & Co. Montreal.
 Montreal Steel Works. Montreal.

Rails (new)

Dominion Iron & Steel Co. Sydney, N.S.
 Drummond, McCall & Co. Montreal.
 J. T. Gardner. Chicago, Ill.
 J. J. Gartshore. Toronto.
 F. H. Hopkins & Co. Montreal.

Rails (for relaying)

F. H. Hopkins & Co. Montreal.
 J. J. Gartshore. Toronto.
 Mussens Limited. Montreal.
 Jas. W. Pyke & Co. Montreal.

Rail Joints

Goldschmidt Thermit Co. Toronto.
 The Rail Joint Co. of Canada. Montreal.

Railway Pile Drivers

F. H. Hopkins & Co. Montreal.
 Mussens Limited. Montreal.

Railway Supplies

Canadian Fairbanks Co. Montreal.
 The W. H. Kelson Co. Montreal.
 The Hiram L. Piper Co. Montreal.
 The N. L. Piper Railway Supply Co. . . . Toronto.
 Rice Lewis & Son Toronto.

Reamers

W. Abbott. Montreal.
 Butterfield & Co. Rock Island, Que.

Rivets, Boiler, Bridge and Structural

Toronto Bolt and Forging Co. Toronto.

Rolled Wheels

Standard Steel Works Co. Philadelphia, Pa.

Roof Trusses

Canadian Bridge Co. Walkerville, Ont.
 Dominion Bridge Co. Montreal.

Rope

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

Rotary Snow Ploughs

Crossen Car Mfg. Co. Cobourg, Ont.

Sash Balances

O. M. Edwards. Syracuse, N.Y.

Sash Locks

O. M. Edwards. Syracuse, N.Y.

Saw Steel

Montreal Steel Works. Montreal.

Scoria Blocks

W. H. Knowlton. Toronto.

Scrapers (Wheel and Drag)

F. H. Hopkins & Co. Montreal.
 Mussens Limited. Montreal.
 Toronto Pressed Steel Co. Toronto.

Screw Plates

Butterfield & Co. Rock Island, Que.

Screws, Coach and Lag

Toronto Bolt and Forging Co. Toronto.

Semaphore Arms

Acton Burrows Limited. Toronto.

Semaphores

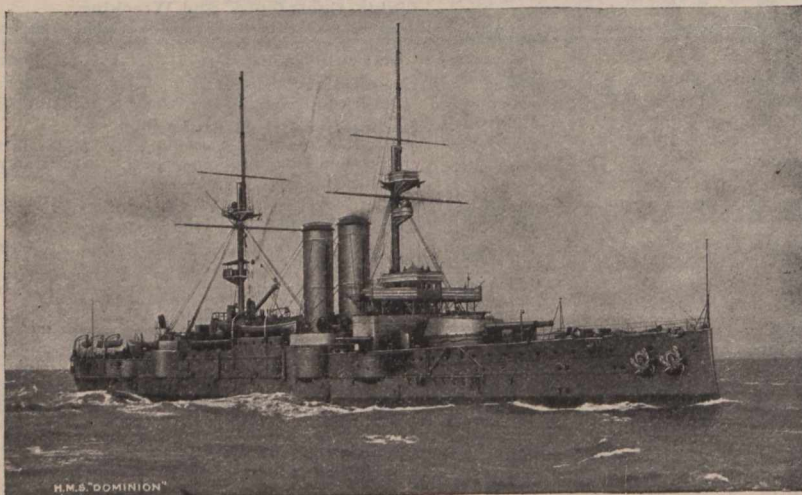
The N. L. Piper Railway Supply Co. . . . Toronto.
 Saxby and Farmer Ltd. Montreal.

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Gartshore-Thompson Pipe & F'dry Co. . Hamilton.

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PATENT WATER-TUBE BOILERS

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