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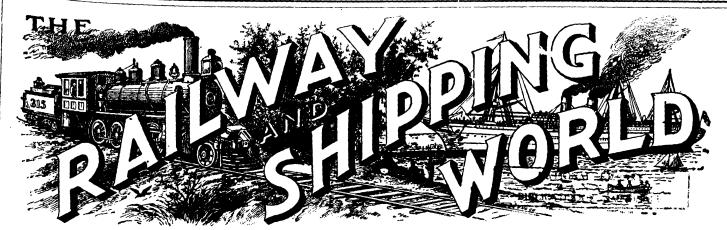
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The Board of Railway Commissioners in the West

The work accomplished during the first trip of the Board of Railway Commissioners will be of very great interest to the people of Western Canada, and, in fact, to the whole Dominion. Having travelled with the commissioners throughout the whole journey of between 7,000 and 8,000 miles, covering the whole of the Canadian Northwest and British Columbia, it occurred to me it would be but fair to volunteer an account of the business

transacted, and to again point out the vast possibilities of this great Dominion, and the place it will eventually occupy as the back-bone of the food supply of the British Empire. The travelling board consisted of Hon. A. G. Blair and Dr. James Mills, with A. G. Blair, jun., law clerk and acting Secretary. Hon. Mr. Bernier volunteered to remain in Ottawa to look after the many matters which can be attended to by one commissioner. A. D. Cartwright, the Secretary, also decided to remain and complete the organization of his new department.

The business of the commissioners divided itself into two branches: first, the hearing of complaints regarding railway matters; second, visiting the whole territory, with a view of getting as nearly as possible a practical knowledge of the requirements of the farming and ranching industries of Manitoba and the Territories, and the lumber, shingle, mineral, coal, fish and fruit interests of British Columbia and the coast.

Railway facilities throughout the great West have grown up in some cases in advance of settlement, in other cases concurrent with it, and in some instances have followed business development. The freight tariffs are an evolution, based upon conditions and circumstances existing at these various periods. They are so far-reaching in their effects and so interlaced with the building up of industries at certain periods that many industrial enterprises are dependent upon these special rates that even changes which on their face

seem eminently fair react on some other industry fostered or brought into existence by reason of the necessities of the case at some former period. This phase of the matter was so strongly developed that in dealing with these cases the commissioners have proceeded with extreme caution. They have travelled nearly 8,000 miles, covering the main line of the C.P.R. to the coast, the branches to Prince Albert and Edmonton, returning through the Kootenay district and the Crow's Nest Pass, including the Macleod and Edmonton branches. They also covered the Canadian Northern Ry. between Fort William and Winnipeg. They have visited

the Port Arthur and Fort William terminals, where they inspected the facilities afforded for the storage and transhipment of grain, and in British Columbia they visited the large lumber mills; they have had meetings in Winnipeg, Carberry, Brandon, Regina, Prince Albert, Medicine Hat, Calgary, Macleod, Edmonton, Revelstoke, Vancouver, Victoria, New Westminster, Vernon and Nelson. At these places the hearing of specific complaints was but a small portion of their work. A great deal of their time has been devoted to becoming acquainted



HUGH D. LUMSDEN, M. CAN. Soc. C. E., Chief Engineer National Transcontinental Railway.

with the requirements of the different industries. They have visited the large ranches, have driven through the finest farming districts, in one instance covering as much as 60 miles in one day; they have talked with the farmers, with the cattle shippers, with the fruit growers, the lumbermen, and with the traders, and also representatives of the different towns, and the divisional superintendents of the railways. In this way they have acquired on the one hand a knowledge of what the public requires in a most practical way, and, on the other hand, the difficulties which the railway companies experience in

coping with the marvellous increase in traffic consequent upon the rapid development of the country.

On the whole, with the exception of a few specific instances, there exists a friendly feeling between the people and the railway companies. Throughout the whole western country there was constantly looming up the influence for good exercised by William Whyte, of the C.P.R., at Winnipeg, whom the people describe as a big man. In many of the towns visited where complaints had been lodged for hearing it was found that his

lodged for hearing it was found that his diplomacy had effected an amicable settlement, and the Boards of Trade would announce that since the filing of their complaints things had been arranged to the satisfaction of all con-Most of the trouble complained of had been the result of some careless subordinate, or by the blocking of traffic at stations where the business had grown faster than the shipping facilities, but everywhere was to be seen immense improvement, works which must be costing the railways many millions of dollars. On the whole, those who addressed the board as complainants or on behalf of the railways treated the subjects in a manly way. There was very little bickering, and the meetings closed with amicable feelings as between the companies and the people.

One of the most important questions brought before the commission, and one which required exhaustive investigation, was the subject of fireguards throughout the ranching districts be-tween Moose Jaw and the Rockies. The railways cannot operate without their locomotives emitting sparks which cause fires. The heavy winds which prevail on the prairies cause these fires to spread, burning hundreds of miles of grazing country. Great herds of cattle are sometimes lost. The cattle have either to be driven great distances or perish of starvation. Mr. Whyte took much interest in this question and asked that the commissioners give the subject their earnest consideration. Eviden was taken at Winnipeg, Regina, Medicine Hat and other points regarding

the most effective means of preventing these fires. The sum of it all was that the board should prescribe the most approved spark-arrester and firebox for the engine, and that fire-guards, consisting of 16 furrows, eight on each side of the railway, should be plowed at a sufficient distance, in some cases 300 feet from the track, and that then the grass should be burned between the track and these fire-guards under the management of a special crew supplied with proper appliances. Then came up the question of the cost. Premier Haultain and others

(Continued on page 345.)

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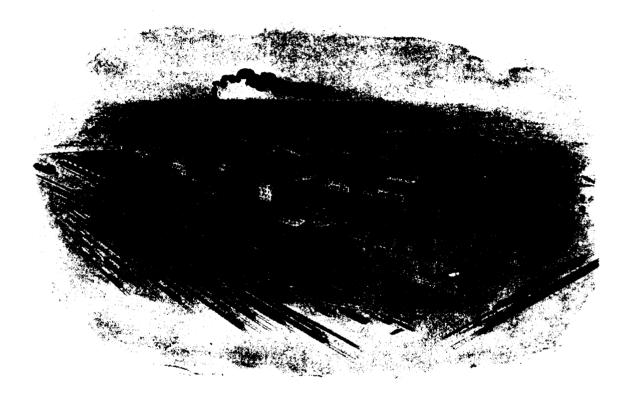
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The G.T.R. and the C.P.R. have reduced the minimum rate on small packages from 15 cents to 12 cents a pound.

The Hamilton, Ont., Street Ry. has been in the habit of selling workmen's tickets good at certain hours in the day at eight for 25c., but finding that they were being used by all classes of the community issued an order prohibiting their sale by conductors. The city council obtained an interim injunction directing the company to continue to sell tickets as heretofore pending the trial of the general action which was set down for hearing Oct. 10. The company has issued directions to its conductors setting forth what classes of workers are entitled to the eight for a quarter tickets and who are not.

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The Board of Railway Commissioners in the West

(Continued from page 341.)

claimed that in view of the liability of the railway companies under the new act those companies should pay the whole of the expense. On the other hand, the railway companies claimed that the country should bear a fair share of the cost. They instanced the fact that the Northwest Territories had been voluntarily bearing a share of the expense until the passing of the new railway act. This they urged as an argument showing that at that time the public considered they were vitally interested, and should contribute. This was, of course, before Parliament had passed the recent act.

The meeting at Prince Albert was a rather important one. Judge Macguire, on behalf of that town, urged a reduction in freight charges, basing his contention practically on the statement that the rates from Calgary to Edmonton were lower than the rates from Regina to Prince Albert, though the branches were practically identical, built under similar conditions, and operated by the same com-Pany, although the length of the Edmonton line is greater than the Prince Albert branch. A. M. Nanton, on behalf of the Qu'Appelle, Long Lake and Saskatchewan Ry., claimed that the Prince Albert line was not paying, though the Edmonton line did; that the Prince Albert line was merely operated by the C.P.R. under lease, and submitted figures to show that it was impossible to further favor Prince Albert without entailing a loss upon the company.

A deputation from Battleford waited upon the commissioners at Prince Albert, urging them to use their influence in preventing their town from being sidetracked and ruined by the Canadian Northern Ry. locating its station on the opposite side of the Saskatchewan River. They claimed that the engineering difficulties were not as great as reported, and asked that an independent engineer should be sent to investigate. The board pointed out that while this did not come within the scope of their authority, they would bring the matter to the attention of the proper parties and urge that no injustice should be done to the people of Battleford. The commissioners subsequently transmitted communications on the subject to the Minister of Railways and the Canadian Northern Ry. Co.

Some of the matters discussed at the various stations had reference to transferring cars between the different railways, applications for street-crossings by towns and the granting of better shipping facilities.

When the commissioners reached British Columbia and the Pacific coast they were confronted with a complaint from the coast lumber and shingle millers asking for better rates to Manitoba and the Northwest. They asked but a slight reduction. As soon as the mountain tain millers were apprised of what was being requested a protest was promptly lodged that it would ruin their industries, and asked that an adjournment should be had until they could attend at Vancouver and present their objections to any further advantage being given to the coast mills. Time was accordingly given, and in the meantime the commissioners attended at New Westminster, where they heard argument in the much-debated question her. between the C.P.R. and the Vancouver, Westminster & Yukon Ry. over the water front, the ocation of a station and the question of crossings. When they returned to Vancouver ver the mountain millers attended in force, trging that their mills could hardly exist under present conditions, and that the giving of any better rate to the coast mills would involve the mountain mills going out of business; in fact, raised a strong argument in favor of a reduction in their rates as against the mills of the coast, especially having reference to the shingle trade. The result of the whole investigation on this line was to confront the commissioners with a very difficult problem, and one that will require by them serious consideration before arriving at any conclusion. They heard further evidence from the mountain millers at Revelstoke.

At Nelson, B.C., the commissioners were told that since the filing of complaints matters had been amicably adjusted, but the Board of Trade of Kaslo, and representatives from Slocan City, Sandon, New Denver, Ainsworth and other places put forward a claim that Nelson had secured an advantage in the matter of distribution rates, and claimed they were also entitled to the same consideration. This same question of distribution rates and wholesale centres has come up throughout the whole country. Most of the towns aspire to be wholesale distributing centres, and claim rates equal to those accorded large wholesale centres. This has become a difficult question, and will require much consideration. All of the freight rate investigations will have to be concluded at Ottawa, where the officials of the railway companies will be required to produce tariffs, and so on, and in many instances the cases of the claimants are being supplemented by further par-ticulars. The indications are that the board will have months of work in disposing of the business initiated on this western trip. Cases simple at first developed intricate phases as the trip proceeded, and contentions were advanced by other districts involving diametrically opposite principles.

The trip was an exceedingly interesting one, covering practically the whole of the Northwest Territories, from the boundary line to the most northerly portion of the settled country. The development which has been going on is simply marvellous, and no matter how often this statement may be repeated in the press, nor in what glowing terms it may be described, the people of eastern Canada and of Great Britain can but faintly appreciate the opportunities which are afforded.—N. R. Butcher, in Toronto Globe.

Board of Railway Commissioners.

The following orders have been issued by the Railway Commissioners for Canada:—

Approving of the construction of an additional crossing of the Northern Division G.T.R. near Toronto Junction, Ont., by the C.P.R., the crossing and signals to be provided by the C.P.R. and placed in position by the G.T.R. at the cost of the C.P.R., which company is also directed to provide for the reasonable maintenance and inspection of the crossing. (July 6.)

Approving of the construction of a branch line from the G.T.R. to the crossing of Collin and Lytton Avenues, Toronto Junction, Ont., the G.T.R. to purchase a certain lot, the price of which is fixed at \$400. (July 6.)

Approving of the terms agreed between the city of Toronto and the C.P.R. for the laying by the former of an iron water pipe under the tracks of the latter at the junction of Davenport Road and Poplar Plains Road, near Toronto.

Approving of the location of the line of the Toronto and Hamilton Ry. (Electric), from the west side of Davenport Road, Toronto, through the townships of York and Etobicoke in York county, Toronto township in Peel county and Trafalgar township in Halton county. The order of approval is given subject to the consent of the Toronto and Niagara Power Co. to the same, as such located line is on the right of way for its power line from Niagara Falls to Toronto. (July 20.)

Approving of the location of a line from the

Approving of the location of a line from the junction of the East River and St. George roads to the village of St. George, Ont., 6.08 miles, for the Grand Valley Ry. (Electric). (July 20.)

Approving of the location plans of the James Bay Ry. from mileage 3.53 south from Parry Sound, Ont., to the boundary line between Humphrey and Medora townships, 20.09 miles. (Aug. 10.)

Authorizing the crossing of the Canadian Northern Ry. on Main Street, Winnipeg, between Assiniboine River Ave. and the north end of Norwood bridge, by the Winnipeg Electric Street Ry., and making directions for the use of the same. (Aug. 12.)

Authorizing the construction by the C.P.R. of a branch line from Bienfait, Assa., on its Souris branch, to the south-west quarter of sec. 19, tp. 2, range 6, west of second principal meridian. (Aug. 13.)

Approving of the location of the Quebec,

Approving of the location of the Quebec, New Brunswick and Nova Scotia Ry., from the Quebec bridge to the boundary between Quebec and Portneuf counties, 15.6 miles (Aug. 15.)

Authorizing the diversion of the highway between concessions 2 and 3 in London township, Ont., the construction of an overhead bridge over the C.P.R., and approving of an agreement entered into between the C.P.R. Co. and the London township council in respect of the same. (Aug. 16.)

Approving plan of a bridge over Aberdeen Ave., Hamilton, Ont., for the Toronto, Hamilton and Buffalo By. (Aug. 18)

ilton and Buffalo Ry. (Aug. 18.)
Sanctioning plans, profiles, and books of reference for the right of way and station of the Guelph and Goderich Ry. in Guelph, Ont. (Aug. 18.)

Sanctioning deviations from the previously approved plans of the location of the Guelph and Goderich Rv. (Aug. 21.)

Approving of the plans for the strengthening and reconstruction of bridges at a number of points on the C.P.R. (Sept. 6.)

of points on the C.P.R. (Sept. 6.)

Limiting the time for the use of the crossing of the C.P.R. tracks in Sault Ste. Marie, Ont., by the International Transit Co., to three months after Aug. 24, 1904. (Sept. 7.)

Sanctioning deviations from the previously approved location of the power transmission line of the Toronto and Niagara Power Co., in Etobicoke township. (Sept. 7.)

Approving of location of a branch line for the Toronto and Hamilton Ry. between Islington and New Toronto, Ont., from lot 7, con. C, to lot 5, con. 1, Etobicoke township. (Sept. 7.)

Sanctioning plans for a deviation of the C.P.R. near Virden, Man., between mileage 180, 2 and mileage 182.6. (Sept. 8.)

180.2 and mileage 182.6. (Sept. 8.)
Approving of the lease of the Lindsay,
Bobcaygeon and Pontypool Ry. to the C.P.R.,
and recommending the final approval of the
same by the Governor-General. (Sept. 9.)

Authorizing the construction by the C.P.R. of a spur line or siding from its Manitoba and South-Western branch line along Trinity Street, Winnipeg. (Sept. 13.)

Complete copies of the above mentioned orders are on file in The RAILWAY AND SHIPPING WORLD office, where they can be seen by subscribers to this paper.

The Annual Financial Review, vol. 4, published at 83 Yonge St., Toronto, by W. R. Houston, gives a review of the important Canadian companies, and of a number of U.S. companies, the securities of which are dealt in on Canadian exchanges. The names of the members of the different exchanges, and representative brokers in other places are given, together with tables showing the prices at which the various securities were dealt in during the year. The compilation of the volume, which extends to 386 pages, involves considerable labor, and appears to have been carefully done. The work has grown considerably since its first issue, and the several volumes give in a concise form the growth of the principal financial, savings, industrial and transportation companies of the Dominion during the present century.

American Locomotive Company,

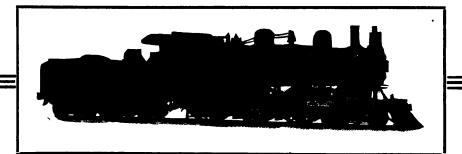
The third annual report covering the operation of the various works for the year ended June 30, 1904, states that the gross earnings were \$33,068,751 and the expenses \$27,404,986 against \$33,105,735 and \$28,052,315 for same period 1902-03. The expenditure includes a depreciation charge of 20% of the book value of patterns, drawings, templates, iron flasks, formers and dies, and a charge of \$1,101,299 for additions to properties. In

making inventories current market values were used and any excess of cost shown was charged against current income. After paying interest on the bonds of constituent companies, \$75,125, the interest on miscellaneous outstanding obligations, \$163,101, and the dividend of 7% on the preferred stock, \$1,750,000, there remained a surplus of \$3,675,539. Out of this surplus the directors have created an extraordinary betterment and improvement fund of \$1,000,000 for the purpose of completing certain radical better-

ments and additions to property already under way, which are deemed necessary to the most economical operation of the property as a whole. Additional land, new building machinery and tools to the value of \$1,101,299, were secured during the year and paid out of earnings, which added to the \$3,256,530 similarly disbursed in the previous two years, makes an aggregate outlay of \$4,357,589, all of which has been paid out of the yearly income. Notable progress has been made in the accumulation of a larger working

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SCHENECTADY WORKS, Schenectady, N. Y. BROOKS WORKS, Dunkirk, N. Y. PITTSBURG WORKS, Allegheny, Pa. RICHMOND WORKS, Richmond, Ya.

cooke Works, Paterson, N. J.
RHODE ISLAND WORKS, Providence, R. I.
DICKSON WORKS, Scranton, Pa.
MANCHESTER WORKS, Manchester, N. H.
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capital. After deducting \$980,037 in partial payment of the securities of the Locomotive & Machine Co., of Montreal, the convertible cash assets amount to \$12,215,720 and the current liabilities to \$2,892,350, leaving a net Working capital of \$9,323,370, as compared with \$6,751,714 excess of assets on June 30, 1903, and of \$4,998,916 on June 30, 1902. In order to protect the company's important relations in Canada, control of the Locomotive & Machine Co. of Montreal (Ltd.) was acquired on Mar. 31. The American Locomotive Co. owns the entire capital stock and \$1,000,000 out of a total issue of \$1,500,000 of the first mortgage 4% bonds of that com-pany. This purchase has met with general favor in Canada, where the rapid development of that great territory promises an adequate return upon the investment. It is the intention of the directors to broaden the scope of the company's operations as opportunity may offer for so doing with safety. The sale of this product and of other manufacturing specialties, including rotary snow ploughs, high Power dredging machinery, small second-hand engines for mining, plantation and con-tractors' use, is negotiated by the Atlantic Equipment Co., a new corporation, the entire capital stock of which is owned by the American Locomotive Co. During the past year the mechanical and electrical engineers of the company have been in frequent consultation, not only as to the general problem of the possible future application of electric power to steam surface railways, but also in regard to a specific proposition for an electric locomotive suitable for use in the suburban traffic of one of the great trunk lines. After much study and in co-operation with the General Electric Co. agreements have been entered into for the manufacture of 30 electric locomotives, to be delivered by 1906. The American Locomotive Co. will construct the mechanical parts of the locomotive, the General Electric Co. supplying all the electrical apparatus.

	1903-4	1902-3
Gross earnings. Manufacturing, maintenance and administration expenses		\$33,10 5 .72 5 28,052,315
Net earnings		\$ 5,053.410
Interest on bonds of constituent companies, bills payable, etc	238,226	248,157
Profit available for dividend	\$5,425,539	\$4,805,253
Dividend on preferred stock at	1,750,000	1,750,000
Surplus	\$3,675,539	\$3,055,253
Addition to properties	••••	1,142,932
fund.	1,000,000	
Net surplus for year	\$2,675,539	\$1,912,2
Surplus brought forward from previous year	2,136,556	224,235
Profit and loss surplus	\$4,812,095	\$2,136,556

In the general balance sheet the properties and securities are carried at \$60,216,945 against \$60,324,488 at June 30, 1903, the Locomotive and Machine Co. of Montreal being carried at \$980,037. The liabilities are: Preferred stock, \$25,000,000; common stock, \$25,000,000; bonds of constituent companies, \$1,512,500; accounts payable, \$1,804,592; bills payable, \$650,000; unclaimed interest, \$257; dividends payable in July, \$437,500; improvement and betterment fund, \$1,000,000; profit and loss surplus, \$4,812,095.

The Locomotive and Machine Co., of Montreal, has appropriated \$100,000 to build an hotel at its works to accommodate 60 to 75 men, and it will also build several two-family and four-family houses.

C.P.R. ANNUAL REPORT.

Following is the 23rd annual report, addressed to the shareholders, over the signature of the President, Sir Thos. G. Shaughnessy:—

The accounts for the year ended June 30, 1904, show the following results:--

, ,,	
Gross earnings	
Net earnings. Interest on deposits and loans. \$380,716 51 Interest due from Duluth. South Shore & Atlantic Ry. Co. on consolidated bonds held by the Co \$604,280 co Less advanced by the Co 422,280 co	\$14,213,105 03
182,000 00	
Interest from Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. on bonds held by the Co. Interest from Mineral Range	
Rd. Co. on bonds held by the	
Co. 50,160 00 Dividends on Minneapolis, St. Paul & Sault Ste. Marie Ry. preferred and ordinary stocks	
held by the Co 918,672 00	1,691,268 51
	\$15,904,373 54
Deduct fixed charges	7,586,096 64
Surplus	
sion Fund	
From this there has been charged a half-yearly dividend on preference stock of 2% paid April 1, 1904\$ 653,406 65 And a half-yearly dividend on ordinary stock of 3%, paid April 1, 1904	\$ 8,088,276 go 3,188,406 65
From this there has been de-	\$ 4,899, 8 70 25

From this there has been declared a second half-yearly dividend on preference stock of 2%, payable Oct. 1, 1904...\$ 698,666 65 And a second half-yearly dividend on ordinary stock of 3%, payable Oct. 1, 1904............2,535,000 00

The working expenses for the year were 69.42% of the gross earnings, and the net earnings 30.58%, compared with 63.97 and 36.03% respectively in 1903. The large increase in working expenses over the previous year was due, not only to the additional railway mileage operated, but to the higher prices paid for wages, fuel and supplies, and the unprecedented weather conditions that prevailed during the winter.

Four per cent. consolidated debenture stock to the amount of £3,103,349 was created and sold during the year. The proceeds were applied, in the purchase of 15 Atlantic steamships, in the construction of 260 additional miles of railway, and in the acquisition of bonds of other companies, the interest on which had been guaranteed by your company. Four per cent. preference stock to the amount of £200,000 was also created and sold, and the proceeds applied to purposes for which your authority had already been obtained.

A final, and in the opinion of your directors satisfactory settlement has been reached with the Dominion Government in connection with the selection of the balance of your land grants by the company agreeing to accept lands in what is known as the Irrigation Tract between Medicine Hat and Calgary, to the extent of about 2,900,000 acres, the main condition being that the lands shall be conveyed in a solid block instead of alternate sections as originally contemplated. After careful consideration of the whole matter, and exhaustive reports by expert engineers on the tract referred to, your directors are convinced that it is in the company's interest that the construction of the necessary works for irrigation purposes should be at once commenced, and contracts have been let for portions of the required canals, starting from the Bow

River near Calgary, involving an expenditure of about \$1,000,000.

The land sales for the year were 928,854 acres for \$3,807,248, an average of \$4.10 an acre. There was a considerable decrease in the acreage sold, as compared with the previous year, when large blocks of land were sold to colonization companies, but the price realized was 43c. an acre higher.

A further amount of \$3,000,000 has been deposited with the Dominion Government during the year on account of the \$15,000,000 land bonds mortgage, making a total amount of \$3,500,000 deposited up to the end of the fiscal year. The amount of deferred payments on lands sold is now \$15,252,308, drawing interest at 6%, while the total of the land bonds outstanding is \$11,500,000 at 3½%.

Your directors have arranged to acquire by lease the control of the Tillsonburg, Lake Erie and Pacific Ry., extending from Port Burwell on Lake Ontario, via Tillsonburg, to Ingersoll on your Ontario division, a distance of about 35 miles, the rental payable under the lease to be a sum equal to the interest on bonds which may be issued by the Tillsonburg, Lake Erie and Pacific Ry. Co., with the consent of this company, as more specifically set out in the resolution to be submitted. This line is important as affording a connection by vessel at Port Burwell with the great coal producing districts of Ohio and Pennsylvania.

At the request of your directors, and to meet the present requirements of settlement in the district east of the main line of the Calgary & Edmonton Ry., that company has authorized the construction of two branch lines, each for about 50 miles and extending respectively from Lacombe and Wetaskiwin stations on its main line.

Arrangements have been made, subject to your approval, for the leasing for 999 years, of the line of the Northern Colonization Railway Co., extending from the terminus of the Montreal and Western Ry., leased to your company, to Nominingue, Que., 21 miles, at a rental equal to the interest at the rate of 4% per annum payable on all bonds which the Northern Colonization Ry. Co. may issue with the consent of your company, the aggregate of such bonds not to exceed \$20,000 a mile, the rental to be reduced by the amount of any Government subsidy or annual payment to which the Northern Colonization Ry. Co. may be entitled. A draft of the proposed lease will be submitted for approval.

Arrangements have been completed for a lease for 999 years of the railway of the Guelph and Goderich Ry. Co., now under construction from the terminus of the Guelph Junction Ry. at Guelph, already leased to your company and forming part of the Ontario Division, to Goderich, on Lake Huron, about 80 miles. The rental will be a sum equal to the interest, at the rate of 4% per annum, on bonds issued with the consent of your company to an amount not to exceed \$25,000 a mile. The line will run through well settled and very fertile portions of Ontario at present, to a large extent, without railway facilities. Your approval of the proposed lease will be asked.

During the year the guarantee of your company has been endorsed on consolidated bonds of the Minneapolis, St. Paul and Sault Ste. Marie Ry. Co., to the amount of \$3,572,000, representing the cost of 178,6 miles of additional railway acquired and constructed by that company.

The net earnings of your Atlantic Steamship Line amounted to about \$200,000 for the first six months, but this profit was practically absorbed by the shrinkage in net revenue during the last half of the year, due to the demoralized state of the Atlantic trade. Nevertheless the steamship line has, as was anticipated, proved a valuable auxiliary to the railway. The revenue and expenses are not taken into the accounts for the year, but the

interest on the debenture stock, issued for the purchase of the vessels, is included in the fixed charges. It is desirable that the directors be authorized to arrange for the construction of two additional passenger steamships with a sea speed of about 18 knots an hour and ample cargo capacity. These will be useful and profitable ships on the Atlantic and they will be admirably adapted to your Pacific trade if, at a later date, you determine to replace them on the Atlantic with a fleet of larger and faster vessels.

In view of the contemplated construction of the Grand Trunk Pacific Ry., it will be impracticable to continue the use of the G.T.R's line between Toronto and North Bay for the routing of traffic between points in Ontario and points reached by your lines in Northwestern Canada, and, therefore, it is important that you should, with the least possible delay, secure your own independent connection between the main line and Toronto. shortest and best route, and one upon which the local traffic will be profitable, is from the vicinity of Sudbury to near Kleinburg on your Ontario Division, about 230 miles. directors are proceeding with the construction of the line, and you will be asked to authorize the issue and sale of the necessary securities to meet the expenditure.

In accordance with the authority given at the last annual meeting, your directors have proceeded with the work of improving your property and enlarging your facilities, and

with your approval, they propose to continue the same policy, within the limits of prudence, until your capacity to handle traffic is well abreast of the requirements during the busiest portion of the year.

The expenditures on capital account have largely exceeded the proceeds of the sale of capital stock and the appropriation from earnings, and most of this excess has been temporarily advanced from your surplus. To cover the amount advanced, and to provide for future requirements, your directors recommend that the ordinary capital stock be increased by \$25,500,000, namely, from \$84,-500,000 to \$110,000,000, 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. A resolution giving effect to this recommendation will be submitted for approval.

The undermentioned directors retire from office at the approaching annual meeting. They are eligible for re-election: Hon. Sir Geo. A. Drummond; Sir Sandford Fleming; G. R. Harris; Wilmot D. Matthews.

CONDENSED BALANCE SHEET, JUNE 30, 1904. Cost of railway and equipment. Ocean, lake and river steam-\$255,665,689 19

Stat, 027,345 00

Less amount applied in reduction of cost. 2,118,224 69

Acquired securities held (cost): Hotels, buildings and proper-ties held in trust for the com-

2,724,417 70

11.909,120 31 46,875,306 42

Deferred payments on land and town site sales..... \$15,252,308 90 Advances: Advances:

To Montreal and Atlantic Ry., secured by \$875,000 first mortgage bonds.....

The Duluth, South Shore & Atlantic Ry., car trust, etc...

Advances to new lines under construction

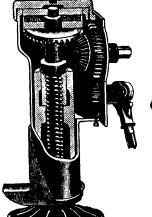
Material and supplies on hand Station and traffic balances, accounts receivable... 799,627 03 236,213 19 568,847 94 5,802,493 85 5,412,382 19 686,079 45 245,105 15 \$358,919,294 46

In addition to the above assets, the company owns 11,338,350 acres of land in Manitoba and the Territories (average sales past rear \$4.10 per acre) and 3,744,324 acres in British Columbia.

Capital stock... \$84,500,000 00 33,473,333 33 % preference stock... % consolidated debenture stock.... 82,355,217 66 3,650,000 00 North Shore Ry., 1st mort-

616,119 67 47,238,086 33

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Land grant bonds-		DESCRIPTION OF FREIGHT CA	RRIED.
Guaranteed 3½% land bonds 15,000,000 00 Less amount paid Dominion		Flour help	190
Government towards re-		Flour, brls 5,110,7, Grain, bush 63,822,7	
demption	11,500,000 00	Live stock, head 1,103,66	86 1.3
Current accounts, pay rolls and traffic balances	7,764,096 84	Lumber, ft	01 2
Interest on funded debt and	111-41-24	Manufactured articles, tons 2,665,26 All other articles, tons 2,942,7;	
rental of leased lines— Coupons due July, 1904, and			3,0
reducing coupons over-		FREIGHT TRAFFIC.	•~
Accrued to date, not due		No. of tons carried 1903	
	1,770,183 53	No. of tons carried one mile 3,862,242,90 Earnings per ton per mile 0.74 ct	
Equipment replacement fund Steamship replacement fund	582,937 44 340,666 67		· ·
Cash subsidies from Domin- ion and Provincial Govern-	0.,	PASSENGER TRAFFIC.	
ments and municipalities.	30,673,283 07	No. of passengers carried 5,524.10	98 6,2
Land grant— Sales of land and town sites, Surplus	,	No. of passengers carried one	
Surplus	41,160,443 54 17,561,046 05	mile	33 677,9
<u>:</u>		mile 1.73 ct	is. 1.
•	358,919,294 46	TRAIN TRAFFIC STATISTICS FOR Y	YEAR EN
FIXED CHARGES FOR YEAR ENDE	D JUNE 30,	JUNE 30, 1904.	-
1904.		TRAIN MILEAGE.	Incre- decr
1st Mortgage Bonds 5% due July 1, 1915 Province of Quebec, 4½% North Shore Ry, 1st mortgage c% bonds—	\$ 1,749,931 66	December 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Per
	283.500 00		
Canada Central Ry. 2nd mortgage 6%	223 05		348 12
bonds due Nov. 1, 1910	58,400 00	Total trains 24,185,5	527 4.0
St. Lawrence & Ottawa Ry. 4% 1st mort-			
Man. Southwestern Colonization Ry. 1st	38,933 34	CAR MILEAGE. Passenger—	
Toronte Gran & Bruce Dy mantel	127,200 00	Coaches and P.D. and S. cars. 43,277,0	25 4.
Ontario & Quebec Ry. Debenture Stock 5% Ontario & Quebec Ry. (Ordinary Stock)	975,129 56		B22 6. 330 8.

Atlantic & North-West Ry, 1st mortgage		FREIGHT—	
bonds (less Government proportion) due	136,333 34	Loaded	52 6.
Jan. 1, 1937. Algoma Branch 5% 1st mortgage bonds	.80 500 00	Caboose	
due July 1, 1937	182,500 00 138,357 60	Total freight cars318,938,0	36 .
Rental, Farnham to Brigham Jct.	1,400 00 23,800 00		.,
Rental, Mattawamkeag to Vanceboro Rental, New Brunswick Ry. System	372.829 74	_ mile	.90 1.
Rental of terminals at Homilton	32,318 69 32,784 82		74 4
Rental St. Stanban and Miller P.	40,027 86	PASSENGER TRAFFIC.	
Interest on Montreal & Western Ry nur-	2,050 00	rassengers carried (earning rev-	
Interest on equipment leases	19.678 45	i assengers carried tearning rev-	,223 25.
•	89,349 12	enue) one mile	,402 6.
For C. 4% DEBENTURE STOCK	•	enue) one mile per mile of road 82.	,500 .
For General purposes. £ 3.913.748 China and Japan steamers 720,000		Average journey per passenger	5.74 15.
Loo4.000		Average amount received per	
Retire Canada Central Ry. 1. st mortgage bonds 250,000	,	passenger\$ Average amount received per	1.72 9.
Branch lines 1,491,250			1.78 5
Allantic Steamships. 1.417 foo		per train mile 6	4 27 .
Acquiring mortgage bonds of roads of which		Average number of passengers per car mile	5 03 1.
principal or interest is	•	Revenue from passengers per	_
guaranteed by C.P.Ry. 7,880,807		passenger car milects. 26 Total passenger train earnings	6.75 7.
£ 16,922,305 6 mos, on £ 2 8,2326	i	per train mile\$	1.40 5.
6 mos, on £ 2,803,349.		Total passenger train earnings per mile of road\$ 1,79	2.83 6.
	\$ 3.021,349 41		
	\$ 7.586,096 64	FREIGHT TRAFFIC. Tons of revenue freight carried	
EADWING			·775 I
EARNINGS FOR YEAR ENDED JUN Passenger			,213 15.
Passengers. Preight Mails	\$ 12,418,419 33	Total tons (all classes) freight	
			,988 .
Parlor and i	1,002,379 64	one mile per mile of road 451	.311 7
Ous, including profits on Profits steam		carried one mile per mile of road 76	3,85 9.
ships	. 2,350,281 77	Total tons (all classes) freight	
Total		Average amount received per ton	,696 5.
		A	•773 4•
WORKING EXPENSES FOR YEAR E	NDED JUNE	freight per train mile 23	8.76 5.
30, 1904.		freight per train mile 4	0.19 10.
Conducting transportation .\$14 045,459 79 Maintenance of way and	\$16.140.578	Average no. of tons of (all classes)	•
Maintenance of way and		Average no. of tons of revenue	8.95 3
Maintan 0,042,105 17		freight per loaded car mile 1	5.08 I
parlor and sleeping car expenses.	,	freight per loaded car mile	2.54 14
Expenses of lake and river	3 161,026 00	Average no. of tons of (all classes)	7.62
General 470,773 oc	519,994 1	Freight train earnings per load-	
Commercial telegraph 1.405.790 57	7 1,589,134 70 5 590,722 80	ed car mile	1.65 2.
Total\$28,120,527 26		- mile\$	1.85 1.
		of road \$ 2.40	1.83 3.
The classification of accounts was chan year to make them conform to the prosti	ged during the		, 34
on this continue of the practic	e now genera	Earnings of lake and river stea	amers n
same way are given for comparison,	sined in the	cluded in above statement.	

Grain, bush	5,110,757 63,822,710	52,990,151
Live stock, head	1,103,686	1,314,814 267,404,321
Firewood, cords	268,401	270,803
Manufactured articles, tons All other articles, tons	2,665,260 2,942,736	3,119,6 5 9 3,620, 5 15
FREIGHT TRA	FFIC.	
	1903	1904
No. of tons carried	10,180,847	11,135,896
Earnings per ton per mile	0.74 cts.	0.77 cts.
PASSENGER TR	AFFIC.	
111002110211	1903	1904
No. of passengers carried	5,524.198	6,251,471
No. of passengers carried one mile	35,855,533	677,940,496
Earnings per passenger per mile	1.73 cts.	1.83 cts.
		-
TRAIN TRAFFIC STATISTICS JUNE 30, 19		R ENDED
JUNE 30, 19		Increase or
TRAIN MILEAGE.		decrease. Per cent.
Passenger trains	8,810,999	6.04+
Freight "		3.42+ 12.47+
Total trains		
Total trans	24,105,527	4.91+
CAR MILEAG	GB.	
PASSENGER—Coaches and P.D. and S. cars.	43.277,025	4.46+
Combination cars	2,162,822	6.63+ 8.77+
•		
Total Passenger cars .		5.61+
Loaded	243,394,348 60.842 852	.36+ 6.21 -
Caboose	14,700.836	1.90+
Total freight cars	318,938,036	.89-
Passenger cars per traffic train		-
mile Freight cars per traffic train mile.	5.90	1.17-
	20.74	4 99 -
PASSENGER TR	AFFIC.	
Passengers carried (earning revenue	6,893,223	25.57+
Passengers carried (earning rev-		
Passengers carried (earning revenue) one mile per mile of road	666,740,402	6.46+
enue) one mile per mile of road Average journey per passenger	82,500	.36+
Average amount received per	96.74	15.20 -
Average amount received per passenger \$	1.72	9.95-
passenger\$ Average amount received per	1.78	
passenger milects. Average number of passengers		5 95+
Average number of passengers	64 27	.46-
per car mile	15 03	1.83+
passenger car milects.	26.75	7.99+
Total passenger train earnings	1.40	5.26+
per train mile\$ Total passenger train earnings		•
per mile of road\$	1,792.83	6.11+
FREIGHT TRA	FFIC.	
Tons of revenue freight carried		
one mile	,,0,0,021,775	1 37 -
one mile	617,906,213	15.54+
Carried one mile	,,288,727,988	.75+
one mile per mile of road	451.311	7.38-
Tons of non-revenue freight	763,85	
carried one mile per mile of road Total tons (all classes) freight		
carried one mile per mile of road Average amount received per ton	527,696	5.31 -
per mile of revenue freight. cts Average no. of tons of revenue	0.773	4.04+
freight per train mile	238.76	5.42
freight per train mile	40.19	10.78+
Average no. of tons of (all classes)		
freight per train mile	278.95	3. 38 ~
freight per loaded car mile Average no. of tons of non-rev.	15.08	1.60-
freight per loaded car mile	2.54	14.93+
Average no. of tons of (all classes) freight per loaded car mile	17.62	.40+
Freight train earnings per load-		
ed car mile	11.65	
mile\$ Freight train earnings per mile	1.85	1.60 -
of road\$	3,491.83	3.78 -
+ Increase Decrea		
Earnings of lake and riv		ers not in-
cluded in above statement	•	

Mileage included in C.P.R. traffic returns . 8332.0 Mileage of other lines worked
Mileage of Minneapolis, St. Paul & Sault Ste. Marie Ry
tic Ry 565.0
2213.t

11321.6

Minneapolis, St. Paul and Sault Ste. Marie Railway.

Following are extracts from the report for the year ended June 30, 1904, presented at the annual meeting in Minneapolis, Sept. 20:

Gross earnings from all	1904.	1903.
sources	\$ 7,082,153.19	
Operating expenses	3,746,780.49	3,719,923.63
Net earnings	\$ 3,335,372.70	\$ 3,573,820 63
Net earnings	1.948 126.82	1,909,323,20

Surplus earnings....... \$ 1,387,245.88 \$ 1,664,497.43 The gross earnings as compared with the previous year decreased \$211,590.07, or 2.9%, the operating expenses increased \$26,857.86 and the fixed charges \$38,803.62, resulting in a decrease in the net earnings of \$238.447.93, or 6.6%, and in surplus of \$277,251.55, or 16.6%. When the unfavorable conditions that prevailed throughout the year are considered, the result is most encouraging; a comparatively small wheat crop in 1903 was followed by a very severe winter, making operation most difficult and expensive; the heavy snowfall of the winter coupled with an abnormal rainfall in the spring resulted in very disastrous washouts in North Dakota, which paralyzed traffic during the busy spring season and made expensive repairs necessary. late opening of navigation on the Great Lakes in the spring of 1904 eliminated a very large volume of business usually handled over the lines east of Minneapolis, and greatly reduced business activity throughout the entire Northwest. When these unfavorable local conditions are considered, and the abnormal condition of business generally throughout the entire country, the fact that the gross earnings were maintained at a figure within 2.9% of the most favorable year in the company's history reflects the wonderful growth of the territory along its lines, and certainly offers brightest prospects for the future.

On Oct. 15, 1903, the company paid its first dividend. This was paid out of the surplus earnings of the calendar year 1902, being the full dividend of 7% on the preferred shares and 2% on the common shares. In April, 1904, a second dividend was paid; the preferred shares receiving 31/2% from the earnings of 1903 and the common shares 2% from the earnings of 1902. The company also appropriated from its surplus earnings of the current year \$250,000 for betterments and improvements to the property, \$200,000 having been appropriated from the previous year for similar purposes; the improvement Fund aggregated \$450,000, and was expended principally as follows:

Steel bridges (\$20,000 charged operating expenses)

Replacing 60-lb. rails with 80-lb. rails Minneapolis to Hoffman, about 141 miles, and about 17 miles east of Minneapolis (cost of relaving charged to operating expenses)

Ballasting Minneapolis to Glenwood.

Extending side and passenger tracks, about

44.000,00

The balance of the fund was used to enlarge shops and roundhouses at Minneapolis and to improve and enlarge fuel and water stations, including several automatic coaling plants. About \$75,000 was expended to complete the acquirement of terminal grounds at St. Paul and Minneapolis, and \$45,000 for a suitable piece of property in Minneapolis, on which during the coming year a general office building will be erected.

During the year the company completed the extension of its line from Birchwood to Reserve, Wis., 18.85 miles; purchased the line from Rex to Meads Quarry, Mich., 15.54 miles; completed and put in operation the extension from Glenwood to eight miles south of Detroit, Minn., 84 miles, and purchased the Bismarck, Washburn & Great Falls Ry., extending from Bismarck northwesterly to Underwood, N.D., 59.97 miles, making a total addition to mileage, 176.36 miles. The extension north from Glenwood, known as the Winnipeg line, is under construction, and will be completed and in operation not later than Dec. 1. To provide funds for the

construction and purchase of this additional mileage the company issued during the fiscal year 3,572 of its 1st consolidated mortgage bonds; and since the close of the fiscal year has issued 580 more of said bonds, which will provide all the funds required to complete the Winnipeg line and pay for additional equipment contracted for delivery at an early date. With the completion of this line, and after the issuance of the above mentioned bonds, the company will own about 160 miles of railway on which no bonds have as yet been issued.

The equipment was increased during the year by the purchase of 15 locomotives and 5

passenger cars, besides considerable secondhand equipment received with the purchase of the Bismarck, Washburn & Great Falls D...

Ry.

The company's property, including roadbed, buildings and equipment, has been not only maintained but greatly improved by many additions, of which no detail mention is made for the reason that the cost of same has been carried in its operating expenses.

The mileage owned and operated is 1,606.51 and 23.13 miles of spur lines. In addition the company has trackage facilities over 18.52 miles of terminal property in Minneapolis, St. Paul and Sault Ste. Marie.

RAILWAY AND RUBBER GOODS of the Highest STEAMBOAT RUBBER GOODS Grade

HOSE

For Air Brakes, Steam, Gas, Water, Pneumatic Tools, Fire Protection.



PACKINGS

IN GREAT VARIETY.

Special Valves and Gaskets.

Mats, Matting and Stair

Treads.

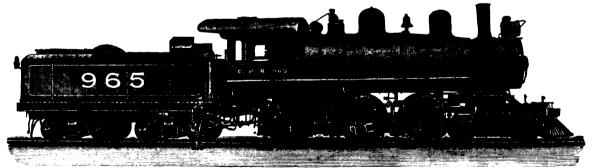
Superior in Quality.

Satisfactory in Service.

MANUFACTURED BY

THE GUTTA PERCHA & RUBBER MFG. CO. OF TORONTO LIMITED

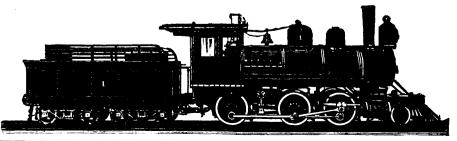
Temporary Offices-15 EAST WELLINGTON ST., TORONTO, CANADA



The Saxon Engine Works, late Rich. Hartmann, Limited

Carry on the construction of LOCOMOTIVES of every description.

Number of Workmen, 5,200.



Oapital, \$3,000,000.

EARNINGS AND EXPENSES.
Page 2
Passenger. \$1,523,262.18
Piess, mail and miscellaneous 402,759.07
Maintenance of way and struc-
tures
Conduction to requipment 730,074.10
General expenses
3,746,780,49
Net earnings from operation\$3,246,717.92
REVENUE FROM OTHER SOURCES.
Interest, discount and exchange.\$ 73.657.95 Interest on bonds and stock 16,288.50 ————————————————————————————————————
Total income. \$3,336,664.37
10tal income
OTHER PAYMENTS.
Interest on hands \$- re8 406 88
Interest on bonds\$1,528,496.88
Interest on bonds. \$1,528,496.88 Taxes. 327,784.71 Rental of terminals 18
Interest on bonds \$1,528,496,88 Taxes \$327,784.71 Rental of terminals 91,845,23 Loss on sale of 15 Minnesota
Interest on bonds \$1,528,496,88 Taxes \$327,784.71 Rental of terminals 91,845,23 Loss on sale of 15 Minnesota
Interest on bonds \$1,528,496,88 Taxes 327,784,71 Rental of terminals 91,845,23 Loss on sale of 15 Minnesota Transfer Ry, bonds 1,291,67
Interest on bonds \$1,528,496,88 Taxes \$327,784,71 Rental of terminals 91,845,23 Loss on sale of 15 Minnesota Transfer Ry. bonds 1,291,67 Surplus earnings \$1,394,448,49 Deduct amount appropriated for additions and betterments \$250,000.00
Interest on bonds \$1,528,496,88 Taxes \$327,784,71 Rental of terminals 91,845,23 Loss on sale of 15 Minnesota Transfer Ry. bonds 1,291,67 Surplus earnings \$1,394,245,88 Deduct amount appropriated for additions and betterments \$250,000.00
Interest on bonds \$1,528,496,88 Taxes \$327,784,71 Rental of terminals 91,845,23 Loss on sale of 15 Minnesota Transfer Ry. bonds 1,291,67 Surplus earnings \$1,394,448,49 Deduct amount appropriated for additions and betterments \$250,000.00

The expenditure account for construction and equipment contains these items: Long branch, \$3,846.60; Birchwood extension, \$218,934.79; Glenwood extension, \$1,999,571.72; Bismarck, Washburn and Great Falls
Ry., \$1,112,086.29; Rex branch, \$63,147.24; Preliminary surveys, \$4,209.69; terminal property St. Paul and Minneapolis, \$75,466.75; betterments to main line, \$44,129.78; general office building Minneapolis, \$44,877.12; joint terminals Sault Ste. Marie, \$1,060.23; new equipment, \$317,090.12. Total, \$3,884,420.-

The report was adopted, a resolution ratifying the purchase of the Bismarck, Washburn and Great Falls Ry. was passed, and the retiring directors were re-elected. The directors and officers for the current year are: President, T. Lowry; Vice-President, J. Martin; 2nd Vice-President and General Manager, E. Pennington; other directors: W. D. Washburn, Sir Wm. C. Van Horne, Sir Thos. G. Shaughnessy, C. H. Pettit, A. H. Bright, G. R. Newell, R. B. Angus, E. A. Young; Secretary and Treasurer, C. F. Clement; Auditor, C. W. Gardner.

Duluth South Shore and Atlantic Ry.

The report of this subsidiary company of the C.P.R. for the year ended June 30, 1904, consists of tabular statements, which are printed without comment. The main line owned is 517.44 miles, branch lines owned 51.59 miles; total owned 569.48 miles; trackage rights leased 9.64 miles, total miles operated ated 578.64 miles against 573.07 miles on June 30, 1903. The equipment is 73 locomotives, 58 passenger cars, 2,630 freight cars, 76 miscellaneous cars. The income accounts, in comparison with the year ended June 30, 1903, are as follows:

Gross earnings Operating expenses	1903-4. \$2, 524,612.07 1,749,456.12	1902-3. \$2,772,134.67 1,758,089.74
Net earnings		
Net income	\$ 786,639.91	\$1,028,710.13
Interest on bonds	859,700.00 210,391.07	\$ 859,700.00 200,213.67
Total Deficit		\$1,059,913.67

EARNINGS AND OPERATING EXPENSES.

M. Gross Earnings.	1903-4.	1902-3.
Gross Earnings. Merchandise freight\$	1,281,901.98	\$1,339,560.20
Passenger		
Passenger Mail	913,472.56	
Mail Express	58,889.60	
Express Sleeping and chargestion care	35,348.80	40,676.04
Sleeping and observation cars.	25,797.90	27,506.70
Miscellaneous	37,412.57	57,306.37
Total\$	2.524.612.07	\$2,772,134.67

Operating Expenses.			
Maintenance of way and str			
Maintenance of equipment.	\$ 406,72:	.40 236,446,05	
Conducting transportation.	1,041,80	3.84 1,001,693.31	
General expenses	81,618	86,434.72	
Total	\$1,749,456	5.12 \$1,758,089.74	
Net earnings	\$ 775.155	.95 \$1,014,044.93	
Net earnings Percentage of expenses earnings	to	69.3 63.4	
Gross earnings from operat	ion	J9.3 03.4	
per mile of road	4,36	2.78 4,837.34	
Operating expenses per mile	e of 3,02;	3,23 3,067.84	
Net earnings per mile of roa	d.\$ 1,339	9.55 \$ 1,769.50	
Gross earnings from operat			
operating expenses per tr	\$ I.3	1.4637	
mile		9192 .9283	
Net earnings per train mile.	\$	1073 \$ ·5354	
FREIGHT	TRAFFIC.		
	1903-4.	1902-3.	
Tons through freight carried, earning reve-	_		
Tons local freight car-	352,194	892, <i>5</i> 88	
	108,555	1,564,977	
Total tons freight car-			
ried, earning revenue.	960,749	2,457,565	
Mileage of through			
freight 95. Mileage of local freight. 46.	250,662	103,813,419	
Total freight mileage, or	759.940	45.045,295	
tons carried one mile. 142	,010,610	148,858,714	
		====	
Average ton haul for through freight I	11.77 miles	116,3 miles	
Average ton haul for			
Average ton haul for	;2 . 18 ''	28.78 "	
all freight	72.43 ''	60.57 "	
Average amount receiv-	va s <i>ea c</i> ente	64.06g cents	
Average receipts ton per	73.153 cents	, ,	
mile for through freight	•934 ''	.938 ''	
Average receipts ton per mile for local freight.	1.165 "	1.334 "	
Average receipts ton per	J		
mile for all freight Total freight earnings \$	1.010 '' 1,453,690.64	1.058 '' \$1,599,109.55	
Freight earnings per		A.1924.02.02	,
mile of road	2,512,12	2,790.43	ì
Freight earnings per train mile	1.48	1.46	Š

Following is the percentage of the tonnage of the principal commodities carried:-Ores, 41.24; lumber, 10.85; logs, 10.83; other forest products, 9.79; merchandise, 5.68; bituminous coal, 3.08; copper, 2.92; flour, 2.84; grain, 1.60; stone, sand and other like articles, 1.28; iron, pig and bloom, 1.23; cement, brick and lime, 1.22; miscellaneous castings and machinery, 1.04.

PASSENGER TRAFFIC.

10024

1002-2

m i	1903-4.	1902-3.
Through passengers car- ried, earning revenue. Local passengers car-	152,537	146,826
ried, earning revenue.	450,771	494,384
Total number passen- gers carried, earning revenue	603,308	641,210
Passengers carried one mile	33.388,599	35,327,390
ried	55.342 miles	55.095 miles
ed from each passenger Average receipts per mile	\$1.46875	\$1.50599
for through passengers Average receipts per mile	2.526 cents	2.588 cents
for local passengers Average receipts per passenger per mile for	2.822 "	2,899 "
all passengers Total passenger earn-	2.654 "	2.733 "
ings	\$1,033,508.86	\$1,115,718.75
Passenger earnings per mile of road Passenger earnings per	1,786.01	1,946.92
train mile	1.0845	1.1187

BALANCE SHEET, JUNE 30, 1904.

Cost of road and equipment

Cost of load and equipment	43,410,110,13
Mackinaw Transportation Co	237,371.70
Lake Superior Terminal & Transfer Ry	22,300,00
Lake Michigan and Lake Superior Ry	7,662.68
S. S. Marie Bridge Co	250.00
Mineral Range Rd. Co	532,295.00
Sainte Marie Union Depot Co	56,065.27
Western Express Co	25,000.00
E. W. Allen, treasurer	149,046.46
Sundry account ledger	115,268.25
Rent ledger	487.50
-	

Station ledger	268,682,38
Western Express Co. (current account)	12,987.94
Post Office department	14,722.95
Material	241,355.18
Profit and loss	2,253,867.77
	49,408,133.83
Common conital steels	•
Common capital stock	φ12,000,000.00
Preferred capital stock	
D., S.S. & A. consols, 4% gold bonds	
D., S.S. & A. 1st mortgage 5% bonds	. 3,816,000.00
M. H. & O. 6% bonds of 1925	. 1,077,000.00
Income certificates	. 3,000,000.00
Car trust notes, 3rd series	. 15,298.83
Car trust notes, 5th series	. 236,213.19
C.P.R. guaranteed interest advances	. 2,805,835.18
C.P.R. general account	. 198,012.58
South Shore Land Co	. 112,004.30
M. H. & O. Lands	. 11,338.61
Bills payable	. 16,000.00
Vouchers payable	237,525,73
Labor	. 127,684.46
Coupon ticket ledger	92,156.36
Con service ledger	. 92,150.30
Car service ledger	6,424.35
Accrued interest on bonds	
Accrued taxes	. 280,711.91
	\$ 49,408,133.83

During the year \$42,797.83 was charged to construction account, the principal items of expenditure being: new buildings, \$9,968. 69; new machinery and tools, \$596.87; new fence, \$2,428.67; new telegraph line, \$256; new sidings, \$29,434.50.

Quebec Bridge and Railway Co.

The report of the directors presented at the annual meeting on Sept. 6, set forth that under the terms of an act of Parliament passed in 1903, an agreement was approved at a special general meeting, held Jan. 28, between the Dominion Government, the Royal Trust Co. and the Q.B. and Ry. Co., giving full effect to the guarantee by the Government of the capital and interest of the company's bonds to the extent of \$6,678,200. With the aid thus afforded the company has been able

to proceed with the work of construction. The report of E. A. Hoare, Chief Engineer, shows that satisfactory progress is being made on the bridge; the approach spans, which were under construction at the date of the last annual report, have since been completed. The manufacture of metal was commenced early in June at Phoenixville, Pa., and Harrisburg, Pa., special plates being made at the latter place under a sub-contract. Three inspectors representing the company are employed day and night following the metal from the open-hearth furnaces until the various members of the structure are manufactured, riveted and built to the forms required for shipment to Quebec. A large quantity of the materials for permanent and temporary purposes has already been delivered at the bridge site. Shipments will continue both by rail and water and will only be interrupted during storms in the winter. At the bridge site a large force of men are employed erecting a heavy steel structure to be used temporarily for raising the south anchor arm, in connection with which a heavy timber structure is also being built for carrying tracks for delivery of cars loaded with metal for the permanent work. It is scarcely necessary to dwell upon the enormous amount of work that has been and has still to be performed by all grades of engineers in the study, designing and calculations, not only for the permanent structure itself, but for the solution of problems connected with temporary structures, hoisting machinery, etc., all of which must be perfected before the erection of such an enormous structure can be attempted. Double track lines are being laid out with sufficient sidings for the accommodation of future traffic. Progress has been made in the construction of the main lines and sidings between the south end of the bridge and the I.C.R., on which section the culverts and fencing are being constructed, with rock and earth excavation in progress; at the same time the

C.P.R. LANDS.

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

TERMS OF PAYMENT.

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

160 acres at \$4.00 per acre, 1st instalment \$95.85, and 9 equal instalments of \$80.

160 acres at \$4.50 per acre, 1st instalment \$107.85, and 9 equal instalments of \$50.

160 acres at \$5.50 per acre, 1st instalment \$119.85, and 9 equal instalments of \$100.

160 acres at \$5.50 per acre, 1st instalment \$131.80, and 9 equal instalments of \$100.

160 acres at \$5.50 per acre, 1st instalment \$143.80, and 9 equal instalments of \$100.

160 acres at \$5.50 per acre, 1st instalment \$155.80 and 9 equal instalments of \$130.00.

160 acres at \$5.50 per acre, 1st instalment \$107.80 and 9 equal instalments of \$130.00.

160 acres at \$5.50 per acre, 1st instalment \$107.80 and 9 equal instalments of \$130.00.

160 acres at \$5.50 per acre, 1st instalment \$107.80 and 9 equal instalments of \$140.00.

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

DISCOUNT FOR CASH.

rate of 6 per cent. per annum.

DISCOUNT FOR CASH.

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

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

F. T. GRIFFIN,

Land Commissioner C.P.R. Co., Winnipeg

CANADA NORTH-WEST LAND CO.

This Company has 800,000 acres of selected lands in Manitoba and Assiniboia which offer excellent opportunities to settlers and investors who desire to secure good lands in well settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Pailway Company. Railway Company

TO THE WORLD'S FAIR ST. LOUIS

OVER THE-

WABASH LINE

The World's Fair is a grand success. In all probability, none now living will see anything of its character approaching it in grandeur and magnitude, and the great Wabash is the best route to go by, because it saves many hours of travel and lands passengers right at the main entrance World's Fair grounds before going to Union Depot. Excursion tickets on sale daily until Dec. 1st. Passengers leaving Toronto on evening trainsarrive at World's Fair grounds next day at noon. For time-tables, descriptive folder, address

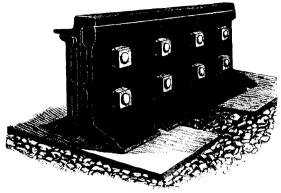
J. A. RICHARDSON

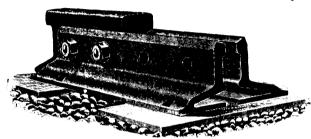
District Passenger Agent

North-East Corner King and Yonge Streets, TORONTO

C. H. Bowers, who was recently appointed Assistant Master Car Builder C.P.R. lines east of Port Arthur, has resigned on account of ill-health, and is succeeded by S. King, heretofore Master Car Builder Intercolonial Ry., Moncton, N.B.

Railroad Essentials.





The day has passed when men of finance are willing to place their money into bad material in railroad construction only to be compelled to replace it by renewals or reconstruction after very little use. Many of the best and most successful steam and electric railroads use the rail joints of the Continuous patent type for standard track work, insulated joints, step joints, and electric bonding

joints for the reason that experience has proven it to be the best appliance of its kind ever put upon the market, as evidenced by the fact that it is used in all parts of the world on over 20,000 miles of track.

MADE BY

The Continuous Rail Joint Company of Canada Limited

216 Board of Trade Bldg., MONTREAL, CANADA

Medals awarded at Paris and Buffalo Expositions.

The N. L. Piper Railway Supply Co.

TORONTO CANADA

LOCOMOTIVE HEADLIGHT

foundations for the bridge over the Chaudiere River are being prepared, and stone quarried and cut. and cut. The metal work for the same is more than half ready for shipment from the Dominion Bridge Co.'s works at Lachine. Over a mile of track has been laid from the eastern connection with the I.C.R. towards the bridge, and in a few days the crossing of Mr. Breakey's lumber railway, will be made, an order for which has been obtained from the Board of Railway Commissioners, which also covers the future operation of the safety signals, etc. Inspected 80 lb. steel rails, and corresponding fastenings have been delivered to lay the main line tracks and sidings between the I.C.R. way on the south side and Point Pizeau on the north side of the River St. Lawrence. Some right of way has been purchased on both sides of the river and a quantity of materials delivered for culverts and fencing for work ahead.

The report was adopted, directors and other officers elected, and the by-laws were amended so as to conform to the terms of the act of 1903. The directors and officers for the current year are: President, Hon. S. A. Parent; Vice-President, R. Audette; other directors, V. Boswell, J. Breakey, Hon. N. Garneau, G. Lemoine, H. M. Price, Hon. J. Sharples; auditor, G. Lefaivre. In accordance with the agreement made under the act of 1903 three directors are to be appointed by the Dominion Government.

Quebec Ry., Light and Power Co.

The directors' report presented at the annual meeting on Sept. 13, gave the result of opera-tions for the year ended June 30, 1904. The net profits were \$35,631.32, which, added to the balance of profit and loss account, increased the amount at the credit of that account to \$152,988.72. In the report submitted in 1903, attention was called to the loss shown during that year by the power division, arising from the termination of the contract for the city lighting. The deficiency of revenue, say \$17,000.00, referred to, has been made up by the increased earnings obtained by this division from other sources during the year, the statement submitted showing a net profit of \$21,079.86 over the previous year. The railway divisions, in the city and to Ste. Anne, were unfavorably affected during the year by the unusually severe winter experienced not only locally. severe winter experienced not only locally, but over the whole Province. As a consequence, there was a falling off in the passenger receipts during the greater part of the Winter and an increase in the cost of operating expenses, the result being a loss of \$843.-74 in the net earnings, as compared with the statements of the previous year. Notwith-standing this unfavorable feature of the year's business, the net result from all divisions gives a net gain of \$17,426.47 over that of the previous year, which must be regarded as satisfactory progress in the development of the company's operations.

The report of E. A. Evans, General Manager, respecting the operation of the railway Portion of the company's undertaking follows:

CITADEL DIVISION.—During the year, 4,-457.761 passengers were carried, an increase of 33.634 over the previous year. The small increase in the number of passengers is accounted for by the climatic conditions of the Past winter, resulting in a very irregular service from the beginning of Oct. to the end of Mar., during which months a very considerable decrease in the number of passengers Occurred. The car mileage has been 1,138,-546, a decrease of 40,486 miles, the whole of thich decrease took place during the months referred to. Sweeper mileage, 11,571 miles, an increase of 1,295 miles over the previous year, thus showing the severity of the winter. The operating expenses have

been increased from 10.85 to 11.80c. a car mile, which increase is accounted for by the necessary increase in wages of employes, the severity of the winter and the accident account. It is satisfactory to note that there has been a decrease of over \$1,800 in the cost of maintenance of equipment, without its having in any way affected the excellent condition of the rolling stock and equipment.

THE MONTMORENCY DIVISION continues to show satisfactory increase. No. of passengers carried on electric trains, 721,330; no. of passengers carried on steam trains, 155,980; total passengers carried, 877,310; an increase of 79,369 passengers over the previous year, 54,870 on the electric trains and 24,499 on the steam trains. Steam passenger trains made 135,721 miles, an increase of 6,455 miles; electric passenger trains made 196,869 miles, an increase of 1,635 miles. In addition to the above, foreign passenger trains were carried 12,688 miles; loaded freight cars, 53,091 miles; empty freight cars, 24,426 miles; foreign freight cars, 16,350 miles; snow plough, 1,913 miles, a total mileage of 441,058 miles, an increase of 30,249 miles over the previous year. There were 114 organized pilgrimages to Ste. Anne de Beaupré as against 103 the previous year, and 43 special excursions, as against 61 last year. This decrease was due to the more frequent use of extra cars on the regular trains, thus enabling these trains to carry more passengers instead of having to run specials. The freight business continues to show satisfactory increases, and owing to the company having added more freight cars to the rolling stock, further increase may be expected. Over \$2,000 of the increase in the operating expenses of this division is due to the severity of the past winter necessitating a considerable extra consumption of coal-

The figures given in the report of the power division do not include the power supplied to the Montmorency and Citadel Divisions, although these divisions are respectively charged in their operating expenses with the power used. The rolling stock, roadway, buildings and other property of the company have all been maintained in most efficient working order, and nearly all the stations on the Montmorency division have been repaired and repainted.

ASSETS.

Road and equipment, real estate, buildings,	
etc., including Kent House,	55, 388,877.68
Cash on hand and in bank	4.383.59
Power division-operating, including ac-	
counts due, stores for operating equip-	
ment, etc	41,771 84
Kent House-operating account	9,836.15
Citadel division-operating account, repre-	
sented by stores on hand	11,198.25
Montmorency division-operating account,	
stores on hand, cash assets, etc	29, 107.35
Accounts receivable	9,264.19
9	5,494,439.05
LIABILITIES.	
LIABILITIES.	
Capital stock	\$2,500,000.co
Bonds	2,500,000 00
Preferred capital stock \$ 500,000.00	2,500,000 00
Bonds	2,500,000 00
Bonds. Preferred capital stock \$500,000.00 Less in treasury \$262,200.00 Balance of instal-	2,500,000 00
Bonds\$ 500,000.00 Less in treasury\$ 262,200.00 Balance of instalments on stock	2,500,000 00
Bonds	2,500,000 00 237,300.00 43,045.00
Bonds	237,300.00 43,045.00
Bonds. Preferred capital stock\$ 500,000.00 Less in treasury\$ 262,200.00 Balance of instalments on stock subscribed for 500.00 Bills payable	2,500,000 00 237,300.00 43,045.00 13,757.10 47,348.23
Bonds	237,300.00 43,045.00
Bonds. Preferred capital stock \$500,000.00 Less in treasury \$262,200.00 Balance of instalments on stock subscribed for 500.00 Bills payable Accrued interest. Accounts payable. Profit and loss.	2,500,000 00 237,300.00 43,045.00 13,757.10 47,348.23
Bonds. Preferred capital stock \$500,000.00 Less in treasury \$262,200.00 Balance of instalments on stock subscribed for 500.00 Bills payable Accrued interest. Accounts payable. Profit and loss.	237,300.00 43,045.00 13,757.10 47,348.23 152,988.72

35.631.3
152,988.72

October Birthdays.

Many happy returns of the day to

E. P. Allen, Travelling Passenger Agent, C.P.R., at Syracuse, N.Y., born Oct. 21,

R. A. Burford, City Passenger and Freight Agent, C.P.R., Buffalo, N.Y., born at Brooklyn, N.Y., Oct. 4, 1878.

T. C. Burgess, Commercial Agent G.T.R., at Minneapolis, Minn., born at New York

City, Oct 2, 1853.
C. E. Cartwright, Division Engineer C.P.R., Vancouver, B.C., born at Toronto, Oct. 14, 1864.

James Conmee, M.L.A., railway contractor, etc., Port Arthur, Ont., born at Sydenham,

etc., Port Arthur, Ont., born at Sydenham, Ont., Oct. 13, 1848.
C. Cooper, General Manager, Halifax and Yarmouth Ry., at Yarmouth, N.S., born in New Jersey, Oct. 18, 1869.
G. L. Courtney, Traffic Manager, Esquimalt and Nanaimo Ry. at Victoria, B.C., born at Chatham, Ont., Oct. 7, 1868.
F. S. Darling, Division Engineer of Construction, C.P.R., at Montreal, born at Burlville, R.I., Oct. 8, 1863.
I. Farls Secretary and Treasurer Canadian

J. Earls, Secretary and Treasurer Canadian Freight Association at Toronto, Ont., born in

Ireland, Oct. 30, 1838.
A. H. Harris, C.P.R. freight department at Montreal, Que., born in Devonshire, Eng.,

Oct. 15, 1855.

W. P. Fitzsimons, Manager Lackawanna-Grand Trunk Line at Buffalo, N.Y., born at Detroit, Mich., Oct. 27, 1868.

C. F. Gildersleeve, President Lake Ontario and Bay of Quinte Steamboat Co., Kingston,

Ont., born there Oct. 17, 1833.

B. W. Greer, General Freight Agent C.P.R. at Vancouver, B.C., born at Aldboro,

Ont., Oct. 4, 1867.

J. W. Higgins, Superintendent G.T.R., at London, Ont., born at Newport, R.I., Oct.

12, 1846.
W. M. Kirkpatrick, Assistant General Freight Agent Pacific Division C.P.R. at Vancouver, B.C., born at Kingston, Ont., Oct. 8, 1874.

J. F. Lee, ex-Traffic Manager White Pass

& Yukon Route at Seattle, Wash., born at

London, Eng., Oct. 23, 1851.

Jas. W. Leonard, President Guelph and Goderich Ry., Toronto, born at Epsom, Ont., Oct., 1858.

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

R. Marpole, General Superintendent C.P.R. Pacific Division at Vancouver, born in Montgomeryshire, Wales, Oct. 9, 1850.

W. H. Moore, Secretary Canadian North,

ern Ry., etc., born Oct. 19, 1872.
G. Olds, ex-General Traffic Manager C.P.R., born at Stapleton, Gloucestershire,

Eng., Oct. 29, 1832.

H. Paton, Secretary-Treasurer Shedden Forwarding Co., director Bell Telephone Co., Montreal, born at Johnstown, Renfrew,

Scotland Oct. 5, 1852.
C. A. Pipon, Passenger Agent for Ontario, International Mercantile Marine Co., at Toronto, born at St. Helier's, Jersey, Oct. 19, 1853.

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

J. E. Price, General Superintendent I.C.R. at Moncton, N.B., born at Petitcodiac, N.B.,

Oct. 18, 1854.

N. L. Rand, Master Mechanic I.C.R. at 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. at Montreal, born at Milwaukee, Wis.,

Oct. 6, 1853.

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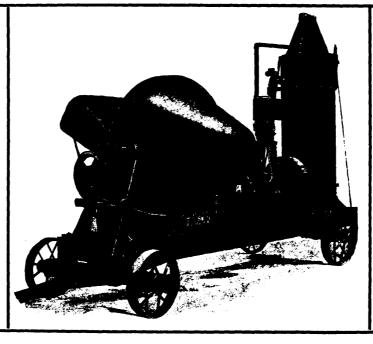
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C. W. Spencer, Vice-President and General Manager Ottawa, Northernand Western Ry., Pontiac Pacific Ry., Hull Electric Ry., and Kingston and Pembroke Ry., and General Superintendent of Transportation Eastern Lines C.P.R. at Montreal, born at Kempt-

ville, Ont., Oct. 31, 1857.

W. S. Taylor, Treasurer C.P.R. at Montreal, born at Dornoch, Sutherlandshire,

Scotland, Oct. 18, 1839.
L. H. Wheaton, ex-Chief Engineer and General Superintendent Halifax and Yarmouth Ry., born at Sackville, N.B., Oct. 5,

E. A. Williams, ex-Superintendent Rolling Stock C.P.R., now Assistant General Manager Erie Rd., at New York, born at Wiscasset, Me., Oct. 4, 1848.

Railway Equipment Notes.

The Locomotive and Machine Co., of Montreal, is building a 4-wheel saddle tank locomotive for the International Harvester Co., Hamilton, Ont.

The Locomotive and Machine Co. of Montreal is building and has in course of delivery li locomotives for the C.P.R., 10 for the G.T.R., and two for the Halifax and Southwestern Ry.

The Record of Recent Construction, no. 48, of the Baldwin Locomotive Works, gives details of a large number of locomotives of different types turned out for various railway companies and for public corporations.

At the close of the financial year, June 30, 1904, the equipment of the C.P.R. consisted of 934 locomotives, 814 first and second-class Passenger cars, baggage cars and colonist sleeping cars, 141 first-class sleeping and dining cars, 48 parlor cars, official and paymasters' cars, 28,060 freight and cattle cars, 511 conductors' cars, 993 board, tool and auxiliary cars, and steam shovels.

The Simplex Railway Appliance Co. has Purchased a site in Montreal on which it is proposed to erect a new factory. The site lies between the G.T.R. tracks and the Lachine canal. It has a frontage of 3,000 ft. on the canal and a total area of about 40 acres. Plans for the buildings are being prepared and are expected to be ready in Nov. The question of adding to the number of lines manufactured has not been finally decided.

The Canada Rolling Stock Co., which was recently incorporated under the Dominion Companies' Act, will supply rolling stock on the car trust plan. For the present it is intended that the rolling stock will be manufactured by Rhodes, Curry & Co., Amherst, N.S., and the C.R.S. Co. will do the financing. The officials are: President, N. Curry; Vice-President, N. A. Rhodes; Secretary-Treasurer, J. M. Curry; Solicitor, E. N. Rhodes.

The equipment of the Minneapolis, St. Paul and Sault Ste. Marie Ry. en June 30, 1904, Consisted of 133 locomotives, 27 first-class passenger coaches, 12 second-class passenger coaches, 8 combination coaches, 16 sleepers, 9 tourist sleepers, 6 dining cars, 1 buffet car, 30 baggage, mail and express cars, 2 official cars, 8,361 freight cars of all kinds and 19 miscellaneous cars. There was added to equipment during the year: 3 second-hand locomotives, 15 new locomotives, 2 steamboats and 2 barges, 3 passenger. Rer cars, 3 baggage and mail cars, 49 freight cars and 7 cabooses.

The C.P.R. Car Department's general the C.P.R. Car Department's general offices are now located at the new Angus shops, Montreal. The moving from the Hochelaga shops was completed early in Sent with the avention of the grey iron Sept., with the exception of the grey iron foundry, which was expected to make the change by the end of the month. The Hochelaga shops will not be abandoned this

winter, but will be operated in connection with the Angus shop. All the passenger equipment will be shopped at Hochelaga for general repairs, and the sleeping, dining and parlor cars and all new work will be done at the Angus shops. It is probable that the Hochelaga shops will be permanently closed in the spring of 1905.

The question of fenders for street railway cars has been brought forward owing to a verdict returned by a coroner's jury in Toron-to. In 1901 an act was passed by the Ontario Legislature under which the Provincial Engineer was authorized to approve of a fender or fenders to be adopted by the electric railway companies. Under this act three patterns were approved, and one of these was adopted by the Toronto Ry. Experience showed that some improvements on this fender were necessary, and some alterations were made by way of experiment. An Engineer of the Public Works Department has been directed to look into the matter of the use of the approved fender on the Toronto Ry. and to report to the Commissioner.

Following are the general dimensions of the 11 locomotives now being constructed for the C.P.R. by the Locomotive and Machine Co. of Montreal:

9 in. x 12 in,
engine truck journals, diameter 6 in., length 11 in.
tender " 5½ in., " 10 in. "engine truck journals, diameter 6 in, length 11 in, tender "" 5½ in., "to in. Boiler, type....ext, wagon top, o.d. first ring 703% in. "working pressure 200, fuel bituminous coal Firebox, type wide, length 96% in. width 65½ in. "... thickness of crown 3% in., tube ½ in., back ¾ in. com staying 13 in. back ¾ in. Crown staying 13 in. radial stays.

water space, front 5 in., sides 4½ in., back 3½ in.
Crown staying. 1½ in. radial stays
Tubes, material charcoal iron No. 244.
diam. 2 in. x 1t in. Tk.
No. 22, 5 in. x ½ in.
length 1½ ft. 2½ in. gauge
Boxes, driving, main. cast steel, others cast steel
Brake, tender. Westinghouse, air signal Westinghouse
pump 11 in., reservoir 22½ in. x 140 in.
Engine truck two wheel
Exhaust pipe single, 5½ in. 5½ in. 5½ in.
Grate, style rocking
Piston rod diam. 3½ in.
Smoke stack diam. 16½ in., top above rail 1.5 ft. ½ in.
Tender frame 10 in. and 12 in. channels
Tank, style Lyshape

capacity 5000 gallons Imperial
lel 12 tons
Valves. type piston, travel 6 in., steam lap ½ in. Capacity 5000 gallons Imperial fuel 12 tons

Valves, type piston, travel 6 in., steam lap 4 in.

\$\frac{1}{2}\text{ in.} \text{ class fine and line in full gear} \frac{1}{2}\text{ in. lead at 25\% cut off.} \frac{1}{2}\text{ wheels, driv., diam. outside tire 57 in., centres diam. 51 in.

material, main cast steel, others cast steel

material, main cast steel, others cast steel

engine truck diam. 31, kind

tender 33 cast iron

The two locomotions

The two locomotives now under construction at the works of the Locomotive and Machine Co. of Montreal for the Halifax and Southwestern Ry. have the following dimen-

23 ft. 8 in.

Weight in working order 137800, on drivers 103000

in working order, engine and tender 233800

Heating surface, tubes 1713.11 sq. ft.

"159-75"

arch tubes 21.6

total 1894.46 sq. ft.

Axles, driving journals, main 8½ in. x10 in., others

"engine truck journals, diameter 5½ in., length 10 in.
"tender "sin. "oin.

" tender " " 5 in. " 6 in.

Boiler, type.....ext. wagon top, o.d. first ring 38 in.

working pressure 200, fuel bit. coal

Firebox, type....on top of frames, length 103 in., width " thickness of crown & in., tube & in., sides & in.,

Tubes, material char, iron, no. 248, diam, 2 in. "length 13.21% in, gauge No. 12
Boxes, driving, main cast steel, others cast steel
Brake, tender Westinghouse, air signal Westinghouse
"pump 9½ in., Westinghouse reservoir 31½ in x36 in.
Engine truck four wheel, swing centre
Exhaust pipe single rocking
Piston rod diam, 3½ in.
Smoke stack diam, 15½ in., top above rail 14 ft. 9 in.
Tender frame wood
Tank, style Ushape
"capacity 5000 gallons U.S.
"full 10 tons
Valves, type piston, travel 5½ in, steam lap 1 in.
Setting Ain and the factor of some travel gallons gains fin. Setting hin, in full gear Wheels, driv., diam. outside tire 62 in., centres diam. 56 in. material, main steel, other steel engine truck, diam. 33 in., kind C. I. spoke steel tender " " 33 " cast iron

The G.T.R.'s to locomotives which are under construction at the works of the Locomotive and Machine Co. of Montreal have the following general dimensions:

Axles, driving journals, main 91 in. x12 in., others

engine truck journals, diameter 6½ in., length 10½ in. tender 5½ in., length 10½ in. 5½ in., 10 in. 10 in. 62½ in., ext. wagon top, od. first ring 62½ in., working pressure 225, fuel bit. coal " thickness of crown \vec{r}_8 in., tube \vec{r}_8 , in, sides $\hat{\vec{r}}_8$ in., back \vec{r}_8 in. water space, front 4 in., sides \vec{r}_8 in., back 4 in.

"water space, front 4 in., sides 3\frac{1}{2} in., back 4 in.

Crown staying 1\frac{1}{2} in., radial stays
Tubes, material char. iron no. 2\frac{2}{3}, diam. 2 in.

I fit. oin, gauge 1.2\frac{1}{2} in.

Boxes, driving main, cast steel, others cast steel

Brake, truck. Westinghouse, westing the control of the control of

Engine truck four wheel, swing centre
Exhaust pipe length 5 in.
Grate, style rocking
Pieton rod diam, 3\frac{3}{2} in. Exhaust pipe
Grate, style
Piston

Smoke stack

diam. 16½ in., top above rail, 15 ft. 1½ in.

Tender frame

Grave

The locomotive shops of the C.P.R. at De-

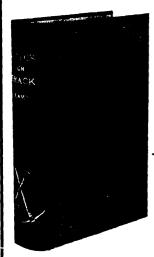
lorimier Avenue, Montreal, have been practically closed, the only shops open on Sept. 26 being the bolt and nut shops and the brass foundry, the whole of the machines, together with a staff of operators, as well as the office staff, having been removed for some time to the Angus shops. The office staff moved on Aug. 9, the shop machinery and the shop staff having been moved gradually group by group, in fact, on April 1 a temporary group of machinery was started up in the Angus shops composed of new machines purchased for the new plant, thus forming a nucleus of the present plant, 10 locomotives being taken into the shop for repairs. While the repairs were going on with this temporary group of machinery, the machines, tools and operators were gradually removed from Delorimier Ave. and placed in position in the new shops; and this system was carried on until the Angus shops were able to take care of the whole of the repairs, when the company stopped sending locomotives into the Delorimier shops and sent them to the Angus shops, simply holding sufficient machines to keep a few locomotives left at the Delorimier shops going. By this means the work was so gradually transferred from the old shops to the new, that, outside of the men working in the shops, it was hardly known on the road gen-

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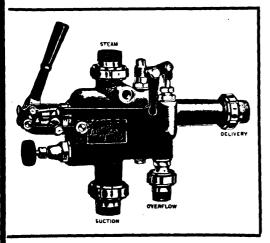
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minion Government homesteads, and railway lands to be secured.

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

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

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

For lands owned by private individuals apply
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erally that any change was being made, the whole thing being carried out without any in-terruption to the work of the road whatever. The power for running the machinery at the Angus shops was obtained temporarily from the Montreal Light, Heat and Power Co., but now the permanent power plant has supplied the whole of the current for the past month, in fact, the works will be entirely self-supporting so far as power plant, light and heat are concerned. The Stores Department is also permanently located at the Angus shops, having been removed from Delorimier Ave. and Hochelaga, so that, although naturally there is a lot to be done in the way of completing the details, it may be fairly said that the locomotive and car departments are now fairly established in the new shops.

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

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

Earnings. Expenses, Net Profits. Decrease. J'ly \$4,398,833.95 \$2,949,181.81 \$1,449,652.14 \$131.1 Aug. 4 474,237.64 2,946,307.21 1,527,930.43 93.5

\$8,873,071.59 \$5,895.489.02 \$2,977.582.57 \$224,952.95+

\$8,873,071.59 \$5,895.489.02 \$2.977.882.57 \$224.952.95+
Approximate earnings for Sept. \$4.171,000, against
3.880,000 for Sept., 1903.
DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross
arnings for July, \$256,008; net earnings, \$87,217.50,
against \$265,230.28 gross and \$90,282.09 net for July,
\$250,555 for Aug., 1903.
MINERAL RANGE RY.—Approximate earnings for Aug.,
\$56,650, against \$47,325 for Aug., 1903.
MINERAPOLIS, ST. PAUL AND SAULT STE. MARIE
\$304,107.69, against \$889,731.76 gross and \$366,63.71
net for July, 1903. Approximate earnings for Aug.,
\$50,000,000 against \$889,731.76 gross and \$366,63.71
net for July, 1903. Approximate earnings for Aug.,
\$610,149, against \$575,261 for Aug., 1903.

Canadian Pacific Railway Land Sales.

			-	
	Ac	res.	Am	ount.
T., 1	1904-05	1903-04	1904-05	1903-04
July		267,647.32	\$177.473.94 88,735.88	\$1,020,404.70
Aug.	15,669.90	263,339.45	88,735.88	1,217,529,81
-pt.,	13,110.02	60,441.12	61,962.96	268,757.99
	65,205.67	591,427.89	\$268,172.78	\$2,506,692.56

Grand Trunk Ry. Earnings, Expenses, &c.

Revenue for Aug	.:	NK RY.		Decrease.
Working expenses	^ '	£546,500 370,900		£16,300 16,600
Net profit Aggregate from	£176,000	£175,600 Aug. 31:	£400	
Gross receipts £1, Working expen.	1904.	1903. I		Decrease £42,700 42,600
Net profit				£100
GRAND TE Revenue for Aug	RUNK W			0,
Gross receipts Working exp'ses	1904.	1903, I £86,200 84,800	ncrease.	Decrease. £10,700 10,200
Net profit Aggregate from	£900	£1,400	• • • • • • • • • • • • • • • • • • • •	£500
Gross receipts Working expenses	1904.	1903. I		Decrease £27,500 16,900
Net profit				£10,600
DETROIT, GRANI Revenue for Aug	HAVE	N & MILV	VAUKEI	E RY. CO.
Gross receipts Working expenses	1904.		£7,900	
Net profit Aggregate from	£12,200		£3,400	
Gross receipts Working expenses	1904.	1903. 1	ncrease. £14,400 8,600	Decrease.
N		£14,000	£5.900	

TRAPFIC RECEIT ...

Aggregate from July 1 to Aug. 31:
1904. 1903. Increase. Decrease.
1904. 1905. 11.090.637 ... £42.822
198.001 27,642

45,223 £14,401

£56,063

Grand Trunk. £1,047,815 £1,090,637 G. T. Western 150,359 178.001 D. G. H. & M. 59,624 45,223

Total £1,257,798 £1,313,861

G.T.R. SEMI-ANNUAL MEETING.

The following report for the half-year ended June 30, was submitted at the meeting in London, Eng., Sept. 29:-

The following summary s' ows a comparison of the half-year's revenue account with that of the corresponding half-year, ended June 30, 1903:

June 30, 196	23.	June 30,	19	04.
£2,778,080	Gross receipts	£2,559,315	ιó	c
1,995,031	Deduct— Working expenses being at the rate of 74.06% as com- pared with 71.81% in 1903.	1 895,568	17	8
783,049	Net traffic receipts	663,746	18	4
12,931	Add— Received from the Interna- tional Bridge Co	12,930	12	ç
2,571	Interest on Toledo, Sagin- aw, and Muskegon bonds.			
6,507	Interest on bonds of Central Vermont Ry	6,506	14	3
60,311	Interest on securities of con- trolled lines and on St. Clair tunnel bonds acquir- ed by the issue of Grand			
12,546	_ Trunk 4% debenture stock	60,311	I	ŧ
12,540	account	12,283	3	10
£877.915	Net revenue receipts	£ 755,778	10	8



F. B. WADE, Chairman National Transcontinental Railway Commission.

NET REVENUE CHARGES FOR THE HALF-YEAR.

June 30, 1904.
£ 77,603 0 9
stocks 488,720 19 11 stock
s con- T.Co. 45,460 18 7
611,784 19 3 Petroit, I Mil- ds the on its ments, 19,383 6 3
631,168 5 6 124,610 5 2
£755,778 10 8

Adding the balance of £2,699 1s. 11d. at credit of net revenue account on Dec. 31, 1903, to the above surplus for the past half-year of £124.610 5s. 2d., the total amount available for dividend is £127,309 7s. 1d., from which the directors recommend the payment of the full half-year's dividend on the 4% guaranteed stock, amounting to £122,946 3s. 2d., leaving £4,363 3s. 11d. to be carried forward to the next half-year's accounts.

The following table gives a comparison of the gross receipts for the half-years ended June 30, 1904 and 1903:

Description of Receipts.	1904.	1903.	Increase,	Decrease.
Passengers Mails and express. Freight and live stock. Miscellaneous.	691,240 129,339 1,664,191 74,546	£ 681,107 119,101 1,904,689 73,183	10,133 10,238 	£
	£2.559,316	£2,778,080		£218,764
	TRAFFIC S	TRAFFIC STATISTICS.		
	1904.	1903.	Increase.	Decrease.
	3.957,814	3,960,494	:	2,680
Senger rate per pas- senger	41.92d.	41.27d.	o.65d.	:
stock	5,927,994	6,745,354	:	817.360
Tons carried one mile.	1,129,081,776 69.64d.	1:426,228,689 68.87d.	0.77d.	297,146,913

The average rate per ton per mile on the entire freight business was 0.72 of a cent, compared with o 65 of a cent in the corresponding half-year.

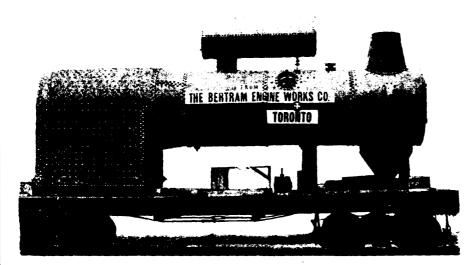
The working expenses, excluding taxes, in the half-year were £1,879,121, or 73.42% of the gross receipts, as compared with £1,978,850, or 71.23%; a decrease in amount of £99,729, and an increase in the proportion to the gross receipts of 2.19%.

The following table gives a comparison of the revenue expenditure, including taxes, for the half-years ended June 30, 1904 and 1903:-

Description of Expenditure,	19062	1903.	Increase.	Increase. Decrease.
•	3	43	વર	વર
Maintenance of way, and struc-	7.7	0.0		
Maintenance of equipment	240,575	270,014	:	31.4.39
Conducting transportation	1,225,754	1,184,234	41.520	- Co.
General expenses Taxes	69,921	69,099	822	: :
Total	£1,895,569 £1,995,032	£1,995.032	:	£99.463
Percentage of gross receipts	74.06 51.58d.	71.81 49.46d.	2.25 2.12d.	<u>:</u> :
Train mileage for half-years ended June 30, 1903 and 1904:	ars ende	d June 30	o, 1903 a	nd 1904 :
Description of Mileage.	1904.	1903.	Increase.	Increase. Decrease.
Passenger Freight Mixed trains	3.774.258 4.733.697 312.244	3.570,809 5.678,746 430,876	203,449	945.049
Total	8,820,199	9,680.431		860,232

The falling off of revenue and the high ratio of working expenses are attributable to the unprecedented severity of the weather during the first three months of the half-year; every exertion was made by the management to reduce expenditure, which, however, was a matter of special difficulty in view of the heavy charges necessarily resulting from the efforts to conduct the traffic and keep open communications during that period.

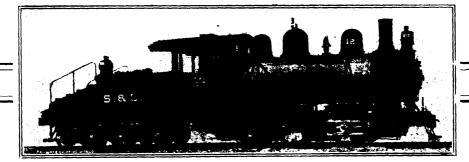
From the foregoing statements it will be observed that the gross receipts for the half-year decreased £218,764, or 7.87%; the work-ing expenses, including taxes, decreased



The BERTRAM ENGINE WORKS CO., Limited, Toronto, Canada.

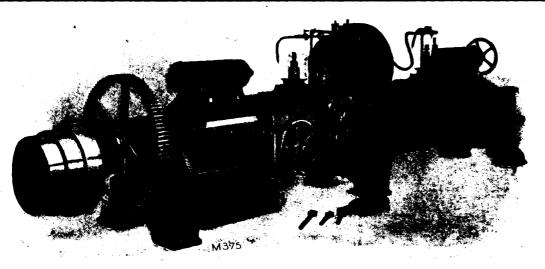
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The JOHN BERTRAM & SONS CO., Limited Dundas, Ontario, Canada

£99.463, or 4.99%; and the train mileage decreased 860,232, or 8.89%.

The total charges to the capital account for the half-year were £124,282 6s. 1d. Of this £39,993 19s. 9d. was for discount and commission on £610,143 4% guaranteed stock is sued during the half-year. The actual expenditure on capital account was: New works, £904 15s. 6d.; double track, £51,650 6s. 3d.; land purchased, £31,757 1s. 3d, £84,312 3s. od.

land purchased, £31,757 1s. 3d, £84,312 3s. od.

No additions to rolling stock at the expense
of capital were made during the half-year.
Five passenger engines were purchased, and
128 refrigerator cars and 25 tank cars were
built in the company's shops during the halfyear on revenue account, and on June 30
there remained £45,189 8s. 1d. at the credit
of the engine and car renewal funds, applicable to future renewals.

The doubling and deviation of the main line between Whitby and Port Hope was completed during the half-year, making a continuous double line between St. John's, Montreal, Hamilton, and Niagara Falls, 441¾ miles. The congestion, and consequent difficulty of economically handling the traffic, have rendered necessary the doubling of portions of the line west of Hamilton, and it has been decided to proceed with the work between Hamilton and Lynden (14 miles), Brantford and Paris (7.80 miles), and Paris and London (47.29 miles), which is now in hand, and considerable progress will be made

during the current half-year.
The gross receipts of the G. T. Western Ry. Co. for the half-year were £506,147, against £554,020 in 1903, a decrease of £47, 873, and the working expenses were £432,874, against £475,586, a decrease of £42,712, leaving a net profit of £73,273, against £78,434, a decrease of £5,161, compared with the corresponding period of 1903. The net revenue charges for the half-year were £72,745, against £75,439, so that there was a net revenue surplus for the half-year of £528, as compared with a surplus of £2,995 for the corresponding half-year of 1903. The above surplus of £528 added to the surplus of £2,-191 for the half-year ended Dec. 31, 1903, and the balance of £996 carried forward on June 30, 1903, makes a net revenue balance of £3,715 at June 30, 1902, which will admit of the payment of 1% on the second mortgage income bonds. The number of passengers carried during the half-year was 764,030, against 737,637, an increase of 26,-393, or 3.58% and the passenger train receipts, including mails and express receipts, were £133,746, against £137,407, a decrease of £3,661, or 2.66%. The quantity of freight moved during the half-year was 1,375,720 tons, against 1,544,207, a decrease of 168,487, or 10.91%. The receipts from this traffic were £271.786 against £416,127 in 1002, a

or 10.91%. The receipts from this train. Were £371,786, against £416,137 in 1903, a decrease of £41,351, or 10.66%.

The gross receipts of the Detroit, Grand Haven and Milwaukee Ry., for the half-year were £117,746 against £115,038 in 1903, an increase of £2,708; the working expenses Were £100,078, against £92,408, an increase of £7,670, leaving a balance of £17,668, against £22,630, a decrease of £4,962, compared with the corresponding half-year of 1903. The net revenue charges for the half-year were £37,051, against £36,995 in 1903, so that there was a net revenue deficiency of £19,383, as compared with £14,365, for the corresponding period of 1903. The number corresponding period of 1903. of passengers carried during the half-year was 278,409, against 268,425, an increase of 9,984, or 3.72%; and the passenger receipts, including mails and express receipts, were £40,238, against £42,704, a decrease of £2,-466, or 5.77%. The quantity of freight moved was 503,702 tons, against 454,833 in 1903, an increase of 48,869, or 10.74% and the receipts from freight traffic were £73,783, against £70,-565 in 1903, an increase of £3,218, or 4.56%. The act of the Dominion Parliament ratifying the supplemental agreement between the Government and the G.T. Pacific Ry. Co., approved by the proprietors on March 8, received the Royal Assent on July 18. Considerable progress has been made with the surveys of the proposed route of the railway, and it is intended to commence the work of

construction next spring.

A resolution will be submitted for the approval of the proprietors authorizing the directors to enter into an agreement for acquiring the control of the Canada Atlantic Ry., and authorizing an application to Parliament for an act to ratify such agreement. The railway extends from Depot Harbor on Georgian Bay, through Ottawa and Coteau to the boundary line of the Province of Quebec and the State of Vermont, 400.3 miles, and by means of the Vermont and Province Line Ry., a controlled line of 3.1 miles, to a connection with the Central Vermont Ry. at Aldburgh Jct. The Canada Atlantic Ry. also owns the Canada Atlantic Transit companies incorporated in Canada and the United States, the steamers of which lines run between Depot Harbor and the Canadian and United States ports on Lake Superior and Lake Michigan. The consideration to be given by the G.T.R. Co. is a guarantee of the principal



Commissioner National Transcontinental Railway.

and interest of a total mortgage of \$16,000,000 four % fifty-year gold bonds, of which a proportion will be reserved for future capital expenditure. The Canada Atlantic Ry. forms a very valuable connection, via the lakes, between the G.T. and Central Vermont Rys. and the Northwest of Canada, and its acquisition will tend to strengthen and consolidate the G.T.R. system, and will also secure to the Company the advantage of possessing its own station in Ottawa.

The Chief Engineer reports that the expenditure for maintenance of the company's property during the half-year ended June 30 last, was \$153,000 less than during the corresponding period of 1903. The company's permanent way and works have been maintained in good condition.

The Superintendent of Motive Power reports the expenditure, mileage, etc., as follows:

Half-year	Total Expendi-	Train	Rate of Expenses per Mile.			
ended.	ture.	Mileage.	Train Engine Car.			
June, 1904	Dollars. \$3.873.353 4.072.289	8,820,199 9,680,431	Cents 43.91 42.07	Cents 32.95 32.97	Cents 2.86 2.53	

A decrease in expenditure of \$198,936.00 or 4.89%, compared with a decrease in train miles of 860,232 or 8.89%.

The comparative cost of repairs per train, engine and car mile was:—

ိ 	Cost per Mile.	ă	Repairs and renewals of Locomotives.	enewals tives.	All re inch chin marin	Il repairing charge including shop ma- clainery, tools, and arine equipment, et	All repairing charges, including shop ma- chinery, tools, and marine equipment, etc.
			1904.	1903.	1904.		1903.
			Cents.	Cents.	Cents.	1	Cents.
Train			7.03	7.55	9.72	7.5	9,6
Engine			5.27	5.93	7.29	6.	18.7
Car		-	0.46	0.45	0	23	0.80
The Sur mileage, e	The Superintendent of Car Department reports the expenditure, mileage, etc., as follows:—	nt of Car D	epartmen	t repor	ts the	exper	ıditure,
Half-vear	Total Cost of	Total	Total Miles run by Cars.	y Cars.		Cost p	Cost per Mile.
ended.	and re-	Passenger.	Freight.	Total.	Ę.	Car.	Train.
June, 1904.	Dollars. 782, 107	16,062,659	119,428,916	135,491,575	1,575	Cents. o.577	Cents. 8.87
1903.	1,213,431	16,016,379	144,776,180	160,792,559	2,559	0.755	12.53

A decrease in expenditure of \$431,324, or 35.55%, with a decrease in car miles of 25,-300,984, or 15.74%.

The second of th		Freight Trains	Mixed Trains
The average number of car- moved per train was And for the corresponding	4.1	24.9	7.7
period	. 4.2	25.0	9. 1

During the half-year seven locomotives were scrapped or sold, and five 10-wheel passenger locomotives were purchased. The actual stock at June 30, 1904, was 804 locomotives against the official figure of 803.

The revenue account was as follows:

8 S	01.00			74,546 6 5	£2,559,315 16 0
£ s. d. 696,995 18 7	5,756 2 10	1,734,239 11 10	6 0 640'01	:	
RECEIPTS.	4.376 7 1	::	38,529 2 9 11,584 17 10 19,935 0 2	:	
R Passengers	International bridge tolls St. Clair tunnel tolls	Mails and express Freight and live stock	Cartage, etc. 38,539 a 9 International bridge tolls 11,584 17 10 St. Clair tunnel tolls 19,535 0 a	Miscellaneous receipts, rents, tolls,	

Maintenance of way and structures. Maintenance of equipment. Conducting transportation. General expenses.	246,575 336,870	8. 6 17 8	10 8 6	
Total working expenses	1,879,120	15	10	

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OF ALL KINDS, INCLUDING

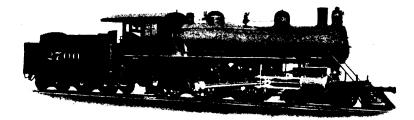
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& HUDSON RIVER R. R.

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Day Train leaves Toronto 9.45 a.m., Hamilton 10.45 a.m., connects with the

"EMPIRE STATE EXPRESS" Arrives New York 10 p.m.

Night Train with sleeping car and dining car leaves Toronto 5.20 p.m., Hamilton 6.20 p.m., arrives New York 7.50 next morning.

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HEAD OFFICE, TORONTO.

D. R. WILKIE - General Manager.
E. HAY - - Asst. General Manager.
W. MOFFAT - - Chief Inspector.

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AGENTS.—London, Eng., Lloyds Bank, Limited, New York, Bank of Montreal, Bank of the Manhattan Co., Bank of Americase Sterling exchange bought and sold. Letters of credit issued available in any part of the world.

A general Banking business transacted.

Taxes		£ 16,448		d.
Balance to	net revenue account	1,895,568 663,746		
		2,559,315	16	(
June 30, 1903.	Train Mileage.	June 30.	19	04
3,570,809 5,678,746 430,876	Passenger trains Freight trains Mixed trains	3·774 4·733 312	,69	7
9,680,431		8,820	, 19	— 9

Sir C. Rivers Wilson, President, in moving the adoption of the report, said following the almost uninterrupted progress during the Past eight years, the company had, during the half-year ended June 30, received a tem-Porary check. He expressed confidence that the check was only temporary. He blamed the severity of the weather for the falling off in freight traffic and the enormous amount of snow blocking the country roads for preventing the farmers from bringing out their freight. The removal of snow during the half-year cost £80,346, a sum never before approached in the history of the company. He quoted the figures relating to the C.P.R. and to other railways, as showing that the G.T.R. was not

alone in increased expenditure.

Referring to R. L. Borden's opposition to the G.T. Pacific, Sir Charles said it was not one of hostility, but of urging the adoption of a system of Government-owned railways. Mr. Borden's opposition was a great surprise, as other Conservative leaders, Sir Charles Tupper and Sir John A. Macdonald, had been against the system of state ownership. Mr. Borden's threat of expropriation, though possibly legally right, and not breaking contract, is a declaration that does not tend to uphold the dignity of the Government. E. B. Osler, said the President, had launched out in considerable abuse, and had uttered threats against the President, but Sir Charles claimed that the G.T.R. had always held aloof from politics in Canada.

The resolution accepting the report and the accounts was carried unanimously.

The agreement adopted for the purchase of the Canada Atlantic Ry, is referred to on Pg. 365.

The arbitrators proceedings between the Intercolonial Ry, and the G.T.R. have been adjourned until further notice. A good deal of evidence had been taken at Montreal, Quebec and elsewhere.

The Canadian Northern Ry, has issued a folder dealing with the wheat growing lands of the Saskatchewan Valley opened up by its railway. The illustrations show the wheatfields of the country, and the towns that are springing up as the line is pushed through.

The Atlantic Construction Co. (Ltd.) has been incorporated under the Dominion Companies' Act, with a capital of \$500,000 and offices at Montreal, to carry on a general contracting business. The provisional directors are R. D. McGibbon, K.C.; V. E. Mitchell, A. Chase-Casgrain, L. Legault and W.R. Lee, all of Montreal. The incorporators are, it is understood, acting in the interests of some U.S. capitalists.

The Nor hern Construction Co. (Ltd.) has been incorporated under the Ontario Companies' Act, with a capital of \$200,000 and offices at Toronto, to take over the businesses, in whole or in part, of A. R. Mann and A. C. Mackenzie, and to carry on a general contracting business. The incorporators and provisional directors are: A. R. Mann, A. C. Mackenzie, contractors; W. H. Moore, barrister-at-law; F. Annesley, secretary, and A. Mitchell, accountant, all of Toronto.

MAINLY ABOUT PEOPLE.

Mrs. Dickey, wife of J. A. Dickey, C.E., died recently at Amherst, N.S.

Dr. B. R. O'Reilly, of Toronto, has been appointed Surgeon on the C.P.R. Pacific str. Tartar.

Mrs. Mills, mother of J. Mills, one of the Railway Commissioners, died at Toronto, Sept. 1, aged 87.

P. Breen, railway contractor, St. Catharines, Ont., dropped dead in the street there Sept. 5, aged 65.

G. A. Irving, Manager of the Kent Telephone Co., was married at Rexton, N.B., Sept. 14, to Miss M. A. Bowser.

W. F. Egg, City Passenger Agent, C.P.R., Montreal, was in our last issue inadvertently spoken of as being in the G.T.R. service.

F. McPherson, Yardmaster Intercolonial Ry., Point Tupper, N.S., was killed there by falling from a moving freight car Sept. 16.

The estate of the late Marcus Smith, C.E., who died recently at Ottawa, has been valued for probate at \$79,200, of which \$72,200 is personalty.



P. E. RYAN,

Secretary of the Commissioners of the Transcontinental Railway.

Lord Strathcona has purchased the Colansay Oronsay estates in the Inner Hebrides group of islands, Scotland, comprising about 12,000 acres.

H. H. Gildersleeve, Manager Northern Navigation Co., Colling wood, Ont., was married to Miss L. A. Thompson at Buffalo, N.Y., Sept. 3.

A. H. Notman, Assistant General Passenger Agent, C.P.R., Toronto, expects to leave shortly for California where he will spend a couple of months.

Dr. R. S. Cheffey, who died in Toronto Sept. 10, aged 78, was father of Mrs. Earls, wife of J. Earls, Secretary-Treasurer, Canadian Freight Association.

A. J. Cameron, at one time engineer of the C.P.R. Upper Lake str. Alberta, and latterly of the C.P.R. car ferry at Windsor, Ont., died there recently aged 67.

N. A. Fuller, Manager of the telephone system at Dawson, Yukon, broke his leg in jumping from a window during a fire at the Hotel Cecil there, Sept. 24.

Mrs., Merkley, wife of the C.P.R. station agent at Navan, Ont., was killed in a collision at St. Louis, Mo., Sept. 3, between a passenger train and a street car.

Mrs. W. Mackenzie, wife of the President of the Canadian Northern Ry., has presented 150 volumes of books to the library of the Kirkfield, Ont., public school.

Mrs. Apps and Miss Ada Apps, wife and daughter of W. Apps, ex-Master Car Builder of the C.P.R., now living in Toronto, have been staying at Huronia Beach, Mich.

Miss A. M. Morgan, daughter of C. E. Morgan, City Passenger and Ticket Agent G.T.R., Hamilton, Ont., was married there Sept. 6, to W. F. Robinson, of Belleville, Ont.

F. S. Reay, of the Chateauguay and Beauharnois Navigation Co., was presented with a purse of gold on the occasion of his marriage to Miss G. Wilson, of New York, Sept. 7.

Jno. Stewart, who entered the C.P.R. service as Superintendent when it took over the New Brunswick Ry. in 1890, and remained with it for some time, died at Woodstock, N.B., Sept. 5.

D. Seath, Secretary to the Montreal Harbor Commissioners, was recently presented with a cabinet of cultery and silverware by the members on the occasion of his approaching marriage.

John Brown, C.P.R. ticket agent, Stratford, Ont., who was unseated on petition as member of the Ontario Legislature for North Perth, has been again chosen as the Liberal candidate.

J. Hardwell, traffic officer of the Board of Railway Commissioners for Canada, has recently been in Washington, D.C., looking into the working of the Interstate Commerce Commission.

Sir Wm. Van Horne has gone to his seaside house at St. Andrews, N.B., and on his return to Montreal Lady Van Horne, who has been at St. Andrews during the summer, will accompany him.

Miss L. M. Bell, daughter of J. Bell, Inspector of Fuel and Locomotives, Wabash Rd., London, Ont., was married there Sept. 14, to W. Y. Martin, of St. Albans, Vt., formerly of London.

S. T. Callaway has been appointed Manager of the Locomotive and Machine Co. of Montreal, succeeding Roger Miller, resigned on account of contracting interests which take up all his time.

Sir Howard Vincent, M.P. for Sheffield, Eng., who has been visiting Canada, is a director of the Temiscouata Ry., and in company with F. Grundy, the President, went over the line Sept. 27.

C. C. Haskins, the inventor of the multiple switchboard for telephones, and who sent the first telegraph message from the U.S. to Canada—from Buffalo to Queenston—in 1844, died Sept. 3, aged 77.

H. C. Stovel, who learned his trade in the Stratford, Ont., shops of the G.T.R., has been appointed to be general shop foreman at the locomotive and car works of the Union Pacific Rd., Omaha, Neb.

Jas. Abbott, Chief Train Dispatcher Canadian Northern Ry., Winnipeg, Man., was married there Sept. 7, to Miss N. M. Reid. He was presented with a cabinet of silverware by the employes of the C.N.R.

G. H. Strevel, railway contractor, Winnipeg, is a provisional director of a company incorporated under the Manitoba Companies' Act, to manufacture tents, sails, etc., and to deal in ship chandlery at Winnipeg.

E. Izasky, a Hungarian engineer, who was inspecting the St. Lawrence canal system for the information of the Austrian Government, died suddenly at Coteau Landing, Que., while on the way to catch a train, Sept. 17.

A. Johnson, son of the C.P.R. station agent at Cavanville, Ont., was knocked down by a way freight and run over. One of his shoulders was dislocated and one of his legs had to be amputated at Peterboro' hospital.

BRAKE CHAIN BROKE

Newspapers of August 16th

described a trolley disaster in which the conductor was killed and nine passengers injured. The brake chain broke on a steep grade and the car overturned on a curve.

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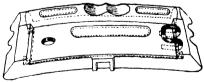


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MISCELLANEOUS IRON AND STEEL CASTINGS

- J. F. Stairs, President of the Nova Scotia Steel and Coal Co., New Glasgow, N.S., died suddenly in Toronto General Hospital, Sept. 25. He was a member of the firm of Wm. Stairs, Son and Morrow, shippers, Halifax.
- S. King, who has resigned his position as Master Car Builder, Intercolonial Ry., was Presented with an address and walking cane, and a pair of opera glasses for Mrs. King by the foremen of the car shops at Moncton, N.B., Sept. 22.
- M. K. Cowan, ex-M.P., Windsor, Ont., has announced his retirement from politics, and it is reported that he will become solicitor for the G.T. Pacific Ry. Co., going into partnership with W. H. Biggar, Assistant General Counsel, G.T.R.
- W. R. Woollatt, heretofore agent Pere Marquette Rd. (Buffalo Division) at Port Stanley, Ont., was entertained at dinner and presented with a pair of pictures Sept. 15, Prior to leaving for Winnipeg to enter the C.P.R. service.
- A. Frew, who was at one time agent for the old Great Western Ry. at Guelph and at London, Ont., and was subsequently with the Canada Southern Ry. at St. Thomas, Ont., died in Chicago, Ill., Sept. 16, and was buried at Guelph Sept. 24.
- G. D. Ellis, ex-Manager of the Turbine Steamship Co., Hamilton, Ont., is suing the company for \$184.00, balance of salary and expenses, alleged to be due for June, July and Aug. It is stated that he will also bring an action for breach of contract.
- F. Ronaldson, C.P.R. locomotive foreman, North Bay, Ont., was recently presented with a gold watch by the firemen, a gold chain and locket by the machinists, and a purse of money by the engineers of the division on his removing to Megantic, Que., to take a similar Position.
- J. McGillivray, who was recently appointed Trainmaster Canadian Northern Ry. at Kamsack, Assa., has recovered from the effects of an operation which he underwent in Winnipeg General Hospital, and has been appointed Superintendent of the Inverness Ry. at Inverness, N.S.
- E. E. Perrault was entertained at dinner at North Bay, Ont., Sept. 20, by those with Whom he had been associated as assistant to the Chief Engineer, Temiskaming and Northern Ontario Ry.. on his appointment as a sectional engineer on the Montreal, Ottawa and Georgian Bay canal survey.

- N. J. Ker, city engineer of Ottawa, Ont., having been offered a position as a district engineer on the National Transcontinental Ry, survey between Lake Nepigon and Winnipeg, the Ottawa city council increased his salary to \$3,600 a year with annual increases of \$100 a year until \$4,000 a year is reached in order to retain his services.
- When the directors of the G.T. Pacific Ry. Co. were on their trip to the Pacific coast, a number of engineers at Winnipeg who felt aggrieved at the employ of U.S. engineers on the surveys, presented President C. M. Hays with a copy of a recent novel, entitled "The Grafters." It is reported that Mr. Hays enjoyed the joke and accepted the volume.
- D. E. Blair, Assistant Superintendent, Montreal Street Ry., was married at Quebec Sept. 28 to Miss Gertrude E. Evans, daughter of E. A. Evans, General Manager of the Quebec Ry., Light and Power Co. The employes of the Montreal Street Ry. presented Mr. Blair with a silver tea set, and a number of engineering friends gave him a piece of plate at a dinner at the Engineers' Club, Montreal, prior to the event.
- J. A. Roche, General Contracting Freight Agent for the Detroit and Buffalo Steamship line, Detroit, Mich., who died there Sept. 8, was in the G. T. R. service from 1869 until 1882 at Montreal and London, Ont.; from 1882 to 1885 he was with the G.T. R. and Wabash Rd. at Detroit; was Travelling Freight Agent G.T. R. at Chicago from 1886 to 1888, and from 1888 to 1901 was Agent for Michigan for the National Despatch Fast Freight Line, Detroit.
- H. J. Coffin, who has been appointed C.P.R. Trainmaster at Brandon, Man., was born at Gaspe Basin, Que., and entered railway service in 1883, his record being: 1883 to Sept., 1885, timekeeper in the road department of the Portage, Western and Northwestern Ry., afterwards the Manitoba and Northwestern Ry., and now C.P.R.; Sept., 1885, to April, 1904, conductor; April, 1904, to Sept., 1904, Yardmaster, C.P.R. at Moose Jaw, Assa.
- Robt. Reid, who has been appointed a member of the Transcontinental Ry. Commission, and whose portrait is given on page 359, was born in London, Ont., in 1855, and has hitherto been engaged in commercial pursuits. He entered his father's wholesale stationery business at London after leaving school, and in 1878 the business was transferred to him and another brother. The only

- public appointment he has held has been that of license commissioner.
- The judges who heard the petition against the return of C. N. Smith as member of the Ontario Legislature for the Algoma district, reported the following, among others for corrupt and illegal practices: W. Coyne, formerly assistant to the President of the old Consolidated Lake Superior Co., owning the Algoma and Hudson Bay Ry., etc., and David Hopkins, a railway conductor, and made a reference to T. J. Kennedy, General Superintendent A.C. and H.B. Ry.
- J. R. Cameron, who has been appointed Trainmaster Canadian Northern Ry., was born at Truro, N.S., Nov. 5, 1865, and entered railway service 1882, since which he has been consecutively: May, 1882, to April, 1883, brakeman and baggageman C.P.R., Winnipeg, Man.; April, 1883, to Mar., 1886, conductor, C.P.R., Winnipeg; April, 1886, to April, 1887, conductor, Manitoba and Northwestern Ry., Winnipeg; April, 1887, to Oct., 1898, conductor, Northern Pacific Ry., Winipeg; Oct., 1898, to June, 1901, Trainmaster same road; June, 1901, to Aug., 1904, conductor, Canadian Northern Ry., Winnipeg.
- C. A. Young, who has been appointed one of the Commissioners of the Transcontinental Ry., was born at Chrysostome, Chateauguay county, Que., and in 1879 removed to Manitoba in company with his brother, now Senator F. M. Young. He engaged in farming work until 1885 when he went into the grain business in which he has continued until his present appointment. He is President of the Young Grain Co., owning a line of elevators in Southwestern Manitoba, and is also a partner in the firm of Alex. McPhee & Co., grain exporters, Montreal. He was elected to the Manitoba Legislature in 1896 and again in 1900, but retired from active politics in 1903.
- P. E. Ryan, who has been appointed Secre tary of the Transcontinental Railway Commissioners at Ottawa, was born there July 26, 1876, and entered railway service in Oct., 1892, since which his record has been: Oct., 1892, to June, 1895, clerk stores department, Canada Atlantic Ry., at Ottawa; June, 1895, to Oct., 1897, secretary and general clerk in Superintendent's office, same road; Oct., 1897, to Dec., 1899, clerk in General Purchasing Agent's Dept., C.P.R., Montreal; Dec., 1899, to July, 1902, private secretary to the Minister of Public Works for Ontario; July, 1902, to Aug., 1904, Secretary-Treasurer Ontario Commission for the construction of

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the Temiskaming and Northern Ontario Ry., Toronto.

Wm. Cotter, who has been appointed General Manager, Pere Marquette Rd., is a native of Bloomington, Ill., and is 43 years old. His first railway experience was with the Chicago & Alton as night operator in 1873. He then went to the St. Louis, Iron Mountain & Southern, and was soon promoted to be train dispatcher and later trainmaster. He left this Co. in 1882 to go to the Chicago, Milwaukee & St. Paul as train dispatcher, and after remaining there one year took a similar position on the Wabash. The next year (1884) he was made Chief Train Disspatcher. In July, 1896, he went to the G.T.R. as Superintendent of the Eastern Division, and was transferred to the Western Division in 1899. He was subsequently General Superintendent St. Louis, Iron Mountain and Southern Rd., and latterly has been Manager, Missouri Pacific Rd. at St. Louis, Mo.

M. J. Butler, who has been appointed Assistant Chief Engineer of the National Transcontinental Railway, was born at Deseronto, Ont, Nov. 19, 1856, and was educated at the

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Kensington	-	-	-	-	"	Oct. 22
Dominion	-	-	-	-	- 44	Oct. 29
Vancouver	-	-	-	-	6.6	Nov. 5
Canada -	-	-	-	-	"	Nov. 12

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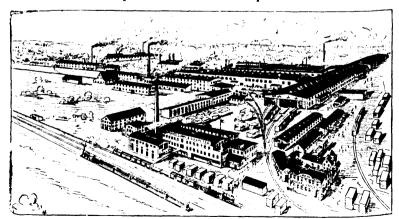
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De La Salle Institute, and University College, Toronto, and entered railway service in 1879 as transitman on location of the Renfrew extension Kingston and Pembroke Ry., and was engaged in various capacities to 1882, since which his record has been: 1882 to 1883, engineer in charge of construction Thousand Islands Ry.; 1883 to 1886, Chief Engineer Napanee, Tamworth and Quebec Ry.; 1887 to 1889, Assistant Engineer Atcheson, Topeka and Santa Fe Ry., on building and water service in Colorado and Kansas; 1889 to 1891, Chief Engineer and Superintendent Temiscouata Wood Pulp Factory; 1891 to 1900, Chief Engineer Bay of Quinte Ry., Thousand Islands Ry., and Oshawa Ry. During his connection with the Rathbun Company's lines he designed and constructed the cement works, waterworks and sewerage system at Deseronto; he was subsequently engineer in charge of the construction of the bridge over the Hillsboro River at Charlottetown, P.E.I., and latterly designed and supervised the works of the Locomotive and Machine Co. of Montreal, of which he was Chief Engineer to the date of his present appointment. He is also an attorney-at-law of the State of Illinois.

Hugh David Lumsden, whose portrait aplears on the first page of this issue, is the Youngest son of the late Col. Thomas Lumsden, C.B., of Belhelvie Lodge, Aberdeenshire, Scotland, and was born there Sept. 7, 1844. He was educated at Bellview Academy, Aberdeen, and Wimbledon School, Surrey, Eng., and came to Canada in 1861, was admitted a provincial land surveyor for Ontario in Jan., 1866, and remained in active practice as such up to 1870. He was elected Reeve of the Township of Eldon, and President of the Eldon Agricultural Society in 1870. In 1867 he obtained a Military School certificate and was gazetted a lieutenant in the 34th Batt. Was elected a member of the Institute of Civil Engineers, Eng., in 1885, a member of the Canadian Society of Civil Engineers in 1887, and for several years was a member of the council of the latter body. He has had a long and varied experience as an engineer commencing in Oct., 1870, when he was in charge of the location of the northerly portion of the Toronto and Nipissing Ry., under E. Wragge, C.E., since which date he has been almost constantly employed in the location or construction of railways, amongst others the location of portions of the Credit Valley Ry., Toronto, Grey and Bruce Ry., Northern Ry., Georgian Bay branch C.P.R., etc., the location and construction of the Ontario and Smith's Falls, Ont., to Vandreuil, Que.; St. John's to Lennoxville, Que.; and Holeb to Mattawamkeag, Me.; Supervising Engineer of the least and apparatus of the On'An of the location and construction of the Qu'Ap-Pelle, Long Lake and Saskatchewan Ry., and Calgary and Edmonton Ry., in the North-West Territories; the C.P.R. from Rigaud to Ottawa; the Crow's Nest Pass Ry., Lethbridge to Kootenay Landing, and numerous branches of the C.P.R. in other portions of the Dominion. In Aug., 1904, he was appointed Chief Engineer of the National Trans-Continental Railway. He was married in Oct., 1885, to Mary Frederica, only daughter of J. W. G. Whitney, of Toronto. He resides at 63 Homewood Ave., Toronto, his summer residence being Buchrome, Orillia, Ont. He 3. a member of the Toronto Club, and of the Rideau Club, Ottawa. He is a brother of General Sir Peter Lumsden, who was with Lord Roberts in the march to Kandahar.

F. B. Wade, K.C., who has been appointed Chairman of the Commissioners of the Transcontinental Ry., and whose portrait appears on page 357, was born at Granville, N.S., Sept. 9, 1852. He is descended from Jonathan Wade who emigrated from Norfolk, Eng., to Massachusetts in 1632, and more immediately from John Wade, a great-grandson

of Jonathan, who came to Nova Scotia over 100 years later. Having been a school teacher for a year and a half, he studied law in the offices of Hon. W. H. Owen, K.C., Bridgewater; and McDonald & Rigby, Halifax, and was called to the Nova Scotia bar July, 1875. Was Crown prosecutor for Lunenburg county from 1890 until his present appointment, and was created a Q.C. in 1891. In 1900 he was appointed one of the arbitrators representing Nova Scotia in the case with the Dominion Government regarding the Eastern Extension Ry. claim, which resulted in an award for \$671,000 in favor of the Province. Mr. Wade is best known through his connection with railway and other corporation enterprises and cases. He has been identified, professionally and otherwise, with many railway, steamship, mining and other companies. Up to the date of his appointment he was the senior member of the law firm of Wade & Paton, of Halifax and Bridgewater, N.S. His connection with railways dates back to 1878 when he was apconnection with pointed Solicitor of the Nova Scotia, Nictaux and Atlantic Ry. Co. In 1888 he undertook and successfully financed the completion of the Nova Scotia Central Ry, for that company. The company proving incompetent, it became necessary for him to virtually take control of the work of completing the road. Under the management of the company this road did not pay the interest upon its bonded indebtedness. Foreclosure proceedings were commenced, and he was appointed Receiver and Manager by the Supreme Court of Nova Scotia, a position he held for six years, and until the road was sold to the Central Ry. Co. It may be mentioned, as an incident, that he was not asked to, and did not give, any security while he held this position. He was one of the most active promotors of the Halifax and Southwestern Ry. He promoted and organized the Middleton and Victoria Beach Ry. Co., and subsequently negotiated a sale of that road to Mackenzie, Mann & Co. He was leading counsel for the South Shore Ry. Co. in its struggle with the Narrow Gauge Ry. Co., and for the Yarmouth Steamship Co. in its long fight with the Dominion Atlantic Ry. Co. He represented Annapolis in the Dominion Parliament from 1901. He has been an active supporter of the Liberal party since 1878 when he was chosen organizer for the Lunenburg county, and in that year contested that county for the Local Legislature. In 1901 he was nominated against J. B. Mills, the Conservative member in Annapolis, who had held that county for 14 years, and was elected by 150 majority. He has spoken freely, both in the debates of the House and in the committee discussions. He married in 1877, Florence L., daughter of Capt. R. P. Trefry, Bridgewater.

The G.T.R. and the Canada Atlantic Ry.

At the half-yearly meeting of the G.T.R. shareholders in London, Eng., Sept. 29, a resolution was passed authorizing that company to enter into an agreement providing for the purchase of the franchise, property and assets of the Canada Atlantic Ry., and par-ticularly for a guarantee by the G.T.R. of the principal and interest on the bonds proposed to be issued by the C.A. Ry. Co.; and also authorizing the application to the Dominion Parliament for an act to legalize the agreement. The report presented to the shareholders contained a reference to the proposal to acquire the line, and stated that the consideration to be given by the G.T.R. Co. is a guarantee of the principal and interest of a total mortgage of \$16,000,000 4% 50-year gold bonds, of which a proportion will be reserved for future capital expenditure. Sir C. Rivers Wilson (President) presented the resolution to the meeting, and a somewhat heated discussion ensued, an amendment to adjourn the matter to the next half-yearly meeting being proposed. Sir C. Rivers Wilson stated that the resolution re the acquisition must be voted on at the present meeting, as an answer was required within 20 days. He regretted he had been unable to take the shareholders into his confidence, as he would have liked to do, but if the acquisition were postponed it meant abandoning the idea altogether. Finally the resolution was put and carried.

The Canada Atlantic Ry. Co. was formed in 1899 by the consolidation of the C.A. Ry. and the Ottawa, Amprior and Parry Sound Ry. The line extends from Depot Harbor, Ont., to the International boundary at Lacolle, Que., 400.3 miles; it operates under lease, 3.1 miles on the Vermont and Province Line from the International boundary to Aldburgh Jct., Me.; 37.4 miles of the Central Counties Ry.; from Hawkesbury to Glen Robertson, Ont., 21 miles, and from South Indian to Rockland, Ont., 16.4 miles; 20.9 miles of the Pembroke Southern Ry. from Pembroke to Golden Lake, Ont. It has also trackage rights on the Central Vermont Ry. from Aldburgh Jct. to Swanton, Vt., 6.7 miles, and has traffic agreements with the G.T.R., by which it uses the latter's tracks between Lacolle and Rouse's Point, N.Y., 4 miles, and between Coteau and Montreal. This makes a total of 400.3 miles owned, 61.4 miles leased, 6.7 miles operated under trackage rights, and 41 miles run over under traffic agreements, in all 509.4. On the owned and leased lines there are 97.30 miles of sidings, the lines and sidings being laid with steel rails, 56 lbs., 72 lbs., 73 lbs. and 75 lbs. There are 13 level crossings of 10 junctions with other railways and three junctions with branch lines. heaviest gradient is 66 ft. to the mile, and the radius of the sharpest curve is 955 ft. June 30, 1903, its equipment consisted of 60 locomotives owned, and four hired; two official cars, three drawing room cars, 20 firstclass cars, 11 second-class and immigrant cars, seven baggage, mail and express cars, 945 box cars owned, 1,080 box cars hired, 27 refrigerator cars, 442 platform cars (including one gas tank car), 87 coal and dump cars, 29 conductors' vans, nine tool cars, five snow plows and 10 flangers. Its operations for the year ended June 30, 1903, showed: train mileage—passenger 433,946; freight, 752,536; mixed, 146,915; total, 1,333,397; total engine mileage, 1,782,235 miles. Passengers carried, 377,779; freight carried, 1,494,809 tons. Earnings - passenger, \$307,854.84; freight, \$1.514,579.96; mail and express, \$30,525.41; other sources, \$55,065.32; total, \$1,908,025. 53. Operating expenses—maintenance of line, buildings, etc., \$239,919.96; working and rebuildings, etc., \$239,919.90; working and repair of engines, \$510,630.21; working and repair of cars, \$95,034.34; general operating expenses, \$370,450; total, \$1,216,935.26; net earnings, \$691,090.27. The financial statement June 30, showed: common stock, authorized and subscribed, \$6,200,000, paid up, \$6,199,100; preference stock, subscribed and paid up, \$1,000,000; 5% bonds, issued and paid up, \$4,450,000; bonuses-Dominion, \$1,-214,867.20; Ontario, \$847,326.06; Quebec, \$192,000; Ontario municipal bonuses, \$152,-000; bonds subscribed for by municipalities, \$32,000. The cost of the railway and rolling stock to that date was \$20,481,328 51. The bonds are due Jan. 5, 1909. The Central Counties Ry. was leased for 99 years from Jan. 1, 1892, the rental payable being an amount equal to the interest on the company's bonds, which in 1901-2 amounted to \$19,000. The Pembroke Southern Ry, was leased to the C.A. Ry. Co. Sept. 1, 1899, and a press report states that this lease has expired. The franchises, etc., of the P.S. Ry. were claimed as being part of the assets of the Dominion Securities Co., a New York company which in 1902 secured an option on the C.A. Ry., but which failed to carry out its bargain, and

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By Steam Jacket System of Hot Water Circulation, Direct Steam and Regulating Direct Steam Systems. 130 Railroads in the United States are using these systems of Heating-applied on over 14,500 cars.

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Subsequently there was a sensational fall in Rutland Rd., who was the President of the D. S. Co., has been in Ottawa since the agreement with the G.T.R. has been made, and had an interview with J. R. Booth, but its Object has not transpired.

The C.A. Ry. obtained an amendment to its charter in 1903 authorizing the construction of a line from some point on its line near Whitney, to Sault Ste. Marie. It has also an agreement with the city of Ottawa by which it has to erect a central railway station there. The company also owns the Canada Atlantic Transit Co., which operates steamers on the upper lakes, and two elevators.

At the annual meeting held Sept. 27 a re-port for the year ended June 30, 1904, was Presented, but has not yet been issued. The officers and directors for the current year are: President, C. J. Booth; other directors: J. F. Booth, J. Christie, W. Anderson, N. MacIntosh, G. W. Mitchell. Secretary-Treasurer, A. W. Fleck.

National Transcontinental Railway.

Following the appointment of H. D. Lumsden as Chief Engineer to the Commissioners of the Transcontinental Ry., M. J. Butler was appointed Assistant Chief Engineer, and the work of organizing the survey staffs was proceeded with. The route of the line which the Commissioners have been authorized to construct extends from Moncton, N.B., to Winnipeg. Surveys were made on the section of the route between the Ontario boundary near Abitibi River and Winnipeg during the winter of 1903-04 by surveyors working for the G.T. p 1903-04 by surveyors working of acific Ry., which company will operate the ine under lease. No arrangement for sur-Veys on this section has been announced by the Commissioners, but it is reported that some surveys will be made with the view of ascertaining how far the surveys made by the G.T. Pacific engineers can be utilized for the The section between Moncton and the Quebec-Ontario boundary near Lake Abitibi has been divided into three districts, viz.: District A, New Brunswick, G. C. Dunn, Acting Engineer, Fredericton, N.B.; District B, Lastern Quebec, A. E. Doucet, District Engineer, Quebec; District C, Western Quebec, A. N. Molesworth, District Engineer, Ottawa. Wa. Eight parties are in the field in District A, and a ninth party will shortly be sent out.
Nine parties will be sent out in District B, and eight parties in District C. Press reports from Moncton, N.B., state that the parties sent out in District A are in charge of the following engineers: K. Weatherbee, from Moncton to Chipman; D. W. Burpee, from Chipman to Moncton; H. Balkam, from Chipman to Moncion; ii. Danam, to Woodstock, C. O. Foss; C. Garden, from Woodstock, C. O. Foss; C. Ballock from stock to Fredericton; G. R. Ballock, from Chipman to Fredericton; K. McIntosh, from Bolestown to Plaster Rock; D. F. Maxwell, from Plaster Rock to Boiestown; H. Longley, from Plaster Rock to Grand Falls; C. Leb. Miles, from Edmundston to Woodstock. Dr. Martin Murphy, formerly Provincial En-Sineer of Nova Scotia, it is stated, is to have charge of a party to report as to the crossings of rivers in the province. The Quebec pa-Pers state that the following will have charge of Parties on Districts B and C. D. B. Brown, O.A. Hazlewood, J. P. Pim, J. Wilgas, E. O'Sullivan, W. Usborne, J. F. Armour and —.

Poulin, and that E. A. Hoare, Chief Engineer

Of the Co. will look of the Quebec Bridge and Ry. Co., will look after surveys for lines on both sides of the the Eastern and Western Quebec districts will be at Clear Lake.

The C.P.R. and the G.T.R. have put in force new rates for fruit from Ontario points, the concessions given varying from \$10 a car to Ottawa and Montreal to \$36 a car to the Northwest.

RAILWAY FINANCE, MEETINGS, ETC.

Alberta Ry. and Irrigation Co.-The formal sanction of the Governor-in-Council to the mutual agreement for amalgamation of the Alberta Ry. and Irrigation Co., the Alberta Ry. and Coal Co., the Northwest Irrigation Co., and the St. Mary's River Ry. Co., under the name of the Alberta Ry. and Irrigation Co., has been given. The agreement was made July 20, and became operative Sept. 30.

Atlantic and Lake Superior Ry .- An action has been commenced by Galindez Bros., financial brokers, London, Eng., against the A. and L.S. Ry. Co. to recover \$480,440 interest accrued on bonds of the railway held

Baie des Chaleurs Ry .- A special meeting of the shareholders was called to be held in Montreal Sept. 19, but was adjourned until Sept. 27, after some routine business had been attended to.

Beersville Coal and Ry. Co .- The annual meeting was held at Harcourt, N.B., Sept. 6, when reports were presented showing the practical completion of the railway line, and the satisfactory development of the coal properties at Beersbridge. The officers for the current year are: President, H. Von Hagen; Vice-President, I. Von Hagen; Solicitor and Secretary, Hon. C. W. Robinson; Treasurer and General Manager, M. F. Keith.

British Columbia Electric Ry .- Railway earnings for July: Vancouver, \$24,064; Victoria, \$10,668; New Westminster, \$13,554; total, \$49,632, against \$42,839 for July, 1903. Gross earnings: railway and lighting, \$71,-305, against \$61,845 for July, 1903. Working expenses, \$38,914; renewal funds, \$6,695; net income, \$25,696, against \$32,904, \$4,998 and \$23,953 respectively for July, 1903.
The B.C.E.R. Co. has assumed formal

control of the Vancouver Gas Co., the stock of which was recently acquired.

Buffalo and Lake Huron Ry, -- The report of the directors for the half-year ended June 30 shows that after providing interest on the 1st and 2nd mortgage bonds the available balance, including the amount brought forward from the previous half-year, is £14,264 15s. 5d., which will enable the directors to pay the usual dividend of 5s. 3d. per share and leave a balance of £480 28. 2d. to be carried forward. The company's line is leased to the

Canada Eastern Ry .-- The C.E. Ry. was formally transferred to the Intercolonial Ry. Sept. 30, a meeting of shareholders being held Sept. 20, at which the signing of the documents of transfer was authorized.

Canadian Northern Ry .- Gross earnings for Aug., \$302,700, against \$250,800 for Aug., 1903, making for two months ended Aug 31, \$606,600, against \$505,600 for same period 1903. Net earnings for July, \$91,100, against \$89,200 for July, 1903.

Central Ontario Ry .- A special meeting of the shareholders has been called for Oct. 10 to consider the validity and binding effect of the bonds and coupons of the railway under the terms of the bonds and mortgage, and to take such legal action as is necessary for the cancellation of these bonds and coupons if it is found that under existing circumstances they are not valid.

Press reports state that C.P.R. officials have inspected the line with a view of reporting on its condition, in connection with negotiations for its purchase.

Dominton Atlantic Ry .- Gross earnings for Aug., \$141,800, against \$130,576 for Aug., 1903, making for eight months ended Aug. 31, \$665,000, against \$621,576 for same period 1903.

The D. A. Ry. Co. has been granted, under

the New Brunswick act for the licensing of

foreign corporations, a license to transact business in the province for one year from Nov. 1, 1904.

Halifax Electric Tramway.—Railway receipts for Aug., \$17,402.03, against \$16,786 .-03 for Aug., 1903, making for eight months ending Aug. 31, \$104,023.56, against \$96-, 457.08 for same period 1903.

The usual quarterly dividend at the rate of 5% per annum has been declared and will be paid Oct. 1.

Hamilton, Grimsby and Beamsville Electric Ry.—C. J. Myles, President; L. Bauer and W. Harris have resigned from the board, their interests having been acquired by the G.T.R.; the present directors being J. W. Nesbitt, J. G. Gauld and James Dickson; who purchased the majority stock for the G.T.R., and R. S. Morris, whose interests were not purchased. R. S. Morris has been appointed Treasurer. In connection with the purchase of the shares of the directors and others, the Hamilton city assessment department proposes to assess the sellers with the profit of \$100 a share made as income.

Kent Northern Ry .-- Press reports state that an option has been secured on the Kent Northern Ry., in New Brunswick, by interests connected with the New Brunswick Petroleum Co., the price being \$135,000.

Lindsay, Bobcaygeon and Pontypool Rv. The agreement for leasing the line for a period of 99 years to the C.P.R. has been sanctioned by the Governor-in-Council, and a duplicate filed with the Secretary of State at Ottawa. A duplicate of the mortgage of the line to the National Trust Co. (Ltd.) has also been deposited with the Secretary of State.

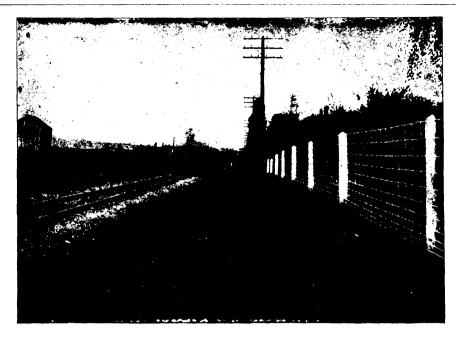
At the annual meeting held Sept. 1, the only business transacted was the election of directors. The officers for the current year are: President, C. Swabey, Toronto; Secretary, T. Stewart, Lindsay, Ont.

Massawipi Valley Ry.—The annual meeting was held Sept. 7. No report is issued, and the proceedings were routine. The offiand the proceedings were routine. The officers and directors for the current year are:
President, J. G. Foster; Vice-President, C.
W. Cate; Treasurer, J. H. Williams. Other
directors: A. Barnes, O. Edwards, L. Tuttle,
C. H. Kathan, C. D. White, J. W. Dunkler;
Secretary, S. Stevens.

Montreal Street Ry .- Gross earnings for Aug., \$236,245.35, against \$211,815.65 for Aug., 1903; operating expenses, \$122,991.36, against \$109,158.86; fixed charges, \$30,255.02, against \$21,415.32; leaving a surplus of \$82,-998.97, against \$81,241.57 for Aug., 1903. Gross earnings for nine months to Aug. 31, \$2,224,857.51; operating expenses, \$1,404,-203.88; fixed charges, \$231,262.81; surplus, \$589,390.82, against a surplus of \$570,-246.74 for the same period 1902-03. The interest of the Montreal Park and Island Ry. Co.'s bonds owned by the M.S. Ry, is not in-

New York and Canada Rd.—At a recent meeting of shareholders in Albany, N.Y., the capital stock was increased from \$4,000,000 to \$9,000,000. The N.Y. and C. Ry. has a mileage of 151.4 miles, and extends to Rouse's Point, N.Y. It is leased to the Delaware and Hudson Rd., the President of which line stated that the new stock will be turned into the treasury of the D. and H. Rd., in payment for the N.Y. and C. Ry. bonds, which the controllers paid off last spring.

Ottawa and New York Ry .- At the annual meeting Sept. 20 the following directors were elected: G. B. Moffatt, G. F. Peabody, H. S. Snow, C. J. Peabody, A. M. White, A. Nichols, S. Trask, R. B. Moffatt, H. W. Gays. The election of officers was deferred until a future meeting of the Board; in the meantime there is no change in those at present in charge.



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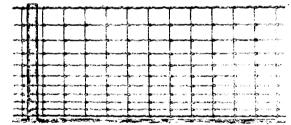
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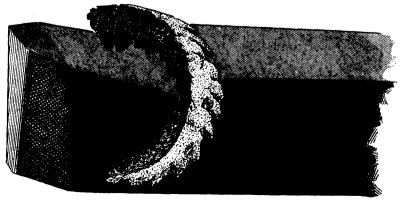
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The Pere Marquette Rd.Co. recently acquired the Cincinnati, Hamilton and Dayton Ry. The general headquarters of the consolidated lines will be at Cincinnati, Ohio, where R. Harding, President P. M. Rd., will have his offices, and the operating headquarters will be at Detroit, Mich., where the General Manager will be located. The C.H. and D. Ry. Operates 1,033 miles, which, added to the mileage of the Pere Marquette Rd., 2,108 miles, gives the new system 3,141 miles.

Port Arthur, Ont., Street Ry.—The operations for the six months ended June 30, 1904, show: Gross earnings, \$15,338; operating expenses, \$10,075; net earnings, \$5,263; interest charges, \$2,030; surplus, \$3,233. For 1903 the net earnings were \$4,083 and the surplus \$832. The number of passengers carried for the six months was 320,210, against 258,043 for same period 1903. The line is owned by the corporation and is nine miles long, of which five are in Port Arthur, and four in Fort William; it has seven motor cars and four trailers. The bonds outstanding in connection with the line, less amount paid into sinking fund, amounts to \$144,000. They are of \$1,000 each, Lear 5% interest and are due for redemption Feb. 1, 1905, and Feb. 1, 1919.

Ry.—Net loss for July, \$5,599.32, as compared with a net loss of \$3,128.72 for July, 1903, making for eight months to July 31, a net loss of \$42,167.17, against earnings of \$19,141 for same period 1902-03.

Quebec and Lake St. John Ry.—Gross earnings for July, \$48,049, against \$52,668 for July, 1903, making for seven months ended July 31, \$237,049, against \$229,668 for same Period 1903.

Quebee Central Ry.—Gross earnings for Aug., \$84,390, against \$70,132 for Aug., 1903.

Quebee Ry., Light and Power Co.—Following are the directors and officers for the current year:—President, A. Thompson; Vice-President, F. Ross; other directors: W. Shaw, G. H. Thomson, F. W. Ross, W. Hanson, E. W. Methot, Hon. J. Sharples and Hon. S. N. Parent. The annual report appears on Pg. 353.

Rutland and Noyan Ry.—At the annual meeting at Noyan, Que., Sept. 7, the following were elected directors: W. S. Webb, G. T. Jarvis, C. Morgan, H. H. Powers, A. G. Adams. The figures covering the annual report are included in the annual report of the Rutland Rd., which has not yet been issued.

Temiscouata Ry.—Gross earnings for Aug., \$13,961.72, making for eight months ended Aug. 31, \$91,258.89.

A meeting of the shareholders and registered bondholders has been called for Oct. 18, for the purpose of petitioning the Governor-in-Council to put in force the act of 1903, respecting the finances of the company, which has already been approved by the general body of bondholders in London, Eng.

Tillsonburg, Lake Erie and Pacific Ry.—The shareholders of the C.P.R. will be asked at the annual meeting Oct. 5 to approve of the lease of the line of the T., L.E. and P. Ry. at a rental equal to the interest of an issue of bonds not to exceed \$25,000 a mile. This will total \$875,000, which is the amount of bonds the company is at present authorized to issue. A neeting of the shareholders of the T., L. and P. Ry. will be held to approve of the lease at an early date.

The T., L. and P. Ry. extends from Port Burwell, Lake Erie, to Ingersoll, Ont., 35.33 miles, and it may be extended under its char ter to Collingwood, either by Berlin or Stratford. The extension into Ingersoll was completed in 1902. Its main line and five miles of sidings are laid with steel rails of 56, 65 and 70 lbs. weight. The equipment consists of four locomotives, six 1st class passenger cars, 13 cattle, freight and box cars, and 17 platform cars. During the year ended June 30, 1903, it carried 26,672 passengers, and 20,-937 tons of freight, its passenger trains running 34,220 miles, and its mixed trains 10,920 miles in so doing. The gross earnings for the year amounted to \$19,239.12, and the net to \$842.51; the figures for the year ended June 30, 19 4, are not yet obtainable. common stock issued and paid up is \$400,ooo; the company received by way of bonus \$113,431.48 out of a total of \$151,712 voted by the Dominion Government; \$38,564 from the Ontario Government and \$75,000 from municipalities. The cost of the line, exclusive of equipment is given as \$326,200.

The Toronto and York Radial Ry. Co. is an amalgamation of the Metropolitan Ry. Co., 30 miles; the Toronto and Scarboro' Ry., Light and Power Co., 4½ miles; and the Toronto and Mimico Electric Ry. Co., 5½ miles, a total of 40 miles, and is controlled by the Toronto Ry. Co. The company has made an issue of 5% first mortgage gold bonds, guaranteed both as to principal and interest by the Toronto Ry. Co. The amount issued is \$800,000, and of these \$250,000 is being offered for sale at 102.66 and interest,

by the Dominion Securities Co., Toronto. In 1903 the surplus of the T. Ry. Co., available for the guarantee amounted to \$556,363.16, or 13 times the amount required for the purpose. The bonds are also secured by a first mortgage of \$20,000 a mile on the lines and properties of the three companies owned. The earnings of these three lines for 1903, after paying all operating and maintenance charges, amounted to \$42,119.53, more than sufficient to meet the interest on the bonds. The bonds are being issued in denominations of \$1000 each, interest payable half yearly, and are due Oct. 1, 1919.

Toronto, Hamilton and Buffalo Ry.—Gross earnings for Aug., \$53,068.51, against \$50,852.14 for Aug., 1903, making for three months ended Aug. 31, \$164,682.75, against \$146,754.61 for same period 1903.

Toronto Railway.—Car earnings for Sept. \$246,861.68 against \$237,009.91 for Sept., 1903, making for nine months ended Sept. 30, \$1,797,394.55 against \$1,597.475.41.

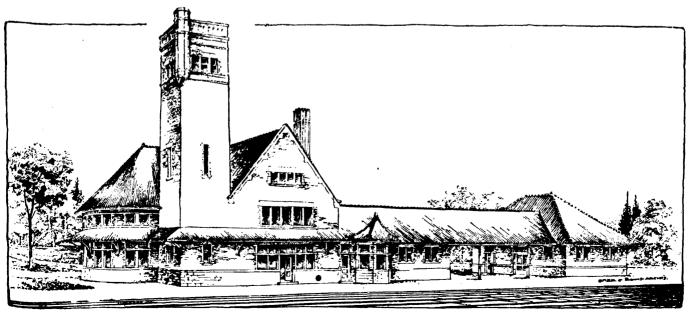
White Pass and Yukon Ry.—Gross earnings for two months ended Aug. 31, \$825,254.

W. Immell, a Souris, Man., farmer, and his wife were each fined \$20 and costs, Sept. 9, for selling the return portion of a reduced rate ticket from Pontiac, Ill., to Souris, Man.

The case against Jas. Rutherford, a conductor on the electric railway at Kingston, Ont., for running a car on Sunday was heard by the police magistrate there Sept. 16, and judgment reserved.

Taxation of Railways in Ontario.—The Commission appointed by the Ontario Government to enquire into the question of the taxation of railways, has completed its investigations in the United States and held an informal meeting with the representatives of railway companies at Toronto, Sept. 16. H. J. Pettypiece, Chairman of the Commission, stated that the G.T.R. and the C.P.R. representatives might as well make up their minds that those companies would have to pay \$2,000,000 a year taxes in Ontario. The railways were paying more than that in the U.S., but he admitted that the State of Michigan was overdoing it in the way of taxation. The case for the railway companies will be formally presented Oct. 8.

Uses of Electricity on Shipboard.—An interesting book for a practical electrician, bearing this title, has been written by J. W. Kellog, and is published by Marine Engineer-



GRAND TRUNK RAILWAY'S NEW STATION AT BRANTFORD, ONT. (For description see Sept. issue, pg. 319.)

ing, of New York. In the first chapter an ing, of New York. In the first chapter an account is given of the earlier installations, the first of which was on board the Oregon Ry. and Navigation Co.'s str. Columbia in 1880, and the four following chapters deal with the general considerations for modern plants with a straightful straight plants, wiring and insulation, electric fixtures and fittings, and electrically driven auxiliaries. A chapter is devoted to the electric wiring for a small steamer, and in an appendix are descriptions of small lighting plants for The different chapters are suitably illustrated, and the descriptions are clear and practical.

British Civil Engineers in Canada. -- A party of about 100 civil engineers from Great Britain, en route to the St. Louis exhibition, reached Montreal Sept. 19, where they were met by a deputation representing the Canadian Society of Civil Engineers, headed by the President, W. McL. Walbank. On Sept. 20 the party inspected the C.P.R. Angus shops and were shown round the city on special cars by the Montreal Street Ry. The following day the G.T.R. took the party over the Victoria Bridge and gave each member a souvenir descriptive of the original tubular bridge and telling of the construction of the present bridge. Later in the day the party visited the Lachine and Soulanges canals, returning to Montreal through the rapids. Sept. 22 was spent in Quebec, the following day in Ottawa, and on Sept. 26 Toronto was reached, where after a trip round the city on tallyho coaches, a luncheon was given by the Canadian Society of Civil Engineers. The party subsequently visited Niagara and inspected the power development plants in progress of construction there. Sir Wm. H. White, the President of the Institute of Civil Engineers, spoke at several of the places visited, all his utterances having a true Imperial ring.

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TRANSPORTATION APPOINTMENTS.

Board of Railway Commissioners.—E. C. Lalonde has been appointed Inspector. He will report to the Chief Inspector, J. E. Duval.

J. H. Tessier, formerly Engineer of Construction of the Drummond County Ry., Drummondville, Que., has been appointed Assistant Engineer.

A. G. Blair, jr., has been appointed Law Clerk.

Cape Breton Electric Co.-A. J. Bemis, of Boston, Mass., has been appointed General Manager, succeeding E. S. Dimmock, who is returning to the U.S. Office, Sydney,

Canadian Pacific Ry.-F. Ronaldson, heretofore locomotive foreman at North Bay, Ont., has been appointed to a similar position at Megantic, Que.

S. King, heretofore Master Car Builder, Intercolonial Ry., at Moncton, N.B., has been appointed Assistant Master Car Builder,

C.P.R., at Montreal.

H. Boyd has been appointed Chief Electrical Engineer in charge of work on the Western lines. He will report to each General Superintendent, to the Assistant to the Second Vice-President, and furnish monthly reports to the Chief Electrical Engineer at Montreal. Office, Winnipeg.

P. J. Lydiatt, heretofore chief clerk to the General Superintendent Lake Superior Division, North Bay, Ont., has been appointed chief clerk to the Superintendent of Trans-Portation, Western Lines, at Winnipeg.

J. K. Savage, heretofore train dispatcher, C.P.R., Toronto, has been appointed Inspector of Dispatchers for Western Lines. Office,

Winnipeg, Man.
C. E. Stockdill has been appointed chief

Division, Winnipeg.

H. J. Coffin, heretofore Yard Master at Moose Jaw, Assa., has been appointed Train Master 3rd District, Central Division, succeeding R. T. Smith, transferred. Office, Brandon, Man.

W. F. Brougham, heretofore in the office of the General Superintendent at Vancouver, B.C., has been appointed Local Right-of-Way and Lease Agent at Vancouver, in charge of right-of-way and lease matters affecting the Pacific Division.

Halifax and Southwestern Ry.-C. O. Poss, engineer at Bridgewater, N.S., has been appointed engineer in charge of one of the survey parties on the National Transcontinental Ry., in the district between Moncton, N.B., and the Quebec boundary.

Intercolonial Ry .- S. King, Master Car

Builder, has resigned.

T. E. Hoben, heretofore Superintendent Canada Eastern Ry., recently taken over by the control of the canada been appointed. the Intercolonial Ry., has been appointed Assistant Superintendent Moncton and St. Plavie district, I.C.R., of which the newly acquired line forms a part. Office, Gibson, N.B.

J. A. Hendry, heretofore station agent Canda Eastern Ry., has been appointed train dispatcher by the I.C.R., for the Canada Eastern section of the Moncton and St. Flavie district. Office, Gibson, N.B.

P. A. Logan, heretofore Mechanical Superintendent, Canada Eastern Ry., has been appointed mechanical foreman, I.C.R. Office, Gibson, N.B.

Inverness Ry. and Coal Co.-J. L. Brass having resigned and gone to the U.S., the position of General Manager has been abolished. ished.

C. Fergie, Managing Director of the Intercolonial Coal Co., has been appointed Chief Engineer and agent in general charge, I.C. Ry. and Coal Co.

R. Campbell, from Mackenzie, Mann & Co.'s Toronto office, has been appointed local manager.

MANUAL PROPERTY.

G. T. R. PAVILION AT ST. LOUIS EXPOSITION.

J. McGillivray, heretofore Trainmaster of the Canadian Northern Ry. at Kamsack, Assa., has been appointed Superintendent I. Ry.

The headquarters of these officers are at Inverness, N.S.

Moneton and Buctoche Ry.-E. G. Evans, General Superintendent and Engineer, is reported to have been appointed engineer in charge of one of the survey parties on the National Transcontinental Ry. in the district between Moncton, N.B., and the Quebec boundary.

New York Central and Hudson River Ry.-A. E. Lock, heretofore passenger agent at Saranac Lake, N.Y., has been appointed passenger agent at Montreal, succeeding the late A. J. Hebert.

Pere Marquette Rd.-W. Cotter, heretofore Manager, Missouri Pacific Rd., at St. Louis, Mo., has been appointed General Manager P.M. Rd., succeeding M. J. Carpenter, resigned to go into business for himself. Office, Detroit, Mich.

Quebec and Lake St. John Ry.—A. E. Doucet, Chief Engineer, has been appointed District Engineer on the survey of the National Transcontinental Ry. for the district between Edmundston, on the New Brunswick-Quebec boundary, and Clear Lake. Que.

Temiskaming and Northern Ontario Ry. Commission. -H. W. Pearson, heretofore Accountant to the Commission, has been appointed Secretary-Treasurer, succeeding P. E. Ryan, appointed Secretary to the Commissioners of the Transcontinental Ry. Office, Toronto.

J. H. Black, heretofore Auditor of the Kingston and Pembroke Ry., has been appointed General Freight and Passenger Agent of the T. and N.O. Ry.

E. E. Perrault, assistant to the Chief Engineer, has resigned on his appointment as a sectional engineer in charge of a party on the survey of the Montreal, Ottawa and Georgian Bay Canal.

The first of the ice-breaking steamers for the Dominion Government was launched at Paisley, Scotland, Sept. 9.

An action has been entered in the courts in the Northwest by Senator Maclaren against the C.P.R. for \$125,000 damages caused by forest fires alleged to have been started by sparks from the company's locomotives.

G.T.R. Exhibit at St. Louis.

The G.T.R. pavilion is regarded as being one of the principal features of the Forestry, Fish and Game building at the St. Louis Exposition. The exhibit is made in a pavilion, an illustration of which is given on this page, decorated with deer and moose heads, and with large bromide pictures on the outside depicting shooting, fishing and summer re-sort scenes on the system. The interior has large photographic reproductions, mounted fish, oil paintings, a magnificent moose head, and two moving picture machines, showing the International Limited and scenic pictures of different sections of the company's line, more particularly of the summering, hunting and fishing resorts in Canada. The exhibit reflects great credit on the company's Advertising Agent, H. R. Charlton, under whose direction it was erected. It is in charge of the company's Southern Passenger Agent, R. McC. Smith.

Control of C.P.R. Tolls.

In the Canadian Pacific Railway Act passed by the Dominion Parliament in 1881 it was provided that "the limit to the reduction of tolls by the Parliament of Canada provided for by the 11th subsection of the 17th section of the Consolidated Railway Act, 1879, respecting tolls, is hereby extended, so that such reduction may be to such an extent that such tolls, when reduced, shall not produce less than 10% per annum profit of the capital actually expended in the construction of the railway, instead of not less than 15% per an-num profit as provided for by the said subsection; and so also that such reduction shall not be made until the net income of the company, ascertained as described in the said subsection, shall have exceeded 10% per annum instead of 15% per annum as provided by the said subsection. And the exercise by the Governor-in-Council of the power of reducing the tolls of the company as provided by the 10th subsection of said section 17 is hereby limited to the same extent with relation to the profit of the company, and to its net revenue, as that to which the power of Parliament to reduce tolls is limited by said subsection 11 as hereby amended.'

A reference has been made by the Dominion Government to the Supreme Court to ascertain when Parliament is to have the right of control over the C.P.R. tolls. Under the terms of the section quoted above such control cannot be exercised until such time as the road earns 10% on the "capital actually expended in the construction of the railway." It is for the court to interpret this term and to say what the actual capital expenditure has been on which the calculation is to be based. In the order-in-council on which the reference is based it is stated that after conference between the Government and the C.P.R. Co. it was thought that a judicial determination of a series of questions would materially assist in arriving at an understanding of the mutual rights of the Government and the company. The questions to be submitted are as follows:
(1) In the words "capital actually expend-

ed in the construction of the railway," used in the act 44 Vic. cap. 1, schedule A, sec. 20," respecting the C.P.R. should the word "capital" be construed as meaning ascribed to it by the definition in the act to amend the consolidated railway act of 1879.

(2) If the word "capital" in the expression "capital actually expended in the construction of the railway" as used in the act 44 Vic. cap. is not to be construed as the meaning ascribed thereto by the definition aforesaid does it include moneys received from all sources which have been expended in the construction of the road. In other words, does it mean actual cost of the railway and if not then for what sources other than capital?

(3) In ascertaining the sum in respect of stock or share capital on which the 10% mentioned in section 20 is computed.

(a) Is the par or face value of such stock or share capital or are the proceeds realized by the company therefor to be adopted as the basis of computation?

(b) Are all the classes of stock or shares mentioned in the accompanying admissions to

be included, and if not, then which of said classes?

(4) In the words "the construction of the railway" mean the railway which the company contracted to construct, or does it include other portions which by its original charter it was authorized to construct, and does it include all other portions of railway which by subsequent legislation it was authorized to construct, and does it include railway west from Port Moody to its present terminus at Vancouver and east from Callendar to points on St. Lawrence and Bay of Fundy?

(5) Can any capital actually expended on

the railway after November 2, 1886, be regarded as "capital actually expended on the construction of the railway," and if so can it exceed the amount which was expended on the railway at or near Mount Stephen as agreed upon by order-in-council bearing that date?

The sixth question asks whether expenditure to raise the standard of construction above what was originally contemplated be included.

The seventh and last question asks whether money received from the following sources and expended on the construction of the rail-

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JOHN GARTSHORE, Treasurer.

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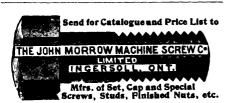
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way shall be included in the capital, preference stock, consolidated debenture stock, sale of lands, earnings, borrowed moneys, and if not from which of these sources.

It is contended that the company is earning 10% per year profit on the capital actually ex-Pended in the construction of the railway, and that as a consequence the Governor-in-Council had, and the Board of Railway Commissioners now have, power to reduce the company's tolls. The taking of the accounts will be a very tedious and intricate piece of work, but before this can be done, it must be determined upon what principle or by what method of computation the 10% is to be arrived at. The questions as above given were agreed on some time since between the Department of Justice and the company's Chief Solicitor, A. R. Creelman, K.C., but the case for submission to the Supreme Court has not been finalsettled, nor have the arguments for the Crown and for the company been prepared. They will be put in the form of factums, as in an ordinary appeal. The case has not been et down for argument, and it is not likely that it will be argued before Feb. next.

Grain Elevator Notes.

The Anglo-Canadian Elevator Co. is building elevators having a capacity of 30,000 bush, each, at Drinkwater, Milestone and Borham, Assa.

The Montreal Harbor Commission has not yet formally taken over the new elevator at the harbor from the contractors, and it is stated that it will not be taken over until spring.

The Department of Public Works has invited tenders for the foundations of a 2,000,000 bush. elevator at Port Colborne, Ont., to be erected on the west pier. J. A. Jamieson, of Montreal, is the engineer called in to advise on the construction of the elevator.

The Collingwood Elevator Co. (Ltd.) has been incorporated under the Ontario Companies' Act, with a capital of \$250,000, and offices at Collingwood, Ont., to carry on a general elevator business. The provisional directors are J. J. Daley, Chicago, Ill.; P. Paton, C. E. Stephens, W. T. Toner and F. W. Churchill, Collingwood, Ont.

The Young Grain Co. (Ltd.) has been incorporated under the Dominion Companies' Act, with a capital of \$300,000, and offices in Winnipeg, to engage in a general grain dealing, elevator and milling business in Canada. The provisional directors are: C. A. Young, Winnipeg; Hon. F. McN. Young, T. Buck, Killarney, Man.; D. D. Young, Dunrae, Man., and F. Y. Young, Boissevain, Man.

A map has been issued showing the location of all elevators and grain warehouses west of Lake Superior. There are now 982 elevators and warehouses being operated with capacities ranging from 1,000 bush. to the Canadian Northern Ry. Co.'s terminal elevator at Port Arthur, Ont., with a capacity of 7,000,000 bush. The total capacity of the 982 elevators and warehouses is 41,186,000 bush. In 1900 there were 522 elevators and warehouses, having a total capacity of 18,-879,352 bush.

A joint meeting of General Passenger Agents and General Baggage Agents of Canadian railways was held at Montreal Sept. It o discuss the rules governing the interchange of baggage and of passenger traffic and interpret the provisions of the Railway Act of 1903 dealing with these interests. W. P. Hinton, G.F. and P.A., Canada Atlantic Ry., presided. The existing rules were gone over and amended in several particulars in order to suit the requirements of the new act. The amended rules will be submitted to the Railway Commission for final approval.

SHIPPING MATTERS.

Notices to Mariners.

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

No. 66. Aug. 24—British Columbia—177. Strait of Georgia, Rock Point reef, buoy established. 178. Malaspena Strait, Thormanby islands, Tattenham ledge, change in character of buoy. 179. Malaspena Strait, off north point of Texada Island, buoy established. 180. Strait of Georgia, Altrevida reef, buoy established. 181. Sutil Channel, Cortes island, Whaleton bay, buoy established.

island, Whaleton bay, buoy established.

No. 68. Aug. 26—Quebec—185. Gulf of
St. Lawrence, offeast end of Anticosti Island,
submarine bell established at lightship. St.
Pierre Island—186. Bonniere shoal, decreased depth. Miquelon Islands—187. Plate
Point additional for signal

Point, additional fog signal.

No. 69. Sept. 6 Ontario—188. Lake Erie,
Port Colborne, construction of southeastern
breakwater begun. 189. St. Joseph Channel,
Shoal Island band fog born at light station

Shoal Island, hand fog-horn at light station.

No. 70. Sept. 7—Quebec—190. Chaleur
Bay, Restigouche River, Garde point, light
boat re-established. Newfoundland—191.
East coast, St. John's harbor, Fort Amherst,
fog signal altered.

No. 72. Sept. 14.—Nova Scotia—198. Bay

No. 72. Sept. 14.—Nova Scotia—198. Bay of Fundy, Lurcher light ship, submarine fog bell attachment.

No. 73. Sept. 15.—Nova Scotia—199. South coast, Madame Island, West Arichat, range lights established.

Maritime Provinces and Newfoundland.

The lighthouse and oil store at Guysboro, N.S., were destroyed by fire Sept. 12. Orders have been given by the Department of Marine to reconstruct the lighthouse immediately.

Press reports state that negotiations are in progress between the Imperial Dock Co., St. John, N.B., and W. J. Poupore, contractor, Montreal, with a view to the latter building the projected graving dock at St. John.

A steamer named Alfreda has reached Halifax, N.S., from England, for the Army Service Corps, and for towing targets for artillery practice. She has a speed of about 20 miles an hour, and is owned by the Imperial Government.

C. Chaloner has completed a further section of the work of establishing a system of levels between the sea and the Great Lakes. The survey this season has covered 75 miles between Moncton and Bathurst, N.B. In the spring of 1905 the survey will be resumed at Dorchester.

The Plant Line and Canada Atlantic Steamship Co. has decided to rebuild its warehouses, etc., at Halifax, destroyed in the recent fire. The President, R. W. Perry, of Boston, Mass., has arranged to go to Europe shortly to purchase or charter an additional steamer for the service between Halifax and the West Indies.

At the annual meeting of the Plant Line and Canada Atlantic Steamship Co. directors were elected and authority given to have plans prepared for a new steamer. The officers for the current year are: President, A. W. Perry; Vice-President, McC. Grant; Treasurer, E. L. Wires; other directors: H. G. Perry, G. Morrow H. McInnes, W. Mitchell. Secretary, H. L. Chipman.

The Dominion Coal Co. has entered into a contract with a Norwegian firm for the charter of three large steamers for its coal-carrying fleet. The steamers are to be built at Sunderland, Eng., and will have a length of 360 ft.; a breadth of 49 ft. 6 in., and a draught of 22 ft. They will carry 6,500 tons at a speed of 10 knots an hour. The first steamer will be ready for service in May, 1005.

The Interprovincial Navigation Co. is having constructed a steamer for the Baie des Chaleurs, to run from Campbellton, N.B., for which service the company has secured a government subsidy. The steamer will have a length of 180 ft., beam 31 ft., depth of hold 11 ft. 6 in., and will have a speed of 12 knots an hour. She will have accommodation for 200 passengers and 250 tons of cargo.

The schooner King of Avon Co. (Ltd.) has been incorporated under the Dominion Companies' Act, with a capital of \$25,000, and offices at Hantsport, N.S., to carry on a general shipping business. W. C. Balcom, Frances A. Balcom, of Hantsport; H. E. Mosher, Parrsboro, N.S.; W. J. Aylward, Falmouth, N.S.; E. L. Gould, Grand Pré, N.S., are the provisional directors.

The Schooner Rothesay Co. (Ltd.) has been incorporated under the New Brunswick Companies' Act, with a capital of \$16,000, and offices at Rothesay, N.B., to acquire the schooner Rothesay, and to carry on a general shipping business. E. B. Ketchum, D. W. Puddington, of St. John, N.B.; F. R. Taylor, of Rothesay, N.B.; A. C. Puddington, H. B. Holman, of New York, are the provisional directors.

A serious fire occurred on the water front at Halifax, N.S., Sept. 14, destroying six wharves and threatening others. A number of schooners were towed out of danger. The following shipping firms suffered damage: Plant Steamship Line, two warehouses, wharf and offices; Dominion Coal Co., sheds and coal chutes; G. P. Mitchell & Co. (Ltd.), offices, three warehouses and wharf. Another fire occurred on Sept. 19, when a portion of the warehouse of Pickford & Black, steamship agents, was burned.

The Interprovincial Navigation Co. of Canada (Ltd.) has been incorporated under the Dominion Companies' Act, with a capital of \$90,000, and offices at Richardsville, N.B., to carry on a general navigation business in Canada and elsewhere. The provisional directors are: D. Richards, F. S. Blair, J. Boudreau, G. G. McKenzie, H. B. Sheals, Campbellton, N.B.; J. F. Guité, Marie, Que.; T. Enright, Port Daniel, Que.; E. P. Le Marquand, Newport, Que.; J. X. Lavoie, Percé, Que.; A. T. Carter, Gaspe, Que.

Province of Quebec Shipping.

The Richelieu and Ontario Navigation Co.'s str. Virginia went ashore near Chicoutimi, Sept. 8, but was got off the same day, and on examination at Quebec was found not to have received any material damage.

Tenders are asked by the Department of Railways and Canals for the construction of a wall adjoining no. 1 basin and locks nos. 1 and 2 of the Lachine canal, Montreal. The work is estimated to cost \$40,000.

A steel tug, 60 ft. long over all, 15 ft. beam and 7 ft. draught, has been completed at Riviere du Loup, for towing purposes on the river. The hull was constructed in Scotland, brought out in sections and put together at Riviere du Loup.

The str. Turret Cape, with a cargo of coal from Port Hastings, N.S., to Cleveland, Ohio, went ashore on Goose Island, in the St. Lawrence, Sept. 18, and some temporary repairs were made at Montreal. She will go into dry dock at Cleveland.

Judgment has been reserved in the investigation of charges of drunkenness against J. S. Labranche, J. B. Nadeau and E. Nadeau, St. Lawrence River pilots between Quebec and Montreal. The accused men did not appear at the investigation.

The Montreal Harbor Commission is considering a proposal to widen the channel from Longue Pointe up to the wharves. The ship channel constructed by the Public Works

Department between Sorel and Longue Pointe is 450 ft. wide, with a greater width at curves, and is 30 ft. deep.

The investigation into the circumstances attending the loss of the Richelieu and Ontario Navigation Co.'s str. Canada after collision with the Cape Breton, a steamer belonging to the Dominion Coal Co., in June, has been completed, but the findings of the court have not been made public.

A hydrographic survey of Lake St. Francis is being gone on with under the charge of an engineer of the Marine Department. work is being done from Cornwall easterly, and will occupy some months. This survey will fit into that recently completed by U.S. engineers of the portion of the river and lake south of the International boundary.

The difficulties between Gagnon Bros., Quebec, and the Richeliev and Ontario Navigation Co. regarding the raising of the Canada, sunk off Sorel, have been settled, and all legal proceedings have been with-drawn. The R. and O.N. Co. will complete the work of raising the steamer, using the tackle and appliances at the wreck owned by Gagnon Bros.

Press reports are current that a new company, composed of U.S. capitalists, proposes to put a line of steamers on the St. Lawrence and Lake Ontario to compete with the Richelieu and Ontario Navigation Co. It was stated that Gagnon Bros., Quebec, were interested in the project, but on being interviewed, they stated that nothing definite had been decided in regard to the proposed line.

Ontario and the Great Lakes.

Thos. Head, a retired lake mariner, died at Windsor, Ont., Sept. 8, aged 77.

The steam barge Abercorn of Cleveland, Ohio, was damaged to the extent of \$4,000 by fire at Goderich, Ont., Sept. 5.

A new storm signal will be built at the eastern gap, Toronto, for the opening of the season of 1905, by the Department of Marine.

The schooner Singapore was wrecked just outside Kincardine harbor, Ont., Sept. 15, while on a trip from Tobermory, Ont., with lumber.

The Canadian str. Arabian, having refused to pay an inspection fee of \$100 at Chicago, Ill., has been forbidden to carry passengel from that port.

The water level of Lake Ontario in Sept. showed a height of 26½ inches above the zero mark, 13 inches higher than in 1903. Sept., 1894, the water level was 14 in. below zero.

Tenders will shortly be asked for the construction of a second lift lock on the Trent Valley Canal similar to that recently opened at Peterborough, Ont. The new lock will have a lift of 52 ft.

The Dominion Government has erected public docks and pavilions at Redhorse lights Gordon Island and Red Deer Island, and is erecting similar docks at other points in the Thousand Islands.

A new shoal has been discovered midway between the Middle Ground and Pelee Island lights, at the west end of Lake Erie. 100 ft. in diameter on the 18 ft. contour, with a minimum depth of 17.3 ft.

It is announced that the Detroit and Cleve land Navigation Co. propose to build a turbine steamer for its line at a cost of \$500,000. The directors of the company recently in spected the Turbinia at Toronto.

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H. McLeod, one of the engineers of the Department of Railways and Canals, Ottawa, is in charge of the surveys for the projected extension of the Rideau canal into the Hastings county mining district.

A survey to ascertain and define the International boundary between Detroit and Lake Erie, it is reported, will be made at an early date by the Dominion Department of Marine. The last survey was made in 1822.

The Victoria Island lighthouse near Fort William, which was being removed recently to a more exposed position, was blown over in transit, and smashed beyond repair. It is too late to erect a new lighthouse this year.

Press reports state that the Dominion Government is considering the desirability of constructing a graving dock at Prescott, Ont., large enough to accommodate the biggest steamer navigating Lake Ontario and the St. Lawrence River.

The str. Canada, formerly the Dominion cruiser Druid, owned by the Georgian Bay Park and Summer Resort Co., is again for sale. The steamer has been on the ferry service from Owen Sound, Ont., having a license to carry 550 passengers.

The str. S. N. Parent, belonging to the Great Lakes and St. Lawrence Transportation Co., has been in dry dock at Buffalo, N.Y., undergoing repairs, having recently been aground twice, once in the Lachine and once in the Welland canal.

A large warehouse has been erected on the wharf on the south side of the river at New Liskeard, Ont., for the Lumsdenline of steamers. It is expected that a spur line will be run on to this wharf from the Temiskaming and Northern Ontario Ry., now nearly completed to New Liskeard.

The Rondeau Tug Co. has been incorporated under the Ontario Companies' Act with a capital of \$20,000, and offices at Blenheim, to acquire and operate steamships and tugs for fishing purposes. J. W. Post, W. E. Hall and R. N. Thompson, of Blenheim, are the provisional directors.

Tenders were received to Sept. 30 for leasing the Yonge St. wharf, Toronto, for two, three, five or 21 years, or for the purchase of the property. The property has a land frontage of 325 ft., a depth of 1,000 ft., or 250 ft. total dock frontage of 2,500 ft.

The Northern Navigation Co.'s str. United Empire has been libelled at the instance of the Calbick Transportation Co., Chicago, Ill., which claims \$14,542 damages to its schooner Oct. 10, 1903. The allegation is that the United Empire was on her wrong side.

The Collingwood Shipbuilding Co. at its annual meeting to be held Oct. 3, will be asked to pass a by-law authorizing the issue of bonds to the total amount of \$300,000. It also stated that Capt. A. Macdougall, of Duluth, now Vice-President, will be elected President, succeeding the late J. J. Long.

The grain carrying steamer Haddington, recently completed at the yard of the Bertram Engine Works Co., Toronto, made 12 miles an hour on her trial trip Sept. 6. She is chartered to J. T. Matthews for the balance of the season, and will carry grain from Fort William to Montreal. She has a capacity of 80,000 bush.

The effect of the competition in the steamship traffic between Toronto and Hamilton has resulted in a large increase of the number of passengers carried. The Hamilton trip will be made by the Macassa as long as the lake is open, and is giving a return fare of 25c., while the Turbinia is making two round trips a day at a return fare of 5oc.

A project has been mooted for the construction of a dam at Long Lake, Ont., over



THE HUDSON'S BAY CO.'S STEAMER MOUNT ROYAL,

on which the Grand Trunk Pacific Ry. Co.'s directors recently inspected various harbors and inlets on the B.C. coast, and went up the Skeena River as far as Hazleton.

the height of land north of Lake Temiskaming, to turn the water so that it will flow into the Ottawa instead of by the Abitibi River into Hudson's Bay. By a series of dams it is proposed to hold the water of the lake and river at various points in wet seasons so as to provide a sufficiency of water for periods when the river level is below the average height.

The work in progress at the canal at Sault Ste. Marie, Ont., was inspected Aug. 30 by C. Schrieber, Deputy Minister of Railways and Canals. The upper entrance to the lock is being deepened so as to allow vessels having a draught of 21 ft. 3 in. to pass, and the lower entrance pier is being extended for 500 ft. Most of the cribbing is in place, and it is expected to have the whole of the cribwork completed by the end of Oct. The cement work will be gone on with in the spring.

There passed through the Canadian canal at Sault Ste. Marie, Ont., during Aug. 518 vessels having a registered tonnage of 588, 867 tons against 644 vessels and 741,778 tons for Aug., 1903, while the actual freight carried in Aug. was 690,713 tons against 879,420 tons for Aug., 1903. The total number of vessels using the Canadian canal for the season was 1,884, and the freight carried was 2,123,588 tons against 2,774 vessels and 3,481,911 tons for same period 1903. During the season the U.S. and the Canadian canals carried 14,842,975 tons of freight against 22,628,146 tons for the season of 1903 to Aug. 31.

J. Dudley, of Hamilton, Ont., has secured a patent for a new method of propelling vessels, by which he claims an extraordinary speed can be obtained. There is a tube in the vessel open at both ends; at one side is a gasoline engine which will pump the water through a feed pipe against the water in the tube. A model boat four feet in length has been tested with satisfactory results, and a 40 ft. boat is now under construction at Hamilton for experimental purposes on the bay. According to the calculations of the inventor a 75 h.p. engine would drive a vessel of the size of the Macassa at 40 miles an hour.

The Turbine Steamship Co. has under consideration the desirability of having another steamer built for its trade, but we are advised that nothing has been definitely decided, and no decision has been reached as to the route upon which it is to be placed. Reports in Hamilton state that the order for a second steamer has been placed at Hebburn-on-Tyne, Eng., and that the keel has already been laid. It is also reported in Hamilton that the new boat will run from Toronto to

Niagara in connection with the Turbinia, while another report says that it will be put on the Toronto-Hamilton run in addition to the Turbinia.

The piston rod of one of the cylinders of the engine on the Niagara Navigation Co.'s str. Chicora broke on the return trip to Toronto, Sept. 25, when the vessel was about 10 miles from port. The cylinder was damaged by the broken rod, and other damage was done to the machinery. After some delay some temporary repairs were effected, and the Chicora reached port under her own steam. The vessel was thoroughly overhauled and some new machinery put in prior to going on her route for the season. The loss is covered by insurance. As the company's other steamers had been laid up for the season the str. City of Owen Sound was put on the route on Sept. 26, on the 27th the Hamilton Steamboat Co.'s Modjeska was chartered, and on the 28th the company's own str. Chippewa, which was being dismantled for the winter, had been got ready to take up the run.

The lake cruiser Vigilant for the Dominion Government was launched at the yard of the Polson Iron Works, Toronto, Sept. 10. vessel was named as she left the ways by Mrs. F. B. Polson. Capt. Spain, R.N., of the fisheries protection service, was present on behalf of the Government. A general description and plan of the steamer was given in our May issue, p. 171. The following additional particulars are of interest: The Vigilant has a commodious deckhouse aft of the foremast, containing chart-room, galley and fan-room, and also a deckhouse abast the mainmast. The bridge is arranged extending from the forward deckhouse to the ship's side. The vessel is schooner-rigged, with jib-headed foresail and mainsail. She has a complete installation of auxiliary gear, including steam steering gear, steam windlass for working the anchors, electric engines and dynamos and powerful searchlight. She is to carry a 30 ft. speed motor-launch, two 25 ft. gigs and one 16 ft. dinghy. Accommodation for the officers and crew, about 40, are located below the maindeck.

The engineers who will make the surveys of the proposed Montreal, Ottawa and Georgian Bay canal from Montreal to North Bay, Ont., have been appointed by the Department of Public Works. The staff comprises: Chief Engineer, E. D. Lafleur; engineer in charge, A. St. Laurent; Divisional Engineers—Montreal section, G. P. Brophy, Ottawa; Ottawa section, E. J. Remboth, Hull, Que.; Nipissing section, J. C. Lapleau, Ottawa. Sectional engineers—E. R. Perrault, North Bay, Ont.;

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Manitoba and Northwest Territories.

Co. on the banks of the Assiniboine River at Winnipeg, has been levelled with the ground. It was erected for the accommodation of the steamboat trade on the Red and Assiniboine rivers in 1871.

A small pleasure steamer for use on the Saskatchewan River has been built at Edmonton, Alta., for J. A. McDougall. Her dimensions are: length, 56 ft. keel; 60 ft. over all; breadth, 8 ft. 4 in.; with a draught of eight inches. She is a side-wheeler, and has en-gines of 12 h.p.

The Dominion Government str. Arctic sailed from Quebec Sept. 19 for Hudson's Bay, under the command of Capt. Bernier as Sailing master. Major Moodie, of the N.W.M. Police, who is invested with considerable powers by the Government, being in charge of the expedition. The object of the expedition is to relieve the Neptune, which has now been about two years out, to continue the work of exploration in the northern seas, and to uphold Canadian authority there.

B.C. and Pacific Coast Shipping.

At the annual meeting of the Western Steamboat Co., held at New Westminster, B.C., Sept. 9, satisfactory reports were presented.

The Great Northern Ry., U.S., has decided to make Victoria, B.C., a port of call for its line of steamers sailing from Seattle, Wash., to China and Japan.

The Dominion Government is having constructed at Victoria, B.C., a snagboat for the Fraser River. Her dimensions will be: length, 115 ft.; breadth, 30 ft.; depth of hold, 7 ft.

There is a mirage almost daily off Cape Flattery, B.C., and tug captains state that it assists in discovering the presence of inbound ships, thereby enabling them to get out to their aid before the ordinary signal for a tug could be seen.

The Minister of Marine during his recent visit to the Pacific Coast, is reported to have stated at Vancouver, B.C., that a large dredge was to be constructed for use in the harbor there, and that the Imperial survey steamer Egeria had been transferred to the Dominion Government for survey work on the Pacific coast,

The Hazel Dollar Steamship Co. (Ltd.) has been incorporated under the B.C. Companies' Act, with a capital of \$200,000, to purchase the Hazel Dollar, a steamship now under construction at Glasgow, Scotland, and to engage in a general shipping business. The Dollar Line trades from U.S. ports to China and Japan, but its vessels are registered in B.C. ports.

The provisional directors of the G.T. Pacific Ry. recently made a tour of the ports on the Pacific coast available for the new line,

proceeding from Vancouver to Port Simpson, B.C., on the Dominion Government str. Quadra. On running into Victoria on the return journey the steamer struck on a rock and was fast for six hours before the rising tide floated her off. The party made a trip up the Skeena River on the Hudson's Bay Co.'s str. Mount Royal.

A list of the steamers trading on the inland waters of British Columbia, and which make Nelson their home port, recently published, shows the following to be engaged in the trade: C.P.R. steamers—Kokanee, Moyie, Nelson (emergency steamer), Ymir and Valhalla, on Kootenay Lake; Slocan and Sandon on Slocan Lake; Victoria and Proctor on Trout Lake; Aberdeen and York on Okanagan Lake; Rossland, Kootenay, Minto and Columbia on Columbia River and Arrow Lake. The Great Northern Ry., U.S., has one steamer, the Kaslo, in operation between Nelson, Kaslo and Bonner's Ferry, and has several other steamers and tugs lying idle at Kaslo.

The Dominion Government has libelled the Lake Simcoe, a steamer operated by the Canadian Steamship Lines (Ltd.), between European ports and Montreal, \$26,000 for allowing 26 Syrians, ordered to be deported, to escape.

L. Lacoste has returned to Montreal from England where he had been for the purpose of interesting the marine people there in his ship brake. The brake was explained by the inventor at a meeting of underwriters, engineers and shipowners in London.

The Dominion Government has granted permission for the steamships of the Canadian-Australian line to call at Fanning Island, the mid-ocean station of the All-British Pacific The company's steamers will make a call at the island every other month.

A report has been presented to the State Engineer of New York on the type of barge best adapted to the proposed 1,000-ton barge canal to give connection between Buffalo and the Hudson River. The designs show a barge 150 ft. long, 27 ft. wide, and having a draught of 10 ft. Such a barge will carry 1,200 tons of grain in the midship section, and provide accommodation for the crew in a deckhouse.

An order-in-council has been passed enabling steamship and railway companies engaged in transporting Chinamen from one point to another outside the Dominion through Canadian territory to put up bonds as security for the payment of the capitation tax for each Chinaman carried. Hitherto the companies have had to put up the \$500 capitation tax in cash. The C.P.R. is the company mainly interested.

The C.P.R. annual report says that two 18knot steamers are to be constructed for the company's Atlantic lines. It is also stated that the vessels are to be constructed on such lines as will make them suitable for being transferred to the Pacific ocean, when the extension of the trade there warrants it, when they will be replaced by larger vessels on the Atlantic. The contracts will, it is expected, be signed after the annual meeting Oct 5, and the vessels will be ready for service by the end of 1905.

A contract has been let by the Dominion Government to A. Weir & Co., Glasgow, Scotland, to put on a steamship service between Vancouver, B.C., and ports on the Pacific coast of Mexico. The subsidy is \$100,000 a year, one-half of which will be paid by Mexico. The service will be inaugurated early in 1905. The proposal for a service between Canada and Mexican ports on the Atlantic has not been taken up by the shipping men, but negotiations are in progress between the Governments as to the amount of the subsidy to be offered.

Among the Express Companies.

The Western Ex. Co. has closed the Hancock and Arcadian stage route.

A building is being erected at Quebec city in which the Dominion Ex. Co. will have its

Among the miscellaneous securities held by the C.P.R. Co. is Dominion Ex. Co. stock, valued at \$113,750.

The Dominion Ex. Co. has opened an office at Temagami, Ont., on the Temiskaming and Northern Ontario Ry.

F. H. Hackett, route agent Canadian Ex. Co., Montreal, was killed in a collision on the G.T.R., near Richmond, Que., Aug. 31.

The Western Ex. Co. has extended its route on the Minneapolis, St. Paul and Sault Ste. Marie Ry., from Glenwood to Mahomen, Minn., from Bismarck to Underwood, N.D., and from Ashley to Pollock, S.D.

E. T. Hogle, son of the late E. A. Hogle, General Superintendent U.S. Ex. Co., Cleveland, Ohio, has entered the service of the Dominion Ex. Co. as messenger on the C.P.R. lines between Nelson and Midway, B.C.

Telegraph and Cable Matters.

The Commercial Cable Co. has declared a

quarterly dividend of 2% payable Oct. 1.

The Canada Atlantic Ry. Co.'s telegraph office in Parry Sound, Ont., has been closed.

The G.N.W. Telegraph Co. has closed its offices at Brechin, Ont., and Perthuis, Que., and has re-opened its office at Kiskisink, Que.

Signor Marconi reached Glace Bay, N.S., Sept. 24, and will remain there for some time in connection with the operation of the wireless telegraph station.

The U.S. cable connecting Seattle, Wash., and Sitka, Alaska, was finally completed Aug. 28, when the Seattle shore end was picked up and spliced to the main cable.

L. B. McFarland, Superintendent Bell Telephone Co., Montreal, was elected a member of the executive committee of the Old Time Telegraphers' Association at the convention Atlanta, Ga., Sept. 20.

The C.P.R. Telegraph Department has completed a new pole line between Slocan City and New Denver, B.C., on a right-ofway about 30 ft. wide. Previous to this the wire was strung on trees.

The C.P.R. Telegraph Department has secured the lease of two stores on James St., Hamilton, Ont., for office purposes, its present offices being required for the extension of the Bank of Hamilton building.

Owing to the completion of the U.S. Alaska cable the G.N.W. Telegraph Co. has announced the following reductions in rates from Vancouver, B.C., on a 10 word basis: to Sitka, \$1.90; to Juneau, \$2.15; to Hain's Mission and Skagway, \$2.40.

The C.P.R Telegraph Department is about to string copper wires between Rossland and Castlegar, B.C., to replace the present iron wires, which are being constantly eaten away by the corrosive action of the fumes from the Traill smelter.

Sir Sandford Fleming, who has been appointed to represent New Zealand at the all-British Trans-Pacific Cable Congress to be held in London, Eng., in Nov., recently visited Bampfield Creek, Vancouver Island, where the cable is brought ashore, to see the station there and acquire information as to the operation of the cable.

The G.N.W. Telegraph Co. has been ordered to pay \$60 damages and costs for cutting shade trees on the streets of Tillsonburg, Ont. E. C. Jackson, Manager of the Traders' Bank, was the plaintiff in the action, in which it was held that the cutting of the trees was unnecessary, and that the company was guilty of negligence in cutting them.

The Minister of Labor has appointed Justice Teetzel, G. F. Shepley, K.C., and H. Hall, arbitrators in the matter of the differences between the G.T.R. and its telegraph operators. These gentlemen previously acted as a conciliation committee, but failed to bring about an understanding. They are now invested with full powers to arbitrate the differences under the terms of the Railway Labor Disputes Act, 1903.

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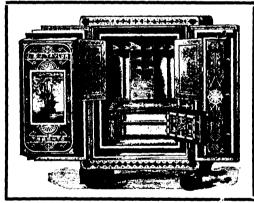
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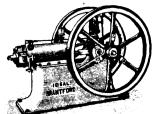
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The Great Northwestern Telegraph Co.'s annual meeting was held at Toronto Sept. 28. The directors and officers elected for the current year are: President, H. P. Dwight; Vice-President, Adam Brown; Vice-President and General Manager, I. McMichael; other directors, James Hedley, W. C. Matthews, H. N. Baird, Toronto; Hon. W. McDougall, Ottawa; Col. R. C. Clowry, J. B. Vanevery, New York; Secretary-Treasurer, G. D. Perry; Auditor, A. C. McConnell.

The Anglo-American Telegraph Co. has submitted a proposition for the improvement of the telegraph and cable service between Prince Edward Island and the mainland, as a result of the proposed increase of the grant from the Dominion Parliament to \$5.000 a year. In return for the increased subsidy the company will give an all-night service; a 30c. rate for 10-word messages to and from the Maritime Provinces, Quebec and Ontario, and a proportionate reduction for press messages.

The C.P.R. Telegraph Department has announced in Winnipeg that it will have in operation during the winter or early in the spring a short telegraph line between Winnipeg and Minneapolis and St. Paul. The new line will be strung on the branch line now approaching completion from Glenwood, Minn., to the International boundary near Emerson, Man., to which point the C.P.R. line now extends. The present C.P.R. telegraph line operated between Winnipeg and St. Paul is via Portal, Assa.

In addition to renewing a number of the older sections of its lines west of Winnipeg. Man., the C.P.R. Telegraph Department has strung a new copper wire from Winnipeg to Regina, Assa.; a new copper wire from Ignace to Fort William, Ont., for train despatching purposes; and new wires have been strung along the railway lines just completed between Arcola and Regina, Assa.; the branch from Kirkella, through Neudorf, Sask.; and the extension from Yorkton towards Battleford, Sask.

General Telephone Matters.

The Bell Telephone Co. has made considerable extensions to its lines in Prince Albert, Sask., and vicinity during the past summer.

St. Martin's, N.B., line, and will connect it with the lines it has under construction in King's county.

The Bell Telephone Co. is installing in hotels, restaurants and drug stores in Montreal automatic telephones for the use of the general public.

The Alaska Telephone and Telegraph Co. of New York has been incorporated there with a capital of \$100,000, with the object of constructing lines in Alaska.

The Bell Telephone Co. has completed the installation of a long distance line connecting Winnipeg and Emerson, Man., and in connection therewith has opened offices at Emerson, Dominion City, Letellier and St. Jean Baptiste.

The Bell Telephone Co. is negotiating for a new franchise with Owen Sound, Ont., and offers the council 5% a year for five years, based on the receipts of 1903, with some other advantages in connection with the instruments for the use of the council offices.

The Bell Telephone Co. proposes to extend its lines to Petrel, Man., this fall, and to make connections with Brookdale, McKempoint, Wallwood, Kerfoot and Pleasant for these lines will be at Carberry.

At the annual meeting of the Union of Canadian Municipalities in London, Ont., Sept.

3, the President expressed the opinion that the one solution of the telephone question was the nationalization of the trunk lines, and the right to expropriate the local lines.

The Bell Telephone Co. has completed the conduit on Poulett St., Owen Sound, Ont., in regard to the construction of which there was some litigation with the town council, which objected to the excavation necessary. The conduit will give space for carrying 1,600 wires.

The Bell Telephone Co. has completed the installation of a long distance telephone system on the G.T.R. line terminating in Owen Sound, Ont. The instruments are connected with the telegraph lines, and the circuit is operated similarly to that described in our Feb. issue, pg. 71.

The Canadian Manufacturers' Association has passed a resolution commending the resolution passed by the Windsor, Ont., Board of Trade favoring the acquisition of the telephone system of the country by the Dominion Government, to the consideration of its parliamentary committee.

The Bell Telephone Co.'s new central energy switchboard was put in operation at Hamilton, Ont., Aug. 27. It is wired for 2,400 instruments, and provision is made so that its capacity can be increased to 5,600 instruments. There are at present 1,800 telephones in use in the city.

The Ontario Independent Telephone Co. has been incorporated under the Ontario Companies' Act, with a capital of \$100,000, and head offices at Windsor, Ont., to carry on a general telephone business in any muicipality where a franchise may be obtained. The provisional directors are C. W. Taylor, J. R. Brooks, J. A. McRae, P. T. Chesley, A. D. Prosser, of Detroit, Mich.

The C.P.R. has added a train telephone to the equipment of its cars on one of the districts of the Eastern Division. The apparatus consists of a telephone receiver and transmitter, a length of wire with a pole and hook at the end. If the necessity arises, by reason of a breakdown or other accident, the conductor by placing the hook over a telegraph wire can communicate with the Chief Dispatcher at Montreal, and thus secure protection for his train and assistance at once.

The Brantford, Ont., City Council has adopted a report of the special telephone committee recommending the provision of a municipal telephone system at a cost of about \$40,000. A by-law to authorize the issue of debentures to raise the money for the installation was passed be voted on in October, but on Sept. 25 the council rescinded this motion and threw out the by-law. An offer has been received from a telephone construction company in the U.S. for the installation of a municipal telephone system. A Toronto company, in asking for a franchise, offers to supply instruments for business houses at \$25 a year, and for private houses at \$12 a year, such terms to hold good for a radius of 15 miles from Brantford, to pay \$700 a year, and to provide to free instruments for the use of the corporation.

PURCHASING AGENTS' GUIDE.

(Continued from third page of Cover.)

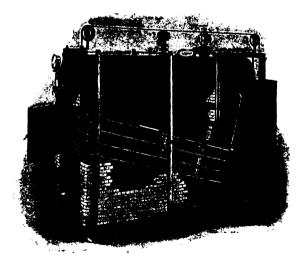
Lo		ives (Steam)	New York N V
	Baldw	in Locomotive Works	Philadelphia, Pa.
	Canad	la Foundry Co	
	F. H.	Hopkins & Co	
	Locor	Locomotive and Machine Co. of the	of Montreal
	The S	axon Engine Works, Che	emnitz, Germany.

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Machine Tools
W. Abbott. Montreal.
The Saxon Engine Works, Chemnitz, Germany.

Machinery Repairs The Bertram Engine Works CoToronto.
Manganese Steel Castings Montreal Steel WorksMontreal.
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Matches The Hudson's Bay Company
Mats and Matting The Gutta Percha & Rubber Mfg. Co. of Toronto.
Mechanical Draft Pans Babcock & Wilcox (Ltd.) Montreal.
Milepost Numbers Acton Burrows Co
Milling Cutters W. Abbott Montreal.
Milling Machines The John Bertram Sons Co Dundas, Ont.
Mills, Boring and Turning The John Bertram Sons Co Dundas, Ont.
Mohair The Hudson's Bay Company
Numbers Acton Burrows Co
Nuts, Square and Hexagon
Canada Foundry Co
Rice Lewis & Son
Canadian Office&School Furniture Co., Preston, Ont. Office Fittings
Canadian Office&School Furniture Co., Preston, Ont. Office Signs
Acton Burrows Co Toronto.
Galena-Signal Oil Co Franklin, Pa., & Toronto. The Queen City Oil Company Toronto.
Packing The N. L. Piper Railway Supply Co Toronto.
Packing, High Pressure Sheet The Gutta Percha & Rubber Mfg. Co. of Toronto
Packing, Piston The Gutta Percha & Rubber Mfg. Co. of Toronto.
Pinch Bars The N. L. Piper Railway Supply CoToronto.
Pipe Covering The James Morrison Brass Mfg. CoToronto. Mica Boiler Covering CoMontreal.
Planers The John Bertram Sons CoDundas, Ont.
Plushes The Hudson's Bay Company
Porter E. L. Drewry
Portable Bollers Babcock & Wilcox (Ltd.)
Printing The Hunter, Rose Co
Pumps Canada Foundry Co
Punching and Shearing Machines The John Bertram Sons CoDundas, Ont.
Rati Benders, Roller Montreal Steel Works
Railway Interlocking General Railway Signal CoBuffalo, N.Y.
Railway Signalling General Railway Signal CoBuffalo, N.Y.
Railway Supplies The N. L. Piper Railway Supply Co Toronto.
Rails (New) Drummond, McCail & Co. Montreel
F. H. Hopkins & Co. Montreal. J. J. Gartshore Toronto. W. H. C. Mussen & Co. Montreal.
Rails (for relaying)
J. J. Gartshore Toronto, T. A. Morrison & Co Montreal.
J. J. Gartahore. Toronto. T. A. Morrison & Co. Montreal. W. H. C. Mussen & Co. Montreal. Rice Lewis & Son. Toronto. Jas. W. Pyke & Co. Montreal.
Reamers W. Abbott
Ribbons and Carbon Paper United Typewriter Co
Rivets, Boiler and Bridge
Canada Foundry Co

Rolls, Plate Bending The John Bertram Sons Co Dundas, Ont.	Steam Hammers The John Bertram Sons Co Dundas, Ont.	Turnbuckles Montreal Steel Works
Roof Trusses	Steam Shovels	Turntables
Canada Foundry Co	F. H. Hopkins & Co. Montreal. W. H. C. Mussen & Co. Montreal.	Canada Foundry Co Dominion Bridge Co
Rope	Steam Traps	Typewriters
Rice Lewis & Son	The James Morrison Brass Mfg. CoToronto.	United Typewriter Co Typewriter Repairs
Rubber Tiling, Interlocking	W. Abbott Montreal.	United Typewriter Co
The Gutta Percha & Rubber Mfg. Co. of Toronto.	F. H. Hopkins & Co. Montreal. Wm. Jessop & Sons Sheffield, Eng.	Typewriter Supplies United Typewriter Co
J. & J. TaylorToronto.	Rice Lewis & Son	Valves, Iron and Brass
Safety Valves	Steel Buildings	Canada Foundry Co
The James Morrison Brass Mfg, Co Toronto.	Canada Foundry Co	The James Morrison Bra
Grews, Coach and Log Toronto Bolt and Forging Co Toronto.	Steel for Springs James Hutton & Co	Valves, Rubber The Gutta Percha & Ru
Semaphore Arms	Steel Plate	Varnishes
Acton Burrows CoToronto.	Jas. W. Pyke & CoMontreal.	McCaskill, Dougall & Co
Semaphores	Steel Tyres	Vessels
The N. L. Piper Railway Supply Co Toronto.	James Hutton & Co	Polson Iron Works
Sewer Pipe (Cast Iron)	Jas. W. Pyke & Co	Waste Rice Lawis & Son
Gartshore-Thompson Pipe & F'dry CoHamilton	Stop Cocks, Iron and Brass	Rice Lewis & Son N. L. Piper Ry. Supply 6
Shaking Grates Raboock & Wilcox (I td.) Vantreal	The James Morrison Brass Mfg. Co Toronto.	The Queen City Oil Co.
Babcock & Wilcox (Ltd.)Montreal.	Structural Metal Work	Water Pipe (Cast Iron)
Shaping Machines The John Bertram Sons CoDundas, Ont	Canada Foundry Co	Gartshore-Thompson Pip
Shipbuilders' Tools and Supplies	Locomotive and Machine Co. of Montreal	Water Softeners
Rice Lewis & Son Toronto.	Jas. W. Pyke & CoMontreal.	Babcock & Wilcox (Ltd
Ship Lamps	Superheaters	Wheelbarrows
Continental Heat & Light Co Montreal. The N. L. Piper Railway Supply Co Toronto.	Babcock & Wilcox (Ltd.)Montreal. Switches	F. H. Hopkins & Co Rice Lewis & Son
Ships	Montreal Steel WorksMontreal.	Windmills
Canadian Shipbuilding Co	Switch Lamps The N. L. Piper Railway Supply CoToronto.	Goold, Shapley & Muir C Ontario Wind Engine an
	Switch Ropes	Window Blinds
Shipbuilders and Engineers Canadian Shipbuilding CoToronto.	The B. Greening Co	The Hudson's Bay Comp
ihovels	Switch Targets Acton Burrows Co	Wines and Liquors The Hudson's Bay Comp
F. H. Hopkins & Co. Montreal. The Hudson's Bay Company	Tanks	Wire and Wire Rope
Rice Lewis & Son	Goold, Shapley & Muir CoBrantford, Ont	Dominion Wire Rope Co
Side Bearings	Tanks and Tank Fixtures	The B. Greening Co Rice Lewis & Son
Simplex Railway Appliance Co Montreal,	Canada Foundry Co	W. H. C. Mussen & Co.
Signal House Numbers	Ontario Wind Engine and Pump CoToronto.	The Wire and Cable Co.
Acton Burrows Co,Toronto.	Telegraph and Telephone Office Signs	Wire Cloth
lignals	Acton Burrows CoToronto.	The B. Greening Co
General Railway Signal CoBuffalo, N.Y.	Tobacco and Cigars The Hudgen's Rev Company	Wire, Copper
N. L. Piper Railway Supply CoToronto.	The Hudson's Bay Company	E. F. Phillips Electrical V The Wire and Cable Co.
igns Acton Burrows CoToronto.	The Hudson's Bay Company	
Slotting Machines	Track Jacks	Wire, Electric Canadian General Electric
The John Bertram Sons CoDundas, Ont.	F. H. Hopkins & Co Montreal.	E. F. Phillips Electrical
Snow Ploughs	Montreal Steel Works	The Wire and Cable Co.
Rhodes, Curry & CoAmherst, N.S.	W. H. C. Mussen & Co. Montreal. A. O. Norton Coaticook, Que.	Wire, Insulated Copper
pikes, Railway and Ship	Track Tools	Canadian General Electi
Toronto Bolt and Forging Co Toronto.	Canada Switch and Spring CoMontreal.	E. F. Phillips Electrical
Springs	F. H. Hopkins & Co. Montreal. Rice Lewis & Son. Toronto.	The Wire and Cable Co
Montreal Steel WorksMontreal.	Montreal Steel Works Montreal.	Wire, Telegraph and Tele
Station Name Signs Acton Burrows Co	W. H. C. Mussen & CoMontreal.	E. F. Phillips Electrical 'The Wire and Cable Co.
Acton Burrows Co 1 oronto.	Tramway Equipment	Wire, Transmission and
Canadian Shipbuilding CoToronto.	F. H. Hopkins & Co Montreal.	The Wire and Cable Co
Polson Iron Works Toronto.	W. H. C. Mussen & Co	Wrought Steel Piping
Steamboat Signs	Trucks (Electric Car)	Babcock & Wilcox (Ltd
Acton Burrows CoToronto.	Baldwin Locomotive WorksPhiladelphia, Pa.	Canada Foundry Co
Steam Couplers	Canada Foundry Co	Yachts
Safety Car Heating and Lighting Co, New York.		Polson Iron Works

Turnbuckles Montreal Steel WorksMontreal.
Turntables Canada Foundry Co Dominion Bridge Co Montreal.
Typewriters United Typewriter Co
Typewriter Repairs United Typewriter CoToronto.
Typewriter Supplies United Typewriter Co
Canada Foundry Co
Valves, Rubber The Gutta Percha & Rubber Mfg. Co. of Toronto.
Varnishes McCaskill, Dougall & Co
Polson Iron Works
Rice Lewis & Son
Gartshore-Thompson Pipe & Foundry Co., Hamilton
Babcock & Wilcox (Ltd)
F. H. Hopkins & Co. Montread Rice Lewis & Son. Torosto.
Goold, Shapley & Muir Co Brantford, Ontario Wind Engine and Pump Co Toronto.
Window Blinds The Hudson's Bay Company
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Dominion Wire Rope Co Montress
W. H. C. Mussen & Co. Montreal. The Wire and Cable Co. Montreal.
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	Canadian Ky. Accident Ins. Co Ottawa, Ont.	Cast-Steel Track Tools	Gas and Electric Fixtures
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	Rice Lewis & SonToronto.	Concrete Mixers and Rock Crushers	The James Morrison Brass Mfg. Co Toronto.
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	The Bertram Engine Works Co Toronto.	Cross Arms, Top Pins & Side Blocks	Rice Lewis & SonToronto.
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	The Gutta Percha & Rubber Mfg. Co. of Toronto. Billing Machines	The Firstbrook Box CoToronto.	Headlights
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	Blankets & Bedding	Canadian General Electric Co Toronto.	Hose
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	Dominion Wire Rope Co Montreal.	The N. L. Piper Railway Supply Co Toronto.	The Gutta Percha & Rubber Mfg. Co. of Toronto. Hose, Fire
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	General Railway Signal CoBuffalo, N.Y. Boat Fittings & Hardware	Culvert Pipe (Cast Iron)	The Gutta Percha & Rubber Mfg. Co. of Toronto.
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	Canada Foundry Co Toronto. Polson Iron Works	Derricks	General Railway Signal Co Buffalo, N.Y,
	Boilers, Locomotive	F. H. Hopkins & CoMontreal.	Interlocking Signals
	The Bertram Engine Works Co Toronto.	Door Signs	Montreal Steel Works
	Boilers, Stationary and Marine	Acton Burrows Co	Iron
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	Buoy Lighting	Engineers' Supplies	Continental Heat & Light Co Montreal.
	Safety Car Heating and Lighting Co., New York	The Gutta Percha & Rubber Mfg. Co. of Toronto.	Lights, Portable
	Cables, Electric and Feeder	The James Morrison Brass Mfg. CoToronto.	Continental Heat & Light Co Montreal.
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	Car Castings	The Bertram Engine Works Co Toronto.	The James Morrison Brass Mfg. Co Toronto.
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	Car Heating	Engraving	American Brake Shoe & F'dry Co., Mahwah, N.J.
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