

# THE Railway and Marine World

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

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## Commutation Fares from Brampton.

In our last issue we gave in full the judgment delivered by J. P. Mabee, Chief Railway Commissioner, on Nov. 23, concurred in by Commissioner S. J. McLean, dismissing the application of F. W. Wegenast against the G.T.R., alleging discrimination against the town of Brampton, Ont., as compared with the town of Oakville, in the matter of commutation tickets and applying to the Board for relief. Commissioner Mills gave the following dissenting judgment Dec. 24:

The G.T.R. Co. admits that it has been, and is now, discriminating against Brampton as compared with Oakville in the matter of commutation tickets. Discrimination in tolls or rates against any person, commodity, or locality, is prima facie unjust, and should be disallowed by the Board, unless facts are stated and reasons given which are sufficient to prove that, under the special circumstances and conditions of any case in question, the difference in treatment "does not amount to an undue preference or an unjust discrimination" (Railway Act, sec. 77).

In every case of a lower toll given to one person, commodity, or locality than is given to another person, commodity, or locality, "under substantially similar circumstances and conditions," "the burden of proving that such lower toll or difference in treatment does not amount to an undue preference or unjust discrimination, shall lie on the company" (Railway Act, sec. 77).

A great deal of so-called evidence was given in this case; but very little of it bore even remotely upon the point at issue, viz., whether or not the admitted discrimination against Brampton as compared with Oakville in the matter of commutation tickets is just and reasonable. The railway company made an effort to justify the discrimination; but its failure to do so was, in my opinion, most signal and complete. The only witness called in defence was G. T. Bell, the company's General Passenger and Ticket Agent, who went at length

into an explanation of the reasons why the company had issued commutation tickets to Brampton and other places for a number of years, and why it had ceased to do so, especially in the case of Brampton. M. K. Cowan, counsel for the railway company, stated that the commutation tickets were withdrawn from Brampton because "they had not been taken advantage of"; and Mr. Bell testified that they were withdrawn on account of a demand, backed by a threat, from the business men of the town, because so many Brampton people were availing themselves of the commutation tickets to purchase goods in Toronto. Note Mr. Bell's evidence on this point. Question by Mr. Fullerton: "When you were giving commutation tickets to Brampton, the traffic got so large that it alarmed the Brampton mer-

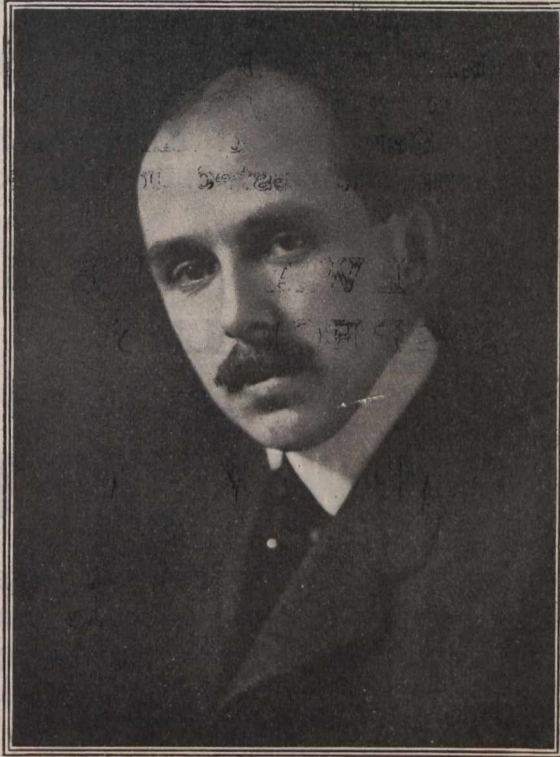
chants, and they, as you said, put a pistol to your head?" Answer by Mr. Bell: "It got enough for them to get excited"; but, he adds, "it was not the class of traffic the rate was put in to cultivate. It was people doing business and living in Brampton, and coming in daily to the city." Further—question by Mr. Cowan: "Is it possible to bring up a suburban service between here and Brampton by commutation tickets?" Answer by Mr. Bell: "I cannot believe it possible in the

people in Oakville, during this experimental stage, had bought homes in the country that they might have to sacrifice if the cheap rates were withdrawn"; but, further on, he stated that he could not tell how many people living at Oakville were doing business in Toronto when the company decided to continue the tickets to Oakville and withdraw them from Brampton. He was, he said, "just stating the general principle"; but he gave no evidence as to how many then had or now have

vested interests in Oakville, neither the number of the people nor the extent of their interests; nor any evidence as to the amount of property which might be sacrificed, especially in view of the fact that there is now an electric line between Oakville and Toronto; nor anything which would be called evidence as to whether or not there were and are similar vested interests in Brampton, from which town there is no competing electric line to Toronto. The population of Brampton is nearly double that of Oakville; the two towns are practically the same distance from Toronto. Mr. Bell's evidence proves that there was a very considerable amount—to the merchants of Brampton, an alarming amount—of daily traffic between Toronto and Brampton when the commutation tickets were withdrawn; and the evidence of other witnesses examined at the hearing tends to show, without actually proving, that, with commutation tickets such as those sold to the people of Oakville, the G.T.R.'s suburban traffic between Brampton and Toronto would be much greater than that on the G.T.R. between Oakville and Toronto.

I would not at present be disposed to order the issue of any class of tickets which would reduce the company's revenue, but it was not urged that commutation tickets such as those asked for by Brampton would result in a reduction of revenue. The regular return trip ticket from Brampton to Toronto costs \$1.10; and a 55-trip commutation ticket, good for one month, costs \$7.15. The former is purchased only by people who

must, or think they must, travel; and the latter (the cheaper ticket) appeals, not only to those who must do a certain amount of travelling, but also to the much larger number of people who need not travel, but will do so for a consideration—an inducement offered in the way of rate reduction, combined with the possibility of a greater variety of goods and better bargains in buying and selling; but no one can avail himself of the benefit, or supposed benefit, of the cheaper ticket until he has paid the company \$7.15, which is sure income to the company whether the purchaser makes the whole or only a small proportion of the trips within the month covered by the ticket; and so for each succeeding month. Hence it seems almost certain that the use of commutation tickets such as the above on ordinary trains, without any additional ex-



W. G. ANNABLE,

General Passenger Agent C.P.R. Atlantic Steamship Lines.

conditions existing." Thus the company is represented as withdrawing the commutation tickets from Brampton at the dictation of the business men of the town, because so many people were going "daily to the city," and at the same time justifying the withdrawal on the ground that it was then, and is now, impossible to develop a reasonably profitable suburban traffic between the town and the city,—traffic of the kind which the company desires; but no evidence is given to prove that the admitted discrimination against Brampton is not unjust or unreasonable.

Mr. Bell stated that, after making an experiment with commutation tickets, the company had withdrawn them from certain places, including Brampton, and had decided to continue them at Oakville, because "some

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PRESIDENT.

pense for equipment or service, would pay the company better than the use of the ordinary return trip ticket; and I think this is true wherever the traffic may be—from surrounding towns and villages to Montreal, Quebec, Toronto, Hamilton, London, Ottawa, Kingston, or any other important business centre. I express no opinion as to whether the issue of such commutation tickets, under approved conditions, would benefit the country as a whole; but I am satisfied that it would increase the revenue of the railway companies.

In his evidence regarding the withdrawal of commutation tickets from certain places, Mr. Bell said: "We took the view that it was right to continue to use commutation rates where the ordinary train service made it possible for people to live in the country and come into the city and do their business and go back again at reasonable rates." Now, this is precisely the condition of things at Brampton. It was clearly proved at the hearing that the present train service on the G.T.R. at Brampton is adequate, satisfactory, quite equal to that furnished at Oakville, and the Brampton Council and Board of Trade specifically stated that their application was for commutation tickets to be used on the ordinary trains running between Toronto and Brampton—that and nothing more; so, on Mr. Bell's own evidence, it would appear that Brampton should have commutation tickets. Hence, to sum up, I would say that, as I understand the case, the facts are as follows: Complaint was made to the Board by the applicant and other interested parties, alleging that the G.T.R. was discriminating in tolls, against Brampton, as compared with Oakville. At the hearing of the complaint, the railway company admitted that it was discriminating against Brampton, but not unjustly so—maintaining that the discrimination complained of and admitted was just, fair, and reasonable. The railway company completely failed to justify the said discrimination—not having given any evidence which, by the utmost stretch of imagination, could be said to prove that the difference in treatment of Brampton as compared with Oakville, is either just, fair, or reasonable. Therefore my judgment is that the Board is under obligation to take such action as may be necessary to remove the discrimination either by ordering the restoration of commutation tickets to the town of Brampton, or by simply directing the railway company to cease and desist from further discrimination against Brampton as compared with Oakville, in the matter of commutation tickets.

At a meeting of Brampton residents, Jan. 15, it was decided to ask for a re-hearing of the application.

**EDITOR'S NOTE.**—Commissioner Mills is in error in saying that there is an electric railway between Oakville and Toronto. The Hamilton Radial Ry. Co. runs from Hamilton to Oakville, but no further. The Toronto and York Radial Ry. has a line from Toronto to Port Credit, but there is no electric road between Port Credit and Oakville.

During Nov., 1908, 56 railway employes were killed and 36 injured while engaged on Canadian railways. Of the fatalities, 18 were due to explosions of dynamite, 16 to being run over, 6 to collisions, 5 to derailments, 3 to falling material, 2 each to falls, to explosions of boilers, and to being caught between cars, and one each to being struck by a passing object and to being struck by a locomotive. Of the non-fatal accidents 8 were due to collisions, 6 to derailments, 5 each to being caught between cars, to falls, and to explosions of dynamite, 2 each to being run over and to falling material, and one each to a flying object, to machinery and to escaping steam.

**Minneapolis, St. Paul, and S.S. Marie Ry.**

Following are extracts from the report of this subsidiary company of the C.P.R. for the year ended June 30:

|                                 | 1907-08         | 1906-07         |
|---------------------------------|-----------------|-----------------|
| Gross earnings.....             | \$11,509,857.32 | \$12,892,079.03 |
| Operating expenses ..           | 7,115,964.91    | 7,433,548.79    |
| Net earnings .....              | \$ 4,393,892.41 | \$ 5,458,530.24 |
| Income from other sources ..... | 669,111.99      | 52,076.86       |
| Total net earnings ..           | \$ 5,063,004.40 | \$ 5,510,607.10 |
| Fixed charges, taxes, etc.....  | 3,062,135.29    | 2,901,921.32    |
| Surplus income.....             | \$ 2,000,869.11 | \$ 2,608,685.78 |

The gross earnings show a decrease of \$1,382,211.71, the net earnings \$1,064,637.83, and the surplus income \$607,816.67. The decrease of \$1,382,211.71 in gross earnings is the combined result of a short grain crop, reduced rates and general business depression. The operating expenses decreased \$317,583.88. The expenses are somewhat increased, compared with previous years, on account of depreciation charges made in accordance with the revised classification of operating expenses issued by the Interstate Commerce Commission. This new classification makes detailed comparisons of operating expenses with previous years impracticable. Total net earnings decreased but \$447,602.70, some \$551,000.00 of profits from the sale of real estate having been carried to income account. The percentage of expenses to earnings is 61 8-10%, compared with 57 6-10% the previous year.

On account of the financial stringency during the early months of the year, and the consequent inability to provide funds from the sale of securities, the line from Brooten to Duluth will not be completed until 1909. Fifty miles of track were laid during the autumn of 1907, and an additional 50 miles have already been laid this year. Funds for this extension and for the acquirement and improvement of suitable terminals at Duluth have been provided from the sale of bonds and of \$4,200,000.00 of increased capital stock, referred to in the last report.

The usual policy of improving the property by the construction of additional side tracks, the enlargement of stations, shops and other buildings, has been continued. The motive power is in first-class condition. In short, the condition of both roadbed, buildings and equipment has not only been maintained, but largely improved. Owing to more favorable crop prospects, business conditions in the Northwest are much improved, and therefore, reasonable hope is entertained for a much better showing for the current year.

The mileage owned and operated is 629.76 east, and 1,643.62 west of Minneapolis, with 15.91 miles of spur lines, making a total of 2,289.29 miles against 2,262.88 miles at June 30, 1907. In addition to this the company has trackage facilities over 19.17 miles of terminal property in Minneapolis, St. Paul and Sault Ste. Marie. One hundred miles of track laid on the Duluth line is not included in the foregoing figures.

**EARNINGS AND EXPENSES.**

|  |                 |
|--|-----------------|
| Freight .....                            | \$ 7,828,851.60 |
| Passenger .....                          | 2,681,221.84    |
| Mail .....                               | 317,504.13      |
| Excess baggage .....                     | 33,659.88       |
| Miscellaneous revenue ..                 | 11,105.58       |
| Operation other than transportation....  | 141,871.90      |
| Total operating revenue .....            | \$11,014,214.93 |
| Outside operations:                      |                 |
| Express .....                            | \$179,505.03    |
| Sleeping cars, dining cars and hotels .. | 158,006.99      |
| Car service and equipment rentals ..     | 158,130.37      |
|  | 495,642.39      |
| Total gross earnings .....               | \$11,509,857.32 |

|   |                 |
|---|-----------------|
| Maintenance of way and structures,...               | \$1,330,856.15  |
| Maintenance of equipment .....                      | 1,361,625.06    |
| Traffic expenses.....                               | 235,675.36      |
| Transportation expenses .....                       | 3,988,799.34    |
| General expenses.....                               | 199,009.00      |
|   | 7,115,964.91    |
| Net earnings from operation.....                    | \$ 4,393,892.41 |
| Interest, discount and exchange.....                | \$127,509.54    |
| Interest and dividends on bonds and stocks owned .. | 11,026.50       |
| Profit from sale of real estate.....                | 530,575.95      |
|   | 669,111.99      |
| Total income.....                                   | \$ 5,063,004.40 |
| Interest on bonds.....                              | \$ 2,144,640.00 |
| Interest on equipment notes .....                   | 89,550.00       |
| Taxes.....  | 696,907.70      |
| Rental of terminals..                               | 131,037.59      |
|   | \$ 3,062,135.29 |
| Net surplus for year ..                             | \$ 2,000,869.11 |

**BALANCE SHEET, JUNE 30, 1908**

|   |                 |
|---|-----------------|
| Cost of road, acquired lines, extensions and equipment.....           | \$80,057,853.73 |
| Advances for equipment, terminals, etc.                               | 2,699,841.84    |
| Real estate .....   | 668,061.71      |
| Stocks & bonds owned  | 4,083,190.56    |
| Materials and supplies  | 1,258,686.68    |
| Due from—   |                 |
| Foreign roads.....  | \$ 273,570.09   |
| Agents and conductors   | 366,489.97      |
| U.S. Post Office Department.....                                      | 73,583.25       |
| Bills and accounts receivable .....                                   | 348,811.00      |
| Cash — Minneapolis, St. Paul, New York and London.....                | 1,640,754.67    |
| Total cash and current assets.....                                    | 2,703,208.98    |
| Other accounts.....   | 7,501.72        |
| *Advance account—   |                 |
| Betterment and Improvement Fund .....                                 | 204,525.26      |
|   | \$91,682,870.48 |
| Capital stock—  |                 |
| Common.....   | \$16,800,000.00 |
| Preferred.....  | 8,400,000.00    |
|   | \$25,200,000.00 |
| Funded debt—  |                 |
| First mortgage M. & P. Ry. bonds, 4% ..                               | 306,000.00      |
| First mortgage M. S. S.M. & At. Ry. bonds, 4% .....                   | 8,204,000.00    |
| First mortgage M., St. P. & S. S. M. Ry. consolidated bonds, 4% ..... | 43,285,000.00   |
| Second mortgage M. St. P. & S. S. M. Ry. bonds, 4% .....              | 3,500,000.00    |
|   | 55,295,000.00   |
| Bills payable—  |                 |
| Equipm't trust notes  | 1,743,000.00    |
| Interest accrued on bonds due July 1 ..                               | \$1,001,785.00  |
| Interest accrued on equipment, notes due July 1 .....                 | 43,575.00       |
| Accrued taxes not yet due.....  | 222,680.08      |
|   | 1,268,040.08    |
| Current liabilities—  |                 |
| Vouchers.....   | \$ 842,804.54   |
| Pay rolls.....  | 452,600.10      |
|   | 1,295,404.64    |
| Dividends due and unpaid.....   | 1,765.00        |
| Insurance fund.....   | 16,505.88       |
| Equipment replacement .....   | 210,947.91      |
| Income account.....   | 6,652,206.97    |
|   | \$91,682,870.48 |

\*The Directors, at a meeting held Aug. 24, appropriated \$250,000.00 from the Income account as of June 30, to take care of these advances for betterments.

**TRAFFIC AND MILEAGE STATISTICS.**

|                                | 1907             | 1908             |
|--------------------------------|------------------|------------------|
| <b>TRAIN MILEAGE—</b>          |                  |                  |
| Freight trains... (miles)      | 3,163,625        | 2,773,120        |
| Passenger trains "             | 2,141,827        | 2,472,902        |
| Mixed trains.....              | 304,604          | 352,059          |
| Non-revenue trains "           | 162,906          | 76,182           |
| <b>Total train mileage "</b>   | <b>5,772,962</b> | <b>5,674,263</b> |
| <b>CAR MILEAGE—</b>            |                  |                  |
| Freight—                       |                  |                  |
| Loaded cars north or east..... | 30,921,517       | 27,968,616       |
| Loaded cars south or west..... | 39,643,428       | 34,355,368       |
| Empty cars north or east.....  | 13,414,052       | 12,889,277       |
| Empty cars south or west.....  | 5,521,145        | 7,408,352        |



|  |               |               |
|--|---------------|---------------|
| Total freight car mileage.....   | 89,500,142    | 82,621,613    |
| Passenger coaches, mail and express cars—                                  |               |               |
| North or east.....   | 6,165,507     | 7,039,426     |
| South or west.....   | 6,209,618     | 7,070,605     |
| Total passenger car mileage.....   | 12,375,125    | 14,110,031    |
| FREIGHT TRAFFIC—   |               |               |
| Tons of revenue freight carried.....                                       | 4,954,177     | 4,439,186     |
| Tons of non-revenue freight carried.....                                   | 953,624       | 613,200       |
| Total tons freight carried.....  | 5,907,801     | 5,052,386     |
| Tons of revenue freight carried one mile.....                              | 1,158,634,051 | 961,934,837   |
| Tons of non-revenue freight carried one mile.....                          | 168,836,776   | 117,516,583   |
| Total tons freight carried one mile.....                                   | 1,327,470,827 | 1,079,451,420 |
| Tons of revenue freight carried one mile per mile of road.....             | 518,985       | 417,523       |
| Tons of non-revenue freight carried one mile per mile of road.....         | 75,627        | 51,007        |
| Total tons (all classes) freight carried one mile per mile of road.....    | 594,612       | 468,530       |
| Average distance haul of one ton revenue freight, miles.....               | 233.87        | 216.69        |
| Average distance haul of one ton freight (all classes).....                | 224.70        | 213.65        |
| Average amount received per ton for revenue freight.....                   | \$1.92        | \$1.76        |
| Average amount received per ton per mile revenue freight.....              | 8.20 mills    | 8.14 mills    |
| Freight earnings per mile of road.....                                     | \$4,270.13    | \$3,402.89    |
| Freight earnings per train mile.....                                       | \$2.74        | \$2.51        |
| Average number of freight cars in train.....                               | 25.81         | 26.44         |
| Average number of loaded cars in train.....                                | 20.35         | 19.94         |
| Average number of tons revenue freight per train (entire line).....        | 334.07        | 307.80        |
| Average number of tons of non-revenue freight per train (entire line)..... | 48.68         | 37.60         |
| Average number of tons of all classes freight per train (entire line)..... | 382.75        | 345.40        |
| Average number of tons revenue freight per train (main line).....          | 384.53        | 343.92        |
| Average no. of tons revenue freight per train (branch lines).....          | 202.40        | 119.46        |
| Average no. of tons revenue freight in each loaded car.....                | 16.42         | 15.43         |
| Average no. of tons of non-revenue freight in each loaded car.....         | 2.39          | 1.89          |
| Average no. of tons (all classes) freight in each loaded car.....          | 18.81         | 17.32         |
| PASSENGER TRAFFIC—   |               |               |
| No. of passengers carried earning revenue.....                             | 1,336,078     | 1,606,991     |
| No. of passengers carried one mile.....                                    | 116,461,222   | 128,293,907   |
| No. of passengers carried one mile per mile of road.....                   | \$2,166       | 55,685        |
| Average distance carried (miles).....                                      | 87.17         | 79.83         |
| Average amount received for each passenger.....                            | \$1.99        | \$1.67        |
| Average rate per passenger mile (cents).....                               | 2.28          | 2.09          |
| Passenger earnings per mile of road.....                                   | \$1,467.86    | \$1,466.67    |
| Passenger earnings per train mile.....                                     | \$1.34        | \$1.20        |
| Average no. of passenger cars per train.....                               | 5.06          | 4.99          |
| Average no. of passengers per train.....                                   | 48            | 45            |
| MISCELLANEOUS—   |               |               |
| Gross earnings per mile of road.....                                       | \$5,774.73    | \$4,995.79    |
| Operating expenses per mile of road.....                                   | 3,329.70      | 3,088.64      |
| Net earnings per mile of road.....   | \$2,445.03    | \$1,907.15    |
| Average mileage operated during the year.....                              | 2,232.50      | 2,303.91      |

The expenditure charged for construction and equipment was as follows:

|  |                 |
|--|-----------------|
| Thief River Falls line.....  | \$ 391.39       |
| Egeland line.....  | 12,994.31       |
| Flaxton extension.....   | 26,202.02       |
| Garrison extension.....  | 127,714.64      |
| Superior line.....   | 2,219,311.67    |
| A. B. & N. W. Ry.....  | 1,087.49        |
| Terminal property, St. Paul, Minneapolis and other points.....       | 46,849.84       |
| Betterment to main line.....   | 115,357.86      |
| New equipment.....   | 13,119.52       |
| Equipment transferred to replacement account from previous year..... | 53,797.22       |
|  | \$ 2,616,825.96 |

The expenditures charged to capital account for betterment to main line during the year amounted to \$115,357.86.

EXPENDITURES CHARGED TO FUND APPROPRIATED FOR ADDITIONS AND BETTERMENTS.

|  |               |
|--|---------------|
| Right-of-way.....  | \$ 469.55     |
| Side tracks.....   | 95,090.34     |
| Buildings.....   | 34,614.22     |
| Fuel and water stations.....   | 39,715.04     |
| Shops, engine houses and turntables.....   | 50,235.53     |
| Crossing signs and cattle guards.....  | 5,083.30      |
| Grade reductions (Minnesota division).....   | 405,059.50    |
| Filling bridges.....   | 47,354.29     |
| Widening and ballasting.....   | 43,695.92     |
| Bridges and culverts.....  | 44,817.96     |
| Telegraph line.....  | 3,105.59      |
| Fencing.....   | 27,850.91     |
| Highway grading.....   | 2,023.29      |
| Rails and fastenings—difference between 60-lb., 72-lb. and 80-lb. rails re-laid..... | 7,609.45      |
|  | \$ 806,724.89 |

|  |               |
|--|---------------|
| Balance at credit of fund, June 30, '07.....   | \$ 252,199.63 |
| Appropriated from income account.....  | 350,000.00    |
| Balance advanced for which no appropriation has yet been made from surplus income..... | 204,525.26    |
|  | \$ 806,724.89 |

The amount spent on additions to equipment was \$13,119.52 and on equipment replacement, \$210,947.91. The rolling stock owned at June 30 comprised: 252 locomotives, 200 passenger cars, 12,916 freight cars, and 177 miscellaneous.

C.P.R. Roundhouse at Sutherland.

The roundhouse and shops which the C.P.R. has constructed at Sutherland, a suburb of Saskatoon, Sask., have been fully completed and are in use. They are situated in an angle southwest of the main line into Saskatoon. The building consists of a roundhouse completed for 10 locomotives, but arranged for four additional stalls. The petty store building is at the eastern end, and the machine shop and boiler house at the western end. On the track leading to the turntable to the roundhouse are the coal pockets, sand house, ash-pit, etc. The machine shop is 87 by 72 ft., and the boiler shop 48 ft. 4 in. by 65 ft. 4 in., outside measurements. There are two tracks with pits in the machine shop. The contractor was the J. McDiarmid Co., Winnipeg.

The engine and boiler house is equipped with a battery of boilers to drive a large engine, the other equipment including a 300 h.p. heater, boiler feed pump, vacuum pump, and a Northey duplex washout pump. The driving pulley on the main shaft in the engine room has a diameter of 6 ft. 4 in., with a face of 2 ft., and the dimensions of the pulleys on the main shaft are: to shaper, 24 3/4 in. diameter by 8 in. face; to lathe, 25 3/8 in. diameter by 6 1/2 in. face; to drill, 39 in. diameter by 8 1/2 in. face; to lathe, 18 in. diameter by 18 in. face; to driving wheel lathe, 30 in. diameter by 12 in. face. The speed of the main shaft is 130 revolutions per minute. The shaper countershaft, on which are fast and loose pulleys 16 in. diameter by 4 in. face, has a speed of 200 revolutions a minute, while the pulleys on the countershaft connecting with the shaper are respectively 10 1/8 in., 8 3/8 in., 6 3/8 in., and 4 3/8 in. diameter by 2 1/2 in. face; while those on the shaper are 16 in., 14 in., 12 in., and 10 in. diameter respectively by 3 1/4 in. face. The first lathe countershaft, on which are fast and loose pulleys 11 3/4 in. diameter, 3 1/10 in. face, is driven at a speed of 280 revolutions per minute, while

the pulleys on the countershaft connecting with the lathe are respectively 8 5/8 in., 6 13/16 in., 5 1/6 in., and 3 3/4 in. diameter. The drill countershaft, on which are fast and loose pulleys 13 7/8 in. diameter by 4 1/4 in. face, has a speed of 365 revolutions per minute, the pulleys on the countershaft being respectively 14 in., 11 3/4 in., 9 1/2 in., and 7 in. diameter by 3 3/4 in. face. The countershaft for lathe no. 2, on which are fast and loose pulleys 18 in. diameter by 9 in. face, has a speed of 130 revolutions a minute, while the countershaft for the driving wheel lathe, fast and loose pulleys 29 1/4 in. diameter by 6 in. face, has a speed of 135 revolutions a minute.

Victorian Railways, Australia.

The report of the Victorian Railways Commissioners for the year ended June 30, 1908, shows the following financial results:

|   |              |
|---|--------------|
| Gross revenue.....  | \$18,849,745 |
| Working expenses (including payment into railway accident and fire insurance fund).....   | 11,124,318   |
| Net revenue.....  | \$ 7,725,427 |
| Less deficit, St. Kilda and Brighton Electric St. Ry.....   | 19,101       |
| Total net revenue.....  | \$ 7,706,326 |
| Special expenditures and charges completing the liquidation of extraordinary liabilities taken over by the Commissioners, July 1, 1903..... | 229,008      |
| Balance.....  | \$ 7,477,318 |
| Interest charges and expenses.....  | 7,220,946    |
| Surplus credited to consolidated revenue \$   | 256,372      |

In view of the completion of the liquidation of the extraordinary liabilities taken over by the Commissioners July 1, 1903, a comparison of the results for the five years from that date, with those of the previous five years will be of interest:

|   | 1908         | 1903         |
|---|--------------|--------------|
| Gross revenue.....  | \$90,974,521 | \$76,167,484 |
| Working expenses.....   | 48,835,532   | 45,554,907   |
| Net revenue.....  | \$42,138,989 | \$30,622,577 |
| Special expenditures and charges in liquidation of extraordinary liabilities..... | 3,398,715    | 781,706      |
| Balance.....  | \$38,740,274 | \$29,840,872 |
| Interest charges and expenses.....  | 36,095,984   | 35,688,837   |
| Surplus.....  | \$2,644,290  | \$5,847,965  |
| Deficit.....  | 48,007,400   | 52,429,079   |
| Traffic train mileage.....  | 324,149,961  | 262,105,154  |
| No. of passengers carried.....  | 16,942,845   | 14,445,830   |
| Tons of freight carried.....  | 1,521,265    | 1,241,705    |
| Tons of live stock carried.....   | 53.68        | 59.80        |
| Percentage of working expenses to gross revenue                                   |              |              |

The report shows the financial figures in sterling, but for the convenience of local comparison, these have been converted into dollars. The total mileage of track operated during the year was 4,316.76, made up as follows: Main tracks, 5' 3" gauge, 3,641.14 miles; 2' 6" gauge, 81.60 miles; electric street railway, 5' 3" gauge, 5.13 miles; sidings, 5' 3" gauge, 583.12 miles; 2' 6" gauge, 4.94 miles; electric street railway, 5' 3" gauge, 0.83 mile.

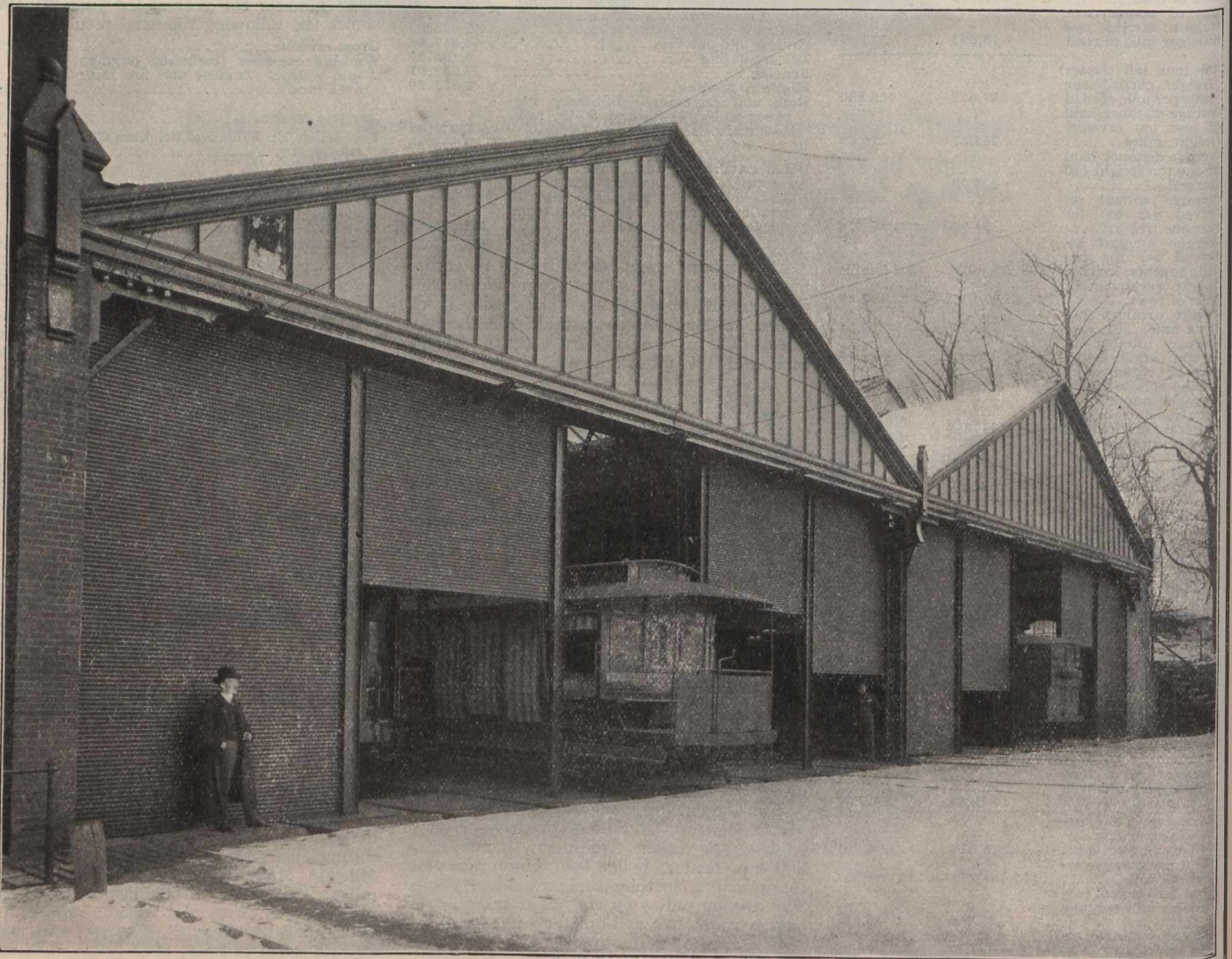
The Victorian Railways were placed under the control of the present Commissioners July 1, 1903, and Thos. Tait, until then Manager of Transportation C.P.R., Montreal, was appointed Chairman. The success which has been achieved, as shown by the present report, is, without doubt, due in a great measure to the energy and experience which Mr. Tait has introduced into the management.

At the Central Railway and Engineering Club's monthly meeting in Toronto Jan. 20, the newly elected President, C. A. Jefferis, occupied the chair. A. E. Nourse read a paper on reinforced concrete construction. On behalf of the club Acton Burrows presented the retiring President, W. R. McRae, Master Mechanic Toronto Ry., with a handsome gold watch chain emblem.

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**Train Dispatching by Telephone.**

By W. W. Ryder, Superintendent of Telegraph, Chicago, Burlington and Quincy Rd.

Electric interurban roads early recognized the desirability of the telephone and they have extended their use of it until it is now recognized by them as the standard method of operation. Steam roads, however, with their ultra-conservatism, were loath to part with the long-established telegraph, and it is only recently that the use of the telephone for this purpose has been attempted on a sufficiently large scale to secure a fair demonstration of its possibilities. The immediate incentive for these experiments was the near approach of the date for the enforcement of the Federal nine-hour law, coupled with the well-defined shortage of telegraph operators that had existed for two or three years.

The first experiment on the Burlington of handling trains exclusively by telephone was begun Dec. 11, 1907, on the main line between Aurora and Mendota, 46 miles, and 11 offices. The result was so satisfactory that the construction of another circuit from Aurora to Galesburg, 125 miles, with 16 offices, was immediately authorized to handle the dispatching between Mendota and Galesburg. This circuit was completed Jan. 24 and has been in use regularly since that date. On Mar. 1 the third telephone circuit was completed, from Clyde, the end of the Chicago terminals, to Aurora, 28 miles, with 15 offices. These three circuits are all on double track. On Mar. 19, the first installation on single track was completed between Aurora and Savanna, 106 miles, with 23 offices.

Up to this time, while many who personally investigated the matter were willing to concede its efficiency as applied to double-track operation, they were very sceptical as to what would be the result on single track. In this distrust, they overlooked the fact that in our method of double-track operation, the irregularity of reverse movements in reality made the requirements on such lines more exacting than on single track, where opposing movements were perforce the regular method of operation. The results of this last installation were even more marked than on double track, and I am convinced that the handling of trains by telephone is not only much more satisfactory, but is really safer as well, and this opinion is shared by all who have personally looked into the matter.

We use two 210-lb. copper wires and have made the installation as complete and perfect as we know how. With the present market price of copper, the telephone circuit costs approximately \$100 a mile and the station equipment about \$50 a station. This is more expensive than the telegraph circuit, and the maintenance will be a little more difficult and the cost a little higher, but the results have proven so absolutely satisfactory we feel the additional expense is fully warranted. Our arrangement makes the circuit entirely self-contained, that is, the signalling and talking is all done on the same pair of wires. The signalling is done by semi-automatic selectors that enable the dispatcher merely by the depression of a couple of buttons in connection with a series of synchronous clocks to ring at will vibrating bells in one or more offices on the circuit. This is a much less laborious method of calling, and we also find a very great saving in time, the operators responding very much more quickly than is the practice with the telegraph. In the local offices we put a 4-in. vibrating bell, one large enough to be heard at a considerable distance, and when this bell lets go without any preliminary warning, the one thought of the operator is to shut it off and so he immediately answers the call. More often than otherwise the operators to avoid the annoyance of the signal bell forestall the dispatcher's call and report trains as soon as they pass.

In handling orders, the same general

methods are observed as with the telegraph, any figures or names of stations occurring in the order being spelled out letter by letter, both in the giving of the order and all of the repetitions, and the name of the conductor on a "31" order is spelled out as well.

The use of the telephone is so quick in every way and so much more flexible, the dispatcher is enabled to get far more detailed information of just exactly what each train is doing, even, when occasion requires, talking directly with the conductor or engineer personally, and is thus brought just so much nearer the actual details of train movement. Only a personal investigation of the scheme can show how valuable is this information. There has also been a marked improvement in the work of the men on these telephone circuits, due to the fact that the conversations between the dispatcher and the operators or other employes are of a much more personal character than obtains with the telegraph, resulting in much closer co-operation. It is even possible to save considerable time in the actual putting out of orders. The dispatcher copies the orders in his order book as he talks it off, thus gauging, or rather reducing, his speed of conversation to his ability to write it down, as well as the ability of the operators to do so. Then when the operators repeat the order, they talk it off as fast as they can or much faster than is possible by telegraph.

The change in method in every case was made without a hitch and without any opposition worth mentioning. I had an idea that while possibly the dispatchers themselves might not openly oppose the change, their support might be of a passive character, but in this I was agreeably disappointed. The first circuit had not been in operation a week before a little spirit of jealousy was evidenced, directed against the dispatchers on the telephone circuit, it being so clearly evident they had the "snap" of the office. Soon all the dispatchers in Aurora office were desirous that we give them the same facilities, and now that all have been taken care of, there is not one out of the 12 that would willingly go back to the old method.

It is far easier to train telephone operators than to secure telegraphers. There is hardly a town anywhere on the line in which there are not young men who, by reason of their frequently being around the depot, are more or less familiar with the railroad game, and who with a very little training would be perfectly competent to sit in as telephone operators. There is much to be gained by making use of men in their own home towns, or who have grown up along the line. Our telegraph service was at its best when this condition existed to a considerable extent, and discipline has lessened in proportion as we have been compelled to import telegraph talent. This increased use of the telephone has also opened an avenue whereby we can offer better employment to those unfortunately injured in our service few of whom in the past have been able to learn telegraphy. Another item worthy of consideration is the broadened field from which we can make dispatchers. In the past, the first requisite for a dispatcher was an ability to telegraph, and with the character and ability of telegraphers in general dropping as fast as it has during the past two or three years, we certainly can but expect difficulty in the future in getting satisfactory talent, even if this difficulty has not been greatly evidenced in the past. I maintain that a good, bright, young freight conductor, who has been actually carrying out the train orders, would make a better dispatcher himself and be better able to assist in getting other trains over the road than is the telegraph dispatcher, who, in spite of his occasional trips on freight trains, is a theorist after all.

The establishment of telephone circuits enables us to close unimportant offices wholly or a portion of the time, as a telephone in-

strument can be placed where the train conductors can readily get in touch with the dispatcher. Another important feature in the use of the telephone is the fact that it works even better in bad weather than in good—just the reverse of the telegraph—and if there is ever a time when good service is needed, it is when the weather is wet and foggy. There is no exasperating interference with the dispatcher's efforts by reason of the relay in some way office being out of adjustment and the inattentive operator making no effort to see whether this is the case or not. The telephone is always in proper adjustment and because of the lowered static capacity of the circuits, works as if charmed.

With the telephone it is possible to arrange apparatus, for instance, in the superintendent's office, so that he can at any time listen to the actual work of the dispatchers and operators and thus check up any tendency to slackness. This has not always been possible in the past, as not all superintendents were telegraphers.

The improvement in the handling of train dispatching by telephone having been so clearly demonstrated, we have decided to attempt to handle other messages in like manner and in a short time all business for the way offices on certain portions of our line (both main and branches) will be handled by telephone, this to include Western Union Telegraph business as well. At junction points, where branch telegraph lines are to be worked, and at certain wire test offices, it may be necessary to maintain telegraph service, but at all other points all classes of business will be handled by telephone.

The field for substituting the telephone for the telegraph daily opens up before us almost faster than we can comprehend it, and the results we are obtaining from our experiments are a constant but very agreeable surprise. For instance, only about a month ago it seemed next to impossible to get satisfactory telephone service on single-wire branch lines without completing the metallic circuit, and this the volume of business did not warrant. But within the last few days we have made successful substitution on two branch lines, one 18 miles long with three offices, and the other 49 miles long with 10 offices. These branch wires have been so arranged that while not connected permanently with the main line, they can be connected at the will of the dispatcher or the way office operator, the signalling on the branch being done by means of ordinary bridged bells.

The unqualified success of our experiments with the telephone as a substitute for the telegraph, and the rapidity with which other roads are extending the work, convinces me that the next few months will make a great change in method of handling trains all over the country, one that will greatly benefit the service.

The foregoing paper was read at the last convention of the Association of Railway Telegraph Superintendents in Montreal.

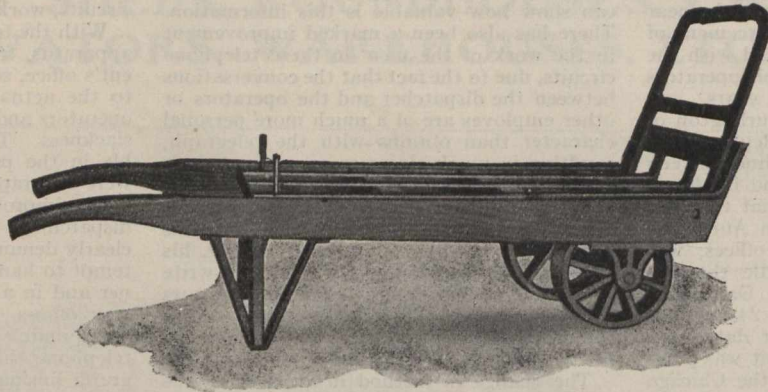
Railways using the telephone system for dispatching, either already in operation, or authorized, are:

|  |              |
|--|--------------|
| Illinois Central Rd. ....                | 2,536 miles. |
| Chicago, Burlington and Quincy Rd. . .   | 746 "        |
| Chicago and Northwestern Ry. ....        | 478 "        |
| Chicago, Rock Island and Pacific Ry. . . | 333 "        |
| Michigan Central Rd. ....                | 259 "        |
| Chicago, Milwaukee and St. Paul Rd. . .  | 223 "        |
| Great Northern Ry. ....                  | 202 "        |
| Northern Pacific Ry. ....                | 109 "        |
| Baltimore and Ohio Rd. ....              | 105 "        |
| New York Central Rd. ....                | 95 "         |
| Lake Shore and Michigan Southern Rd . .  | 88 "         |
| Delaware, Lackawanna and Western Ry. .   | 62 "         |
| Wheeling and Lake Erie Rd. ....          | 60 "         |
| Canadian Pacific Ry. ....                | 49 "         |
| Pennsylvania Rd. (East) ....             | 225 "        |
| Lake Erie, Alliance and Wheeling Rd. . . | 104 "        |

Total..... 5,674 miles.

Since the foregoing table was prepared, the system has been extended to a further mileage, details of which are not yet to hand.

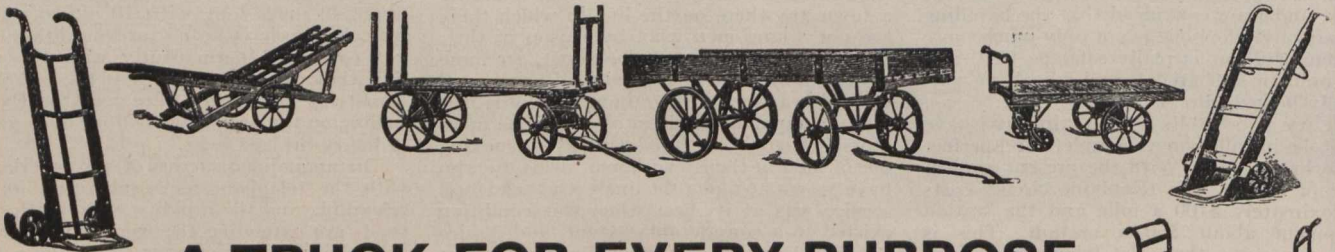
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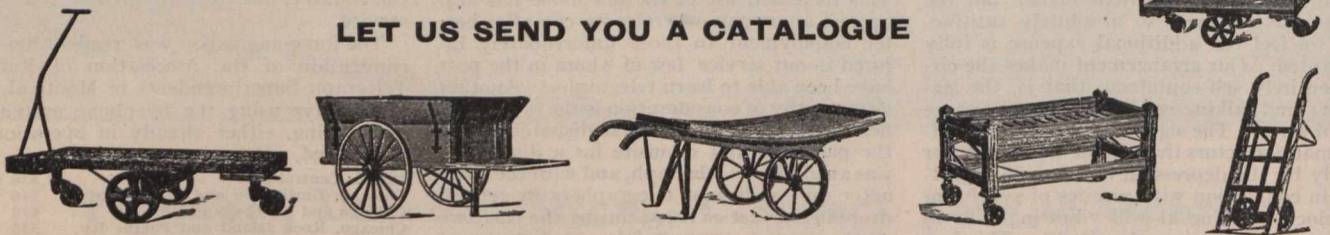
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## Orders by the Railway Commissioners.

Beginning with June, 1904, we have published in each issue summaries of orders passed by the Board of Railway Commissioners, so that subscribers who have filed our paper have a continuous record of the Board's proceedings. No other paper has done this. Complete copies of any of the orders summarized below, or of others previously passed by the Commission, will be furnished for 25 cents, cash to accompany requests for copies in all cases.

5801. Dec. 10.—Authorizing E. Raymond to construct a crossing over C.P.R. in Chatham tp., Que.

5802. Dec. 10.—Authorizing North-West Ranching and Packing Co. to construct two highways across Calgary and Edmonton Ry. in the w. ½ sec. 16, tp. 15, r. 27, w. 4th. m., Alta.

5803. Dec. 10.—Dismissing application of C.N.Q.R. for leave to construct a spur line to Argenteuil Lumber Co.'s Mills, Morin's Flats, Que.

5804. Dec. 10.—Authorizing Hamilton, Waterloo and Guelph Ry. to take certain G.T.R. lands in Hamilton, Ont.

5805. Dec. 10.—Authorizing Rochester tp., Essex, Ont., to erect wires across C.P.R. at Belle River, Ont.

5806. Dec. 10.—Authorizing Creelman Telephone Co. to erect wires across C.P.R. in Saskatchewan.

5807, 5808. Dec. 10.—Authorizing the Saskatchewan Government Telephones to place wires across C.P.R. near Wauchope, Sask.

5809. Dec. 10.—Authorizing Mallorytown Independent Telephone Co. to place wires across G.T.R. at Mallorytown, Ont.

5810. Dec. 10.—Authorizing C.P.R. to open for traffic the portions of its second track between mileages 31.6 to 31.63, 106.0 to 106.2, 112.6 to 124.7, 71.9 to 89.9, 124.7 to 130.3, and 140.8 to 148.0, Fort William section.

5811. Dec. 10.—Authorizing Manitoba Government Telephones to place wires across C.N.R. to J. Bray's residence, Portage la Prairie, Man.

5812. Dec. 10.—Authorizing Mallorytown Independent Telephone Corporation to place wires across G.T.R. at Yonge Mills village, Ont.

5813. Dec. 10.—Authorizing Barrie & Angus Telephone Co. to place wires across C.P.R. at Utopia station, Ont.

5814. Dec. 10.—Authorizing Consumers' Gas Co. to lay a main under C.P.R. on Elizabeth St., West Toronto, Ont.

5815. Dec. 10.—Authorizing Adams River Lumber Co. to lay telephone wires across C.P.R. near Shuswap station, B.C.

5816. Dec. 10.—Authorizing the Bell Telephone Co. to place wires across G.T.R. at St. Agnes, Que.

5817. Dec. 10.—Authorizing Bell Telephone Co. to place wires across C.P.R. near St. Mary's, Ont.

5819. Dec. 12.—Authorizing the British Columbia Telephone Co. to place wires across C.P.R. at Duncan, B.C.

5820. Dec. 11.—Authorizing Andover and Perth Electric Light Commissioners to place wires across C.P.R. near Perth, N.B.

5821. Dec. 11.—Authorizing the Falkirk Telephone Association to place wires across G.T.R. at Ailsa Craig, Ont.

5822. Dec. 11.—Authorizing the British Columbia Telephone Co. to place wires across C.P.R. at Hammond station, B.C.

5823. Dec. 11.—Authorizing Bell Telephone Co. to place wires across Central Ont. Ry. near Trenton, Ont.

5824. Dec. 11.—Authorizing Princeton and Drumbo Telephone Co. to place wires across G.T.R. near Bright, Ont.

5825. Dec. 11.—Authorizing G.T.R. to open for traffic its new second track from

North Parkdale, Toronto, to St. Clair Ave., West Toronto.

5826. Dec. 7.—Dismissing application of Mannville Board of Trade, for order directing C.N.R. to construct a crossing west of the station joining Main St., Mannville, Alta.

5827, 5828. Dec. 11.—Authorizing the Andover and Perth Electric Light Commissioners to place wires across C.P.R. in Andover, N.B.

5829. Dec. 11.—Authorizing Princeton & Drumbo Telephone Co. to place wires across G.T.R. near Gobles, Ont.

5830. Dec. 11.—Authorizing the Bell Telephone Co. to place wires across Central Ont. Ry. near Trenton, Ont.

5831. Dec. 14.—Extending till Jan. 15, 1909, time for installation of interlocking plant at crossing of the C.N.Q.R. with the C.P.R. east of Lorette, Que.

5832. Dec. 14.—Authorizing Montreal St. Ry. to operate trains over crossing of Chateauguay and Northern Ry. at Maisonneuve, without being brought to a stop; the C. & N.R. trains to be prepared to come to a stop 75 ft. on the east and west sides of the semaphore and the blade of the semaphore to the west to be painted red.

5833. Dec. 14.—Approving location of the V.V. & E. Ry. & Nav. Co. from the west line of tp. 26 to east line of sec. 15, tp. 16, New Westminster district, B.C.

5834. Dec. 14.—Authorizing C.P.R. to construct a spur line to Graves Bigwood Co.'s premises, Parry Sound district, Ont.

5835. Dec. 14.—Authorizing C.N.O.R. to purchase a portion of Norrow's lot no. 139, and to construct a suitable crossing on lot 140, con. A, Foley tp., Ont.; and to fence its right-of-way.

5836. Dec. 23.—Authorizing Saskatchewan Government Telephones to carry wires across C.N.R. tracks at Disley, Sask.

5837. Dec. 14.—Approving Standard Passenger Tariff C.R.C. B2 of Chatham, Wallaceburg and Lake Erie Ry. between Chatham and Erie Beach, Ont., showing a basis of 3c. a mile.

5838. Dec. 14.—Dismissing application of C.N.O.R. for authority to construct its line across the Montreal-Ottawa Road, Cumberland tp., Ont., and across Cameron St., near Cumberland station grounds, mileage 42 west from Hawkesbury, Ont.

5839. Dec. 14.—Dismissing application of A. LaForest, Megantic, Que., for authority to lay a sewer pipe under C.P.R. in Levis, Que.

5840. Dec. 15.—Approving by-law 24 of New Brunswick and Prince Edward Island Ry., authorizing J. Wood, President, to prepare and issue tariffs of tolls for traffic.

5841. Dec. 15.—Authorizing the C.N.O.R. and the C.P.R. Cos. to operate trains over the crossing on lot 12, con. 2, Cleland tp., Ont., near Elbow Creek, without being brought to a stop.

5842. Dec. 15.—Granting leave to Brantford and Hamilton Elec. Ry. to operate cars over G.T.R. crossing in Brantford, Ont., without being brought to a stop.

5843, 5844. Dec. 15.—Authorizing Bell Telephone Co. to place wires across G.T.R. near Tottenham and Novar stations, Ont.

5845. Dec. 14.—Dismissing application of J. Malkin & Sons, Sprucedale, Ont., complaining of discrimination by the G.T.R. in rates on tan bark from Sprucedale to Berlin, as compared with rates from Burk's Falls and Sundridge to Berlin and London, Ont.

5846. Dec. 17.—Authorizing Bell Telephone Co. to place wires across the tracks of the G.T.R. 1¼ miles north of Alvinston station, Ont.

5847. Dec. 1.—Directing that all proceed-

ings by V.V. & E. Ry. & Nav. Co. under orders 3505, 4578, and 5494, in retaking of lands for diversion of River road, Delta, B.C., be stayed until further consideration by the Board, the company to be at liberty to proceed with construction without prejudice to the rights of the land owners and at the company's peril.

5848. Dec. 15.—Authorizing Chatham, Wallaceburg and Lake Erie Ry. to construct its railway across certain highways in Raleigh and Harwich tps., Ont., subject to certain conditions.

5849. Dec. 11.—Authorizing the Bell Telephone Co. to place wires across Central Ont. Ry. near Trenton, Ont.

5850-5854. Dec. 15.—Authorizing the Toronto and Niagara Power Co. to place wires across G.T.R. at Davenport road, York County, Brant House, Burlington, and Burlington Beach, Ont.; across C.P.R. near Weston road, York County, and across G.T.R. near Weston road, York County, Ont.

5855. Dec. 15.—Authorizing the C.N.O.R. to construct its railway across certain highways in North Plantagenet tp., Ont.

5856. Dec. 15.—Approving by-law of Esquimaux and Nanaimo Ry. authorizing L. D. Chetham, Victoria, B.C., to prepare and issue tariffs of tolls to be charged for traffic.

5857. Dec. 7.—Dismissing application of Government of Alberta for leave to place wires across C.P.R. at Lethbridge, Alta.

5858. Dec. 17.—Authorizing the Bell Telephone Co. to place wires across C.P.R. at Holland Centre, Ont.

5859. Dec. 17.—Authorizing the Bell Telephone Co. to place wires across G.T.R. tracks near Alvinston station, Ont.

5860. Dec. 17.—Authorizing the Bell Telephone Co. to place wires across C.P.R. near Holland Centre, Ont.

5861. Dec. 16.—Authorizing Toronto and Niagara Power Co. to place wires across Pere Marquette Ry. at Welland, Ont.

5862. Dec. 16.—Dismissing application of town of Lindsay, Ont., to lay sewer pipe under G.T.R.

5863. Dec. 14.—Authorizing town of Buckingham, Que., to lay water pipe under C.P.R.

5864. Dec. 1.—Authorizing Toronto and Niagara Power Co. to place wires across Toronto Suburban Ry. at Bathurst St., Toronto.

5865. Dec. 16.—Dismissing application of Buffalo, Niagara and Toronto Ry. for authority to construct a branch line between St. Davids and St. Catharines, Ont.

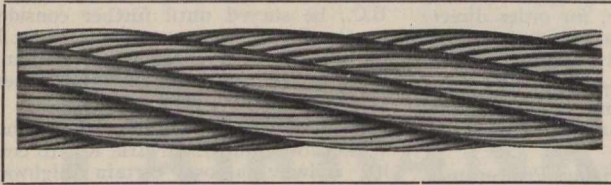
5866, 5867. Dec. 16.—Authorizing C.N.O.R. to construct its railway across the highway between Clarence and Cumberland tps., and across certain highways in West Hawkesbury and Alfred tp., and the town of L'Orignal, Prescott Co., Ont.

5868. Dec. 16.—Dismissing application of Buffalo, Niagara & Toronto Ry. for approval of plan and profile showing location of line between Niagara-on-the-Lake and Welland, Ont.

5869. Dec. 16.—Authorizing C.N.O.R. to construct its railway across the highway on lot 20, con. 2, York tp., Ont.

5870. Dec. 18.—Authorizing Lake Erie and Detroit River Ry. and the G.T.R. to operate trains over the crossing of the two roads in Chatham, Ont., permitting the L.E. & D.R.R. to dispense with the north distant signal at the crossing, and directing the L.E. & D.R.R. to trim off trees that partially obstruct view of the south distant signal on its line.

5871-2. Dec. 18.—Authorizing Manitoba Government Telephones to place wires across C.P.R. at Carter Ave., Elmwood, and near Harding.



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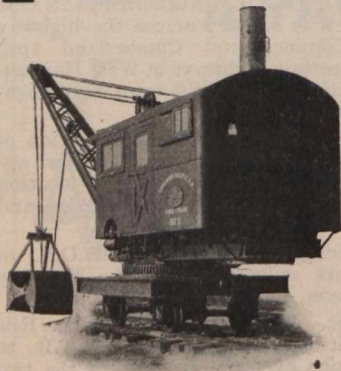
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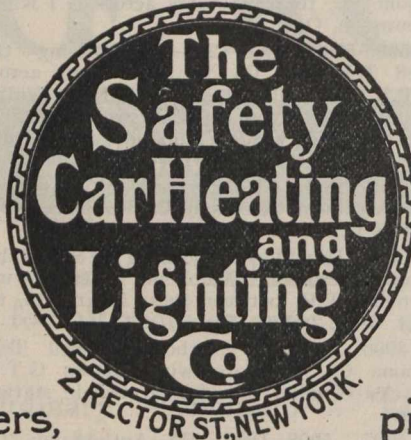
SUCCESSORS LATE  
JAMES COOPER

# Montreal

5873. Dec. 18.—Authorizing Saskatchewan Government Telephones to place wires across C.P.R. between secs. 14 and 15-7-30, west of 1st mer., Sask.
- 5874-5. Dec. 18.—Authorizing Norfolk County Telephone Co. to place wires across G.T.R. at Simcoe, Ont.
5876. Dec. 18.—Authorizing Manitoba Government Telephones to place wires across C.P.R. 4½ miles northeast of Winnipeg station.
5877. Dec. 18.—Authorizing National Transcontinental Ry. to place wires across C.P.R. at Vermillion Bay, Ont.
5878. Dec. 18.—Authorizing Laval Electric Co. to place wires across C.P.R. at L'Epiphanie, Que.
5879. Dec. 17.—Dismissing application of Quebec, Montreal and Southern Ry. for authority to construct a branch line near St. Angele, Que.
- 5880-1. Dec. 17.—Rescinding orders 5695 and 5696 authorizing Bell Telephone Co. to place wires across Pere Marquette Rd. at Adelaide St., London, Ont.
5882. Dec. 21.—Ordering Grand Valley Ry. to file its tariff of tolls with the Board.
5883. Dec. 16.—Authorizing G.T. Pacific Telegraph Co. to place wires across C.P.R. west of Portage la Prairie, Man.
5884. Dec. 17.—Dismissing the application of C.P.R. (Ont. & Que. Ry. Co.) for authority to take additional lands, for railway purposes, between Mountain and Windsor Sts., Montreal.
5885. Dec. 22.—Rescinding order 5661, Nov. 10, 1908, and directing Berlin and Waterloo St. Ry. to pay the G.T.R. 85 cents a day from Dec. 12, 1905, to May 1, 1907; and that the Light Commissioners of Berlin, Ont., pay the G.T.R. 90 cents a day from May 1, 1907, re wages of watchman.
5886. Dec. 22.—Authorizing Quebec, Montreal and Southern Ry. to construct spur line to the Distillery Packing and Vinegar Co.'s premises, St. Hyacinthe, Que.
5887. Nov. 4.—Authorizing St. John Ry. upon maintaining a semaphore at the crossing, to operate its line across the C.P.R. in Lancaster parish, county and city of St. John, N.B., without installing an interlocker or other similar appliance, for 12 months from Nov. 4, 1908.
5888. Dec. 16.—Regulations for protection of railway employes. (See pg. 95.)
5889. Dec. 22.—Authorizing C.P.R. Co. to construct revised location of its railway from lot 59, con. 2 E, Glenelg tp., Ont., to park lot 1, north of George St., Durham, Ont.
5890. Dec. 18.—Authorizing C.N.O.R. and G.T.R. to operate trains over crossing near Beaverton, Ont., without being brought to a stop.
5891. Dec. 22.—Authorizing C.N.O.R. to construct branch line partly within Hawkesbury town and partly within West Hawkesbury tp., Ont., from its main line to a junction with the G.T.R. at Riordan's Mills; the branch line to be completed within two years from date of order.
5892. Dec. 1.—Authorizing Toronto and Niagara Power Co. to erect wires across Toronto Suburban Ry. at the Weston Road, York County, Ont., subject to certain conditions.
5893. Dec. 21.—Authorizing the C.N.Q.R. to erect telegraph wires across C.P.R. at crossing east of Lorette, Que.
5894. Dec. 21.—Authorizing the Niagara, St. Catharines and Toronto Ry. to construct a spur from Hedley-Shaw Milling Co.'s mills, Thorold, Ont.; and to complete its branch line within two years from date of order.
5895. Dec. 21.—Authorizing C.N.O.R. to place telegraph wires across G.T.R. at Hawkesbury, Ont.
5896. Dec. 23.—Authorizing G.T.R. to construct spur branch line and two spurs therefrom to the Provincial Steel Co.'s property, Cobourg, Ont.
5897. Dec. 21.—Authorizing the Bell Telephone Co. to place wires across M.C.Rd. near Inwood station, Ont.
5898. Dec. 21.—Authorizing the Bell Telephone Co. to place wires across C.P.R. at Main Road, Megantic, Que.
5899. Dec. 21.—Authorizing Bell Telephone Co. to place wires across G.T.R. at Powassan, Ont.
- 5900-5903. Dec. 21.—Authorizing the Bell Telephone Co. to place wires across C.P.R. 4½ miles west of Holland Centre, Ont.; 1 mile east of Chatsworth station, Ont.; 5 miles west of Holland Centre, Ont.; and ¼ mile east of Chatsworth station, Ont.
5904. Dec. 21.—Authorizing Claremont and Ashburn Telephone Co. to place wires across C.P.R. at Claremont, Ont.
5905. Dec. 21.—Authorizing the Saskatchewan Government Telephones to erect wires across C.P.R. between secs. 10 and 15, tp. 8, r. 5, w. 2nd m., Sask.
5906. Dec. 21.—Authorizing Bell Telephone Co. to place wires across G.T.R. tracks ¾ mile east of Beaconsfield station, Que.
- 5907, 5908. Dec. 21.—Authorizing the Saskatchewan Government Telephones to place wires across the C.P.R. between secs. 8 and 11, tp. 8, r. 4, w.p.m., Sask.; and between sec. 18, tp. 8, r. 5, and sec. 13, tp. 8, r. 6, w. 2nd m., Sask.
5909. Dec. 21.—Authorizing Claremont and Ashburn Telephone Co. to place wires across C.P.R. at Dagmar, Ont.
- 5910-5912. Dec. 21.—Authorizing Barrie and Angus Telephone Co. to place wires across G.T.R. tracks at four points.
5913. Dec. 21.—Authorizing Bell Telephone Co. to place wires\* across G.T.R. near Strathmore station, Que.
5914. Dec. 21.—Authorizing C.P.R. to construct spur line to Sunbeam Incandescent Light Co.'s premises, Toronto; the spur to be completed within two years from date of order.
- 5915, 5916. Dec. 24.—Authorizing British Columbia Telephone Co. to place wires across V.V. & E. Ry. at Sapperton and Kamloops, B.C.
5917. Dec. 22.—Authorizing G.T.P.R. to carry freight over the portion of its line from Winnipeg to Battle River, Alta., notwithstanding that such portion has not been opened for carriage of traffic, in accordance with Railway Act, sec. 261; and cancelling order 3780, Oct. 11, 1907.
5918. Dec. 22.—Authorizing G.T.P.R. to carry freight over its line from Fort William, Ont., to end of track, mileage 0.00 to 188.77, Ontario, notwithstanding that such line has not been opened for carriage of traffic in accordance with Railway Act, sec. 261.
5919. Dec. 10.—Authorizing C.P.R. to open for carriage of traffic its Moose Jaw North-west branch, in Saskatchewan, subject to condition that trains be not run at a greater speed than 15 miles an hour.
5920. Dec. 26.—Authorizing Bell Telephone Co. to place wires across C.P.R. near Strathmore station, Ont.
5921. Dec. 26.—Authorizing Vancouver Power Co. to place wires across C.P.R. at or near Barnet, B.C.
5922. Dec. 26.—Authorizing C.P.R. Co. to place telegraph wires across G.T.R. in Bentinck tp., Ont.
5923. Dec. 28.—Authorizing Town of Cobourg, Ont., to lay pipe under G.T.R. tracks on Ontario St.
5924. Dec. 22.—Authorizing Montreal Terminal Ry. to cross C.N.Q.R. opposite Vulcan Cement Co.'s works, Longue Pointe, Que.
5925. Dec. 22.—Directing that Quebec, Montreal and Southern Ry., be at expense of changing details at junction of its line with the Rutland Rd. and the G.T.R. at Noyan Jct., Que.
5926. Oct. 20.—Authorizing the M.C. Rd. to construct crossing over its railway on boundary line between C. and F. Slade's farms, Raleigh tp., Ont.
5927. Dec. 24.—Authorizing the M.C. Rd. to construct bridge at Charing Cross, Ont.
5928. Dec. 28.—Rescinding order 5803, Dec. 10, 1908, and authorizing C.N.Q.R. to construct a spur line to Argenteuil Lumber Co.'s mills at Morin Flats, Que., the spur to be completed within two years from date of order.
5929. Dec. 28.—Authorizing the G.T.P.R. to construct a double-track passenger bridge across the Assiniboine River at Winnipeg, Man.
- 5930-5933. Dec. 28.—Authorizing Manitoba Government Telephones to place wires across C.N.R. at three places northeast of St. Boniface station, and at ½ mile east of Swan Lake.
5934. Dec. 28.—Approving deviation of G.T.R. spur line from west side of King St., Chesley, Ont., to the Chesley Lake and Novelty Co.'s premises, Chesley, Ont.
5935. Jan. 11. Approving Grand Valley Ry. Co.'s by-law authorizing M. A. Verner, or such officers as the directors may designate, to issue tariffs of traffic tolls.
5936. Dec. 22.—Approving fire extinguisher for use in Central Ontario Ry. cars.
5937. Dec. 22.—Authorizing the Okabena Telephone Association to place wires across C.P.R. in s.w. ¼ sec. 32, tp. 15, r. 23, w. 2nd m., Sask.
5938. July 15.—Authorizing Walkerton and Lucknow Ry. to construct spur lines of railway in Hanover, Ont., to the Knechtel Furniture Co. and Hanover Portland Cement Co.'s premises.
5939. Oct. 6.—Authorizing the G.T.R. to construct a branch line, with spurs therefrom, to the Simonds Canada Saw Co., Jenkins Bros., the Lang Mfg. Co., and other premises, Montreal.
5940. Dec. 22.—Authorizing C.N.O.R. to construct its line across and divert the Montreal road and the sideroad between the counties of Russell and Prescott, at about mileage 28 west from Hawkesbury, Ont.
- 5941, 5942. Dec. 23.—Authorizing the G.T.P. Ry. Co. to divert highways at various points in Manitoba.
5943. Dec. 16.—Directing St. John's Electric Light Co. to forthwith remove wires placed over C.P.R. at Stevenson St., St. John's, Que.
5944. Dec. 23.—Authorizing C.P.R. to construct a spur line to the Royal Collieries Co.'s premises at Lethbridge, Alta., the spur to be completed within two years from date of order.
5945. Dec. 23.—Authorizing C. E. Knister, of Comber, Ont., to place wires across M.C. Rd. in Tilbury West tp., Ont.
5946. Dec. 23.—Approving by-law passed by M.C. Rd. authorizing C. F. Daly, Vice-President, in respect of freight and passenger traffic; O. W. Ruggles, General Passenger Agent, in respect of passenger traffic, and W. C. Rowley, General Freight Agent, and N. D. Chapin, Chief of Tariff Bureau, in respect of freight traffic, to prepare and issue tariffs of tolls to be charged.

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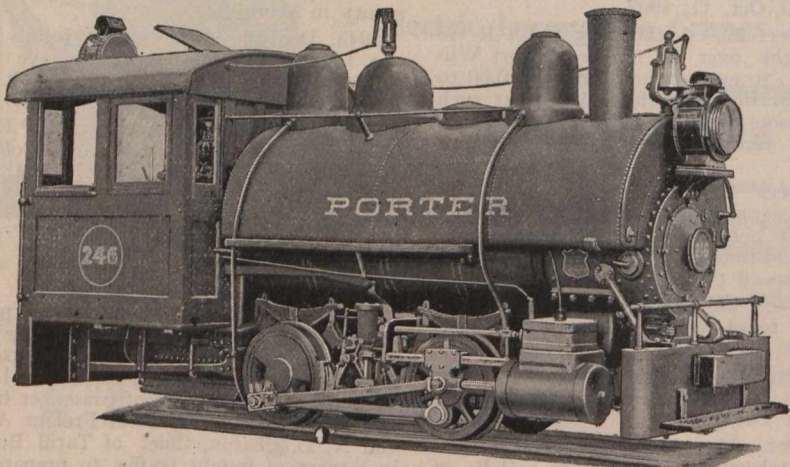
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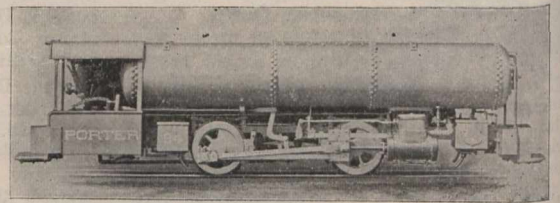
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5947. Dec. 22.—Authorizing G.T.P.R. to construct a bridge between Watson Island and Kaien Island, B.C.

5948. Dec. 23.—Approving location of C.P.R. station at Coldwater, Ont.

5949-5952. Dec. 23.—Authorizing Saskatchewan Government Telephones to place wires across C.N.R. at four points near Findlater and Bethune, Sask.

5953. Dec. 14.—Dismissing application of the Chapple municipality, Ont., for order directing C.N.R. to place an agent at Barwick.

5954. Dec. 21.—Directing railway companies to file distances between stations. (See pg. 95.)

5955. Dec. 15.—Ordering C.N.R. to file joint tariff on grains and grain products from points on Q., L.L., and S. Rd. & Steamboat Co.'s railway to Pacific Coast terminal points and intermediate stations in British Columbia. (See pg. 95.)

5956. Dec. 22.—Directing Quebec, Montreal and Southern Ry. to prepare plans for new stations at Sorel and Pierreville Que., for the approval of the Board, within two months from the date of order; that the Q.M. & S. Ry., operate its trains according to its timetables, unless prevented from doing so by reason of accidents, snow storms, or causes of a like nature; that all frogs on its line be packed in accordance with the Railway Act; that signboards be erected; and that the company shall be liable to a penalty of \$50 a day for a breach of any of the terms of this order.

5957. July 14.—Authorizing Guelph and Goderich Ry. to cross G.T.R. spur at Listowel, Ont.

5958. Dec. 23.—Authorizing Saskatchewan Government Telephones to place wires across C.N.R. near Disley, Sask.

5959. Dec. 15.—Dismissing application of City of Chatham, Ont., for order directing C.P.R. to provide gates at certain street crossings, and electric bells or other systems of warning at other crossings.

5960. Dec. 23.—Authorizing Saskatchewan Government Telephones to place wires across C.N.R. at Chamberlain, Sask.

5961. Dec. 22.—Amending error in plan and book of reference in connection with order 4498, dated Mar. 24, 1908, wherein, through mistake, Jos. Charron is named as owner of lands instead of F. Charron.

5962. Dec. 23.—Authorizing C.P.R. to operate bridges on its Fort William section at mileages, namely: 30.44, 64.4, 58.5, 72.27, 31.98, 88.73, 30.08, 31.62, 111.45, 112.89, 68.61, 139.98, 28.63, 101.11, 106.17, 48.24, 97.83, and 94.06.

5963. Dec. 23.—Extending until June 1, 1909, time within which C.N.R. shall do the work required in order 5742 of Dec. 1, 1908.

5964. Dec. 29.—Dismissing application of Grenfell Milling and Elevator Co., Grenfell, Sask., for leave to erect electric light wires across C.P.R.

5965. Dec. 29.—Dismissing application of City of Saskatoon, Sask., for permission to lay water main under C.N.R. tracks.

5966. Dec. 29.—Authorizing Manitoba Government Telephones to place wires across C.N.R. 4½ miles northeast of St. Boniface station.

5967. Dec. 29.—Dismissing application of Village of Mannville, Alta., for order directing C.N.R. to provide a street crossing.

5968. Dec. 29.—Authorizing Manitoba Government Telephones to place wires across C.N.R. near Altamont.

5969. Dec. 29.—Authorizing Bell Telephone Co. to place wires across C.N.R. at Prince Albert, Sask.

5970. Dec. 29.—Authorizing C.P.R. to place stop-block 267 feet from switch leading to McIntosh-Gullett Co.'s siding at North Toronto, key of which shall be in custody of McIntosh-Gullett Co., who shall be responsible for seeing that the stop-block is at all times closed and locked when not in use.

5971. Dec. 24.—Approving revised location of the G.T.P.R., Prince Rupert easterly, mileage 10.64 to mileage 50, Coast District, B.C.

5972. Dec. 18.—Approving Orford Mountain Ry. Standard Passenger Tariff C.R.C. no. 20.

5973. Dec. 23.—Authorizing M.C. Rd. to use the interlocking plant at crossing just west of Ross St., St. Thomas, Ont.

5974. Dec. 23.—Authorizing Manitoba Government Telephones to place wires across C.N.R. at Oakville, Man.

5975. Dec. 29.—Authorizing C.N.R. to open for traffic the portion of its line from Lumsden to Disley, Sask., the company undertaking to do before July 1, 1909, all fencing necessary.

5976. Dec. 29.—Dismissing application of Hinton Electric Co. for leave to erect wires across C.P.R. in Enderby, B.C.

5977. Dec. 29.—Authorizing the removal of the east derail and home semaphore at Walkerville Jct., Ont., 375 and 428 ft. respectively, from the Pere Marquette crossing with the C.P.R.

5978. Dec. 29.—Directing C.N.R. to construct certain highway crossings over its Oak Point branch, and pending the completion of a permanent highway crossing at mileage 27, the company to provide at once a temporary crossing and put it in such shape that teams may cross in safety during winter.

#### Saskatchewan Dept. of Railways, Etc.

The Department of Railways, Telegraphs and Telephones for Saskatchewan was created in May, 1908, by an act of the Legislature, which provides for the appointment of a member of the Executive Council by the Lt.-Governor to act as commissioner and of a deputy commissioner by the Lt.-Governor in Council, who shall have jurisdiction over all matters connected with railways over which the Provincial Government may have control, and over every telegraph and telephone system which may be constructed or acquired by the commission, unless otherwise provided. Power is also vested in the commission to construct, equip and operate telegraph and telephone systems, and to purchase, either in whole or part, any existing systems. The commissioner may summon witnesses, require deliveries of documents, and hear evidence on oath, penalties being provided in the event of refusal in the first two cases.

The chief work during the past year has been in connection with the Government telephone system. Long distance lines are in course of construction between Regina and Antler, and Lumsden and Saskatoon, and will shortly be completed. Twenty-one companies had been organized and incorporated under the Rural Telephone Act to the end of 1908, and about 20 companies are in course of organization. Hon. J. A. Calder is the Minister of the Department; S. P. Porter, Deputy Commissioner; J. Sutherland, Superintendent of Telephones; W. Warren, Engineer; D. C. McNab, Inspector of Rural Telephone companies; C. F. Smith, Accountant; R. Chown, Draughtsman; and H. Willsmer, Chief Clerk. The Department also maintains a staff of line inspectors, pole inspectors, storekeepers, etc.

#### St. Clair Tunnel Operating Results.

In our Dec. issue we devoted a large amount of space to an illustrated description of the electrification of the St. Clair Tunnel. We are now able to present some information as to the results of the operation of the tunnel by electric locomotives as compared with steam locomotives.

Electrification has increased the capacity of the tunnel fully 30%; it has removed a serious handicap from the passenger service and reduced the operating expenses. These improvements have been effected by the single-phase locomotive. The electric locomotives handle 1,000 ton trains, where the steam locomotives handled 700 ton trains. The electric locomotives climb the 2% grades with these trains at 10 miles an hour, where the steam locomotives were barely able to pull out at 3 miles an hour. Under electric conditions the average time from summit to summit is 10 minutes, and the average number of cars per train is 27.3, and this number can be increased. Under steam conditions the average time from summit to summit was 15 minutes, and the average number of cars per train was 19.7. During the first 24 hours of continuous electric service 1,529 freight cars and the usual number of passenger trains were put through the tunnel. This was done without any attempt to establish a record. The record under the steam conditions (exclusive of one for which extraordinary preparations were made) was 1,501 freight cars and the usual number of passenger trains. The average number of freight cars per day in Jan., 1908 (steam service), was 937, the average in Feb. was 682, in March 923. The low average in Feb. was due mainly to snow blockades resulting from 11 blizzards that occurred during that month. During the first half of March the business that offered exceeded the capacity of the tunnel. Just after the middle of March an 18-hour-per-day electric service was instituted. The first time the service was carried through 24 hours (March 23), the result indicated above was obtained. For several years past the business offered during the season of closed lake navigation has at times exceeded the capacity of the tunnel. With the electric service the capacity of the tunnel exceeds the capacity of the terminals. A run can be made through the tunnel every 15 minutes. Assuming 70% of these runs to be freight, and the average number of cars per train to be 30, the total is 2,016 freight cars a day, which is more than 30% greater than was the steam capacity of the tunnel.

The electric locomotives have transformed the atmospheric conditions of the tunnel. The air has been cleared of the exhaust steam and the gases of combustion. The tunnel is now as clean and well lighted as a city street, and the air is as pure as the St. Clair River air. Air brakes can now be used on all the trains. With the steam service hand brakes had to be used on freight trains. Had the air brakes been used, a break-in-two in the tunnel would have held the engine in the tunnel beyond the danger limit. Fortunately no accident ever occurred to a passenger train during the 18 years of steam service. There have been, of course, numerous break-in-twos and occasional derailments with freight trains, some of which accidents were accompanied with results that gave the tunnel a sinister reputation. With the electric service the tunnel trip is a safe and comfortable one. Moreover, the elimination of the exhaust steam and the corroding fumes has done away with what was a source of depreciation on the passenger rolling stock. A further saving in operation has been effected, due to the fact that the electric locomotives are less severe on the rails than the steam locomotives were.

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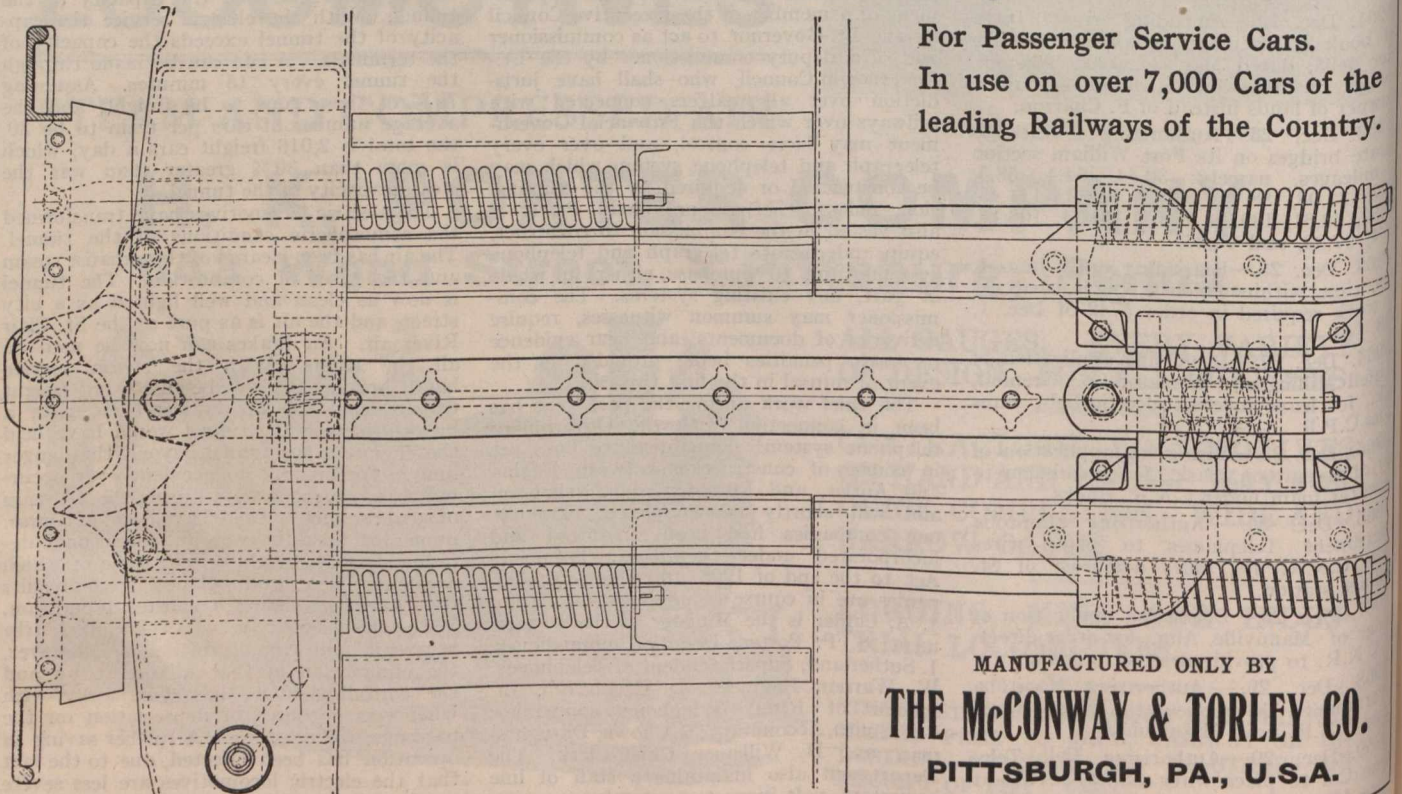
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The fuel bill for the locomotives during the last six months of steam service averaged \$4,956 a month. The fuel bill for the first six months of electric service averaged \$1,152.60 a month. Hard coal costing \$6 a ton was used on the steam locomotives; bituminous coal costing \$2 a ton is used in the tunnel power station. The maintenance of the steam locomotives averaged 13.6c. per locomotive mile. The maintenance of the electric locomotives during the first six months of service was 4.3c. per locomotive mile. There has been a 15% reduction in the total wages paid to locomotive crews, and 23% reduction in the total wages paid to train crews. The first six months of electric operation shows a 44% reduction on the cost of steam operation.

The electric locomotives have handled the entire tunnel service since May 17, 1908, prior to which date there were two months of 18-hours-per-day electric service, and prior to which period there was some preliminary electric operation. The transition period occupied about 10 weeks, continuous electric service not being inaugurated until the men and equipment were thoroughly seasoned. Gradual transition was, of course, but common prudence, as the results have abundantly proved. The change-over was made with practically no interference to traffic, and the new service has been a success from the start. Each one of the five original locomotives has made more than 23,000 miles. The wear on the gears is inappreciable, and the pinions, from present indications, will each make 50,000 miles. Main motor brushes are making 15,000 miles and the pantograph shoes average 2,000, some have made 3,400 miles. The life of the brake shoes has been quite variable, however. The original shoes made from 5,000 to 6,000 miles. Steel shoes have been found to be quite unsatisfactory. Various kinds of cast iron shoes are now being tried. Their life is ranging from 400 to 2,000 miles. The commutation of the motors is good. The control system is practically troubleless. There has been some weeding out of defects that were not discovered during test, but the amount has been small. Two main motors and one auxiliary motor have failed. The trouble in each instance seems to have been due to defective workmanship. During the last six months there have been 34 delays to traffic, nine of which were chargeable to the electric locomotive. The power consumption for the passenger service is averaging about 38 watt hours per ton mile, and for the freight service about 35 watts per ton mile. Trouble with the overhead construction outside the tunnel has been limited to several lightning arrester failures, and the replacement of some three or four trolley ears. In the tunnel but two insulators have failed since the commencement of the service. On one occasion the trolley wire was burnt in two through the careless resetting of the pantograph of a work train locomotive standing in the tunnel. On another occasion a box car with an extraordinarily high handbrake wheel grounded the tunnel trolley. The trolley breaker cleared the trouble, and no damage to the trolley wire resulted. The wear on the trolley wire is insignificant.

The foregoing is extracted from a paper by H. L. Kirker, who was resident engineer for the Westinghouse Co. in connection with the installation of the electric equipment, etc.

The C.P.R. is considering the withdrawal or, at any rate, the curtailment of the half-fare rate extended on its western lines to clergymen and ministers. All permits have been cancelled pending a decision as to the company's policy. It is stated that the half-fare privilege will be extended only to certain districts of Saskatchewan and Alberta for the future.

**Grand Valley Railway Tariffs.**

The Board of Railway Commissioners passed the following order 5882, Dec. 21: In the matter of the tariff of tolls of the Grand Valley Railway Co., the company not having filed its tariff of tolls with the Board in accordance with the provisions of the Railway Act, although it has been requested to do so by letter from the Secretary of the Board on several occasions: It is ordered that the Company file its tariff of tolls with the Board, pursuant to sec. 314 of the Railway Act, within 15 days from the date of this order. And it is further ordered that the President, the Secretary, and the directors of the Company shall have the tariff of tolls of the Company filed with the Board in accordance with the provisions of this order. Any person wilfully omitting or failing to comply with the provisions of this order shall be liable to a penalty of \$100 for every day that he shall omit or fail to comply with the provisions of this order."

**Distances Between Stations.**

The Board of Railway Commissioners passed the following order 5954, Dec. 21: In pursuance of powers conferred upon it by secs. 26, 30, 322, 326, 330 and 339, of the Railway Act, and of all other powers possessed by the Board in that behalf: Upon the report and recommendation of the Chief Traffic Officer of the Board it is ordered that railway companies subject to the Board's jurisdiction file with the Board, within three months from the date of this order, the exact distances, to not exceeding two decimal points, between their stations, such tables to bear a C.R.C. number in both the freight and passenger tariff series, and to be in the form, size, and style prescribed by the Board for freight and passenger tariffs. And it is further ordered that the said railway companies shall deposit and keep on file a copy of such tables at the places and in the manner provided by sec. 339 of the Railway Act, in respect of tariffs of tolls.

**Effect of Flat Wheels on Rails.**

By H. H. Vaughan, Assistant to the Vice-President C.P.R.

An article by E. L. Hancock appeared in the American Engineer a few months ago discussing the effect of a flat wheel on a rail in which it was calculated that the blow delivered by the wheel was exceedingly serious in its amount and increased very considerably with the speed. This calculation was based on two assumptions, namely, that the weight carried by the wheel could be considered as a weight concentrated at the centre of the axle, and that the leading edge of the flat spot remained in contact with the rail while this weight described a circle round it. Neither of these assertions is justifiable. In the first place, allowing that the wheels, together with such other parts of a car or tender as are carried below the springs, may be considered as concentrated at the axle, the body of the car is spring supported and cannot be considered as acting in the manner assumed, and in the second place the edge of a flat spot on a wheel with any given weight concentrated at its centre would not remain in contact with the rail after a certain critical speed is reached. A more reasonable method of considering this problem is to assume that the weight supported by each wheel below the springs is concentrated at the centre of the axle and that this weight is pressed down by a force equal to the weight supported by each wheel above the springs and these quantities

may be roughly taken at 1,600 and 14,400 lbs., respectively, giving a total weight per wheel of 16,000 lbs., or of 128,000 lbs. per car. On this basis the problem has been thoroughly worked out by L. S. Spilsbury, of the office of the Engineer of Bridges, C.P.R., whose mathematical discussion is given below. The results of this thorough and ingenious analysis are entirely different from those previously obtained and may be summarized as follows:

The striking velocity of the trailing edge of the flat spot on the rail increases proportionately to the speed up to a critical speed at which the leading edge leaves the rail. This critical speed under the assumption as to weights, etc., specified above, is about 21 ft. per second, or 14.5 miles per hour for a 33-in. wheel. After this critical speed is reached, there is a small range of higher speeds during which the leading edge of the flat spot after leaving the rail hits it again almost instantly, then one slightly higher speed at which the flat surface strikes the rail, after which the leading edge of the flat spot, after leaving the rail, does not again touch it, and the wheel leaves the rail until the trailing edge of the flat spot strikes it; this last condition continues indefinitely as the speed increases. After this last condition is reached the velocity with which the trailing edge of the flat spot strikes the rail is constant. It varies, for small flats, directly as the length of the flat, directly as the square root of the ratio between the total weight supported by the wheel to the weight below the springs and inversely as the square root of the radius of the wheel. For a 33-in. wheel supporting a total weight equal to 10 times the weight below the springs, this constant and maximum striking velocity is as follows:

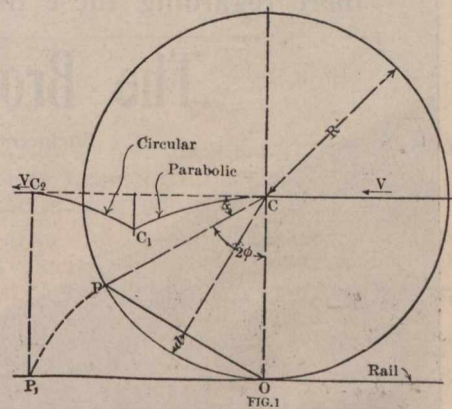
- For 3" flat spot..... 3.8 feet per second.
- For 4 1/2" flat spot..... 5.7 feet per second.
- For 6" flat spot..... 7.6 feet per second.

The blow delivered by the wheel at these velocities corresponds to that delivered by a weight of 1,600 lbs. falling through the following distances:

- For 3" flat spot..... 0.22 feet.
- For 4 1/2" flat spot..... 0.50 feet.
- For 6" flat spot..... 0.89 feet.

The results of these calculations are in close accordance with practical experience, and the curious fact that the blow delivered by a flat spot is constant after a certain speed is reached corresponds with the sound

C C1 C2 is path of centre of wheel from when CO is vertical until CP is vertical.



given at varying speeds. The blow delivered on a rail by a flat spot while severe is not to be compared with that of a 2,000-lbs. weight falling through several feet, and is well within the capacity of any sound rail to withstand. The regulations of the Master Car Builders' Association give ample protection against excessive blows and do not allow wheels to run in a condition that may prove injurious to the rail. Mr. Spilsbury's calculations are as follows:

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### The Brown Hoisting Machinery Co.

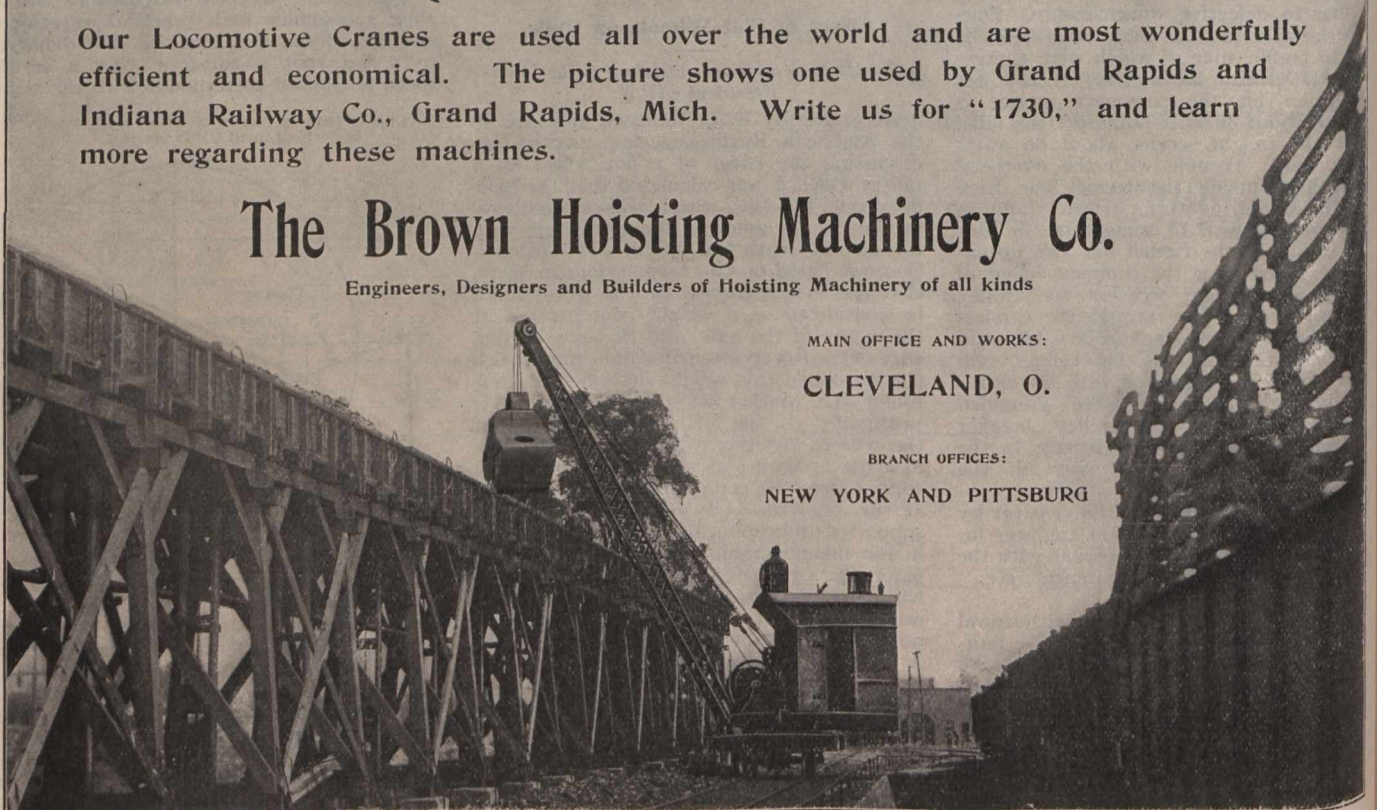
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Let  $R$  = radius of wheel in feet.  
 $l$  = length of flat spot in feet.  
 $d$  = depth of flat spot in feet.  
 $V$  = velocity of centre of wheel parallel to rail in f. s.  
 $w$  = angular velocity of wheel =  $\frac{V}{R}$   
 $P$  = pressure of spring on wheel when motion is steady, in lbs. (This is assumed constant throughout.)  
 $W$  = weight of wheel in lbs.

Then  $(2R - d) d = \frac{l^2}{4}$  (See fig. 1.)

$$a = \frac{\pi}{2} - 2\phi = \frac{\pi}{2} - 2 \sin^{-1} \frac{l}{2R}$$

When the wheel is in position shown in fig. 1 it is instantaneously turning about  $O$ , and the resultant upward acceleration =  $\frac{V^2}{R}$  f. s. per sec.

It also has a downward acceleration due to the spring =  $\frac{P+W}{W} g = f$ .

So the point  $O$  will rise off the rail as soon as  $\frac{V^2}{R} > f$

i.e., when  $V > \sqrt{fR}$ .

So the limiting speed,  $V_{lt} = \sqrt{fR}$  f. s.

I. Before the limiting velocity is reached.

$$V_s = \text{striking velocity of pt } P = \frac{V}{R}$$

So for any given wheel and flat spot,  $V_s$  will increase uniformly until the limiting vel. is reached, when

$$V_s = V_{lt} \times \frac{1}{R} = 1 \sqrt{\frac{f}{R}}$$

II. After the limiting velocity is reached.

Let  $t$  secs. = time taken from when  $O$  leaves the rail to when  $P$  strikes the rail.

Downward accel. of wheel =  $f = \frac{P+W}{W} g$  f. s. per sec.

The motion of point  $P$  (see fig. 2) is made up of two distinct motions:

- (a) Translation. That of the wheel as a whole which moves  $Vt$  ft. horz. forward and  $\frac{1}{2} ft.^2$  ft. vert. down.
- (b) Rotation of wheel about its centre through angle  $wt$ , during which  $P$  moves from  $P_0$  down to the rail at  $P_1$ .

$$\text{We have } P_0 P_1 = 2R \sin \frac{wt}{2}$$

$$\gamma = a + \frac{wt}{2}$$

$$P_0 N_1 = P_0 P_1 \cos \gamma = 2R \sin \frac{wt}{2} \cos \left[ a + \frac{wt}{2} \right]$$

$$P_1 N_1 = P_0 P_1 \sin \gamma = 2R \sin \frac{wt}{2} \sin \left[ a + \frac{wt}{2} \right]$$

Now  $L_1 M + M P_0 + P_0 N_1 = CO = R$

$$\therefore \frac{1}{2} ft^2 + R \sin a + 2R \sin \frac{wt}{2} \cos \left[ a + \frac{wt}{2} \right] = R,$$

$$\text{or } \frac{1}{2} ft^2 + R \sin (a + wt) = R \dots \dots \dots (A)$$

Distance between points of departure and strike:  
 =  $OP_1$   
 =  $ON + NP_1$   
 =  $Vt + R \cos (a + wt)$

At the instant of striking, vertical velocity of the wheel as a whole =  $ft$  downwards.

The velocity of  $P_1$  due to rotation is  $V$  perpendicular to  $C_1 P_1$ . Its vertical component =  $V \cos (a + wt)$ .

$$\therefore V_s = ft + V \cos (a + wt) \dots \dots \dots (B)$$

From (B) we get:

$$\begin{aligned} V_s &= ft + R w \cos (a + wt) \\ &= ft + R w \sin \left[ \frac{\pi}{2} - a - wt \right] \\ &= ft + R w \left[ \frac{\pi}{2} - a - wt \right], \text{ since } \left[ \frac{\pi}{2} - a - wt \right] \text{ is very small} \\ &= t (f - R w^2) + R w \left[ \frac{\pi}{2} - a \right] \dots \dots \dots (C) \end{aligned}$$

From (A) we get:

$$\frac{1}{2} ft^2 + R \cos \left[ \frac{\pi}{2} - a - wt \right] = R$$

$$\text{or } \frac{1}{2} ft^2 + R \left\{ 1 - \frac{\left[ \frac{\pi}{2} - a - wt \right]^2}{2} \right\} = R, \text{ since } \left[ \frac{\pi}{2} - a - wt \right] \text{ is small.}$$

$$\text{or } t \left[ w + \sqrt{\frac{f}{R}} \right] = \frac{\pi}{2} - a$$

Substituting in (C) for  $t$ , we get:

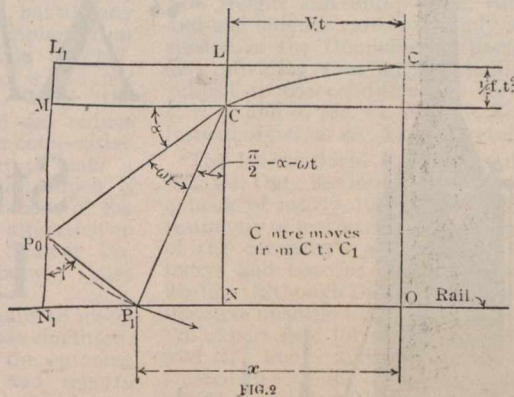
$$V_s = \left[ \frac{\pi}{2} - a \right] \left\{ \frac{f - R w^2}{w + \sqrt{\frac{f}{R}}} + R w \right\}$$

$$\begin{aligned} &= \left[ \frac{\pi}{2} - a \right] \left\{ \frac{f + R w \sqrt{\frac{f}{R}}}{w + \sqrt{\frac{f}{R}}} \right\} \\ &= 2 \sin^{-1} \left[ \frac{1}{2R} \right] \times \sqrt{fR} \end{aligned}$$

For small flats,  $\sin^{-1} \frac{1}{2R} = \frac{1}{2R}$

$$\therefore V_s = 2 \frac{1}{2R} \times \sqrt{fR} = 1 \sqrt{\frac{f}{R}} \dots \dots \dots (D)$$

After the limiting velocity is reached.



THE ANGLE INDICATED BY THE GREEK LETTER ALPHA IN THIS DIAGRAM IS DESIGNATED BY THE LETTER  $a$  IN THE FORMULÆ.

This shows that after the limiting velocity is reached, the striking velocity becomes independent of the wheel's velocity, and is constant for any given wheel and flat spot:

For any given wheel,  $V_s$  varies directly with the length of flat spot.

The general result is therefore:

Before limiting velocity is reached

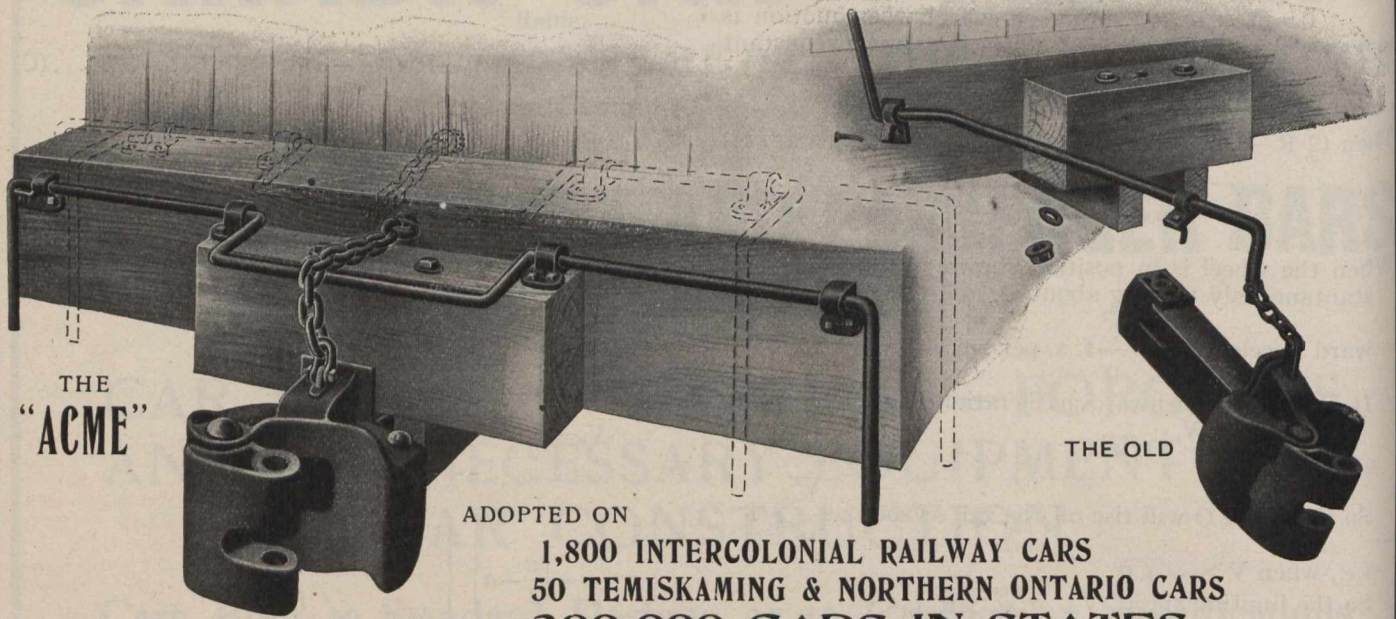
$$V_s = \frac{V}{R}, \text{ increasing uniformly from 0 to } 1 \sqrt{\frac{f}{R}}$$

After limiting velocity is reached

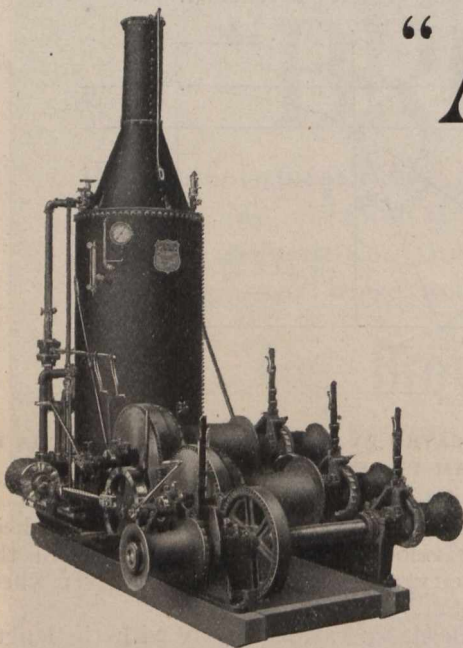
$$V_s = 1 \sqrt{\frac{f}{R}}$$

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### Railway Commissioners' Traffic Orders.

5955. Dec. 15.—In the matter of the application of the Board of Trade of Prince Albert, Sask., under sec. 334 of the Railway Act, for an order directing the C.P.R. and the C.N.R. to issue a joint tariff on grain and grain products in carloads, so that the new rates will restore to Prince Albert the position that it occupied with respect to Winnipeg and Regina, under the C.P.R. tariff, which was cancelled by that company on Feb. 12, 1908. Whereas, prior to the transfer of the Qu'Appelle, Long Lake and Saskatchewan Railroad and Steamboat Co.'s railway by the C.P.R. Co. to the C.N.R. Co., the C.P.R. had in force certain commodity rates on grain and grain products in carloads, from points on the Q., L.L. & S.R. & S. Co.'s railway to Pacific Coast terminal points, and intermediate stations in British Columbia, as shown in C.P.R. special tariff C.R.C. no. W543, which rates were withdrawn and cancelled by the C.P.R. on Feb. 12, 1908. And whereas the C.N.R. has not substituted therefor a joint tariff of commodity rates between the same points, but has charged and still charges its local rates to its point of connection with the C.P.R. Upon the report and recommendation of the Chief Traffic Officer of the Board, it is ordered that the C.N.R. and the C.P.R. be directed to agree upon and file not later than Feb. 1, 1909, a printer's proof of a joint tariff for the approval of the Board, to apply on such grains and grain products as were covered by C.P.R. special tariff C.R.C. no. W543, from points on the Q., L.L. & S.R. & S. Co.'s railway to Pacific Coast terminal points and intermediate stations in B.C. to which the said tariff applied.

### LUMBER INTERSWITCHING AT TORONTO.

6048. Jan 8. In the matter of the application of the R. Laidlaw Lumber Co., Ltd., of Toronto, under the provisions of the Railway Act, for an order directing that order 4988, dated July 8, 1908, be made retroactive, so as to apply to all cars loaded with lumber received at Toronto over the G.T.R., from Feb., 1907, until the interswitching arrangements prescribed by the Board in the said order became effective on Sept. 1, 1908, and switched by the C.P.R. to the applicant's siding at Dundas St., Toronto; also that the railway company refund \$42.00, paid by applicant as demurrage on eight carloads received at Toronto in April, 1907. Upon the hearing of counsel for applicant and the railway company, the evidence adduced, and what was alleged—it is ordered that the application be dismissed.

The judgment was given by Commissioner McLean as follows: The decision of the Board in this case must be governed by the decision in the joint switching rates case; Canadian Manufacturers Association vs. Canadian Freight Association, VII Canadian Railway Cases, 302. While the question of interswitching was dealt with in the London case: G.T.R. Co. vs. C.P.R. Co. and City of London, VI Canadian Railway Cases 327, the Board was careful to limit itself to the mere facts of the particular case before it. For it refused to deal in a general way with the question of the division of interswitching rates in reference to all the points in Canada where the railways of the two companies concerned connected.

It is admitted in case 1356, that it had, for a considerable period, been the practice of the railways in Toronto to absorb the interswitching charges. In the hearing at Toronto it was suggested that the applicant company had furnished sufficient antecedent consideration for the continuation of the practice of absorption. This was, however, by the way and not material. In addition the late Chief Commissioner held that the

existence of such a practice of absorption for a period of time did not preclude railways changing the practice. Canadian Manufacturers' Association vs. Canadian Freight Association, ut supra 308.

In the absence of a joint tariff, including the switching charges, it was open to the railway to charge its standard tariff, and in addition thereto switching rates. Ibid, 308, 306.

While a comparatively sudden change from the practice of absorption of the switching charges to a practice of charging the shippers for the switching services may have been arbitrary, the railway was within its legal right in so acting.

It is alleged that the interswitching tariff of the Grand Trunk, effective March 1, 1907, was simply a tariff as between the railways, and not having been properly filed was illegal. While it was advisable that switching tariffs should be filed with the Board, the non-filing of such tariffs was not illegal prior to the issue of the order of July 8, 1908, by the Board. Ibid, 308.

While the Board may require the two railway companies to treat traffic involving interswitching as joint traffic, it was not illegal, in the absence of the filing of a joint tariff, covering switching services, for the railway to charge an additional sum for its switching services, which are something distinct from the ordinary work of transportation, although such switching charges might not have been filed. The argument then from the switching tariff, as between the railways themselves, fails.

Under an order of the Board of July 8, 1908, effective Sept. 1, 1908, there were established regulations in regard to the switching charges on traffic both competitive and non-competitive. The applicant claims that in so far as the interswitching rates charged by the railways were in excess of those established by the Board's order, there should be a refund. The first portion of the complaint of the applicant, namely, that dealing with the conditions under the tariff effective March 1, 1907, has already been dealt with. There is no complaint that the G.T.R. tariff, effective June 5, 1907, was not properly filed, or that it did not properly notify the public. While the subsequent order of the Board did reduce the switching rates on non-competitive traffic, the Board has no power to make a retroactive alteration in a tariff, which is not contrary to any of the provisions of the Railway Act, so as to apply the alteration to past transactions. Dominion Cement Co. vs. C.P.R. Co., VI Canadian Railway Cases 516.

It is clear that the law in regard to interswitching had been in an inchoate condition. The order of July 8, 1908, was the outcome of a series of investigations and reports which dates as far back as 1904. In view of this and of the established policy of the Board in regard to refunds, it is impossible to grant any such retroactive order as is asked for, and the complaint of the applicant should, therefore, be dismissed.

**Railway Lands Patented.**—Letters patent were recently issued covering Dominion lands in Manitoba, Saskatchewan, Alberta, British Columbia and the Yukon as follows:

|  | Aces.      |
|--|------------|
| Calgary and Edmonton Ry.....                                   | 747.71     |
| C.N.R.....   | 6,675.52   |
| C.P.R. grants.....   | 16,243.40  |
| "    Souris branch.....  | 618.13     |
| G.T.P.R.....   | 11,950.31  |
| Manitoba Southwestern Col. Ry.....                             | 282,645.30 |
| Qu'Appelle, Long Lake and Saskatchewan Rd. & Steamboat Co..... | 639.00     |
| Total.....   | 319,519.37 |

R. E. Tully, formerly C.P.R. agent at Emerson, Man., has been sentenced to one month imprisonment for having charged excessive rates on tickets and converted the difference to his own use.

### TRADE AND SUPPLY NOTES.

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

The Hart-Otis Car Co., Ltd., Montreal, has issued a large hanging calendar, illustrated with a number of half-tone views of Hart convertible and Otis dump cars.

The Canadian Westinghouse Co., Ltd., has issued circular no. 1118, describing its CCL polyphase induction motors, with squirrel-cage rotors, and constant speeds as applied to various machine tools.

Robert W. Hunt & Co., Chicago, Ill., and Montreal, have been awarded the contract for the inspection and testing of all materials entering into the constructive work of the terminal buildings being erected at Chicago by the Chicago and Northwestern Ry.

The B. Greening Wire Co., Ltd., Hamilton, Ont., has issued a wall calendar, following its usual style, a large pad of sheets for the various months, with a view of the works. The company will have ready for distribution in Feb., new catalogues for all branches of its business.

The Dougall Varnish Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$150,000, to acquire and carry on the business of McCaskill, Dougall & Co., of Montreal. The officers of the company are: President, J. S. N. Dougall; Vice-President, G. Gylling; Sec.-Treas., W. A. McGuinness.

The Hart-Otis Car Co., Ltd., Montreal, holders of a number of Canadian patents for dump cars, ballast spreading cars, combination freight and dump cars, railway cars, and end sills for cars, will apply at the next session of the Dominion Parliament for an act providing that such patents be made subject to the conditions set forth in pars. a, b, c, and d, sec. 44, cap. 69, R.S.C. 1906, instead of par. a, sec. 38, as heretofore.

The International Marine Signal Co., Ltd., Ottawa, Ont., has issued "As Others See Us," a book of nearly 100 pages, containing the testimony of mariners regarding the efficiency of the company's automatic acetylene gas buoys and beacons in various parts of the world. Although the company has only been in active business for about four years, and in the export field for about 18 months, it has sold 277 buoys and 50 beacons, which are located in Canada on the Great Lakes and the St. Lawrence River and on the Atlantic and Pacific coasts, in the United States on the Atlantic coast, in Panama, Brazil, Guatemala, England, Austria, India and Korea.

The American Locomotive Co. has purchased 130 acres of land at Gary, Ind., and plans are being drawn for a plant which officers of the company say will be the most complete and best equipped locomotive works in the world. The land purchased is twice the extent of that occupied by the largest of its present plants, and when fully occupied will give employment to from 12,000 to 15,000 men. The site was selected 24 miles from Chicago, to provide for the territory where the largest number of railways converge to a single commercial centre. The Chicago district is a great railway centre and that district is rapidly developing in manufacturing importance, which renders it favorable as a location for securing material for building locomotives. The company now operates plants in Schenectady and Dunkirk, N.Y.; Pittsburgh and Scranton, Pa.; Richmond,

# THE ELECTRIC HEADLIGHT

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

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

**PYLE-NATIONAL ELECTRIC HEADLIGHT CO.**  
MONADNOCK, CHICAGO

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Steel Shipbuilders, Engineers  
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Va.; Paterson, N.J.; Manchester, N.H.; and Montreal, Que. The selection of a location in the Chicago district provides additional locomotive building capacity where it is most needed for prompt and direct delivery to a large number of railways. The size of the new plant will be sufficient to provide liberally for the growing needs of the railways for years to come.

### February Birthdays.

Many happy returns of the day to—  
 S. A. Baker, Canadian Freight and Passenger Agent, Chicago Great Western Ry., Toronto, born at Morrisburg, Ont., Feb. 1, 1877.  
 B. H. Bennett, General Agent Chicago and North-Western Ry., Toronto, born at Cobourg, Ont., Feb. 6, 1858.  
 F. L. C. Bond, Resident Engineer G.T.R., Montreal, born there Feb. 21, 1877.  
 Thos. Britt, General Fuel Agent C.P.R., Montreal, born there Feb. 3, 1871.  
 F. W. Churchill, C.P.R. ticket agent, Collingwood, Ont., born in London, Eng., Feb. 6, 1853.  
 H. R. Charlton, Advertising Agent G.T.R., Montreal, born at St. John's, Que., Feb. 9, 1866.  
 F. W. Cooper, Resident Engineer C.P.R., London, Ont., born there Feb. 16, 1880.  
 R. Crawford, Northwest Agent Northern Navigation Co., Winnipeg, Man., born at Kingston, Ont., Feb. 21, 1870.  
 E. A. Evans, General Manager and Chief Engineer Quebec Ry., Light and Power Co., Quebec, born at Kensington, London, Eng., Feb. 26, 1855.  
 E. H. Fitzhugh, Third Vice-President G.T.R. and Vice-President Central Vermont Ry., Montreal, born in Montgomery County, Mo., Feb. 1, 1853.  
 L. O. Genest, General Storekeeper, C.P.R. Western Lines, Winnipeg, Man., born at St. Henri, Levis County, Que., Feb. 16, 1856.  
 W. Jackson, C.P.R. ticket agent, Clinton, Ont., born there Feb. 4, 1860.  
 C. Gardiner Johnson, Lloyd's Agent for British Columbia, Vancouver, B.C., born at Dumblane, Perthshire, Scotland, Feb. 8, 1857.  
 R. S. Logan, Assistant to 2nd Vice-President and General Manager G.T.R., Montreal, born at St. Louis, Mo., Feb. 13, 1864.  
 D. MacPherson, Assistant Chief Engineer Transcontinental Ry. Commission, Ottawa, born at Bath, Ont., Feb. 2, 1858.  
 C. S. Maharg, Superintendent District 2, Western Division C.P.R., Medicine Hat, Alta., born in Dufferin County, Ont., Feb. 4, 1867.  
 T. McNabb, Master Mechanic Alberta Ry. and Irrigation Co. at Lethbridge, Alta., born in Scotland, Feb. 16, 1849.  
 J. K. McNeillie, Superintendent District 1, Ontario Division, C.P.R., Toronto, born there Feb. 23, 1874.  
 A. H. Robinson, Superintendent Elgin and Havelock Ry., Havelock, N.B., born at Elgin, N.B., Feb. 2, 1862.  
 A. E. Rosevear, Assistant General Freight Agent G.T.R., Montreal, born Feb. 20, 1863.  
 H. H. Schaefer, Division Freight Agent Intercolonial Ry., St. John, N.B., born at Cologne, Germany, Feb. 10, 1848.  
 J. G. Scott, ex-General Manager Quebec and Lake St. John Ry., Quebec, born there Feb. 13, 1847.  
 G. Spencer, Superintendent District 1, Lake Superior Division, C.P.R., North Bay, Ont., born in London, Eng., Feb. 21, 1865.  
 H. E. Suckling, Treasurer C.P.R., Montreal, born at Gibraltar, Feb. 27, 1851.  
 Hugh Sutherland, Executive Agent Canadian Northern Ry., Winnipeg, Man., born at New London, P.E.I., Feb. 22, 1845.  
 Sir Wm. C. VanHorne, K.C.M.G., Chairman C.P.R. and President Cuba Co., Montreal, born in Will County, Ill., Feb., 1843.

### Railway Finance, Meetings, etc.

**Alberta Ry. and Irrigation Co.**—Approximate net profits, exclusive of land sales for Nov., 1908, \$50,870, against \$42,532 for Nov., 1907. Total net profits for 5 months ended Nov. 30, 1908, \$179,438. Approximate railway receipts for Dec., 1908, \$31,523, against \$23,671 for Dec., 1907.

**Alexander Gibson Ry. and Mfg. Co.**—The annual meeting was held at Fredericton, N.B., Jan. 9. Following are the officers and directors for the current year: President, H. H. McLean, M.P.; other directors, A. Gibson, A. Gibson, jr., J. S. MacLaren, G. W. Massey; Secretary-Treasurer and Manager, A. Rowley.

**Calgary and Edmonton Ry.**—D. D. Mann, Vice-President Canadian Northern Ry., was quoted recently as having stated that the C.N.R. had no intention of purchasing the Calgary and Edmonton Ry., which is operated by the C.P.R. under a lease, approved by the bondholders at a meeting held in London, Eng., Feb. 6, 1903, for 99 years, and renewable for a further period of 99 years, at a rental equal to 4% of the bond issue. Following the signing of this agreement the C.P.R. purchased for \$500,000 the entire capital stock of the C. and E.R. Co. The newspaper reports were to the effect that the lease of the C.P.R. of the line would expire in June, 1910, and that a clause in the original contract was that in the event of a sale of the line the contractors were to have the first chance of purchasing. The contractors were Mackenzie, Mann & Co., and the reports stated that they had an option on the line. If the statement had any foundation in fact, it would presumably have come to light in 1903 when the C.P.R. acquired the line.

**Central Ontario Ry.**—A mortgage made by the company in favor of the Trusts and Guarantee Co., Toronto, to secure a bond issue of £200,000, has been deposited with the Secretary of State at Ottawa, as required by sec. 140 of the Railway Act, chap. 37, R.S.C., 1906.

A meeting of the shareholders has been called to be held at Trenton, Ont., Feb. 10, for the purpose of authorizing the directors to issue bonds to the amount of \$500,000, such bonds to constitute the second bond issue, and to be subject to the issue of £200,000 dated Jan. 1, 1909. The object of the issue is to provide for the completion of the extension of the railway and for other purposes.

**Columbia and Western Ry.**—The proceedings in the case in which the C.P.R. sought to compel F. A. Heinze to select his half of the land grant, will be fought out before the Imperial Privy Council. At the first trial the C.P.R. obtained a verdict, but on appeal reversed this decision, it being held that under the agreement Heinze has several years in which to make the selection.

**Dominion Atlantic Ry.**—Gross earnings for Nov., 1908, \$97,000, against \$99,916 for Nov., 1907. Gross earnings for 11 months ended Nov. 30, \$1,168,300, against \$1,205,555 for same period 1907.

**Duluth, Rainy Lake and Winnipeg Ry.**—A Duluth, Minn., press despatch recently stated that the amalgamation of the Meyerhauser and Hines Lumber and the Virginia Lumber Co. had been effected, the capital involved being \$20,000,000. In closing up the deal the Duluth, Rainy Lake and Winnipeg Ry., controlled by the Virginia Lumber Co., was sold to the Canadian Northern Ry.

**Intercolonial Ry.**—The daily press has been giving considerable space of late to a discussion of a projected lease or sale of the Intercolonial Ry., either in whole or in part. Replying to the whole of the reports the Min-

ister of Railways said, Jan. 13, no negotiations had taken place either for the sale or the leasing of the line to Mackenzie, Mann & Co., nor to anyone else, and no offer had ever been made by Mackenzie, Mann & Co. for the line; and on Jan. 15 he said: "If changes be decided on they will not include either the sale or the lease of the Government line."

**Lake Superior Corporation.**—The announcement was made officially, Jan. 14, that the Canadian Improvement Co. had paid in \$1,000,000, and the Moreton Trust Co. of New York gave certificates that all guarantee certificates are cancelled and the matter closed. This, the Premier of Ontario states, puts an end to the liability of the province in regard to the guarantee of \$2,000,000, given some years ago to assist the industries at Sault Ste. Marie, Ont.

The guarantee has been released owing to the introduction of new capital by R. Fleming, of Edinburgh, Scotland, and his London, Eng., and New York associates. A statement from New York set out that the interest acquired by this syndicate in the company is that formerly held by certain Philadelphia banking institutions, as security for advances, about which there was considerable litigation a year ago, the point in dispute being with respect to the voting power thereon. The arrangements for the reorganization of the company necessitated by the introduction of this new capital are being made.

The company owns, in addition to a number of industrial concerns, the Algoma Central and Hudson Bay Ry., and its steamship line on the Great Lakes; the Manitoulin and North Shore Ry.; the British America Express Co., the International Transit Co., and the Trans St. Mary Traction Co., these two latter being the street railways in Sault Ste. Marie, Ont., and Sault Ste. Marie, Mich.

**London and Port Stanley Ry.**—The annual general meeting of shareholders was held in London, Ont., Jan. 18. At the last meeting of the directors for 1908, the final reports of the year's operation were received. These showed that the city council would receive \$19,549.69 as a return for its investment in the line, and that the remainder of the income, \$153, was absorbed by current charges. The rental for the year from the Pere Marquette Rd., which operates the line under lease, is \$10,000, and the other receipts include \$2,596.60 for interest as rental, and \$6,706 percentage of earnings of P.M.R. for 1907; the percentage on earnings for 1908 not being due for some time. The railway is practically owned by the city of London, the city council appointing the directors.

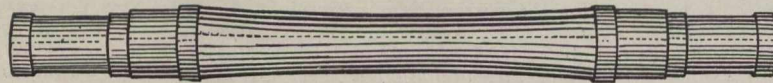
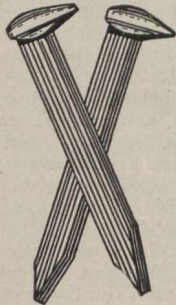
**New Brunswick Southern Ry.**—The annual meeting was held Jan. 11. Following are the officers and directors for the current year: President and General Manager, H. H. McLean, M.P.; other directors, F. R. Taylor, M. B. Edwards; Secretary-Treasurer, O. Ring.

**Pere Marquette Rd.**—Reports are again current that the P.M.R., which includes the old Lake Erie and Detroit River Ry. in Canada, will shortly be absorbed by another company. H. B. Ledyard, chairman of the Board, Michigan Central Rd., said recently there was absolutely no foundation for the report so far as that company was concerned. His connection with the P.M.R. as a director was entirely a personal one, and at the request of J. P. Morgan. The other report, which has been denied more than once already, is that the line will be taken over by the C.P.R.

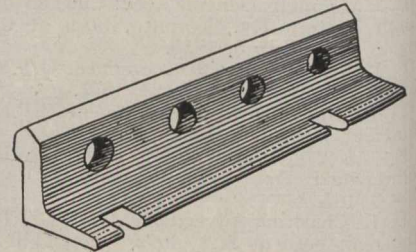
**Quebec Central Ry.**—Gross earnings for Oct., \$78,935.41; expenses, \$57,238.95; net earnings, \$21,696.46; gross earnings for Nov., 1908, \$65,615.98; expenses, \$49,815.34; net earnings, \$15,800.64, against \$88,256.89 gross earnings; \$62,592.13 expenses; \$25,664.76

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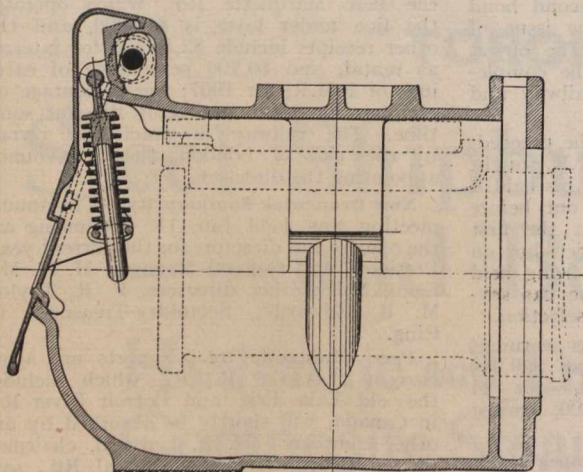
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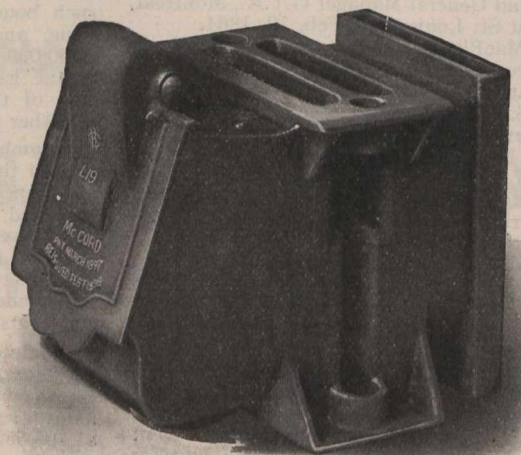
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**HEAVY FORGINGS**  
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net earnings for Oct., and \$85,012.63 gross earnings; \$61,473.83 expenses; \$23,538.80 net earnings for Nov., 1907. Gross earnings for 5 months ended Nov. 30, 1908, \$480,076.58; expenses, \$321,145.52; net earnings, \$158,931.06; against \$497,291.54 gross earnings; \$324,701.44 expenses; \$172,590.10 net earnings, for same period 1907.

**St. John Bridge and Railway Extension Co.**—The annual meeting was held at St. John, N.B., Jan. 12. Following are the officers and directors for the current year: President, D. McNicoll; Vice-President, W. Downie; Secretary-Treasurer, H. H. McLean, M.P.; other directors, R. Meighen, W. H. Thorne, H. E. Macdonell.

**Temiscouata Ry.**—Total traffic receipts for Dec., 1908, \$15,720.30; aggregate for 12 months ended Dec. 31, 1908, \$225,556.26.

**Temiskaming and Northern Ontario Ry.**—The report of the operations of this line during 1908, it is stated, shows that there were 487,051 passengers and 475,000 tons of freight carried, against 518,678 passengers and 393,589 tons of freight in 1907. The decrease in revenue from passengers is about \$40,000, but there is an increase of about \$100,000 in the receipts from freight. The Commissioners have paid over to the Government about \$350,000 as the net receipts for the year, against \$235,000 in 1907.

**Canadian Northern Ry. Earnings, etc.**

Gross earnings, working expenses, net profits, increases or decreases over 1907-08, from July 1, 1908:

|              | Earnings.   | Expenses.   | Net Earnings. | Net Increase or Decrease. |
|--------------|-------------|-------------|---------------|---------------------------|
| July..       | \$728,500   | \$525,600   | \$202,900     | \$159,000-                |
| Aug..        | 747,400     | 561,300     | 186,100       | 30,400-                   |
| Sept..       | 901,700     | 650,600     | 251,100       | 42,000+                   |
| Oct..        | 1,172,700   | 752,600     | 420,100       | 110,200+                  |
| Nov..        | 1,156,900   | 744,300     | 412,600       | 144,300+                  |
| Dec..        | 927,900     | 642,800     | 285,100       | 42,400+                   |
| Inc. or Dec. | \$5,635,100 | \$3,877,200 | \$1,757,900   | \$149,500+                |
| Inc. or Dec. | \$126,800   | \$84,400    | \$42,400      | .....                     |

Approximate earnings for 3 weeks ended Jan. 21, \$378,400, against \$414,800 for same period 1908.

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

Gross earnings, working expenses, net profits, increases or decreases over 1907-8, from July 1, 1908:

|              | Earnings.       | Expenses.       | Net Profits.    | Net Increase or Decrease. |
|--------------|-----------------|-----------------|-----------------|---------------------------|
| July         | \$6,202,880.82  | \$4,018,307.57  | \$2,184,573.25  | \$232,279.41-             |
| Aug.         | 6,385,956.69    | 3,807,057.98    | 2,578,898.71    | 8,623.56+                 |
| Sept.        | 6,391,672.48    | 4,277,064.71    | 2,114,607.77    | 36,745.58-                |
| Oct.         | 7,381,970.41    | 4,726,703.70    | 2,655,266.71    | 25,050.93-                |
| Nov.         | 7,303,303.20    | 5,082,223.85    | 2,221,079.35    | 223,954.86-               |
| Dec.         | 6,955,874.11    | 4,759,122.54    | 2,196,751.57    | 119,561.99+               |
| Inc. or Dec. | \$40,711,657.71 | \$26,670,480.35 | \$14,041,177.36 | \$389,845.23-             |
| Inc. or Dec. | .....           | \$216,006.87    | .....           | .....                     |
| Dec.         | \$143,838.36    | .....           | \$380,845.23    | .....                     |

Approximate earnings for 3 weeks ended Jan. 21, \$3,107,000, against \$3,062,000 for same period 1908. Mileage operated 9,844 miles.

**DULUTH, SOUTH SHORE AND ATLANTIC RY.**—Gross earnings for Nov., 1908, \$237,816.12; expenses, \$163,728.11; net earnings, \$74,088.01, against \$263,465.45 gross earnings; \$201,438.98 expenses; \$62,026.47 net earnings for Nov., 1907. Gross earnings for 5 months ended Nov. 30, \$1,203,374.47; expenses, \$847,208.73; net earnings, \$356,165.74, against \$1,553,516.35 gross earnings; \$1,126,168.74 expenses; \$427,347.61 net earnings for same period 1907. Approximate earnings for Dec., 1908, \$223,671, and for 3 weeks ended Jan. 21, \$134,222, against \$225,142 and \$133,512 for same periods 1907 and 1908 respectively.

**MINERAL RANGE RD.**—Operating earnings for Nov., 1908, \$66,326.16; expenses, \$54,726.52; net earnings, \$11,599.64; against \$68,873.15 operating earnings; \$53,449.93 expenses; \$15,423.22 net earnings for Nov., 1907. Operating earnings for 5 months ended Nov. 30, \$362,502.84; expenses, \$284,978.77; net earnings, \$77,524.07, against \$359,240.60 operating earnings; \$282,575.33 expenses; \$76,665.27 net earnings for same period 1907. Approximate earnings for Dec., 1908, \$68,408, and for 3 weeks ended Jan. 21, \$43,069, against \$61,993 and \$39,000 for same periods 1907 and 1908 respectively.

**MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.**—Gross earnings for Nov., 1908, \$1,180,183.63; expenses, \$591,899.00; net earnings, \$588,284.63, against \$1,106,558.89 gross earnings; \$677,639.80 expenses; \$428,919.09 net earnings for Nov., 1907. Gross earnings for 5 months ended Nov. 30, 1908, \$6,103,328.06; expenses, \$3,087,708.36; net earnings \$3,020,619.70, against \$5,602,760.92 gross earnings; \$3,376,374.56 expenses; \$2,226,386.36 net earnings for same period 1907. Approximate earnings

for Dec., 1908, \$897,374, and for 3 weeks ended Jan. 21, \$515,000, against \$896,480 and \$506,589 for same periods 1907 and 1908 respectively.

**Grand Trunk Ry. Earnings, Expenses, etc.**

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

| GRAND TRUNK RAILWAY. |             |             |
|----------------------|-------------|-------------|
|                      | 1908        | 1907        |
| Earnings.....        | \$2,814,700 | \$3,056,400 |
| Expenses.....        | 1,982,300   | 2,224,400   |
| Net earnings.....    | \$832,400   | \$832,000   |

| CANADA ATLANTIC RAILWAY. |           |           |
|--------------------------|-----------|-----------|
|                          | 1908      | 1907      |
| Earnings.....            | \$167,800 | \$202,400 |
| Expenses.....            | 123,900   | 189,100   |
| Net earnings.....        | \$43,900  | \$13,300  |

| GRAND TRUNK WESTERN RAILWAY. |           |           |
|------------------------------|-----------|-----------|
|                              | 1908      | 1907      |
| Earnings.....                | \$436,100 | \$528,400 |
| Expenses.....                | 386,900   | 438,100   |
| Net earnings.....            | \$49,200  | \$90,300  |

| DETROIT, GRAND HAVEN & MILWAUKEE RY. |           |           |
|--------------------------------------|-----------|-----------|
|                                      | 1908      | 1907      |
| Earnings.....                        | \$137,000 | \$147,400 |
| Expenses.....                        | 121,600   | 121,200   |
| Net earnings.....                    | \$15,400  | \$26,200  |

Approximate earnings for Dec., 1908, \$3,200,624, against \$3,659,296 for Dec., 1907; and for 3 weeks ended Jan. 21, \$1,806,208, against \$1,909,089 for same period 1908.

**TRAFFIC RECEIPTS OF THE SYSTEM.**

Aggregate from July 1 to Dec. 31, 1908:

|                 | 1908.      | 1907.      | Increase. | Decrease. |
|-----------------|------------|------------|-----------|-----------|
| Grand Trunk     | £3,329,571 | £3,781,097 | .....     | £451,526  |
| Canada Atlantic | 203,791    | 244,878    | .....     | 41,087    |
| G. T. Western   | 586,362    | 690,172    | .....     | 103,810   |
| D. G. H. & M.   | 181,259    | 206,335    | .....     | 25,076    |
| Total.....      | £4,300,983 | £4,922,482 | .....     | £621,499  |

A circular letter issued by H. H. Norman, Secretary, from the company's head office, intimates that in accordance with the Dominion Government's revised classification, the published earnings and expenses will in future differ from those previously published by the elimination from the gross earnings of rents payable by other companies for the use of the companies' system, and from the working expenses, of the amounts paid to or received from other companies on account of car mileage and hire of equipment. These items will be included in the net revenue accounts each half-year. For purposes of comparison, the figures quoted for 1908 will be shown on a similar basis.

**Viaduct Ordered for Toronto.**

The Board of Railway Commissioners issued the following draft order, Dec. 31: "In the matter of the application of the City of Toronto for an order directing the G.T.R. Co., and the C.P.R. Co., to carry York St. and certain other streets in the said city under the tracks of the said companies: Upon the hearing of evidence and of counsel for the city, the railway companies, the Toronto Board of Trade, and a number of landowners in the city, it is ordered and directed:

"That the railway companies submit to the Board, within 60 days from the date of this order, a plan showing at least four tracks of railway elevated and carried over the streets now open in the city between York and Cherry Sts., both included, at a height sufficient to give a clear headway not less than 14 ft. between the present level of the street and the superstructure at each crossing, and showing John St., Spadina Ave., and Bathurst St. carried over the railway tracks by bridges at a height sufficient to give, under each bridge, a clear headway of 22½ ft. above rail level.

"That within two years from the date of the approval of the plan by the Board, York St. be extended to the waterfront.

"That within two years from the date of the approval of the plan by the Board, the railway companies alter and arrange their yards and sidings so that no tracks on the ground level shall cross York, Bay, Yonge or Church Sts.

"That, after two years from the date of the approval of the plan by the Board, no locomotive or car be moved on tracks at ground level between Church and York Sts., except between 10 p.m. and 6 a.m., during the season of lake navigation, and between 7 p.m. and 6 a.m. during the re-

mainder of the year—provided, however, that cars containing fruit or other perishable merchandise may be moved across streets within the said limits between 6 a.m. and 10 p.m. when a flagman, on foot, precedes the train (engine, car or cars) to warn persons on such streets that a train is approaching.

"That no amount be paid to the city as damages or otherwise for any city property which may be taken or used by the railway companies in the elevation of their tracks or the re-arrangement of their terminals as shown on the said plan.

"That the city pay one-third of the cost—of the elevation of four tracks, excepting rails and tracklaying, of the elevation of the bridges at John St., Spadina Ave. and Bathurst St., and of the substructure for the elevation of necessary tracks at the proposed new union station, with a concourse such as that suggested in the plan submitted by the city.

"That all consequential damages (other than those of the city and the railway companies) recoverable by reason of the elevation of the tracks of the railway companies in accordance with the plan approved by the Board, be adjusted or settled by the city, and that, after settlement, two-thirds of the amount required to make such settlement be paid to the city by the railway companies.

"That the manner and expense of removing York St. bridge, and the extension of York St. as herein ordered, be arranged between the city and the railway companies, and that in case they fail to agree, the points at issue be referred to and settled by the Board.

"That the proportion which each railway company shall pay of the cost of carrying out the provisions of this order, and the amount which either of the railway companies shall pay to the other for consequential damages suffered by it through the carrying out of the provisions of this order, be determined by mutual agreement between the railway companies and that, in the event of their failing to agree, the questions in dispute be settled by arbitration, pursuant to the arbitration clauses of the railway act or by an expert to be chosen by the railway companies or by the Board."

At a sitting of the Board at Ottawa, Jan. 12, an order was issued requiring the companies to file plans with the Board within 90 days from that date. This order, we are informed, will be complied with, and in the meantime the question of an appeal to the Supreme Court, as to the jurisdiction of the Board regarding the matter remains quiescent. It is contended that any steps which the companies are taking towards compliance with the order for filing plans, etc., will not prejudice them, should an appeal on the Board's jurisdiction be proceeded with at a later date.

The reconstruction of the Union Stock yards at West Toronto, Ont., is to be taken in hand at once. The new buildings will be constructed of cement.

The Ontario Lumbermen's Association held a meeting recently in Ottawa, in regard to the details of the adjustment of railway rates on lumber, which is being dealt with by the Board of Railway Commissioners.

A press despatch from Winnipeg, Jan. 11, announced that the Tribune, a daily paper in that city, had been sold to C.P.R. interests announced the appointment of a new editor, and gave other details of a reorganization. Sir Thos. G. Shaughnessy, President C.P.R., stated, Jan. 12: "We have no intention of going into the newspaper business, and the paper would be of absolutely no use to the C.P.R. R. L. Richardson, principal owner of the Tribune, said he was not even negotiating for its sale.

N. CURRY, President  
N. A. RHODES, Vice-President

CAPITAL, \$1,000,000

J. M. CURRY, Sec.-Treas.

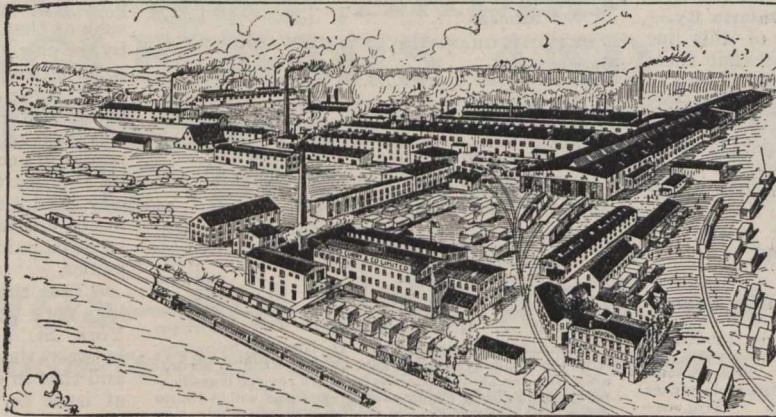
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## RAILWAY DEVELOPMENT.

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

**Abitibi and Hudson Bay Ry.**—The Dominion Parliament will be asked to pass an act extending the time within which the company may construct the lines authorized by sec. 7, chap. 55, of the statutes of 1907. H. Fisher, Ottawa, is solicitor for the applicants. (May, 1907, pg. 323.)

**Alberta Central Ry.**—The Red Deer, Alta., Board of Trade is taking active steps to support this company's application to the Dominion Parliament for an extension of time for the construction of the projected railway from Red Deer towards Rocky Mountain House. A delegation from the Board has been visiting a number of districts through which the line would pass and the speakers stated that the Board had satisfied itself there was a bona fide prospect of the company starting active operations in the near future, and of the placing in operation of the section of the line which would serve the Medicine River country, within the next two years. They stated that negotiations had been going on with one of the transcontinental systems, and the company was advised that if proper gradients could be secured to make the proposed line equal to any of the transcontinental lines, the question of financing would be arranged. As a result of the visit of the delegates several settlements which had decided to petition against the granting of any further extension of time for the construction of the line have withdrawn their opposition. The projected line, it is stated, will serve a large and fairly well-populated district, besides striking some good coal areas and timber berths, and opening up a large area of high-class agricultural land. (Jan., pg. 17.)

**Algoma Central and Hudson Bay Ry.**—In connection with the discharge of the loan of \$1,000,000 by the Ontario Government to the Lake Superior Corporation, the President, C. D. Warren, of Toronto, stated, Jan. 9, that there would be some change in the directorate, and that an announcement would be made as to plans of extension. A press report states of the \$5,000,000 which it is proposed shall be expended on the company's plant, etc., at Sault Ste. Marie, Ont., a considerable proportion will be utilized on the extension of the A.C. and H.B. Ry. to the C.P.R., and that the work will be started early in the spring. F. H. Clergue was quoted, Jan. 7, as stating that within two years the railway will be constructed right through to connect with the C.P.R. The surveys for the entire distance to connect the detached portions of the line and the C.P.R. have been completed; grading has been done on a considerable portion of this location, and some track has been laid. (Jan., pg. 17.)

**Arnprior and Pontiac Ry.**—Application will be made to the Dominion Parliament for an act incorporating a company with this title to construct a line of railway from the Pontiac Junction Ry., between Quyon and Campbell's Bay, Que., southerly across the Ottawa River to Fitzroy Harbor, Ont., thence westerly via Arnprior to, or near, High Falls, on the Kingston and Pembroke Ry., also from Fitzroy Harbor easterly to Britannia, on the C.P.R., and to South March, on the G.T.R., with power to construct a bridge over the Ottawa River at Chats Falls; to operate steam and other vessels, wharves, elevators, telegraph and telephone lines, etc. Perkins, Fraser and Gibson, Ottawa, are solicitors for applicants.

**The Atlantic, Quebec and Western Ry.** is proceeding with the construction of the line from Port Daniel to Gaspé, Que., 82 miles. During 1908 it completed track-laying on five miles of line between Port

Daniel and Anse à la Barbe, and two miles between Grand Pabos and Anse aux Canards. The steel superstructures on nine bridges between Port Daniel and Pabos are in course of erection, and the tracklaying is being proceeded with on the remaining 14 miles between these two points. The New Canadian Co. (Ltd.), New Carlisle, Que., has the contract, and W. L. Bravue is the Chief Engineer in charge of construction.

**Bruce Mines and Algoma Ry.**—Application will be made next session of the Ontario Legislature, for an act extending the time for the construction of the lines authorized for five years from April 1, 1909, and to declare the act incorporating the company, 62 Vic., cap. 93, as amended by 5 Edward VII, chap. 91, to be in force notwithstanding any neglect or default in complying with the provisions of the amending act.

**Burrard, Westminster Boundary Ry. and Navigation Co.**—Application will be made to the Dominion Parliament for an act extending the time within which the company may commence and complete the railway authorized by its act of incorporation, chap. 68 of the Statutes of 1907; to authorize it to enter into any agreement with the Vancouver, Westminster and Yukon Ry. Co.; and to construct a branch line from the authorized main line easterly and northerly through Yale, Lillooet and Cariboo districts to the most convenient point where a junction can be made with the branch of the Vancouver, Westminster and Yukon Ry., which is projected to run from the main line of that railway easterly to Edmonton.

**Cabano Ry.**—Application is being made to the Dominion Parliament for an act incorporating a company with this title, with power to construct, equip, and operate a railway from Long Lake, Temiscouata Co., Que., on the National Transcontinental Ry., thence easterly through Temiscouata county, following the valley of the Cabano River to Cabano, on Lake Temiscouata, the railway to be declared a work for the general advantage of Canada. A. Fraser, Cabano, Que., is solicitor for applicants.

**Canada and Gulf Terminal Ry.**—See Matane and Gaspé Ry.

**Central Ontario Ry.**—During the past year eight miles of track have been laid upon the extension of the line northerly to Whitney, Ont., the mileage laid being from Maynooth to Lake St. Peter. The extension from Lake St. Peter to Whitney, a distance of about 20 miles, is under construction, and work will be proceeded with during the coming season.

**Cobalt Range Ry.**—The Dominion Parliament will be asked for an act extending the time fixed for the commencement and completion of the lines authorized by the company's act of incorporation; giving permission for the extension of its authorized line northerly from Ville Marie, Que., to or near Opasitica Lake and thence northerly to a junction with the National Transcontinental Ry.; and power to construct a line from Haileybury, Ont., to or near Elk Lake, via the townships of Bucke, Firstbrook, Barr or Hudson, Lundy, Auld, Cane or Henwood, Barber, Tudhope or Bryce and James, all in the Nipissing district, and thence to or near Gowganda Lake via the township of Smyth, and unsurveyed portions of the Nipissing district. MacCraken, Henderson, McDougal and Greene, Ottawa, are solicitors for the company.

**Collingwood Southern Ry.**—Application will be made to the Dominion Parliament for an act extending the time within which the company may construct the lines authorized by sec. 8, chap. 77 of the Statutes of 1907. (Oct., 1908, pg. 711.)

**Eastern British Columbia Ry.**—During 1908, tracklaying was commenced and completed on this line from McGillvray station

on the C.P.R., Crow's Nest branch, southerly along Michel Creek to Corbin Mines, 14 miles. (Oct., 1908, pg. 711.)

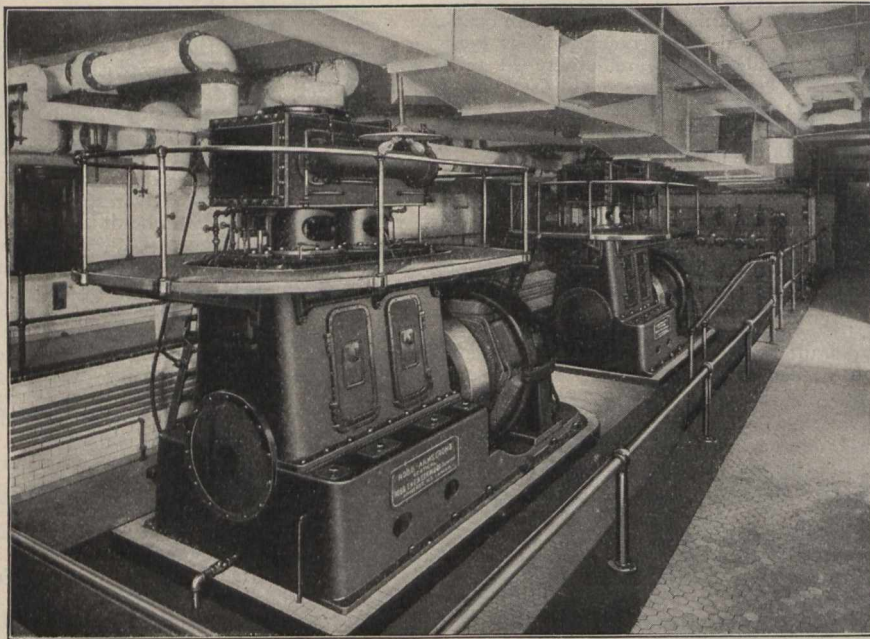
**Farmers Ry.**—The Saskatchewan Legislature will be asked this session to pass an act incorporating a company with this title to construct a line or lines of railway from Regina North, on the west side of Last Mountain Lake to or near Humboldt, and thence to Melfort; from Melfort northerly along the Carrot River to the eastern side of the province; from near the Carrot River west to Prince Albert; from near Humboldt to Saskatoon, and from Saskatoon northwesterly to the west side of the province; from or near the south end of Last Mountain Lake to Moose Jaw and from Moose Jaw south to the International boundary, and to extend the line from Regina southeasterly to the International boundary. Authority will also be asked to purchase and operate a system of steamboats and ferries in connection with the railways, and for other powers. D. W. Hines, Nokomis, Sask., is solicitor for the applicants.

**Flathead River to Kootenay Pass.**—The British Columbia Legislature will be asked to pass an act incorporating a company with power to construct a railway from the International boundary in East Kootenay, near the intersection of the boundary and the Flathead River, to a point near the boundary between British Columbia and Alberta, where it is intersected by the North Kootenay Pass. It is also desired to have authority to construct branch lines; to acquire steam and other vessels; to construct wharves, docks, etc.; to operate telegraph and telephone lines, and all the other powers usually conferred upon railway companies. Wilson, Senkler and Bloomfield, Vancouver, B.C., are solicitors for the applicants.

**Graham Island.**—Application will be made to the British Columbia Legislature for an act incorporating a company with power to construct a railway from near Masset, on the north coast of Graham Island, one of the Queen Charlotte Islands, lying east of the Masset Inlet, southerly to near Skidegate, on the same island; thence northerly and westerly by the southwest shore of Masset Inlet to or near Naden Harbor, thence westerly to the west coast of Graham Island, with power to construct branch lines from any point on the line, not exceeding in any one case 50 miles. The company also asks power to construct or acquire docks, wharves, etc.; to operate steam and other vessels; to construct telegraph and telephone lines, and other necessary and incidental powers. Wilson, Senkler and Bloomfield, Vancouver, B.C., are solicitors for the applicants. (See also Queen Charlotte Islands Ry., June, 1907, pg. 409.)

**Grand Lake and Bell River Ry.**—Application is being made to the Quebec Legislature for an act to incorporate a company with this title to construct and operate a line of railway from a point on the National Transcontinental Ry. near Bell River, to Twenty-one Mile Bay, an arm of Grand Lake, or to Rabbit Lake on the Ottawa River, including a branch line not more than 12 miles in length. Power will also be asked to operate steam and other vessels, docks, wharves, etc., in all places on the railway or connected with it, and to erect and operate telegraph and telephone lines, acquire and transmit power, and operate boarding houses, etc. C. B. Devlin, Hull, Que., is solicitor for the company.

**Halifax to Guysboro.**—The property of the Alfred Dickie Lumber Co., of Nova Scotia, has been sold to a British syndicate, the purchase price being \$1,567,500. The property transferred includes 405,000 acres of land, and it is stated that according to the contract of sale the purchasers are to construct a railway connecting Halifax, Country Harbour,



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Guysboro, and other points in the Musquodoboit Valley, and possibly to the Straits of Canso, connecting up all the various properties. The construction of such a line has been under consideration for years under various titles, and while many surveys have been completed, and plans filed by the several companies, no construction has been done. The Nova Scotia Government finally took the matter in hand and after going over all the old surveys, and making some new ones, took power in a general act to finance liberally any company undertaking the construction of a line in the district according to a specified general plan. The principal man in the syndicate is Sir Thos. Troubridge, a British engineer, who is one of the principal promoters of the All Red route via Black Sod Bay, Ireland. The terminal port of the steamship line in Canada was to be Halifax, all the year round. Whether the purchase of these properties has anything to do with the development of the project has not been disclosed. (Nov., 1908, pg. 711.)

**International Ry. of New Brunswick.**—Track was laid during 1908, on 27 miles of this line, from mileage 35 to 62. The line as projected is from Campbellton, N.B., on the Intercolonial Ry., to a point on the St. John River, between Grand Falls and Edmundston, N.B., a total distance of about 110 miles. A Dominion subsidy was granted last session for the construction from mileage 20 to the point above named, not exceeding 90 miles. Grading has been done on an additional 42 miles, work having been carried on from both ends. T. Malcolm, Campbellton, N.B., is the general contractor. (Nov., 1908, pg. 793.)

**Joliette and Lake Manuan Colonization Ry.**—Application will be made to the Dominion Parliament for an act to extend the time within which construction of the railway authorized by sec. 2, ch. 111, R.S.C. 1905, may be commenced and completed. Desaulniers and Vallée, Montreal, are solicitors for applicants.

**Kapitchouan Ry.**—Application is being made to the Dominion Parliament for an act to incorporate a company with this title, to construct a railway from the National Transcontinental Ry. near Lake Kapitchouan, Que., southeastwardly to Montreal, with branch lines of about 12 miles in length. Power to operate steam and other vessels, wharves, elevators, telegraph, and telephone lines will also be sought. G. Desaulniers is solicitor for applicants.

**Kettle Valley Lines.**—Application will be made to the Dominion Parliament by the K.R.V. Ry. Co., owning the lines operated under the title of the Kettle Valley Lines, for an act authorizing it to construct a railway from or near Penticton, on Okanagan Lake, to or near Nicola, B.C., on the Nicola, Kamloops and Similkameen Coal and Ry. Co.'s railway.

We have been informed that there has been paid to the Kettle River Valley Ry., the company operating the line during 1908, \$97,000 on account of subsidy by the Dominion Government, towards the construction of 40 miles of line from Grand Forks towards Penticton, B.C. This extension was expected to be open for traffic by Jan. 31. The mileage of the lines owned by the company in Canada previously was 3.86 miles, this line connecting at the International boundary with a line to Republic, Wash.

Application will be made to the British Columbia Legislature for an act to incorporate the Kettle River Valley Ry., with power to construct a railway to be operated by steam, electricity or any other power, from, at or near Midway, thence to Penticton, a distance of about 120 miles; and commencing at or near Penticton, on Okanagan Lake, thence to or near Nicola, a distance of about 150 miles, with all the powers usually conferred upon railway companies.

The Kettle River Valley Ry. Co. is the title of a company chartered by an act of the Dominion Parliament to construct certain railways along the valley of the Kettle River, which company will make application to Dominion Parliament this session for power to construct the line above-mentioned. The lines of railway already constructed in Canada by the K.R.V.R. Co., and operated as the Kettle Valley Lines, were constructed under the act incorporating the Grand Forks and Kettle River Ry. Co., passed by the B.C. Legislature in 1900. (Jan., pg. 17.)

**Matane and Gaspé Ry.**—Application will be made to the Quebec Legislature for an act changing the name of the company to Canada and Gulf Terminal Ry. Co.; designating St. Flavie instead of St. Octave de Metis as a connecting point with the Intercolonial Ry.; designating the connecting points with the National Transcontinental Ry. in the counties of Temiscouata and Kamouraska; giving the right to continue its main line or branches to the head of the Matane River, and continuing towards the east to the head of the Ste. Ann and Magdalene Rivers, thence to Mount Louis village, Gaspé County, and on to Gaspé Basin, either by the river, or starting from the main line behind Tourelle, Christie and Duchesner tps. It is also desired to have power to change the place of the company's head office; and to increase its capital to \$4,000,000 in \$100 shares instead of \$50 shares.

The line is under construction from St. Flavie to Matane, Que., 37 miles; the contractors being the H. J. Beemer Co., Windsor Hotel, Montreal, and 42 Broadway, New York. The company has also under survey routes for a line from Matane up the river to Mount Louis, about 138 miles; and for a line from Mount Louis to Gaspé Basin, about 78 miles. (Dec., 1908, pg. 865.)

**Michigan Central Rd.**—A Detroit, Mich., press report states that it has been decided to make some important alterations in the operation of this railway. This change will involve the electrification of all the terminals in Detroit, and of the main line as far west as Ypsilanti, Mich., 30 miles. Electric power, it is said, will be generated by water power on the Huron River at Chelsea, Mich.

We are advised that during 1908, the company laid 6.50 miles of track in the new yards being constructed at Windsor, Ont., in connection with the Detroit Tunnel works. In addition a number of industrial sidings or spurs were laid, but none of them are of any consequence.

**Montreal-Longueuil Bridge.**—In an article on bridges between Montreal and the south shore, the Montreal Witness says: "The Montreal and Longueuil bridge was the first to die. The other lived till last year, when the offices of the bridge company were closed and the Royal Albert project was once more interred." The article reviewed the work done in connection with the promotion of these bridge schemes since 1876, when the Royal Albert bridge was promoted by Hon. John Young, then chairman of the Montreal Harbor Commissioners. This bridge was to be a double-decked structure, and was to be carried from the foot of Delorimier Ave., across Ile Ronde to Longueuil. In 1892 the Montreal-Longueuil bridge scheme was projected, the proposal being to construct a bridge from the end of the guard pier across the channel to St. Helen's Island, and then on to Longueuil, and construction was actually decided upon in 1898. Various attempts were subsequently made to revive the project, but without success.

**North Eastern Ry.**—Application will be made to the Quebec Legislature for an act extending the time within which the company may construct the lines authorized. Desaulniers and Vallée, Montreal, are attorneys for the company. (Sept., 1908, pg. 617.)

**North Lanark Ry.**—A press report states that this railway will be completed to Darling, Ont., during the year. Jas. Bell, of Arrprior, Ont., is President of the company. (Feb., 1908, pg. 99.)

**Prince Albert and Hudson Bay Ry.**—Application will be made to the Dominion Parliament for an act to incorporate a company with this title, to construct and operate a railway from near Prince Albert, Sask., to the mouth of the Nelson River, or to York Factory on Hudson Bay, by way of a crossing of the Saskatchewan River, and thence northeasterly. Power will also be sought to construct or otherwise acquire and to operate steam and other vessels on all navigable waters touching on the proposed railway, to acquire and utilize steam and water power for the development of electricity for motive or other power, to erect and operate telegraph and telephone lines, to construct railway bridges, etc., and to enter into contracts with other railway companies. It is sought to have the foregoing works declared to be for the general advantage of Canada. F. W. Halliday, Prince Albert, Sask., is solicitor for applicants.

**Prince Edward Island Ry.**—Tenders are under consideration for the erection of a freight shed on the wharf at Charlottetown. (Jan., pg. 17.)

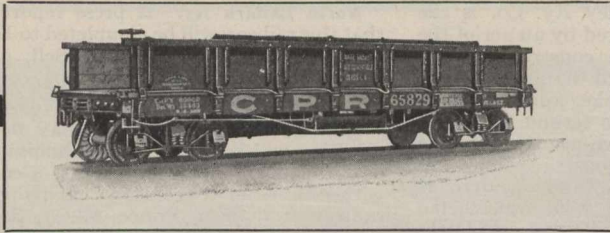
**Quebec County Ry.**—The Quebec Legislature will be asked for an act extending the time with which this projected railway may be constructed and for other amendments to the charter powers. R. Campbell, Quebec, is attorney for the company.

**Quebec Eastern Ry.**—We are advised that F. N. McCrea, of Sherbrooke, Que., who is interested in the Lotbinière and Megantic Ry., is also interested in negotiations now in progress for the construction of a railway from Quebec to Sherbrooke, Que., in the territory covered by the charter granted to the Q.E. Ry. Co. C. B. Hibbard, formerly General Manager of the Quebec, Montreal and Southern Ry., has been appointed Second Vice-President of the Q.E.R. Co., which, however, is not yet in a shape to commence operations. The act of incorporation gives the company power to acquire the Lotbinière and Megantic Ry., and to utilize it as part of the projected line. (Feb., 1908, pg. 99.)

**Quebec, Montreal and Southern Ry.**—The Board of Railway Commissioners has made an order giving this company, which is controlled by the Delaware and Hudson Co., two months in which to file plans for new stations at Sorel and Pierreville, Que., and for carrying out other improvements. During the year track was laid on the extension towards Levis, Que., for 48.50 miles, from Pierreville to St. Philomene. The route of the extension from St. Philomene to Levis, 48 miles, has been located. (Jan., pg. 17.)

**The Quebec Oriental Ry. Co.** is applying to the Dominion Parliament for an act amending former acts respecting the company, by extending the time within which construction of the authorized lines may be commenced and completed, and by authorizing it to construct and operate a railway from its authorized line near Rivière du Loup, Que., thence southeasterly through Temiscouata county to a junction with the National Transcontinental Ry. near the boundary between Temiscouata and Kamouraska counties, and to empower the company to buy from the Royal Trust Co., or the owners for the time being, the railway lines from Metapedia to Caplin, and from Caplin to Paspébiac, heretofore known as the Baie des Chaleurs section of the Atlantic and Lake Superior Ry.

Power is also being asked to provide that the head office may be either in Canada or England; and for authority to fix the number of directors, which shall not be less than three



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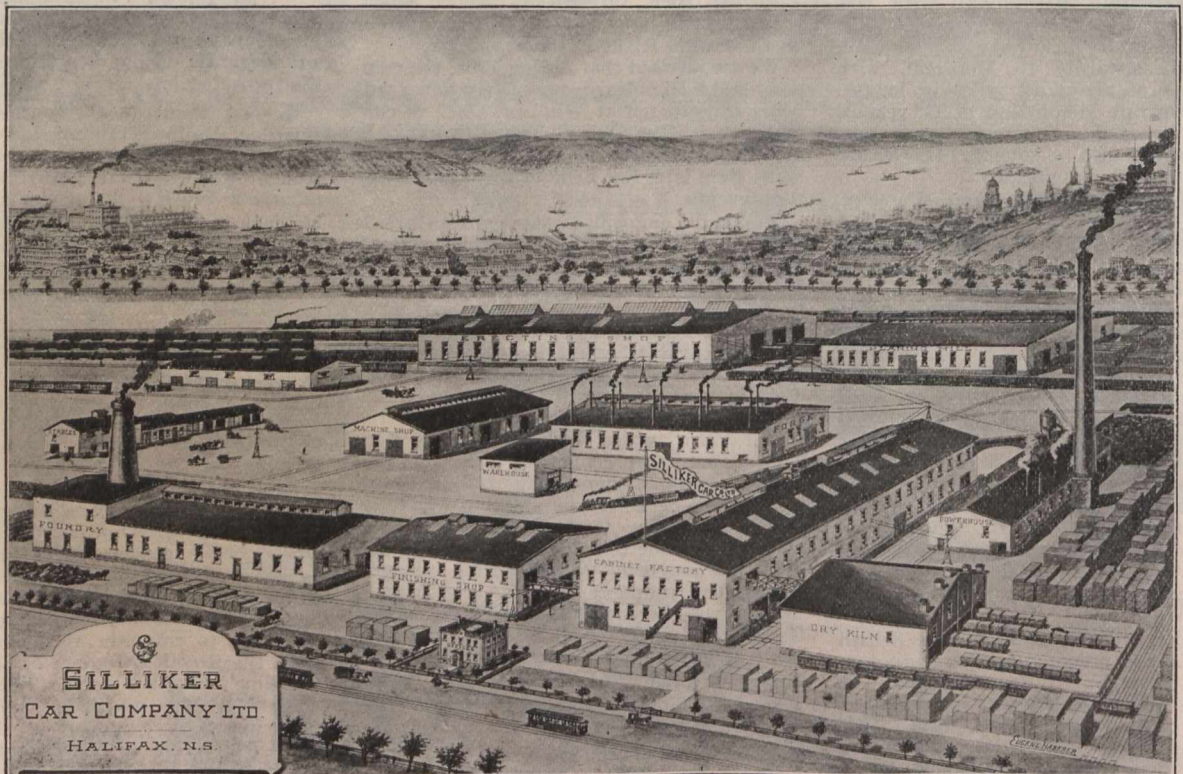
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nor more than seven; to change the date of the annual meeting to the last Wednesday in Oct. of each year, and to increase the bonding powers of the company to \$45,000 a mile.

The Q.O.R. Co. was originally incorporated in 1903, by the Quebec Legislature. The act was amended in 1905, and the company was granted a Dominion charter in 1907. Power was granted to construct a railway from Rivière du Loup, Que., on the Intercolonial Ry., to a point on the same railway near Metapedia, passing through Temiscouata and Rimouski counties, the northern part of New Brunswick, Bonaventure county and along the Metapedia River to St. Laurent de Metapedia, and the time within which the construction of the line was to commence and be completed was extended to 1909 and 1912 respectively. Provision was also made, in the event of the company desiring to purchase the Baie des Chaleurs Ry., as to the conditions on which such transfer should be made.

**Railway to Hudson Bay.**—Reports received at Ottawa with respect to the progress of the survey for the projected railway to Hudson Bay, show that very rapid progress has been made. R. D. Fry, E. Morrier, and F. Peters, arrived in Gimli, Man., from Fort Churchill, Jan. 5. The first named was one of the engineers on the railway survey, and he states that the distance of about 1,100 miles was accomplished in 45 days by dog train. With the exception of the last few days, which were stormy, the weather was fine and agreeable. The members of the party left behind to complete the work of the survey were reported all well. (Jan., pg. 19.)

**Royal Collieries Ltd.**—Application will be made to the Alberta Legislature for an act authorizing the Royal Collieries Ltd. to construct a railway from the C.P.R. Crow's Nest branch, 2,123 ft. west of Lethbridge Junction, to the s.w.  $\frac{1}{4}$  of sec. 32, tp. 9, range 21, west of the 4th p. m., and to acquire by purchase, lease or otherwise, the spur line now under construction between the same points, together with all powers incidental to the construction, operation and acquisition of the said line of railway as are necessary. J. B. Wilkie, Lethbridge, Alta., is Secretary of the company.

**Saskatchewan Central Ry.**—Application will be made to the Saskatchewan Legislature for an act extending the time within which the lines of railway authorized by the company's act of incorporation of 1906 may be constructed. Allan, Gordon and Bryant, Regina, Sask., are solicitors for the applicants.

Application will be made to the Saskatchewan Legislature for an act incorporating another company with this title for the purpose of constructing the following lines of railway: (1) From or near the authorized line of the Canadian Northern Ry., between Prince Albert and Battleford, northerly to Crooked Lake. (2) From the Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co.'s line between Findlater and Davidson, thence northerly and westerly to the provincial boundary. (3) From the Canadian Northern Ry. between Findlater and Davidson, westerly to the western boundary of the province south of the Saskatchewan River. (4) From or near Moose Jaw southerly or easterly to the International boundary. (5) From between ranges 1 and 12 west of the second meridian on or near the authorized line of the Canadian Northern Ry., southerly to the Souris coal fields and the International boundary. The company desires to have power to make agreements with other railway companies for amalgamation, or otherwise, with other necessary and usual powers, rights and privileges. Balfour, Martin and Casey,

Regina, Sask., are solicitors for the applicants.

The above information is taken from the Saskatchewan Gazette, and the second notice would suggest that it is proposed to ask for the incorporation of a new company with the title of the Saskatchewan Central Ry. There is nothing to suggest that there is any connection between the owners of the charter granted in 1906 and the applicants for the additional one. In Manitoba, notice has been given of an application for the extension of time for the Midland Ry. of Manitoba, as well as for the incorporation of a new company with the same title, but there is a connection disclosed between the two; and some few years ago applications were made for legislation affecting the Central Ontario Ry. by two different sets of shareholders whose interests conflicted.

**South East Kootenay Ry.**—The British Columbia Legislature will be asked for an act extending the time for the construction of this projected railway. Barnard and Robertson, Victoria, B.C., are solicitors for the applicants.

**Superior and Western Ontario Ry.**—Application will be made to the Dominion Parliament for an act to incorporate a company under this name, with power to construct railways from the G.T.P.R., Lake Superior branch, about 154 miles northwest of Fort William, Ont., to the National Transcontinental Ry., north of Sturgeon Lake. Power will also be sought to operate steam and other vessels, wharves, elevators, telegraph and telephone lines, etc., and to have the work declared to be for the general advantage of Canada. McDougall and Honeywell are solicitors for applicants.

**Sydney and Louisburg Ry.**—Nine miles of track were laid during 1908 on this railway, which is owned and operated by the Dominion Coal Co., as follows: From Grand Lake Jct. to Colliery No. 12, 7 miles; from No. 14 Junction to Colliery No. 14, 2 miles.

The branch line from Grand Lake to Waterford, N.S., and the grading about collieries 10 and 12, have been completed. The contract was carried out by the Lindsay Construction Co. (Mar., 1908, pg. 185.)

**Temiskaming and Northern Ontario Ry.**—The buildings erected recently at North Bay, Ont., consist of a frame car repairers' shelter, 20 by 40 ft.; and a shed, 30 by 60 ft., of timber frame with corrugated iron sheeting, for iron pipe and castings.

During 1908, tracklaying was completed upon this line as follows: Wateybeag River to Cochrane, Ont., 44 miles; Eglehart to Charlton, 8 miles; Cobalt to Kerr Lake, 4 miles; and from milepost 110 to Moore's Cove, on Lake Temiskaming, 2 miles. The engineers have located a line from Charlton to Elk Lake, 20 miles; and a project is under consideration to construct a line from Elk Lake to Gowganda, 38 miles.

A second survey for the proposed extension of the line from Charlton to Elk City has been made, and the Chairman of the Commission recently stated that he expected the report of the engineers would be ready by Feb. 1. Before the line was extended to Elk City, however, he said the Commissioners wished to know whether the traffic would meet the charges against the investment of about \$600,000, which it is estimated the extension would cost. If the report was favorable a contract could be closed at once, a good deal of the rock cutting done this winter, and the extension probably completed by the end of the summer. The Commissioners had an exploration party in the field making a survey of the country between Elk City and Gowganda. With regard to the main line between Cobalt and Haileybury, the Chairman at the same time said the Commissioners had been extending the sidings at these points as part of the plan for a second track.

The completion of this work would enable the operation of a special hourly service, for which they were looking for a suitable motor car. Several cars had been considered, and it was hoped that a suitable one would be found during the year.

In connection with the project for the extension of the line from Charlton to Elk Lake, 18 miles, it is stated that the principal object of the third survey was to ascertain whether an easier gradient could be obtained. As to the extension from Elk Lake to Gowganda, the principal difficulty in the way of construction is the large amount of rock work which will be required to be done. There will only be one large bridge on the extension, viz., that over the Montreal River at Elk Lake. (Jan., pg. 19.)

**The Thessalon and Northern Ry. Co.,** which was incorporated by the Ontario Legislature in 1907, is applying to the Dominion Parliament for an act declaring the railway which it is authorized to construct, to be a work for the general advantage of Canada, and authorizing it to enter into an agreement with the C.P.R., the G.T.R., or the C.N.R.

**Vancouver to Howe Sound, etc.**—Application will be made to the British Columbia Legislature for an act incorporating a company with power to construct a railway, to be operated by steam, electricity or any other motive power, commencing at or near Vancouver, thence northerly, following the valley of the Seymour Creek to the watershed north of Loch Lomond, and thence via the valley of the Indian River to the north arm of Burrard Inlet, with power to extend northerly to and through the Pemberton Meadows, and to construct a branch line via Ferry Creek Valley to Howe Sound, and any other short branches that may be needed to mines in the vicinity of the main line and branches. It is also proposed to ask for all other powers which are usually granted to railways. F. C. Wade, Vancouver, B.C., is solicitor for the applicants. (See Howe Sound, Pemberton and Northern Ry., Nov., 1908, pg. 793.)

**Vancouver, Westminster and Yukon Ry.**—Application will be made to the Dominion Parliament for an act extending the time within which the following projected lines may be constructed: (1) From the main line between Anderson and Green Lakes, running along or near Lillooet Lake, Lillooet River, and Harrison Lake, then southeasterly to the International boundary near Huntington, B.C.; (2) From the main line between Lillooet and Quesnel easterly through Quesnel Lake basin, to Tete Jaune Cache. (3) From the main line between the Cottonwood and Willow Rivers, southeasterly to Barkerville, B.C. (4) From the main line on Willow River, easterly to the Fraser River, along the Fraser River to Tete Jaune Cache, thence through the Yellow Head Pass, and thence by the most convenient route to Edmonton, Alta. It is also desired to have power to enter into agreements with the Burrard, Westminster Boundary Ry. and Navigation Co. (Sept., 1908, pg. 621.)

**Winnipeg City Power Plant.**—The line of railway along the right-of-way of the power plant has been completed from Lac du Bonnet to Point du Bois, Man., 24 miles.

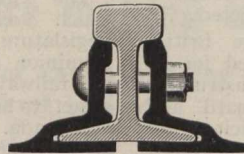
**Yellow Head Pass Coal and Ry. Co.**—Application will be made to the Dominion Parliament for an act incorporating a company with this title to acquire and hold timber, mining and other lands in Canada, and to develop the same by the construction of railways, etc. Power is particularly to be asked to construct a railway from the G.T. Pacific Ry. main line west of the crossing of the Pembina River, in Alberta, southwesterly to the Embarras River, thence southerly to the headquarters of the Little Pembina River, a distance not exceeding 100 miles; and a line commencing on the G.T. Pacific Ry., along

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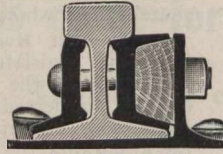
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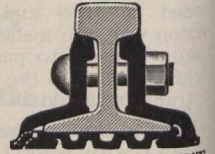
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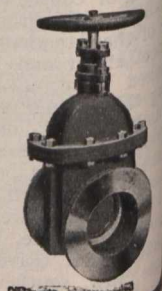
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the Embarras River southwesterly towards the McLeod River, a distance of 25 miles. J. A. Ritchie, Ottawa, is solicitor for the applicants.

The coal mining properties owned by this company are located around the headwaters of the MacLeod, Pembina and the Embarras Rivers, 30 miles from the Saskatchewan River and about 130 miles from Edmonton, Alta. They will also be about 30 miles from the G.T. Pacific Ry., and the railway located from the mines will connect with that line at Big Eddy. The engineer of the syndicate, Landstreet, is reported to have said, recently, that it was hoped to have the line completed by July next, when operations will be started on the development of the coal properties. The gradient of the projected line will be  $\frac{1}{4}$  %.

### Protection for Railway Employees.

The Board of Railway Commissioners passed the following order 5888, Dec. 16: In the matter of the Memorial of the Trainmen's Association of Canada, for the adoption of certain regulations by the Board, having in view the protection of employes of railway companies subject to the Board's jurisdiction. Upon the report of the operating officials of the Board, and upon hearing the representatives of the railway companies and of the employes; and in pursuance of the powers conferred upon it by secs. 30 and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf, it is ordered that:

1. No freight train, except work or construction trains of 15 cars or less, now in service, shall be made up or allowed to proceed upon its journey unless at least three-quarters of the cars composing such train have air brakes in good working order.

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

3. Every road locomotive engine shall be equipped with a step or steps and handholds on both sides of and at or near the rear ends of tenders; foot-rests shall be provided on the pilots of every such engine, sufficiently wide for a man to stand on; every switching or yard engine shall be equipped with footboards and headlights on the front and rear ends of the engine and tender, such footboards to be not less than 10 ins. wide; the back of such footboards shall be protected by a board not less than 4 ins. high, and if cut in the centre, the inner ends shall be protected in like manner; and footboards and headlights shall be placed on the rear end of the tender of every road locomotive engine used for switching services, except in cases of emergency; in no case, however, shall any engine be continuously used for switching purposes for more than 24 hours without such equipment.

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

5. Every locomotive engineer of such companies must have at least one year's continuous experience as a fireman, pass a satisfactory examination in regard to the proper care of locomotive engines, the handling of air brakes, and train rules and regulations; be at least 21 years of age,

and undergo an eye and ear test by a competent examiner before being eligible for appointment as such engineer. Except in cases of emergency, every conductor of such companies must have at least one year's experience as brakeman or conductor and be at least 21 years of age before being eligible for appointment as such.

6. The telegraph operators of such companies required to handle train orders shall be at least 18 years of age, able to write a legible hand, to send and receive messages at the rate of not less than 20 words a minute, and be thoroughly familiar with and required to pass an examination upon train rules before a competent examiner.

7. Every employe of such railway companies engaged in operating trains shall, before undertaking such duties, be required to undergo a color test by a competent examiner.

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

9. All open drains crossing tracks in the yards of such companies shall be covered for 5 ft. on each side of the rails, except in times of flood, when temporary open drains may be provided; semaphore and signal wires, when they cross under tracks, shall be carried in pipes or boxes; new buildings and semaphores and poles erected shall be placed not less than 6 ft. from the rail of the main track; water stand supply pipe shall be fastened parallel with the main line, and enginemen shall be required to see that this is done after using such pipes.

10. Every person or company offending against any of the foregoing provisions shall forfeit and pay \$50 for every such offence.

### Great Northern Railway Lines in Canada.

In a recent interview J. J. Hill stated that it was the determination of his company to push railway construction in Western Canada generally, and in Manitoba particularly. It is said that as soon as spring opens work will be begun on some additional lines under the Midland Ry. of Manitoba's charter. This work, a Winnipeg despatch says, will probably be on a line from Emerson to Winnipeg, and upon the laying out of terminals and a station in Winnipeg. The company purchased land in Winnipeg for terminals, and for an entrance into the city, nearly three years ago, but beyond some clearing nothing was done. The company's operations in Manitoba are being carried on under the charters of the Midland Ry. Co. of Manitoba, and the Brandon, Saskatchewan and Hudson Bay Ry., and probably under some other charters not yet identified.

**Midland Ry. Co. of Manitoba.**—Application will be made next session of the Manitoba Legislature for an act incorporating a company with this title, with authority to acquire and operate the existing constructed lines of the Midland Ry. of Manitoba, viz.: the line from Gretna, at the International boundary, to Portage la Prairie, and from Morden to the southern boundary of the province; and to construct the following additional lines: From or near Winnipeg, westerly to Brandon; thence westerly to near Elkhorn, and thence westerly to the western boundary of the province; a line from near Morden, running northwesterly to near Rathwell, thence northwesterly to the first mentioned line. It is also desired to obtain authority to construct and

operate telegraph and telephone lines in connection therewith, and all other powers necessary or incidental thereto. Fisher, Wilson, Batram and Hamilton, Winnipeg, are solicitors for the applicants.

Notice is also given for the Midland Ry. Co. of Manitoba, by the same firm of solicitors of intention to apply to the Legislature for an Act empowering the company in connection with its authorized line of railway between Winnipeg and the International boundary, to construct and operate a branch line from some point on the east side of the Red River, in tp. 1, range 2, or 3, to the International boundary, on the west side of the river in range 2 e. It is also desired to have power to sell its existing lines, viz., from Gretna to Portage la Prairie, and from Morden to the International boundary, to another company.

**Vancouver, Victoria and Eastern Ry. and Navigation Co.**—During 1908, the company completed tracklaying on the section of the line from the International boundary to Olivers, B.C., 11.33 miles (of this distance 0.86 mile was laid in 1907); and from Olivers to Brownsville, B.C., 9.72 miles (of which 5.22 miles was laid in 1907). On this portion of the line grading is in progress between Keremeos and Princeton, 40.3 miles. Tracklaying was expected to be well in hand between Keremeos and Princeton, Jan. 31. Beyond Princeton surveys only are being made, but south of New Westminster, and in the vicinity of Vancouver, construction is going on, in connection with the lines amalgamated with the V.V. and E. Ry. and N. Co., and formerly known as the Vancouver, Westminster and Yukon Ry., and the Victoria Terminal Ry. and Ferry Co. The work there has been the completion of tracklaying on the line from Cloverdale to Sumas, of 29.28 miles, of which 1.38 miles were laid in 1907.

Vancouver press reports state that the G.N.R. proposes to expend \$3,000,000 during the current year on terminals in that city. This report arises out of the recent purchase by G.N.R. and Northern Pacific Ry. interests of False Creek waterfront property valued at about \$350,000. The property involved in the purchase comprises all the waterfront on the north side of the upper basin of False Creek lying between Heatley Ave. on the east and Boundary Ave. on the west. L. C. Gilman, of Seattle, Wash., attorney for the G.N.R., who made the purchases, is quoted as saying: "In making these purchases the company had in view not only its own requirements in Vancouver, but also those of the Northern Pacific Ry., which has the intention of entering the city, and doing business directly here. What we expect to do now is to go to the Northern Pacific people and endeavor to join with them in some plan for the location of joint facilities for terminal purposes at some convenient spot on the shores of False Creek." (Jan., pg. 35.)

Jeffery Hennigar, C.P.R. Freight Office, Fort William, Ont., in renewing his subscription to The Railway and Marine World, says: "Your paper certainly covers the railway field in a manner which no other even approaches."

The Grand Trunk Development Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$500,000, to purchase or otherwise acquire lands, etc., from the B.C. or any other Government; to erect and operate manufacturing concerns, to develop such properties, to carry on the general business of importer and exporter, to construct and operate railways or tramways, logging railways, telegraph and telephone lines, barges, boats, docks, wharves, etc., and for other purposes.

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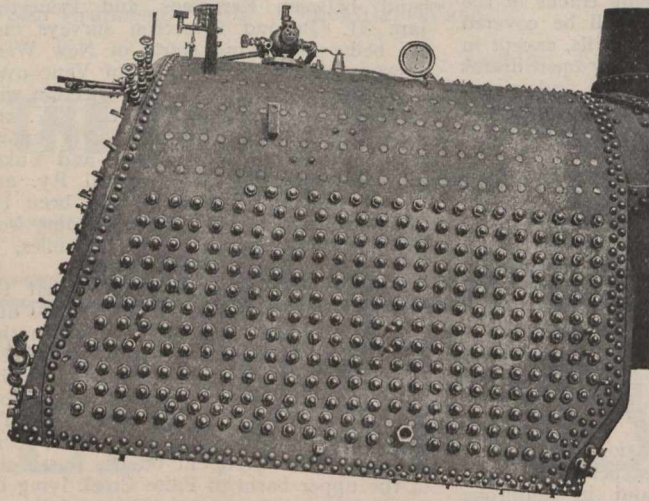
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**Woodstock Branch.**—During 1908 the company completed the following changes of line on the Woodstock branch in New Brunswick: Between mileage 55.3 and 59.8, a distance of 4.5 miles, not yet opened for traffic; between mileage 62.5 and mileage 64.0, a distance of 1.5 miles, which has been opened for traffic.

**Northern Colonization Ry.**—Track was laid on the extension from Noming, Que., towards Rapide de L'Orignal, during 1908, from two miles north of Noming to mileage 30.74, a distance of 28.74 miles. The total distance from Noming to Rapide de L'Orignal is 34.6 miles. The contractors were the Toronto Construction Co. The extension has not yet been opened for traffic.

**Place Viger Hotel and Terminals.**—The proposal to enlarge and rearrange the hotel and terminals at Place Viger, Montreal, is reported to be taking definite shape, and it is said that a recent visit of D. McNicoll, Vice-President, to New York, was for the purpose of inspecting hotels and terminals there, before finally adopting plans for the work.

**Montreal-Toronto Second Track.**—During 1908 there was completed 10 miles of second track work upon the contract between Vaudreuil and Dalhousie Mills, a distance of 22.5 miles. J. P. Mullarkey, Montreal, is the contractor.

The second track construction between Finch and Smith's Falls, Ont., 50 miles, has been completed, track having been laid during 1908 upon the last 23.5 miles of the distance. The Toronto Construction Co. had the contract.

**Georgian Bay and Seaboard Ry.**—There was completed, during 1908, a line from Coldwater Junction, on the Toronto-Sudbury line, to the west side of Victoria Harbor, on Georgian Bay, 11.5 miles. The contractors were the Toronto Construction Co. The line has not yet been opened for traffic.

**Walkerton and Lucknow Ry.**—During 1908, tracklaying was completed on this line from mileage 26.2 to Walkerton, Ont., 11.5 miles, enabling the whole line from Saugeen, on the company's Owen Sound line, to Walkerton, 37.7 miles, to be opened for traffic. The contractor was Randolph MacDonald Co., Ltd., Toronto.

**St. Mary's and Western Ontario Ry.**—This line, completed during 1908, extends from St. Mary's to Embro, Ont., 15.9 miles. It effects a junction at Embro village with the extension of the T.L.E. and P. Ry. from Code Junction, and trains are being operated over these two lines, a total distance of 21.68 miles.

An application will be made to the Dominion Parliament for an act to amend the act of incorporation by giving the company power to construct the following lines: From Woodstock to Brantford; from near St. Mary's to near Stratford; from the company's main line between St. Mary's and Exeter in northerly and westerly direction through Perth and Huron counties to the Guelph and Goderich Ry. between Milverton and Goderich; and from the company's main line near Exeter to Grand Bend harbor, Lake Huron; and for further and other powers.

A freight shed is being erected at St. Mary's, Ont. A supplemental agreement under the act granting subsidies to certain railways was entered into Dec. 10, 1908, with the Dominion Government, with respect to the construction of a railway from Woodstock to Exeter, Ont., 45 miles.

**Tillsonburg, Lake Erie and Pacific Ry.**—The extension of this line, which was completed during 1908, leaves the main line, London section, at Code Junction, and ex-

tends to Embro village, Ont., 5.69 miles, where a junction is effected with the St. Mary's and Western Ontario Ry.

**Sudbury to Gowganda.**—It was stated in Montreal recently that while no actual decision on the matter had been reached, the C.P.R. was prepared to construct a branch line, without a subsidy, from Sudbury, northeasterly into the heart of the Gowganda district.

**North Bay to Fort William.**—A Montreal dispatch stated recently that the company "will have to build a line around Lake Superior, say from North Bay to Fort William, so as to be able to compete in hauling capacity with the G.T. Pacific Ry. . . . The proposed improvement will be undertaken and completed almost as soon as the G.T. Pacific will be finished from Ottawa to Lake Superior." It is stated "that it would be impossible for the C.P.R. either to double-track their present line around Lake Superior or to improve the grades and curves without entailing tremendous cost, and that the cheaper way would be to build a new line beyond the height of land." There are two mis-statements of fact in the item quoted which stamp the whole of it as the invention of an uninformed newsmonger making copy. The G.T. Pacific Ry. is not under construction from Ottawa to Lake Superior, its nearest point to Ottawa being 200 miles to the north; and if the C.P.R. were to decide to construct a line from Fort William easterly beyond the height of land, it would pass a considerable distance north of North Bay.

**Fort William Terminals.**—Application will be made next session of the Dominion Parliament for an act ratifying an agreement made Dec. 1, 1908, between the C.P.R. and the G.T. Pacific Ry. providing for joint terminal facilities at Fort William, Ont.

The agreement between the C.P.R. and the Fort William city council with respect to the extension of terminal facilities at that place, fixing a basis of taxation and other matters, has been signed. The terms of the agreement have not been made public.

**Manitoba and Northwestern Ry.**—Application is being made to the Dominion Parliament for an extension of time within which the company may construct the lines authorized by sec. 9, ch. 52, R.S.C. 1893, and sec. 2, ch. 104, R.S.C. 1907, and for other purposes.

**Wilkie, Sask.**—At this point, the present end of steel on the line westerly from Saskatoon, which is to be connected up with the branch from Wetaskiwin, Alta., now terminating at Hardisty, considerable activity prevails. A roundhouse, machine shop, station building, coal chutes and other necessary buildings are being put up. Construction on the line westerly is expected to be resumed as soon as spring opens up.

**Weyburn, Milestone, etc.**—Residents in Milestone and other points in southeastern Saskatchewan have sent petitions to C.P.R. officials asking that the line be extended from Weyburn westerly, so as to serve that territory. Farmers are said to be hauling wheat for distances up to 70 miles in order to reach a market.

**Moose Jaw Northerly.**—In connection with the construction of the line northerly from Moose Jaw, which has now reached Outlook, Sask., a roundhouse is being built, and other terminal facilities are being provided. A large staff of engineers is quartered in the town, in connection with the extension. The construction of a bridge across the river is necessary, and local reports state that work will be started this winter on the abutments.

**Cardston to Great Falls, Mont.**—In connection with the report mentioned on pg. 17 of our Jan. issue, we are advised that

there is no foundation for the report that the C.P.R. was contemplating the construction of a line "from Cardston to Macleod, and the International boundary, and thence southerly almost in a straight line to Great Falls, Mont."

**Western Lines Work for 1909.**—W. Whyte, Second Vice-President, in the course of an interview at Montreal, Jan. 21, stated that the more important proposals regarding extensions and betterments of the western lines had been settled, but that several smaller extensions had not then been decided upon. One of the most important of the new lines will be through Southern Saskatchewan and Alberta, about midway between the main line and the International boundary. This line will start from Weyburn, southeast of Moose Jaw, and go across country to Lethbridge, about 400 miles. Construction will be started in the spring from Weyburn, and it is expected that from 20 to 25 miles will be completed this year.

The line from Saskatoon to Edmonton now has a gap in the centre of it of 130 miles. All the grading on this gap has been completed and rails are to be laid immediately, so that the whole of this line will be in operation in the spring, giving a new short line between Winnipeg and Edmonton.

There has been a great deal of new settlement in the fall wheat district of Alberta, particularly east of the line running up north from Macleod to Calgary. The company has decided to build another line up through this district, starting from Lethbridge, and joining the Macleod to Calgary line a little north of High River station. The total distance is about 80 miles, and 30 miles of this are to be built this season, taking the line up to the Little Bow River.

The bridge which the company is building at Lethbridge, over a mile long and 300 ft. high, will be completed early this year.

Another district in which there has been much new settlement is east of the line from Calgary. The company will therefore build a branch northwards from Cheadle—which is on the main line east of Calgary—and eventually connect it with the line east from Lacombe, at Alix. This line will be 100 miles long, and it is intended to carry it as far as the Ghost Pine Creek this year—a distance northward from Cheadle of from 35 to 40 miles. The Lacombe-Stettler line will also be extended easterly about 35 miles.

These are the most important extensions decided on, but there will be a lot of betterment work done this year throughout the west in replacing light rails with heavy ones and in building new stations. In the matter of improvements at any one place the plan for the development of the company's terminals at Fort William will take first place. The foundation of the extensions contemplated there are to be laid this year. Mr. Whyte did not think it advisable to state the total amount of money decided on for the western appropriations, but there was no objection to saying that it ran into millions.

**Esquimalt and Nanaimo Ry.**—The steel superstructure for the bridges across the Nanaimo and Chemainus Rivers have been delivered, and will be put up as early as possible. These bridges are to replace wooden trestles. The superstructure for the bridge over the Cowichan River was expected to be delivered by Jan. 31. The substructure for this latter bridge is completed. In respect of works of betterment to be undertaken during the coming year, it is expected that the appropriations will include amounts for the replacing of the wooden trestles between Victoria and Shawinigan Lake with steel span bridges. These and the other steel spans being erected on the line are light bridges which are being replaced on the C.P.R. transcontinental

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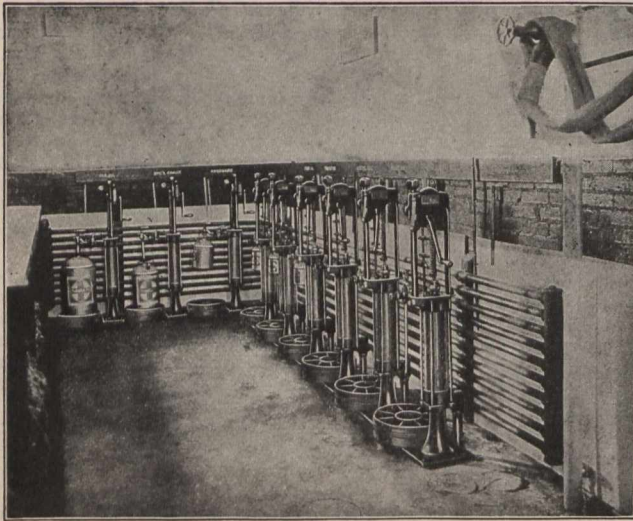
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MANAGER

line by larger and heavier bridges necessary to carry the increasing traffic.

Great progress is reported to have been made with the clearing of the company's lands in the vicinity of Ladysmith, and their preparation for sale to settlers in small lots.

**British Columbia Southern Ry.**—Application is being made to the Dominion Parliament for an act granting an extension of time within which the company may construct an extension of its railway to the 49th parallel and the Tobacco Plains, authorized by ch. 55, R.S.C. 1899; the western section of its railway and the branches to Nelson and Martin Creek, authorized by sec. 1, ch. 52, R.S.C. 1900; and authorizing the construction or acquirement of a branch line from near Michel northerly through Kananaskis Pass to a point of junction with the C.P.R. main line near Kananaskis, about 120 miles.

**Kootenay and Arrowhead Ry.**—Application will be made to the Dominion Parliament for an act extending the time within which the company may construct the lines authorized by sec. 7, ch. 70, R.S.C. 1901, and for other purposes.

**Minneapolis, St. Paul and Sault Ste. Marie Ry.**—An announcement was made Jan. 10 by Vice-President and General Manager Pennington, that the company's extension into Duluth was expected to be completed and opened for traffic by July 1. (Jan., pg. 15.)

During 1908, the company laid track upon its extension to Superior and Duluth, Minn., upon 91 miles between Mississippi River and Moose Lake, Minn. The remaining mileage of the extension, which leaves the main line at Brooten, from Moose Lake to Superior-Duluth, a distance of 47 miles, is under construction. Foley Bros., Larsen & Co., St. Paul, Minn., are the contractors.

**Duluth, South Shore and Atlantic Ry.**—Exclusive of sidings and logging tracks for temporary purposes, the company, during 1908, laid the following lengths of permanent track: A branch from milepost 79, about 1.50 miles east of Humboldt, Mich., to the Boston-American Mine, 2 miles; and a branch from Ahmeek Mine track to Kearsarge Mine, no. 4 shaft, 1 mile. The company has no branches nor extensions now under construction.

### Bridge Engineering—Roof Trusses.

This is the title of a work of 384 pages, by F. O. Dufour, C.E., which has been adopted as a text-book at the University of Chicago. It is a manual of practical instruction in the calculation and design of structural steel truss and girder bridges for railways and highways, and includes also chapters on the analysis and design of roof trusses and other details of mill building construction. The treatment of the complicated problems involved in the calculation and design of modern steel structures is exceedingly clear and concise and free from the abstruse mathematical calculations that usually overburden other works in this difficult field. Special stress is laid on the practical side of the subjects treated or as distinguished from a mere theoretical or academic discussion. The section on bridge engineering treats fully of analysis and detail of all kinds and descriptions. Every detail is clearly explained by the aid of diagrams, while graphic methods are chiefly used in the computations. The same practical and concise treatment marks the section on roof trusses. Photographs of typical structures are given with full explanation of the methods followed in their design, and in some cases statements of cost. There are 340 illustrations. The volume is published by the American School of Correspondence, Chicago, and may be obtained through THE RAILWAY AND MARINE WORLD's book department, the price being \$3.

### President Hays on the G.T.P.R.

In a recent interview, C. M. Hays, President G.T. Pacific Ry., referring to his last inspection trip as far west as Prince Rupert, B.C., said, among other things:

"We are doing very well, indeed. The various contractors are in good spirits and well abreast of their dates. Indeed, the financial disaster in New York a year ago was for us a blessing in disguise. Large numbers of men have come north seeking work. Labor is abundant and is more productive, at lower wages. Already our trains are running regularly over the whole section 660 miles west of Winnipeg into Alberta. The newly arrived settlers have harvested a great wheat crop—great both in quantity and in quality, greater still for the price it is bringing. At our Pacific terminus, Prince Rupert, good progress is being made with the grading of the first 100 miles east, and I see no reason to doubt that by the autumn of 1911 our first train will break through to tide-water, passing from the Atlantic to the Pacific.

"We carry our road from Winnipeg over the Rockies to Prince Rupert with a maximum gradient of 26 ft. to the mile going west and 21 to the mile going east. The immense economy in hauling freights with gradients so remarkable, every railway man must recognize. We shall be able to put 2,000 tons of freight into Prince Rupert from Winnipeg behind a single engine. Of the seven great railroad systems which to-day cross the Rockies and reach the Pacific, the Union Pacific with grades of 116 ft. eastbound and 105 westbound, comes nearest to us. I will tabulate for you the grades of our six competitors and the dynamics of an engine on each.

| Railroad.                | Max. Grade. | Tractive Resistance in Pounds Per Ton. | Gross Capacity of Engine in Tons. |
|--------------------------|-------------|--|-----------------------------------|
| Grand Trunk Pacific..... | .26         | 14                                     | 2,041                             |
| Great Northern.....      | .116        | 50                                     | 572                               |
| Northern Pacific.....    | .116        | 50                                     | 572                               |
| Union Pacific.....       | .116        | 50                                     | 572                               |
| Santa Fe.....            | .185        | 76                                     | 376                               |
| Canadian Pacific.....    | .237        | 96                                     | 298                               |

"In other words, the same engine could haul up the maximum grade of the G.T. Pacific nearly four times more freight in a train than either the Great Northern, Northern Pacific, or Union Pacific, over five times more than on the Santa Fe, and about seven times more than on the C.P.R. These are very remarkable figures, I am aware, and I accept the responsibility of putting them on record. You can read in these figures the reason for our so-called 'generous expenditures.' The interest on the cost of such a line will be returned to us ten times over in the economy of our operations and in the increased safety of our passengers.

"We expect that our easy gradients, which are due not only or chiefly to our 'generous expenditures,' but to our possession of the Yellow Head Pass through the Rockies, will in a few years twist around a great portion of the wheat export trade of the Northwest, and with the opening of the Panama Canal in 1914, send wheat to Europe (let alone to Asia) by way of the Pacific. At present the wheat crop is either hurried to the ports on the great lakes, Duluth, Fort William, and Chicago, during the few weeks between threshing and the closing of lake navigation in November, or it is held up for six months in elevators at a considerable cost, or again, if it is carried through to the Eastern seaboard in winter, when the St. Lawrence route is closed by ice, the long haul through heavy snows makes the operation difficult, costly, and even disastrous both for the railway and to the farmer. Westbound from Saskatchewan and Alberta to Prince Rupert, the grades are easy; there is very little snow in winter, so that when the Panama Canal opens in six years I look to see Prince Rupert one of the very great grain ports of the world. I have more

than once ventured the prediction that in my lifetime we shall haul to the Pacific as much grain as we shall haul to the Atlantic."

Mr. Hays declared that this diversion of traffic would not seriously diminish the earnings of the G.T.P.R. Eastern Division. "The volume of traffic," said he, "coming out of the new Northwest, if we may judge from the way settlers are already swarming in, will throw far more business upon our existing lines than they can possibly handle. The present cultivated area is but six million acres, a mere patch this on a farm of 300,000,000 acres. As yet we have but scratched the surface. We shall require very shortly to do what the C.P.R. is already doing in Manitoba, that is, double-track our road to enable us to handle the traffic. Thus the diversion of a large portion of the far western wheat trade will advantage every section of our road; it will even enable us to give settlers much lower rates, because we shall even up our loads, sending full cars both east and west, instead of only east. While we send cattle, grain, and minerals west to Prince Rupert, we shall haul back east the coal and the lumber which the settlers on that three hundred million-acre farm need.

"When Prince Rupert has been connected with Sydney across the Pacific by a good line of steamships—and that will come soon—the connection will have been completed of the two very finest harbors in the British Empire. Our route cuts off to the Far East—say Yokohama—1,500 miles from New York, compared with the San Francisco route, and 500 miles over the Vancouver route, and the saving of two or three days will often decide the choice. The climate of the place is neither hot in summer nor cold in winter; the mercury rarely, if ever, goes to zero."

[EDITOR'S NOTE—Mr. Hays' statement in regard to the maximum gradient on the C.P.R. is misleading, and we do not consider it fair to the latter line to publish his comparison without explanation. The gradient of 237 ft. to the mile which he mentions is the original gradient between Field and Hector, B.C., eastbound. In September, 1907, we published an article describing the work of grade revision which the company was then about to undertake there. This work will reduce the gradient to 116 ft. to the mile on tangents which, on account of compensation for curvature, will give an actual rise of about 103 ft. to the mile. This work is practically completed, and the new line will, it is expected, be opened for traffic early this summer, before the G.T.P.R. mountain section is completed. In making a comparison of the gradients on the two lines, the reduction on the C.P.R. should in all fairness be taken into account.]

### Corrections for the Erring.

"Following the announcement in The Globe yesterday as to changes in the staff of the C.P.R. at West Toronto, the company has issued a circular giving a number of other changes which will take effect to-day. Mr. Allen Cameron, a former resident of this city, has been transferred from London, Eng., to New York, where he will be general traffic manager, while Mr. E. V. Skinner, of Montreal, will succeed him in London. Mr. G. McL. Brown, of Hamilton, will be general passenger agent for the C.P.R.'s Atlantic lines and will also be located in London."—Toronto Globe, Jan. 1.

Allan, not Allen, Cameron has been appointed General Traffic Agent, not General Traffic Manager, at New York. E. V. Skinner was not "of Montreal," never having lived there. He was Assistant Traffic Manager at New York. He has not been appointed to succeed Allan Cameron in London, the principal reason being that he died Nov. 7, 1908. Allan Cameron succeeds him in New York under a different title. G. McL. Brown has not been appointed General Passenger Agent for the C.P.R. Atlantic Lines with headquarters at London. He held that position in Montreal, but he has been transferred to London to succeed Allan Cameron as General Traffic Agent.

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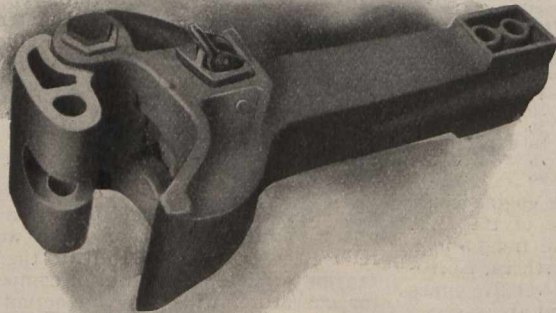
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## MONTREAL

### Canadian Northern Ry. Construction, Etc.

**Canadian Northern Quebec Ry.**—Application will be made to the Dominion Parliament for an act extending the time for the construction of the proposed line from Rawdon to Lake Archambault and for the line from Quebec to James Bay, with branches to Chicoutimi and Tadousac, Que.

**Canadian Northern Ontario Ry.**—The Dominion Parliament will be asked for an act to authorize the construction of the following lines of railway: (1) From or near Nipigon Bay northerly to a junction with the National Transcontinental Ry., with two branches to reach water connections at the northerly and southerly ends of Lake Nipigon. (2) From the authorized line between Montreal and French River, in or near Chisholm tp., northerly and westerly to the company's Hutton branch, in or near Capreol tp. (3) From the authorized line between Sudbury Jct. and Port Arthur, near the source of Vermillion River, northerly and easterly to a junction with the National Transcontinental Ry. near its crossing of the Abitibi

steel is laid for the railway. The railway line will follow the sleigh road as nearly as possible. It is stated that there have been some 3,000 claims staked out, and that there is a population of about 4,000 people in the district. These are at present being supplied largely from Sudbury, from which point the C.N.O.R. is operating by sleighs, a passenger, freight and express service.

In a recent interview, D. D. Mann, Vice-President C.N.R., stated that the next project which was absolutely essential to the carrying out of the company's programme was the construction of the line between Sudbury and Port Arthur, Ont. The company had to get assistance from the Government for this and he added: "We shall get after it as soon as Parliament meets." W. H. Moore, Secretary of the company, was in Ottawa recently, and it was said that his visit had to do with the obtaining of a subsidy for the construction of this line.

W. Mackenzie, President, in an interview at Montreal, Jan. 15, said the company was going to construct the line in the near future. The company's engineers had already per-

the Dominion Government for the purchase of the mounted police barracks in Calgary, Alta., which it is proposed to use as a union station by the C.N.R. and the G.T. Pacific Ry.

The Edmonton Board of Trade is pressing the company to extend the Unionville branch to Athabasca Landing, Alta., and it is expected that work will be put in hand during the coming season. (Jan., pg. 27.)

**Edmonton and Slave Lake Ry.**—Application will be made to the Dominion Parliament for an Act extending the time within which the company may complete and put into operation the lines which it was authorized to construct by sec. 8, chap. 66, of the statutes of 1899. G. F. Macdonnell, Toronto, is solicitor for the applicants. (Sept., 1907, pg. 663.)

### C.P.R. Industrial Department.

F. W. Peters, Assistant to the Second Vice-President, C.P.R., Winnipeg, has issued the following circular:



FORT GARRY STATION, WINNIPEG

Now being erected by the Canadian Northern Ry. for joint use of Canadian Northern Ry. and Grand Trunk Pacific Ry.

River. (4) From the last mentioned line between its starting point and the great northern bend of the Montreal River, southerly and easterly to near the south end of Lake Temiskaming. It is also desired to obtain an extension of time within which the following lines may be constructed: (1) Washago to Kincardine; (2) Arnprior to Gananoque; (3) Pembroke to Port Hope or Cobourg; (4) Pickering tp. to Owen Sound; (5) from near Toronto to Windsor, with a branch from London to St. Thomas and Sarnia, and a branch or loop north of Toronto; (6) Niagara River to Goderich; (7) from Sound or Meaford; (8) Washago to Midland; (9) Hawkesbury to the Ottawa-Toronto line in Leeds or Lanark; (10) Parry Sound to North Bay; (11) the line authorized in 1902 from French River to Batchawana Bay; and (12) the line authorized in 1905 from Toronto to Ottawa.

The sleigh road which the company is constructing from Sellwood Jct., on its line near Sudbury, Ont., into the Gowganda country, is expected to be completed at an early date. It was reported, Jan. 11, that 12 miles of the road had been completed and that it was expected to complete 53 miles by Jan. 31. The work of making the sleigh road available for waggon traffic is expected to be completed by spring, and traffic will be carried on by means of waggons until the

manently located a good portion of the route from Port Arthur eastward. A first-class route had been found, its location being between the C.P.R. and the National Transcontinental Ry. At some points the route would be nearer the N.T. Ry. than the C.P.R. We have reason to believe that about 37 miles of line will be built this year, from Sellwood Jct. 3 miles east of the present terminus at Sellwood westerly.

**Canadian Northern Ry.**—The Mayor of Port Arthur, Ont., was in Winnipeg, Jan. 1, in conference with W. Mackenzie, and other officers and officials of the C.N.R., discussing matters affecting the railway interests of the city. It was stated that as a result of the conference an agreement had been signed for the transfer of a piece of the city property to the company upon which is to be built an hotel at a cost of \$250,000. It is said the erection of this hotel is to be started early in the season. The company is reported to have also agreed to make considerable extensions of its terminal tracks, and to do a good deal in the way of dredging in the harbor. To increase the freight storage capacity, a shed is being built over the steel dock. A new dock is to be built just south of the present one; the work is to be started as soon as possible, and it is expected to have it completed for the summer trade.

Negotiations are said to be in progress with

"This company, with a view to encouraging the development of the cities, towns and villages along its lines in the West, and supplying their needs, has established an Industrial Department. Enquiries are constantly coming in through the company's various departments from manufacturers, importers, wholesale merchants and individuals in Eastern Canada and elsewhere, as to the openings in the West for manufactories, wholesale and retail houses, etc. Many of the new, as well as the older established points along our main line and branches throughout the West, are desirous of securing industries which will supply their needs and assist in their growth and prosperity. Our desire is, therefore, to obtain from all stations along our Western lines full information as to their requirements and the attractions their particular localities present to settlement, as well as to manufactories, jobbing or any industry that will assist in the development of our great west and bring a profitable return for investment. Secretaries of boards of trade are invited to correspond freely with the undersigned and furnish all particulars possible as outlined above, and manufacturers or intending investors are also asked to communicate with me if they desire any information. Such enquiries will receive the most careful and prompt attention, and it will be my endeavor to give information that will be reliable."

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**Railway Rolling Stock Notes.**

The Temiskaming and Northern Ontario Ry. is in the market for two switching locomotives.

The G.T. Pacific Ry., between Dec. 18 and Jan. 16, received 225 box cars, nos. 307925 to 308149.

The Temiskaming and Northern Ontario Ry. has ordered 4 first-class coaches to be rebuilt by the Preston Car and Coach Co., Preston, Ont.

The J. D. McArthur Co., contractors, Winnipeg, has ordered 50 flat cars, 30 tons capacity, from the Crossen Car Mfg. Co., Cobourg, Ont.

The Canadian Northern Ry. has ordered 4 60-ft. combination baggage and mail cars, and 2 second-class cars from the Preston Car and Coach Co., Preston, Ont.

The Intercolonial Ry. has ordered 2 60-ft. baggage cars from the Preston Car and Coach Co., Preston, Ont., and 3 baggage cars from the Crossen Car Mfg. Co., Cobourg, Ont.

The Preston Car and Coach Co., Preston, Ont., is rebuilding one 70-ft. baggage, and one 70-ft. sleeping car for a theatrical touring company; has delivered one carload of platform sleighs to the Canadian Express Co., one station platform truck to the C.P.R., and is building 10 taximeter cabs for the Berna Commercial Motors and Taxicabs of Toronto.

The C.N.R., between Dec. 15, 1908, and Jan. 15, ordered the following rolling stock: 1,000 box cars (mentioned in our last issue), and 15 cabooses, from Rhodes, Curry and Co., Amherst, N.S.; 25 stock cars from the Crossen Car Mfg. Co., Cobourg, Ont.; 4 mail and express and 2 second-class coaches from the Preston Car and Coach Co., Preston, Ont.

The Dominion Bridge Co., Montreal, has ordered one 4-wheel locomotive from the Montreal Locomotive Works. Following are the chief dimensions:

|               |       |                     |
|---------------|-------|---------------------|
| Cylinders     | ..... | 13" by 18"          |
| Drivers, diar | ..... | 36"                 |
| Boiler, type  | ..... | straight top.       |
| " pressure    | ..... | 160 lbs.            |
| Firebox       | ..... | 40 3/16" by 38 3/8" |

|                     |       |                     |
|---------------------|-------|---------------------|
| Wheels, drivers     | ..... | 69" diar.           |
| " trailers          | ..... | 44" diar.           |
| Boiler, type        | ..... | Extended wagon top. |
| " pressure          | ..... | 200 lbs.            |
| Firebox             | ..... | 94 1/8" by 69 3/8"  |
| Tubes, no. and diar | ..... | 193-2 1/4", 22-5"   |
| " length            | ..... | 19' 6"              |
| Driving wheel base  | ..... | 13' 0"              |
| Engine wheel base   | ..... | 33' 7"              |
| Engine and tender   | ..... | 59' 11 3/4"         |
| Weight on drivers   | ..... | 135,000 lbs.        |
| Total weight        | ..... | 214,200 lbs.        |
| Tank capacity       | ..... | 5,000 imp. galls.   |
| Superheater         | ..... | Vaughan-Horsely.    |

Following are chief particulars of the 750 box cars which the Canada Car Co., Montreal, is building for the C.N.R.:

|   |       |             |
|---|-------|-------------|
| Length over end sills                           | ..... | 36' 9 3/4"  |
| Width over side sills                           | ..... | 9' 0 3/4"   |
| Height from top of sill to bottom of plate      | ..... | 7' 10 3/4"  |
| Length inside                                   | ..... | 35' 10 3/4" |
| Width inside                                    | ..... | 8' 6"       |
| Height from top of floor to bottom of car line  | ..... | 8' 0"       |
| Outside of end sill to centre of bolster        | ..... | 5' 0"       |
| Centre to centre of cross ties                  | ..... | 7' 6"       |
| Door opening                                    | ..... | 6' 0"       |
| Wheel base of truck                             | ..... | 5' 2"       |
| Height from top of rail to centre of drawbar    | ..... | 2' 10 1/2"  |
| Height from top of rail to top of brake mast    | ..... | 14' 0"      |
| Height from top of rail to top of running board | ..... | 13' 3"      |
| Width over eaves                                | ..... | 9' 7 3/8"   |
| Body and truck bolsters                         | ..... | Simplex     |
| Brake beams                                     | ..... | Simplex     |



ONE OF THE STEAM LOCOMOTIVES USED IN THE ST. CLAIR TUNNEL PRIOR TO ITS ELECTRIFICATION

During Jan., the Montreal Locomotive Works shipped to St. Thomas, Ont., 3 locomotives for the Michigan Central Rd., and completed 10 locomotives for the Canadian Northern Ry.

The C.P.R., between Dec. 21 and Jan. 13, received the following additions to rolling stock: 109 box cars and 1 snowplow from its Angus, Montreal, shops, and 18 vans from its Farnham, Quebec, shops.

The G. T. Pacific Ry., in addition to the 25 eight-wheel locomotives ordered with the Montreal Locomotive Works, details of which are given, has ordered 25 mogul locomotives from the Canadian Locomotive Co., Kingston, Ont., a total of 50 locomotives for delivery this year.

The C.N.R., between Dec. 15 and Jan. 15, received the following additions to rolling stock: 11 consolidation locomotives, 7 of which were from the Canadian Locomotive Co., Kingston, Ont., and 2 snowplows from the Crossen Car Mfg. Co., Cobourg, Ont.

The C.P.R., between Dec. 21 and Jan. 13, placed orders for the following rolling stock: 70 box cars, 1 colonist car, 6 stock cars, 3 refrigerator freight cars, at its Angus, Montreal, shops; 3 vans at its Farnham, Que., shops, and 5 steel coal cars and 3 Hart-Otis ballast cars, with the Dominion Car and Foundry Co., Montreal.

|                     |       |                 |
|---------------------|-------|-----------------|
| Tubes, no. and diar | ..... | 92-2"           |
| " length            | ..... | 9' 9"           |
| Wheel base          | ..... | 6' 3"           |
| Weight              | ..... | 51,000 lbs.     |
| Tank capacity       | ..... | 950 U.S. galls. |

M. P. and J. T. Davis, railway contractors, Quebec, have ordered two 4-wheel locomotives from the Montreal Locomotive Works. Following are the chief particulars:

|                     |       |                   |
|---------------------|-------|-------------------|
| Cylinders           | ..... | 15" by 24"        |
| Drivers, diar       | ..... | 69"               |
| Boiler, type        | ..... | straight top.     |
| " pressure          | ..... | 160 lbs.          |
| Firebox             | ..... | 72" by 33 3/8"    |
| Tubes, no. and diar | ..... | 137-2"            |
| " length            | ..... | 9' 7"             |
| Wheel base          | ..... | 7' 0"             |
| Weight              | ..... | 75,420 lbs.       |
| Tank capacity       | ..... | 1,000 U.S. galls. |

The G.T. Pacific Ry. has ordered 25 American type locomotives from the Montreal Locomotive Works. Following are the chief dimensions:

|                     |       |                     |
|---------------------|-------|---------------------|
| Cylinders           | ..... | 18" by 24"          |
| Drivers             | ..... | 69" diar.           |
| Boiler, type        | ..... | Extended wagon top. |
| " pressure          | ..... | 200 lbs.            |
| Firebox             | ..... | 95 3/4" by 41 3/4"  |
| Tubes, no. and diar | ..... | 210-2"              |
| " length            | ..... | 11' 2 3/8"          |
| Driving wheel base  | ..... | 8' 10"              |
| Engine wheel base   | ..... | 23' 8 1/2"          |
| Engine and tender   | ..... | 50' 11 3/4"         |
| Weight on drivers   | ..... | 74,770 lbs.         |
| Total weight        | ..... | 120,700 lbs.        |
| Tank capacity       | ..... | 7,000 U.S. galls.   |

The C.P.R. has ordered 30 Pacific type locomotives from the Montreal Locomotive Works. Following are the chief dimensions:

|           |       |            |
|-----------|-------|------------|
| Cylinders | ..... | 21" by 28" |
|-----------|-------|------------|

|               |       |                  |
|---------------|-------|------------------|
| Side bearings | ..... | Susemihl, roller |
| Couplers      | ..... | Latrobe steel    |
| Air brakes    | ..... | Westinghouse     |
| Journal boxes | ..... | McCord           |

The locomotives, nos. 1301 to 1304, used by the G.T.R. for the operation of the trains through the Sarnia tunnel, which have now been retired in favor of electric traction, and one of which is illustrated on this page, are of the 10-wheel type, 22 x 26 in., with 50 1/2 in. drivers. Their general dimensions are as follows:

**WEIGHT.**—On drivers—42,150 lbs., 40,050 lbs., 32,400 lbs., 29,400 lbs., 29,100 lbs., on each pair of drivers from front to rear; total weight of locomotive, loaded, 173,000 lbs.; the engine being weighed with three gauges of water. Weight of tender loaded, 62,500 lbs.; total weight of locomotive and tender, 235,600 lbs.

**LENGTH.**—Wheel base of locomotive, 18 ft. 5 in.; wheel base of tender, 16 ft. 3 in.; total wheel base of locomotive and tender, 48 ft. 2 in. Total length of locomotive, 42 ft. 7 1/2 in.; length of tender 19 ft. 11 1/2 in.; total length of engine and tender, 62 ft. 7 in. Height, 14 ft. 9 in.; width of locomotive over all, 10 ft. 4 in.

**BOILER.**—Outside diameter, 74 in.; working pressure, 165 lbs. to the square inch.

**HEATING SURFACE.**—Firebox, 180 sq. ft.; tubes, 1,905.5 sq. ft.; total, 2,085.5 sq. ft. Grate area, 37.3 sq. ft.

**TENDER.**—Capacity, 2,925 U.S. galls. of water.

The Minister of Railways stated, Jan. 5, that the reduction, on Jan 1, from 10 hours to eight hours, with a corresponding reduction of pay, in the Intercolonial Ry. shops, is merely temporary, and will probably not last more than a month or two.

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Plain

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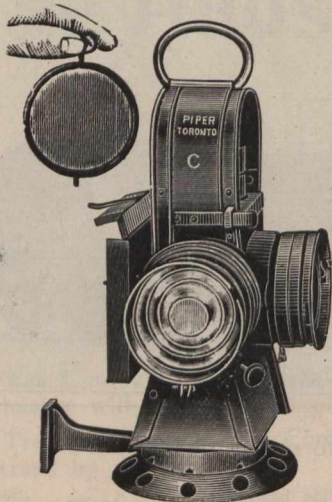
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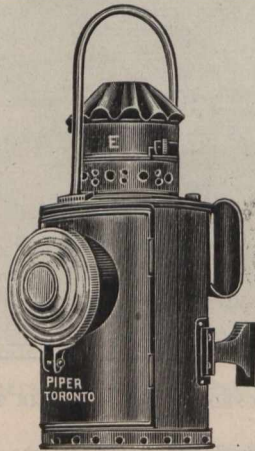
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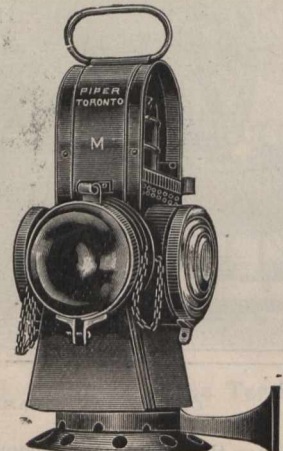
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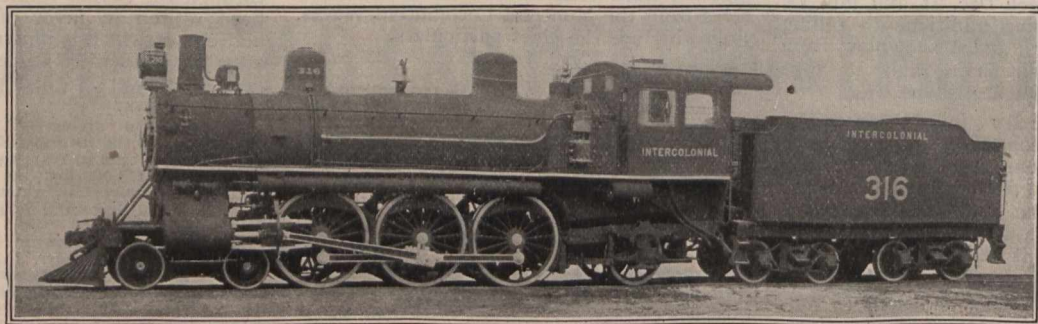


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# THE RAILWAY & MARINE WORLD

With which are incorporated The Western World and The Railway and Shipping World, Established 1890.

An Illustrated Periodical devoted to Steam and Electric Railway, Marine, Grain Elevator, Express, Telegraph, Telephone and Contractors' Interests.

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TORONTO, CANADA, FEBRUARY, 1909

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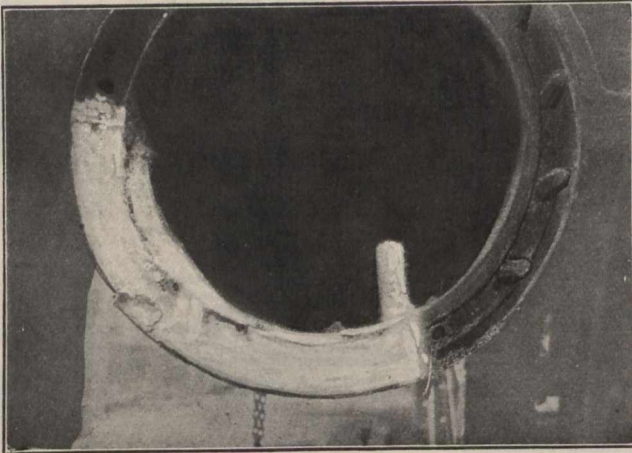
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## MAINLY ABOUT PEOPLE.

J. W. Leonard, General Manager C.P.R. Eastern Lines, who has been ill, is recuperating at Preston Springs, Ont.

J. O'Connor, an old G.T.R. employe at Montreal and Brockville, Ont., died at the latter place Dec. 28, 1908, aged 65.

J. B. Jones, who was engaged on C.P.R. surveys in Manitoba in the company's early days, died in Winnipeg Dec. 25, 1908.

M. Donohue, an employe of the old Northern Ry. prior to its absorption by the G.T.R., died in Toronto recently, aged 80.

R. K. Sperling, of London, Eng., a director of the B.C. Electric Ry. Co., and a brother of R. H. Sperling, its General Manager, died recently.

Mrs. Wm. Mackenzie, wife of the President C.N.R., has been elected Vice-President of the St. Elizabeth Visiting Nurses' Association Toronto.

J. J. Hill, Chairman of the Board, Great Northern Ry., has contributed \$1,000 towards the building fund of the Friends' College at Newmarket, Ont.

D. D. Mann, Vice-President Canadian Northern Ry., recently presented to each official of the company, a set of three volumes of Queen Victoria's Letters.

Miss Elizabeth Vickers, who died at Dublin, Ireland, recently, aged 89, was the only sister of the late J. J. Vickers, of Toronto, founder of Vickers' Express.

Geo. Jackson, who died in Toronto Jan. 6, aged 74, was father of H. A. Jackson, Assistant General Freight and Passenger Agent, Great Northern Ry., at Helena, Mont.

Robert Tinsley, who has been appointed Manager Pullman Car Works, Chicago, Ill., is a son of E. Tinsley, Superintendent Ontario Game and Fisheries Department.

Lord Strathcona has subscribed \$5,000, and Lord Mount Stephen \$2,500, to the Mansion House Fund, London, Eng., for the sufferers by the recent earthquake at Messina, Italy.

Winnipeg press reports mention Andrew Strang, a merchant of that city, as a likely appointee to the Board of Railway Commissioners to fill the vacancy caused by T. Greenway's death.

J. E. Quick, General Baggage Agent G.T.R., left Toronto, Jan. 20, for St. Augustine, Fla., to attend the meetings of the Association of General Baggage Agents of America, of which he is Secretary.

G. Johnson, C.E., a native of Belleville, Ont., who has for some years been engaged on railway construction work in China, has been appointed to take charge of a large irrigation project in Mexico.

A fire occurred at the residence of S. Higgins, General Manager New York, New Haven and Hartford Rd., New Haven, Conn., Jan. 13, in which his mother lost her life, and other members of the family were injured.

Judge Gunn, of Ottawa, has been appointed Chairman, and J. L. Whiting, K.C., and J. G. O'Donoghue, members of a board of conciliation to deal with a dispute between the Kingston and Pembroke Ry. and its telegraphers.

F. Nicholls, Vice-President Toronto Ry., and associated with other transportation interests, had a narrow escape from a serious accident in Toronto, Jan. 7, when his automobile was struck by a street car and badly damaged.

Dr. W. J. McGuigan, who died Dec. 25, 1908, at Vancouver, B.C., was from 1885 to the completion of the construction of the transcontinental line, C.P.R. Medical Superintendent on construction work within the province.

T. S. Acheson, General Grain Agent C.P.R., Central and Western Divisions, was, from 1895 to 1904, Agent; 1904 to 1905, Supervisor of Agencies; 1905 to Jan. 1, 1909, Travelling Freight Agent Central Division C.P.R., Winnipeg.

B. W. Folger, General Manager Niagara Navigation Co., Toronto, with Mrs. Folger and family, left Toronto Jan. 3, and sailed from New York for Europe. They will spend some time in Munich, Bavaria, probably returning in March.

Judson Harmon, who was receiver of the Pere Marquette Rd., as well as of the Cincinnati, Hamilton and Dayton Rd., when they were operated jointly, and who still retains the latter office, has been elected Governor of the State of Ohio.

D. Sutherland, General Agent C.P.R., Prince Rupert, B.C., was prior to entering C.P.R. service, General Freight Agent Reid Newfoundland Co., St. John's, Nfld., and until Jan. 1, was Travelling Freight Agent C.P.R., Vancouver, B.C.

J. H. Gordon, Travelling Freight Agent Eastern Manitoba, C.P.R., Winnipeg, has been in the company's service eight years, during which time he has been in the operating and traffic departments, and was, until Jan. 1, Soliciting Freight Agent at Winnipeg.

Imperial Service Medals have been awarded to the following Government railway employes for long and meritorious service: J. C. Clarke, section foreman; A. McCabe, engineman; J. G. McDonald, engineman, and E. Shaw, crossing watchman, all of the Intercolonial Ry.

Miss L. Begy, daughter of G. A. Begy, St. Catharines, Ont., who was connected with the construction of the Nicola, Kamloops and Similkameen Ry., and is interested in other railway projects in Canada, was married Jan. 11 to F. Ritchie, Brockville, Ont.

C. Graham Drinkwater, heretofore Manager railway and contractors' department, Canadian Fairbanks Co., Montreal, has been appointed Manager of the company's Montreal house, vice C. M. Rudel, resigned. Mr. Drinkwater is a son of the late C. Drinkwater, Secretary C.P.R.

F. A. Miller, claims clerk, G.T.R., Montreal, was presented, Jan. 15, by the clerical staff at the Montreal freight terminals, with a gold watch and chain, on his retirement under the provisions of the Pension Fund. He was in the G.T.R. employ for 36 years and will in future reside in England.

In a list of railway stockholders of the U.S., recently published in New York, Lord Strathcona appears as the holder of \$4,000,000 of Northern Pacific and \$2,880,000 of Great Northern stock, and his daughter, Hon. Mrs. Howard, as owner of \$1,990,000 of Northern Pacific and \$1,700,000 of Great Northern stock.

Additional subscriptions recently received for the Hammond Endowment Fund, inaugurated by H. C. Hammond, President Northern Navigation Co., for the Toronto Free Hospital for Consumptives, include: S. H. Blake, K.C., \$300; D. D. Mann, \$200; G. T. Blackstock, K.C., \$100; Z. A. Lash, K.C., \$100; Angus Sinclair, \$50.

Mrs. J. L. Englehart, wife of the Chairman of the Temiskaming and Northern Ontario Ry. Commission, died at Toronto, Dec. 31, after a somewhat lengthy illness. The funeral, which took place at Petrolia, Ont., Jan. 4, was attended by F. Dane, one of the Commissioners; A. J. McGee, Secretary-Treasurer; J. H. Black, Superintendent, as representing the railway.

I. Randolph, Chicago, Ill., who was retained by the City of Toronto as an expert in the recent application to the Board of Railway Commissioners for an order to compel the railway companies to construct a viaduct

across the city, has been appointed one of the six engineers who have been instructed to proceed to Panama to prepare a report on the progress of the canal project.

In our issue of October last, reference was made to the death at Red Deer, Alta., of Jos. Wallace, formerly General Agent G.T.R., Hamilton, Ont., from which position he retired in May, 1905. The item was based on information which we believed to be authentic, but we have since learned that it was incorrect, and we very much regret having published it. We were recently advised that Mr. Wallace was still living at Red Deer, and in good health.

W. H. Estano, who has been appointed acting Traffic Auditor, Intercolonial Ry., Moncton, N.B., was born at Halifax, N.S., Sept. 29, 1874; educated at Moncton, N.B., and entered the I.C.R. Traffic Auditor's office, Moncton, Oct., 1892, occupying various positions, these including those of clerk in charge of interline, passenger, parlor and sleeping cars; statistical and outstanding accounts, travelling auditor, etc. He was appointed chief clerk, Accounting Department, Mar. 1, 1907, which position he held until Jan. 1, 1909.

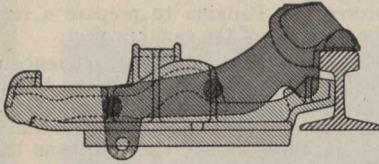
The Montreal Transportation Co.'s directors, at a meeting Jan. 7, passed the following resolution: "That the directors of this company wish to place on record the great loss they have sustained through the death of J. A. Cuttle, the Managing Director. He had been in the employ of the company for 34 years, and his ability, foresight, and single-minded devotion to the company, and its interests, have done much for its advancement, and his sudden death is not only a great loss to this company, but to the business interests of Montreal."

John Halstead, General Freight Agent C.P.R., Calgary, Alta., entered C.P.R. service Jan. 7, 1892, and was to Sept., 1901, in the Local and General Freight office, Toronto; Sept., 1901, to April, 1902, chief clerk General Freight office, Winnipeg, and during the latter portion of that time he was Travelling Freight Agent there; 1902 to 1906, chief clerk General Freight office, Vancouver, B.C., and during the latter part of 1906 was General Agent Freight and Passenger Department, Tacoma, Wash.; 1906 to Jan. 1, 1909, Assistant General Freight Agent, Calgary, Alta.

F. L. Hay, whose appointment as Superintendent Sleeping and Dining Cars and News Service, district 5, Pacific Division, C.P.R., at Vancouver, B.C., was announced in our Jan. issue, was born at Portland, Ore., Jan. 16, 1868, and entered the Pullman Co.'s service at Chicago in 1887, where he remained until July, 1895, since when he has been till July, 1908, in the Dining Car Dept., Pennsylvania Rd., Jersey City, for the last eight years as Assistant Superintendent of Dining Cars and Restaurants; July to Dec., 1908, acting Superintendent, Sleeping and Dining Cars and News Service, C.P.R., Vancouver, B.C.

G. H. Middleton, C.E., who died at Edinburgh, Scotland, Dec. 17, 1908, was engaged in 1871 in construction work on the St. Lawrence district of the Intercolonial Ry., and subsequently in C.P.R. construction north of Lake Superior. On the completion of this latter work he entered into partnership with the late Sir Robert G. Reid, in connection with the railways in Newfoundland. For several years he has been engaged in railway work in South Africa. He married a daughter of the late S. Hazlewood, some time District Engineer Intercolonial Ry., one son being on the C.P.R. engineering staff at Lethbridge, Alta.,

J. W. Donald, formerly District Passenger Agent, Chicago and Alton Rd., Detroit, Mich., whose death was mentioned in our last issue, was born at St. John, N.B., Dec. 22, 1857, entered railway service in 1877, and was to 1881 Travelling Passenger



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G. T. BELL, General Passenger and Ticket Agent, MONTREAL, QUE.

Agent C.P.R., St. John, N.B., and at Bangor, Me., 1881 to 1887, Travelling Passenger Agent, Atcheson, Topeka and Santa Fe Rd., Boston, Mass.; 1887 to 1901, General Agent Passenger Department, Chicago and Alton Rd., Boston, Mass.; 1901 to 1904, District Passenger Agent, same road, Buffalo, N.Y.; 1904 to Nov. 20, 1908, District Passenger Agent, in charge of Michigan and Ontario territory, same road, Detroit, Mich.

G. D. Robinson, whose appointment as Assistant Export and Import Freight Agent C.P.R., Toronto, was announced in our last issue, was born at St. John, N.B., Dec. 7, 1877, and entered C.P.R. service Nov. 25, 1895, since when he has been, to Dec., 1901, in the General Freight Agent's office, St. John, N.B.; Dec., 1901, to Aug., 1903, Travelling Freight Agent, covering territory east of St. John in New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland; Aug., 1903, to Aug., 1907, chief clerk, General Freight Agent's office, St. John, N.B.; Aug., 1907, to Jan. 1, 1909, chief clerk, General Foreign Freight Agent's office, Montreal.

J. K. Savage, whose appointment as Chief Train Dispatcher, District 3, Central Division C.P.R., Brandon, Man., was announced in our Jan. issue, was born at Forreton, Ill., Oct. 5, 1876. He entered the C.P.R. service Mar. 1, 1890, as station agent at South Stukely, Que., since when he has been successively to May 1, 1894, station agent and operator at various stations in Quebec Province; May 1, 1894, to May 24, 1897, train dispatcher, Farnham, Que.; Jan. to Sept., 1904, Night Chief Train Dispatcher, Toronto; Sept., 1904, to Sept., 1906, Inspector Train Dispatching Western Lines, Winnipeg; Sept., 1906, to Mar. 1, 1907, Chief Dispatcher, District 1, Central Division, Kenora, Ont.; Mar. 1, 1907, to Dec., 1908, Trainmaster District 3, Central Division, Brandon, Man.

H. C. Hammond, President Northern Navigation Co., who has been suffering from cancer of the throat since June last, died in Toronto Jan. 26. He was born at Grafton, Ont., Oct. 19, 1844; educated at Cobourg Grammar School and Upper Canada College, and began his business career in the Cobourg branch of the Bank of Montreal, passing to the Quebec Bank, and subsequently to the Bank of Hamilton. He entered into partnership with E. B. Osler in Toronto in 1872, and took a leading part in many important commercial and financial projects. In 1904 he was elected President Northern Navigation Co., at a time of exceptional difficulty in that company's career, and the strong position it now occupies is due in a great measure to the energy of the late President.

W. M. Ansley, whose appointment as Trainmaster, district 3, Central Division, C.P.R., Brandon, Man., was announced in our Jan. issue, was born June 15, 1873, at Fiesherton, Ont. He entered railway service April 6, 1897, as wiper on the Canada Atlantic Ry., at Depot Harbor, and was subsequently transferred to the mechanical department until Dec., 1900, when he engaged with the Algoma Central and Hudson Bay Ry., Sault Ste. Marie, Ont., and later left railway service. He re-entered it in 1901, since when he has been: Aug. 4, 1901, to Mar. 17, 1903, brakeman, C.P.R., Kenora, Ont.; Mar. 17, 1903, to Aug. 19, 1907, conductor, same road; Aug. 19 to Nov. 3, 1907, Assistant Trainmaster, same road, Brandon, Man.; Nov. 3, 1907, to completion of construction, Trainmaster, Sheho extension, same road, Saskatoon, Sask.; from then to Oct. 1, 1908, Trainmaster, district 5, Central Division, Saskatoon, Sask.; Oct. 1 to Dec. 1, 1908, Trainmaster district 4, Central Division, Souris, Man.

The Winnipeg Tribune, under the heading "Ten Years Hence," recently published the following: "The report that Sir George J. Bury has accepted the presidency of the

Winnipeg, Hudson's Bay and Liverpool Aerial Navigation Co., is premature. Sir George explains that the offer from a monetary point of view was extremely flattering, but the condition that obliged him to demur was that the president should sit in the stern of the air train and steer the thing across the Atlantic on the initial trip. While he was fond of sea bathing at Atlantic City, Old Orchard, or Pawm Beach, providing the conditions and company were agreeable, he did not fancy a dip among the icebergs in the northern inland sea, or along the Labrador coast. He had been reading up the history of northern navigation from Sir Henry Hudson's voyage, down on past Sir John Franklyn's expedition, and those which went out to find him, and Sir George fancied that, all things considered, he would quietly and unostentatiously remain with horizontal navigation as near to terra firma as possible."

#### Shipment of Long Materials and Stones.

The Board of Railway Commissioners has sent out the following draft of an order which it proposes to issue, stating that the matter will be taken up at the sittings in Ottawa, April 6:

Whereas the attention of the Board has been called to a number of accidents, in some instances fatal, caused by defects in the flat and open cars of railway companies, used for shipments of long materials and stone, not affording proper safeguards for the handling of such traffic. Upon the report and recommendation of its inspectors, and in pursuance of the powers conferred upon it by secs. 30 and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf, it is ordered that every railway company subject to the legislative authority of the Parliament of Canada operating a railway by steam power, adopt the following rules and regulations to govern the loading of lumber, logs and stone on flat or open cars, namely:

1. That cars be so loaded that one hand-brake shall always be accessible and operative; and that there be at least 6 inches between the brake wheel and the lading.

2. That all stakes, clamping pieces, bearing pieces, and braces be sound, straight grained lumber (hardwood preferred), and free from knots that would materially impair their strength. (Hemlock must never be used.) Care must be taken to keep the stakes from spreading at the top while cars are being loaded, and in no case must the load exceed the width of the car. Unless otherwise specified, stakes must not be less than 4 ins. wide by 5 ins. deep, or saplings 5 ins. in diameter at the centre, tapered at the ends to fit accurately, extend through and completely fill the stake pockets, which should not be less than 3½ ins. wide by 5 ins. deep.

3. That opposite stakes be always fastened together. When the specified fastening is by means of boards, there must be two boards on opposite sides of every pair of stakes, each board not less than 1 by 6 ins. in dimension, unless otherwise specified, and fastened at each end by not less than 3 ten-penny wire nails. (Hemlock must never be used.) When the specified fastening is by means of wire, the wire used, unless otherwise specified, must be equal to 6 strands or three wrappings of no. 8 telegraph wire (or wire of equal strength), and the wire must be secured, to prevent it from slipping.

4. (a) That all large flagging block, or breakwater stone, with approximately straight face, loaded on flat or open cars, be placed on strips spaced 18 ins. apart, placed crosswise on the car, and of sufficient thickness to keep the stone clear of the car floor—cars so loaded to be provided with hardwood stakes or cleats, to prevent the stone from shifting; (b) that all large block or breakwater

stones resting on uneven face be wedged to prevent them from rocking, and that cars so loaded be provided with hardwood stakes or cleats, to prevent end and side shifting; (c) and that when small-sized stone, such as rip rap, spawls, paving blocks, etc., is loaded on flat or open cars, such cars be provided with side and end boards securely staked and fastened, that is to say, the boards and stakes are to be high enough and strong enough to carry the load safely, and not allow any of it to fall from the car during transit or switching, the side and end boards 10, 20, or 30 ins. in height, as the load may require, to be securely fastened to the stakes by the use of clamps or nails so that the ends and sides of the car shall be securely closed.

5. That if the load on a car shifts in transit, the train crew shall see that it is readjusted in accordance with this order before the same is allowed to proceed.

6. That shippers and the railway companies and their operators and employes shall see that all open and flat cars are loaded, and the loads protected in accordance with the terms of this order.

7. That every such railway company shall be liable to a penalty not exceeding \$50 for every failure to comply with the foregoing regulations.

8. That every employe of such railway company and every shipper shall be liable to a penalty of not exceeding \$25 for every failure to comply with the foregoing regulations.

#### Railway Interests in Parliament.

The speech of the Governor-General at the opening of the Dominion Parliament, Jan. 20, contained the following references to railway interests:

"The rapid settlement of the new provinces calls for new lines of transportation. The construction of the Transcontinental Railway has been vigorously pressed forward during the last year. The line was open for the carrying of the crops from Winnipeg to the Battle River, a distance of 675 miles.

"Exploratory surveys for a railway from the western wheat fields to Hudson Bay are being pushed energetically. Four parties have been at work since August last. Upon the report it will be possible to reach a decision as to both the route to be followed and the approximate cost. The provision of the Dominion Lands Act of last session for the sale of pre-emptions and purchased homesteads has created a new source of revenue that will be sufficient to bear the cost of the railway to Hudson Bay without burdening the ordinary revenue. From Sept. 1, when the Act came into force, until Jan. 1, sales of pre-emptions and purchased homesteads amounted to over two million acres, all subject to homestead rules.

"In pursuance of an announcement made during the concluding session of last Parliament, a commission was appointed to examine various lines of railway connected with the Intercolonial Ry., and which might become valuable feeders thereto. The report of this commission has been received and will be placed before you."

**Canadian Lake Line.**—The following appointments have been made: W. Askin, formerly General Agent, Montreal and Lake Superior Line, Montreal, to be Western Agent at Winnipeg, vice J. McLerie, resigned. W. J. Rochford, Travelling Freight Agent for Western Ontario, with headquarters at Windsor, Ont. The Oceanic Transit Co., General European Agent, London, Eng. The Traffic Manager, H. A. Young, has removed from the wharf office at the foot of York St., Toronto, to 18 Wellington St. East, where the offices of the Canadian Lake and Ocean Navigation Co. and the Canadian Lake Transportation Co. are now located.

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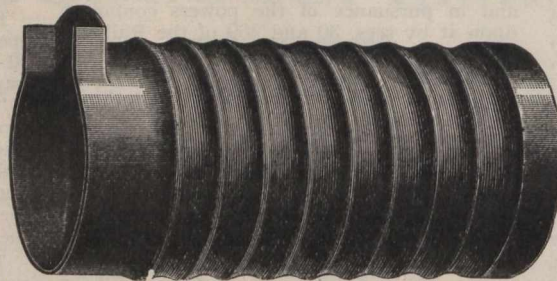
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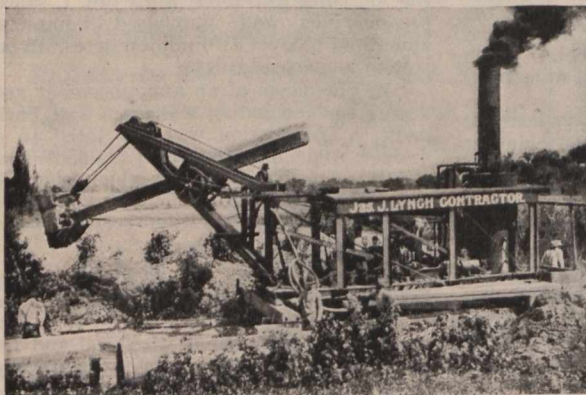
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**National Transcontinental Railway.**

H. J. Mackenzie, divisional engineer for the first 40 miles of the main line easterly from Superior Junction, recently stated in Winnipeg, that the contractors on several portions of District F, were busily engaged in taking in their supplies from various points on the G.T. Pacific Ry.'s Lake Superior Branch, toting roads having been cleared for this purpose. The principal route used is from Waco. On the contract easterly from Superior Junction, 138 miles, the work is in the hands of O'Brien, Fowler & McDougall, who have about 1,000 men at work upon the first 50 miles. About 20 miles of bush clearing had been completed at the end of 1908, and some 16 miles of grading was being progressed with. There was a good deal of rock cutting along the 50 miles, and work will be proceeding on all the cuts throughout the winter.

S. R. Poulin, Engineer of District F, on his recent visit to Ottawa, stated that the Commissioners were determined to leave no stone unturned to have the track laid from Winnipeg to Superior Junction in time to move the western crop of 1909.

**GRAND TRUNK PACIFIC RY.**

An official statement has been issued by the company showing the total mileage of the company's line, the mileage of track laid in 1908, the mileage under contract, and the mileage surveyed, but for which contracts have not been let. This statement shows that on Jan. 1, 1908, the company had laid track on 418.3 miles of line, and that on Dec. 31, track had been laid on 878.8 miles, the mileage laid in 1908 therefore being 460.5 miles. This was distributed as follows:

|  | Miles.       |
|--|--------------|
| Ont., mileage 99.6 to mileage 188.8.....   | 89.2         |
| Man., Winnipeg to mileage 45.....          | 45.0         |
| Sask., mileage 312 to mileage 414.9.....   | 102.9        |
| Sask., mileage 466.6 to mileage 627.1..... | 160.5        |
| Alta., mileage 627.1 to mileage 685.0..... | 57.9         |
| Alta., mileage 786.6 to mileage 791.6..... | 5.0          |
| <b>Total</b>                               | <b>460.5</b> |

The new line upon which construction was proceeded with or completed during the year includes the following distances: Winnipeg to mileage 45; mileage 312 to 414.9, a distance of 102.9 miles; mileage 466.6 to 916, a distance of 449.4 miles, of which the last 231 miles was placed under contract in 1908; mileage 1655 to 1755, a distance of 100 miles; Lake Superior branch, mileage 99.6 to 188.8, a distance of 89.2 miles; and Pacific Northern and Omineca Ry., from Kitimat, B.C., to mileage 53.7. The contractors now at work on the line are Foley, Welch and Stewart, their headquarters being Stoney Plains, Alta., and Prince Rupert, B.C. The company has had under survey during 1908, mileage 916 to 1655, a distance of 739 miles; of which the 609 miles from mileage 1045 was still marked as being under survey Dec. 31, 1908.

The Ontario Railway and Municipal Board, Jan. 5, gave a certificate to the company for presentation to the Provincial Treasurer, to enable it to obtain the bonus of \$2,000 a mile and 3,000 acres of land granted by the Ontario Legislature towards the construction of the line. The certificate given covers the first 122 miles out of Fort William. It was anticipated that the town of Port Arthur would have opposed the granting of the certificate, on the ground that that city's interests were being neglected in the laying out of the terminals at the head of the lakes. An understanding, however, had been reached and the Board received a telegram, Jan. 5, to the effect that all opposition had been withdrawn.

Application will be made at the current session of the Dominion Parliament by the C.P.R. and the G.T.P.R. companies for an act ratifying and confirming an agreement,

dated Dec. 1, 1908, between the two companies, respecting joint facilities at Fort William, Ont.

With the completion of the bridge across the Battle River, 675 miles westerly from Winnipeg, tracklaying was resumed in the direction of Edmonton. The whole of the grading between Battle River and Edmonton, Alta., has been completed, the last link required to enable tracklaying to be rushed through without a break being forged Dec. 29, when the big bridge at Clover Bar was finished. This bridge has an aggregate length of 663 ft., and consists of 19 spans, varying from 40 to 225 ft. in length, and is 136½ ft. above low water level. The substructure is of concrete, and the spans of steel. It is expected that the track will be laid into Edmonton, and the line opened for traffic early in the summer.

J. W. Stewart, of Foley, Welch and Stewart, stated Jan. 12, that the firm's contract for the grading of the G.T.P. Ry., from Edmonton to the Pembina River, 125 miles westerly, had been completed, and the line was ready for tracklaying.

With regard to the construction on the line easterly from Prince Rupert, J. W. Stewart, of Foley, Welch & Stewart, who have the contract for the first 100 miles, stated in Montreal, Jan. 11, that the grading upon this distance was expected to be completed by Sept. 1, and that tracklaying would probably be started at Prince Rupert in June. All the camps were accessible from the Skeena River, and when he came out at the end of Dec., there were 3,500 men at work and very satisfactory progress was being made.

The railway ferry barge Georgian, the deck of which is laid with three tracks, recently made a trip from New Westminster to Prince Rupert, carrying a load of equipment, including locomotives, dump and flat cars, steam shovels, etc. The locomotives and cars were landed at Prince Rupert Dec. 28.

**G.T.P.R. BRANCH LINES.**

The statement was made in Edmonton, Alta., Jan. 18, on the authority of D'Arcy Tate, Assistant Solicitor G.T.P.R., that the company would have a route into Calgary before the end of next season. The intention of the company is to construct a line from Wainwright to Calgary, and then on to Coutts, Alta., 330 miles. Work will be started as soon as spring opens and will be pushed through to completion. (See also Saskatchewan-Regina Railways.)

**Pacific Northern and Omineca Ry.**—Application will be made to the British Columbia Legislature for an act giving the company power to construct a railway from the junction of the Skeena and Copper Rivers to the junction of the Bulkley and Telkwa Rivers, or that vicinity, and to amend the company's act of 1905, by extending the time for the completion of the lines then authorized to be constructed to June 26, 1911. Bodwell & Lawson, Victoria, B.C., are solicitors for the company.

**Canadian Ticket Agents' Association.**—At a meeting of the Executive Committee in Toronto, Jan. 19, W. Bunton, G.T.R., Peterboro, Ont., was appointed to represent the Association at the next meeting of the American Association of General Passenger and Ticket Agents at Toledo, Ohio, Oct. 19. The C.T.A.A. will hold its next annual meeting at Buffalo, N.Y., Oct. 5 to 7.

The Ontario Government has under consideration plans for a new wing at the Parliament Buildings, Toronto. The new wing would provide accommodation for the Ontario Railway and Municipal Board, the Temiskaming and Northern Ontario Ry. Commission and the Hydro-Electric Commission, as well as some other departments.

**Rate Meetings at Niagara Falls.**

Three important rate meetings were held at the Clifton House, Niagara Falls, Ont., Jan. 19 to 21. The rate clerks of the lines comprising the Niagara Frontier Summer Rate Committee and the Great Lakes and St. Lawrence River Rate Committee met Jan. 19 and 20 to arrange the details of rates for the current year.

The International Water Lines Passenger Association met Jan. 20. In the absence of the President, C. A. Jaques, of Montreal, C. F. Bielman, of Detroit, Mich., presided.

R. C. Davis, G.P.A. Goodrich Line, on behalf of the Association presented a gavel for the retiring President, which was accepted by Melville Jaques in behalf of his father. The gavel was made of wood from the Allan Line s.s. Grampian, which was wrecked in the St. Lawrence, and which is said to be the first large vessel ever raised by compressed air. The wood was procured by T. Henry, G.T.M. Richelieu and Ontario Navigation Co.

The Tennessee River Navigation Co. and the Temagami Steamboat and Hotel Co. were admitted to membership; other applications are under consideration.

J. Berolzeim, formerly Manager Manitou S.S. Co., and J. F. Chapman, General Passenger Agent Deseronto Navigation Co., were elected honorary members.

The meeting declared itself heartily in favor of uniformity in prepaid ticket orders, but it was felt that until the various railway lines adopt a uniform order the Association could not take any united action and that the matter must be left for individual action on the part of each line.

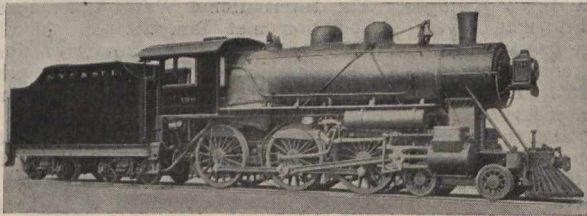
The question of an improved style of dating stamp was left to each line for individual action, with a recommendation that where possible the new form as suggested by the American Association of General Passenger and Ticket Agents be adopted and put in use as fast as possible.

The question of the advisability of filing the Association's tariff with the Interstate Commerce Commission having been taken up, the Secretary reported that he had a ruling from the Commission as follows: "Under the act to regulate commerce you are not required to file the local tariffs of your steamship line covering transportation from one lake port to another. However, the law does require the filing of joint through tariffs covering transportation partly by rail and partly by water." The Commission does not assume or assert any authority or jurisdiction over the local rates (from port to port) of a steamship line, even though local tariff is filed. But in order to participate in interstate rates, partly rail, and partly steamship, a tariff must be filed. Where a steamship line does not issue a through joint tariff, the filing of a local tariff for interstate business does not in any way affect the Commission's jurisdiction over the local business (from port to port). Again, "Where a carrier has no tariffs on file with the Commission, and does not acknowledge itself subject to the Commission's jurisdiction (on interstate business), the Commission will regard the issuance of passes (by rail lines) to its officers, or employes, as unlawful." It was the consensus of opinion that the Association's tariff entitled "Passenger Fares" be filed with the Commission and that each member line furnish the Association's Secretary with power of attorney to file their tariffs on their behalf. The Secretary submitted correspondence with the Commission regarding the matter, also letters from a large number of railway lines which distributed the tariff among their agents, and which consider it very valuable and requested that it be filed.

The following officers, etc., were elected for the current year: President C. F. Bielman,

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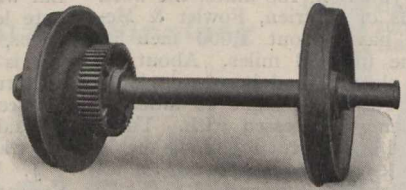


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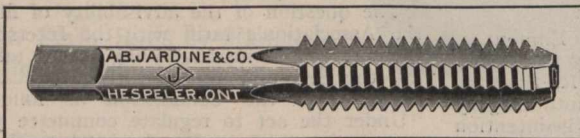


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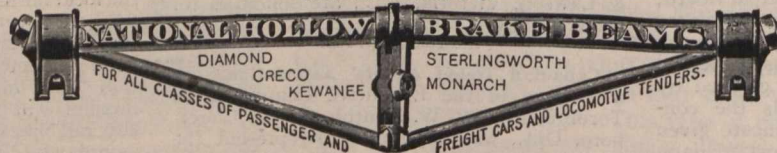
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T.M. White Star Line, Detroit, Mich.; Vice-President, W. M. Lowrie, G.P.A. Northern S.S. Co., New York; Sec.-Treas., M. R. Nelson, Northern S.S. Co., New York; Executive Committee, for two years, A. A. Heard, G.P.A. Delaware and Hudson Co.; for one year, L. G. Lewis, G.P. and T.A. Detroit and Cleveland Navigation Co.; R. C. Davis, G.P.A. Goodrich Transit Co., remains on the committee from a previous year's election. Audit Committee, C. H. Nicholson, T.M. Northern Navigation Co.; J. H. Allaire, G.P.A. Hudson Navigation Co.; H. Foster Chaffee, A.G.P.A. Richelieu and Ontario Navigation Co.

A committee was appointed to draft a resolution of sympathy with C. E. Markham, G.P.A. Anchor Line, who has been ill for some time.

#### THE NIAGARA FRONTIER SUMMER RATE COMMITTEE

met Jan. 21, the chairman, W. J. Lynch, P.T.M. New York Central Lines, Chicago, presiding. A. A. Heard, G.P.A. Delaware and Hudson Co., Albany, N.Y., was elected chairman for the current year and took the chair.

The rates as prepared by the rate clerks, and which contained no important changes beyond adjustments and extension of territory were adopted.

The New York, New Haven and Hartford Rd., the Quebec, Montreal and Southern Ry., and the Prince Edward Island Ry. were elected members.

#### THE GREAT LAKES AND ST. LAWRENCE RIVER RATE COMMITTEE

met Jan. 21, the chairman, T. Henry, T.M. Richelieu and Ontario Navigation Co., presiding. C. H. Nicholson, T.M. Northern Navigation Co., was elected chairman for the current year and took the chair.

The rates as arranged by the rate clerks were unanimously adopted.

The three Associations decided to hold their 1910 meetings at the same place, viz., Clifton House, Niagara Falls, Ont.

#### Saskatchewan and Alberta Railways.

The question of railway extensions in the Provinces of Saskatchewan and Alberta has been attracting considerable attention of late. The Premiers of the two provinces had a conference at Winnipeg, early in Jan., with W. Mackenzie, President, and other officers of the Canadian Northern Ry., and it was subsequently stated that the Legislatures of Saskatchewan and Alberta would probably ratify an agreement which would carry a guarantee of bonds to the extent of \$10,000 a mile on ordinary mileage, and that where exceptional construction difficulties were encountered, and the Governments were satisfied that the extra cost was necessary, the bonds for these portions would be guaranteed to the extent of \$15,000 a mile, but under no circumstances would a higher figure be allowed. The general routes of the lines to be constructed were discussed and it is said that the guarantee of bonds will cover about 500 miles of line, which will give the company access to the coalfields of Southern Alberta. There are said to be few if any engineering difficulties in the way of construction of a line through the southern portions of the provinces. A representative of the C.N.R. is in the territory mentioned looking over the field.

The first official pronouncement as to the proposed extension of lines under provincial guarantee was made in the Saskatchewan Legislature, Jan. 18, when the Government presented bills to aid railway development in the province. The bill authorizing the guarantee of certain securities of the G.T. Pacific Ry. provides that the amount of the securities to be guaranteed shall not exceed

\$13,000 a mile of railways constructed, at 4%, the principal to be repaid in 30 years. The securities to be issued are to be secured by one or more deeds of trust by way of first mortgage in the usual way. Not less than 50 miles of the lines mentioned in the schedule are to be completed by Dec. 31, and the remaining mileage is to be completed by Dec. 31, 1911, and an agreement is to be made for the operation of the lines so constructed. The standard of the lines is to be not inferior to that of the main line of the Canadian Northern Ry. between Winnipeg and Edmonton, and the routes of the different lines are to be approved by the Government. Provision is also made for the guarantee of an additional \$2,000 a mile upon a supplementary deed of mortgage provided the sanction of the Legislature has previously been obtained to the guarantee being affixed thereto. The lines to be constructed by the G.T. Pacific Ry. under this guarantee are as follows: From the western division of the G.T. Pacific Ry. in the vicinity of tp. 22, range 6, west of the second meridian, on the G.T. Pacific Ry., to Yorkton, 40 miles. From between the 108th and 109th degrees of longitude on the G.T. Pacific Ry. to Battleford, 40 miles. From the vicinity of tp. 22, range six, on the western division G.T. Pacific Ry., to Regina, 110 miles.

The bill relating to the guarantee of bonds of the Canadian Northern Ry. is similar in every respect, except that the mileage to be constructed during the current year is 125, and the remaining mileage is to be completed by Dec. 31, 1911. The lines to be constructed under the guarantee are as follows: From Craven, running west of Last Mountain Lake to the Prince Albert branch, between Adams Ferry and Branchpetha. From between Aylesbury and Davidson, north-westerly and westerly to a junction with the Goose Lake branch of the C.N.R. near r. 16, west 3rd meridian, about 100 miles. A line to Roche Perceé coalfields, about 25 miles. From Maryfield westerly and northerly to near range 17, west 2nd meridian, for 135 miles. A line from Dalmeny, on the main line of the C.N.R., north and north-westerly for 40 miles. A line from North Battleford northerly for 40 miles.

At the opening of the session of the Alberta Legislature, Jan. 14, the Lt.-Governor in the speech from the throne said: "The great problem of transportation facilities has been receiving the most anxious consideration of my Government. In the vast country to the north of us, with all its agricultural and mineral possibilities, and in the mining and wheat-producing districts of the south, the province has two assets of which the value can only be guessed until they have been penetrated and traversed by railways. The south country is already tapped, but it needs and will need as time goes on in an increasing measure more and more arteries through which its riches can flow. The north has not at present a single line, and without a line it is impossible to measure the vastness of its future. Several bills will be submitted for your approval authorizing my Government to assist the railway development of the country. Both north and south will be found to be cared for in the bills presented. The already existing facilities in the centre of the province will be very considerably supplemented."

An Edmonton dispatch, Jan. 24, said that as a result of a conference between Premier Rutherford and D. D. Mann, Vice-President C.N.R., the following lines would be gone on with at an early date, viz., from Edmonton to Fort Assiniboine on the Athabasca River, and eventually to Lesser Slave Lake and Peace River Crossing; from the eastern boundary of Alberta to Edmonton, running north of the Saskatchewan River, and probably a line from Strathcona to Calgary, meeting a wide detour to the east to

Penetal. The guarantee of bonds to be the same as in Saskatchewan.

W. Wainwright, Second Vice-President G.T. Pacific Ry., who has been spending some time in Saskatchewan and Alberta, in connection with the negotiations between the G.T. Pacific Ry. and the two provincial governments, has given out some details of the company's plans. So far as his statement refers to Saskatchewan, it is covered by the proposals of the Government quoted above. With reference to Alberta his statement is to the effect that the line starting from Wainwright will be extended through Alberta, south-westerly to Calgary, and then carried south-easterly to the International boundary.

#### Packing of Railway Frogs.

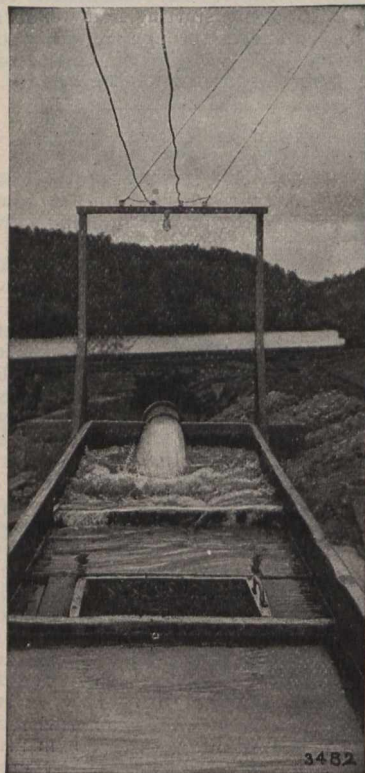
The Railway Act, sec. 288, provides as follows: "The spaces behind and in front of every railway frog or crossing, and between the fixed rails of every switch, where such spaces are less than 4 ins. in width, shall be filled with packing up to the under side of the head of the rail. The spaces between any wing rail and any railway frog, and between any guard rail and the track rail alongside of it, shall be filled with packing at their splayed ends, so that the whole splay shall be so filled where the width of the space between the rails is less than 4 ins. Such packing shall not reach higher than to the under side of the head of the rail. Such packing shall consist of wood or metal, or some equally substantial and solid material, of not less than 2 ins. in thickness, and, where by this section any space is required to be filled in on any railway, shall extend to within 1½ ins. of the crown of the rails in use, shall be neatly filled, so as to come against the web of such rails, and shall be well and solidly fastened to the ties on which such rails are laid. The Board of Railway Commissioners may, notwithstanding the requirements of this section, allow the filling and packing therein mentioned to be left out from the month of December to the month of April in each year, both months included, or between any such dates as the Board, by regulation, or in any particular case, determines."

On Dec. 22, 1905, the Board of Railway Commissioners passed an order permitting the G.T.R. to leave out the filling and packing required by the above section from Dec. to April in each year, both months included. This order was rescinded by the Board, Nov. 4, 1908, and the G.T.R. applied for the restoration of the original order. In giving judgment, Dec. 29, Chief Commissioner Mabee said: "Oral evidence was given in support of the application, the principal ground being that the snow and ice forming on the packing increased the possibility of derailment. No specific instances of such were given. No other railway is asking for the like order. The reasons for requiring packing exist to almost the same extent in winter as in summer; and I am, therefore, of opinion that no sufficient cause has been shown that would justify the Board in relieving the company from complying with the provisions of the section."

The C.P.R. has presented to the London, Eng., County Council Educational Department, a series of 200 pictures of Canadian scenery framed in Canadian woods, which are being utilized for educational purposes, with a view to stimulating interest in the Dominion.

The Board of Conciliation appointed to investigate the complaints of the C.P.R. locomotive engineers consists of Mr. Justice Fortin, Montreal, Chairman; W. Nesbitt, K.C., representing the C.P.R., and J. G. O'Donoghue on behalf of the men. The enquiry commenced Jan. 14.

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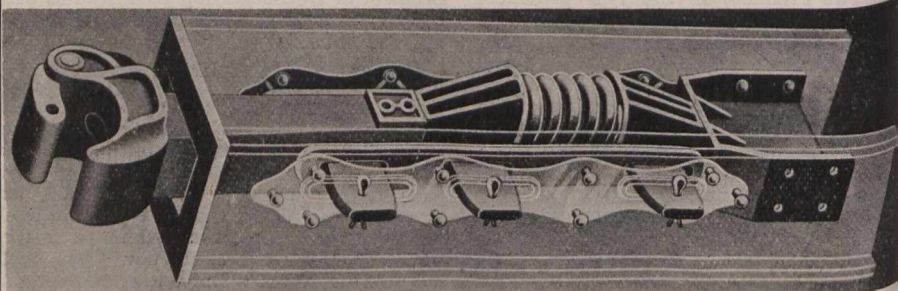
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## TRANSPORTATION APPOINTMENTS.

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

**Canadian Pacific Ry.**—The duties of Mechanical Engineer, locomotive branch, Angus shops, Montreal, heretofore performed by A. W. Horsey, who has been appointed District Master Mechanic, Smith's Falls, Ont., will hereafter be carried on by G. I. Evans, Chief Draughtsman.

D. L. Jones has been appointed Locomotive Foreman at Smith's Falls, Ont., vice B. Pendleton, transferred.

J. R. Nelson, heretofore Superintendent District 2, Ontario Division, London, Ont., has been appointed Superintendent District 1, Ontario Division, vice J. K. McNeillie, transferred. Office, Toronto.

J. H. Mills, heretofore District Master Mechanic, Farnham, Que., has been appointed acting Master Mechanic, Ontario Division, vice R. Preston, who has been granted leave of absence. Headquarters, West Toronto, Ont.

A. Maynes, heretofore District Master Mechanic, District 1, Ontario Division, has been appointed Rule Examiner.

J. R. Sprague, heretofore District Master Mechanic, District 3, Ontario Division, has been appointed District Master Mechanic, District 1, Ontario Division, vice A. Maynes. Headquarters, West Toronto, Ont.

A. E. Stewart, heretofore Trainmaster, Walkerton and Lucknow branch, has been appointed acting District Master Mechanic, District 3, Ontario Division, vice J. R. Sprague, transferred. Headquarters, West Toronto.

F. Rowlandson, heretofore Locomotive Foreman, Brownville Jct., Me., has been appointed Locomotive Foreman, West Toronto, Ont., vice T. Reynolds, resigned.

J. K. McNeillie, heretofore Superintendent District 1, Ontario Division, Toronto, has been appointed Superintendent District 2, Ontario Division, vice J. R. Nelson, transferred. Office, London, Ont.

A. E. Hough, heretofore Locomotive Foreman, Ignace, Ont., has been appointed night shop foreman, Fort William, Ont.

W. F. Lowe has been appointed Locomotive Foreman, Ignace, Ont., vice A. E. Hough, transferred.

T. S. Acheson, heretofore Travelling Freight Agent Central Division, has been appointed General Grain Agent, Central and Western Divisions, and will give direct attention to grain traffic conditions. Office, Winnipeg.

J. H. Gordon, heretofore Soliciting Freight Agent, Winnipeg, has been appointed Travelling Freight Agent, Eastern Manitoba, covering main line and branches east of Brandon, Orcadia, Varcoe, Souris, and Boissevain. Office, Winnipeg.

A. T. McKean, heretofore chief clerk Assistant Freight Traffic Manager's office, Winnipeg, has been appointed Soliciting Freight Agent, Winnipeg, vice J. H. Gordon, promoted.

C. S. Morse, heretofore in charge of export work, General Freight Department, Winnipeg, has been appointed Travelling Freight Agent.

G. Hebb has been appointed Road Foreman, District 2, Central Division, vice A. West, appointed District Master Mechanic at Kenora, Ont.

J. Montgomery has been appointed acting Roadmaster, Miniota and Lenore branches, Rapid City section, and Brandon yard, Central Division, vice R. J. Hood, who has been granted leave of absence.

J. H. Longworth, City Freight Agent, Brandon, and Travelling Freight Agent Western Manitoba, has been assigned the

following territory: Broadview section on the main line; Rapid City section, Miniota and Lenore branches; Pheasant Hills section, including Neudorf; Arcola section, Reston and Lyleton branches; and Kemnay to Boissevain via Napinka. Office, Brandon, Man.

W. H. Allinson, heretofore chief clerk, General Freight Department, Winnipeg, has been appointed City Freight Agent, Regina, and Travelling Freight Agent, Southern Saskatchewan, with territory covering the main line from Broadview to Swift Current, both inclusive, Outlook, Portal and Moose Mountain sections; Weyburn branch, and Estevan section, Melita to Estevan. Office, Regina, Sask.

R. W. Drew, District and Travelling Freight Agent, Northern Saskatchewan, has been assigned the following territory, covering Last Mountain, Lanigan, Saskatoon and Sheho sections. Office, Saskatoon, Sask.

John Halstead, heretofore Assistant General Freight Agent, Calgary, Alta., has been appointed General Freight Agent, Western Division; with jurisdiction over freight matters from Swift Current on the main line to Laggan, B.C., and from Dunmore Jct., on the Crow's Nest branch, to Frank, Alta. Office, Calgary, Alta.

A. H. Eager, heretofore District Master Mechanic, Kenora, Ont., has been appointed Locomotive Foreman, Calgary, Alta.,

F. W. Sadler has been appointed Locomotive Foreman at Field, B.C., vice J. Archibald, transferred to Vancouver.

P. Wade, heretofore General Roadmaster, District 3, Pacific Division, has been appointed Roadmaster covering territory in District 3, as follows: Nelson to Castlegar Jct., not including Castlegar yard; Slovan Jct. to Slovan; Nakusp to Sandon; Nelson to Procter; Lardo to Gerrard. Office, Nelson, B.C. The position of General Roadmaster has been abolished.

T. H. Nichols has been appointed Roadmaster covering territory in District 3, Pacific Division, as follows: Farron to Midway, not including Farron; Eholt Jct. to Phoenix; Greenwood to Motherlode; B.C. Jct. to B.C. Mine; Granby Jct. to Granby Smelter. Office, Eholt Jct., B.C.

J. M. McGreevey has been appointed Roadmaster covering territory in District 3, Pacific Division, as follows: Rossland to Farron, including Farron; Smelter Jct. to Trail. Office, Smelter Jct., B.C.

J. Archibald, heretofore Locomotive Foreman, Field, B.C., has been appointed shop foreman, Vancouver, B.C.

D. Sutherland, heretofore Travelling Freight Agent, Vancouver, B.C., has been appointed General Agent, Prince Rupert, B.C.

R. Main, heretofore Commercial Agent at Pittsburg, Pa., has been appointed District Freight Agent there.

C. S. Richardson, heretofore Travelling Freight Agent, Buffalo, N. Y., has been appointed District Freight Agent there.

B. C. Tucker, heretofore Commercial Agent, Cleveland, Ohio, has been appointed District Freight Agent there.

**Central Vermont Ry.**—T. McHattie, heretofore Master Mechanic, Eastern Division, G.T.R., Montreal, has been appointed Superintendent of Motive Power and Car Department, C.V.R., vice W. Kennedy, resigned. Office, St. Albans, Vt.

**Grand Trunk Pacific Ry.**—E. J. Chamberlin, formerly General Manager Canada Atlantic Ry., has been appointed Vice-President and General Manager G.T.P.R., vice F. W. Morse, resigned.

W. H. Ardley, General Auditor, Grand Trunk Ry., has also been appointed General Auditor, G.T.P.R., vice N. J. Power, retired. Office, Montreal.

**Grand Trunk Ry.**—N. J. Power, General Auditor, after more than 50 years of faithful

and continuous service with the company, retired under the provisions of the Company's pension scheme on Jan. 1.

W. H. Ardley, heretofore acting General Auditor, has been appointed General Auditor, vice N. J. Power, retired. Office, Montreal.

J. C. Garden, heretofore general shop foreman, Toronto, has been appointed Master Mechanic, Eastern Division, Montreal, vice T. McHattie, who has entered the Central Vermont Ry. Co.'s service.

L. L. Grabill, heretofore chief clerk General Baggage Agent's office, Toronto, has been appointed Assistant General Baggage Agent. Office, Toronto.

G. Stilson, heretofore Roadmaster at Sarnia Tunnel, has been appointed Roadmaster, 17th District, east of Sand Pit, and 19th District, Port Dalhousie to Port Robinson, Welland Jct. to Port Colborne, vice A. Grills, promoted. Headquarters, Hamilton, Ont.

A. Grills, heretofore Roadmaster at Hamilton, Ont., has been appointed General Roadmaster, Southern Division, vice A. S. Haynes, resigned. Headquarters, St. Thomas, Ont.

G. H. Allen, heretofore section foreman, Ingersoll, Ont., has been appointed Roadmaster, 17th district, west of Sand Pit; 18th district, Komoka to Glencoe, and 19th district, Glencoe to Kingscourt Jct., Middle Division, vice G. Stilson, transferred. Headquarters, Sarnia Tunnel, Ont.

R. Bushby, Eastern Passenger Agent, Cortland, N.Y., has, at his own request, been transferred to other duties.

D. P. Drewery has been appointed Travelling Passenger Agent. Office, 6 Burgess Block, Cortland, N.Y.

**Intercolonial Ry.**—W. H. Estano, heretofore chief clerk Traffic Auditor's office, has been appointed acting Traffic Auditor, vice J. R. Bruce, Traffic Auditor, who has been placed on the retired list. Office, Moncton, N.B.

**Pullman Co.**—The following appointments have been made: T. Dunbar, Manager Mechanical Department. C. W. Pflager, Assistant to Manager Mechanical Department. R. Tinsley, Manager Pullman Car Works. F. M. Gunn, Assistant to Manager Pullman Car Works, Chicago, Ill.

**Temiskaming and Northern Ontario Ry.**—F. Dane, one of the Commissioners, has also been appointed Land Commissioner. Office, Toronto.

### Eastern Canadian Passenger Agents' Association.

At the regular meeting in Montreal Jan. 5 reduced fares and uniform arrangements for a number of occasions were considered. In connection with the application for reduced fares, etc., for the Sherbrooke, Que., snowshoe carnival and the Montreal carnival of winter sports to be held in Feb., the following resolution was adopted: Whereas, the extensive advertising of unusual and novel features required to attract any considerable number of visitors to winter carnivals or similar winter events creates wrong or exaggerated ideas regarding winter conditions in Canada, and therefore tends to injure the best interests and permanent growth of the country, it is resolved, that the lines in this Association will not make, or participate in, any special reduced fares for such undesirable enterprises, or otherwise encourage them.

The following officers, etc., were elected for the current year: Chairman, J. W. Hanley; Executive Committee, G. T. Bell, W. Stitt, G. Tombs; Rules Committee, G. T. Bell, W. Stitt, T. Henry, C. Hartigan, E. O. Grundy, F. F. Backus, O. W. Ruggles, J. M. Lyons, and F. E. Barbour. Secretary, G. H. Webster.

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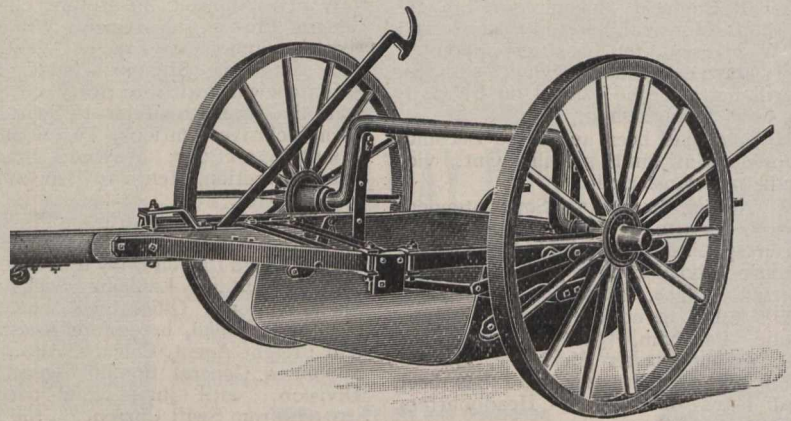
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The CANADIAN NORTHERN QUEBEC and QUEBEC AND LAKE ST. JOHN RAILWAYS span the native country of the ouananiche, northern brook trout, and the spruce-shored lakes of the Roberval country, where moose and caribou abound.

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**For Information, General and Special, Address the  
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### Railway Commissioners' Traffic Orders.

6073. Jan. 13.—In the matter of the application of the Pere Marquette Rd., by its General Freight Agent at Detroit, for permission to refund to Parke, Davis & Co., of Montreal, 8c. per 100 pounds on a shipment of pharmaceutical goods from Walkerville to Montreal. Upon reading what was alleged in support of the application; and upon the report of the Chief Traffic Officer of the Board, it is ordered that the application be dismissed.

#### BRICK RATES FROM CASSELMAN, ONT.

6096. Jan. 12.—In the matter of the complaint of Hyde & Webster, of Montreal, alleging that the G.T.R. had increased the rate on bricks from Casselman, Ont., to Montreal, from 4½c. per 100 lbs. to 6c. per 100 lbs., for delivery by the C.P.R., and applying for an order directing the G.T.R. to restore its former rate of 4½c. per 100 lbs.: Whereas the G.T.R. has, since the filing of the complaint, established a special joint rate of 5c. per 100 lbs. on brick (except enamelled and glazed), in carloads, from Casselman for C.P.R. deliveries at Montreal, Atwater, Westmount, Montreal Jct., Mile End, and Angus shops, Que. Upon the hearing of Counsel for the G.T.R. and the C.P.R., the complainants appearing in person, the evidence adduced, and what was alleged—It is ordered that the application for a less rate between the said points than the said special joint rate of 5c. per 100 lbs. be dismissed.

#### DOMINION ATLANTIC RY. STEAMSHIP FARES.

6097. Jan. 18.—In the matter of the complaint of the Board of Trade of St. John, N.B., against the increase by the Dominion Atlantic Ry. of its passenger fare on its steamship line between St. John, N.B., and Digby, N.S., from \$1.50 to \$1.75 per capita: No one appearing at the hearing on behalf of the complainant, although notified by the Secretary of the Board that the complaint had been set down for hearing at St. John, N.B., it is ordered that the complaint be dismissed.

#### PULPWOOD RATES, ST. STEPHEN TO MILLTOWN.

6098. Jan. 18.—In the matter of the complaint of I. R. Todd, of St. Stephen, N.B., complaining against the rate charged by the C.P.R. on pulpwood from St. Stephen to Milltown, N.B.: No one appearing on behalf of complainant, although notified by the Secretary of the Board that the complaint had been set down for hearing at St. John, N.B., it is ordered that the complaint be dismissed.

#### CANADIAN FREIGHT CLASSIFICATION.

6080. Jan. 18.—In the matter of the requirements of the Board in connection with the proposed additions to and changes in the Canadian classification of freight traffic: It is ordered that the following rules be, and they are hereby, prescribed: 1. The printer's proof of the proposed classification or supplement shall show and include: (a) A list of the articles not previously provided for which it is proposed to add to the classification, and the ratings therefor, the said list to be headed "Additions." (b) The proposed advances, reductions, or other changes in the rules, ratings, or minimum weights, and in a parallel column those previously approved by the Board.

2. The Board shall be furnished with at least 10 copies of the aforesaid proof, and in one of these the proposed changes shall be underscored as follows, namely, the advances in black, the reductions in red, and the other changes in green.

3. The Board shall, at the same time, be furnished with the reasons for the proposed advances stated fully and separately in manuscript.

4. The applicants shall arrange for two consecutive publications of the proposed advances in The Canada Gazette, and shall, simultaneously with the submission of the aforesaid proofs, furnish the Board with copies of the communication and enclosure to the King's Printer.

### Board of Railway Commissioners.

Since the sittings of the Commissioners with reference to the construction of a viaduct along the waterfront in Toronto, and the consideration of the express rates, both of which are dealt with elsewhere, the Commissioners held sittings at Montreal, Jan. 4; Ottawa, Jan. 12; and Toronto, Jan. 27. The principal case at the last sitting, so far as Toronto is concerned, had to do with the proposal to depress the tracks west of Bathurst St., and other works connected therewith westerly to the Toronto Bolt and Forging Co.'s works at Windermere Ave., and the proposed high level bridge at Queen St. East. These matters are all closely associated with the construction of the viaduct along the waterfront in the central part of the city. Since the order of the Commissioners as to the viaduct was made, there appears to be a disposition on the part of the city council and the railway companies to reach such a settlement as will enable a complete job to be made and to prevent any litigation between the two interests. While there is an appeal pending as to the jurisdiction of the Board to order the construction of a viaduct, the railway companies show a disposition to accept the order, but in doing so they are desirous of having other matters arranged. The whole question is under discussion, and while both sides talk as to rights and privileges, and what action may be taken, they are averse to making an authoritative statement as to the real position of negotiations. Immediately following the sittings at Toronto, some of the Commissioners proceeded to the West, the dates fixed for the holdings of sittings being: Winnipeg, Feb. 1; Regina, Feb. 11; Medicine Hat, Feb. 15; Calgary, Feb. 17; Edmonton, Feb. 18; Vancouver, Feb. 23; Victoria, Feb. 27. The dates for the holding of sittings at Nelson and Lethbridge are to be fixed later.

### Railway Commissioners' Districts.

An Ottawa dispatch says the Dominion has been divided into districts, each of which has been placed in charge of one of the members of the Board of Railway Commissioners as to routine applications, Chief Commissioner Mabee having a general supervision over the whole:

Ontario, with exception of Port Arthur and west thereof, and the City of Montreal, under D'Arcy Scott, Assistant Chief Commissioner, with J. Ogilvie and J. Clarke as Inspectors.

Quebec Province, except City of Montreal, New Brunswick, Nova Scotia and Prince Edward Island, under Hon. M. E. Bernier, Deputy Chief Commissioner, with E. C. Lalonde, as Inspector.

Manitoba, Saskatchewan and the portion of Ontario west of and including Port Arthur, under Commissioner S. J. McLean, with W. S. Blythe as Inspector.

Alberta and British Columbia, under Commissioner Mills, with M. J. McCaul as Inspector.

Since the above was put into type we have been officially advised that the dispatch quoted is entirely erroneous and misleading, no such arrangement as that referred to having been made. For the purposes of convenience, the Board's Inspectors of Accidents have been located at the following points to investigate and report on accidents and rolling stock: Calgary, Alta., M. J. McCaul; Winnipeg, W. S. Blyth; Ottawa, J. Ogilvie and J. Clarke; Montreal, E. C. Lalonde.

It is reported from Edmonton, Alta., that D. Marshall, managing editor Edmonton Bulletin, will probably be appointed Railway Commissioner, to carry out the extensive plans of railway development contemplated by the Provincial Government.

### The G.T.P.R. Management.

Great surprise was expressed, especially in railway circles, at the announcement made in Montreal, Jan. 22, by C. M. Hays, President Grand Trunk Pacific Ry. Co., that F. W. Morse, Vice-President and General Manager, had resigned. Mr. Morse tendered his resignation to Mr. Hays before leaving Montreal, Jan. 18, for New York, from which port he sailed on Jan. 21, on the s.s. Carmania, for a three months' trip to the Mediterranean, accompanied by his mother, who is in poor health. It was stipulated that the resignation was not to be announced until after he had sailed and he left the following statement to be given to the press:

"Mr. Frank W. Morse has asked to be relieved from his duties as Vice-President and General Manager of the Grand Trunk Pacific and constituent properties, and just before leaving for a trip to the other side tendered his resignation, to become effective at such date as should be decided. He is not prepared to announce what his future plans may be, but that will doubtless be known on his return."

In an interview Mr. Hays expressed regret at Mr. Morse's resignation, but assigned no cause for it. He denied that there was any trouble between himself and Mr. Morse, and said the resignation was purely voluntary. There is a great deal of speculation as to the real reason, friction with the Dominion Government and many other things being guessed at, but no definite information is obtainable.

On Jan. 25, it was officially announced that E. J. Chamberlin, who was General Manager of the Canada Atlantic Ry. at the time of its absorption by the G.T.R., had been appointed to succeed Mr. Morse. He had been in California on a visit, but was wired for and assumed his new position in Montreal, Jan. 26, when he stated that he had not sought the appointment, and that after spending a few days in picking up the ends of the business, the work would proceed as hitherto.

Frank W. Morse entered railway service in 1885, with the Wabash Rd., at Springfield, Ill. Promotions from time to time took him to Quincy, Ill.; Des Moines, Iowa, and St. Louis, Mo. In 1887 he severed his connection with the Wabash and entered the service of the Pan Handle Rd., which was composed of the Denver, Texas and Gulf; Denver, Texas and Fort Worth and Fort Worth and Denver City railroads, at that time being under construction. After it had been completed and successfully operated, he, at the solicitation of C. M. Hays, at the time of the consolidation of the Wabash Western and Wabash railroads into the present Wabash System, returned to that company, and was located at Fort Wayne, Ind., remaining until Mr. Hays called him to Canada in 1896, to become Superintendent of Motive Power, G.T.R. He was appointed Third Vice-President in 1902, and went over the route of the projected G.T.P. Ry. in 1902-03. He was elected Vice-President on the organization of the G.T.P. Ry. Co. in Aug., 1904, and was also appointed General Manager, Jan. 1, 1905.

E. J. Chamberlin, was born at Lancaster, N.H., and entered railway service in 1871, since when he has been consecutively to 1872, timekeeper in car shops; 1872 to 1875, clerk in Paymaster's and Superintendent of Transportation's offices; 1875 to 1876, corresponding secretary to General Superintendent; and 1877 to 1884, private secretary to General Manager Central Vermont Ry., St. Albans, Vt.; April, 1884, to Sept., 1886, Superintendent Ogdensburg and Lake Champlain Rd., and Central Vermont Line steamers running between Chicago and Ogdensburg; Sept. 1, 1886, to Oct., 1905, General Manager Canada Atlantic Ry. Since the absorption of the C.A. Ry. by the G.T.R., he has been connected with lumber, contracting and mining interests.

**The Wisconsin Central Railway.**

Sir Thos. G. Shaughnessy, President C.P.R., stated, Jan. 15, that the C.P.R. is not acquiring any additional property in the United States, but that the Minneapolis, St. Paul and Sault Ste. Marie Ry., which is closely associated with the C.P.R., has been negotiating for the Wisconsin Central Ry., and that he had every reason to believe the negotiations have reached an advanced stage." This is generally understood to be a diplomatic way of stating that the M., St. P. and S.S.M. Ry., in which the C.P.R. holds a controlling interest, has purchased from N. Erb, of New York, the controlling interest in the Wisconsin Central Rd., an option which he has held for some time past.

The Wisconsin Central Ry. operates 977 miles of railway, and extends from Chicago, Ill., to Minneapolis, Minn., with the following branch lines: Rugby Junction to Milwaukee; Neenah to Manitowoc; Stephens to Portage, with a stub branch to Montello; Marshfield to Nekoosa; Marshfield to Greenwood; Abbotsford to Ashland, with branches from Chester to Hib Lake, and from Melton to Bessemer; from Owen to Ladysmith, and a projected extension from Ladysmith to Superior and Duluth; from Chippewa Falls to Eau Claire. The company also operates over a number of logging spurs.

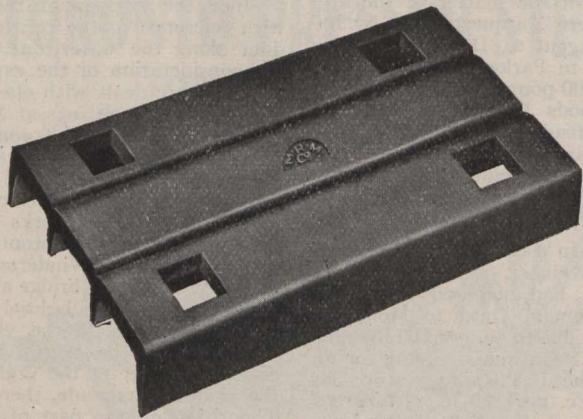
The W. C. Ry. Co. was chartered Dec. 27, 1897, and on July 13, 1899, acquired title of the property of the Wisconsin Central Co.; Wisconsin Central Rd. Co.; Packwaukee and Montello Rd.; Milwaukee and Winnebago Rd.; Chicago, Wisconsin and Minnesota Rd., and Central Car Co., under the plan of reorganization. The Marshfield and Southeastern Rd., 32.61 miles, was purchased May 1, 1901. In July, 1906, the company acquired all the property and rights of the Owen and Northern Ry. Co. and the Lake Superior and Eastern Rd., which was organized to construct an extension from Owen through Ladysmith to Superior and Duluth, a distance of 160.5 miles. The line from Owen to Ladysmith, 45.5, was put in operation Aug. 6, 1906; and the remainder of the line is still uncompleted. The company has also trackage rights over 59.94 miles in Chicago, St. Paul and Minneapolis, under 99-year agreements with the Illinois Central Rd., and the Great Northern Ry., and in Milwaukee, under a five years' agreement with the Chicago, Milwaukee and St. Paul Rd. It has also lake ferry connection from Manitowoc with the Ann Arbor Rd. at Frankford, Mich., and the Pere Marquette Rd. at Ludington, Mich.

Its rolling stock consists of 190 locomotives, 151 passenger cars of all kinds, and 8,661 freight cars of all classes. The Pullman Co. and the National Express Co. operate over the line.

The negotiations by the M., St. P. and S.S. M Ry., for the acquirement of the Wisconsin Central Ry., have been concluded, and at a meeting of directors of the latter company, the following directors resigned: F. T. Gates, W. A. Bradford, G. J. Gould, T. L. Chadbourne jr., G. A. Fernald and G. W. Webster. The following officers and directors were subsequently elected: President and Chairman of the Board, N. Erb; Assistant Secretary, W. M. Walden; other directors, L. Baldwin, W. J. Wollman, C. D. Simpson, F. H. Prince and E. N. Foss.

The C.P.R., it is reported, is considering the adoption of the "no crop—no payment" plan in the disposal of lands in the irrigated district easterly of Calgary, Alta.

The Orford Mountain Ry. has filed its standard passenger tariff C.R.C., no. 20, with the Board of Railway Commissioners, which has approved of the same. The tariff fixes a maximum passenger fare between all stations on the company's line at 3 1/4 c. a mile.



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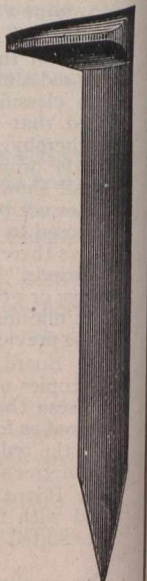
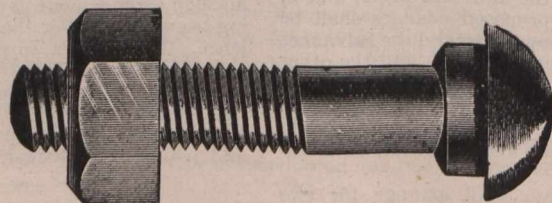
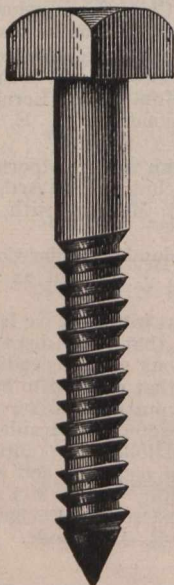
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**Steam Railway Track Laid in 1908.**

In accordance with our annual custom circulars were sent in December to all railway companies in Canada asking particulars of new track laid during 1908. Below is a compilation of figures showing that the total length of new track, exclusive of second track and sidings, laid during the year on steam railways from which reports have been received, was 1,150.70 miles. No returns have been received from the Canadian Northern and National Transcontinental Railways, so we have from data in our possession estimated the track laid on those lines as 167 and 170 miles respectively, making a total of 1,484.70 miles laid in Canada during 1908.

|   | Miles. | Miles.   |
|---|--------|----------|
| ATLANTIC, QUEBEC AND WESTERN RY.  |        |          |
| Port Daniel to Anse à la Barbe...   | 5.00   |          |
| Grand Pabos to Anse aux Canards..   | 2.00   |          |
|   |        | 7.00     |
| CANADIAN NORTHERN QUEBEC RY.  |        |          |
| Garneau to Quebec.....  | 60.90  | 60.90    |
| CANADIAN NORTHERN ONTARIO RY.   |        |          |
| Connecting track at French River..  | 7.90   |          |
| Orillia branch.....   | 3.60   |          |
|   |        | 11.50    |
| CANADIAN PACIFIC RY.  |        |          |
| Northern Colonization Ry.—From 2 miles north of Nomining, Que., towards L'Orignal.....          | 30.74  |          |
| Georgian Bay and Seaboard Ry.—Coldwater Junction to Victoria Harbor.....                        | 11.50  |          |
| Walkerton and Lucknow Ry.—Mileage 26.2 to Walkerton, Ont.                                       | 11.50  |          |
| Tilsonburg, Lake Erie and Pacific Ry.—Code Junction to Embro, Ont.....                          | 5.69   |          |
| St. Mary's and Western Ontario Ry. From Embro to St. Mary's, Ont.                               | 15.90  |          |
| Toronto Sudbury branch—From Naiscontyong to Pickerel.....                                       | 25.25  |          |
| From Teulon northerly, Man.....   | 2.00   |          |
| Mowbray extension, Man.....   | 4.00   |          |
| Stoughton-Weyburn Line, Sask.....   | 25.00  |          |
| Wolsley-Reston line, Sask.....  | 24.00  |          |
| Sheho-Lanigan line, Sask.....   | 46.10  |          |
| Pheasant Hills branch, Sask.....  | 74.60  |          |
| Moose Jaw northwesterly, Sask.....  | 101.60 |          |
| Lethbridge-MacLeod line, Alta.....  | 12.00  |          |
|   |        | 389.88   |
| CENTRAL ONTARIO RY.   |        |          |
| From Maynooth to Lake St. Peter.  | 8.00   | 8.00     |
| DELAWARE AND HUDSON CO. QUEBEC, MONTREAL AND SOUTHERN RY.—From Pierreville to St. Philomen..... | 48.05  | 48.05    |
| EASTERN BRITISH COLUMBIA RY. From McGillvray to Corbin Mines, B.C.....                          | 14.00  | 14.00    |
| GRAND TRUNK PACIFIC RY.   |        |          |
| Lake Superior Branch—Mileage 99.6 to mileage 188.8, Ontario.....                                | 89.20  |          |
| Winnipeg to Portage la Prairie, Manitoba.....   | 45.00  |          |
| Mileage 312 to mileage 414.9, Saskatchewan.....   | 102.90 |          |
| Mileage 466.64 to mileage 627.1, Saskatchewan.....  | 160.50 |          |
| Mileage 627.1 to mileage 685, Alberta.....  | 57.90  |          |
| Mileage 786.6 to mileage 791.6, Alberta.....  | 5.00   |          |
|   |        | 460.50   |
| GREAT NORTHERN RY. (U.S.)   |        |          |
| Between International boundary and Olivers, B.C., 11.33 miles, less 0.86 in 1907.....           | 10.47  |          |
| Between Olivers and Brownville, B.C., 9.72 miles less 5.22 laid in 1907.....                    | 4.50   |          |
| Between Cloverdale and Sumas, B.C., 29.28 miles, less 1.38 laid in 1907.....                    | 27.90  |          |
| These mileages were laid on the line known as the Vancouver, Victoria and Eastern Ry.....       | 42.87  |          |
| INTERNATIONAL RY. OF NEW BRUNSWICK. From end of mileage 35 to 62...                             | 27.00  | 27.00    |
| SYDNEY AND LOUISBURG RY. From Grand Lake Jct. to Colliery 12                                    | 7.00   |          |
| From No. 14 Jct. to Colliery 14....   | 2.00   |          |
|   |        | 9.00     |
| TEMISKAMING AND NORTHERN ONTARIO RY.  |        |          |
| From Watybeag to Cochrane, Ont.   | 44.00  |          |
| From Englehart to Charlton, Ont...  | 8.00   |          |
| From Cobalt to Kerr Lake, Ont....   | 4.00   |          |
| From milepost 110 to Moore's Cove on Lake Temiskaming, Ont.....                                 | 2.00   |          |
|   |        | 58.00    |
| WINNIPEG CITY POWER PLANT LINE. Lac du Bonnet to Point du Bois, Man.....                        | 24.00  | 24.00    |
|   |        | 1,150.70 |
| The estimated totals of single track laid by the Canadian Northern Ry. and the                  |        |          |

National Transcontinental Ry., from which no returns have been received are:

| CANADIAN NORTHERN RY.                             | Miles. | Miles. |
|---|--------|--------|
| Saskatoon to Zealandia, Sask.....                 | 75.00  |        |
| Dalmeny to Laird's, Sask.....                     | 28.00  |        |
| Extension of Pas Mission branch...                | 20.00  |        |
| Rosburn to Russell, Man.....                      | 23.00  |        |
| Swan River, Man., to end of track.                | 21.00  |        |
|   |        | 167.00 |
| NATIONAL TRANSCONTINENTAL RY.                     | Miles. | Miles. |
| Moncton, N.B., westerly.....                      | 37.00  |        |
| Chipman, N.B.....                                 | 3.00   |        |
| Bellaire, Que., 7 miles e. to 11 miles w.....     | 18.00  |        |
| St. Thicple, Que., 16 miles w. to 17 miles e..... | 33.00  |        |
| La Tuque, Que., 16 miles e. to 15 miles w.....    | 31.00  |        |
| Winnipeg to Superior Jct.....                     | 48.00  |        |
|   |        | 170.00 |

**C.P.R. SUBSIDIARY LINES IN UNITED STATES.**

| DULUTH, SOUTH SHORE AND ATLANTIC RY.                                      | Miles. | Miles. |
|---|--------|--------|
| Branch to Boston-American mine, 1.50 miles east of Humboldt, Mich.        | 2.00   |        |
| Ahmick mine track to Kearsarge mine, No. 4 shaft (Mineral Range Rd.)..... | 1.00   | 3.00   |
| MINNEAPOLIS, ST. PAUL AND S. S. MARIE RY.                                 | Miles. | Miles. |
| From Mississippi River to Moose Lake, Minn.....                           | 91.00  | 91.00  |

**Freight Car Balances and Performances.**

The committee on car efficiency of the American Railway Association issued, Jan. 14, its statistical statement of freight car balance and performance for Aug., 1908. During the period covered by the report the number of surplus cars averaged 267,312 daily; this number being 12.44% of the total cars on all lines included in the statement. There were in addition bad order cars equal to 9.99% of the total cars, making 22.43% of the equipment that contributed nothing to the mileage, tonnage or earnings. Including surplus cars the average miles per day was 20.8; the average ton miles per car per day, 292, and the average earnings per car per day, \$1.98; while excluding the surplus cars the figures were 25.1, 354, and \$2.40 respectively. There is a marked improvement in the per cent. of loaded mileage, the figure for Aug. reaching 68.8%, the highest since Nov., 1907, and only two points below the average for Aug., 1907. This increase is natural in connection with the outward flow of cars indicated in the car balance figures, which show a continued decrease in the number of cars on their home lines. It is probable, however, that the return to the normal use of foreign equipment will not be brought about until the surplus is practically wiped out or at least quite materially reduced.

The figures relating to the Canadian group show four lines reporting, viz., the C.P.R., G.T.R., Intercolonial, and Toronto, Hamilton and Buffalo. Their figures are revenue freight cars owned, 98,343; average number of system cars on line, 81,073; average foreign railway cars on line, 14,015; private cars on line, 4,032; total cars on line, 99,120; per cent. of cars in shops, 9.67; freight engines owned, 2,120; average cars on line per freight engine owned, 47; total freight car mileage, 67,083,842; average miles per car per day, 22.0; per cent. loaded mileage, 73.6; ton miles of freight, including company freight, 829,103,871; average ton miles (including company freight), per car mile, 12.0; per loaded car mile, 16.7; per car per day, 270; gross freight earnings, \$5,901,713. Average daily earnings: per car owned, \$1.94; per railway car on line, \$2.00; all cars on line, \$1.92.

The committee on car efficiency of the American Railway Association has issued its statement of car surpluses and shortages for the period ended Jan. 6. The report shows a total of 333,019 surplus cars, an increase of 110,942 in the figures for the previous two weeks. Taken by groups the increase seems to be general. The large increase in the Canadian group is due to the

addition of 5,000 cars reported by a line that had not reported for some time. The totals for the Canadian group showed surpluses of 12,468 box cars, 4,144 flat cars, 110 coal, gondola and hopper cars, and 2,115 other cars, making altogether 18,837 cars, against a total of 3,598 cars on Dec. 23.

**Levers for Uncoupling Cars.**

The Board of Railway Commissioners for Canada passed the following order 6027, dated Nov. 25, 1908: In the matter of the accident on the Canadian Northern Ry., at Portage la Prairie, Man., on Feb. 19, 1908; and in pursuance of the powers conferred upon it by secs. 30 and 269 of the Railway Act, and of all other powers possessed by the Board in that behalf: Upon the report and recommendation of the Inspector of Accidents of the Board, it is ordered that every railway company subject to the legislative authority of the Parliament of Canada, operating a railway by steam power, equip, within the time hereinafter mentioned, each of its non-platform cars, as for example, ordinary box and mail or baggage cars, with the proper operating lever for uncoupling cars, and dispense with the operating wheel where in use on the ends of such cars for that purpose: (a) In cars to be constructed in the future for use on their said railways, before they are so used; (b) In cars under construction or in shops undergoing repairs, within three months from the date of this order; (c) In cars at present in use on their respective railways, within six months from the date of this order.

And it is further ordered that every such railway company be liable to a penalty of a sum not exceeding \$50 for every failure to comply with the foregoing regulations within the time for their coming into force and thereafter.

**Dominion Railway Subsidies.**

The Dominion public accounts for the fiscal year ended Mar. 31, 1908, issued recently, contain a considerable amount of information with reference to the subsidizing of railways by Parliament. Table 1 gives a list of railways subsidized by money grant. Contracts were made with 132 railway companies, on account of which \$59,605,026.64 has been paid, \$1,238,989.07 has been cancelled or has lapsed, and there are balances of \$1,521.82 of subsidies outstanding on these contracts. There are a number of contracts upon which nothing has been paid, the amount of the subsidy for which the Government is liable is not included in these figures. Table 2 gives a list of four railways, not included in the first table, of fixed amounts payable annually or semi-annually for a fixed period of years, or interest in place of or until the capital granted be paid. These contracts were in respect of 587 miles of line, of which 56 miles, the Kingston, Smith's Falls and Ottawa Ry., has not been constructed. The amount paid under these contracts has been \$6,121,950. Table 3 shows that three railways were aided by loans of \$815,000, of which \$66,374.44 is still undrawn. Table 4 shows that eight railways were aided by the grant of used iron rails valued at \$242,661.19, of which there has been repaid \$152,305.20, and there is standing as an asset in the public accounts \$90,355.79. This table also shows that the Qu'Appelle, Long Lake and Saskatchewan Rd. and Steamboat Co., the Calgary and Edmonton Ry., the Lake Manitoba Ry. and the Winnipeg Great Northern Ry., are in receipt of annual subsidies amounting in all to \$240,000 on certain conditions, the contracts expiring 1909 and 1910 respectively for the first two, and in 1915 in respect of the last two.

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### Ontario Railway and Municipal Board.

In reference to newspaper attacks on some of the Board's decisions, the chairman, J. Leitch, K.C., made the following report at a recent sitting: "The Legislature has not seen fit to give this board power to protect ourselves as other courts have been protected for about a thousand years. Our hands are tied, our pens are tied and our tongues are tied. We simply have to take what we get and look happy. There is one thing: We will not be stampeded by Toronto journals or by aldermen, or by anybody else. We are here to administer the law, and we are going to administer it as we understand it. When we don't understand it right, the Court of Appeal may, and then if that Court does not, the gentlemen of the Privy Council have the final say. Nothing will provoke us to say one single word in answer to newspaper criticism or any other criticism. We are going to hew to the line."

### Orders by the Railway Commissioners.

The following orders have been passed in addition to those on page 85:

5979. Dec. 30.—Dismissing application of C.N.O.R. for authority to replace its tracks across C.P.R. spur to the Barber Asphalt Co.'s property south of Eastern Ave., Toronto.

5980. Dec. 30.—Authorizing C.N.O.R. to divert concession road between concessions 2 and 3, Albert tp., between mileages 13-14 west from Hawkesbury, Ont.

5981. Dec. 30.—Dismissing application of Vancouver, Westminster and Yukon Ry. for authority to construct a branch line in North Vancouver, from its main line near the mouth of Seymour Creek, on the north shore of Burrard Inlet, to or near Deep Cove, on the north arm of Burrard Inlet.

5982. Dec. 29.—Ordering Chatham, Wallaceburg and Lake Erie Ry. to equip its cars with air brakes within three months.

5983. Dec. 31. Jan. 22.—Authorizing C.N.O.R. to erect a wire across Montreal & Ottawa road in Cumberland tp., Ont., and across Cameron St., near the station grounds.

5984. Dec. 31.—Authorizing Bell Telephone Co. to place wires across C.N.O.R. at Charlebourg road, ½ mile west of Quebec city.

5985. Dec. 31.—Authorizing Bell Telephone Co. to place wires across C.N.O.R. near Brechin station, Ont.

5986. Dec. 31.—Authorizing Bell Telephone Co. to place wires across C.N.O.R. at St. Valier Road, 4 miles west of Quebec city.

5987. Dec. 31.—Authorizing Adams River Lumber Co. to lay water pipe under C.P.R., 2 miles west of Shuswap station, B.C.

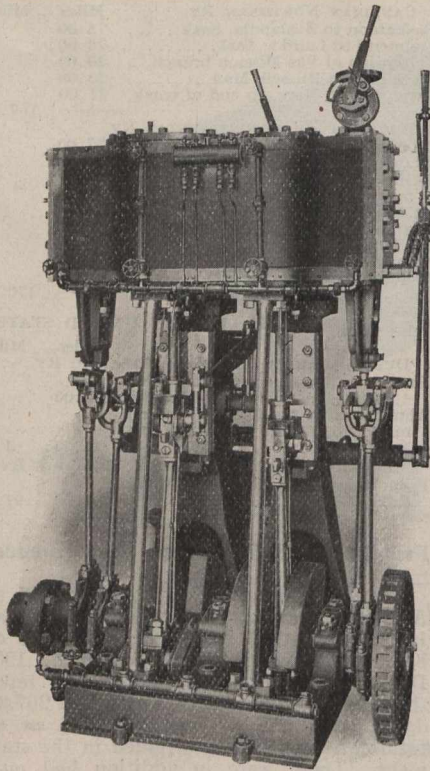
5988. Dec. 31.—Authorizing Byron Telephone Co. to place wires across London & Port Stanley Ry. in Westminster tp., Ont.

5989. Dec. 31.—Ordering G.T.R. to install at crossing of its line with L'Esperance road, Tecumseh tp., Sandwich East, Ont., an automatic electric bell with a cut-off opposite station, subject to terms of order 875, of Dec. 8, 1905.

5990. Jan. 2.—Authorizing the B.C. Telephone Co. to place wires across Esquimalt & Nanaimo Ry. at Duncans, B.C.

5991. Jan. 2.—Authorizing G.T.P.R. to carry freight over its line from Winnipeg to Battle River, Alta., notwithstanding that such portion has not been opened for traffic, according to sec. 261, Railway Act; and rescinding orders 3780, Oct. 11, 1907, and 5917, Dec. 22, 1908.

5992. Jan. 2.—Authorizing G.T.P.R. to carry freight traffic over its line from Fort William to end of track, mileage 0.00 to 188.77



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in Ontario, notwithstanding that such portion has not been opened for traffic according to sec. 261, Railway Act; and rescinding order 5918, Dec. 22, 1908.

5993. Jan. 4.—Approving Rutland Rd. Co.'s by-law authorizing F. E. Barbour, G.P.A., and G. Cassidy, G.F.A., to prepare and issue tariffs of tolls to be charged.

5994. Jan. 4.—Authorizing Manitoba Government Telephones to place wires across C.P.R. at Gunton.

5995. Jan. 4.—Authorizing the Merritton Water Commissioners to lay water pipe under G.T.R. at Concession road, Merritton, Ont.

5996. Jan. 4.—Authorizing G. Collinson to place wires across C.P.R. on Broadway St., Killarney, Man.

5997. Jan. 4.—Authorizing Saskatchewan Government Telephones to place wires across C.P.R. between Manor and Carlyle, Sask.

5998. Jan. 8.—Authorizing C.P.R. to construct spur line into W., C. M. and R. Peters' coal yard, Elizabeth and Maria Sts., East Toronto, Ont.

5999. Jan. 4.—Authorizing G.T.R. to construct a branch line to G. Niebergal & Son's premises, Strong tp., Parry Sound district, Ont.; and a through siding, or service track, on C.P.R. property and crossing, John and Main Sts., Sundridge, Ont.

6000. Jan. 5.—Authorizing C.P.R. to operate the Hull trestle, on its Eastern Division, Quebec province.

6001. Jan. 4.—Authorizing city of Winnipeg to lay a pipe under C.P.R. at Polson Ave., Winnipeg.

6002. Jan. 5.—Authorizing Bell Telephone Co. to place wires across G.T.R. at Salisbury St., 200 yds. south of Galt, Ont.

6003. Jan. 7.—Authorizing Erie Telephone Co. to place wires across G.T.R. at overhead bridge, Munsey St., Cayuga, Ont.

6004. Jan. 8.—Approving revision of location of B.C. Southern Ry., Michel branch, from mileage 0.2½ west of Michel, northerly following east bank of Elk River, B.C.

6005. Jan. 8.—Approving location of the C.N.O.R. through Stratton, Barren, Niven, and White tps., Nipissing district, Ont.

6006. Jan. 18.—Approving G.T.P.R. standard passenger tariff, C.R.C. 2, to apply between stations east of and including Edmonton, Alta., on the basis of 3c. a mile.

6007. Jan. 8.—Approving location of M.C. Rd.'s passenger station at Welland, Ont.

6008. Jan. 8.—Approving location of C.N.R. Humboldt-Calgary line, through tps. 29 and 28, ranges 15-21, w. 3rd m., mileage 76.09 to 117.06, southwesterly from Saskatoon, Sask.

6009, 6010. Jan. 8.—Authorizing Bell Telephone Co. to place wires across G.T.R. near Marshville station, Ont.

6011. Jan. 9.—Authorizing Norfolk County Telephone Co. to place wires across G.T.R. at road allowance between cons. 4 and 5, lot 3, Woodhouse tp., Ont.

6012. Jan. 11.—Authorizing B.C. Southern Ry. to construct a crossing to J. Cosovell's premises, Moyie, B.C.

6013. Jan. 9.—Authorizing J. Lortie to lay pipe under Quebec Ry., Light & Power Co.'s tracks at Beauport, Que.

6014. Jan. 9.—Approving C.N.Q.R. by-law authorizing President, General Freight and Passenger Agent, and the chief clerk in office of G.F. & P.A., to prepare and issue tariffs of tolls to be charged.

6015. Dec. 18.—Authorizing Manitoba Government Telephones to place wires across G.T.P.R. and C.N.R., one mile west of Portage la Prairie, Man.

6016. Jan. 9.—Authorizing G.T.R. to open for traffic the portion of its line of an additional track between Hamilton and Port Dover,

from the main line between Hamilton and Niagara Falls, at Mary St., to Ferguson Ave., near where the latter crosses Cannon St., Hamilton, Ont.

6017. Jan. 8.—Authorizing New Brunswick Southern Ry. to construct bridge across Lancaster River.

6018. Jan. 9.—Authorizing Wood Bay Telephone Co. to place wires across C.P.R. at Wood Bay, Man.

6019. Jan. 12.—Authorizing G.T.R. to re-construct bridge across Richelieu River, Belœil, Que.

6020. Jan. 12.—Rescinding order 5493, Oct. 22, 1908, approving Express Classification C.R.C. 1, Tables of Graduated Charges C.R.C. 2, and Money Classification C.R.C. 3; and directing that the express companies notify agents to apply tariffs in existence prior to Jan. 1, until further orders.

6021. Jan. 9.—Authorizing C.P.R. to open for traffic the grade revision of its line between Woodstock and Hartland, N.B., near Newburg Jct., and directing the company to complete fencing along the line not later than May 15.

6022. Dec. 29.—Authorizing C.P.R. to construct public crossing at Gordon Lumber Co.'s private crossing, 231 ft. west of proposed Bay St. crossing, Cache Bay, Ont.; and ordering it to slope the southern side of cut through bluff, 600 ft. west of crossing, from fence to 3 ft. above track, the work to be completed by June 1.

6023. Jan. 4.—Authorizing Toronto and Niagara Power Co. to place wires across Toronto Suburban Ry. at Davenport road, York county, Ont.

6024, 6025. Jan. 8.—Authorizing town of Oshawa, Ont., to construct highways across Oshawa Ry. at Barrie Ave and First Ave..

6026. Jan. 9.—Authorizing city of Hamilton to lay sewer pipe under G.T.R., Port Dover branch, at Sanford Ave., Hamilton, Ont.

6027. Nov. 25.—Directing railway companies to equip their non-platform cars with operating levers for uncoupling cars.

6028. Jan. 13.—Authorizing city of Hamilton, Ont., to lay water main under T.H. & B. Ry. at Wentworth St.

6029. Jan. 12.—Dismissing application of Bay of Quinte Ry. for order settling compensation payable by it to Kingston and Pembroke Ry. in respect of running rights possessed by applicant over K. & P.R., from Harrowsmith to Kingston, Ont.

**Aerial Tramway in the Yukon.**—A contract is reported to have been closed with a U.S. firm for the construction of an aerial tramway line from tideway at Dyea to the head of Lake Lindeman, Alaska. This latter point connects with the system of lakes which has over 1,000 miles of coast line in the Yukon country, and also connects with the Yukon River as far as Dawson, Yukon. The contract, it is stated, calls for the completion of the line, which will have a length of about 15 miles, by 1909. The promoters state that the actual cost of handling freight over the line will not exceed 25 cents a ton, and that the cost of transportation on the rivers and lakes to any of the camps in the Yukon or Klondike will be nominal. The line will be utilized to carry ore to tidewater. It is claimed that by the operation of this line the cost of living in a large number of the camps can be reduced by from 50 to 75%.

The Chicago, Ill., courts granted an injunction recently on the application of the C.P.R., restraining Nichols Bros. from distributing alleged defamatory circulars concerning the business of the railway company in selling Canadian lands.

ELECTRIC RAILWAYS.

British Columbia Electric Railway Co.

Following are extracts from the 11th annual report for the year ended June 30, 1908, submitted at the last general meeting held in London, Eng.:

The business shows continued and increasing prosperity in all departments. The past year has been one of quiet, steady progress for the cities and districts served by the railway. Large numbers of the best class of settlers have arrived in the country; in a great many instances, men who, having made money in the central provinces of Canada or in the U.S., prefer to live in the more uniform climate of British Columbia. Building has been active in the cities; a number of large and imposing business structures have been erected, and important public improvements have been carried out. During the spring your Managing Director, J. C. M. Buntzen, spent two months in British Columbia carefully investigating conditions and inspecting the company's property, and he entirely confirms the opinion formed by Hon. M. R. Gifford the previous autumn that the increasing business is founded on sound commercial conditions, and may be relied on to continue. For the 12 months to June 30, gross receipts increased \$525,218, or 36%, and the net earnings, including income from investments in subsidiaries and after charging renewals, increased \$208,749, or 30% over the preceding year. The following charges have been made against revenue account:

|   |                |
|---|----------------|
| Provision for renewals maintenance (from which £11,830-9-11 has been deducted for adjustments and expenditure on renewals during the year)..... | £ 31,161 16 2  |
| Bonus to employes.....  | 8,350 14 5     |
| Amount added to capital amortization fund.....  | 1,940 9 5      |
| Net profit for year, after making above deductions.....   | £154,223 13 7  |
| Balance brought forward from last year.....   | 3,480 19 6     |
|   | £ 157,704 13 1 |

|   |              |
|---|--------------|
| Deduct—   |              |
| Interest on debentures and debenture stock to June 30.....                  | £33,230 14 2 |
| Dividends already paid—   |              |
| On 5% cumulative perpetual preference stock for the year ended June 30..... | 15,000 0 0   |
| On preferred ordinary stock for the year ended June 30.....                 | 19,500 0 0   |
| On deferred ordinary stock for 6 months to Dec. 31, 1907.....               | 16,000 0 0   |
|   | 83,730 14 2  |

Leaving available for further distribution and reserves..... £ 73,973 18 11

From this the directors have decided to recommend the payment of a dividend on the deferred ordinary stock, including the recent issue of 100,000 deferred ordinary shares of £1 each, at 8% per annum for the 6 months to June 30, 1908, making 8% for the year, £20,000; to transfer to reserve fund (increasing this fund to £140,000), £49,000; total, £69,000; leaving to carry forward to next account, £4,973, 18s. 11d.

The number of lights in use at June 30, 1908, was 287,624, an increase of 70,838 over June 30, 1907. The number of passengers carried during the year was 21,328,180, an increase of 5,046,414. During the year £218,021-6-11 was spent in extensions and improvement of the company's property and equipment.

Your company has been granted valuable rights to conduct a light and power business in perpetuity by the municipalities of South Vancouver, Burnaby, Richmond,

Delta, Surrey, Langley, Matsqui, Sumas and Chilliwack, and the perpetual right—which for 99 years is exclusive—to conduct an electric railway business through the latter five municipalities, under conditions which are in every way satisfactory and equitable to all parties concerned. The acquisition of these important privileges in the districts surrounding and immediately adjacent to Vancouver and New Westminster has been confirmed by the votes of large majorities of the taxpayers. Your directors take especial pleasure in recording their appreciation of the confidence thus reposed in your company and its management, and they will continue their settled policy of doing their utmost to promote the prosperity of the territory served by the company, and of keeping constantly before them the interests of the public. The company has already established a light and power service in South Vancouver, Richmond, Burnaby and Delta, and with the completion of the railway to Chilliwack, will extend this service into the other municipalities. The Westminster and Chilliwack line is the most important railway extension in hand. It will be approximately 63 miles long, and will pass through perhaps the most fertile territory in B.C., namely, the rich lands on the south side of the Fraser River, the proper development of which has up to the present been most seriously retarded by lack of transportation. Already some hundreds of families have settled on the lands adjacent to our new line, and land values have very largely appreciated. A considerable number of industrial works, saw mills, etc., are also being built along the line. Another important and much desired extension is being constructed through the eastern suburbs of Victoria towards Foul Bay. The line will pass the Victoria cemetery and terminate near one of the most beautiful bays of B.C., with a sheltered position, southern aspect and fine sandy beach. It is expected to draw a large amount of summer traffic, as indicated by the number of residences already being built there in anticipation of the railway. The traffic arrangements made with the C.P.R. in 1905 with reference to their line from Vancouver to Steveston, have been extended to their line from New Westminster to Eburne, which line the company having electrified is now commencing to operate. Your company has, in connection with the Chilliwack extension of the railway, acquired through one of its subsidiaries the whole of the shares of the Sumas Development Co., Ltd., which is now actively engaged in protecting by dykes about 35,000 acres of land which have heretofore been subject to periodical overflow by the waters of the Fraser River. The major portion of the cost of these works will be borne by the Dyking Commissioners, and when they are completed they will be maintained by the Commissioners at the cost of the owners of the land benefited. On the completion of the works the company will receive from the Dominion Government a bonus of about 11,000 acres of land, through the centre of which the railway will pass, and which should be very valuable. The carrying out of these works will also provide a better line for the company's railway. Your directors were fortunate enough to foresee the financial troubles which occurred throughout the world last November, and the crisis found the company with large cash reserves with which it was enabled to buy large quantities of supplies in advance, both for ordinary use and for the above extensions, at very low prices. The Vancouver power installation continues to work satisfactorily, and has delivered all the power required in the Van-

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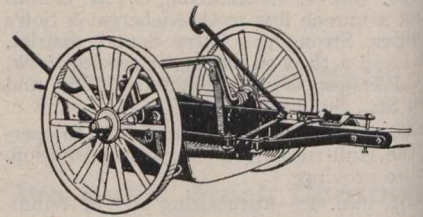
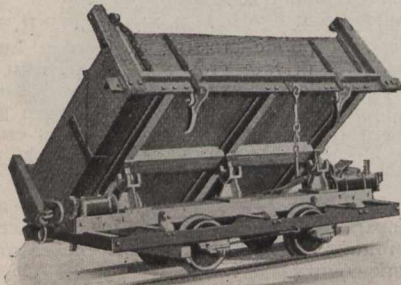
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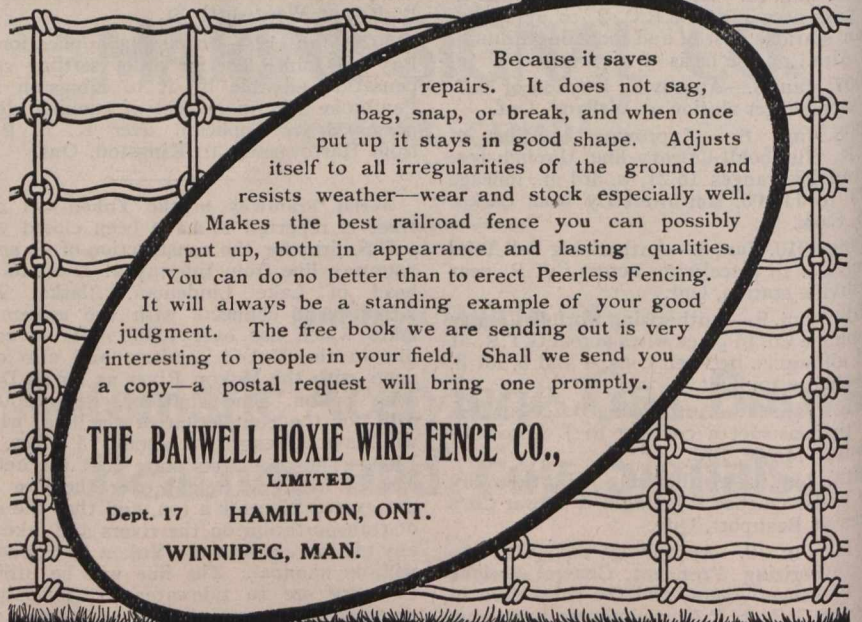
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cover and New Westminster districts. A new electrical unit of 10,500 h.p. has been installed, and came into operation during the year under review. The installation of a further unit of 10,500 h.p. has been commenced and will come into operation during 1909. Certain improvements are being undertaken tending to increase the available water power, which will then be sufficient to meet the company's prospective needs for some years to come. Your directors, fully alive to the possible requirements of the future, have from time to time had practically all the known water powers within possible distance examined by eminent engineers, and, acting on their advice that the falls of the Chilliwack River offer the best available power for future extensions of our system, have secured these water rights with the object of developing them as soon as required. A large increase in the amount of power available for Victoria has become a matter of pressing necessity, which is receiving the earnest consideration of your directors, who have had experienced hydro-electric engineers in the field throughout the summer collecting data on which to base construction plans. The large increase in the volume of business has rendered it necessary to extend the freight yards and sheds, and also the offices and terminus in Vancouver. A large block of land in the heart of the wholesale district of Vancouver has been purchased for the first-named purpose, and the new sheds will be in use before the end of the year. Land adjacent to our present offices has also been secured, and during the current year new office buildings and terminal station will be commenced. It has also been found necessary to increase the capacity for building rolling stock, and large additions to our building yards and shops at New Westminster have been completed.

The directors have much pleasure in recording their appreciation of the services of the company's General Manager, the officers and staff in British Columbia, and their satisfaction with the excellent relations which continue to exist between the company and its employees. The share of profits for the past year distributable among the employes amounts to \$40,501.

Since the date of the last report £300,000 further capital has been issued to provide funds to meet the rapid development of business in all departments; the directors now propose to increase the authorized capital by £300,000, leaving the balance of unissued capital at the same figure as last year. In accordance with the stockholders' wishes as expressed at the last two annual meetings this further capital was allotted direct to them, and has constituted a very considerable bonus. Your directors will, whenever possible, continue to offer all underwriting and issues of new capital direct to the stockholders, but in consequence of representations made, which seem well founded, that this course inflicts an injustice on a large number of firms of stockbrokers who have supported the company by their influence in the past, the directors feel that in future they must stipulate that allotments and underwriting on new shares must be taken up by the stockholders through a stockbroker, to whom the usual commission will be paid by the company.

The period of J. Buntzen's engagement as Managing Director has expired, and he having decided to reside permanently in Denmark, is unable to continue in his responsible position. His colleagues are glad to inform the stockholders, however, that they have succeeded in persuading him to retain his seat on the board and to maintain his close supervision and guidance of the board's general policy in a consulting or

advisory capacity. The board need not remind the stockholders that Mr. Buntzen's advice, based on his long experience as General Manager, to which much of the company's prosperity is due, is invaluable to his colleagues.

### Projects, Construction and Betterments.

**Brantford Street Ry.**—In connection with the new franchise granted by the Brantford Ont., City Council, on Dec. 21, the company's solicitor informed the council that if the bond of \$25,000 was not deposited within the specified time the franchise would not be extended. In addition to the reconstruction of the lines in the city within a year, the new agreement provides that the company will, within two years, proceed with the construction of a line from Brantford to Port Dover. The company is reported to have secured \$3,000,000 of capital, sufficient to insure the carrying out of the plans of reconstruction and extension. (Jan., pg. 51.)

**British Columbia Electric Ry.**—The Provincial Government has given the company permission to extend its car lines through Hastings townsite, upon condition of constructing a line across the townsite on Hastings road, and extending the Powell St. line for about a mile. The work is to be gone on with at an early date.

Application is being made by the Vancouver Power Co., a subsidiary of the B.C. E. Ry. Co., to the Provincial Government for certificates in connection with further construction at the outlet of Coquitlam Lake. It is proposed to construct a further dam 650 ft. long, with a crest width of 20 ft., and a thickness at base of 430 ft., at the upper end of the main upper channel, the dam to be of sufficient height to raise the water level of Coquitlam Lake by about 60 ft., and a spillway channel about 150 ft. wide and 12 ft. deep to carry away the surplus water. (Jan., pg. 51.)

**Calgary, Alta.**—C. Taylor, of Edmonton, Alta., was in Calgary, Jan. 6, in consultation with the Mayor and city council with respect to the construction of an electric railway there. It is said that the street railway will be completed by July 1. A press report states that the pay-as-you-enter type of cars will be used. Mr. Taylor was asked to make certain investigations on behalf of the council in connection with the construction of the line. On Dec. 26, a car for the street railway arrived in the city, and was hauled over the portion of the tracks already laid, viz., from Second Street East to Fourth Street West. (Jan., pg. 51.)

Tenders were invited Jan. 22 for the installation of the street railway in the city, complete, and also for the extension of the civic power plant, in order to supply power to operate the railway.

**Cobourg, Peterborough and Kawartha Lakes Electric Ry.**—The Ontario Legislature will be asked to pass an act incorporating a company with this title for the purpose of constructing and operating by electricity, or any other motive power except steam, a railway from Cobourg to the C.P.R. near Havelock, Ont., passing through the townships of Hamilton, Haldimand, Percy, Seymour, and Belmont, and the towns and villages of Campbellford, Trent Bridge, Warkworth, Burnley, Centreton and Baltimore; also a line from Cobourg to the Kawartha Lakes, passing through the townships of Hamilton, South Monaghan, Otonabee and Smith, the villages of Cold Springs, Plainville, Bewdley, Bailieboro, Centreville and the city of Peterborough. It is also desired to have authority to construct branch lines not exceeding in any one instance 30 miles, or to go beyond the bound-

aries of Northumberland, Durham and Peterborough; and to issue bonds to the amount of \$25,000 a mile of line constructed. D. Ewing, Cobourg, Ont., is solicitor for applicants.

**Cobourg, Port Hope and Havelock Electric Ry.**—Application is being made to the Ontario Legislature to incorporate a company to build an electric railway from Port Hope to Cobourg, and to Havelock, via Hope, Hamilton, Haldimand, Percy, Seymour, Belmont and Methuen, also a branch line from Cobourg to Gore's Landing, and with power to build branch lines of 30 miles each, and issue bonds up to \$25,000 a mile. H. A. Ward, Port Hope, Ont., is the solicitor.

**Dunnville, Wellandport and Beamsville Electric Ry.**—The Ontario Legislature will be asked next session for an act authorizing the company to extend its projected line from Beamsville to Jordan Harbor, Ont. J. R. Roaf, Toronto, is solicitor for applicants.

**East Ontario Counties Electric Belt Line Ry.**—Application will be made to the Ontario Legislature for an act incorporating a company with this title with power to construct a railway from Lancaster tp., Glengarry county, westerly to Cornwall, thence through the townships of Osna-bruck, Williamsburg, Matilda, Edwardsburg, and Augusta, to Brockville; thence to the western boundary of Elizabeth tp., and through the tps. of Young and Darling, to the boundary of Lanark, to connect with the Lanark County Electric Ry., which company was incorporated in 1897; also from Morrisburg northerly to Winchester, Kenmore and Ottawa, to connect there with the Lanark County Electric Ry.; and a branch from Kenmore to Russell, connecting with the Ottawa and New York Ry. It is also desired to have power to enter into agreements with the Cornwall Electric Street Ry., or to amalgamate with or purchase the same; and to issue bonds to the extent of \$20,000 a mile of railway constructed. F. Iveson, Ottawa, is solicitor for applicants.

A meeting was held at Ottawa Dec. 30, when the project was discussed, and it was decided to proceed with the application to the Legislature for the act, and to go on with the applications for franchises from the municipalities. The line, which would have a total length of about 200 miles, would connect Ottawa with Arnprior, Renfrew, and other towns, on the way to Brockville, along the St. Lawrence River and back to Ottawa.

**Hamilton Street Ry.**—A press report states that the company has decided to proceed with the work of relaying the track on James St., Hamilton, Ont.

**The Hull Electric Co.** has under consideration the question of constructing the following extensions: From Bridge St. to Laurier Ave., Hull, Que., three miles; and from Hull station to the toll gate on Chelsea road, 4,000 yards.

**Huron and Ontario Ry.**—Application will be made to the Dominion Parliament for an act extending the time within which the projected lines may be constructed, and giving the company power to issue bonds to a larger amount than it is now authorized to do.

**Moncton Street Ry., Heat and Power Co.**—Representatives of this company have held several meetings with the special committee appointed by the city council, to discuss the question of the construction of a street railway within Moncton, N.B. Considerable progress is reported to have been made, and it is expected that a complete understanding will be arrived at, so that when the company's application for an extension of franchise comes before the Legislature, there will be no fighting to be done in committee.

**Montreal and Southern Counties Electric Ry.**—A public meeting of the inhabitants of St. Lambert, Que., held Dec. 29, passed a resolution asking the town council to pass the by-law granting the company a franchise in the town, and on Dec. 30 the town council approved of the by-law. W. B. Powell, representing the company, said \$200,000 had been expended upon the project, and the necessary capital for construction had been secured. A vote of the taxpayers on the by-law was taken Jan. 21.

**Morrisburg Electric Ry.**—Application will be made to the Ontario Legislature for an act amending the company's act, chap. 130, of the statutes of 8th Edward VII, by authorizing the extension of the main line to Ormond in Winchester tp., Dundas county, and on through the tps. of Winchester, Osgoode and Gloucester to Ottawa, passing through or near Kenmore, Metcalfe and Greeley, then along the Gloucester macadamized road; and also by extending the line from St. Therese in Winchester tp., to connect with the main line in Osgoode tp. I. Hilliard, Morrisburg, Ont., is solicitor for applicants.

**Mount McKay and Kakabeka Falls Ry.**—A press report states that construction will be resumed on this line in the spring. When work ceased for the winter about three miles of track had been laid. The line is projected to connect Fort William, Ont., and Kakabeka Falls on the Kaministikwia River, a distance of about 20 miles. The portion of the line immediately under construction will connect the city with an amusement park, which the company is laying out about six miles from the city. G. R. Duncan, Fort William, is the company's engineer.

**Ontario Inter-Urban Ry.**—Application will be made to the Ontario Legislature for an act extending the time within which the company may construct the various lines which it is authorized to construct by its act of incorporation. S. S. Martin, Toronto, is solicitor for the applicants.

**Ontario West Shore Electric Ry.**—Application will be made next session of the Ontario Legislature for an act changing the name of this company to that of the Ontario West Shore Ry., and declaring valid a contract between the company and the Maitland River Power Co., for the supply of light, heat and power for 30 years from July 1, 1908; and confirming an agreement with the Toronto General Trusts Corporation with respect to an issue of bonds.

**People's Ry.**—The Ontario Legislature will be asked to pass an act incorporating a company with this title to construct a railway to be operated by electricity or

**NOTICE.**—The Canadian Pacific Railway Company will apply to the Parliament of Canada at its next session for an Act:—

I.—Extending the time within which it may construct (a) the railway which it was authorized by Chapter 52 of the Statutes of 1902 to construct from a point at or near Piles Junction, thence to Shawinigan Falls, and thence to Grand Mere; (b) the railways which it was authorized to construct by Section 3 (a), (b), (c), (d), (f), (g) and (i), of Chapter 74 of the Statutes of 1907.

II.—Authorizing it to construct a line from a point on the revision of the Crow's Nest Pass Branch in Township 9, Range 22 West 4th, in a northerly and northwesterly direction to a point of junction with the Macleod Branch of the Calgary & Edmonton Railway at or near Aldersyde, in the Province of Alberta, a distance of about 85 miles; and for other purposes.

WALTER R. BAKER,  
Secretary.

DATED at Montreal, January 20th, 1909.

The Salt Breath of the Sea Brings Health

# GALEN HALL ATLANTIC CITY, N. J.

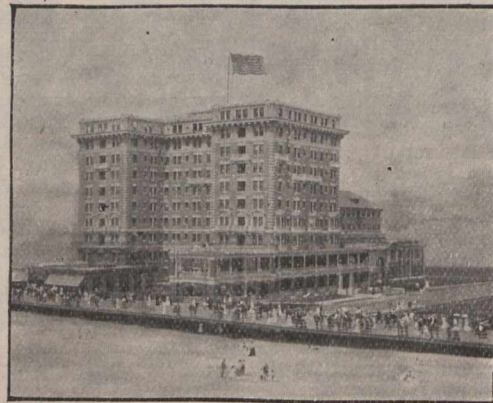
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other motive power from Woodstock, via Plattsville, New Hamburg, Baden, Berlin, Guelph, Fergus, and Elora, to Arthur, Ont., with a branch from New Hamburg, via Tavistock, to Stratford. Power will also be asked to construct lines connecting these lines with other electric railways, to issue bonds not exceeding \$20,000 a mile of line constructed; to enter into agreements with other companies for the operation of its railways, and to acquire other railway lines or branches in the district served by its lines. J. R. Roaf, Toronto, is solicitor for applicants.

N. R. and W. A. Bugg, of Toronto, who are active in the promotion of the company, were in Stratford, Jan 7, to explain the project to the city council there. The question will likely be considered at a public meeting to be called jointly by the city council and the Board of Trade. (See Woodstock to Guelph, Jan., pg. 55.)

**Peterborough Radial Ry.**—Application will be made to the Ontario Legislature for an act extending the time for the completion of the lines already authorized, and granting permission to construct an extension of the line from Clear Lake through Douro, Dummer and Smith tps., or either of them, to Stoney Lake.

**Port Arthur, Ont.**—Provision was made in a by-law voted on at the recent municipal elections at Port Arthur, for the expenditure of \$25,000 upon improvements of the street railway system within the city boundaries.

**Regina Inter-Urban Tramway Co.**—Application will be made to the Saskatchewan Legislature for an act incorporating a company with this title, with power to construct a tramway line without the city of Regina, but connected with the city. Mackenzie, Brown, Thom and Frame, Regina, are solicitors for applicants.

A press despatch from Regina says the project aimed at by the promoters of the company is to construct a railway from Regina to Long Lake, and a line from that point circling Regina. Surveys are reported to be in progress, and it is said that construction will be started in the spring. Among those interested in the formation of the company are: J. L. R. Parsons, W. M. Logan, J. F. Frame, of Regina; R. R. Barber, Georgetown, Ont.; C. J. Harris, Brantford, Ont.; H. H. Houser, Toronto.

**St. Albert, Alta.**—Application will be made to the Alberta Legislature by the municipal council of St. Albert, for power among other things to grant a franchise, exclusive or non-exclusive, for running within the limits of the town a street railway, to be operated by steam, electricity or other motive power; of granting a bonus for the construction of such a railway, and of borrowing the money required to provide the bonus by means of debentures or otherwise.

**Sarnia St. Ry.**—During 1908 the company completed 1.25 miles of line from up-town to the Pere Marquette Rd. station. It has been decided to construct a second track for about 2,000 ft. on Front St. during the coming season.

**Sydney-East Bay Electric Tram Ry.**—Application has been made to the county council of Cape Breton for a franchise for an electric railway from Sydney to the southern end of East Bay, with branches and spur lines, the whole to have a length of about 17 miles. The proposal is being supported by the Cape Breton Electric Co., and the surveys made show a route along the main highway for the entire distance. If this route is adopted it will enable the line to follow the shore line of the river from near Gibbons' bridge to the Forks or Barnes Lake. There are extensive gypsum deposits at the end of the projected line, which are

being developed by the Dominion Ry. and Plaster Co., which is promoting the construction of the railway. W. Crowe, K.C., explained the proposals of the promoters at a meeting of the county council at Sydney, Jan. 13, and asked that a guarantee of the principal and interest of \$500,000 of the company's bonds be given. A committee was appointed to investigate the company's plans and propositions.

**Toronto and York Radial Ry.**—The Metropolitan Division has been placed in operation for an additional distance of 1.50 miles, viz., from Jackson's Point to Sutton, Ont. The new roadbed was recently inspected by F. H. Wyse, engineer for the Ontario Railway and Municipal Board, and an order was issued by the Board Dec. 31, authorizing its operation for traffic.

**Toronto, Niagara and Western Ry.**—Application will be made to the Dominion Parliament for an act extending the time for the commencement and completion of the company's railways, viz., Toronto to Niagara Falls, Ont.; Toronto to Windsor, Ont.; St. Catharines to Port Colborne, Ont. It is also desired to have power to increase the amount of bonds to be issued. Royce and Henderson, Toronto, are solicitors for applicants.

Preliminary work has been started at Niagara Falls, N.Y., in connection with the construction of this company's line, which will give a through electric railway connection with Toronto. Surveys have also been started on the New York side of the river for the approaches of the projected bridge which is to connect the railway with the electric railway on the U.S. side, and more particularly with the Buffalo, Lockport and Rochester Electric Ry., which is controlled by allied interests. The President of the International Ry., Buffalo, says the work in progress is in no way connected with that company's operations.

**The Toronto Ry.** has completed arrangements for the construction of large barns on the west side of Lansdowne Ave., north of Bloor St. The plans show a brick and concrete structure, 100 ft. by 350 ft., with accommodation for over 100 cars. By an arrangement with the city council new tracks will be laid on the Arthur St. line, between Bathurst St. and Ossington Ave., at the same time as the street is being repaved.

The city council has given notice that it will make application next session of the Ontario Legislature for authority to raise \$135,000 by means of debentures, or to use that amount from the revenue received from the T. Ry. Co., to provide the bridges, grading, etc., required for the eastern entrance to the Exhibition Grounds without obtaining the assent of the ratepayers. The Legislature threw out a similar application in 1908, as a popular vote had declared against it.

**Windsor, Essex and Lake Shore Rapid Ry.**—Application is being made to the Dominion Parliament for an act extending the time for the commencement and completion of the construction of the balance of the authorized line.

**Electric Ry. Finance, Meetings, Etc.**

**British Columbia Electric Ry.**—Gross earnings for Nov., 1908, \$202,378; operating expenses, \$124,621 (including \$30,000 in respect of the estimated cost of the accident of Nov. 7); net operating earnings, \$77,757; renewal funds, \$14,443; net earnings, \$63,314; income from investments, \$13,550; net income, \$76,864, against \$180,851 gross earnings; \$84,054 working expenses; \$96,797 net operating earnings; \$10,750 renewal funds; \$86,047 net earnings; \$11,036 income from investments; \$97,083 net income for

Nov., 1907. Gross earnings for 5 months ended Nov. 30, 1908, \$937,589; net earnings, \$433,074, against \$814,290 gross earnings and \$407,476 net earnings for same period 1907.

The Vancouver city treasurer recently received \$2,720.19, being the percentage due the city on the company's Nov. earnings. This is \$860.76 more than was paid for Nov., 1907. The amount paid to Vancouver during the 11 months ended Nov., 1908, was \$20,276.66, against \$14,232.51 for same period 1907.

**Chatham, Wallaceburg and Lake Erie Ry.**—The city council of Chatham, Ont., will apply to the Ontario Legislature for an act reviving and confirming a by-law passed in 1904, authorizing the corporation to lend \$50,000 to the company, and to authorize the issue of debentures to provide the sum. It is also desired to have a by-law of 1908 confirmed, by which the interest to be paid upon the sum is fixed at 5% instead of 4%, as previously authorized; declaring the debentures issued valid and providing for the levying of rates to meet the instalments of principal and interest, as they become due.

**Detroit United Ry.**—It is said that the D.U.R. Co. is arranging to issue \$2,500,000 of consolidated first mortgage 5% bonds in London, Eng., with the object of retiring \$1,000,000 of short term notes which fall due in March, and providing funds for various purposes. The company owns the Sandwich, Windsor and Amherstburg Electric Ry. and the Windsor and Tecumseh Ry. in Canada.

**Hull Electric Co.**—Application will be made at the current session of the Dominion Parliament for an act authorizing the company to change the date of the annual meeting of shareholders.

**London St. Ry.**—Gross earnings for Dec., 1908, \$20,558.16; expenses, \$14,848.66; net earnings, \$5,709.50; interest, \$2,544.56; surplus, \$3,164.94; against \$19,494.24 gross earnings; \$14,524.54 expenses; \$4,969.70 net earnings; \$2,329.80 interest; \$2,639.90 surplus for Dec., 1907. Gross earnings for 12 months ended Dec. 31, 1908, \$235,032.40; expenses, \$167,566.72; net earnings, \$67,465.68; interest, \$28,454.74; surplus, \$39,010.94; against \$232,376.59 gross earnings; \$168,024.88 expenses; \$64,351.71 net earnings; \$27,228.64 interest; \$37,123.07 surplus for same period 1907.

**Montreal St. Ry.**—Gross earnings for Dec., 1908, \$304,884.84; expenses, \$205,818.97; net earnings, \$99,065.87; city percentage on earnings, \$12,275.79; interest on bonds and loans, \$15,306.25; rent leased lines, \$444.46; surplus, \$71,039.37; against \$294,640.17 gross earnings; \$192,310.26 expenses; \$102,329.91 net earnings; \$11,275.50 city percentage on earnings; \$16,719.31 interest on bonds and loans; \$339.93 rent leased lines; \$73,995.17 surplus for Dec., 1907. Gross earnings for 3 months ended Dec. 31, 1908, \$935,071.10; expenses, \$557,295.02; net earnings, \$377,776.08; standing charges, \$82,463.93; surplus, \$295,307.15, against \$902,723.02 gross earnings; \$539,522.94 expenses; \$363,200.08 net earnings; \$83,253.80 standing charges; \$279,946.28 surplus for same period 1907.

**St. Thomas Electric Ry.**—At a recent meeting of the City Commissioners managing the local electric railway, the question of leasing the line to the Southwestern Traction Co. was raised. The Chairman of the Commission, W. E. Idsardi, was authorized to communicate with the S.W.T. Co. on the matter, and arrange for a conference.

**Toronto Ry.**—Car earnings for Dec., 1908, \$313,057.15, against \$286,944.68 for Dec., 1907. Total earnings for 12 months ended Dec. 31, 1908, \$3,531,693.68, against \$3,384,788.08 for 1907.

# FENCE TALK No. 1

There are two kinds of fence wire in use, the common hard drawn wire of low carbon—about 0.10. The other is the high carbon steel—0.30 carbon. The former, the low carbon, is, of course, the cheaper. It is the kind used by other fence manufacturers for reasons best known to themselves. We use both kinds. For the discerning trade that is willing to pay a cent or two more per rod, so as to save four or five times as much in completed fence, we make "Page" and "Page Empire" fences, out of high carbon wire made especially for ourselves according to our own specifications. For others we make our "Star" fences from hard drawn wire.

But common sense and simple arithmetic can show you the economy of high carbon fence as against our hard drawn or any other fence there is.

Common sense will show you that because high carbon fences are—by actual test—fully one-third stronger than the best of other fences.

Common sense shows you that the stronger fence is the better fence—because it can be stretched tighter, and will stand up to its work longer.

Page Fences, with their high carbon (tougher, harder) steel nine-gauge horizontal wires, are a third stronger than the best of the other kinds. By harsh tests, this high carbon wire stands a strain of 2,400 lbs. The "hard drawn" horizontals in the other kinds break at 1,800 lbs. strain.

Simple arithmetic will show you that the high carbon fences, costing maybe a cent more a rod than the half-as-strong kinds, is actually five cents and more a rod cheaper—because fewer posts will keep them in better shape.

Figure it yourself. Using high carbon fences, say, you can safely set the posts half as far apart again as you'd dare to with ordinary wire fencing. That means two posts for high carbon fence to three for the other kind.

What does it cost to dig post holes? What do fence-posts cost? Figure out the saving for yourself—it is easy to do.

These are but part of the reasons why a railroad can't afford to buy other than the Page Fences—no matter what you pay. Let us send you a booklet (free) that shows you how to prove fence value. The Page Wire Fence Co., Limited, Walkerville, Toronto, Montreal, St. John.

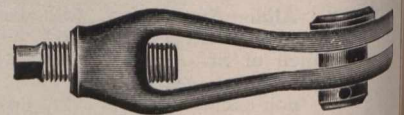
## "PAGE FENCES WEAR BEST"

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Cleveland, Ohio, U.S.A.

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MANUFACTURERS OF

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Railway and Highway  
BRIDGES

STRUCTURAL  
IRON WORK  
OF ALL  
DESCRIPTIONS

NOTICE.—The Kootenay and Arrowhead Railway Company will apply to the Parliament of Canada, at its next session, for an Act extending the time within which it may construct the railways which it has been authorized to construct by section 7 of chapter 70 of the Statutes of Canada of 1901; and for other purposes.

H. C. OSWALD,  
Secretary.

Dated at Montreal, 13th January, 1909.

NOTICE.—The Manitoba and Northwestern Railway Company of Canada will apply to the Parliament of Canada, at its next session, for an Act extending the time within which it may construct the railways which it has been authorized to construct by section 9 of chapter 52 of the Statutes of 1893, and by section 2 of chapter 104 of the Statutes of 1907; and for other purposes.

H. C. OSWALD,  
Secretary.

Dated at Montreal, 13th January, 1909.

NOTICE.—The British Columbia Southern Railway Company will apply to the Parliament of Canada, at its next session, for an Act—

I. Extending the time within which it may construct:

(a) the extension of its railway to the 49th parallel and the Tobacco Plains, which it was authorized to construct by chapter 55 of the Statutes of 1899;

(b) the western section of its railway and the branches to Nelson and Martin Creek as described in section 1 of chapter 52 of the Statutes of 1900.

II. Authorizing it to construct, acquire and operate a branch line from a point at or near Michel in a northerly direction through Kananaskis Pass to a point of junction with the main line of the C.P.R. at or near Kananaskis, a distance of about 120 miles; and for other purposes.

H. C. OSWALD,  
Secretary.

Dated at Montreal, 13th January, 1909.

The Ry. C liame: in co or to amou is des intere treat, being able chang Wi 1908 over earnir the 1; ment \$46,2; are m; cash \$3,40; have ; Sev betwe and t to ac franch the c to sel sentin Jan. I asked an ar zation gather to rej; constr compa lightir rights The 50-ft. Car ar The has b; taxati \$2,624 —; senger N.Y., Agent The Ry.'s which All the estima The ed the would "pay; a trou; E. A engine the O; May, award; R. Ry. f; ager o Ontari will b; Co.'s c The has c Weir, to pa alleged compa higher The closed Manag routes

**The Windsor, Essex and Lake Shore Rapid Ry. Co.** is applying to the Dominion Parliament for authority to issue further bonds in connection with its railway constructed or to be constructed, so that they may amount in the whole to \$25,000 a mile. It is desired that the bonds with coupons for interest may be payable in Toronto, Montreal, New York, or London, Eng., interest being at the rate of 5%, and that it be payable in Canadian currency or sterling exchange.

**Winnipeg Electric Ry.**—Gross earnings for 1908 \$899,632.61, an increase of \$37,775.19 over 1907. The city receives 5% of gross earnings, \$44,981.63, and \$20 for each of the 176 cars operated, making a total payment to the city of \$48,501.63, against \$46,252.87 for 1907. The gross earnings are made up as follows: Tickets, \$697,342.05; cash fares, \$198,880.80; sundry earnings, \$3,409.76. Since 1902 the gross earnings have increased from \$199,738.75.

Several conferences have taken place between representatives of the company and the city council to discuss a proposal to acquire the Street Ry. Co.'s property, franchises, etc. It was stated Jan. 9 that the company had signified its willingness to sell the property. D. D. Mann, representing the company, met the city council Jan. 16, and the reports state that the price asked on behalf of the company was such an amount as would pay 6% on a capitalization of about \$16,000,000. At a further gathering Jan. 18, the city council decided to reject the offer, and to proceed with the construction of its own power plant. The company's offer was to sell its railway, lighting plant, gas plant, and all its assets, rights and undertakings as a going concern.

#### Electric Railway Notes.

The Grand Valley Ry. has received one 50-ft. double-truck car from the Preston Car and Coach Co., Preston, Ont.

The Toronto Ry.'s property in Toronto has been assessed for the purposes of local taxation in 1909 at \$2,646,311, against \$2,624,833 in 1908.

Stengel has been appointed acting Passenger Agent International Ry., Buffalo, N.Y., vice G. Chambers, who is now General Agent with charge of taxes, land, etc.

The Kingston, Portsmouth and Cataract Ry.'s car barns were destroyed by a fire which occurred at Kingston, Ont., Jan. 13. All the cars but two were saved. The loss is estimated at \$10,000.

The Montreal St. Ry. recently acknowledged the receipt of \$1 conscience money. It would be of interest to learn how far the "pay-as-you-enter" system may stimulate a troubled conscience.

E. A. Bredenberg, a London, Eng., mining engineer, who was injured in the accident on the Ottawa Electric Ry. Britannia line, in May, 1908, and had a leg amputated, was awarded \$30,000 damages Jan. 12.

R. J. Fleming, General Manager Toronto Ry., has also been appointed General Manager of the Electrical Development Co. of Ontario, Ltd. The affairs of both companies will be administered from the Toronto Ry. Co.'s offices.

The Court of Review, sitting in Montreal, has confirmed the judgment of Recorder Weir, directing the Montreal Street Ry. to pay to the city \$39,691.80 for taxes alleged to be in arrears on rolling stock. The company will make a further appeal to a higher court.

The Toronto Ry.'s car shops have been closed except for repairs. The General Manager says there are all the cars on the routes that can be handled on the existing

lines, and that until the question of the construction of additional lines is finally settled, it would be useless to build more cars.

The Quebec Courts have reserved judgment on some points raised in the action brought by the Montreal City Council to recover from the Montreal Street Ry. half the cost of the clearing of snow from streets used by the company. Among other things the company alleges that the work was not properly done, and cost more than was necessary.

A New York despatch, Jan. 8, says T. A. Edison has invented a storage battery for power propelled cars which will enable them to run 100 miles continuously. The batteries are placed under the seats of the cars, and they can be sufficiently charged at existing power houses to run all day. No new power houses or poles or tracks will be needed.

The Cape Breton Electric Co. is issuing a series of illustrated advertisements in the local press, showing how accidents are likely to happen on street railways, at crossings and other points. The series will doubtless serve a useful purpose in directing public attention to the cases which frequently occur, when a little exercise of thought and care would prevent a catastrophe.

By-laws in favor of the operation of street cars on Sundays were carried at the recent municipal elections at London, St. Thomas and Port Stanley, Ont. The question will probably be raised during next session of the Ontario Legislature, as it is held that a section in the Ontario Railway Act prohibits towns in which street cars were not being operated on Sundays at the time of the passing of the act from securing the privilege.

The Edmonton Radial Ry. has ordered 4 double-truck cars, to be built on the "pay-as-you-enter system," from the Preston Car and Coach Co., Preston, Ont. Following are the chief particulars: Length of body, 28 ft.; width over all, 8½ ft.; "Pay-as-you-enter" platforms at each end, with P.C. and C. Co.'s patent alternate sliding door arrangement on the end bulk-head; interior finish, stained birch; automatic folding door on each side of each vestibule; bottom framing, combination steel and wood; drop platform; single steps; roof with bullnose extending to points of vestibules; P. C. and C. Co.'s positive sand boxes; short wheel base trucks; seating capacity for 44 passengers, with 2 longitudinal seats at each end, and 18 walkover seats of spring cane. The cars will be supplied with double-end equipment and four G.E. 80 motors.

#### Grain Elevator Notes.

The Alberta Pacific elevator at Red Deer, Alta., recently shipped a carload of wheat to Mexico, via Vancouver, B.C.

A press report states that the Atlas Elevator Co. will erect 25 elevators along the G.T. Pacific route during the year.

Three elevators are under construction at Outlook, Sask., a town which commenced its existence in Aug., 1908, when the C.P.R. branch line from Moose Jaw reached the place.

The Vancouver Milling and Grain Co.'s elevator was destroyed by fire Jan. 4. The loss is estimated to reach \$100,000. It is said to be the company's intention to rebuild as soon as possible.

The Western Milling Co.'s elevator and warehouse at Calgary, Alta., together with about 25,000 bush. of wheat and 3 cars of flour, were destroyed by fire Jan. 2. The loss is estimated at \$50,000, which is covered by insurance.

A deputation representing various On-

tario milling interests waited on members of the Dominion Government Jan. 8, regarding the question of mixing and grading at terminal elevators. The advisability of Government ownership of terminal elevators was also urged.

In the Saskatchewan Legislature, Mr. Langley, M.P.P. for Redberry, Sask., in a speech Jan. 6, advocated the empowering of rural municipalities to erect, own and operate grain elevators for loading, cleaning and storage purposes, but prohibiting them from dealing in grain.

The new agreement which was signed Dec. 15 between the C.P.R. and the city of Fort William, Ont., provides, among other things, that the company shall provide a cleaning elevator at the port within the next three years. At present the cleaning elevator at the head of the lakes is at Port Arthur, and is in private hands.

The proposal to ship Alberta grain westward to Pacific coast ports has been endorsed by the Vancouver Board of Trade. The consensus of opinion is that though the scheme is not likely to be carried out in the immediate future, preparations should be commenced at Pacific coast ports for the construction of elevators and other grain handling facilities.

The Grand Trunk Pacific Elevator Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$1,000,000 and office at Winnipeg, to lease and operate the terminal elevator now under construction at Mission River, Fort William, Ont. The provisional directors are: F. W. Morse, Vice-President and General Manager G.T.P.R., Montreal; J. E. Dalrymple, Assistant Freight Traffic Manager G.T.P.R., Winnipeg; H. H. Palethorpe, W. K. Chandler, T. Gillespie, J. A. Stevenson, and H. Phillips, Winnipeg.

The result of the recent conference of the Premiers of Manitoba, Saskatchewan and Alberta, as to the owning and operation of elevators by the provincial governments, was expected to be announced at the end of Jan. Premier Scott, of Saskatchewan, is reported to have said, at Regina, regarding a dispatch from Winnipeg, Jan. 3, to the effect that the proposals had been vetoed owing to the heavy financial obligations involved, that there was no truth in such a report. Premier Roblin, of Manitoba, estimated recently that about \$14,000,000 would be necessary to acquire the elevators by purchase, and stated that such a procedure was unlikely, but that some system of government control was more probable. The full reply of the Premiers to the Grain Growers' Association has been drafted and was signed by Premier Roblin Jan. 16, after which it was sent to Premiers Scott and Rutherford in turn.

The Thunder Bay Elevator Co., has let a contract for the construction of an elevator, with 1,500,000 bush. capacity, at Port Arthur, Ont., to the Barnett-McQueen Co., Fort William. The site on which the elevator will be constructed is on the east boundary of Port Arthur, about midway between the dual ports. The contract price is stated to be \$550,000, including the cost of site and trackage, but excluding the cost of a concrete dock which it is proposed to construct as a part of the plant. The plans show three unloading tracks, each with capacity for three cars, and there will be nine pits, each with a capacity of 2,000 bushels. The handling machinery will enable 200 cars to be dealt with each 10 hrs., and the grain to be loaded into vessels at the rate of 50,000 bush. an hour. The plant is to be ready for operation by Sept. 15. The officers of the Thunder Bay Elevator Co. are: President, W. H. McWilliams; Vice-President, G. R. Crowe; Secretary-Treasurer, C. Piper.

MARINE DEPARTMENT.

The All-Red Route.

On the subject of the proposed all-British route to the Antipodes by way of Canada, Lord Strathcona recently said: "Another point upon which I wish to touch is the question of steamship communication, and especially that part of it relating to the opening of the route between Great Britain, Australia and New Zealand by way of Canada. I am quite prepared to admit that a great deal is being done by the existing companies in that direction, but we want something more. Fast communication between the United Kingdom and Canada means a great deal to the relations of the two countries. It must inevitably lead to more emigration, more general passenger travel, and more business. There is a splendid train service between the Atlantic and Pacific through Canada, over the C.P.R.—which is capable of acceleration if required; and before very long the G.T. Pacific and the Canadian Northern Railways will be in operation from one end of the Dominion to the other, opening up new country for settlement and for commercial enterprise. A line of steamers is already plying regularly across the Pacific to China and Japan, largely owing again to the initiative of the very go-ahead C.P.R.; and also a line to Australia and New Zealand. But it cannot be questioned that better and faster steamers on both the Atlantic and Pacific portions of the route would benefit very considerably the different parts of the Empire concerned, while in all probability they would soon pay their way. If the necessary capital cannot easily be obtained by the existing companies, and investors are not ready to face the risks that are believed in some quarters to be involved in the provision of new fast services, the countries to be benefited must step in and take the responsibility. The funds needed might be provided by means of a subsidy, by a direct guarantee of the interest on the capital, or, if thought more advisable, by advancing the necessary funds at a reasonable rate of interest, such as was done in connection with the building of the magnificent Cunard liners, the Lusitania and the Mauretania. Surely, if this was considered desirable in order to promote communication with another nation which is not British, it is worth while to adopt a similar policy in bringing closer together some of the leading countries which are part and parcel of the great Empire to which we belong, and which, I trust, we all desire to perpetuate."

Proposed Grain Clearing House.

At a meeting of the Dominion Marine Association Executive Committee at Montreal, Dec. 31, 1908, the proposals for the installing of a clearing house for grain cargoes were discussed, and unanimously

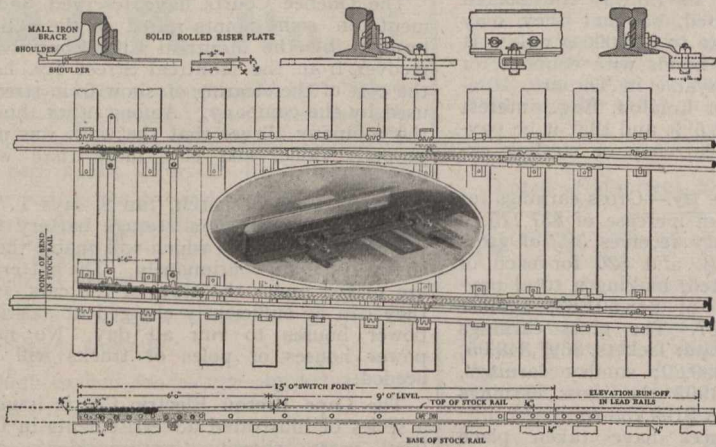
NOTICE is hereby given that application will be made by the Grand Trunk Pacific Railway Company to the Parliament of Canada, at its next session, for an Act to ratify and confirm an agreement, dated the 22nd day of December, 1908, made between the Grand Trunk Pacific Railway Company and His Majesty King Edward the Seventh, represented by the Treasurer of the Province of Ontario, entered into in accordance with the provisions of sections 3, 20, 21 and 22 of an Act passed by the Legislative Assembly of the Province of Ontario, being 4 Edward VII, chapter 18.

D'ARCY TATE,  
Assistant Solicitor,

Grand Trunk Pacific Railway Company.

Dated at Montreal, this 7th day of January, A.D. 1909.

FOR HARD SERVICE, USE THE



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HOW TO REACH THE CLIFTON HOTEL

Arriving on Grand Trunk Railway or Wabash Rd., at Niagara Falls, Ont. Hotel bus meets all trains or take trolley to hotel—7 minutes. Arriving on Michigan Central Rd., Canadian Pacific Railway, at Victoria Park station—Hotel bus meets all trains, only three minutes' walk from station to hotel.

International Railway (trolleys), connecting with Niagara Navigation Co. steamers at Queenston, to or from Toronto, pass the door.

IMPORTANT

Guests coming to the Hotel should see to it that they are taken to The Clifton Hotel, CANADIAN SIDE, and also that their mail is addressed "Care of The Clifton Hotel, Niagara Falls, CANADA." To insure prompt delivery, don't forget to make CANADA plain in the address.

The "DILLON"

is a Hinge-Stay fence made of extra quality wire, either all No. 9, or lighter if required.

"MONARCH"

fence is made of No. 9 Hard wire throughout, and is of the regular straight-stay style.

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OWEN SOUND, ONTARIO  
LIMITED



endorsed. It was given as the opinion of several of those present that such a plan would not only save about 4 days in the loading, but would tend to obviate the trouble over shortages.

A. A. Wright, President, and F. King, Secretary-Treasurer, of the Association, were instructed to attend a meeting of all the interests concerned, which was held at Winnipeg Jan. 7. The object of the meeting was to arrange if possible for the establishment of a clearing house. The representatives of the terminal elevators declared themselves as opposed to the proposal, so far as a clearing house for grain was concerned. An arrangement was, however, made for the establishment of a clearing house for documents at Winnipeg, whereby the loading at Fort William and Port Arthur will be greatly facilitated. Under this arrangement shippers will pass their documents through the clearing house, and the loading will be concentrated in as small a number of elevators as possible. A committee was appointed to arrange the details of the scheme.

The Association has decided to take the necessary steps to have removed from the grain bill of lading the clause whereby the carrier assumes liability for shortage in out-turns of cargoes. It was resolved to adopt the flax seed clause, which limits the liability to one half-bushel per thousand, and agrees to look for no payment for over-runs. The Lake Carriers' Association was asked to join with the Dominion Marine Association, and the matter was discussed at its annual meeting at Detroit, Mich., Jan. 20.

### Atlantic and Pacific Ocean Marine.

A report of a conference in Melbourne, Australia, Jan. 5, states opinions expressed there were strongly in favor of the proposed all-British route via Canada.

The Furness Line's s.s. London City arrived at St. John's, Nfld., Jan. 4, with a fire in her hold, which had been burning for 5 days. The cargo consisted chiefly of phosphorous.

Joint arrangements are reported to have been made whereby the Norddeutscher Lloyd, Holland American, Hamburg and White Star Lines, will run one vessel each, weekly from Antwerp to Montreal.

The Cairn Steamship Line is reported to have placed an order at Wallsend-on-Tyne, Eng., for a steamship for the St. Lawrence route, to take the place of the s.s. Latona, which was run down on her first voyage.

Andrew Weir & Co., owners of the steamships Suveric and Kumeric, will, it is stated, build two steel cargo steamers for the Puget Sound and Victoria trade. They will be operated by the Bank Steamship Line.

Current reports credit the G.T.R. with having made a working agreement with the White Star Line in connection with the inauguration of its St. Lawrence service in conjunction with the Dominion Line, in the spring.

An arrangement is reported to have been made, whereby the C.P.R., Dominion, Allan and other steamship lines operating across the Atlantic, will make a series of international wireless meteorological reports, commencing with Feb.

It was recently announced in Montreal that the General Transatlantic Steamship Co. of France has decided to run a service between Havre, France, and Montreal, with four vessels, named Chicago, La Gascoigne, La Touraine and La Bretagne.

The number of sailings from St. John, N.B., from the commencement of the winter season of navigation to Dec. 31, 1908, was 21, against 18 for the similar period of 1907. The values of outward cargoes were \$3,783,246, against

\$3,754,418 for the periods of 1908 and 1907, respectively.

The Elder-Dempster Co.'s s.s. Dahomey, from Newport News to Vera Cruz, has been beached at Nassau, in a leaking condition. She was built at Middlesbrough, Eng., in 1891; her dimensions are: Length, 312 ft.; breadth, 40 ft.; depth, 24½ ft.; tonnage, 2,850 gross, 1,828 net.

A cablegram from Christiania, Norway, states that a buoy containing a notice that it was set adrift near Cape Bathurst, 284 miles northeast of the Mackenzie River, July 24, 1900, has been driven ashore at Soeroe. The conclusion arrived at is that it has been carried across the Arctic Ocean and between Greenland and Spitzbergen.

P. F. Fraser, captain of the Quebec Steamship Co.'s s.s. Bermudian, has been presented by the U.S. Government with a gold watch; J. F. Walsh, formerly second officer, with a gold watch; and four seamen of the same vessel with gold medals, for rescuing the crew of the schooner Mary L. Newhall, in Feb., 1908, when she was discovered dismantled and in a sinking condition, 260 miles northwest of Bermuda.

The s.s. Sticklestad, which sailed from Glasgow, Scotland, Nov. 23, 1908, for Sydney, N.S., has been given up as lost. She was in charge of Capt. Axelsen, who is well known in Sydney, N.S. The s.s. Falco, which left Glasgow five days later, arrived at Sydney, N.S., recently, without having sighted her. The former vessel was chartered to the Dominion Iron and Steel Co., and the latter to the Nova Scotia Steel and Coal Co.

W. Becket Hill, Managing Director Allan Steamship Line, Liverpool, Eng., whose death was announced in our Jan. issue, joined the Allan Line in 1867 as Freight Manager, and while still at Liverpool, he designed the first twin-screw tug, which was such a success that both it and its two successors were purchased by the Admiralty. The building of big twin-screw ocean-going steamers on the same principle and the use of higher pressures was his next achievement. He was thus the initiator of the immense twin-screw mail boats which opened a new era in speed and safety. Allan Bros. ultimately made him a partner, with the control of the London house. The New York and Canadian business in Leadenhall St. forms a striking monument of his administrative power. He did much to settle the great dock strike of 1889. Though a keen supporter of the strikers' demand for the abolition of the middleman, he was one of the founders of the Shipping Federation. He gave evidence on the subject before the Labor Commission, and was foremost in obtaining from the Board of Agriculture the removal of restrictions onerous to the ocean cattle-carrying traffic, while the shipping interest is indebted to him for concessions from the Board of Trade in the measurement of cattle deck tonnage. He likewise exposed the anomalies of the incidence of the light dues.

### Maritime Provinces and Newfoundland.

N. Randell has been appointed Government wharfinger at Sturgeon, P.E.I.

The crew of the Liverpool, N.S., schooner Annie, which was wrecked near Honduras in Nov., 1908, were landed in New York recently, and proceeded to their homes.

Capt. W. R. Lugar is delivering a series of free lectures in Halifax on matters connected with ships and navigation, at the instance of the Dominion Marine Department.

The schooner W. W. McLaughlin, of St. John, N.B., bound for New York, was driven ashore at Cape Cod Jan. 8. She was subsequently floated and towed to Province Town. She was not seriously damaged.

The schooner J. Arthur Lord, of St. John, N.B., struck on the Stone Horse Shoal during squally weather, Jan. 8. She was floated and towed to Vineyard Haven, Mass., where she was beached in a sinking condition.

The s.s. Turret Bell, on which salvage work has been proceeding for some time, has been successfully floated off the rocks near St. Peter's, P.E.I., and was reported early in Jan. as floating in 7½ ft. of water.

W. H. Price, Assistant General Passenger Agent Eastern Steamship Co., Boston, Mass., having resigned, the position has been abolished, and its duties incorporated with those of the General Passenger Agent.

The schooner Argina was launched at Shelburne, N.S., recently by J. McGill, this making the seventh launched during 1908. The dimensions of the latest vessel are: Length, 98 ft.; breadth, 24 ft.; depth, 24 ft.; tonnage, 98 register.

An order-in-council was passed Jan. 15 amending the order of Nov. 28, 1908, which prohibited ships leaving U.S. ports carrying live stock from touching at Canadian ports, by adding after the words "live stock," the words "with the exception of horses."

The crew of the Newfoundland schooner Red Gauntlet, which was wrecked while bound from Portugal to St. John's, Nfld., were landed at Halifax, N.S., Jan. 9, from the Allan Line s.s. Grampian. They were rescued in the open sea by a French steamer.

The Halifax and Inverness Steamship Co., of Halifax, N.S., has under construction at Mahone Bay, a steamer of about 130 ft. long, for service between Halifax and Cape Breton and Prince Edward Island ports. It is understood that a subsidy has been applied for.

Tenders for the construction of an extension to the breakwater at Tennycape, N.S., were received by the Dominion Public Works Department, but we are advised that no action has been taken on the lowest tender, and that it is probable the work will not be immediately proceeded with.

The St. John Forwarding Co.'s annual meeting was held at St. John, N.B., Jan. 12. Following are the officers and directors for the current year: President, H. H. McLean, M.P.; other directors, A. Gibson, A. Gibson, Jr., J. S. MacLaren, G. W. Massey; Secretary-Treasurer and Manager, A. Rowley.

The bark E. A. O'Brien, which put in at Barbados recently in a damaged condition, has been sold for the benefit of the owners. She carried no insurance. She was built at Noel, N.S., in 1891, her dimensions being: Length, 185 ft.; breadth, 37.4 ft.; depth, 21.3 ft.; tonnage, 1,037 register. G. A. Slawenwhite, of Mahone Bay, N.S., was the managing owner.

An action has been taken in the Supreme Court to compel delivery in Sorel, Que., of the cargo of the schooner H. J. Logan, at present berthed at Halifax, N.S. The vessel, bound from Mobile to Sorel towards the end of 1908, met bad weather, and was considerably damaged. She put in at Halifax, where repairs were made, but in the meantime navigation of the St. Lawrence was closed.

The Valley Steamship Co., Annapolis, N.S., is reported to have ordered a steamboat to be constructed by J. McGill, Shelburne, N.S. Her dimensions will be: Length, 107 ft.; breadth, 22 ft.; depth of hold, 9 ft. She will be fitted with electric light, steam steering gear, and have a powerful searchlight. It is intended to operate her on the Annapolis-St. John route, in place of the Granville, which has been sold to Connors Bros., Black River, N.B. The Granville will be run between St. Andrews and St. John when the new vessel is ready for service.

The Sincennes-McNaughton Co., Ltd., has been awarded \$1,500 as damages for a



### Province of Quebec Marine.

A. Russell has been appointed Port Warden for Quebec harbor.

A Montreal press report, dated Jan. 18, states that a large shipyard and dry dock is being projected there by Montreal and Toronto people.

The tender of Quinlan, Robertson and Haney, Montreal, for closing the gap in the Carillon dam, has been accepted by the Department of Railways and Canals.

The Dominion Public Works Department has decided not to enter into a contract at present for the construction of a breakwater at Longue Point, for which tenders were recently invited.

We are advised that no action has been taken on the lowest tender recently received by the Dominion Public Works Department, for the construction of a wharf at Three Rivers, and that it is improbable the work will be immediately proceeded with.

The centenary of steam navigation in this country will be celebrated this year. It is claimed that the steamboat Accommodation, built by Hon. J. Molson, was the first steam vessel to be operated outside Great Britain entirely built in this continent. The Accommodation was built at Montreal, and her engines and boilers, etc., made at Three Rivers, Que.

The St. Maurice River Boom and Driving Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$25,000 and office at Three Rivers, Que., with power, among other things, to build, purchase or otherwise acquire and operate steam and other vessels, wharves, docks, etc. The provisional directors are: R. F. Grant, J. M. Dalton, A. Baptist, V. Burrill, Three-Rivers; G. Chahoon, Jr., Grandmere; and J. H. Biermans, Shawinigan Falls, Que.

The Canadian General Development Co., Montreal, has ordered from the Montreal Locomotive Works, a 4-yard dipper dredge, capable of working in depths of from 8 ft. to 30 ft., and dumping the dipper at a maximum radius of 45 ft. from the centre. The hull will be of steel, about 90 ft. long by 31 ft. wide, and 9 ft. deep at the front end in the centre. Accommodation will be provided for living, with the necessary galley, store-room, etc., and the vessel will be fitted with electric light. Construction of this nature is an entirely new departure for the Montreal Locomotive Works.

### Ontario and the Great Lakes.

Capt. A. Hicks, a well-known navigator of the Bay of Quinte, died Jan. 3, at Picton, Ont., aged 59.

Capt. W. Craig, a well-known lake navigator, who retired from the service some time ago, died at Goderich Jan. 18.

W. A. Esson, a former Manager of the Toronto Ferry Co., now of Chicago, Ill., was married in Toronto, Jan. 2, to Miss Boyd.

A report is current that the Government dry dock at Kingston is about to be taken over by private interests, but enquiries have so far failed to confirm this.

W. F. Toner has been appointed Harbor Master at Collingwood, succeeding H. Foreman, who has been appointed Measuring Surveyor of Shipping at that port, vice G. Watson, resigned.

The steam barge Tecumseh was burned to the water's edge at Goderich, Jan. 16. She was insured for \$15,000, which is said to be about two-thirds of the loss sustained. The owners are given as Trethewey & Son, of Goderich.

The officers and directors of the Turbine Steamship Co., for the current year, are:

President, J. C. Eaton; other directors, J. Moodie, J. Knox, A. Leitch, Hamilton; C. R. Simpson, H. McGee, J. J. Vaughan, Toronto; Manager, J. A. Goodearle, Toronto.

Imperial service medals have been awarded to the following Government employes for long and meritorious service: F. H. Hill, lighthouse keeper, Lancaster, Ont.; F. Lay, lockmaster, Welland Canal; G. Shannon, Grosse Point lighthouse, Valleyfield, Que.

During the navigation season of 1908, a total of 1,885 vessels arrived at and departed from Fort William, the aggregate tonnage being 3,530,450 tons; a decrease of 4 in the number of vessels for 1907, but an increase in the tonnage of about 1,300,000 tons.

L. Henderson, who has been for about 10 years Local Manager, Montreal Transportation Co., at Kingston, having succeeded his father in the position, has been appointed General Manager of the company, with headquarters at Montreal, succeeding the late J. A. Cuttle.

An order-in-council was issued recently, amending subsection b, art. 28, of the Canadian Rules of the Road for the Great Lakes, which provides that a danger signal shall be several short and rapid blasts, not less than four, of the whistle or syren of a steam vessel, to read several short and rapid blasts of the whistle not less than five.

The Muskoka Lakes Navigation Co.'s annual meeting was held at Toronto recently, when a satisfactory report of the past season was made. Following are the officers and directors for the current year: President, J. S. Playfair; Vice-President, F. J. Phillips; other directors, H. C. McLean, J. Playfair, M. S. Wilson, R. A. Lucas; Manager and Treasurer, W. F. Wasley.

The Farrar Transportation Co.'s annual meeting was held at Collingwood Jan. 12. Following are the officers and directors for the current year: President, D. D. Lewis, Sault Ste. Marie, Ont.; Vice-President, T. I. Thompson, Owen Sound; Managing Director and Secretary-Treasurer, G. E. Fair, Collingwood; other directors, E. R. Wayland, W. E. Allen, W. R. Rowland, E. Stubbs, M. Snetsinger, C. A. Farrar, and F. Scott.

Press reports state that plans are practically complete for the purchase of the Detroit and Buffalo Steamship Co. by the Detroit and Cleveland Navigation Co. The price stated as being paid is \$1,000,000, of which \$900,000 is to be in cash. The capital stock of the new company, it is said, will be increased by \$4,000,000. The companies operate on Lakes Erie and Huron, the latter making connections with the Duluth, South Shore and Atlantic Ry.

Forwarders Ltd., a company recently incorporated under the Dominion Companies Act, with a capital of \$500,000, and office at Kingston, is reported to be about to take over Moore's elevator there, and to order suitable steam and other barges for the transportation of grain from Kingston to Montreal. W. G. Craig, Kingston, is President of the company; others interested being W. H. Comstock, — Mallory, Brockville; — Schmidt, Pembroke, and M. J. Galvin, Detroit, Mich.

The U.S. lake survey reports the levels of the Great Lakes for Dec., 1908, in feet above tidewater, as follows: Superior 602.01; Michigan and Huron, 580.16; Erie, 571.38; Ontario, 245.49. As compared with the average December levels of the past 10 years, Superior is  $8\frac{1}{2}$  ins.; Michigan and Huron,  $\frac{3}{4}$  in.; Erie,  $10\frac{1}{2}$  ins.; and Ontario 10 ins., lower. The anticipated levels during Jan., 1909, are: Superior, 4 ins.; Michigan and Huron,  $1\frac{3}{4}$  ins., lower; Erie,  $\frac{1}{4}$  in., and Ontario,  $1\frac{1}{2}$  ins., higher than those of Dec., 1908.

We are advised that the vessel being built at Detroit, Mich., for the Inland Navigation Co., Hamilton, is a steel bulk freight steamer, 500 ft. long over all, 56 ft. beam. She will be equipped with triple expansion engines and Scotch boilers, and will have patent water-tight steel hatch covers, automatically operated; the hatches will be 12 ft. from centre to centre; construction will be on the modern arch principle, with vertical side tanks, and the general equipment, and passengers' and crew's quarters, will all be modern in every respect. She will be ready for operation early next season.

The transfer of the Hamilton Steamboat Co. to the interests which control the Turbinia Steamship Co., viz., the T. Eaton Co., Ltd., Toronto, was consummated at a special meeting held at Toronto Jan. 15. The two companies will not, as stated in the daily press, be merged, but will be operated independently as hitherto. The Hamilton steamboat owns two vessels, the Macassa, built at Port Glasgow, Scotland, in 1888, and reconstructed at Collingwood, Ont., in 1905, and the Modjeska, built at Yoker, Scotland, in 1889. Following are the new officers and directors: President, J. C. Eaton; Vice-President, R. Y. Eaton; Secretary-Treasurer, J. J. Vaughan; Manager, W. E. Bishop; other directors, H. McGee, C. Booth, and A. McCrea. The former officers and directors were: President, Æmilius Jarvis; Vice-President, H. G. Nicholls; Secretary, C. E. A. Goldman; Manager, W. E. Bishop; other directors, A. Angstrom, A. Bruce, K.C., and H. B. Whitton.

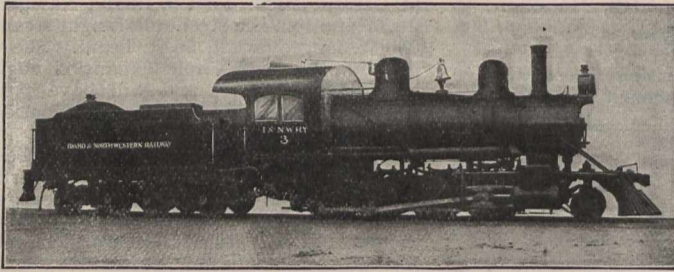
### Manitoba, Saskatchewan, Alberta, Etc.

The North West Ranching and Packing Co. is applying to the Alberta Legislature for an act of incorporation with power among other things to own and operate steam tugs and other vessels in connection with its business, with headquarters at Edmonton, Alta.

The Commissioner of the Hudson's Bay Co. reported recently that he had received information that the company's barque Stork, which was reported from London as overdue from James Bay, was wrecked at Lisbon Shoals, Hudson Bay. The crew and passengers were saved and reached Moose Factory safely. The captain and a portion of the crew reached the railway line, and are proceeding to London.

The Northern Fruit Co., Ltd., has been incorporated under the Manitoba Companies Act, with a capital of \$50,000 and office in Winnipeg, to carry on a general fruit business, and in connection therewith to own and operate wharves, docks, etc., and to build, purchase or otherwise acquire and operate steam and other vessels, and other means of transportation, except that nothing in its act of incorporation shall be held to authorize it to carry on the business of a railway company. W. K. and F. P. Nash, H. B. Finch, Grand Forks, N.D.; F. H. Decamp, Winnipeg; and F. M. Waldron, Saskatoon, Sask., are provisional directors.

A small steamboat has recently been shipped by the Polson Iron Works, Toronto, to Craven, Alta., where it has been laid up for the winter, and will in the spring be transported to McKillop's Landing, or some other convenient point on the Last Mountain Lake, for use by the Dominion Government in dredging and clearing harbors at various points on the lake where towns and settlements have been located. Navigation on this lake has been going on for about four years, a steamer owned and operated by W. Pearson Co., of Winnipeg, with capacity for 150 passengers, and freight, plying between Port Hyman, Lake View Park, Wilkes Bay, Arlington Beach, Watertown and other points.



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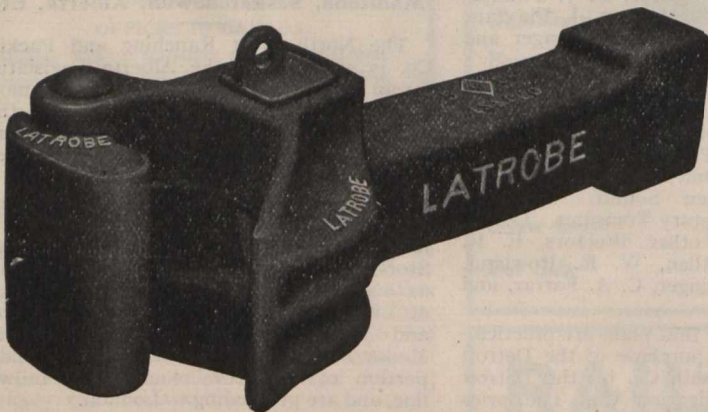
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Philadelphia—Queenstown—Liverpool  
Sailing from Philadelphia Saturdays.

### ATLANTIC TRANSPORT LINE

New York—London  
Sailing from New York Saturdays.

### WHITE STAR—DOMINION LINE

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Montreal to Avonmouth Docks  
(Bristol and Antwerp)

### RED STAR LINE

New York—Antwerp—Paris  
Sailing from New York Wednesdays.

### WHITE STAR LINE

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

N.Y.—Plymouth—Cherbourg—Southampton  
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Boston—Queenstown—Liverpool  
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**B.C. and Pacific Coast Marine.**

Navigation on the Skeena River was brought to a standstill during the early part of Jan., owing to a spell of cold weather.

Press reports state that the C.P.R. purposes building barges for use on B.C. inland waters in the conveyance of loaded cars of fruit, etc., to facilitate shipment.

The steam tug Lottie N., owned by J. E. Gilmore and others, of Prince Rupert, was sunk at Port Essington, by floating ice. It is anticipated that she will be refloated without much damage.

T. H. Horne, Victoria, has deposited with the Dominion Public Works Department, plans of wharf, which he proposes to construct there, and has applied to the Governor-General in Council for approval.

The North Vancouver Ferry Co. is moving to restrain the North Vancouver Motor Boat and Transportation Co. from carrying passengers across Burrard Inlet between Vancouver and North Vancouver.

The Steamer H. C. Henry, Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$10,000, to build, equip and manage steam and other vessels, and to carry on the business of shipowner in all its branches.

The C.P.R., as owners of the s.s. Princess Royal, and the owners of the Japanese s.s. Fukui Maru, have entered actions against each other for damages sustained in the collision between the two vessels, Nov. 8, 1908. The C.P.R. claims \$15,000.

The Vancouver Colonization Co., Ltd., has been incorporated under the B.C. Companies Act, with a capital of \$50,000, to act as a colonization company, and in connection therewith to build, purchase or otherwise acquire steam and other vessels, etc.

The Victoria Board of Trade Council has been assured by Capt. J. W. Troup, Superintendent C.P.R. Pacific Coast Service, that the fortnightly service with the Queen Charlotte Islands will be continued throughout the winter and not reduced to a monthly service as was feared.

The Dominion Marine Department has issued a descriptive list of the beacons in the North Arm, Fraser River, giving their locations, height, color and description, with comments on the positions, etc. Two of the five Dolphin lights, numbered 3 and 4, are quoted as missing.

The C.P.R. s.s. Princess Charlotte, which was described in our Aug., 1908, issue, and illustrated in our last issue, arrived at Victoria, Dec. 30, from Glasgow, Scotland, by way of Cape Horn. Calls for coaling purposes were made at Teneriffe, Montevideo, Coronel, and Callao. She was in charge of Capt. C. Troup.

Various press reports have been current recently, supposed to emanate from London, Eng., regarding the transfer of Esquimalt from Imperial to Dominion control. These are generally misleading. Esquimalt fortress and works have been maintained since 1906, by the Dominion. Regarding the formal transfer of the docks, it has been ascertained that it can only be accomplished by a special act, and it is hoped to introduce a bill embodying the terms of such transfer into the British Parliament during the next session.

It is said that tenders for the repairs considered necessary on the C.P.R. s.s. Glenfarg, as a result of its grounding in the Vancouver Narrows in Dec. last, amount to nearly \$30,000. The repairs include the renewal of 12 plates, the removal and fairing of 10 floors, and the setting up of 73 frames and repairs. If it is decided to make permanent repairs, the work will be carried out at Esquimalt, but it has been suggested that temporary repairs only may be undertaken

to enable the vessel to carry out the terms of the time charter under which she is being operated by the C.P.R.

Capt. J. W. Troup, Superintendent C.P.R. Pacific Coast Service, is reported to have stated recently on his return from a conference with the western lines management at Winnipeg, that all the C.P.R. vessels engaged on the Pacific coast will be equipped with wireless telegraph apparatus; and also that among the recommendations which have been forwarded to Montreal for consideration is the building of two steamships for the Victoria-Prince Rupert service. We were officially advised Jan. 11, that it had not then been decided to build a steel passenger steamer for the B.C. Coast, but that the matter was under consideration.

A London, Eng., press correspondent, who recently visited Prince Rupert, is quoted as saying: "The harbor is the finest in Canada. It is formed by a perfectly protected curved inlet 16 miles long, a mile broad, and 25 fathoms deep on an average. The bottom has good holding for anchors, and there is 30 ft. of water at the lowest tide, by the temporary wharves. The nature of the approach from seaward has been criticized in certain quarters, but all such criticisms have been finally disposed of by Capt. J. F. Parry, R.N., of H.M.S. Egeria, which is making the admiralty survey of the entrance. He says: 'It is no breach of etiquette on my part to state that the result of the survey is entirely satisfactory in so far as the approach to Prince Rupert from seaward is concerned.'"

**St. Lawrence and Chicago Steam Navigation Co., Ltd.**

The following report was presented at the annual meeting in Toronto Jan. 16: The season of 1908 on the lakes was a very unsatisfactory one, rates of freight ruling very low throughout the entire season. The new steamer E. B. Osler was completed and delivered to the company on May 16, 1908, and went into commission at once. The company's steamships met with more than their share of accidents during the season. The E. B. Osler and G. R. Crowe each had two serious strandings, which materially reduced the profits of the year, although being fully covered by insurance, no direct loss was sustained. The directors from the earnings of the season have paid a dividend of 7% on the capital stock, and have carried forward \$415.32 to the credit of profit and loss, leaving a balance at the credit of that amount of \$102,383.55.

**ASSETS.**

|   |                     |
|---|---------------------|
| Five steamships, Algonquin, Iroquois, W. D. Matthews, G. R. Crowe, E. B. Osler..... | \$950,000.00        |
| Insurance unexpired.....  | 11,000.00           |
| Accounts receivable.....  | 5,050.12            |
|   | <u>\$966,050.12</u> |

**LIABILITIES.**

|  |                     |
|--|---------------------|
| Capital.....                           | \$855,700.00        |
| Dominion Bank.....                     | 7,966.57            |
| Balance of profit carried forward..... | 102,383.55          |
|  | <u>\$966,050.12</u> |

**PROFIT AND LOSS.**

|   |                     |
|---|---------------------|
| Balance forward, Jan. 2, 1908.....  | \$101,968.23        |
| Steamships' earnings.....   | \$114,299.85        |
| Interest.....   | 2,249.30            |
|   | <u>116,517.38</u>   |
| Insurance.....  | \$ 43,494.97        |
| Cost of management: salaries, taxes, office rent, directors' and auditors' fees, etc..... | 12,759.86           |
| Dividend, 7% payable Jan. 2, 1909....   | 59,899.00           |
| Balance carried forward.....  | 102,383.55          |
|   | <u>\$218,517.38</u> |

The officers and directors were re-elected for the current year as follows: President, W. D. Mathews; other directors, E. B. Osler, J. H. G. Hagarty, S. Crangle, C. S. Gzowski, G. F. Hagarty, G. R. Crowe, Jas. Carruthers.

**Notices to Mariners.**

The Department of Marine has issued the following notices:

No. 126. Dec. 31.—317. British Columbia, colors of lighted beacons. 318. British Columbia, Vancouver Island, Juan de Fuca Strait, Port San Juan, color of lighted and whistling buoy changed. 319. British Columbia, Strait of Georgia, Burrard Inlet, Spanish Bank, bell buoy replaced by spar. 320. British Columbia, Strait of Georgia, Sister Rocks, fog bell discontinued. 321. British Columbia, Queen Charlotte Sound, new channel, Christie Passage, Balaklava Island, Scarlett Point, fog bell established at light station. 322. British Columbia, northern waters, Skeena River, Port Essington, entrance to Ecstall Inlet, buoy withdrawn. 323. British Columbia, Chatham Sound, Brown Passage, islets, shoals, directions. 324. British Columbia, Chatham Sound, Lucy Island light, arc of visibility. 325. British Columbia, Chatham Sound, Cunningham Passage, Hankin Reefs, change in position of buoy.

No. 1. Jan. 8.—1. British Columbia, Fraser River, changes in buoyage.

No. 2. Jan. 9.—2. New Brunswick, Bay of Fundy, south of Grand Manan Island, local magnetic disturbance. 3. New Brunswick, north coast, Chaleur Bay, Caraqueet harbor, gas buoys established.

No. 3. Jan. 14.—4. British Columbia, Vancouver Island, west coast, Somass River, buoys discontinued. 5. British Columbia, Vancouver Island, Nanaimo harbor, numbers on buoys. 6. British Columbia, Vancouver Island, east coast, Qualicum River, buoy discontinued. 7. British Columbia, Johnstone Strait, Camp Point, beacon erected.

No. 4. Jan. 20.—8. Nova Scotia, south coast, Halifax approach, experimental fog signal buoys. 9. Nova Scotia, Cabot Strait, St. Paul Island, temporary light.

**Vessels Removed from the Register.**

During Dec., 1908, the following vessels were removed from the Canadian register for the reasons assigned: Steam—Alice, Pictou, N.S., 11 tons, unseaworthy; Donney, Vancouver, B.C., 10 tons, lost; Emma Nott, New Westminster, B.C., 46 tons, broken up; Esperanza, Toronto, 11 tons, burned; Minerva, Hamilton, Ont., 3 tons, out of existence; Nellie, Hamilton, Ont., broken up; Philadelphia, Sault Ste. Marie, Ont., 88 tons, stranded; Quick, Dawson, Y.T., 67 tons, out of existence; Tusket, Yarmouth, N.S., 2 tons, broken up. Sailing—Abeona, Lunenburg, N.S., 499 tons, transferred to Barbados; Annie, Liverpool, N.S., 193 tons, wrecked; Erie, St. John, N.B., 119 tons, abandoned at sea; Esmé, Lunenburg, N.S., 5 tons, registry surrendered; Guior, St. Andrews, N.B., 17 tons, sold to foreigners; Hope, Barrington, N.S., 22 tons, wrecked; Hugh G., Parrsboro, N.S., 430 tons, sunk in collision; Ida May, St. John, N.B., 120 tons, wrecked; Lizzie Burrill, Windsor, N.S., 1,185 tons, lost; Oriole, Halifax, N.S., 43 tons, lost; Prosperare, Yarmouth, N.S., 379 tons, lost; S. G. Marshall, Halifax, N.S., 51 tons, lost; Senator, St. Andrews, N.B., 33 tons, broken up; Stanley, Quebec, 34 tons, out of existence; Stella Maris, Quebec, 70 tons, broken up; Stroller, Charlottetown, P.E.I., 12 tons, broken up; Temperance Bell, St. John, N.B., 77 tons, condemned.

During Nov., 1908, 9 navigation employees were killed and 5 injured, while engaged in Canadian waters. Of the fatalities, 5 were due to falls and 2 each to drowning and to the explosion of a boiler. Of the non-fatal accidents, 2 each were caused by falls and by falling material and one by machinery.

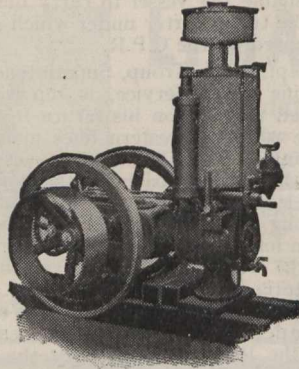
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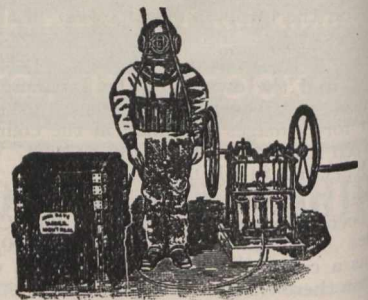
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Navigation of Vancouver Narrows.

While we have no wish to injure the reputation of the port of Vancouver, it would seem that underwriters must eventually take cognizance, to the extent of advancing rates, of the frequent disasters, as shown by the experience of the past two years, dating from the collision of the Princess Victoria with the Chehalis, in connection with the navigation of Vancouver Narrows and the entry to and exit from Vancouver harbor, particularly in a dense fog, conditions now being very different to a decade ago, when traffic was much less. We shall, therefore, await with interest the report of the investigation of the Department of Marine into the collision cases of the Princess Royal and the Fukui Maru, the s.s.

Charmer with tug Bermuda and tow, and the stranding of the s.s. Glenfarg, as possibly suggesting amendments to navigation rules or suggesting special rules, insuring greater safety, governing the navigation of Vancouver harbor. It would be unfair to offer these suggestions without commending the caution and skill displayed by the masters and licensed officers of the coasting fleet of the C.P.R. and of the s.s. Iroquois in their frequent entries and exits to and from Vancouver harbor, in a dense fog, the number of accidents being disproportionate to the difficulties thereof, but nonetheless, there is no evading the fact that under such conditions the risks are great, and, although underwriters presume to cover risks, it is doubtful if they really appreciate how great

the risk is. The public of Vancouver, as well as its shipping interests, should insist upon a thorough investigation to finally determine whether, as suggested at the time of the Victoria-Chehalis disaster, it is possible to make rules providing for greater safety.—Pacific Marine Review.

Several suggestions have been made as to improvements which ought to be undertaken for the betterment of harbor entrance, among them being the removal of Parthia and Burnaby shoals; dredging in the narrows to allow of a straight course inward and outward bound; and the establishment of 4 occulting lights in the narrows, with fog bells attached; buoys and lights in the harbor; semaphore signals at Brockton and Prospect Points, and telephone connections between the lighthouses there.

LIST OF STEAM VESSELS REGISTERED IN CANADA DURING DEC., 1908.

| Name.          | No.     | Where and When Built.       | Engines, etc.  | Length | B'dth. | Depth. | Gross tons. | Reg. tons. | Port of Registry.    | Owners.   |
|----------------|---------|-----------------------------|----------------|--------|--------|--------|-------------|------------|----------------------|---|
| Bellwood       | 126,262 | Bellwood's Sid., Ont., 1908 | Screw 1 N.H.P. | 44.0   | 11.6   | 5.8    | 23          | 13         | Toronto              | C. Mickle, Gravenhurst, Ont.                                      |
| Eng. B. Roam'r | 126,326 | Vancouver, B.C., 1908       | " 3 "          | 45.9   | 10.8   | 4.6    | 18          | 12         | Vancouver, B.C.      | W. Simpson, Vancouver, B.C.                                       |
| Escoumains     | 126,000 | Escoumains, Que., 1907      | " 17 "         | 76.0   | 16.0   | 6.0    | 74          | 42         | Quebec, Que.         | A. Mercier, Les Escoumains, Que.                                  |
| Ethelda        | 126,325 | Vancouver, B.C., 1908       | " 3 "          | 35.4   | 9.7    | 5.0    | 15          | 10         | Vancouver, B.C.      | A. R. Baker, Vancouver, B.C.                                      |
| Hugh D.        | 122,582 | Shelburne, N.S., 1908       | " 2 1/2 "      | 80.0   | 18.0   | 7.6    | 71          | 20         | Yarmouth, N.S.       | H. B. Cann, M.O., Yarmouth, N.S.                                  |
| Jack C.        | 126,263 | Fesserton, Ont., 1907       | " 3 "          | 43.0   | 10.0   | 4.0    | 19          | 13         | Toronto              | W. W. Carter, Fesserton, Ont.                                     |
| John Bull      | 122,271 | Selkirk, Man., 1903         | " 1 "          | 35.0   | 9.5    | 3.5    | 13          | 9          | Winnipeg             | Dominion Fish Co., Winnipeg.                                      |
| Kuiu           | 126,328 | Vancouver, B.C., 1907       | " 1 1/2 "      | 23.4   | 6.0    | 2.6    | 4           | 2          | Vancouver, B.C.      | H. E. Davies, Bowen Island, B.C.                                  |
| Maud L.        | 126,265 | Parry Sound, Ont., 1901     | " 8 "          | 75.0   | 15.0   | 5.5    | 48          | 33         | Toronto              | C. E. and E. S. Pratt, J.O., Parry Sound, Ont.                    |
| Nahma          | 126,044 | Superior, Wis., 1898        | " 2 "          | 34.0   | 7.8    | 4.0    | 7           | 5          | Port Arthur, Ont.    | A. J. McComber, Port Arthur, Ont.                                 |
| Ogistoh        | 126,282 | St. John, N.B., 1908        | " 1 "          | 29.2   | 7.1    | 4.2    | 6           | 4          | St. John, N.B.       | F. A. Dykeman, St. John, N.B.                                     |
| Pannah         | 126,148 | Sorel, Que., 1908           | " 5 "          | 31.5   | 6.3    | 3.0    | 3           | 2          | Sorel, Que.          | P. Lavalle and O. Paul, Sorel, Que.                               |
| Ralph C.       | 126,264 | Fesserton, Ont., 1908       | " 3 "          | 32.0   | 8.6    | 4.0    | 12          | 7          | Toronto              | W. W. Carter, Fesserton, Ont.                                     |
| Robt. Downey   | 112,191 | Buffalo, N.Y., 1893         | " 8 1/2 "      | 58.0   | 14.5   | 7.0    | 37          | 25         | Chatham, Ont.        | C. S. Boone, Toronto.   |
| Sooner         | 126,327 | Vancouver, B.C., 1908       | " 1 "          | 33.7   | 6.8    | 5.3    | 10          | 7          | Vancouver, B.C.      | C. J. and G. Everitt, J.O., Vancouver, B.C.                       |
| Udal           | 126,180 | N. Westminster, B.C., 1908  | " 5 "          | 50.0   | 12.0   | 5.2    | 22          | 11         | N. Westminster, B.C. | W. Oliver, Skidegate, B.C.  |
| *Valdes        | 126,324 | Seattle, Wash., 1896        | " 2 "          | 33.5   | 11.6   | 4.2    | 12          | 8          | Vancouver, B.C.      | R. Martin, Vancouver, B.C.  |
| Verda Belle    | 121,956 | Pt. Stanley, Ont., 1908     | " 4 "          | 55.5   | 13.6   | 6.4    | 34          | 23         | Port Stanley, Ont.   | J. R. and H. L. Moore and W. S. Stanton, J.O., Port Stanley, Ont. |

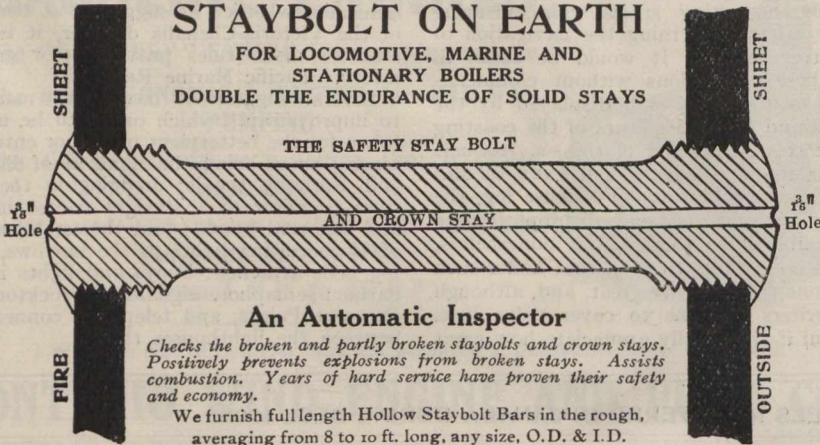
\*Formerly Rona.

LIST OF SAILING VESSELS AND BARGES REGISTERED IN CANADA DURING DEC., 1908.

| Name.                  | No.     | Where and When Built.                 | Rig.  | Length | B'dth. | Depth. | Reg. tons. | Port of Registry.    | Owners.   |
|------------------------|---------|---------------------------------------|-------|--------|--------|--------|------------|----------------------|---|
| Allans No. 4           | 126,168 | Montreal, Que., *—                    | Barge | 105.5  | 30.6   | 9.0    | 152        | Montreal             | H. M., H. A. and A. A. Allan, Montreal, and B. Allan, Boston, Mass. |
| " No. 5                | 126,169 | " 1908                                | "     | 117.0  | 29.6   | 5.0    | 105        | "                    | "   |
| " No. 6                | 126,170 | " 1908                                | "     | 117.8  | 29.1   | 7.9    | 172        | "                    | "   |
| Asp.                   | 126,283 | Gagetown, N.B., 1906                  | Dred. | 60.5   | 20.7   | 5.3    | 82         | St. John, N.B.       | J. S. Gregory, St. John, N.B.                                       |
| B.C.S. & G. Co., No. 1 | 126,234 | Sidney, B.C., 1908                    | Barge | 90.0   | 30.7   | 8.0    | 166        | Victoria             | B.C. Sand & Gravel Co., Victoria                                    |
| C.P.R. No. 2           | 126,235 | Vancouver, B.C., 1908                 | "     | 106.0  | 30.0   | 8.5    | 221        | "                    | C.P.R. Co., Montreal.   |
| Central City           | 126,302 | Cornwall, Ont., *1905                 | Dred. | 79.0   | 26.8   | 6.6    | 157        | Montreal             | L. Cohen, Montreal.   |
| Championess            | 126,320 | Lachine, Que., 1902                   | Scow  | 120.7  | 30.8   | 8.3    | 263        | "                    | Dominion Bridge Co., Lachine, Que.                                  |
| Dombrico No. 1         | 126,319 | " 1908                                | "     | 123.1  | 39.3   | 9.4    | 352        | "                    | "   |
| Hattie Hutt            | 112,190 | Sangatusk, Mich., 1873                | Schr. | 130.0  | 26.0   | 9.0    | 188        | Chatham, Ont.        | F. Granville, Chatham, Ont.   |
| Kathleen W.            | 126,136 | Dartmouth, N.S., 1908                 | "     | 47.0   | 14.3   | 7.0    | 22         | Halifax, N.S.        | R. J. Slaunwhite, Terence Bay, N.S.                                 |
| L. C. & S. No. 2       | 126,303 | Hawkesbury, Ont., *1908               | Scow  | 55.4   | 14.6   | 3.7    | 22         | Montreal             | L. Cohen, Montreal.   |
| " No. 3                | 126,304 | Cornwall, Ont., *1908                 | "     | 79.0   | 20.0   | 5.4    | 91         | "                    | "   |
| " No. 4                | 126,305 | Lachine, Ont., *1904                  | Barge | 65.7   | 14.0   | 3.5    | 26         | "                    | "   |
| " No. 5                | 126,306 | Cornwall, Ont., *1904                 | "     | 45.6   | 13.7   | 2.6    | 20         | "                    | "   |
| " No. 6                | 126,307 | " 1904                                | "     | 60.1   | 16.3   | 4.5    | 35         | "                    | "   |
| " No. 8                | 126,308 | " *1908                               | Scow  | 79.7   | 24.6   | 8.0    | 120        | "                    | "   |
| " No. 9                | 126,309 | " 1908                                | "     | 82.3   | 24.6   | 7.7    | 127        | "                    | "   |
| " No. 10               | 126,310 | " 1908                                | "     | 78.3   | 21.0   | 8.0    | 106        | "                    | "   |
| " No. 11               | 126,311 | " *1906                               | "     | 70.9   | 20.9   | 7.4    | 86         | "                    | "   |
| " No. 12               | 126,312 | " *1907                               | "     | 55.2   | 17.6   | 5.8    | 43         | "                    | "   |
| " No. 13               | 126,313 | " *1906                               | "     | 70.6   | 20.2   | 7.2    | 84         | "                    | "   |
| " No. 14               | 126,314 | " *1905                               | "     | 61.5   | 16.5   | 5.0    | 39         | "                    | "   |
| " No. 15               | 126,315 | " *1906                               | "     | 55.3   | 17.6   | 4.8    | 39         | "                    | "   |
| " No. 16               | 126,316 | " *1906                               | "     | 63.9   | 18.8   | 6.1    | 55         | "                    | "   |
| " No. 17               | 126,317 | " *1906                               | "     | 66.6   | 17.3   | 6.0    | 55         | "                    | "   |
| " No. 18               | 126,318 | " 1906                                | "     | 61.0   | 16.8   | 5.6    | 43         | "                    | "   |
| Lime Light             | 126,065 | Souris, P.E.I., 1908                  | Schr. | 94.0   | 26.0   | 9.2    | 155        | Charlottet'n, P.E.I. | T. Kickham, Souris West, P.E.I.                                     |
| Maberly                | 127,357 | Sorel, Que., 1907                     | Scow  | 83.5   | 22.9   | 5.3    | 110        | Montreal             | L. Cohen, Montreal, Que.  |
| Marg't Kathleen        | 126,291 | White Haven, N.S., 1907               | Schr. | 40.3   | 13.0   | 6.0    | 16         | Canso, N.S.          | P. J. Conway, White Haven, N.S.                                     |
| Marie St. Laurent      | 125,999 | Isle-aux-Coudres, Que., '08           | "     | 52.3   | 15.8   | 5.9    | 31         | Quebec, Que.         | J. and M. Harvey, J.O., Isle-aux-Coudres, Que.                      |
| May Flower             | 96,840  | Summerside, P.E.I., 1890              | "     | 61.5   | 21.6   | 8.0    | 60         | Charlottet'n, P.E.I. | W. Wightman, Montague, P.E.I.                                       |
| Minion No. 1           | 126,355 | Lachine, Que., 1899                   | Scow  | 100.8  | 26.7   | 7.5    | 177        | Montreal             | Dominion Bridge Co., Lachine, Que.                                  |
| " No. 2                | 126,356 | " 1899                                | "     | 100.2  | 26.7   | 7.6    | 180        | "                    | "   |
| Miramichi, No. 1       | 126,351 | Baie Verte, N.B., 1902                | "     | 80.0   | 26.0   | 7.5    | 156        | "                    | "   |
| " No. 2                | 126,352 | " 1902                                | "     | 80.0   | 26.0   | 7.5    | 156        | "                    | "   |
| " No. 3                | 126,353 | " 1902                                | "     | 84.2   | 26.7   | 7.3    | 130        | "                    | "   |
| " No. 4                | 126,354 | " 1902                                | "     | 84.2   | 26.8   | 7.5    | 130        | "                    | "   |
| Nina S.                | 126,135 | Tancook, N.S., 1908                   | Schr. | 44.0   | 12.2   | 6.2    | 19         | Halifax, N.S.        | J. Slaunwhite, Terence Bay, N.S.                                    |
| S. M. Columba          | 126,134 | Shelburne, N.S., 1908                 | "     | 72.0   | 21.0   | 9.6    | 63         | "                    | J. Hayes, M.O., Halifax, N.S.                                       |
| Sakotis                | 126,342 | Clark's Harbor, N.S., 1908            | Sloop | 33.0   | 12.0   | 5.7    | 11         | Barrington, N.S.     | B. Newell, West Head, Cape Island, N.S.                             |
| W. F. I.               | 126,323 | Vancouver, B.C., 1908                 | Scow  | 80.6   | 30.1   | 7.5    | 163        | Vancouver, B.C.      | W. B. Fox, Vancouver, B.C.  |
| W. Bibeau              | 126,301 | Notre Dame de Pierreville, Que., 1903 | Sloop | 108.8  | 22.8   | 7.6    | 119        | Montreal             | W. Bibeau, Notre Dame de Pierreville, Que.                          |

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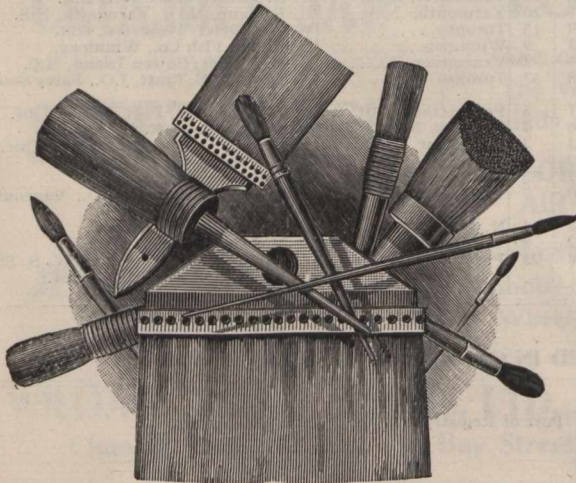
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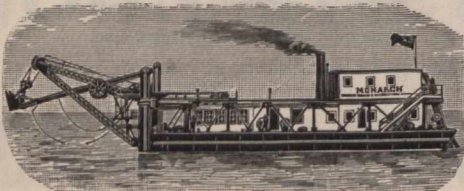
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 LATH, SHINGLES, BOX SHOOKS



**Northern Navigation Co. of Ontario.**

Following are extracts from the report for the year 1908, presented at the annual meeting in Toronto, Jan. 26:

Navigation opened on Lake Superior on April 27, and the Georgian Bay on May 2, for the company's steamers, which was a few days later than in 1907. Our statement shows a falling off of about \$100,000 in the gross receipts, and \$39,000 in the net receipts, as compared with the previous year. This was occasioned by the general depression in trade, which did not revive and reach its normal conditions until late in the season.

The North Shore route between Collingwood Parry Sound, Byng Inlet and French River has been abandoned, and the steamer Britannic operating on it has been sold because of the volume of traffic having been diverted from Collingwood by the new rail lines. Your directors, feeling that the needs of the Midland, Penetang and Parry Sound route required a fast and up-to-date steamer, disposed of the steamer City of Toronto, and have contracted for a new steamer, which will be put in commission on June 15.

Last year 10 steamers appeared in the balance sheet, valued at \$905,696; this year it shows eight steamers valued at \$887,955. This difference is accounted for by the sale of the two steamers mentioned above, and by some machinery being installed in the steamer Ionic. The gross earnings of the company were \$531,554.18, and the expenditure \$428,915.42, which with the balance at credit of profit and loss account Dec. 31, 1907, of \$55,996.20, leaves a balance of \$158,634.96, less appropriations for directors, \$460, and for Secretary-Treasurer, \$700. Out of this amount your directors have made the following appropriations: Claims for 1907 paid in 1908, \$3,820.74; interest on renewal and insurance funds, \$2,701.82; renewal fund, \$24,000; repair and maintenance fund, \$10,000, and dividend at the rate of 8% per annum amounting to \$67,315.31, leaving a balance to be carried forward at the credit of profit and loss account of \$49,637.09. The reserve funds now stand as follows: Renewal account, \$68,058.73; marine insurance fund, \$15,285.20; profit and loss credit, \$49,637.09; total, \$132,981.02. The percentage of expenses of gross earnings (not including claims paid for previous years) are as follows: 1903, 94.16%; 1904, 89.71%; 1905, 80.73%; 1906, 77.73%; 1907, 77.63%; 1908, 80.73%.

Your directors are pleased to report that the construction of the s.s. Hamonic is progressing favorably, and she will be completed and ready to go into commission between Sarnia, Sault Ste. Marie, Port Arthur, Fort William and Duluth on June 15 next. We have paid on the construction of this steamer so far \$282,152.00. When this ship goes into commission she will be the finest, fastest and best equipped vessel of her class on the Upper Lakes.

Your directors hope to be able to resume payment of semi-annual dividends this year. The continued illness of our President during the past year has been a source of deep regret to your directors.

| ASSETS.                                     |                     |
|---|---------------------|
| Right steamers                              | \$887,955.88        |
| Buildings, furniture, etc.                  | 12,867.58           |
| Fuel and supplies                           | 20,295.78           |
| Insurance unexpired                         | 12,211.60           |
| Accounts receivable                         | 43,168.18           |
| Stocks and bonds                            | 1,500.00            |
| Bills receivable                            | 3,000.00            |
| Hamonic, new steamer                        | 282,152.59          |
| Repair and maintenance                      | 11,855.61           |
|   | <u>374,183.76</u>   |
|   | \$1,275,007.22      |
| LIABILITIES.                                |                     |
| To Shareholders:                            |                     |
| Capital stock                               | \$843,600.00        |
| Renewal fund                                | 68,058.73           |
| Marine insurance fund                       | 15,285.20           |
| Dividend at 8% per annum on paid-up capital | 67,315.31           |
| Balance profit and loss                     | 49,637.09           |
|   | <u>1,043,896.33</u> |

|                        |                   |
|------------------------|-------------------|
| Brought forward        | \$1,043,896.33    |
| To the Public:         |                   |
| Bills payable          | 214,059.85        |
| Traders Bank of Canada | 17,051.04         |
|                        | <u>231,110.89</u> |
|                        | \$1,275,007.22    |

| PROFIT AND LOSS ACCOUNT.  |                     |
|---|---------------------|
| Balance from 1907   | \$ 55,996.20        |
| Appropriation for directors' fees, including Secretary-Treasurer's salary | 1,160.00            |
| Dividend on stocks and bonds  | 85.00               |
| Rent of diving suit   | 180.00              |
| Gross earnings of steamers  | 531,289.18          |
| Less total expenditure  | 428,915.42          |
|   | <u>102,373.76</u>   |
|   | \$157,474.96        |
| Interest one year on renewal fund, \$52,475.00, at 3 1/2%                 | \$ 1,836.62         |
| Steamers' renewal fund  | 24,000.00           |
| Interest one year on marine insurance fund, \$14,420.00, at 6%            | 865.20              |
| Repair and maintenance  | 10,000.00           |
| Claims 1907, paid 1908  | 3,820.74            |
| Dividend 8%, on paid-up capital   | 67,315.31           |
| Balance   | 49,637.09           |
|   | <u>\$157,474.96</u> |

The Vice-President, W. J. Sheppard, who took the chair at the annual meeting, stated that the beloved President, H. C. Hammond, had been unconscious for several days and had only a few hours to live. Mr. Sheppard congratulated the shareholders on the satisfactory season's business, considering the unfavorable trade conditions which prevailed. He referred to the traffic contract made with the G.T. and G.T. Pacific Ry. Cos. for a period of years, in accordance with which the shareholders would be asked to elect a G.T.R. representative as a director. The following were elected directors for the current year: W. J. Sheppard, C. E. Stephens, W. E. Davis, F. A. Lett, C. D. Warren, H. B. Smith, Hon. J. S. Hendrie, H. Y. Telfer, W. D. Matthews. The only change in the Board is the substitution of W. E. Davis, Passenger Traffic Manager G.T.R. and G.T.P.R., for H. C. Hammond.

At a subsequent meeting of directors, W. J. Sheppard, of Waubashene, Ont., heretofore Vice-President, was elected President, to succeed H. C. Hammond; H. Y. Telfer, of Collingwood, was elected Vice-President, and C. E. Stephens, of Collingwood, was re-elected Secretary-Treasurer.

**Regulations for Marine Engineers.**

The following amendments to the Canada Shipping Act have been made by order of the Governor-General in Council, on the recommendation of the Board of Steamboat Inspection:

1. That the following paragraph be added to section 1, part VI: (i) When satisfactory evidence is produced that the person has (previous to the year 1909) served 36 months as assistant engineer on the watch in the engine room of a steamboat having an engine of over 10 n.h.p., if a single cylinder engine, or 20 n.h.p. if of the compound type, paragraph (g) may be omitted and the practical knowledge as specified by paragraph (h) may be expressed orally and the result can be entered on the examination forms by the examiner.

2. That the following paragraph be added to section 2, part VI: (f) When satisfactory evidence is produced that the person has (previous to the year 1909) served 36 months as chief engineer on a steamboat having an engine of over 10 n.h.p., if a single cylinder engine, or 20 n.h.p. if of the compound type, together with 12 months' service on the lesser sized engines as specified by paragraph (c), paragraph (e) may be omitted and the practical knowledge as specified by paragraph (d) may be expressed orally and the result entered on the examination forms by the examiner.

3. That under the section "Interpretation," part VI, the third paragraph thereof be rescinded, and the following substituted therefor: The term "engineer on the watch" means the person in charge of the propelling engines and boilers, and responsible for the bells or signals while on duty under way. And service as fireman or engineer on steam dredges, or floating elevators, may be accepted as qualifying for fourth class if the engine is of the required nominal horse power as defined by sec. 1 of the regulations, and for third or second class, one-half of such service may be accepted if the engine is of the required nominal horse power as defined by secs. 2 and 3 of the regulations. The other half shall be service as engineer on steamboats.

**Niagara Navigation Company, Ltd.**

The following report for the year ended Nov. 30, 1908, was presented at the annual meeting in Toronto, Jan. 12: "The net earnings are slightly in excess of those for 1907. No expense has been spared to maintain the steamers at the highest degree of efficiency. Following the policy of past years the directors have written off a further sum of \$25,000 from the valuation of steamers, and have placed \$10,000 to a renewal and betterment fund. An opportunity having recently arisen to purchase the Lewiston wharf and land adjoining at a cost of \$25,000, the directors have considered it wise to secure the property, subject to title being found satisfactory. Payment will be made out of cash on hand. After providing for the dividend, interest on debentures, writing off steamer values, and placing \$10,000 to a renewal and betterment fund, the balance to credit of profit and loss account stands at \$133,394.48."

| ASSETS.                    |                       |
|----------------------------|-----------------------|
| Steamers                   | \$884,725.33          |
| Less written off           | 25,000.00             |
|                            | <u>\$859,725.33</u>   |
| Real estate, wharves, etc. | 50,000.00             |
| Accounts receivable        | 1,829.31              |
| Cash in Dominion Bank      | 91,820.34             |
|                            | <u>\$1,003,374.98</u> |

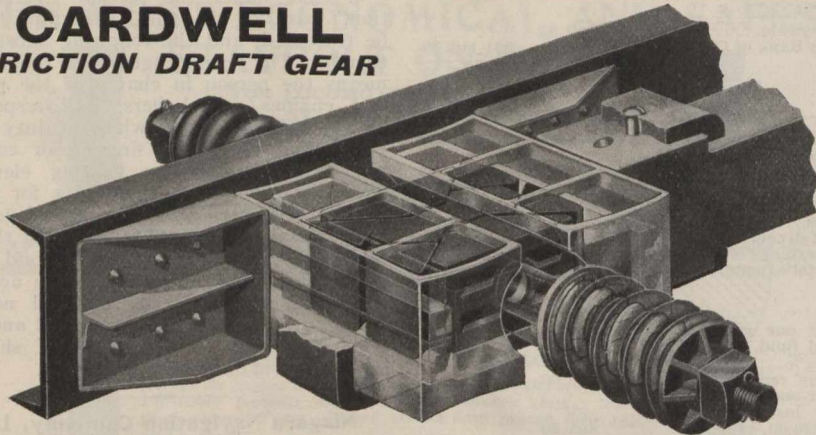
| LIABILITIES.                         |                       |
|--------------------------------------|-----------------------|
| Capital stock authorized             | \$1,000,000.00        |
| Subscribed and paid                  | \$701,700.00          |
| Debentures outstanding               |                       |
| 4 1/2%                               | \$125,000.00          |
| Accrued interest on same             | 2,343.75              |
|                                      | <u>127,343.75</u>     |
| Reserve for renewals and betterments | 10,000.00             |
| Accounts payable                     | 2,868.75              |
| Dividend 4% payable Jan. 2, 1909     | 28,068.00             |
| Balance at credit of profit and loss | 133,394.48            |
|                                      | <u>\$1,003,374.98</u> |

| PROFIT AND LOSS ACCOUNT.             |                     |
|--------------------------------------|---------------------|
| Balance Dec. 1, 1907                 | \$129,692.16        |
| Net earnings for year                | 102,510.28          |
|                                      | <u>\$232,202.44</u> |
| Interest on debentures               | \$ 5,625.00         |
| Written off steamers                 | 25,000.00           |
| Reserve for renewals and betterments | 10,000.00           |
| Stores written off                   | 2,046.96            |
| Dividend 4% paid July 2, 1908        | \$28,068.00         |
| Dividend 4% payable Jan. 2, 1909     | 28,068.00           |
|                                      | <u>56,136.00</u>    |
| Balance carried forward              | 133,394.48          |
|                                      | <u>\$232,202.44</u> |

The President, E. B. Osler, in moving the adoption of the report, expressed the hope that a continuance of good business would, in a short time, enable the company to redeem its outstanding debentures. He and the Vice-President, Barlow Cumberland, expressed warm approval of the work done by B. W. Folger, General Manager.

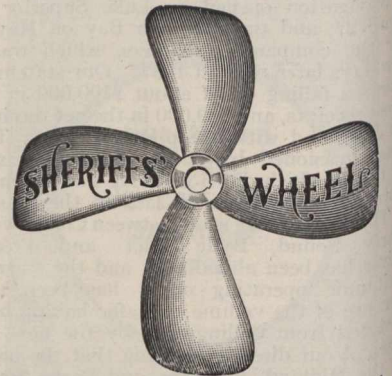
The directors were all re-elected. The officers and directors for the current year are: President, E. B. Osler; Vice-President, Barlow Cumberland; other directors, Hon. J. J. Foy, C. Cockshutt, J. Bruce Macdonald, W. D. Matthews, Hon. J. S. Hendrie; General Manager, B. W. Folger; Treasurer, R. H. McBride; Secretary, J. M. Sullivan.

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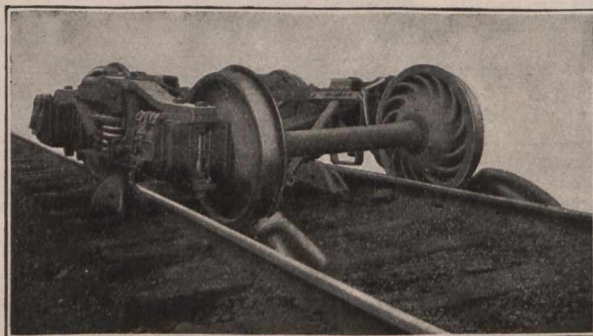
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### Coasting Regulations for Foreign Vessels.

The following order-in-council was passed Dec. 31, 1908: Whereas applications have been made to permit foreign steamships now under charter in the Canadian coasting trade on the Atlantic to continue in such coasting trade for a short period, pending new traffic arrangements, it is ordered that steamships of foreign countries which had been admitted to, and were under charter to engage in, the coasting trade of the Dominion, on Dec. 21, 1908, shall be permitted to continue in the said coasting trade, in the carrying of goods and passengers coastwise, in the provinces of Nova Scotia, New Brunswick, Prince Edward Island, and Quebec, on the same terms and conditions as are applicable to Canadian vessels, until July 1, 1909, notwithstanding anything in the order-in-council of Dec. 17, 1908, respecting the coasting trade of Canada.

The order-in-council dated Dec. 17, 1908, was given in full in our Jan. issue.

### Canadian Light for Messina Straits.

The International Marine Signal Co., of Ottawa, Ont., has loaned a portable lighthouse beacon to the Italian Government for the Straits of Messina, to temporarily replace the lighthouse destroyed in the recent earthquake. The beacon has been gratefully accepted by the Italian Government, and the signal has been shipped to the scene of the earthquake from Birmingham, Eng., where one is constantly kept on exhibition. "It will take six months for the Italian Government to erect another lighthouse in the Straits of Messina," said John Bain, General Manager of the I.M.S. Co., recently. "We are loaning this light until they have one built. The beacon may be put up on any high elevation. It cannot be broken if it falls, and it only takes three or four hours to fix it in position."

### Among the Express Companies.

N. W. Sterie has been appointed agent Canadian Northern Ex. Co., Prince Albert, Sask., vice C. A. Edgley.

The Dominion Ex. Co. recently reported that it carried 924 deer and 57 moose from Ontario, during the season; and the Canadian Ex. Co. reported 2,589 deer.

The Canadian Northern Ex. Co. has closed the following offices: Hilton, Myrtle, Roundthwaite, Man., Jameson and Odessa, Sask., Lake Joseph and Sudbury, Ont., and has opened an office at Mafeking, Man. Warroad, Minn., has been made a common point with the Great Northern Ex. Co.

### Cancellation of Express Tariffs.

J. P. Mabee, Chief Railway Commissioner, on the conclusion of the evidence in the enquiry into the tariffs and classifications of express companies, Jan. 11, cancelled the present tariffs, and ordered the companies to revert to the tariff in force prior to Jan. 1, 1909. His judgment is as follows:

"It is not denied that this classification, which came into force on Jan. 1, 1909, will materially increase the receipts of the express companies. It is not on an inconsiderable volume of traffic that the rates have been increased through the charges on returned empties, and the adoption of the weight and measurement rule. It has been shown that the movement under these heads is large and considerable. The increases, it is said, will run up to nearly 100%. When this inquiry began, before I became a member of the Board, an undertaking was given on behalf of the express companies that, pending the inquiry, no increases of tolls should be made by them. I think it is the duty of

the Board to require that this undertaking be carried out. When this classification was proven, I understood that such changes as were made were small, and that upon the whole, there was a reduction and not an increase. There was, therefore, some surprise, when it was found that these general increases had been attempted.

"There was no notification of any kind given to the public of these changes, and no opportunity to shippers to adapt their business to such changes as might be reasonable. I would not have signed the order approving of this classification upon an ex parte application of the express companies had I been in possession of the facts now before us, but would have required public notice to be given in order that those who have to pay these tolls should have an opportunity to present their views. Many and important rules have been changed; those that I have carefully considered are mostly changes in favor of the companies. These have not yet had sufficient investigation nor is the full purport of them yet understood by the Board.

"I am free to confess that this matter was not given the consideration it was entitled to when the order of Oct. 18, 1908, was made, my understanding being that it was for the convenience and not for the profit of the express companies, and that tolls were not, upon the whole, being increased. It is said the disallowance now of this new tariff and the classification will be a hardship upon the express companies, requiring reprinting of the old classification and its distribution. I regret that this is so, but the present confusion was brought about by reason of the companies' action in filing and asking approval of a classification that materially increases tolls when it was understood that this should not be done, and if an order had been inadvertently issued that should not have been made it is the plain duty of the Board to recall it, and its so doing in this case only reinstates conditions that shippers are perfectly familiar with, and upon which they have been doing business for many years.

"Complaint is made that this course casts an imputation of bad faith upon the companies. I do not say and have not said that there was any bad faith, or deliberate intention to deceive, or mislead, the Board. The traffic officers of the companies discussed matters very fully with the Chief Traffic Officer of the Board, who was of opinion that upon the whole those changes would reduce instead of raise the receipts of the companies, but so far as the evidence given before us goes, the contrary is the case. It is, I think, unfortunate that this proposed change in the classification and rules had not been brought to the attention of counsel for the Government who have had charge of this whole inquiry from its inception, and had this course been taken, it is fair to assume that after inquiry as to the effect of the proposed changes approval would have been for the present withheld. This omission I regard as an oversight and not design.

It is represented to me that some shippers were defrauding the express companies by shipping full packages by freight and returning the empties by express, taking advantage of the rule allowing empties to return free. To stop this, they proposed to charge 50% of the merchandise rate, and in some instances a specific charge on the returned empties. The facts now show that the effect of this upon the business of only some 18 or 20 shippers would be to cause an increase of between \$25,000 and \$30,000 in express tolls upon the volume of business in 1908. I did not understand when approving this change that the companies were protecting themselves in this way. Many cases in the U.S. and England, and followed here, held that a long established rate is regarded as reasonable unless shown to be too low. It would not be proper to permit a general

increase in rates through the medium of imposing a toll upon returned empties without requiring the companies to show affirmatively that the outward rate was not sufficient to cover the transport of the returned empties free of charge. Of course, we do not at this time deal with the suggestion that the practice involves discrimination.

"The weight and measurement rule is creating a disturbance, but could all have been avoided if public notice had been given so that shippers could have adjusted themselves to it if it were thought a proper rule to introduce, as to which we have nothing to say at present.

"We are of opinion that the order approving this classification of Jan. 1, 1909, must be rescinded and this classification and variation of its old rule disallowed as a final disposition of the matter, which merely leaves everything connected with the express business as it stood prior to Jan. 1. All evidence applicable to the subject given upon the inquiry will be treated as given for the purpose of obtaining allowance of this classification and amended rules, some of which appear at present not to be unreasonable.

"The companies must at once notify all their agencies to alter the tariff and rules to those in existence prior to Jan. 1, and in all respects carry on their business in compliance with rates and rules prior to that date until further disposition of this hearing.

"Cancellation of the tariff filed, and above referred to, shall not necessarily give rise to claims for separation as to any shipments occurring within the next 10 days, but such claims if made shall be dealt with individually, regard being had to the steps taken by the companies to inform agents of the above cancellation."

An order putting the judgment into effect was promulgated Jan. 12.

### Telegraph and Cable Matters.

The C.P.R. Telegraph Department owns and operates 65,000 miles of land lines.

W. H. Crandall, local manager Western Union Telegraph Co. at Moncton, N.B., was presented with a writing desk by the local staff recently.

The telegraph commercial night rate between Winnipeg, Man., and Vancouver, B.C., and all points west, has been reduced to 50c. for ten words.

The Dominion Government cable and telegraph system has been stated recently as embracing 380.50 miles of cable, 6,829.25 miles of land lines, and 382 offices.

The Great Northwestern Telegraph Co. owns 49,686 miles of land lines, 406 miles of cable, 1,360 offices, 894 of which are exclusive, and 1,183 of which are in Canada.

The Kingston and Pembroke Ry. telegraph operators have nominated J. G. O'Donoghue to represent them in the enquiry into their complaints. J. L. Whiting, K.C., will represent the company.

Following are the officers and directors of the Marconi Wireless Telegraph Co. of Canada for the current year: President, A. A. Allan; Vice-President, G. Marconi; other directors, J. N. Greenshields, R. Bickerdike, and J. Bottomley.

At a recent meeting of the Prince Rupert, B.C., Board of Trade, a proposal to ask the Dominion Government to construct a telegraph line from Aberdeen to Port Essington; to extend the present line from Prince Rupert to Port Simpson via Georgetown, and to abandon the existing line between Aberdeen and Port Simpson, was adopted. It was suggested that the line be constructed so as to be suitable for both telegraph and telephone.

A press dispatch sent out from Toronto recently states that railway telegraph operators throughout Canada, the U.S. and Mexico, are said to be preparing for a struggle with the companies in an effort to better their working conditions. According to local officials a petition asking the Dominion Government to establish an eight hour day is being largely signed, while individual members of Parliament are being approached on the matter. The operators say they have to work anywhere from 12 to 18 hours out of the 24, and in the case of small stations to perform various other duties as well as looking after the running of the trains. This has been a bone of contention for many years. The men's action, however, is said to be more like a protest against the telephone than anything else.

#### Montreal Telegraph Company.

The 62nd annual meeting was held Jan. 14. The report shows assets of \$2,293,495.68; consisting of telegraph lines in Canada and the U.S., \$1,625,890; cables in Canada and the U.S., \$33,487.39; offices and equipment, \$212,500; real estate, \$279,946.46; cash, accounts receivable, etc., \$141,671.83. The liabilities are: Shareholders' capital, \$2,000,000; excess in value of property operated by G.N.W. Tel. Co. over shareholders' capital, \$151,823.85; dividend payable Jan. 15, \$40,000; unclaimed dividends, \$1,943.40; contingent fund, \$99,728.43; total, \$2,293,495.68. The company's property is operated and maintained by the G.N.W. Telegraph Co., and the operation and maintenance is guaranteed by the Western Union Telegraph Co., under an agreement for 97 years from July 1,

1881, which guarantees payment of dividends of 8%. During the past year \$160,000 was paid in dividends, and a bonus of \$5,000.

#### A Telegraph Company's Suit.

Judgment was delivered in the Ontario Exchequer Court, Jan. 18, in the case of the North American Telegraph Co. vs. the Bay of Quinte Ry. Co., in which the plaintiff claimed free transportation by all passenger trains on the defendant's railway for its men when travelling for any purpose whatsoever, and asked for the return of sums paid for railway fares. The defendant company admitted a limited right to free transportation. The B. of Q. Ry. counter-claims for damages (a) on account of the failure of the Telegraph Co. to keep the telegraph lines in proper working order; (b)

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for not erecting and maintaining a telegraph line between Tweed and Bannockburn, and on two other claims which were disallowed.

Chief Justice Mulock in delivering judgment said: "In my opinion, the words, 'construction and maintenance' qualify the words, 'inspectors, linemen and repairers,' and also the words, 'their tools and stores.' If such is not the legal interpretation of the clause, then it would provide two different kinds of free transportation, namely, unlimited transportation for the men, and limited transportation for the tools and stores. It does not, I think, admit of such interpretation. The only object of such free transportation is clearly stated, namely, construction and maintenance. I think the defendants were not bound to furnish unlimited passes, as demanded by the plaintiffs, but only such free transportation as was reasonably necessary in connection with the plaintiff's work of construction and maintenance. There is no evidence to show that the fares paid and here sued for were for trips in respect of which the plaintiffs are entitled to free carriage for their employes. For this reason alone the action must fail. But, even if this were shown, are there any circumstances in this case which would entitle the plaintiffs to succeed in an action for money had and received, which is in substance the nature of this action? For reasons stated, I am of opinion that the plaintiffs are not entitled to recover the moneys in question, and

that their action fails. As to the counter-claim: As to item (a), damages because of failure on the part of plaintiffs to keep their telegraph lines in working order, as proved by the evidence, for three years, I award defendants \$900. As to item (b), namely, damages because of plaintiffs not erecting and maintaining a telegraph line between Tweed and Bannockburn, I find the defendants are entitled to \$7,736.24 damages. On payment of this amount, the line built by defendants will become the property of plaintiffs, subject to the rights of defendants under the agreements; until payment of this sum, the plaintiffs to continue liable to pay to the defendants the cost of maintenance of the line and interest on \$4,509.24. Owing to the divided success in respect of the counter-claim, no costs of the counter-claim are awarded either party."

**Cheaper Cablegrams.**

In a contribution to a British magazine, Lord Strathcona says, on the question of lower cable rates: "While the ideal of a penny a word may be a good thing to work for, especially in trans-Atlantic messages, a reduction of a far less drastic character even there would be welcomed by all classes of the community. But such low rates will hardly be possible, for a long time to come, to other parts of the world where cable lines are longer, where transfers are necessary from one line to another, where the expenses are obviously greater and the telegraph business

less voluminous. But, be this as it may, upon the general question of the current cost of telegraphing, there is only one opinion—that it might be reduced with great advantage to the public, and perhaps with a prospect of gain to the cable companies. It has often occurred to one that as a beginning some system might be established similar to that which obtains with the telegraphs and long-distance telephones in Canada and the U.S., and more recently introduced in the telephone systems of the United Kingdom, of a differential rate for day and night messages. A concession of that kind would be regarded most favorably, and as an indication of the desire of the cable companies to meet the wishes of their customers so far as it can be done; subject, of course, to the proper safeguarding of the interests of their shareholders, to the provision of reserve funds for meeting debenture debts, and for providing new cables when required. The cry for lower rates has come to stay, but, on the other hand, we cannot expect too many concessions regardless of vested interests and their rights. If we want lower rates than the companies are willing to give, having regard to a fair return on the capital invested, the countries concerned must be prepared to pay for it, or at least to guarantee the companies against loss, which, in most cases, would be but a contingent liability. This is only fair and reasonable, and it is a consideration which must not be overlooked in connection with the discussions that are taking place."

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Robb Engineering Co., Ltd. .... Amherst, N.S.
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Toronto Bolt and Forging Co. .... Toronto.
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Canada Iron Corporation, Ltd. .... Montreal.  
N. J. Holden Co., Ltd. .... Montreal.
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Dominion Bridge Co. .... Montreal.
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Safety Car Heating and Lighting Co. .... New York.
- Buoys**  
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Canada Iron Corporation, Ltd. .... Montreal.
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Modoc Soap Co. .... Philadelphia, Pa.
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Duner Co. .... Chicago, Ill.
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Safety Car Heating and Lighting Co. .... New York.
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Canadian Cold Car Heating & Light'g Co. .... Montreal.  
Safety Car Heating and Lighting Co. .... New York.
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F. H. Hopkins & Co. .... Montreal.  
Mussens Limited. .... Montreal.
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N. J. Holden Co., Ltd. .... Montreal.  
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Wolfe Brush Co. .... Pittsburg, Pa.
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Canada Car Co. (Ltd.) .... Montreal.  
Canadian Fairbanks Co. Ltd. .... Montreal.  
Crossen Car Mfg. Co. .... Cobourg, Ont.  
Dominion Car and Foundry Co. .... Montreal.  
J. T. Gardner. .... Chicago, Ill.  
Hart-Otis Car Co. (Ltd.) .... Montreal.  
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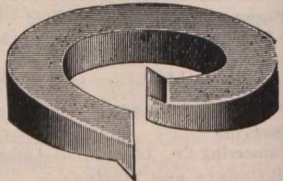
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Standard Coupler Co.....New York City.

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The Hiram L. Piper Co.....Montreal.  
The N. L. Piper Railway Supply Co.....Toronto.  
Rice Lewis & Son.....Toronto.

**Ranges**  
Stearnes Steel Range Co.....Chicago, Ill.

**Reamers**  
W. Abbott.....Montreal.  
Butterfield & Co.....Rock Island, Que.

**Rivets, Boiler, Bridge and Structural**  
Montreal Rolling Mills Co.....Montreal.  
Toronto Bolt and Forging Co.....Toronto.

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

**Roof Trusses**  
Canadian Bridge Co.....Walkerville, Ont.  
Dominion Bridge Co.....Montreal.

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

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

**Sash Balances**  
O. M. Edwards.....Syracuse, N.Y.

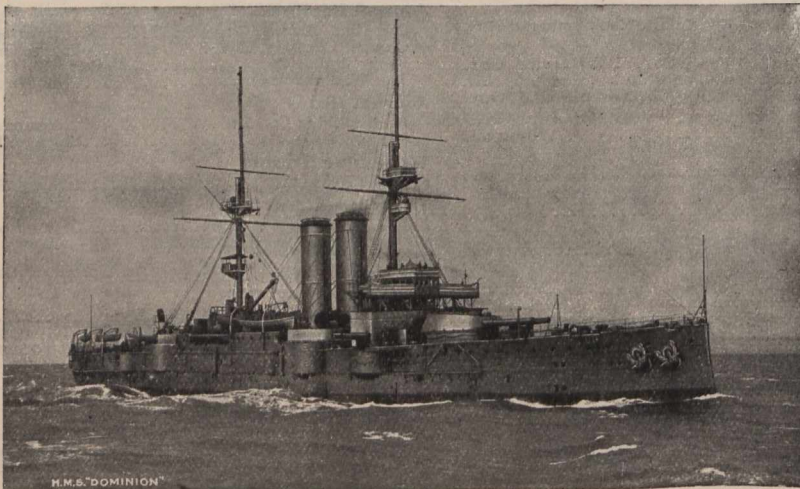
**Sash Locks**  
O. M. Edwards.....Syracuse, N.Y.

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

**Scales**  
Canadian Fairbanks Co., Ltd.....Montreal.

**Scoria Blocks**  
W. H. Knowlton.....Toronto.

**Scrapers (Wheel and Drag)**  
F. H. Hopkins & Co.....Montreal.  
Mussens Limited.....Montreal.  
Toronto Pressed Steel Co.....Toronto.



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