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## RAILWAY FINANCE, MEETINGS, &c.

**Buffalo & Lake Huron.**—The report & accounts for the ½-year ended Dec. 31, 1899, show a credit balance, including the amount brought forward, & after providing for the interest on the 1st & 2nd mortgage bonds of £14,340, which will allow of the payment of a dividend of 5s. 3d. a share, leaving £555 to be carried forward. This time last year a similar dividend was paid, while £518 was carried over. The disputed ownership of £2,000 2nd mortgage bonds has, after considerable delay & trouble, been settled in favor of the Co., & the Co.'s actual investments have been increased by this amount, although the directors have thought it prudent to let the cost price remain the same. This line, which runs from International Bridge, Ont., to Goderich, 162 miles, is leased in perpetuity to the G. T. R. for £70,000 a year.

**Calgary & Edmonton.**—Net earnings for Jan., \$11,881.50, against \$7,694.79 in Jan., 1898.

**Canadian Pacific.**—The annual meeting will be held in Montreal, April 4.

**Chicago & Grand Trunk.**—Applications have been made to the London Stock Exchange Committee to allow the trustee's certificates of deposit for 6% 1st mortgage bonds to be quoted in the official list.

**Dominion Atlantic.**—The annual meeting will be held in London, Eng., Mar. 30.

**East Richelieu Valley.**—In reference to the report that this line had been acquired by the G. T. R., we were informed on Feb. 23, by a prominent official of the United Counties Ry., which is operating the E. R. V. Ry., that there was nothing whatever in the report. He added, "The consolidation of the different interests is progressing in the ordinary manner, & with reasonable despatch." (Feb., pg. 35.)

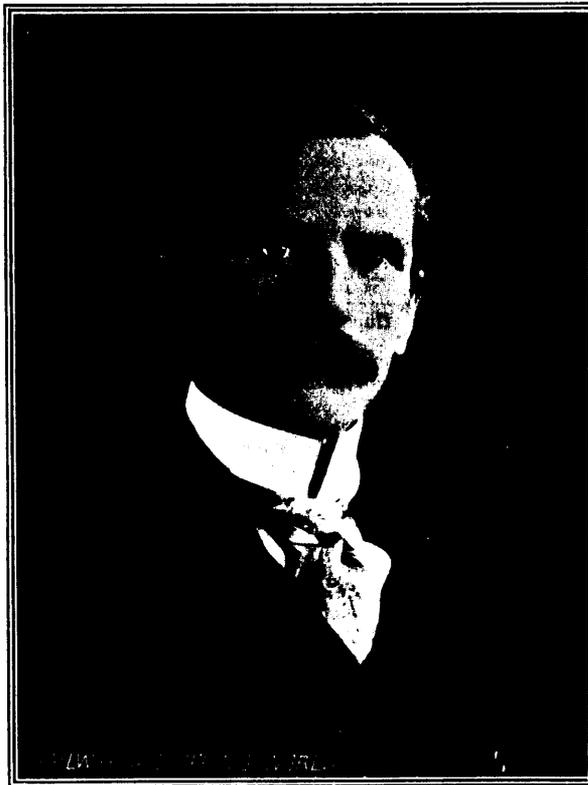
**Grand Trunk.**—The annual meeting will be held in London, Eng., April 5.

**Great Eastern.**—W. McNally, of Montreal, has taken action in the Superior Court against R. Prefontaine & the directors of the South Shore & Great Eastern Railways, & the Sheriff of Richelieu, as *mises-en-cause*, to annul the sale of the Great Eastern Ry. to Prefontaine, on the ground of alleged illegalities. The G. E. R. is a link of the Atlantic & Lake Superior Ry., & runs through a portion of Yamaska County, Que. It was recently purchased by Prefontaine at auction sale. McNally is a creditor of the road.

**Manitoba & Northwestern.**—A special general meeting of shareholders will be held in Winnipeg, April 5, to consider any offer or offers which may be received before that

time to lease the Co.'s railway of the company, & any other railway of which it may be the lessee, & if it be decided to lease or sub-lease the lines, to settle the period, & the terms & conditions. The M. & N. W. R. operates the Saskatchewan & Western under a lease. Both the M. & N. W. R., & the S. & W. R. will undoubtedly be leased to the C. P. R.

**Montreal Incline Ry. Co.**—As the contract of this Co. with the city of Montreal for the carrying of passengers to the mountain top, will expire on May 1 next, the purchase of the Co.'s property by the city is being discussed.



LAUCLAN ALEXANDER HAMILTON,  
Land Commissioner of the Canadian Pacific Railway.

The paid-up capital of the Co. is \$45,000 & the shareholders would probably be willing to sell out at this price, but the city authorities do not seem inclined to offer more than \$35,000.

**Ottawa & New York.**—Application is being made to the Ontario Legislature to legalize a by-law of the Ottawa City Council extending the time for compliance by this Co. with a by-law granting the Co. \$75,000 as a bonus.

**Qu'Appelle, Long Lake & Saskatchewan.**—Net earnings for Jan. \$978.47, against \$125.56 in Jan. 1899.

**Quebec & Lake St. John.**—Notice has been

given to holders of the £780,000 5% first mortgage bonds that the time in which the bonds will be received by the Railway Share Trust & Agency Co., London, has been extended to Mar. 15, after which all bonds deposited will be subject to a fine of ½%.

The net earnings for 1899 were \$42,919 more than for 1898.

**Quebec Central.**—Gross earnings for Jan. \$28,659.94, against \$27,205.43 in Jan., '99. Working expenses \$24,424.94 against \$22,352.21. Net earnings \$4,235.00 against \$4,853.22.

**Port Arthur, Duluth & Western.**—In the High Court of Justice at Toronto, Feb. 27, judgment was given in Dawson v. Port Arthur, Duluth & Western R. W. Co. Defendants, Toronto General Trust Co., appealed from certificate of Master in Ordinary. Action by plaintiffs, who are mortgagees, in trust, to secure payment of the bonds & debentures of the defendant the railway company, upon the mortgage for sale. The judgment is the ordinary judgment in such cases, with reference to the Master in Ordinary. Upon the issue of the appointment to settle advertisement, D. F. Burk, formerly Vice-President of the railway company, & not a party to the action, appeared & claimed to be beneficially entitled to certain of the bonds. The Master thereupon held that he had no jurisdiction to try the claim, & declined to make a report finding who are the holders of the bonds until the determination of an action which he directed Burk to bring to try his claim. The appellant holds the bonds, which are payable to bearer as security for advances made upon them for construction purposes. It was contended that the Master must report pursuant to the judgment who are the legal holders of the bonds subject to any equitable claim. Order made amending report by declaring appellant holders of the bonds subject to any claim to a portion of them of D. F. Burk. Appellant to pay into court to credit of this action any sum to which Burk may be found entitled in his action. Costs of appeal to abide result of his action unless otherwise ordered.

**Toronto, Hamilton & Buffalo.**—F. S. Upton, of Rochester, N.Y., has been appointed receiver to close up the Dominion Construction Co., the syndicate that built the T., H. & B. Ry. It is said the Co. has paid all its just debts, & that the receiver was appointed to wind up everything. J. N. Young, the promoter of the road, has, however, a claim against the Co. for \$4,000 salary & for a much larger amount for money expended by him, & he is trying to prevent the payment of \$14,000, balance due on the bonus. (Nov., '99, pg. 321.)

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NEXT ANNUAL MEETING at Montreal, Oct. 17 & 18, 1900.

### Canadian Ticket Agents' Association.

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PRESIDENT, M. McNamara, Walkerton, Ont.; 3rd  
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Hope, Ont.; J. W. Tierney, Arnprior, Ont.; C. C.  
Young, London, Ont.

NEXT ANNUAL MEETING at Hamilton, Ont., Oct. 10,  
1900

### National Association Marine Engineers of Canada.

HONORARY PRESIDENT, O. P. St. John, Toronto;  
PRES., A. J. Woodward, Toronto; 1st VICE-PRES., R.  
Craig, Toronto; and VICE-PRES., E. Abbey, Toronto.

COUNCIL, W. Jannison, Windsor, Ont.; J. Payne, Col-  
lingwood, Ont.; O. Flummerfelt, St. Catharines, Ont.;  
J. Currie & S. T. Wilson, Toronto.

TREASURER, H. Brownley, Toronto; SECRETARY, S.  
A. Mills, Toronto.

### Track Supply Association.

PRESIDENT.—F. E. Came, Montreal.  
FIRST VICE-PRESIDENT.—R. J. Davidson, Hillburn,  
N.Y.

SECOND VICE-PRESIDENT.—W. H. Frisby, Three Riv-  
ers, Mich.

HON. SECRETARY-TREASURER.—Acton Burrows, 33  
Melinda Street, Toronto.

NEXT ANNUAL MEETING at Montreal, Oct. 16, 1900.

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

The following statement of earnings sup-  
plied from the Montreal office, includes the  
G. T. of Canada, & the Detroit, Grand Haven  
& Milwaukee Rys., the earnings of the  
Chicago & G.T., which is in the hands of  
receivers, being omitted:

	1900	1899	Increase	Decrease
Jan.....	\$ 1,819,988	\$ 1,606,065	\$ 213,923	.....
Feb....	1,587,923	1,505,549	82,374	.....
	\$ 3,407,911	\$ 3,111,614	\$ 296,297	.....

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

#### GRAND TRUNK RAILWAY.

Revenue statement for Jan., 1900:

	1900	1899	Increase	Decrease
Gross receipts....	£358,100	£315,400	£42,700	.....
Working expenses.	257,200	227,400	29,800	.....
Net profit.....	£100,900	£ 88,000	£12,900	.....

DETROIT, GRAND HAVEN AND MILWAUKEE RY.

Revenue statement for Jan., 1900:

	1900	1899	Increase	Decrease
Gross receipts....	£15,800	£14,600	£1,200	.....
Working expenses.	13,000	12,500	500	.....
Net profit....	£ 2,800	£ 2,100	£ 700	.....

#### TRAFFIC RECEIPTS OF THE SYSTEM.

Traffic receipts, Jan. 1 to Feb. 28:

	1900.	1899.	In- crease.	De- crease.
Grand Trunk....	£ 672,297	£ 613,033	£ 59,264	.....
D., G. H. & M....	27,957	26,339	1,618	.....
Total.....	£ 700,254	£ 639,372	£ 60,882	.....

### C.P.R. Earnings & Expenses.

Gross earnings, working expenses, net prof-  
its and increases over 1899, from Jan. 1, 1900:

	Earnings.	Expenses.	Net Profits.	Increase.
Jan. \$2,152,071.32	\$1,460,501.71	\$ 691,569.61	\$ 74,035.75	

Approximate earnings for Feb., \$1,953,000,  
against \$1,752,000 in Feb., 1899; increase,  
\$201,000.

#### SUBSIDIARY LINES.

DULUTH, SOUTH SHORE & ATLANTIC.—  
The gross earnings for 1899 were \$2,407,437,  
against \$1,821,807 in 1898; the operating ex-  
penses were \$1,468,896, against \$1,224,045,  
& the net earnings were \$938,541, against  
\$597,761, the total income amounting to \$943,-  
478. The fixed charges, interest, taxes, &c.,  
were \$929,421, leaving a surplus of \$14,057,  
against a deficit of \$298,191 in 1898. From  
1892 up to & including 1898, the road had a  
deficit, which the C.P.R. made good each  
year. The growth in the net earnings for  
the last three years is as follows:—1897,  
\$546,998.74; 1898, \$603,179.71; 1899, \$943,-  
000. For Jan., 1900, the gross earnings show  
a further increase of \$15,000, equal to 10%,  
which comes on top of an increase for Jan.,  
1899, over the same period of the previous  
year of \$38,000, or 33%.

Approximate earnings for Feb., \$187,799;  
increase over Feb., 1899, \$52,972.

MINERAL RANGE, HANCOCK & CALUMET.—  
Approximate earnings for Feb., \$33,410;  
increase over Feb., 1899, \$9,631.

MINNEAPOLIS, ST. PAUL & SAULT STE.  
MARIE.—Approximate earnings for Feb.,  
\$328,436; increase over Feb., 1899, \$82,074.  
Net earnings for 5 months to Nov. 30, 1899,  
\$1,314,017 against \$1,020,473 for correspond-  
ing period.

### Pensions on the Grand Trunk.

H. S. writes from Montreal as follows:—In  
view of the increasing interest being taken by  
American railways in the formation of old  
age pension funds, it may not be out of place  
to describe briefly the superannuation fund  
established on the G. T. R. in 1874. The fund  
was incorporated by act of Parliament under  
the title, "The G. T. Ry. of Canada Super-  
annuation & Provident Fund Association."  
The funds of the Association are invested in  
the names of three trustees appointed by the  
directors of the railway company, & the man-  
agement is by a committee consisting of 3  
men nominated by the directors, 7 principal  
officers of the company, ex-officio, & 4 nom-  
inees elected triennially by ballot among the  
members of the Association. Membership is  
compulsory upon all officers, agents, opera-  
tors, & the clerical staff generally, receiving  
a salary of \$400 or more, & being not over  
37 years of age. The rate of contribution is  
2½%, & the Co. supplements the contribu-  
tions of employes by giving an equal amount  
each half year.

Members have the privilege of retiring from  
the service of the Co. at the minimum age of  
55 years & receiving a pension for life, on the  
basis of one-sixtieth of their retiring pay for  
each year that they have been contributing to  
the fund; but such allowance must not ex-  
ceed two-thirds of the average annual salary  
during the same period.

In the event of a member of over 10 years'  
standing being permanently incapacitated by  
physical or mental infirmity from performing  
his duties, the Committee of Management  
have the power, subject to the approval of the  
President of the Co., to grant such an allow-  
ance as in their discretion may seem advis-  
able. Should a member leave the service at  
any time after contributing for 10 years, he is  
entitled to a refund of all his contributions. If  
he leaves after contributing for less than 10  
years & more than 5, he receives half his con-  
tributions. In the event of his retiring from  
the service before contributing for 5 years he  
is not entitled to any refund, unless his ser-  
vices have been dispensed with from causes  
other than fraud, misconduct or dishonesty,  
or his retirement is caused by ill health; in  
either case he receives half his contributions.

Prior to 1898, members leaving the service  
at any period after 5 years received only half  
their contributions. This was considered a  
hardship to the employe, & the rules were  
amended to permit of a refund of their total  
contributions to employes who had been con-  
tributors for 10 years or over. Should a mem-  
ber die, the whole amount of his contributions  
is paid to his widow, or if he should leave no  
widow, to his children or other relatives de-  
pendent upon him.

The Superannuation Fund has now been in  
operation for 25 years, & has emerged from  
the experimental stage. The rules of the As-  
sociation were based largely upon the experi-  
ence of similar organizations on English rail-  
ways, & it was a matter of conjecture to what  
extent the different conditions of this country  
would affect the calculations of the actuaries.  
At present the fund is in a most satisfactory  
condition. A number of members who other-  
wise would have been penniless & a burden  
on their relatives are receiving pensions which  
enable them to spend the evening of their  
lives in comparative ease & comfort. Many  
others, again, are looking forward to the time  
when they may take a well-earned rest from  
their labors. Others less fortunate there are  
who, when they had the option of joining the  
fund at its inception, declined to do so, & now  
regret their lack of foresight.

The advantages of the pension system are  
more fully recognized among the railway com-  
panies of America in proportion as competi-  
tion & the struggle of life become keener.  
This competition, coupled with the present

tendency of railways to consolidate for the purpose of more economical administration, must have the effect of reducing the opportunities to the average employe, of improving his position by changing from one service to another, & pensions therefore conduce to permanence of employment. Under such circumstances the advantages resulting to employes from the establishment of a pension fund are very great, & the prospective benefits should spur them to increased efforts in the faithful & efficient performance of their duties. At the same time the consideration that employes are approaching the superannuation age cannot rightfully have any influence upon the responsible officials when dealing with matters of discipline & efficiency.—Railroad Gazette.

### A Passenger Fare Suit.

In the High Court of Justice at Toronto, Feb. 20, judgment was given in Lees vs. Ottawa & New York Ry. Co., on appeal by defendant from judgment of junior Judge of County of Carleton. The action was to recover three times the amount claimed as damages under sec. 290 of the Railway Act for levying from plaintiff, an Ottawa lawyer, unlawfully, as alleged, tolls, rates, charges & moneys for defendant's services as a common carrier. The plaintiff travelled over the defendant's line running between the City of Ottawa & the Village of Russell, & paid the full rates required by the Co., & brought this action to compel defendant to make a reasonable rate between Ottawa & Russell. The plaintiff alleged that there is no by-law of the defendant fixing tolls for carriage of passengers between Ottawa & Cornwall which has been approved by the Governor in Council & published in the Canada Gazette in accordance with terms of sec. 227 of the Railway Act. The objections that the appeal had been set down before the expiration of 30 days from date of judgment, & that the proceedings had not been certified & as required by the County Courts Act, were overruled on the argument. Held, without expressing any opinion on the effect of section 227, that it is plain that the theory upon which the action is brought cannot be supported. To give effect to it would be to hold that a company whose tariff has not been sanctioned by the Governor in Council must not carry on its business, & may not even make special contracts with travellers, & that if it does so, & they & their goods are carried, & a reasonable charge paid, the traveller may recover it back. There is no warrant for this in any provision of the act. Nor is plaintiff entitled to recover under section 290. The fares not being unreasonable nor excessive, it follows that they are neither unjust nor extortionate. Appeal allowed with costs & action dismissed with costs.

**Corporation Taxation.**—Under the revenue act passed by the Ontario Legislature in 1899, corporations paid into the Provincial Treasury during the year \$207,059, among the amounts being the following:—

Railway companies	\$32,944
Street railway companies	7,063
Express companies	3,725
Sleeping & parlor car companies	583
Telegraph companies	1,512
Bell Telephone Company	4,445

**The N.L. Piper Railway Supply Co. Ltd.**—Notice is given that application will be made for the incorporation by Dominion letters patent of a company under this name, to carry on the business of manufacturing & dealing in railway, ship & electric supplies, & to acquire from the old & favorably known firm of Noah L. Piper & Son, of Toronto, the business now carried on under that name. The chief place of business of the Co. is to be Toronto & the capital \$50,000. The principal applicants are E. S. Piper & H. Piper, & it is not proposed to take in any outside capital.

### C.P.R. ANNUAL REPORT.

The 19th annual report for the year ended Dec. 31, 1899, dated Feb. 27, 1900, & signed by President Shaughnessy, has been addressed to the shareholders as follows:

A balance sheet of the affairs of the Co. at Dec. 31, 1899, together with the usual statements & schedules are herewith submitted.

The gross earnings for the year were.....\$29,230,038.26  
The working expenses were.....16,999,872.77

And the net earnings were.....12,230,165.49

Add interest earned on deposits & loans & income from other sources including profits from special steamship charters.....\$ 333,978.57

Add interest due from Duluth, South Shore & Atlantic Ry. Co. on consolidated bonds held by your Co. against debenture stock issued.....\$604,280.00  
Less advanced by your Co.....272,780.00

331,500.00

Add interest from Minneapolis, St. Paul & Sault Ste. Marie Ry. Co. on bonds held by your Co. against debenture stock issued.....159,720.00

Add amount repaid by M., S. P. & S. Ste. M. Ry. Co. on account interest advanced previous to 1895.....325,000.00

1,150,198.57

Deduct fixed charges accrued during the year, including interest on land bonds.....\$6,816,676.36

The surplus for the year was.....\$6,563,687.70  
Deduct amount applied against cost of steamships.....155,000.00

\$6,408,687.70

From this there has been charged off the 3/4 yearly dividend on preference stock 2% paid Oct. 1, 1899.....\$419,020.00

And 3/4 yearly dividend on ordinary stock; 2% paid Oct. 1, 1899.....1,300,000.00

\$1,719,020.00

Leaving balance.....\$4,689,667.70

From this there has been declared a 2nd 3/4 yearly dividend on preference stock of 2% payable April 1, 1900.....\$535,820.00

And a further dividend of 3% on common stock payable April 1, 1900 (making 5% for the year).....1,950,000.00

The working expenses for the year amounted to 58.16% of the gross earnings, & the net earnings to 41.84%, as compared with 59.92 & 40.08% respectively in 1898.

The earnings per passenger per mile were 1.79c, & per ton of freight per mile 0.74c, as against 1.52 & 0.76c respectively in 1898.

During the year, 274 miles of the main line were relaid with steel rails weighing 73 & 80 lbs. a yard, & the policy was continued of improving the railway & its facilities with a view to most economical operation.

To meet the requirements of the traffic, a greater number of cars & locomotives had to be provided than was anticipated a year ago, involving an expenditure of \$1,070,315.36 in excess of the appropriation made at the last annual meeting. You will be asked to approve the action of your directors by sanctioning this expenditure.

The Columbia & Western Ry., from Robson to the Boundary Creek district, has been completed, & there is every evidence that it will add largely to the tonnage & revenue of your railway system.

Branch lines from Deloraine to Waskada, 18 miles, & from La Riviere to Snowflake, 16 miles were built in Manitoba for the purpose of reaching important settlements; & an extension of the Pipestone Branch, 50 miles westward from its present terminus, was commenced, to provide railway facilities for the

productive country in the Moose Mountain district; a branch line, 26 miles, from McGregor in the direction of Varcoe, was partially constructed to protect valuable territory, & work was commenced on another branch line, 24 miles, from Molson to Lac du Bonnet, in order to reach the timber district tributary to English River.

The work of double-tracking the line between Montreal & Toronto was commenced, & 17 miles of the busiest section were completed.

An arrangement was made with the Arrowhead & Kootenay Ry. Co. to build a portion of its line, 35 miles in length, in order to comply with the terms of its charter, & to serve the Trout Lake mining district in B.C. The arrangement contemplates a lease to your Co. of the line on the basis of its actual cost.

During the year 4% consolidated debenture stock to the amount of £960,000, was created & sold for the purpose of acquiring the bonds of the Columbia & Western Ry. Co. The bonds are now in the Co.'s treasury amongst acquired securities held against debenture stock issued.

Four % preference stock to the amount of £1,200,000, was created & sold for the purpose of meeting expenditures for rolling stock, additions & improvements, authorized by the shareholders.

The 1st mortgage 5% Canada Central bonds that matured Oct. 1, amounting to £187,400, were retired by an issue of 4% consolidated debenture stock.

The land grant bonds to the amount of \$1,000,000 held by the Dominion Government as security for certain works to be performed, have been surrendered & destroyed. Under the terms of the mortgage, land grant bonds to the face value of \$250,000 were called for redemption from the proceeds of land sales, & of these \$155,000 had been redeemed & cancelled at the end of the year. A further amount will be called shortly.

The net proceeds of town site sales, as shown in the balance sheet for 1898, viz., \$1,363,224.69, have been transferred in reduction of the cost of the Co.'s property, & especially allotted to the ocean, lake & river steamships, & there has been applied, in further reduction of the same item, a portion of the profit resulting from the operation of the Pacific steamers during the year, amounting to \$155,000.

Pursuant to the authority given at the last annual meeting, your Co. guaranteed interest on \$3,500,000 second mortgage bonds of the Minneapolis, St. Paul & Sault Ste. Marie Ry. Co., the proceeds of which were devoted to the payment of maturing interest bearing securities, the purchase of rolling stock, the repayment of capital advanced by your Co., & the other purposes specified in the resolution. The balance unexpended at the end of the year amounting to \$1,359,629.12 is deposited in trust with your Co. The advances made by your Co. in previous years for the payment of interest on the M., S. P. & S. S. M. Ry. Co.'s bonds are being carried as a deferred liability of that Co. to be repaid in instalments as its earnings may warrant. The net earnings of the M., S. P. & S. S. M. Ry. Co. for the year were \$2,243,883.11, out of which were paid interest & charges amounting to \$1,618,226.73, leaving a surplus of \$625,656.38. From this surplus that Co. repaid \$325,000, of the amount advanced by your Co. previous to 1895 to meet interest on its bonds for which your Co. is responsible as guarantor. As the payments when made were charged against your revenue, the amount received has been credited to the same account.

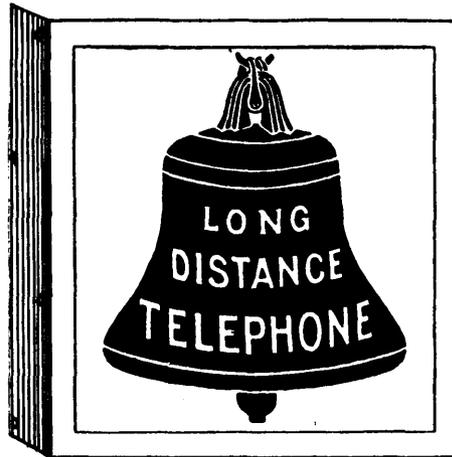
The net earnings of the Duluth, South Shore & Atlantic Ry. Co. for the year were \$943,478.53, or about \$14,000 more than all fixed charges. Notwithstanding the necessity for meeting all capital expenditures out of revenue that Co. was able to pay towards interest on

# ENAMELED IRON TELEPHONE SIGNS.

Guaranteed Not to Fade or in any way to Perish from Exposure.



No. 1. Single, 17 x 18 inches. If made double with flange 18½ x 18 inches.



No. 4. Double, 18½ x 18 inches, including flange. If made single, without flange, 17 x 18 inches.



No. 2. Single, 17 x 18 inches. If made double, with flange, 18½ x 18 inches.



No. 5. Double, 19½ x 8 inches, including flange. If made single, without flange, 18 x 8 inches.



No. 6. Double, 19½ x 8 inches, including flange.



No. 7. Double, 19½ x 8 inches, including flange. If made single, without flange, 18 x 8 inches.



No. 3. Single, 6½ x 7½ inches.



No. 8. Single, 18 x 8 inches.

These signs can be made in any colors. Blue and white are the most effective and are generally preferred.

Signs with any other design or lettering made to order.

PRICES ON ANY QUANTITIES FURNISHED ON APPLICATION.

The ACTON BURROWS COMPANY, 29 Melinda Street, TORONTO.

Sole Agents for Canada for the Imperial Enamel Co., Birmingham, England.

its bonds held by your Co. \$122,500, in excess of the previous year.

The growth of your Co.'s business requires an enlargement of the facilities at Winnipeg that cannot longer be delayed. In connection with a new passenger station it is proposed to provide hotel accommodation for the travelling public. During the past year nearly all of the land necessary for these improvements was acquired, but it is estimated that the buildings & other works will require an expenditure of \$750,000, within the next two years. The addition to Windsor St. station, Montreal, commenced during the past year, was delayed because of the difficulty in getting building material, so that the greater part of the work had to be carried over. You will be asked to authorize expenditure during the current year at Montreal & Winnipeg in connection with these works to the extent of \$750,000; also expenditures for permanent wharves & other terminal works at Vancouver, \$98,817; for improvements to permanent way, \$978,744; for increased yard & other facilities at various points on the system, \$461,928, & for additional rolling stock, \$975,000.

You will be asked to approve a lease by your Co. of the Manitoba & North-Western Ry. Co.'s main line & branches, 253 miles in all, & a lease of the Great North-West Central Ry., extending from your main line near Brandon, Man., north-westerly for 50 miles, with an extension of 20 miles now in course of construction. Both of these lines are important contributors of traffic to your system, & therefore, you could not afford to have them fall into other hands. The terms of the proposed leases, which your directors consider quite advantageous to your Co., are set out in the resolutions that will be submitted for your approval.

The governments, to whom your Co. must, in accordance with law, make full reports of its annual business, require those reports to be made to June 30 each year, & most of the important railway companies on this continent close their fiscal year at the same time; therefore, for the sake of convenience in the preparation of reports, & to simplify the comparison of your operations with those of other large railway systems similarly situated, & for the further advantage of having your largest net revenue result from the earnings of the 1st half rather than the 2nd half of the fiscal year, your directors are of opinion that the annual report & the accounts relating to the operations of your Co. should hereafter be made up to June 30, instead of December 31, & the date of the annual meeting be changed from the 1st Wednesday in April to the 1st Wednesday in Oct. each year. You will be asked to approve a by-law making this arrangement effective. A statement will be issued in Oct. next of the accounts to June 30, 1900, & thereafter the accounts will be submitted at the annual meeting in Oct., covering the fiscal year ending June 30 in the usual way.

The land sales for the past year were 416,806 acres, for \$1,327,667, against 348,608 acres, for \$1,121,774 in 1898.

The growth of your gross earnings from \$18,941,000 in 1895 to \$29,230,000 in 1899, notwithstanding the important reductions made during that period in the rates for the carriage of freight in the territory west of Lake Superior, is evidence of the marvellous progress & development taking place in Canada, & which from all present indications are likely to be maintained.

**CONDENSED BALANCE SHEET, DEC. 31, 1899.**

Cost of railway and equipment	\$218,407,334.21
Ocean, lake & river steamships	\$5,838,385.87
Less amount applied in reduction of cost as explained in report	1,518,224.69
Acquired securities held against debenture stock issued	30,650,875.01
	4,320,161.18

Other acquired securities	2,192,161.94
Real estate, hotels and buildings held by trustees for the Co.	1,194,597.27
Balances due on lands sold, deferred payments	2,372,487.18
Balances due on town-sites, deferred payments	201,790.27
Advances	
To Montreal & Atlantic Ry. secured by \$500,000 1st mortgage bonds	424,144.80
To Duluth, South Shore & Atlantic Ry. car trusts, etc.	236,213.19
Material and supplies on hand	2,600,035.46
Station & traffic balances & accounts receivable	4,409,003.17
Miscellaneous securities & advances	1,272,477.44
Imperial & Dominion governments, amounts due for mail transportation (since paid)	232,746.34
Cash in hand, including amount held in trust for M., St. P. & S. S. M. Ry.	10,904,247.38
	<u>\$279,418,274.84</u>

In addition to above assets the Co. owns 16,758,049 acres of land & will receive through the B.C. Southern Ry. about 3,350,000 acres.

Capital stock	\$ 65,000,000.00
Four % preference stock	26,791,000.00
Four % consolidated debenture stock	54,237,082.53
Mortgage bonds	
1st mortgage, bonds 5 1/2 %	
£7,191,500	\$34,998,633.33
Canada Central mortgage, 6 %	973,333.33
Due Province of Quebec on Q.M.O. & O. North Shore Rys., at 4 1/2 %	7,000,000.00
Algoma Branch, 1st mortgage, 5 1/2 %	3,650,000.00
North Shore Ry., 1st mortgage, 5 %	616,119.67
	<u>47,238,086.33</u>

Land grant bonds	
1st mortgage, amt of issue, \$25,000,000.00	
Less amount redeemed or surrendered & cancelled	21,740,500.00
	<u>3,259,500.00</u>
3 1/2 % bonds, interest guaranteed by Dominion Government	15,000,000.00
	<u>18,259,500.00</u>

Current liabilities	
Interest on funded debt & rental of leased lines, coupons due Jan. 1, 1900, & including coupons overdue not presented	1,476,221.02
Accrued to date, not due	327,102.24
	<u>1,803,323.26</u>

Cash subsidies from Dominion & Provincial governments & municipalities	29,551,218.07
Land grant, net proceeds of sales of land	20,960,250.74
Amount held in trust for M., S. P. & S. S. M. Ry. Co.	1,359,629.12
Surplus earnings account	9,614,528.32
	<u>\$279,418,274.84</u>

**FIXED CHARGES 1899.**

1st mortgage bonds 5 1/2 %	\$1,749,931.66
Province of Quebec 4 1/2 %	283,500.00
North Shore 1st mortgage 5 1/2 %	267.66
Canada Central and mortgage 6 %	58,400.00
1st sinking fund	
St. Lawrence & Ottawa 4 %	34,066.65
Man. S. W. Col. Ry. 1st mortgage 5 %	38,933.34
Toronto, Grey & Bruce rental	127,200.00
Ontario & Quebec debentures 5 %	140,000.00
Ontario & Quebec (ordinary) 6 %	975,129.56
Atlantic & North West Ry. 1st mortgage, less Government proportion	120,000.00
Algoma branch 5 %	136,333.34
Rental, Farnham to Brigham Jct.	182,500.00
Rental, Mattawamkeag to Vanceboro	1,400.00
Rental New Brunswick Ry. System	23,800.00
Rental of terminals at Toronto	372,829.74
Rental of terminals at Hamilton	34,860.10
Rental Hamilton Jct. to Toronto	33,537.49
Rental St. Stephen & Milltown Ry.	40,000.00
Interest on Montreal & Western Ry. purchase	2,050.00
Interest on equipment leases	21,409.36
4 % debenture stock	67,526.63
Issue for general purposes, £3,933,748	
Issue for China & Japan steamers	720,000
Issue for Souris branch	1,004,000
	<u>£5,657,748</u>
Issue for acquiring mortgage bonds of roads of which principal or interest	\$1,101,374.95

is guaranteed by C.P.R. :-	
1 year on £4,276,858	
6 mos. on 960,000	
To retire Canada Central 1st mortgage bonds, 3 months on	250,000
	<u>5,486,858</u>
	£11,144,606
	938,168.34
	<u>2,039,543.99</u>

Interest on land grant bonds £66,684.72, less interest on deferred payments on land sales & proceeds of town sites not covered by mortgage	363,237.18
	<u>333,447.54</u>
	<u>\$6,816,676.36</u>

**CONSTRUCTION—ACQUIRED AND BRANCH LINES.**

Following are the amounts spent on construction during 1899:

Souris branch—Pipestone extension	\$214,543 45
Snowflake branch	123,789 35
McGregor branch	37,576 08
Lac du Bonnet branch	12,030 86
Waskada branch	142,896 69
North Star branch	161,934 08
Lake Temiscamingue Colonization Ry.	938 60
Survey's projected lines	19,111 25
Crow's Nest Pass & B. C. Southern Ry.	1,434,979 94
	<u>\$2,147,820 30</u>
Less:—Stonewall branch extension Cr.	4,530 44
Total	<u>\$2,143,289 86</u>

**EXPENDITURE ON ADDITIONS AND IMPROVEMENTS DURING 1899.**

Main line, Quebec to Bonfield	\$123,401 81
" " Bonfield to Fort William	171,175 27
" " Fort William to Laggan	679,643 04
" " Laggan to Pacific Coast	654,500 76
" " Montreal terminals	168,000 60
Branch lines, Manitoba & B.C.	36,386 73
Algoma branch	42,926 26
Telegraph extensions and additions	24,179 18
	<u>\$1,900,213 65</u>

**EXPENDITURE ON LEASED AND ACQUIRED LINES DURING 1899.**

Ontario & Quebec Ry. \$447,265.59, less sales & real estate, Montreal & Toronto	\$43,226.76
Atlantic & N. W. Ry.	\$404,038 83
Montreal & Western Ry.	103,050 22
Manitoba S. W. Col. Ry.	11,532 13
New Brunswick Ry.	29,969 72
Columbia & Kootenay Ry.	126,551 45
	<u>7,961 52</u>
	<u>\$683,103 87</u>

**RECEIPTS AND EXPENDITURES 1899.**

**RECEIPTS.**

Cash in hand, Dec. 31, 1898	\$4,147,228 80
Surplus revenue, as per statement	6,563,687 70
Land Department	
Net proceeds of sales	\$1,203,698 02
Less amounts remaining in deferred payments	1,044,410 76
	<u>159,287 26</u>
Collection of deferred payments of previous years on lands & town sites	241,320 99
	<u>400,608 25</u>
<b>Bonuses.</b>	
Dominion Government, subsidy on Crow's Nest Pass extension	\$340,060 00
Provincial Government, subsidy on Stonewall & Souris Branch extensions	59,780 00
Town of Calgary, improvements at that place	25,000 00
	<u>424,840 00</u>
Sale of Aylmer Branch	100,000 00
B. C. lake & river steamships—sale of steamboat, less amounts expended in completion of additional steamboats	1,620 95
Received from M. S. P. & S. S. M. Ry. Co. in payment of advances on car trusts, etc.	467,817 89
Advances repaid by Columbia & Western Ry. from proceeds of bonds	2,320,470 16
M. S. P. & S. S. M. Ry., income certificates paid	270,000 00
Consolidated Debenture stock	
Amount realized from issue of £1,268,880 for acquiring guaranteed securities & for paying balance due on Canada Central Ry. 1st mortgage bonds	6,662,028 18
Four per cent. preference stock	
Realized from issue of £1,200,000 sold to meet capital expenditure	5,502,566 15

Received in trust for M. S. P. & S. S. M. Ry. from proceeds 2nd mortgage bonds	1,359,629 12
	\$28,220,497 20
Deduct increase in accounts receivable. Stations and traffic balances and accounts receivable...	4,409,003 17
Miscellaneous securities & advances...	1,272,477 44
Due from Imperial & Dominion Governments.....	232,746 34
Less amounts to Dec. 31, 1898.....	\$5,823,844 87
Deduct M. S. P. & S. S. M. Ry. income certificates reported in receipts.....	270,000 00
	\$5,553,844 87
	\$360,382 08
	\$27,860,115 12

EXPENDITURES.	
Dividends on preference stock. 2% paid April 1, 1899 & 2% paid Oct. 1, 1899	\$ 656,182 50
Dividends on ordinary stock.	2,600,000 00
2% paid April 1, 1899, & 2% paid Oct. 1, 1899	2,600,000 00
Real estate, hotels & buildings held by trustees.....	27,090 56
Construction acquired & branch lines.....	2,143,289 86
Additions & improvements main line & branches.....	1,900,213 65
Additions & improvements leased lines.....	683,103 87
Rolling stock, shops & machinery	2,434,652 38
Canada Central Ry. 1st mortgage bonds, amount paid to retire outstanding bonds.	922,889 41
Land grant bonds, amount paid in redemption of \$155,000 bonds.....	170,500 00
Guaranteed Securities acquired by sale of 4% debenture stock. M. S. P. & S. S. M. Ry. 4% consolidated bonds, \$314,000	\$ 282,193 24
Columbia & Western Ry., 5% 1st mortgage bonds, \$5,477,500, amount paid on account.....	5,067,828 62
	51,350,021 86
Increase in material & stores on hand.....	58,625 34
Decrease in current liabilities.....	9,298 31
	\$16,955,867 74
Cash in hand, Dec. 31, 1899.....	10,904,247 38
	\$27,860,115 12

EARNINGS FOR THE YEAR 1899.	
From passengers.....	\$7,008,006 70
freight.....	18,738,884 96
mails.....	618,385 19
express.....	663,960 52
parlor & sleeping cars.....	441,647 54
telegraph, grain elevators, & miscellaneous, including profit on Pacific steamships.....	1,669,063 35
	\$29,230,038 26

WORKING EXPENSES FOR THE YEAR 1899.	
Conducting transportation.....	\$4,256,097 31
Maintenance of way & structures.....	3,488,253 73
Motive power.....	5,286,871 50
Maintenance of cars.....	1,295,282 03
Parlor & sleeping car expenses.....	85,582 18
Expenses of lake & river steamers.....	417,045 72
General expenses.....	1,680,932 66
Commercial telegraph.....	489,807 64
	\$16,999,872 77

DESCRIPTION OF FREIGHT CARRIED.			
Description.	1897.	1898.	1899.
Flour..... Brls.	2,911,072	3,292,450	4,005,226
Grain..... Bush.	37,756,201	37,443,084	42,763,253
Live stock..... Head.	663,773	715,018	810,559
Lumber..... Feet.	831,895,383	840,145,338	957,702,349
Firewood..... Cords	185,208	203,335	202,461
Manufactured articles..... Tons.	1,310,827	1,529,044	1,795,663
All other articles..... Tons.	994,813	1,119,087	1,461,144

FREIGHT TRAFFIC.			
	1897.	1898.	1899.
Tons carried.....	5,174,484	5,582,038	6,620,903
Tons carried 1 mile.....	1,955,911,006	2,142,319,887	2,539,171,900
Earnings per ton per mile.....	0.78c.	0.76c.	0.74c.

PASSENGER TRAFFIC.			
	1897.	1898.	1899.
Passengers carried.....	3,179,589	3,674,502	3,818,857
Passengers carried 1 mile.....	317,997,951	430,493,139	397,411,745
Earnings per passenger per mile.....	1.82c.	1.52c.	1.79c.

TRAFFIC TRAIN EARNINGS, 1899.			
	Mileage.	Earnings.	Earnings per traffic train mile.
Passenger.....	7,441,828	\$ 8,563,341.94	\$ 1.15
Freight.....	10,982,873	18,266,288.06	1.66
Total.....	18,424,701	\$26,829,630.00	\$ 1.46

The above earnings of traffic trains include earnings from mails, express and sleeping cars, but do not include ocean, lake & river steamers, telegraph, elevators, rents, &c., the net earnings from which amounted to \$1,493,554.90.

EXPENSES PER TRAFFIC TRAIN MILE, 1899.		
	Expenses.	Expenses per Traffic Train Mile.
Maintenance of way & structures.....	\$ 3,488,253.73	0.189
Motive power.....	5,286,871.50	0.287
Maintenance of cars.....	1,295,282.03	0.070
Traffic & general expenses.....	6,022,612.15	0.327
	\$ 16,093,019.41	0.873

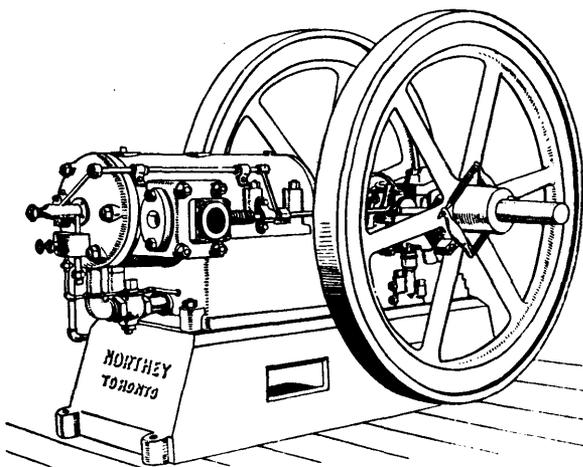
MILEAGE OF THE COMPANY'S LINES.	
Atlantic division.....	689.2
Ontario & Quebec division.....	1,259.2
Eastern division.....	1,785.0
Western division.....	3,359.9
Pacific division.....	889.6

Lines controlled.		7,982.9
M. S. P. & S. S. M.....		1,245.0
Duluth, S. S. & A.....		589.0
		9,816.9

Of the 7,982.9 miles mentioned above, 7,006.6 are included in the C.P.R. traffic returns, 732.4 are other lines worked & 249.9 are under construction, including the Columbia & Western, which, although practically completed, was not in operation at the end of 1899.

# The Northey Gas or Gasoline Engine.

In Connection with Pumping Machinery for Tank Duty.



"BUILT FOR HARD WORK."

Railway Officials will find the Northey Engine to be a marked improvement over steam or other forms of power for this duty. It is simple of construction, and easily managed, necessitating only the turn of a fly-wheel to start, while it can be going at full speed in a few seconds and be shut down on the instant. Needs no engineer to look after it, the station hands can do all that is required, while it will run for hours at a time with little or no attention. The Engine is compactly built and of the best materials; it uses either gas or gasoline for fuel, and its safety and economy with either have proved it to be the most satisfactory power in the market.

We will cheerfully send Booklet and every information upon request.

The Northey Mfg. Co., Limited, 1032 KING ST. SUBWAY, Toronto, Ont.

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

**Expenditures for 1899 & 1900.**—Last year the Co. expended \$2,143,289.86 in surveys & construction of branch lines, details of which are given on pg. 69. This does not include the expenditure on the construction of the Columbia & Western Ry. between West Robson & Trail. On additions & improvements of the main line & branches \$1,900,213.65 were expended, & on additions & improvements on leased & acquired lines \$683,103.87. At the annual meeting, to be held April 4, the shareholders will be asked to authorize the following expenditures to be made this year: Station & hotel at Winnipeg & addition to Windsor st. station, Montreal, \$750,000; permanent wharves & other terminal work at Vancouver, \$98,817; improvements to permanent way, \$978,744; increased yard & other facilities, \$461,928.

**Atlantic Division.**—The following improvements have been decided on for this year. The yard at McAdam Jct. is to be re-arranged & increased, & a very handsome stone passenger station is to be built there, which will contain a dining hall & lunch counter, offices for the Superintendent & divisional staff, & a number of sleeping rooms for passengers who may require to stay over night there. The wooden truss bridge over the Chaudiere River at Megantic is to be replaced by a masonry & steel structure. A new passenger & freight station is to be provided at Holeb, Me. Several wooden bridges are to be replaced by permanent work, & considerable ditching, ballasting & fencing is to be done, & business tracks are to be provided at a number of points to relieve the passing sidings.

**Montreal to Toronto Double Track.**—It is not the intention to continue the work of double tracking the line this year west of St. Annes, to which point it was laid last year. (Feb., pg. 39.)

**Toronto Terminals.**—Notice is given that it is the intention of the Toronto, Grey & Bruce Ry. Co., whose line is leased to the C.P.R., to apply to the Railway Committee of the Privy Council to sanction the building & use of a branch line from a point on the T.G. & B. Ry., near the Queen's wharf, Toronto, to the south limit of Fraser Ave., Toronto.

**The Point Fortune Branch** leaves the Montreal-Ottawa short line at Rigaud, Que., running to Point Fortune, 7 miles. A deputation of residents of the northern portion of Prescott county recently waited on the Dominion Government, asking for a subsidy to be given to the Co. to extend the branch 12 miles to Hawkesbury, & it was also suggested that a further extension might be made to again join the Montreal-Ottawa line at Caledonia Springs, so as to also give railway facilities to L'Orignal.

**Ottawa Connecting Line.**—The route to be taken across the city, to connect the Co.'s present Union station near the Chaudiere Falls with the Central station near the canal basin & the Russel House, is still undecided. The surveys have been completed, & it is said that the latest proposal of the Co. is to use the Isabella st. route, which would place its tracks alongside the Canada Atlantic. (Feb., pg. 39.)

**Pipestone Branch Extension.**—When work was closed down for the winter, grading had been completed to 23.24 miles west of Antler, & track had been laid to 14.07 miles west of Antler. (Jan., pg. 7.)

**The North Star Mine Branch**, which leaves the Crow's Nest Pass Ry., a mile east of Cranbrook station, running 19.05 miles to the vicinity of the North Star & Sullivan group of mines, near Kimberley, has been completed. The first shipment of ore from the North Star mine was made over the branch on Feb. 22 & regular shipments are now going on. It

is reported that this branch may be extended to Windermere & up the Columbia river to Golden, but no official announcement has been made in regard to this. (Jan., pg. 7.)

**Crow's Nest Pass Ry.**—A contract has been let to J. W. Stewart for the construction of another section of this line, from Procter's Creek on the south side of the west arm of Kootenay Lake, to Five Mile Point near Nelson. The contract includes the whole construction of the line, grading, track laying, ballasting etc. The grading will be only moderately heavy, a portion of it being rock & the rest rock & gravel. The bridging will be very light. There will be only one bridge of any size. Mr. Stewart has already established his camps & will start work at once. It is expected to have the section in operation by the end of next summer. It has not yet been decided what will be done in regard to the line west of Five Mile Point. The C.P.R. track already extends from Nelson to within about a mile of Five Mile Point, & it appears to be probable that arrangements will be made to run over the Nelson & Fort Sheppard track for the intervening distance. (Jan., pg. 7.)

**Columbia & Western Ry.**—The extension of this line from West Robson to Midway was taken over from the contractors Mar. 5. (Feb., pg. 39.)

The station names on this line are to be put up in enameled iron plates, similar to those used on the Crow's Nest Pass Ry., instead of painted wooden signs. The order for them has been placed with the Acton Burrows Co., Toronto.

It is said that the Co. will shortly begin the completion of a bridge across the north fork of the Kettle River, in connection with the spur to the smelter.

**Vancouver Terminals.**—The Vancouver despatch referred to in our last issue stating that a contractor had arrived there to commence work on the addition to the Hotel Vancouver was probably incorrect. As far as we can ascertain no appropriation has been made for this purpose, but it is said the question of extending the building is under consideration. Plans were prepared last year, but these appear to have been considered too extensive, & it is understood that a modified scheme is now being worked out. (Feb., pg. 40.)

**Mineral Range Ry.**—The extension of this line from Newton, Mich., southwest via Laird & Mass City to Lake Gogebic, will be 62 miles long. The line has been surveyed from Newton to Mass City, 35 miles, & is under survey from Mass City to Lake Gogebic, 27 miles. Grading has been completed from Newton to the Sturgeon river, 8 miles, & work is in progress from the Fire Steel River to Mass City, 6 miles. The 35 miles from Newton to Mass City are under contract to Balch & Peppard, of Minneapolis, Minn., & contracts are yet to be let for the 27 miles from Mass City to Lake Gogebic. Maximum grades, 1%; maximum curves, 4°; weight of rail, 60 lbs.

**Grand Trunk Betterments, Etc.**

It is said that building operations on the new general offices in Montreal, which have been suspended for some months, will not be resumed for some time owing to the difficulty experienced in obtaining iron & steel. The contractors have ordered a supply of material from Belgium, but it is uncertain when it will arrive, & nothing can be done till it comes. (Jan., pg. 6.)

The erection of an improved passenger station at Aurora has been commenced.

In reference to the rumor that the Co. intends erecting large freight sheds at Midland, Ont., for the handling of package freight, we were informed, on Feb. 23, that orders had not been issued for the erection of such a

building, & that there was nothing in the report referred to, at least for the present.

On the middle division last year the Co. expended about \$550,000 on improvements. This included the laying of new rails, new yards at York, Berlin, Palmerston, Niagara Falls & London, new round house, shop, office & very complete coal chutes at Sarnia tunnel, & new bridges & buildings, among them being freight sheds at Woodstock, Hamilton, Beamsville, Jordan, & the extension at Simcoe street, Toronto, & new stations at Galt, Bright & Brussels. This year about \$800,000 will be expended on improvements on the same division. It is said these will include a new station for Queen street east, coal chutes, new turn-tables, double tracks between Niagara Falls & Hamilton, Hamilton & London, & London & Sarnia.

In connection with the differences between the city of Hamilton & the Co. as to bridges, etc., the city engineer & solicitor have been instructed to take steps to compel the Co. to renew the bridge on the heights, construct a bridge over Strachan st., & open up Ferguson avenue across the main line.

The Engineering Dept. is surveying a line that was located several years ago, from Lynden, Ont., 15.61 miles west of Hamilton, & 3.24 miles east of Harrisburg, to Green's Bridge, near Brantford, the idea being to build a cut-off so as to run the main line passenger trains between Hamilton & London via Brantford. We are informed that nothing definite has as yet been determined in regard to the matter.

Arrangements have been made for the renewal of the superstructure of the bridge across the Niagara River at Buffalo, commonly known as the International Bridge, & the property of the International Bridge Co. The bridge consists of two distinct & independent structures. One of these is the bridge across the Niagara River proper; the other is that across Black Rock Harbor. The bridge across the river consists of 8 spans, & has a total length of 1967 ft. Two openings are bridged by the arms of the draw girder, which has a total length of 362 ft. The length of the bridge across Black Rock Harbor is 517 ft. The draw span of this bridge has a clear opening of 107 ft. This work is being carried out in order to bring the bridge fully up to the requirements of modern rolling stock & loads, which are considerably more than double of what they were in 1870, when the erection of the existing structure was begun. It is expected that the work will be completed during the current year. (July, '99, pg. 207.)

The 30-stall brick roundhouse at Port Huron, Mich., which was recently completed, is now in use. Each stall has a pit 50 ft. long, with brick sides & concrete bottom, heated with coils of 1-in. steam pipes the full length of the pits. It is a little over 76 ft. from the doors across the house to the other outside wall, so the longest engines can be housed & have plenty of room to get around them. The big St. Clair tunnel engines are housed & cared for here. Two lines of 2-in. pipe pass entirely around the house next the roof, one for live steam, the other for compressed air, with pipes down the posts between every two pits. Two lines of 4-in. water pipe also pass clear around the house overhead, one for hot water for washing out & filling up, the other for cold water. A pressure of 100 lbs. is maintained steadily in these pipes. Drop pipes, 2½ ins. in diameter, lead down to the wash-out hydrants. In the side of each pit there is a pipe connection, which the blow-off cock can be coupled to, the water from the boilers is blown out into a hot water receiver or underground tank of very large size. This hot water is used for washing out boilers, being handled by one side of a large duplex pump; cold water is handled by the other side of the pump. Two tubular boilers, 5 ft. in diam. by 16 ft. long, furnish steam for the entire plant

at 125 lbs. per inch. The dynamo & air compressor are in the boiler house. The entire plant is lit with incandescent lights. The copper wires for the electric lights are encased in a 3/4-in. pipe all over the engine house. The foreman's office, storeroom & enginemen's waiting room are in a separate building, 75 x 22 ft. When the engines come from their trains they come by the coal chute, which has 32 pockets, take coal, then get sand from an overhead bin, then to the cinder pit, of which there are 2 side by side, with a track between them for the cinder gondolas, then across the table, a 70-ft. one, & on into the house. When they go out to their trains they pass out on another track, & are not held by the incoming engines. The cinder pits have a bar of iron 4 x 1 in. on each side near the top, supported by brackets, which makes a railway on which the ash buckets are moved along to the center of the pit, where an air hoist lifts the buckets of ashes up over the gondolas & they are dumped. The cinder hoist extends over both cinder pits. The cars of coal are drawn up on the coal chute with a cable passing over pulleys at the end of the building & attached to a locomotive on the tracks below; 4 cars can be pulled up at once. In the end of the coal chute is located the sand house, with drier on the ground floor. From there the sand is elevated to the bins above with air pressure. The storage bins for the fresh sand hold about 800 yards. In the way of running repairs there will be enough machinery to do considerable light work. There is one drop pit which will take out a pair of drivers or truck wheels. As this is a terminus of both the Middle & Detroit divisions, a large number of engines will be handled here daily. The old roundhouse at Ft. Gratoit, of 19 pits, will now be used for a repair shop.

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

**Algoma Central.**—On Feb. 5 we were informed that the Michipicoton branch was completed to within 2 miles of the Helen Mine, & would be finished to the mine by April 1. This branch will be extended during the year to connect with the C.P.R. near Grassett station. Contractor Conmee has commenced work on the main line to Sault Ste. Marie, his contract requiring the completion of 12 miles by June 1. It is intended to complete 50 miles of the main line this year as well as the Michipicoton branch, which will also be about 50 miles in length. It is intended to connect the

main line with the Michipicoton branch during 1901. The line is being laid with 85 lbs. steel & equipped with 100 ton locomotives from the Baldwin Locomotive Works, & 110,000 lbs. steel ore cars. (Feb., pg. 41.)

**The Canada Atlantic** has built a branch line known as the McAulay Central Ry., from 5 miles west of Madawaska, which is 130 miles west of Ottawa, up to the scene of lumbering operations in the shanties, a distance of about 10 miles.

**The Canadian Northern Ry.** starts at Gladstone Jct., on the Manitoba & Northwestern Ry., 35 miles west of the latter line's southern terminus at Portage la Prairie, therefore, in order to reach Winnipeg by existing lines, the C.N. has to run over the M. & N.W.R., now about to be leased by the C.P.R., to Portage la Prairie, from which it has a choice of two routes to Winnipeg, either by the C.P.R. or by the Northern Pacific's Portage branch. Last year negotiations were in progress between the C.N.R. & the N.P.R. for running rights for the former over the latter's Portage branch, but they were broken off. It is understood that if it fails to make satisfactory running arrangements in order to reach Winnipeg the C.N.R. will build between Winnipeg & Gladstone Jct. The old Winnipeg & Hudson's Bay Ry. Co., whose franchise & property has passed into the hands of the C.N.R., built 40 miles of line from just west of Winnipeg to a point between Shoal Lake & Lake Manitoba, but never operated it. Probably some 20 or 30 miles of this line from the Winnipeg end would be utilized & a new line would be built for the balance of the distance to Gladstone Jct. Eventually the whole of the 40 miles built by the W. & H.B. Ry. is likely to be put in running order, & it will probably be extended by way of the narrows of Lake Manitoba to connect with the C.N.R. main line in the Dauphin district.

**Canso & Louisburg.**—Several railway papers published in the U.S. have stated that this Co. will build a bridge over the Strait of Canso, at an estimated cost of \$3,000,000. We are officially informed that the Co. has no such intention, as it is pretty certain that such an enterprise would not pay for many years to come. About 10 miles from the Strait of Canso the River Inhabitants will be crossed by a bridge about 800 ft. in length, 2 spans of 200 ft. each & two 50 ft. girder approaches, with trestles, fills, etc. It is expected to cost about \$75,000 and will be the largest bridge on the line. We are also informed that construction

will be pushed on rapidly as soon as weather will permit. It is stated that Chief Engineer Armstrong has located 30 miles of line to St. Peter's, & that the cutting out of the right of way has commenced. (Feb., pg. 41.)

**Central Ontario.**—We are officially informed that the extension from Ormsby to Bancroft, 21 miles, is practically all graded, there being only a few small places of rock yet to take out. Two miles of track have been laid & ballasted. The rails & all material for laying the balance of the track are now on the ground & track laying will be started as early as possible in the spring. It is expected the whole line will be completed next summer. This line will open up a fine timber district & give an opportunity of developing a number of valuable mineral deposits. (Jan., pg. 8.)

**Edmonton, Yukon & Pacific.**—A Montreal despatch dated Feb. 26 stated that the railway & traffic bridge built by the Dominion over the north Saskatchewan river at Edmonton having been completed so that connection can be made with the terminus of the Calgary & Edmonton Ry., on the south side of the river, it is probable that construction will be commenced this year on the Edmonton, Yukon & Pacific Ry. which is projected to run from Edmonton either to the Yellow Head Pass or to the Peace River Pass, & thence to a port on the Pacific Ocean in B.C. It is said that Mackenzie, Mann & Co. now control the E.Y. & P. charter.

**Great Northern of Canada.**—Col. Jas. McNaught, of New York, who is said to be interested in this line, now being extended westward to connect with the Canada Atlantic at Hawkesbury, is reported to have recently stated as follows: "Plans have been partially completed for a new great transcontinental railway line, with a connecting line of steamships to Liverpool, by which the distance between that city & the western grain States is to be shortened 800 miles. The new Milwaukee Southwestern is to be part of this system, which, when completed, will extend to the Pacific Coast. The final proposition of the M.S. Ry. Co., which is to be built from Milwaukee to Rock Island, Ill., will unquestionably be accepted by a large majority. It will involve a subsidy from Milwaukee County of \$800,000 in county bonds to aid in the construction of the road, for which the county is to receive noncumulative preferred stock of the Co. This road will be operated in connection with the Canada Atlantic & the Great Northern Ry. of Canada. The line of the C. A. & its connections will be used as far as

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Ottawa. From there to Quebec the connection will be furnished by the G.N.R. which is now under construction, & will be completed by June. The line will be in full operation to Quebec by the middle of Aug. The C.A. has an outlet on Georgian Bay, so that grain could be shipped from Milwaukee to this point by steamer. Negotiations for the acquisition of steamers for the new Quebec-Liverpool ocean line, which is to be part of the system, are pending. It has not been definitely settled by which route the Pacific is to be reached, but it is understood that one of the existing lines will operate in harmony with the new route to the Atlantic." (Jan., pg. 8.)

**Great Northern (U.S.A.)**—It is said that a line parallel with the Duluth, Messaba & Northern Ry. will be built by the G.N.R., that preliminary work is under way, & that this road will run within 3 miles of the rival line, & will extend northerly 50 miles through Columbia Jct. to Nelson, Minn., crossing the St. Louis river at Columbia Jct. Another Great Northern line will, it is said, extend from Virginia, Minn., easterly 70 miles to Beaver Bay on Lake Superior.

**Intercolonial.**—The Dominion estimates for the year ending June 30, 1901, contain the following items to be expended on capital account:

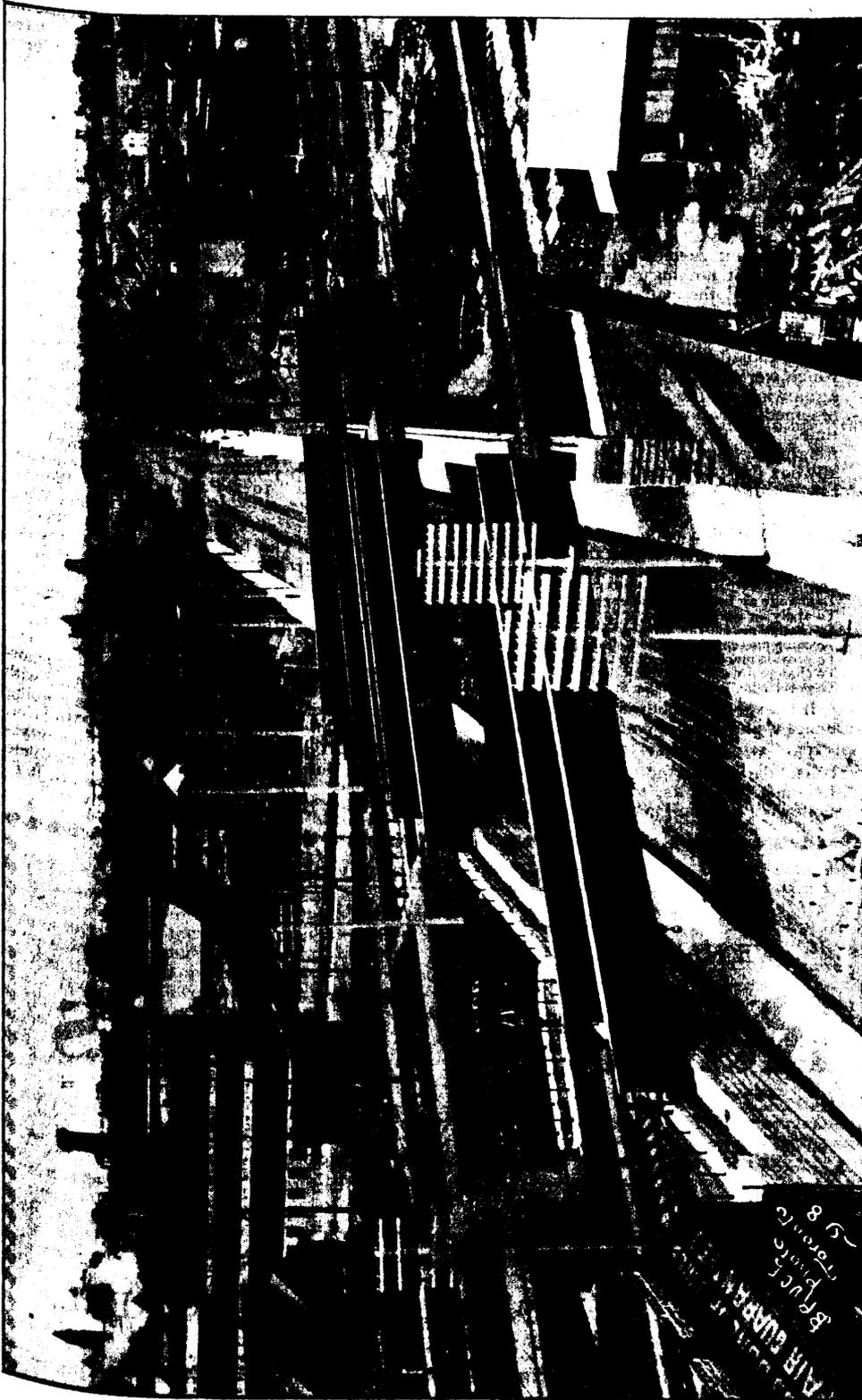
Building at Truro.....	\$ 2,000
Iron highway bridge, Rocky Lake.....	5,000
Additional houses for engines.....	80,000
Balance due on Halifax cotton factory branch.....	5,802
Freight shed station at Rockingham.....	1,800
Extension cotton factory branch at Halifax.....	70,000
Coal trestle at Stellarton.....	3,500
Station accommodation, Westville, N.S.....	8,000
Accommodation at Sydney.....	39,000
Sidings near Albion mines.....	2,500
Station yard at Truro.....	9,500
Accommodation at Halifax.....	16,200
Improvements at Mulgrave.....	25,000
Subway at Christy's Brook, Amherst.....	1,800
Increased accommodation at Amherst.....	3,500
Original construction.....	2,000
Land damages on Oxford, New Glasgow & Cape Breton division.....	2,000
Strengthening bridges.....	100,000
Improved accommodation & facilities along the line of railway.....	104,000

**Inverness & Richmond.**—It is said that about 31 miles of rails have been laid from Port Hastings towards Port Hood, that about 450 men are employed, & that passenger trains will be running to Port Hood by July. (Jan., pg. 8.)

**Lake Erie & Detroit River.**—The route for the extension of this line from Ridgeway to St. Thomas, Ont., has not yet been decided. The Co.'s Engineer is now surveying a second line. It is probable that the extension will serve the following places between the points mentioned above, viz., Highgate, Muirkirk, Rodney West, Lorne, Dutton, Iona & Shedden. It is not yet announced whether the Co. will build the line itself or give out contracts. (Feb., pg. 42.)

The Co. is applying to the Dominion Parliament for an extension of time for the commencement & completion of its proposed line from Simcoe to Fort Erie. An Ottawa despatch relating to this stated that the proposed line was to be made a link of the Wabash system between Buffalo & Detroit. We are informed that there was no foundation for this statement.

**Nova Scotia Southern.**—A deputation of the Halifax Board of Trade waited on the N.S. Government recently in reference to this line now being built from Shelburne to New Germany. Members of the deputation stated that Halifax would support the proposition to give a provincial subsidy from Shelburne to New Germany if the promoters of the line would satisfy the Government as to their ability to extend the line into Halifax, but if such a guarantee could not be given the Board would not decidedly oppose the grant, but would leave the responsibility with the Government. The Premier stated that the Government desired to secure construction of the whole line into Halifax, which, in connection with the Halifax & Yarmouth Ry., would give a through line into Yarmouth. President Hervey, of the N.S.S., stated that his Co. wished to get into Halifax, as the extension would double the value of the line from New Germany to Shelburne, & he expressed his willingness to satisfy the Government as to the Co.'s ability to build the whole line provided the usual subsidies were granted by both Governments. Authority has already been given for the subsidizing of 20 miles of the line by the Dominion, & he stated that when the contract was formally entered



QUEEN STREET SUBWAY, TORONTO, LOOKING WEST.

The total cost of this work was \$122,317.05, the masonry contract being \$63,375, & the iron girders carrying the G.T.R. & C.P.R. tracks costing \$17,454.

into the Co. would be willing to begin operations on the Halifax end of the line & not to ask for payment of any of the subsidies until the whole of the work was completed. There is said to be some difficulty about terminal facilities at Halifax, but the impression is that it cannot be overcome. (Dec., '99, pg. 352.)

**Ontario & Rainy River.**—Up to Mar. 5 a little over 20 miles of track had been laid west from Stanley. Track laying was recommenced on that date & it is hoped to continue the work until 40 miles are laid, which will use up all the rails now on hand. Track laying has been somewhat delayed by having to wait for timber for trestles, but it is now expected to lay about a mile a day until the 40 miles are completed. About 900 men are employed on grading and are covering the first 100 miles west from Stanley. (Feb., pg. 42.)

**Prince Edward Island.**—J. W. McManus has not yet commenced grading the first 10 miles of the Murray Harbor branch, but will probably start as soon as weather will permit. The contract calls for the completion of the work by Aug. 1. The survey for the bridge over the Hillsborough River, at Charlottetown, is about completed and it is expected that as soon as the site is decided upon tenders will be invited. The Dominion estimates for the year ending June 30, 1901, provide \$700,000 for the branch, including the bridge. (Feb., pg. 43.)

**Restigouche & Western.**—Application is being made to Parliament for power to build an extension of this line, including a railway bridge across the St. John River at a point between Grand Falls & Edmundston, N.B.

**Salisbury & Harvey.**—J. Hamilton, C.E., is reported to have completed the survey for the proposed extension of this line from Baltimore to Moncton. Baltimore is 14 miles from Salisbury & 31 miles from Albert, the 2 termini of the S. & H. Ry. (Feb., pg. 43.)

**The South Shore Ry.'s extension** from Sorel to Yamaska, Que., recently completed, is 10 miles in length. (Feb., pg. 43.)

A railway bridge is being built over Loch Etive, at the Falls of Lora, Scotland. When completed, its span of 500 ft. will be the second largest in Europe, coming next to that of the Forth Bridge.

The Houston & Texas Central Ry. has recently created the office of Chief Gardener, the incumbent of which will have charge of making & taking care of the station grounds & flower gardens along the line.

### Railway Equipment Notes.

The G.T.R. has recently put 6 new baggage cars of up-to-date design, on the Montreal-Chicago run.

The White Pass & Yukon has asked tenders for 2 narrow-gauge 10-wheel locomotives, with 16 x 20 in. cylinders.

The Dominion Iron & Steel Co. has ordered 60 stone cars of 80,000 lbs. capacity from Rhodes, Curry & Co., Amherst, N.S.

The Manitoba & Northwestern Ry. has ordered two compound consolidation locomotives for July delivery. They will be practically the same in size & weight as the locomotives of this class which have recently been built for the C.P.R.

The Northern Pacific is building, at its South Tacoma shops, 350 flat cars, 41 ft. long & of 70,000 lbs. capacity, & is reinforcing at Tacoma & Brainerd some 1,500 gondola cars, changing them from 40,000 lbs. to 50,000 lbs. capacity. It is also building 500 box cars of 70,000 lbs. capacity.

An item has been going the rounds of the daily press stating that the G.T.R. has decided to equip all its passenger rolling stock with a patent cushion truck brake. We are advised that nothing whatever is known of this brake by the management. It would appear that the item was started going as a free advertisement for the patentee.

The Canada Atlantic shops at Ottawa, in which work was interfered with a short time ago owing to the scarcity of material, have resumed operations & are running on regular time. The Co. proposes to build about 700 freight cars by July 1. They will be principally box cars for grain traffic, but a number of refrigerator & other cars will also be constructed.

The Dominion estimates for the year ending June 30, 1901, contain the following items for the Intercolonial:—

To change air brakes on passenger cars, etc.	\$ 13,000
To apply air brakes to freight cars	40,000
To change couplers on passenger cars	26,000
To equip passenger cars with vestibules	10,000
To provide machinery at shops	5,000
To change drawbars on freight cars	20,000
To provide additional rolling stock	950,000

It is expected about 20 locomotives will be bought, and also a number of freight cars.

The Algoma Central Ry. has ordered 4 consolidation locomotives from the Baldwin Locomotive Works, to be delivered in Aug. Following are the general dimensions:

Cylinders	21 in. x 26 in.
Driving wheels	56 in.
Wheelbase total	23 ft. 9 in.
driving	15 ft. 1 in.
Weight, total, about	184,000 lbs.
on driving wheels, about	165,000 lbs.
Boiler diameter	68 in.
Tubes	3 1/2 in. diam.; 13 ft., 6 in. long.
Firebox	120 1/2 in. x 42 in.
Tank capacity	4,500 gals.

The Baldwin Locomotive Works expect to establish, this year, a new record in the construction of locomotives. The greatest number ever turned out from the shops in any one year was 946, in 1891. This year, it is confidently expected, the 1,000 mark will be reached. In Feb. 93 locomotives were shipped. There are now on the books orders for 700 locomotives; enough to keep the plant busy until fall. But once before have the works been filled to their capacity for a greater length of time ahead, & that was when the capacity was much less. They have never had more orders ahead for locomotives. At present 7,000 men are employed.

The recent consolidation of the Pullman & Wagner car companies necessitated an amount of work which is not at first thought of. Aside from the changes necessary in the offices & stationery, about the most interesting were those made necessary by the word "Wagner" being painted upon the 720 cars of that Co., as well as the renaming of the cars themselves. Of the 720 cars operated by the Wagner Co., 502 bore exactly the same names as 502 of those belonging to the Pullman. A list of these duplicated cars was made out & the day after the transfer the painters went to work changing them. The first "Wagner" sleeper was metamorphosed by paint into a "Pullman," & its name changed from "Java" to "Paltava." The Pullman standard lock is being placed in former Wagner cars, thus necessitating a change of 40,000 locks. The bed linen, blankets, towels, door-mats, rubber foot-mats, & the glass in those windows containing monograms will all have to be changed, & it may be months before the alterations are completed.

The Northey Co., Ltd., has been incorporated under the Ontario Companies Act, with a capital of \$350,000, to take over as a going concern the business of the Northey Mfg. Co., Ltd., at Toronto, which consists of manufacturing pumping machinery, gas & gasoline engines. The provisional directors are J. P. Northey, H. S. Pell, & H. R. Hardy.



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P.S.—Still Selling the old reliable Fairbanks' Scales.

### Canadian Pacific Railway Equipment.

During 1899 the Co. expended \$2,434,652.38 on rolling stock, shops & machinery.

At the annual meeting to be held April 4, the shareholders will be asked to approve of an expenditure of \$975,000 to provide additional rolling stock this year.

During the past year about 2,000 freight cars of all kinds were built at the Co.'s Perth shops. Material is on hand there for 800 cars, which it is contemplated to complete prior to July 1.

Temperature control apparatus has been placed on the sleeping cars Ivanhoe & Winchester & 1st class car 601, all of which are running on trains between Montreal & Toronto. Sufficient time has not elapsed since the apparatus was put in to enable anything definite to be said as to its efficiency.

Following is a statement of the Co.'s equipment at Dec. 31, 1899:

Locomotives.....	690
First & second class passenger cars, baggage cars, & colonist sleeping cars.....	627
First class sleeping & dining cars.....	113
Parlor cars, official & paymaster's cars.....	33
Freight & cattle cars, (all kinds).....	19,005
Conductors' vans.....	362
Board, tool & auxiliary cars & steam shovels.....	682

The Co. is building eight 1st class coaches at its Montreal shops. These cars will be 65 ft. long over bodies, equipped with wide vestibules & standard steel platforms, mounted on 6-wheel trucks, Westinghouse high speed brakes, 40 in. steel tired wheels. The exterior of these cars will be of the Co.'s standard. The interior finish will be in mahogany of its new standard design & similar to the last lot of 2 cars, nos. 600 & 601, which were described & illustrated in our last issue, & which have been pronounced by the travelling public as second to none on this continent; they will be equipped with acme lamps & wired for electric lighting in the future. The Co. has been experimenting with three different electric light systems generated from the axle, but the management is not fully satisfied with either; one system, however, has run steadily between Montreal and Ottawa with very good success.

### RAILWAY APPOINTMENTS, Etc.

**Canadian Pacific.**—F. P. Gutelius, heretofore Superintendent of the Columbia & Western Ry., from West Robson to Trail & Rossland, has been appointed Resident Engineer of all the C.P.R. lines in the Kootenay & Boundary Creek districts, with headquarters at Nelson.

D. O. Lewis, Roadmaster of the Columbia & Kootenay branch, has also been appointed Roadmaster of the Nakusp & Slocan branch. The announcement made last month, that he had been appointed Division Engineer of the lines in the Kootenay district, was incorrect.

H. L. Johnson, heretofore Roadmaster of the Nakusp & Slocan branches, has been appointed Roadmaster of the Columbia & Western Ry., from West Robson to Midway.

W. W. Colpitts, Chief Clerk in the President's office, has been transferred to the office of the Chief Engineer of Construction at Winnipeg. H. E. Beasley, heretofore Superintendent of the Kootenay lines at Nelson, B.C., succeeding him at Montreal.

**Grand Trunk.**—As foreshadowed in our last issue, G. B. Reeve has resigned his position as General Traffic Manager of the G.T.R. system, & of the Central Vermont Ry., to take effect April 30, & it is understood he will reside in California. A portrait of Mr. Reeve, accompanied by some biographical notes, appeared in our Jan. issue. No announcement as to the appointment of a successor has been made, & many are under the impression that the position will be abolished, & that the freight & passenger departments will be under distinct heads in future.

P. J. Lynch, heretofore Trainmaster of 6th & 7th districts at Belleville, Ont., has been appointed Trainmaster of 22nd, 23rd & 24th districts at Stratford, Ont.

J. A. McLardy, heretofore Despatcher at London, has been appointed Chief Despatcher of the Southern Division at St. Thomas, Ont., vice W. Armstrong assigned other duties.

### Mainly About People.

A. Gaboury, Manager of the Quebec & Levis Ferry, died Feb. 25.

Jas. McShane, formerly Mayor of Montreal & an active politician, has been appointed Harbor Master of Montreal.

Hugh Sutherland, of Mackenzie, Mann & Co., Toronto, sailed for England, Mar. 10, accompanied by Mrs. Sutherland.

Mrs. Ratcliff, wife of Jos. Ratcliff, of the C. P.R. Advertising Dept., & daughter of A. Devine, of the G.T.R., died in Montreal Mar. 4.

J. M. Copeland, formerly with the Great Northern Ry. (U.S.A.) has been appointed freight & passenger solicitor for the Chicago, Milwaukee & St. Paul, at Toronto.

Harry A. Norton, of Boston, is making an extended trip to Mexico & the Pacific Coast in the interest of the Norton ball-bearing jacks, & reports business unusually good.

A Monte Carlo pickpocket is said to have recently relieved Sir C. Rivers-Wilson, President of the G.T.R., of his pocketbook, containing \$1,200 in cash & some valuable papers.

C. R. Hosmer, of the C.P.R. directorate, has been elected a director of the War Eagle Consolidated Mining & Development Co. He is said to be the largest holder of the stock after Geo. Gooderham.

W. Seward Webb, of New York City, President of the St. Lawrence & Adirondack Ry., recently sent through T. Tait, Manager of the C.P.R. Eastern lines, a check for \$1,000 for the Canadian Patriotic Fund.

Capt. Frank McGlynn, who formerly sailed many of the vessels of the Norris & Neelon fleets, died at St. Catharines, Ont., Feb. 21. Death was caused by shock consequent on the explosion of a giant firecracker.

A. D. Baker, who fought during the Matabele war, & left the Chartered Co.'s service with the rank of sergeant-major, volunteered for service in South Africa, & has been appointed on Lord Roberts' bodyguard as sergeant-major. He is a son of Archer Baker, European Traffic Manager of the C.P.R.

Alex. Fraser, railway contractor, who died at Parkdale, Toronto, Feb. 25, of paralysis, was born in Banffshire, Scotland, in 1836, came to Canada about 1855 with his brothers, & took up the business of railway contracting, which he followed throughout life. He settled first in Arthur, Ont., where for some years he occupied the office of reeve. He left there about 16 years ago, & went to Parkdale, where he resided until his death. He was associated in business with G. P. Magann, of Toronto.

Vice-President J. M. Egan, of the Central of Georgia, formerly General Superintendent of the C.P.R. at Winnipeg, has lately issued his third pamphlet containing, "Facts for the Farmers" along the lines of his road. Of the first pamphlet 30,000 copies were printed. In this last issue Mr. Egan describes the work of agricultural experiment stations, especially in connection with fertilizers. He also discusses pure water & how to obtain it, & skimmed milk & what it may be used for.

Lauchlan Alex. Hamilton, Land Commissioner of the C.P.R., whose portrait is given on pg. 65 of this issue, is a son of the late W. B. Hamilton, & grandson of Capt. J. M. Ham-

ilton, late H.M.'s 5th Foot. He was born at Penetanguishene, Ont., Sep. 20, 1852, & was educated at Collingwood High School. He is a provincial land surveyor for Ontario, Manitoba & British Columbia, also a Dominion land surveyor. After occupying a position for several years in the office of the Surveyor General in the Department of the Interior at Ottawa, he was appointed Assistant Land Commissioner of the C.P.R., & on the retirement of the late J. H. McTavish from the Land Commissionership succeeded him in that position. While Assistant Land Commissioner he resided for several years at Vancouver, & was upon the incorporation of that city elected an alderman, & held the chairmanship of the Board of Works & By-Laws Committees in the Council. He was for several years President of the Winnipeg Rugby Football Club. He is a member of the Church of England, & has served as representative to the Provincial & General Synods. For several years he has been a director of the Winnipeg Industrial Exhibition, filling also at different times the offices of President & Vice-President, & also occupying the chairmanship of several of the committees. He is an enthusiastic lover of art, & of late years has travelled considerably on the European continent.

### Dominion Railway Legislation.

During the present session of the Dominion Parliament the following measures have been brought up:—

To incorporate the Alaska & North-western R.R. Co., to build a railway from Pyramid Harbor, at the head of Lynn Canal, or from the International boundary near the Lynn Canal, through the Chilkat Pass, thence by the Dalton trail to Fort Selkirk. Applicants, S. W. Jones & F. Ames, Boston, Mass; J. J. Gillies, Dawson; G. P. Magann, Toronto; G. Campbell, Philadelphia, Pa.; J. Mather & G. P. Brophy, Ottawa.

To incorporate the Alaska Yukon Ry. Co., to build a line from Pyramid Harbor, on the Lynn Canal, or from a point on the International boundary, near Chilkat Pass, to Dalton's House, & along the Dalton Trail to Fort Selkirk, thence to the 141st meridian at or near Fort Cudahy. Applicants, J. Dugdale, F. Pennington, & E. A. Wigan, of London, Eng.

To extend the time for the completion of the construction of the Atlantic & Lake Superior Ry., & to empower the Co. to supply light & motive power.

To declare the Arrowhead & Kootenay Ry. to be a work for the general advantage of Canada, & to extend the time for its completion & for other purposes. This bill was withdrawn after being referred to the standing committee on railways.

To incorporate E. T. Galt & others, of Lethbridge, Alta., as a railway & colonization company, to construct & operate a railway from between Lethbridge & Stirling, on the Alberta Ry. & Coal Co.'s line, to the International boundary.

To empower the Algoma Central Ry. Co. to change its route from that authorized by its act of incorporation.

To extend the time for the completion of the Bay of Quinte Ry., & to amend the acts relating to it.

To empower the Brandon & South-western Ry. to build the following lines in addition to those named in its act of incorporation:— From or near Brandon, Man., to or near Gladstone, thence to Carman, thence to Winnipeg, & also a line from Carman to the International boundary in range 5 or 6; also a line from township 6 or 7, range 4 or 5, to the International boundary in township 1, range 16 or 17, & also a line from township 5 or 6, range 12 or 13 to the International boundary line in township 1, range 11 or 12, to increase the capital stock to \$2,500,000, & to extend the

time for the commencement of the line to Nov. 1, 1903.

To extend until Dec. 31, 1904 the time by which the British Columbia Southern Ry. Co. must complete the section of its line between the western terminus of its central section on the lower Kootenay River & the Pacific coast, by the most convenient route to a favorable place for crossing the Fraser River to the city of New Westminster, thence to a suitable terminus on Burrard Inlet, including a branch line to Nelson, via Salmon River, & a branch line from a point on its main line, or the forks of Michel Creek, by way of Michel Creek to Martin Creek.

To change the name of the British Yukon Mining, Trading & Transportation Co. to the British Yukon Ry. Co., & to empower it to extend its railway from Fort Selkirk to Dawson City, thence to the 141st meridian, with branches from the main line at or near Cariboo Crossing to Teslin Lake or river, & to Atlin Lake or Atlin City, & with power to build other branches, not exceeding 50 miles in length, with the consent of the Governor in Council.

To incorporate the Buffalo Ry. Co., empowering it to carry on its undertakings in Canada, & to purchase the assets, business, etc., of the Niagara Falls Park & River Ry. Co., & of certain bridge companies, etc.

To extend the times for the commencement & completion of the Canada & Michigan Bridge & Tunnel Co.'s works for 5 & 7 years from the passing of this measure.

To revive the power of the Canada Southern Bridge Co., to construct & operate a railway bridge across the Detroit River from Amherstburg, Ont., towards the Island of Grosse Isle, Mich., the work to be completed within 10 years from the passing of this measure.

To authorize the C.P.R. Co. to construct, acquire & operate certain railway lines in Manitoba & the N.W.T. & to issue securities thereon. Full particulars of this measure were given in our issue of Nov. '99, pg. 325.

To incorporate the Comox & Cape Scott Ry. Co., to build & operate a railway from Comox district, Vancouver Island, through Sayward & Rupert districts to Cape Scott, or some other point near the north end of Vancouver Island. Applicants: J. Dunsmuir, R. M. Jeffrey, J. A. Lindsay, L. H. Solly & H. K. Prior, of Victoria, B.C.

To extend the times for the commencement & completion of the Cowichan Valley Ry., of which Senator Cox & others are provisional directors, to June 13, 1902 & June 13, 1905, respectively.

To authorize the increase of the capital stock of the Dominion Atlantic Ry. Co. & to confirm its stock issues, etc.

To incorporate J. Coates, of Ottawa, & others as a company to construct a railway or tramway from Fifty Mile or Lewes River to the mouth of the Takhina River, etc.

To incorporate W. J. Conroy, of Deschenes, Que., & others as a company to construct & operate a railway from the mouth of French River to Pembroke, Ont., thence to Portage du Fort, Que.

To incorporate the Gaspé Short Line Ry. Co. to build & operate a line from Gaspé Basin, Que., following the valley of the York River for about 30 miles, thence through the interior of the Gaspé Peninsula to the I.C.R. north of Causapsal, with branch lines to Paspebiac, or to any point on the Baie de Chaleur Ry. Applicants: Hon. S. Hanbury & H. Higgins, London, Eng.; L. K. Joncas, Quebec; C. B. K. Carpenter, Gaspé Basin; J. X. Lavoie, Perce.

To empower the Grand Valley Ry. Co. to acquire & operate ferry boats between Port Dover & points on the great lakes, etc., to construct & operate a railway from Goderich to Port Dover, with branches, & to change the name of the Company to the Port Dover, Brantford, Berlin & Goderich Ry. Co.

To extend the time for the completion of the Great Eastern Ry., & to empower the Co. to supply light & motive power.

To change the head office of the Hereford Ry. Co. to Sherbrooke, Que.

To extend the time for the completion of the Kaslo & Lardo-Duncan Ry. for 5 years from the passing of this measure.

To incorporate L. A. Manly & H. S. Cayley, of Grand Forks, B.C., & W. T. Smith, of Greenwood, as the Kettle River Valley Ry. Co., to construct & operate a railway from the International boundary line near Cascade, B.C., via the valley of Kettle River, to Carson, with branch lines.

To authorize the Kingston & Pembroke Ry. to extend its line from Renfrew, Ont., across the Ottawa River to Bryson Que., thence northward to the eastern branch of the river.

To incorporate J. Patterson, of Hamilton, & others, as the Lake Superior & Hudson's Bay Ry. Co.

To extend the time for the construction of extensions & branches of the Manitoba & Northwestern Ry.

To incorporate J. McKay, of Sault Ste. Marie, Ont., & others, as the Manitoulin & North Shore Ry. Co.

To authorize the Montford & Gatineau Colonization Ry. to extend its line from the Great

Northern Ry., near St. Canut, to the Union Jacques Cartier Ry.

To extend the time for the completion of the Montreal & Ottawa Ry. for 4 years from the passing of this measure.

To incorporate the Morris & Portage Ry. Co., to build a line from Morris, Man., to Portage la Prairie. Applicants: F. N. Bell, Morris; T. H. & C. Metcalf, Portage la Prairie; J. R. Grant, H. E. Sharpe & W. A. Cavanaugh, Winnipeg.

To extend the times for the commencement & completion of the works of the Niagara Grand Island Bridge Co. for 5 & 10 years from the passing of this measure.

To extend the time for the completion of a certain portion of the Ontario & Rainy River Ry.

To extend the time for the completion of the main line & branches of the Oshawa Ry. Co., & to amend the acts relating thereto.

To authorize the Pontiac Pacific Ry. Co. to construct & operate a railway from or near Quyon or Shawville to Pembroke, etc.

To incorporate the Portage du Fort & French River Ry. Co.

To incorporate A. Jarvis, of Toronto, & others, as the Port Arthur Ry. & Terminals Co., to acquire & operate the Port Arthur, Duluth & Western Ry., etc.

To incorporate F. Pennington, of London, Eng., & others, as a company to construct & operate a railway from Pyramid Harbor, near the head of Lynn Canal, northerly to Dalton's Post, thence to Fort Selkirk & Dawson.

To incorporate J. Dugal & others as the Quebec & Lake Huron Ry. Co.

To incorporate the Quebec & New Brunswick Ry., to build a line from Connor Station, N.B., on the St. Francis branch of the Temiscouata Ry., to the I.C.R. at or near St. Charles Jct., or to the Quebec Central Ry., at or near St. Anselme, or to the G.T.R. at or near Chaudiere Jct., a distance of about 130 miles. The applicants are Hon. J. Costigan, of Ottawa, & others.

An act respecting the Quebec Bridge Co.

To incorporate the Quebec Southern Ry. Co.

To authorize the Restigouche & Western Ry. Co. to construct & maintain a railway bridge across the St. John River at a point between Grand Falls & Edmundston, N.B.

To extend the times for the commencement & completion of the works of the River St. Clair Ry. Bridge & tunnel Co., for 5 & 10 years from the passing of this measure, & to restore the power conferred on it by its act of incorporation as to the bridging or tunneling of the St. Clair River, from Moore Township, Ont., towards St. Clair, Mich.



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To incorporate the St. Mary's River Ry. & Colonization Co.

To empower the Schomberg & Aurora Ry. Co. to extend its line westward from Schomberg, Ont., to Shelburne, thence to Durham, also eastward from its present eastern terminus to Oshawa.

To amend the acts relating to the Thousand Islands Ry. Co.

To authorize the United Counties Ry. to build & operate a railway from some point on its line to the St. Lawrence River at or near Valleyfield, Que.

To extend the time for the commencement & completion of the works of the Western Alberta Ry. Co. Elias Rogers, Toronto, is one of the promoters.

## RAILWAY PROJECTS, ETC.

**Alaska.**—A U.S. military route into Alaska has been reported on by Capt. Abercrombie, U. S. A. It would connect Port Valdez, Alaska, & Port Egbert, on the Yukon River. Starting from Valdez, the exploring party passed up the valley of Lower River with a nominal grade, & through Keystone Canyon, with ordinary work, & emerged on the foot-plain of the inner canyon basin. From the latter point they found two feasible routes, one east of Marshall Pass, crossing at an elevation of 1,700 ft., & then going down the Tasnuna to the Copper River Valley. The other route turns north, crosses the mountain at Thompson Pass, with an elevation of 2,600 ft. & thence down the Teikell River Valley, through the swampy pass at the head of the Knata, & then down the Tonsina to the Copper River Valley. Valdez is 1,250 miles from Seattle, but there is an unimpeded outside passage between these points, which practically offsets the double insurance rates on the 1,050-mile inside passage to Skagway. The direct line from Valdez to Port Egbert is 310 miles, & the railway would probably be 350 miles long. The estimate is \$753,500 for a 3 ft. gauge road, at \$22,531 a mile.

**Algoma & Manitoulin Ry.**—Application is being made to the Ontario Legislature to incorporate a company under this name to build a line from Little Current, Manitoulin district, to the south-east shore of James Bay, & from a point in Drury Township easterly to Sudbury, & from Little Current to the south shore of Manitoulin Island, & from Tobermory to the town of Meaford, passing through or near Wiarton & Owen Sound, with power to construct branch lines not exceeding 12 miles in length, & with other powers. Hearst & McKay, solicitors; Sault Ste. Marie.

**The Atlantic & Lake Superior Ry. Co.** is applying to the Dominion Parliament to extend the time for the completion of its line.

**Batchwanana Bay to James Bay.**—Application is being made to the Dominion Parliament to incorporate a Co. to build a railway from Batchwanana Bay, Lake Superior, to the C.P.R., thence to James Bay, near the mouth of Albany River.

**Bracebridge & Trading Lake Ry.**—Application is being made to the Ontario Legislature to incorporate a Co. under this name to build a railway from Bracebridge to Muskoka Lake, at or near Beaumaris, J. Boyer, Secretary, Bracebridge.

**Carson City to Phoenix, Etc.**—S. C. Biggs, solicitor, Toronto, gives notice of application to the Dominion Parliament to incorporate a company to build a railway from Carson City, B.C., where Kettle River intersects the International boundary line, northerly along Fourth of July Creek to the junction of its east & west forks, thence westerly to Phoenix mining camp, with branches from Carson City to the Columbia & Western Ry., & to the Central, Wellington, Skylark & Summit mining camps, & to Greenwood.

**Carleton & Miramichi Ry.**—J. E. Stewart, Andover, N.B., gives notice that application will be made to the N.B. Legislature to incorporate a company under this name, to build a Railway from Bristol station on the C. P.R., to Forrester, thence to the Canada Eastern Ry. at or near Cross Bridge station.

**Crow Lake Ry. & Development Co.**—The Combined Mining Co., controlled by Pennsylvania people, has  $\frac{1}{2}$  a mile of track in operation on its property on the Lake of the Woods, & under a measure now before the Ontario Legislature proposes to build a 3 miles extension from Whitefish Bay to Crow Lake. It is said this short piece of line will be of great convenience to the mining community in the Camp Bay region, & if it should be extended to Rat Portage, which is said to be the ultimate object of the Co., it should prove of great value to a number of mining properties along the route.

**Guelph to Goderich.**—The delegation appointed at the meeting held in Guelph Dec. 14, 1899, waited on Sir Wm. Van Horne & President Shaughnessy, of the C.P.R., in Montreal Mar. 1 to urge the extension of the Guelph Jct. Ry. from Guelph to Goderich. The proposed extension, which would be about 80 miles in length, would go through the counties of Wellington, Waterloo, Perth & Huron, three different routes, which are known as the southern, midland & northern, being spoken of. It is said that construction would not be difficult & that the grades would be easy except at the Goderich end. The only bridge of any importance would be one over the Grand River. The Goderich delegates made the following statement on their return home: "It was stated distinctly by Sir Wm. Van Horne & Mr. Shaughnessy that they fully recognized Guelph's claim, & it was now, & always had been, their intention to carry out the promises made when in a position to do so. They stated that at times circumstances arose that changed for the time being their arrangements; that it had cost an enormous amount to build roads in the West, which they were in a measure compelled to build to meet the requirements of the present & provide for future business. They had now practically completed their work in the West, & intended to wait the development of the country to recoup them in some measure for their outlay. They have not built any lines in Ontario since 1887, except the line from London to the Detroit River. They assured the deputation that it was their intention to extend this line in the near future. A proposition was made that if the C.P.R. was not in a position to build at once, the Guelph Jct. Ry. would build the line, provided the C.P.R. would agree to lease & operate it. Mr. Shaughnessy said the C.P.R. would seriously consider the proposition. Taking everything into consideration, the deputation are very well satisfied with the result of their interview." (Dec., '99, pg. 359.)

**Huntsville & Lake of Bays.**—C. Cadmus, who is said to represent Toronto & Hamilton people, is reported as endeavoring to organize the Huntsville & Lake of Bays Ry. Co., for the purpose of constructing a line over the portage between Lake of Bays & Peninsula Lake in Muskoka district. The cost of the line is estimated at \$20,000, but the capital of the Co. is placed at \$100,000 as it is proposed to engage in mining also.

**Kitimat Arm to Hazelton, &c.**—Probably the most serious effort to open up the northern portions of B.C. is contained in the application which has been made to the Dominion Parliament, to incorporate a company to construct a railway from Douglas Channel, Kitimat Arm. The proposed route is northward from that point to Copper River, Kitsalas Canyon & the Skeena River, to near Hazelton, in Cassiar, thence by way of the Babine River, Manion River or Creek & Parsnip

River, to Pine River Pass in Cariboo. An alternative route is by the Kitsalas Canyon, via Bulkeley River to Hazelton. Power is also asked to build lines from the nearest available point of the railway, in easterly & southerly directions, by way of Stuart lakes to a point near Fort George, thence along the valley of the Fraser River to Quesnelle, & also from near Fort George or Stuart lakes, by way of the south fork of the Fraser River to the Yellow Head Pass, with power to extend the railway to Kitimat Arm, along the northerly side of Douglas channel to Hartley Bay. The construction of a line of railway through those districts would completely alter the conditions in the North. It would open up a vast tract of country, a great part of which is practically inaccessible at present. According to reports there is a fine area of agricultural & grazing land in that direction, which could be put to profitable use with the help of a railway. But, of course, it is the mining industry chiefly that this line would be designed to benefit, & in that it would produce a wonderful change. Mining in the North is carried on under serious difficulties, mainly due to the lack of transportation facilities. With the discovery of important coal seams in Omineca, a factor of great importance has been introduced into the problem of opening up that country. It is, of course, much easier to maintain a railway through a region which yields coal than through one which yields none, & where all the fuel consumed has to be carried long distances. Then again the demand for coal in the mining districts will increase in direct ratio with the development of the mines, and the development of the mines cannot proceed satisfactorily without coal. It having been proved that coal is to be found in abundance in the North, (there is said to be \$2,000,000 worth of it in sight near the Skeena river) one of the best reasons for building a railway is provided. —Victoria Times. (Jan., pg. 16.)

**Lake Bennett to Chillcoot Pass.**—A bill was introduced at the recent abortive session of the B.C. Legislature to incorporate a company to build a railway from Lake Bennett to the summit of Chillcoot Pass. The Victoria Colonist says:—"The bill is only a part of a larger scheme. Its promoters are associated with some Tacoma people who have filed a memorandum of incorporation in the State of Washington for the construction of a line from Dyea to the summit of the Pass, & who are to ask the Dominion Parliament for power to build from the foot of Lake Bennett to a point below White Horse Rapids. The idea is to establish a combined land & water route from Dyea to the Yukon, substantially paralleling the Yukon & White Pass. Members of the Legislature ought to be satisfied that the whole scheme is a feasible one. Experienced railway men say it is not. They say that no competent engineer has ever pronounced upon the practicability of railway construction over the Chillcoot Pass. This Pass is higher than the White Pass, & the distance in which the elevation must be surmounted is shorter. An electric lift to hoist a train up some hundreds of feet & a tunnel with a  $10\frac{1}{2}\%$  grade are among the features, which are lightly talked of by the promoters of this new undertaking. The utilization of the water stretches will be possible only for the summer months." The Colonist opposes the granting of the charter especially on the ground that it would injure the White Pass & Yukon Railway in the money markets.

**Lindsay, Bobaÿgeon and Pontypool.**—A deputation, chiefly from the Lindsay district, waited on the Ontario Government, Feb. 13, in reference to this line, which it is proposed to build from Burketon, on the Montreal-Toronto line of the C.P.R., to Lindsay. The line has a Dominion subsidy of \$3,200 a mile & municipal bonuses agree-

gating about \$100,000. The cost of construction is estimated at \$600,000, and the Co. wants to issue bonds for about \$400,000, the interest on which it is desirous the Ontario Government should guarantee. (Jan., pg. 16.)

**The Manitoulin & North Shore Ry. Co.** is applying to the Ontario Legislature to empower it to build a railway from Little Current to James Bay, & from township of Drury on its line to Sudbury, also from Little Current to the south shore of Manitoulin Island, & from Tobermory to Meaford, passing through or near Warton & Owen Sound, also to change its head office to Sault Ste. Marie.

**Mineral Ry. Co.**—Application is being made to the Ontario Legislature to incorporate a company under this name to build a railway from Gros Cap harbor, on the north shore of Lake Superior, northerly to the C.P.R.

**The Montreal & Province Line Ry. Co.** is applying to the Dominion Parliament to extend the time limited for the construction, repair & operation of its railway for a further period of five years.

**The Montreal Bridge Co.** is applying to the Dominion Parliament to extend the time for the construction of its bridge & to authorize it to lease or purchase connecting lines.

**Morden to International Boundary.**—Aikins, Culver & Pitblado, solicitors, Winnipeg, gave notice of application to the Manitoba Legislature to incorporate a company to acquire and dispose of land & mining properties, to engage in mining & manufacturing, & to construct a railway from or near Morden to the International Boundary in ranges 3, 4 or 5 west of the first meridian.

**Nickel Belt Ry.**—Application is being made to the Ontario Legislature to incorporate a company under this name to build a railway from Dowling township, Nipissing district, at

or near Onaping station on the C.P.R. north-easterly through the townships of Dowling, Levack, Morgan, Bowell, Lumsden, Wisner, & Norman, thence southerly & southeasterly through the townships of Norman, Capreol, Garson, Blezard, & McKim, to the Stobie branch of the C.P.R.

**The Nipissing & James Bay Ry. Co.** is applying to the Dominion Parliament to extend the time for the completion of its line.

**North Lanark Ry.**—A deputation recently waited on the Ontario Government asking a bonus of \$3,000 a mile for 25 miles of this line to connect the Kingston & Pembroke Ry. with the C.P.R. & Canada Atlantic at Arnprior.

**The Ontario, Belmont & Northern Ry. Co.** gives notice of application to the Ontario Legislature to extend the time for the building of its railway.

**Ottawa to St. Lawrence River.**—Application is being made to the Dominion Parliament to incorporate a company to build a railway from Ottawa, through Gloucester & Osgoode townships to Metcalf, thence to Winchester, Winchester Springs, North Williamsburg, & Morrisburg, with a branch line from Winchester to Inkerman, South Mountain & Iroquois, & to extend branches through other portions of the counties of Carleton & Dundas.

**The Pacific & Atlantic Ry. Co.** is applying to the Ontario Legislature to revive its Act of incorporation, passed in 1886, & to extend the time for commencing & completing the railway. N. W. Rowell, solicitor, Toronto.

**Penetanguishene to Midland.**—The people of Penetanguishene, Ont., want to persuade the G.T.R. to build a line between that town & Midland, following the shore of the Peninsula, a distance of about 8 miles, though the distance in a straight line between the two

places is but 3 miles. The Midland people, however, want the G.T.R. to build a line between there & Perkenfield, on the Penetanguishene branch, about 6 miles south of Penetanguishene, so as to give a direct line to Toronto for their lumber trade, as well as other traffic.

**Quebec & Lake Huron.**—J. M. Nicol, of 311 Hammond Bldg., Detroit, & others, are promoting a company under this name, & give the following information in regard to it:—"This line is to run from Quebec west about 440 miles, via Ancienne, Lorette, St. Bazille, St. Alban, St. Ubalde, St. Tite, Grandes Piles, St. Michel des Saints, Rapide de l'Original Rivières, Joseph & Mattawa to the mouth of French River on the Georgian Bay. The large basin formed by the mouth of French River has sufficient depth of water to accommodate vessels drawing 24 feet of water. Exploratory surveys only have been made. The intention of the promoters is to begin building as soon as they have obtained their incorporation on the 115 miles between the River Ottawa & the Georgian Bay. Building may be begun within a month after the engineers start location. The same is true of the section between Quebec & the River St. Maurice. On the section of 30 miles from St. Maurice westward, the work will be difficult in some places, but the intention is to make light grades & curves. When the Quebec bridge over the St. Lawrence is built, the line will connect with the Quebec Central & with the Boston & Maine system, & thus reach Portland & Boston. It is also proposed to furnish an eastern outlet for the Canadian Northern, now being built through Minnesota & Manitoba."

## C. P. R. LANDS.

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

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

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

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

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

### TERMS OF PAYMENT.

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

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

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

160 acres at \$3.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.

160 acres at \$3.50 per acre, 1st instalment \$83.90, and nine equal instalments of \$70.

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

160 acres at \$4.50 per acre, 1st instalment \$107.85, and nine equal instalments of \$90.

160 acres at \$5.00 per acre, 1st instalment \$119.85, and nine equal instalments of \$100.

160 acres at \$5.50 per acre, 1st instalment \$131.80, and nine equal instalments of \$110.

160 acres at \$6.00 per acre, 1st instalment \$143.80, and nine equal instalments of \$120.

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

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

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

Write for maps and full particulars.

**L. A. HAMILTON,** Land Commissioner,

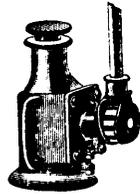
**F. T. GRIFFIN,** - Asst. Land Commissioner,

**WINNIPEG.**

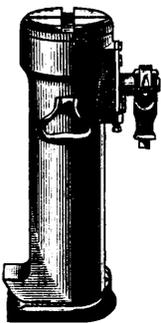
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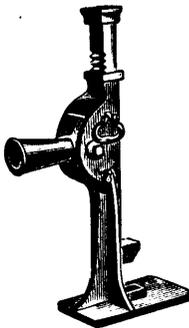
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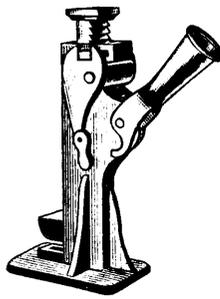
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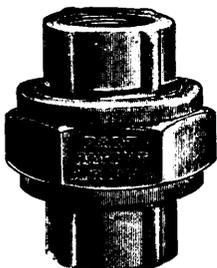
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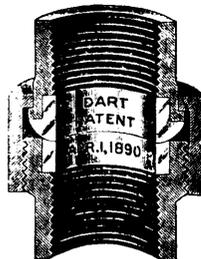
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SECTION OF G.T.R. STANDARD SURFACE SLAT CATTLE GUARD.

**The Red Deer Valley Ry. Co.** is applying to the Dominion Parliament to extend the time for the construction of its railway, & with power to extend the line easterly to the Saskatchewan River.

**Sudbury & Nipissing Ry.**—Notice is given of application to the Ontario Legislature to extend the time for the commencement & completion of this line.

**Thunder Bay District.**—Application is being made to the Ontario Legislature to incorporate a company to build & operate a railway from Rossport, on the C.P.R., north of Lake Superior, to James Bay, south of Albany River, at or near its mouth, & with other powers.

**Toronto & Collingwood.**—W. M. Clark, solicitor, Toronto, gives notice of application to the Dominion Parliament to incorporate a company to build a railway from Toronto to Collingwood.

**Toronto-Georgian Bay Short Line Ry.**—Watson, Smoke & Smith, solicitors, Toronto, give notice of application to the Dominion Parliament to incorporate a company under this name to build a railway from Toronto to Georgian Bay.

**Vancouver Island & the Mainland.**—No progress has been made in the effort of the people of Victoria to secure improved communication with the mainland. Several schemes have been under consideration, one being a proposal that the city should subscribe for \$500,000 of stock in a company to acquire the Victoria & Sidney Ry., to extend it into the business part of Victoria, & to a convenient port north of Sidney, to establish & operate a ferry system between such extension on the Saanich Peninsula & the mainland of B.C. south of the Fraser River, & to build & operate a railway from such point on the mainland through Delta, Surrey, Langley, Matsqui, Sumas and Chilliwack. A by-law providing for the acceptance of these proposals was voted on by the ratepayers of Victoria on Feb.

28 & defeated by 630 to 221 votes. (Jan., pg. 17.)

**Victoria Mines Ry.**—Application is being made to the Ontario Legislature to incorporate a company under this name to build a railway in the districts of Algoma and Nipissing, from the northerly part of Denison township easterly and southerly to the C.P.R. about midway between Whitefish & Worthington stations, also from the township of Garson through that township and Blezard township to the Stobie branch of the C.P.R. McPherson, Clark, Campbell & Jarvis, solicitors, Toronto.

**Wabigoon, Manitou & Rainy Lake Ry.**—Application is being made to the Ontario Legislature to incorporate a company under this name to build a railway from the south eastern end of Minnitakie Lake or Mine Centre, & from the C.P.R. between Dryden & Tache station southerly (east of Manitou Lake), to the Ontario & Rainy River Ry. between Fort Francis & Sturgeon Falls.

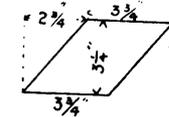
**Western Alberta.**—Application is being made to the Dominion Parliament to incorporate a company to build and operate a railway westward from some point on the Alberta Ry. & Coal Co.'s line between Lethbridge and the International boundary. It is expected that the line will start from Stirling, 19 miles from Lethbridge, so as to serve the Mormon settlements between there & Cardston. E. T. Galt, President of the Alberta Ry. & Coal Co., is the principal applicant.

A number of other projects which are already before the Dominion Parliament are referred to under the head of "Dominion Railway Legislation" on page 75.

The Baltimore & Ohio Ry. is to use electrical locomotives on a 17-mile grade up the Allegheny Mountains. They will assist the ordinary locomotives in pulling the heavy freight trains up the steep grade.

**Cattle Guards on the G.I.R.**

The standard surface slat cattle guard in use on the G.T.R. was briefly described in our last issue. A section and plan are given on this page. The material required for a single track guard is as follows:



4 oak sills 5' 0" x 6" x 1 1/2"; 2 oak sills 4' 6" x 6" x 1 1/2"; 32 oak slats 8' 0" at bottom edge and 7' 4" at top edge x 4 1/2" x 1 1/4" dressed; 64 blocks as per small plan given herewith. The slats are set on edge on the sills & kept in position by the blocks.

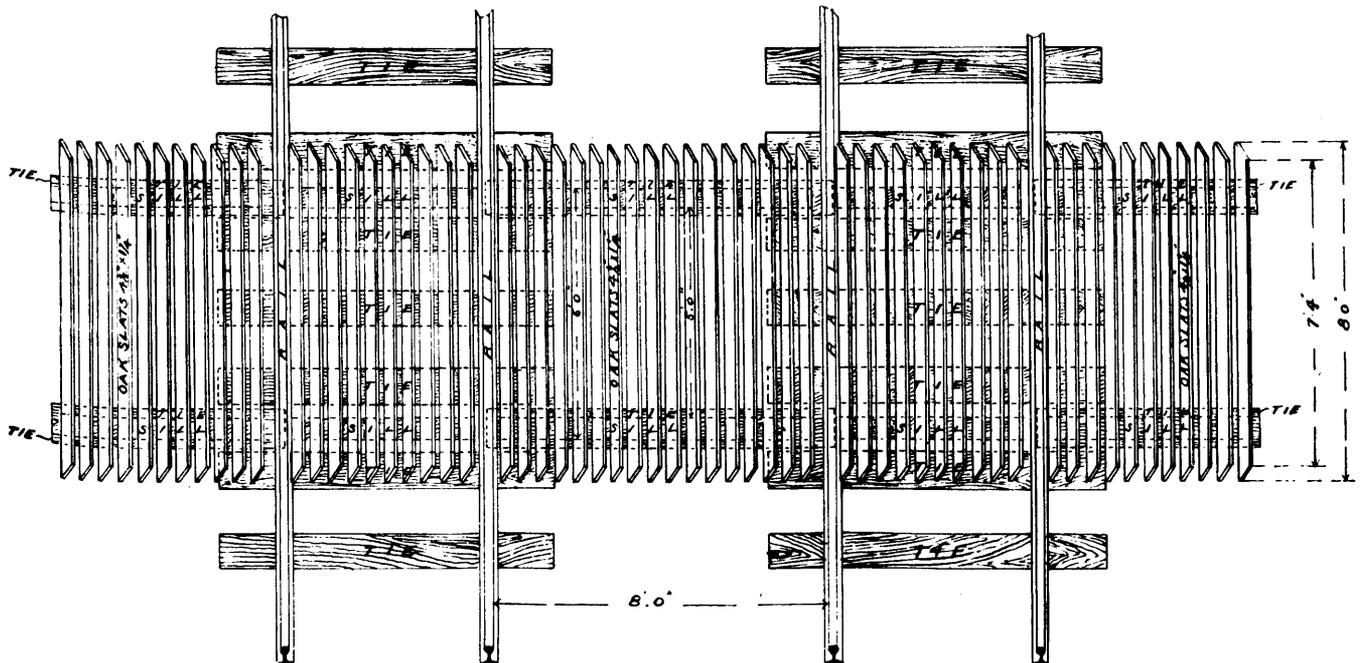
**Mr. Reeve's Retirement.**

G. B. Reeve, the General Traffic Manager of the G.T.R., will leave the service of the Co. on the last day of April next, & upon the evening of the following day he will enter upon a new life which he has been planning for the last twenty years. It will be spent amid orange groves & grape fruit, in a temperature which will be equable the year round, & in an environment which will realize an ideal he has long cherished.

"How does it feel for an active man to be out of harness?" Mr. Reeve echoed the question which a reporter put to him.

"Well," said the able railway man with a smile, "I do not know as yet for an actuality, yet I can figure what it will feel like. Not a few of my friends have said, 'You are making the greatest mistake of your life in retiring from active service. You will go away for a year or two & you will collapse, for you will have no interests to sustain you, & you will sink into a wretched torpidity.'

"Well, but I have planned it differently," said Mr. Reeve, with quiet confidence. "I have been thinking it out for over 20 years, & now I am about to realize it. I want to



PLAN OF G.T.R. STANDARD SURFACE SLAT CATTLE GUARDS.

realize my ideals before I hand in my checks. I want to live comfortably & happy, not merely exist for the balance of my life. I first bought land in lower California, which I thought might come under the rule of the U. S. Disappointed in this, I bought some more land in Florida, but found the malaria a fatal objection. Finally, some 10 years ago, I bought property close to Los Angeles, at the foothills, & have been steadily improving it ever since. I have shipped oranges & grape fruit to New York; I have cultivated the English walnut with success, & I look forward to a life of activity when I reach my property. At present I have a superintendent who receives \$175 a month. I will take his place. I will rise at 6 in the morning, & will work till 6 in the evening. And I know all about planting and grafting. I was always fond of flowers & plants & fruit. I perhaps got this love from my father, who was a fancy farmer in England. That is to say, he cultivated & experimented with fancy seeds, which he sold to the trade, & I, in my boyhood, used to delight in grafting on to our wild roses, which bloomed in the hedges—the beautiful hedges which you only find in the Old Country—cultivated specimens which produced the happiest effects. Then, again, at school the boys got a plot of ground to cultivate, & there was a prize attached to taste & perfection of growth. I liked the work then, work which Mr. Brydges encouraged when he came to take hold of the G.T.R., by giving a prize to the country station agents for neat garden plots—a system which only lasted, I am sorry to say, some 3 years.

“But there will be no collapse, there will be congenial activity. And we shall have quite a society. The place is settled by many wealthy Americans—indeed, I will be the poorest among the lot—and there are over 100 Canadians whom I know. So that, while I give up one form of activity, I enter upon another. When I bought the property it was virgin soil. It is now productive as I tell you. I will have plenty to do to look after it. When I was living on Simpson St., I used to get up at 6 o'clock in the morning to work in my garden. I always liked that kind of work, & I have thought this kind of life out for a long time. I will remain in harness till 6 o'clock on the evening of the last day of April. And

on the evening of the following day I shall proceed to my new home.”

Mr. Reeve spoke in the highest terms of Mr. Hays & the men he had brought with him when he assumed the management of the G.T.R.

“My relations with the General Manager & all the other officials have been most cordial. I can say the same with regard to all the officials in my own department. Some of them have been 25 years with me. The younger men have also got on well, & everything has been agreeable in all our official relations. I leave of my own motion, feeling that at least I have not permitted the business of the department to fall behind.”—Montreal Witness.

#### Canadian Pacific Railway Land Sales.

	Acres.		Amount.	
	1900	1899	1900	1899
Jan. . . . .	31,486	14,718	\$ 100,857.85	\$ 46,411.35
Feb. . . . .	23,613	13,747	75,771.19	43,371.69
	55,099	28,465	\$176,629.04	\$89,783.04

#### Canadian Freight Association.

At a meeting of the Tariff Committee at Toronto Feb. 21 & 22, & at Montreal Mar. 8, minutes 2109 to 2183 were agreed to.

A meeting of the representatives of rail & lake & all-water lines was held at Montreal Mar. 7, the following being represented: Canadian Pacific, Grand Trunk, Intercolonial, Northern Pacific, Great Northern, Michigan Central, Canada Atlantic, Wabash, Lake Erie & Detroit River, Toronto, Hamilton & Buffalo, Niagara, St. Catharines & Toronto Railways, the Northwest Transportation Co., Richelieu & Ontario Nav. Co., Northern Nav. Co., Str. Alexandria, Merchants Line.

Representatives of the Merchants Line reported the following as its proposed fleet for season of 1900: Persia, Ocean, Arabian, Iona, Cuba, Lake Michigan, Melbourne.

The R. & O. Nav. Co. reported the Toronto, Bohemian, Corsican, Spartan, Algerian, Hamilton.

Mr. Smith reported steamer or steamers of the Canada Atlantic Transit Co., or in connection therewith, to & from Depot Harbor.

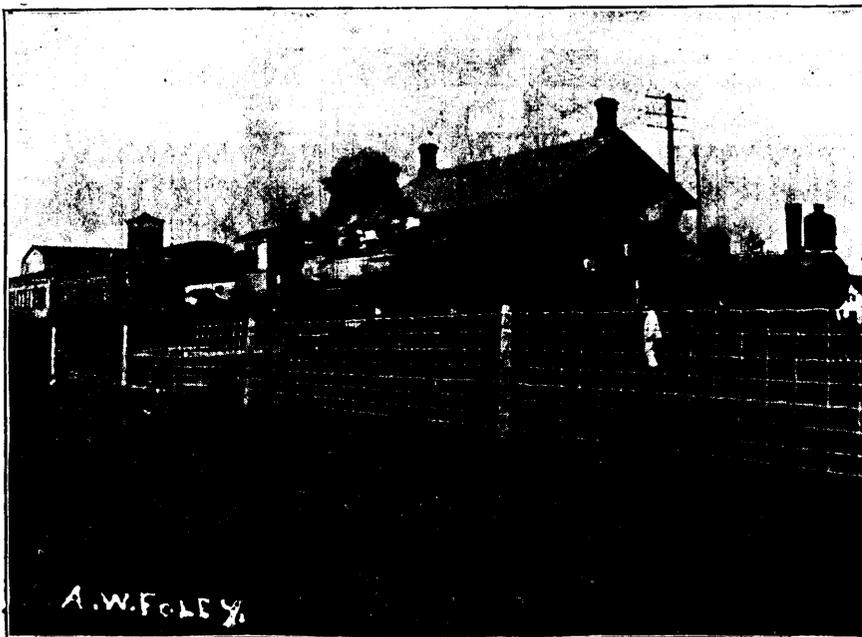
The Northern Navigation Co. reported the City of Collingwood & Majestic to sail between Collingwood, Sault Ste. Marie, Fort William, Port Arthur & Duluth; also steamers between Collingwood, Owen Sound, Sault Ste. Marie & intermediate ports; also to Parry Sound, Byng Inlet & French River.

Mr. Woolson reported the str. Alexandria on the St. Lawrence River & Bay of Quinte ports route.

Arrangements for the coming season's traffic were entered into.

**Northwest Elevators.**—The report of the commission appointed to investigate the elevator & warehouse question in the Northwest has been presented to the Dominion Government. It deals with the question of terminal elevators, weighing grain in & out of such elevators, appointments of public weighmasters, & in fact, the entire subject of handling grain in terminal elevators. It recommends the inspection of elevators & warehouses, for the protection of the producers & shippers of grain. The question of flat warehouses is also dealt with, & it is recommended that practically a complete freedom in the construction of flat warehouses be accorded. The Minister of the Interior has prepared a bill in accordance with the report of the Commission, which will be introduced in the Commons by the Minister of Inland Revenue.

E. M. Wood has been appointed Chief Clerk & Accountant of the Dept. of the Railway Commissioner for Manitoba, vice W. W. Cory, resigned.



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#### LOCOMOTIVE WORKS FOR SALE.

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Those who may be interested in the purchase as a going concern, or otherwise, of these Works, are invited to communicate with the undersigned, who are now carrying on the business—having orders booked for six months ahead.

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K. W. Blackwell, }  
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## CURRENT TOPICS.

**Standard Train Rules.**

The work of securing uniformity of operating rules is proceeding very satisfactorily. Following the G.T.R., the Canada Atlantic put in effect on Feb. 25 the standard code, slightly modified to suit the conditions of the line. The C.P.R., whose present rules are very near the standard code, is preparing to adopt it at an early date. Mr. Whyte, Manager of the system west of Fort William, recently had a conference with his general superintendents, superintendents & chief despatchers at Calgary, at which the proposed changes were thoroughly considered, & at which Mr. Tait, Manager of the Co.'s eastern lines, who is a member of the Train Rules Committee of the American Ry. Association, was present, as it is intended when the changes occur to embrace the whole system. As to efficient regulations it has been well said that the standard code of train rules of the American Ry. Association is the result of years of experience of those best qualified to form such a code, & it is undoubtedly in the interests of all railways, their employes, & the public that practically one uniform system should be in force on all lines in Canada, as it already is on nearly the whole of the lines in the U.S. The question is one which should be promptly taken up by the managements of the Government railways, & of other lines which are operating under other rules, most of which may reasonably be put down as faulty & out of date.

**The Canada Life Assurance Co.**

The 53rd annual report of this Co., published on pg. 89, allays any fears which might have been entertained that the removal of the Co.'s head office to Toronto, or the change in management, would have an unfavorable effect on the business of the year. All along the line gains have been recorded. Especially is this noticeable in the new business written, which amounted to about \$8,000,000, & in the gain in business in force, nearly \$5,000,000. These are the greatest increases in the history of the Co., & bring the total amount in force well above \$80,000,000. The assets have during the year been increased by \$1,325,244.73, & now amount to \$21,364,062. As this is the quinquennial year when the profits of the Co. are usually divided, the appearance of the report was looked for with more than usual interest, especially in view of the recent amendment to the Dominion Insurance Act, which requires the companies to base their valuations on an assumption of an earning power of 1% lower than formerly, & consequently to increase the amount of their invested funds. Although a period of 14 years was allowed in which to effect the change, it appears that this was a concession to the weaker companies. The address of Senator Cox, which as an able & exhaustive exposition of the subject has probably never been equalled in the history of life insurance in this country, treats very fully of the effects of this legislation & the action taken by his Co. to meet it. Although the Co. could at once move to the 3½% basis & still have a substantial surplus, it was decided, on his recommendation, that \$500,000 be set aside with that end in view, & that in addition a substantial dividend to policy-holders be declared. The shareholders have voluntarily relinquished their quinquennial bonus on this occasion. The Co. will now be able to reach the higher standard within the present quinquennium, & through its large amount of invested funds maintain that reputation as a profitable Company, which has become a household word throughout Canada.

**Transportation Companies & Hotels.**

For some time past the C.P.R. Co. has been the largest hotel proprietor in the Dominion, & it is well understood that not only have these hotels proved a valuable assist-

ance to passenger travel, but that they have also paid well as commercial enterprises. The chain of hotels owned & operated by the Co., includes the charming Chateau Frontenac at Quebec, the Place Viger at Montreal; the beautifully situated Banff Springs Hotel, the chalets at Field, Glacier & North Bend, the Hotel Vancouver, & the Hotel Kaministiquia at Fort William, the latter being owned jointly by the C.P.R., & the Hudson's Bay Co.'s, & leased. All these hotels, which are supervised by Superintendent Sheffield, are, it is needless to say, excellently conducted, & on the same up-to-date lines as all other branches of the Co.'s service. The chain is now about to be added to by the erection of a large terminal hotel in Winnipeg. The Grand Trunk management appears to have an aversion to going into the hotel business, & as a consequence the Muskoka district, for the tourist trade of which the Co. has been putting forth tremendous efforts the past few years, is still very deficient of first-class accommodation, but the Co. is willing to assist private enterprise in a liberal way, & it is expected that at least one really good hotel, & perhaps more will be ready for next summer's business. The Canada Atlantic is working on the same lines, & is endeavoring to arrange for the erection of one or two good hotels in the Algonquin National Park, one of the most beautiful & healthy districts in America. We are informed that the Co. will give liberal encouragement to any outside corporation which may be formed for this purpose, & that leading officials will be willing to personally subscribe for stock. The Richelieu & Ontario Navigation Co.'s experience with its hotel at Tadousac has been so satisfactory that it is now building a large hotel at Murray Bay. The tendency undoubtedly is for transportation companies to extend their operations in the hotel line, either directly or by way of subsidies.

**Canadian Pacific Construction.**

In a recently issued construction supplement, the Railroad Gazette, of New York, gave a list of "railways building & proposed," in which, under the head of "Canadian Pacific," it included lines under construction, & branches, etc., which have been talked of, but in regard to which not even the first stages leading to construction have been reached. This list has been copied in a lot of papers in a way that gives the impression that the works are all in hand or to be started this year. To show the absurdity of this it may be mentioned that a line from Kleinburg, Ont., to Sudbury, & one from Guelph to Goderich, are included in the list, though the chances of either of them being constructed for some years to come are very remote. Shareholders of the C.P.R., seeing the large list of lines mentioned, might conclude that the Co. was about to enter on a wholesale scheme of building, which would certainly not improve its financial position. The only lines to be built by the Co. this year, so far as decided on, have been mentioned by us under the head of "C.P.R. Betterments, Construction, etc.," & as any additional work is decided on we shall promptly record it. It is not probable that there will be any mileage added to the Atlantic or to the Ontario & Quebec Divisions this year. On the Eastern Division, the short connecting line across the City of Ottawa may be gone on with. On the Western Division, the Bonnett Lake branch, about 22 miles, is to be completed. The West Selkirk branch may be extended to the west shore of Lake Winnipeg; the McGregor-Varcoe branch will have rails laid on the 28 miles graded last year, but no announcement has been made as to whether it will be continued to Varcoe; & the Pipestone extension is likely to be pushed on further through the Moose Mountain country on its way towards a connection with the main line near Regina or Moose Jaw. On the Pacific Division, a 15

miles section of the Crows Nest Pass line will be built between Procter's Creek & Five Mile Point; work will be continued on the Arrowhead & Kootenay Lake branch; the spur lines branching off from the West Robson-Midway line will be completed; a branch may be built in the Slocan district to reach Kaslo; & the Vancouver & Lulu Island line will be built. This is all the construction that can now be spoken of with any definiteness, but in the aggregate it embraces a considerable amount of work. After putting through such a heavy undertaking as the line from West Robson to Midway, the Company may reasonably be expected to proceed cautiously for a year or two. The programme of betterments, etc., detailed in our last issue calls for heavy expenditure & the Company will, as usual, be a very large purchaser of supplies this year, altogether outside its vast ordinary requirements for the maintenance & operation of its system. The magnitude of the Co.'s operations is shown by the figures given on pg. 71, by which it will be seen that \$4,726,607.38 were expended last year in surveys, construction & betterments. Adding to this the expenditure during the year on the West Robson-Midway extension, the figures for which are given separately, by it being a leased line, & which amounted to \$2,320,470.16, makes a total for the year of \$7,047,077.54.

**Demagogism in British Columbia.**

Jos. Martin, who was recently called on by the Lieutenant-Governor of British Columbia to form a Government, has made a statement of policy from which the following is extracted: "The Government intends to adopt the principle of Government ownership of railways, & to arrange for the construction of a railway first-class in every respect from the Coast to Kootenay, say to Midway, to run on the south side of the Fraser River, & through the Hope mountains. When constructed this railway will be operated by a commission, so as not to come under political influence. At present the C.P.R. controls the main part of the Kootenay territory. It will, of course, be obliged to provide satisfactory connections & joint rates. At present the C.P.R. policy is to divert this trade to Winnipeg & Montreal. We take no stock whatever in the suggestion that a road through the Hope mountains is not practicable. The Victoria & Vancouver railway bridge will be erected over the Fraser River at or near New Westminster, by means of which it is hoped that both the Great Northern & Northern Pacific railways may be induced to run their trains into Vancouver City."

It is evident that Martin is trying in British Columbia the same demagogic methods that he used in Manitoba some ten or twelve years ago, & which, though temporarily successful, ultimately resulted in his complete collapse in the latter Province & led him to seek new fields for the exercise of his peculiar talents. The people of the Coast cities are naturally anxious to secure more direct communication with the Boundary Creek district than at present exists, & the reference to a Government line from the Coast is merely a vote-catching device. If such a line is practical, at anything like reasonable cost, & if it presented a reasonable certainty of securing a paying traffic it is not likely that the C.P.R. would hesitate to build it, or failing that Company, that others would undertake the work as a business proposition. When Martin became Attorney-General of British Columbia last year, there was a contract in existence with MacKenzie, Mann & Co., for the building of this line, but he induced his colleagues to repudiate the arrangement. The idea of Martin appointing an independent commission is amusing to those who know his character & his methods. The Fraser River bridge is another vote-catching proposition.

The participation of Martin in public affairs

in British Columbia is a standing menace to the reasonable rights of capital invested in that Province, & we have no hesitation in saying that until the people there express clearly their want of confidence in him & their determination not to allow him to dominate Provincial politics, it will be unwise for anyone to invest a dollar in any enterprise which may be affected by legislation by the British Columbia Legislature, or by the executive acts of the Provincial Government. The present is undoubtedly a time when the better elements of both parties should unite to rescue the Province from the rule of a demagogue & a wrecker, who has no regard for private or public rights which may stand in his way & one of whose first official acts when he became Attorney-General of Manitoba was to force through the Legislature a measure cancelling contracts legally entered into by the preceding government, & taking away from the injured contractors the right of appeal to the courts to decide whether they were entitled to damages. The step from such legislation to repudiation of the public debt, or in fact anything of a similarly outrageous nature, is a very short one.

#### Suspension of Coasting Regulations.

When the vessel owners' deputation waited on the Dominion Government in Ottawa on Nov. 22 last in reference to the suspension of the coasting regulations between Fort William & Port Arthur & other ports in Canada, the Premier practically admitted that the order-in-council complained of had been passed under a misapprehension of facts, & promised that similar action would not be repeated, but that if anything was to be done along the same line it would be by way of amendment to the coasting laws, & he also said that an early announcement would be made as to the Government's intention on this point. But no announcement has been made, & as the matter is of vital importance to Canadian vessel owners, & as its continuance in a state of uncertainty is having a deterrent effect on ship building, the time seems to have arrived when an answer should be pressed for.

The order-in-council referred to was passed on the following recommendation:

"On a report dated Oct. 14, 1899, from the Minister of Finance, stating that the British & Canadian shipping on the lakes above Montreal appears to be insufficient at the present time for moving the grain cargoes to be transported from Fort William to Ontario lake ports, and thence by rail through Canada to tide water. That under the coasting laws, United States vessels are not at present permitted to engage in this traffic between two Canadian ports. That for want of available British & Canadian tonnage a large portion of this grain traffic is likely to be carried from Fort William to Buffalo, & thence by United States railways or vessels to the sea-board. That it is desirable to promote the movement of the said traffic along Canadian routes to the sea-board, & to assist the building up of Canadian shipping on the lakes by encourag-

ing the permanent movement of the grain traffic through Canadian channels. The Minister therefore recommends, pending an increase in the Lake Shipping now entitled to participate in the coasting trade, that vessels of the United States be permitted to carry cargoes between Fort William or Port Arthur, Ont., & any other port in Canada, either way, during the remainder of the present year (1899) on the same terms & conditions as are applicable to Canadian vessels, forbearing to institute suits for penalties or forfeitures on account of the nationality of such vessels while so employed. The committee submit the foregoing recommendation for Your Excellency's approval."

The deputation which waited on the Government clearly established that the preambles of the recommendation above quoted were not statements of fact, that there was not an insufficiency of Canadian shipping to carry the grain from Thunder Bay & that there was therefore no consequent danger of the diversion of the grain traffic to U.S. routes.

It was never contended for a moment that there was any scarcity of shipping to carry goods from Georgian Bay ports, etc., to Thunder Bay, yet the order-in-council threw in as an extra concession to U.S. vessels the privilege of carrying cargoes "either way," thus depriving the C.P.R. upper lake steamships, the Beatty line & other boats, of traffic to which they were legitimately entitled. But there is another phase of the question which is of even more serious importance. The Act respecting the Coasting Trade of Canada, passed in 1886, provides as follows:

"2. No goods or passengers shall be carried by water, from one port of Canada to another, except in British ships; and if any goods or passengers are so carried, as aforesaid, contrary to this Act, the master of the ship or vessel so carrying the same, shall incur a penalty of \$400, & any goods so carried shall be forfeited, as smuggled; & such ship or vessel may be detained by the collector of customs, at any port or place to which such goods or passengers are brought, until such penalty is paid, or security for the payment thereof given to his satisfaction, & until such goods are delivered up to him, to be dealt with as goods forfeited under the provisions of the Customs Act."

"5. The Governor-in-Council may, from time to time, declare that the foregoing provisions of this Act shall not apply to the ships or vessels of any foreign country in which British ships are admitted to the coasting trade of such country, & to carry goods & passengers from one port or place to another, in such country."

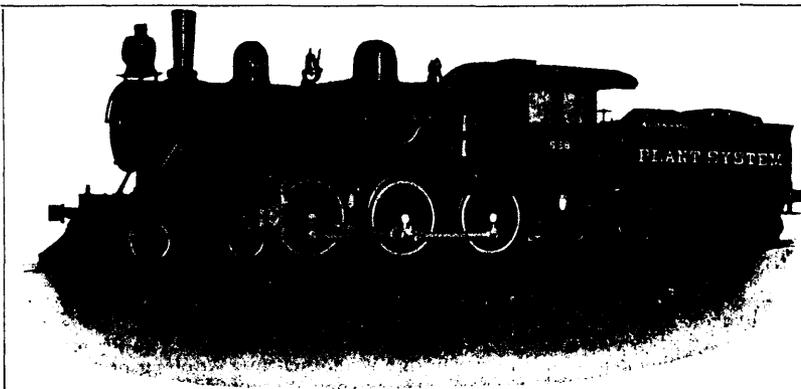
Section 5 above quoted provides that the Governor-in-Council may suspend the operations of section 2 as regards the ships of any foreign country which admits British ships to its coasting trade. The United States does not admit British ships to its coasting trade, consequently the Government had no authority to pass the order-in-council in question, &

it was undoubtedly ultra vires. Such absolute defiance of the statute law is too grave to receive merely a passing notice, & the seriousness of passing an order-in-council for which there is no legal authority, & on the contrary, against which there is a distinct parliamentary prohibition, should be so impressed that neither the present nor any succeeding government will attempt anything of the sort in future. It would be bad enough for vessel owners to suffer from the results of a legal act on the part of the Government, it is much worse when the act is unquestionably illegal, & certainly a most dangerous precedent has been created.

In this connection it is interesting to turn to the report of the Department of Marine & Fisheries for the past fiscal year, in which the following will be found under the head of "Coasting Trade of Canada":

"By the provisions of chap. 83, Consolidated Statutes of Canada, being an Act respecting the Coasting Trade of Canada, no goods or passengers can be carried by water from one port in Canada to another except in British ships, but the Governor-in-Council may, from time to time, declare that the Act shall not apply to ships or vessels of any foreign country in which British ships are admitted to the coasting trade of such country, & to carry goods & passengers from one port or place to another in such country. The Parliament of Canada was empowered to pass the Act alluded to under the provisions of the Imperial Act, 32 Vic., chap. 11, intitled: 'An Act for amending the Law relating to the Coasting Trade & Merchant Shipping in British Possessions,' which came into operation in this country on its proclamation by the Governor-General on Oct. 23, 1869. It was ascertained that the following countries, viz., Italy, Germany, the Netherlands, Sweden & Norway, Austro-Hungary, Denmark, Belgium, & the Argentine Republic, allowed British ships or vessels to participate in their coasting trade on the same footing as their own national vessels—the ships of Italy by order-in-council of Aug. 13, 1873; those of Germany by order-in-council of May 14, 1874; those of the Netherlands by order-in-council of Sept. 9, 1874; those of Sweden & Norway by order-in-council of Nov. 5, 1874; those of Austro-Hungary by order-in-council of June 1, 1874; those of Denmark by order-in-council of Jan. 25, 1877; those of Belgium by order-in-council of Sept. 30, 1879; & those of the Argentine Republic by order-in-council of May 18, 1881, were admitted to the coasting trade of Canada."

Yet in face of these facts, which must have been known to the Minister of Marine, & should have been known to every member of the Government, U.S. vessels were given a privilege from which the coasting laws expressly prohibit them, & in return for which Canada receives no reciprocal advantage whatever. The more the matter is looked into the more humiliating & indefensible does it appear.



## Richmond Locomotive and Machine Works,

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BUILDERS OF

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Adapted to every variety of service.

The effect of a possible repetition of the suspension was put very clearly at the recent banquet of the Collingwood Board of Trade by J. J. Long, who is largely interested in the Dry Dock & Steel Shipbuilding Co. there. He said: "I hope the Government will see that henceforth U.S. vessels shall be excluded from coasting privileges in Canadian waters, which privileges are absolutely refused Canadian vessels in U.S. waters. If this is not done there is no particular use for our shipyard. We only want fair play. If they will throw their ports open, we will throw ours open. But we will not give them privileges they refuse to us."

#### The Intercolonial Management.

It is said on pretty good authority that some months since a number of Liberal members of Parliament from Quebec & the Maritime Provinces, presented the Minister of Railways with a written demand for the removal of General Manager Pottinger & two other prominent officials of the I.C.R. Mr. Blair has stood off the spoilsmen so far, but it is now said that in view of the near approach of the general elections the demand is being renewed, & that it is being pressed so vigorously that the Minister may feel compelled to yield. It is even asserted that Mr. Pottinger's resignation has been tendered, to take effect May 1, & that he will be succeeded by Mr. Mitchell, who built the Drummond County Ry. It is to be hoped that Mr. Blair will not give in. If changes in the I.C.R. management should become necessary for business reasons, let them be made, but not because they are demanded by politicians who may be exasperated because they cannot use the officials for party purposes regardless of the interests of the railway. The wire-pulling in connection with the management of the Canadian Government railways is a subject well worthy the careful consideration of those who argue in favor of Government ownership. From its perpetration in connection with the general railway systems of Canada, the people may well pray to be long spared.

#### Coke for Locomotives.

In his last annual report, President Tuttle, of the Boston & Maine, says:—"The need of a more cleanly substitute for bituminous coal as fuel for passenger locomotives, & one that will minimise the present risk of fires from locomotive sparks thrown upon property adjacent to the roadway, has long been felt. To use anthracite coal has, until recently, been the only alternative; but this, while much more expensive, is difficult to use under ordinary conditions, & is, on the whole, far from satisfactory. Within the past few months the New England Gas & Coke Co., whose works are near this company's tracks in Everett, commenced the production of coke of high grade, which was offered us in such quantities & upon such favorable terms that the experiment of its extensive use in passenger locomotives was at once undertaken. One hundred passenger & switching locomotives are now being regularly & exclusively fired with coke, & the results have been so satisfactory in every detail that its use is to be extended to a larger part of the passenger service as rapidly as the slight changes necessary thereto can be made. Experience has demonstrated that its cost will not exceed greatly, if at all, that of bituminous coal, while its general superiority in steam-producing qualities & its freedom from smoke, dust, cinders & sparks justify the belief that the extent of its introduction on other parts of the B. & M. system will be limited only by the quantity the manufacturers can supply."

The railway & express companies doing business in Buffalo are reported to have subscribed \$300,000 to the capital stock of the Pan-American Exposition.

#### Railway Operating Matters.

The Northern Pacific station agents are now required to wear uniform caps. The passenger conductors & brakemen now wear uniforms of blue cloth with gilt buttons.

The C.P.R. has voluntarily increased the wages of the machinists employed in its erecting shops at Toronto Jct. from 8 to 12%, according to the individual ability of the workmen.

The G.T.R. management has issued instructions, taking effect April 1, that section foremen on the Co.'s lines in Canada, & track laborers at present receiving \$1 per day, will receive an increase of 10c a day.

The G.T.R. has extended the run of some of the passenger conductors. Heretofore they ran from Montreal to Kingston & from Kingston to Toronto. Under the new regulations they run through between Montreal & Toronto without change.

A rumor that the G.T.R. contemplated transferring the round-house & car shops from Belleville & the round-house from Brockville to Gananoque, & making the latter the terminal point of the runs between Montreal & Toronto, is declared to be entirely unfounded.

The Moncton, N.B., Transcript, the Dominion Government organ there, recently announced that the Minister of Railways had authorized General Manager Pottinger, of the I.C.R., to advance track foremen's wages from \$1.60 to \$1.65 a day, & trackmen from \$1.15 to \$1.20 a day.

An order has been issued by the Southern Ry., applicable in South Carolina & Georgia, prohibiting the use of cigarettes by employees, & forbidding the employment in future of anyone who smokes cigarettes. The order applies to all departments, & it is stated that it will be extended to other divisions.

On the C.P.R. lines east of Fort William yellow has been adopted as the standard caution signal, & all the interlocking plants have been equipped with it. The Manager informs us that the color is giving satisfaction, & that the question of adopting green as the clear or proceed signal, instead of white, is being considered.

An order was recently issued by General Superintendent Leonard, of the Ontario & Quebec division of the C.P.R., notifying the engineers & firemen who run the large Mogul engines of an advance of wages, to engineers of 15%, & to firemen 20%. This action of the C.P.R. is purely voluntary, as the wage scale is fixed by an agreement, which does not expire until May 1, 1901.

The Erie Ry. Co. has inaugurated the position of a passenger trainmaster. "He will be expected to ride on the passenger trains on the Ohio division & keep a sharp eye on all the service, making sure that it is up to the standard. He will see that station agents have proper care for the comfort of the passengers, & also that the trains are not delayed by slow handling of baggage, & in general aim to give the public a better service."

Steel ties on the Mexican Southern Railway are said to have given great satisfaction, & they will be adopted by the entire line, 228 miles long. They have been used for 8 years on 141 miles of the line. They are of pressed steel, & are 5 ft. 5 ins. long, the track being 3 ft. gauge, and the weight of the rail 50 lbs. a yard. The tie is an inverted trough with flaring sides. The rail fastening consists of a U-bolt passing up through the tie from underneath the clips. Steel ties are not used on bridges or at switches, nor around shops & roundhouses. Before laying, the ties are coated heavily with tar to prevent oxidation.

#### Freight Traffic Matters.

The first C.P.R. car shipped direct from a point on that line in Kootenay to Spokane, Wash., arrived in the latter place at the end of Feb., laden with coal from the Crow's Nest coal mines. The car was started from Fernie, B.C., on the C.P.R. At South Junction, a little town at the lower end of Kootenay Lake, the car was transferred to the Kootenay Valley Ry., & forwarded to Bonner's Ferry. From Bonner's Ferry it was taken to Spokane over the Great Northern Ry.

In a recent issue we mentioned that the Alberta Railway & Coal Co. had established an agency at Nelson, B.C., & would ship coal there from Lethbridge over the Crow's Nest Pass Ry. We understand that the Co. sells considerable coal at Nelson & other points in B.C., at its usual prices, notwithstanding the competition it meets there, & the fact that the Crow's Nest Pass Coal Co.'s product has a much shorter haul. All through north-west Canada & in the western States the Lethbridge coal is very popular for domestic purposes, mainly owing to its cleanness & non-friability.

E. A. Smyth, President of the Pelzer Manufacturing Co., Pelzer, S.C., says in a recent letter to the press: "The Pelzer Co. is a large shipper of export cottons, & to-day we are shipping 5 carloads of sheetings & drills to China, & as usual with our transcontinental shipments, these goods are routed by the buyers by the most direct line to Canada, then by the C.P.R. to Vancouver, & by its steamship line to China. It is perhaps not altogether strange, under all the circumstances, that while there are three railroad lines in the U.S. across the continent, & with steamship lines from San Francisco, the C.P.R. & its steamship line bag all this business. It is a fact, however, that from mills in South Carolina goods for China go first to Canada & thence across the continent."

The new commodity rates issued by the railway companies came into force Mar. 1. The schedules are those prepared for winter before the decision was taken in Nov. last to abolish these favours to manufacturers & distributors altogether. Though somewhat higher than those in force last winter, the rates are better for the shipper than the rates prevailing all winter. With regard to iron, at one point, to which the rate existing a year ago was 12c per 100 lbs. on less than carloads, & 10c per 100 lbs. on carloads, the new rate is 16c on less than carloads & 13c on carloads, against 19c & 15c respectively, under the rates issued in Nov. Here is an advance on the old rates of last year of 3c to 4c per 100 lbs., but a decrease of 2c to 3c compared with the Nov. rates. Other instances might be cited which show the same proportionate increases & decreases, while an instance here & there is met with where the rate is the same as a year ago. The new rates apply to the same particular iron commodities as enjoyed the special rates prior to Nov. last.

#### Passenger Traffic Matters.

The C.P.R. has reduced passenger fares on all its branches in Manitoba from 4c. to 3c. a mile, making them the same as on the main line there. It is expected that when the Manitoba & Northwestern Ry. is taken over by the C.P.R. a similar reduction will be made.

On Mar. 20, there went into force, as the result on the recent agreement between the trunk lines & transcontinental railways, a marked advance in 2nd-class passenger rates to the Pacific coast. The advance applies to both the G.T.R. & the Canadian Pacific. Up to Mar. 17, 2nd-class tickets from Montreal to Vancouver were \$47.50, now they are \$62.40.

The rates to all Pacific coast points have been advanced in the same proportion. The advance to intermediate points is not so great. For example, tickets for Nelson that cost \$45.50, are now issued at \$52.55.

Here is the position of the Grand Trunk with regard to its observance of the joint passenger agreement as enunciated by General Passenger Agent Davis in a communication to the C.P.R.:—"We will not pay any commission at all, except as a participation in the Trunk Line immigrant clearing house, under their rules, but not as a separate or independent payment, & except such commissions on steamship business westerly through what are known as St. Lawrence ports, including Portland, as may from time to time be understood & agreed between your company & ours, if you so desire."

### SHIPPING MATTERS.

#### The Muskoka Navigation Company.

This Co. is making the following additions & improvements to its fleet:—

A boat is being built specially adapted for side trip passenger business, dimensions 100 ft. in length & 17 ft. in breadth, to be of the composite type, with fore & aft compound condensing engines. The Polson Iron Works are supplying the steel frame, boiler & engine. The boat will be ready for the tourist business this year, & is intended to connect with the Medora, Nipissing & Kenozhia at Port Carling, taking passengers to Bala, Rosseau, etc., & back, while the larger boats are making the through daily trips north & south.

The str. Nipissing is having steel sponsors fitted to her sides to steady her, & also to enable her to carry the pilot house & texas upon the awning deck, thus making room on the promenade deck for a gentleman's cabin, where the Captain's room formerly stood. The awning deck is being both lengthened & widened, the railway around the promenade deck is being moved farther out, & will be enclosed by wire netting.

The str. Oriole's cabin work has undergone some changes & improvements, especially in the matter of windows, which have been greatly enlarged.

The str. Ahmic will be refitted, improved, & made more attractive for the use of private parties.

The other five boats, including the Wenonah & Wanita, on the Magnetawan route, are all receiving some minor improvements as well as being repainted & refitted generally.

Navigation will probably not open much before the end of April this year. Last year it opened on April 27. In 1898 it opened unusually early, about April 8, which was the second earliest opening on record, the earliest being on April 1, 1878.

The Co. has just issued an illustrated booklet about the Muskoka Lake region, which contains a number of half-tone views of its charming scenery.

**Red River Navigation Improvements.**—A contract for the masonry work of the lock & dam to be built at the foot of St. Andrew's Rapids, Red River, Man., has been awarded to T. Kelly, of Winnipeg. The work includes the construction of a concrete & granite stone-faced dam, with 7 concrete piers & 2 abutments, with all the excavating & cofferdamming connected with it; the building of a lift-lock, with excavation & refilling; excavation for upper and lower entrances, with embankments & slope protection; construction of guide & mooring piers of cribwork on each side of the channel, & some stone bank protection & levelling of ground. The movable portion of the dam, the steel service bridge, the lock gates & working apparatus will form a separate contract.

It is said that Mr. Petersen, who is already largely interested in coal traffic between Nova Scotia & Montreal by turret steamers, is contemplating the establishment of a line of whaleback or turret grain steamers from Fort William direct to Liverpool by the St. Lawrence route. Mr. Petersen visited Canada some time ago & went to the west with Wm. Mackenzie, of Mackenzie, Mann & Co.

It is said that President J. J. Hill, of the Great Northern Ry., U.S.A., has organized a corporation known as the Eastern Shipbuilding Co., for the purpose of building large steamers to be run in the trans-Pacific service, that the Co. has purchased an old shipyard on the Thames river, at New London, Conn., where whalers were built many years ago, & that it is expected that contracts for the steel plate for the new steamers will soon be let.

At the recent annual meeting of the Canadian Press Association President Dingman said: "I preach to you the duty of talking up our country. We might even brag of it. The press, by zealously utilizing opportunities to enlarge upon Canada's attractions, can infuse in our own population a strong sentiment on the subject, & through existing ties abroad help to entice a greater flow of visitors. To realize the utmost advantage from this source, however, we need the fast Atlantic service, & the statement may be hazarded that Canada would profit enough from the flow of tourist travel alone—& that is only one item of advantage—through our country by the aid of such a service, to more than pay for the subsidy. Further indications seem to be narrowing down to the C.P.R. as the one, if not the only, corporation adapted to execute such a project with the most credit to Canada, & with the maximum of satisfactory results. Why should not the press unite to urge this solution of the fast Atlantic problem?"

#### War Ships on the Great Lakes.

A report recently sent to the U.S. Congress by Secretary Hay, shows the position taken by the U.S. Executive on this matter, which is well worthy of careful consideration, not only by Canadian shipping interests, but by Canadians generally, so that public opinion on the question may be made known to the Dominion Government. Mr. Hay's report says:—

"An arrangement was reached between the governments of Great Britain & the U. S. on May 30, 1898, for the creation of a high joint commission, to which should be referred for settlement various pending questions be-

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sell through tickets to the Old Country, cheaper than if passengers bought railway tickets to New York or Montreal, and then re-booked.

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tween the U.S. & Canada, among which was a revision of the agreement of 1817 respecting naval vessels on the lakes. Instructions given to the American commissioners on the subject referred to respecting the view of the Government of the U.S., were that it was desirable to secure a declaration or recognition that it was not contrary to the true spirit & interest of the arrangement of 1817 to build vessels of war on the Great Lakes or in its ports, provided they were not to be used or maintained upon those lakes. It was held that the evident meaning of the arrangement, especially when received in the light of the correspondence leading up to it, was that only such named vessels as described should thenceforth be maintained in these waters.

"In 1817 the Great Lakes were independent inland waters. Lake Ontario was shut up by the rapids of the St. Lawrence River & Niagara; the lakes above Lake Erie were shut in by the rapids of the St. Clair River, & Lake Superior in turn was separated by the rapids of Sault Ste. Marie. There was no navigable connection between them & the ocean. Under such circumstances, to build & arm vessels on the lakes meant 'to maintain them there,' and to use them for no other purpose than as part of the permanent armament. The language of the treaty, therefore, was not improper at the time to convey the idea intended. Moreover, at the time of making the arrangement, the region of the Great Lakes was in a large measure an uninhabited wilderness. To-day the lakes are highways for enormous traffic & their ports are great centres of manufacture & industry, & afford to the U.S. facilities not dreamed of in 1817. These lakes have among other things peculiar advantages for the construction of certain classes of war vessels, & their facilities in this respect are capable of large extension & development, which in the future may be of inestimable value to the U.S. For these reasons the Government regards it as entirely consonant with the spirit of the arrangement of 1817, to use those naval facilities, & to do so upon a full understanding with Great Britain that its building of war vessels on the lakes is in no way hostile to the arrangement or intended to increase the permanent armament to be maintained there.

"The American members of the commission were therefore instructed to secure some arrangement whereby under proper conditions such vessels should be constructed & passed through the Canadian canals to the ports of the U.S. on the Atlantic Ocean. It was likewise held that a proper construction of the treaty did not prohibit the maintenance on the lakes of vessels properly equipped for the purpose of training seamen & reserves in the middle states, & that the employment of a proper training ship is not necessarily hostile to the spirit of the treaty, & should be so declared. It is understood that some satisfactory progress was made toward the attainment of these ends, but the labors of the commissioners have been suspended without reaching a definite result."

### The Connors Syndicate.

For the past two months a force of draughtsmen has been employed in Montreal upon the plans for the elevator to be erected on Windmill Point, Montreal, & it is expected that early in April the completed plans will be submitted to the Montreal Harbor Commissioners & to the Dominion Government for approval. J. L. Record, of the Barnett & Record Co., Minneapolis, acting as engineer, has designed the structure, & R. A. Waite, of Buffalo, is acting as consulting architect. The contract for construction has been given to J. Stewart & Co., of St. Louis, who have given out the first sub-contract for material,

2,300 hardwood piles to be delivered on Windmill Point between April 15 & the end of spring. It is understood the Syndicate will build a large elevator at Port Colborne for transshipment purposes, but when this will be gone on with, will doubtless depend on the rapidity with which the Dominion Dept. of Public Works proceeds with the Port Colborne harbor.

It is said that the Syndicate has acquired the charter of the Canadian Inland Transportation Co., which was obtained last session of the Dominion Parliament, by W. Christie, & J. K. Osborne, of Toronto; A. Lumsden & J. W. McRae, of Ottawa; & Senator Forget, of Montreal. The Co. is empowered to issue capital stock to the amount of \$2,000,000, & the charter gives very extensive powers, including the construction & operation of vessels between ports in Canada, & between Canadian ports & those of any other country, the carrying on of the businesses of elevating grain, of common carriers, of forwarders, wharfingers, warehousemen & ship-builders. The Co. has also power to operate wharves, docks, terminal harbors, etc., to carry on lightering & wrecking business, to construct tramways not exceeding 5 miles in length, & such telegraph & telephone lines as may be required for the purposes of the Co., & to acquire the lines or other companies having similar objects. Notice has been given that application will be made to Parliament this session to amend the act of incorporation by increasing the capital stock, by changing the head office of the Co., & by allowing the Co. to acquire stock in other companies, & for other purposes. It is said the capital will be increased to \$4,000,000.

C. I. de Sola, of Montreal, has left for England & the continent, his journey, it is said, being partly in connection with the building of several steel vessels for the Connors Syndicate.

### Maritime Provinces & Newfoundland.

The Yarmouth Steamship Co.'s str. Monticello has resumed her trips between St. John & Yarmouth.

The Magdalen Island Steamship Co. has been incorporated by Dominion letters patent with a capital of \$100,000, the incorporators being R. J. Leslie, of Halifax, & others.

At the annual meeting of the Yarmouth Steamship Co., Feb. 22, a dividend of 3% was declared. R. Caie, of Yarmouth, was elected President; D. MacPherson, Halifax, Vice-President & Manager; W. A. Chase, Sec.-Treas.

The Yarmouth Steamship Co. is applying to the Dominion Parliament to amend its act of incorporation by increasing the number of directors from 3 to 5, & by allowing the directors to appoint a manager instead of a managing director, also that the manager may or may not be a director or shareholder.

### Province of Quebec Shipping.

It is announced that the Department of Marine will place 32 additional buoys in the channel between Montreal & Quebec.

At a recent meeting of the Montreal Harbor Board the Mayor proposed the use of an ice boat to open up the river earlier in the season.

The Montreal Harbor Commissioners have authorized the expenditure of about \$550,000 in harbor improvements this year. At a meeting, Mar. 19, it was decided to go on with the work opposite Bonsecours market, & between the new high level pier already built & the Victoria pier; comprising the shore wharf, 750 ft. in length between the two piers; the flood protection wall between Jacques Cartier

Square & the ramp at Berri St., & the widening of Commissioners St. opposite Bonsecours Market. The estimated cost is \$120,000. At a previous meeting they authorized the completion of the part of the harbor enlargement works between the entrance of the Lachine Canal & the Custom House comprising the high level shore wharf, 1,000 ft. in length, between the entrance to the canal & the new pier nearest the canal; the pier itself of 1,000 ft. in length by 300 ft. in width; the continuation of the flood protection wall from the part already built to Port St., & the widening of Common St. between the harbor office & Port St. The estimated cost of carrying out these works from their present stage to completion is \$425,000.

### Ontario & the Great Lakes.

The name of the Dry Dock & Wrecking Co., Ltd., of Collingwood, has been changed to the Ship Building, Dry Dock & Wrecking Co., of Collingwood, Ltd.

Capt. Jas. Foote & Engineer Munro have gone to England for the purpose, it is said, of purchasing vessels to be used in carrying ore from the Algoma Central Ry.'s terminal at Michipocoton harbor.

The Northern Navigation Co.'s captains for this year will be Campbell, Bassett, Foote, Walton, Wilson, LaFrance, Jacques & Odonnell. Some of them may be changed from the steamers they commanded last year to others.

The Town Council & Board of Trade of Collingwood have approved of amended plans for the deep water channel, which provide for a channel 250 ft. wide, with a depth of 20 ft. at low water. It is said a sum for this work will be placed in the Dominion supplementary estimates.

A recent press despatch stated that Capt. Pierce, of Portsmouth, had completed a model of the old str. Geneva for the Rathbun Co., of Deseronto, & that that Co. would build a boat on her lines to ply on the upper part of the Bay of Quinte. We are informed that the Rathbun Co. contemplated doing this, but has abandoned the idea.

Tourists' rates on the Great Lakes are to be advanced. The advance does not affect rates on the regular traffic between ports where railway connections are important factors. But on round-trip & one-way tickets between Buffalo & Duluth, Detroit & Mackinaw, & Chicago & "the Soo" there has been an advance of \$1 & 50c. respectively.

At the annual meeting of the Rideau Navigation Co., at Kingston, Feb. 24, the following were elected:—President, J. Swift; Vice-President, Geo. F. Kidd, Ottawa; Sec.-Treas., J. F. Lesslie; Managing Director, Capt. D. Noonan; Directors, Capt. D. Noonan, H. W. Wilson & J. Swift. The directors discussed the question of building hotels at Rideau Lake & Jones' Falls, but nothing definite was decided upon.

Statements emanating from Owen Sound to the effect that some \$30,000 will be expended there this winter on the C.P.R. Upper Lake steamships are altogether inaccurate. The work in hand differs very little from what is done every winter. The Athabasca is getting a new smoke-stack, & the Alberta is having a few plates renewed in her main deck, & some alterations are being made in the steerage accommodation of the Manitoba.

The Dry Dock & Steel Ship Building Co., of Collingwood, has not yet appointed a manager, but it is probable that the position will be filled early in April. We are advised that the ship-building plant to be put in by the Co., will be the best that can be obtained, & strictly up-to-date. It is expected that the erection of the buildings will be commenced

during Mar., & that the plant will be in shape to commence work about June 1. The Co. has not definitely closed any contracts for building vessels, but has several in view.

Certain changes in the navigation rules of the St. Mary's River, suggested by Capt. A. B. Davis, who is in charge of the U.S. revenue cutter patrol service on the river, were approved by the vessel owners, & have been promulgated by the Secretary of War. The changes are not of a radical kind, but it would be well for all ship masters to secure from collectors of customs, or from Capt. A. B. Davis, who is located at Milwaukee during the winter, a copy of the latest government circular on the subject, which contains the rules in full as revised.—Marine Review.

Deputations from the town councils of Port Elgin, Kincardine & Southampton met at Stratford recently with reference to securing steamboat service. Goderich was not represented. It is understood they recommended the adoption of a plan for paying a subsidy by each town to some suitable boat, based on the population of the several towns interested, as follows:—Sarnia 7,000, Goderich 4,500, Kincardine 2,500, Port Elgin 1,600, & Southampton 1,600, the subsidy to be at the rate of 6c. per head of the population, to be paid only for round trips actually made & when the boat calls, the basis to be 16 trips during the season.

The C.P.R. Upper Lake steamers will be officered as follows this year:—SS. Manitoba, Capt., E. B. Anderson; 1st mate, A. McNabb; 2nd mate, J. Currie; chief engineer,

W. Lewis; 2nd engineer, J. Greig; purser, W. Bethune; steward, J. H. Brown. SS. Athabasca, Capt., George McDougall; 1st mate, M. McPhee; 2nd mate, T. Benwell; chief engineer, W. Lockerbie; 2nd engineer, J. W. Davey; purser, J. MacEdward; steward, Jas. M. Gardhouse. SS. Alberta, Capt., J. McAllister; 1st mate, L. Pyette; 2nd mate, Alex. Brown; chief engineer, Angus Cameron; 2nd engineer, Chas. Butterworth; purser, J. E. Laine; steward, J. C. Brown.

#### British Columbia Shipping.

The str. North Vancouver, which will run between Vancouver, North Vancouver & Moodyville, has been launched in Vancouver. She is 81 ft. over all, 20 ft. beam, displacement 81 tons. The engines will be compound, 200 h.p. She will be on the route about the end of March.

The Canadian Pacific Navigation Co. started its increased service on the Vancouver-Victoria run, Feb. 20, the passenger service being supplied by the str. Charmer, & the freight service by the str. Yosemite. The passenger steamer leaves Victoria at 7 a.m., & leaves Vancouver at 1 p.m.

Several changes have been made on the C.P.R. Co.'s steamers. Capt. Sears, late of the str. Princess Louise, has been appointed to the str. Yosemite; Capt. P. J. Hickey, of the str. Transfer, has been transferred to the str. Princess Louise, on the Westminster-Victoria run, & C. Gardner, a river pilot, has succeeded Capt. Hickey on the str. Transfer on the Westminster-Steveston run.

#### Yukon and Northern Navigation.

In connection with the owners & operators of the White Pass & Yukon route & the upper Yukon transportation service of the Canadian Development Co., the Canadian Pacific Navigation Co. has issued a circular, whereby the reduced traffic rates for through business to the North are brought into force. The tariff affects a general reduction of rates over those of last year, ranging from 40 to 60%, & with an elimination of the old system of weight & measurement ship's option, the rates now quoted being absolutely fixed on a weight basis with a liberal allowance for displacement. If goods are carefully packed & prepared for transit there seems to be no reason why all classes of general merchandise should not secure the flat-weight rate.

The tariff itself is as follows: "Shipments of 5 tons or under: Through rate, \$145 a ton, weight—provided the total measurement of each shipment does not exceed an allowance of 55 cu. ft. to each 2,000 lbs. weight, all excess measurement over such allowance to be charged for in addition to the through rate at \$1 a cu. ft. Shipments of over 5 tons: Through rate, \$125 a ton weight—provided the total measurement of each shipment does not exceed an allowance of 55 cu. ft. to each 2,000 lbs. weight, all excess measurement over such allowance to be charged for in addition to the through rate, at \$1 a cu. ft. Cattle & horses, in lots of not less than 14, \$85 each. Shipments under this tariff will be carried subject to the conditions of the Co.'s regular bill of lading, & will also be subject to the following general conditions: Single articles of freight

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weighing over 2,000 lbs., or timbers over 35 ft. in length, will be carried only under special arrangement; powder & high explosives, calcium carbide, acids, gasoline & naphtha, will be carried only under special engagement; on all freight of a perishable nature charges must be prepaid in full; on & after Aug. 20, 1900, shipments will only be accepted at owners' risk of delivery during 1900, & the carriers must be fully released from all liability arising out of or occasioned by non-delivery during 1900."

Of the parties to the foregoing agreement, the C.P.N. Co. will this season operate on the northern route, the steamers Amur, Tees & Danube; the White Pass & Yukon route, bring into the agreement the Pacific & Arctic Ry. & Navigation Co., the B.C. Yukon Ry. Co. & the British Yukon M. T. & T. Co., operating the White Pass & Yukon Ry. between Skagway & White Horse Rapids; the Canadian Development Co. is to operate this year the six steamers Columbian, Canadian, Victorian, Australian, Bailey & Anglian.

A Victoria despatch of Mar. 21 says:—A combine was to-day completed by the C.P.R. Co., the White Pass & Yukon Railway Co., & the John Irving Navigation Co., to control the Atlin transportation business during the present season. The through freight rate has been fixed at \$97 a ton on general merchandise, less than 5 ton lots, or \$87 for larger shipments, while the mining machinery rate is \$67, with a limit of measurement.

**Port Colborne Harbor Improvements.**

The works for improving the Port Colborne entrance of the Welland Canal, for which tenders were recently invited by the Dominion Department of Public Works, comprise the removal of the present side slopes & walls of the Port Colborne basin where directed, & the construction of docking formed by sinking crib work & building upon it a concrete wall with stone filling in rear of it. On the west side the docking will extend from the existing crib work near the supply weir to the Ferry crib, & on the east side from the existing crib work south of the new lock southwards, for a distance to be determined. Cleaning up also of the bottom of the basin & entrance for its entire length & width from the locks to the south end of the west pier, to a depth of 15 ft. near the locks to 16 ft. at the south end of the basin, when there is 14 ft. of water upon the south mitre sill of the new lock, & to a depth of 16 ft. of water at that stage of water from the south end of the basin to near the south end of the west pier, where the excavation will be taken to a greater depth. A strip of rock adjoining the west pier on its east side is to be removed so as to continue the line of the face of the west pier down to the level above stated for the bottom of the entrance at this point. From a line drawn across the entrance from the south end of the west pier to the fourth detached block outwards as far as directed, & in an easterly & westerly direction generally, the rock, or whatever the material may be, is to be removed to the extent necessary to afford a depth of 22 ft. of water when there is 14 ft. of water upon the south mitre sill of the new lock. The west pier is to be extended both southerly & westerly for about 600 ft. in each direction by sinking cribs & building upon them a concrete superstructure. W. G. Thompson, M. Inst. C.E., is the Superintending Engineer.

**Richelieu & Ontario Navigation Co.**

A. Nuller, of Winchenden, Mass., has been appointed Manager of the Manoir Richelieu, the hotel the Co. is building at Murray Bay. He was formerly in charge of the Algonquin Hotel, St. Andrews, N.B.

It is announced that the Co has given an order to build a sister steamer to the Toronto, for the Toronto-Prescott run, that she will be 14 ft. longer than the Toronto, will have 208 state rooms, will be ready by June 1, 1901, & will be called the Kingston.

The directors have appointed the following captains for the season of 1900:—The Quebec, L. O. Boucher; the Montreal, L. St. Louis; the Three Rivers, F. St. Louis; the Berthier, C. Gouin; the Laprairie, P. McLean; the Longueuil, T. Jodin; the Saguenay, C. Lapiere; the Canada, J. Dugal; the Carolina, G. Riverin; the Toronto, H. Esford; the Hamilton, A. J. Baker; the Corsican, J. McGrath; the Algerian, D. F. Mills; the Chambly, G. E. Paulet; the Hochelaga, H. Mandeville; the Sorel, A. Berthiaume; the Spartan, H. Grange; the Bohemian, A. Dunlop. The captains of the Terrebonne, Cultivateur, Caspian, Columbian, Riviere du Loup, & Island Queen will be appointed later.

**Steamer Signals for Great Lakes.**

At the annual meeting of the U.S. Board of Supervising Inspectors of Steam Vessels held in Washington recently, some changes were made in the code of signals between deck & engine room, on steamers of the great lakes. This code was last winter made the subject of extended correspondence between the Supervising Inspector-General & Pickands, Mather & Co., of Cleveland, who control a very large fleet of steam vessels on the lakes. The special point of interest in this correspondence was the so-called strong backing signal, which according to the code was 1 long whistle or 4 bells. But it was pointed out that this signal was ignored & that on nearly all vessels the 2-whistle signal was used when it was desired to back strong. As a result of this discussion the board has provided a new code of signals & here they are side by side with the old code:

**NEW CODE.**

- 1 whistle or 1 bell ..... Go ahead.
- 1 whistle or 1 bell ..... Stop.
- 2 whistles or 2 bells ..... Back.
- 4 whistles or 4 bells ..... Strong.
- 4 whistles or 4 bells ..... All right.
- Two whistles or two bells shall always mean back, irrespective of other signals previously given.

**OLD CODE.**

- 1 whistle or bell ..... Go ahead.
- 1 whistle or bell ..... Stop.
- 2 whistles or bells ..... Back.
- 3 whistles or bells ..... Check.
- 1 long whistle or 4 bells ..... Strong.
- 1 long whistle or 4 bells ..... All right.
- Two whistles or two bells, when the engine is working ahead, will always be a signal to stop & back strong.

In regard to search lights it was resolved by the board that masters, mates & pilots of all vessels be required to exercise due caution in the use of same so as not to throw the rays of the light into the pilot house of passing steamers.

Manufacturers of boiler tubes will hereafter be required to furnish copies of reports of physical tests of every order for tubes to be used in marine boilers, to the boiler maker using the same, & a similar copy to the Supervising Inspector-General, to be filed in his office. No connection between the shell of the boiler & mud drum exceeding 6 ins. in diameter will hereafter be allowed.

Another new rule provides that each steam vessel applying for inspection on & after July 1, 1900, shall be fitted with a bilge pipe connecting by a suitably marked valve with the main bilge pump in the engine room, & each compartment of all steam vessels shall be fitted with a suitable sounding pipe. It is also provided that all double-ended ferry steamers & steamers similarly constructed shall have a

steam whistle both fore & aft of the smoke pipe; or if only one whistle is used, said whistle shall be placed on the side of the smoke pipe, so that the steam, when the whistle is blown, can be seen from either end of the steamer.

**Department of Marine Report.**

The annual report of the marine branch of the Department of Marine & Fisheries for the year ended June 30, 1899, has been issued. The total expenditure was \$1,020,259.08 against \$782,911.74 for the previous year. In the outside service of the branch 1,907 persons are employed. The expenditure for maintenance of lighthouse & coast service was \$472,751.93, construction \$64,705.63; total \$537,457.56.

The extended coast line of Canada, & numerous bays, inlets, rivers, lakes, harbors & other navigable waters require a large number of buoys, which are maintained at an average cost of \$55 a year. For the year ended June 30, 1899, the service cost \$78,176.93. It is said that the cost of this service is increased in years when new contracts are given for steel signal & other coast buoys. The Chief Engineer points out that the Department has been substituting steel coast buoys for wooden buoys, with favorable results. The districts now buoyed, in all parts of the Dominion, number over 300 & the buoys number over 3,000. A large number of whistling, bell & other iron buoys are maintained along the coasts of the several provinces by Dominion steamers, particularly Nova Scotia, New Brunswick & British Columbia. The cost of this maintenance by the steamers is not charged directly to the buoy service, but is included in the cost of maintenance of steamers which frequently perform the double duty of attending to lighthouses & the coast buoy service on the same trip. In addition to the buoys for marking dangers there are 11 gas buoys below Quebec & 1 spare buoy, also gas works & supply tanks, etc. Two gas buoys are maintained in Pelee Passage, Lake Erie, & 3 in Parry Sound, Ont. The contract for maintaining the buoys & beacons between Montreal & Quebec in the ship channel was cancelled in the spring of 1899. The steam barge Shamrock, which was built for the work by the late contractor, was purchased & officers were appointed who are immediately under instructions from the Department in carrying out the work of buoying the channel. The buoys were increased in number & various changes & improvements were made. Eighteen large steel conical top & ten 3-ft. iron can buoys were constructed & placed in position by the Shamrock. In addition, a number of heavy spar buoys were prepared & put in the ship channel at various points. Several new beacons were erected & old ones improved. Contracts were entered into for the following steel buoys during the year, viz.: 3 bell buoys, 2 whistling buoys, 2 conical buoys & seven can buoys for New Brunswick; 4 whistling buoys, 3 bell buoys, 5 conical buoys & 4 can buoys for Nova Scotia; 4 conical buoys for Quebec, & 6 conical buoys for British Columbia.

The following description is given of the new steamships built for the Department: The Minto is an iron steamer 225 ft. long, breadth, 32 ft. 6 ins., and depth 20 ft. 6 ins.; gross tonnage 1,089, net tonnage 371; indicated h.p. 2,900 and nominal h.p. 216. She is commanded by Capt. A. Finlayson & has a crew of 35 in all. She was built for the winter service between Prince Edward Island & the Mainland. The Stanley has been upon the route in winter since 1887, & a careful examination of her hull showed that it would not be prudent to depend entirely upon her to continue the winter service. Tenders were invited for a new steamer in Great Brit-

ain and the tender of Gourlay Brothers & Co., Dundee, was accepted. The Minto was built according to plans & specifications prepared by M. P. McElhinney, Nautical Adviser of the Department. She was launched July 12, 1899, equipped & made ready for sea on Sept. 13. The Captain, first officer & second engineer, together with 20 men were sent from Charlottetown to Dundee to bring her out. The crew was increased by a few men who signed articles in Dundee. The Minto left Dundee Sept. 14, 1899, & arrived in Charlottetown Sep. 25, having experienced a rough passage in which her good sea-going qualities were proved. The speed attained was 16 knots on her trial trip & 14 at sea. The engines are triple expansion, having cylinders 26, 41 & 65 ins. diameter; the stroke is 39 ins. The vessel has improved corrugated furnaces fitted with force draught which can be used as required. The stern has been specially designed for backing in the ice, with an ice cutter to protect the rudder stock, the rudder is of solid cast steel. The vessel is provided with water ballast tanks in the bottom & trimming tanks forward & aft, & equipped with a special engine & pump for this purpose. Experience has been gained by the service of the Stanley & in designing the new steamer improvements were kept in view. Instead of berths as in the Stanley, 8 state-rooms are provided, with 2 berths & a lounge in each. One specially large stateroom is fitted up with beds & other conveniences. The dining saloon is sufficiently spacious & neatly furnished, upholstered & well lighted with incandescent electric lamps. Part of the saloon is furnished specially for the comfort of ladies, & has the latest improvements in heating apparatus. The main objects, however, have

been to secure strength of hull & powerful engines.

The Brant is a new wooden steamer 100 ft. long over all, 19 ft. in breadth & 8 ft. depth; her tonnage is 141 gross & 57 net. The Brant is commanded by Capt. D. Makinnon, & has a crew of 12 all told. The steamer was built in Charlottetown for a supply steamer for the Prince Edward Island lighthouse service & other work. The hull was built under Lloyd's inspection to class 10 years & the vessel's bottom is sheathed with muntz metal. The engine is of the compound expansion surface condensing type; cylinders, high pressure 14 ins. & low pressure 28 ins., both having a stroke of 22 ins. The Brant was launched June 10, 1899, but was not completed at that period. The machinery, equipment & furnishings were placed on board, which enabled the steamer to enter upon the work of carrying lighthouse supplies during the season of 1899. The total cost is about \$19,000. She is fitted up with good accommodation for the officers & men, she is substantially built & is a very serviceable steamer. Her engines have worked well from her trial trip, giving a speed of 9½ knots per hour with a small consumption of coal.

The Shamrock is a steam barge 117 ft. long, 25 ft. in breadth & 9 ft. 7 ins. in depth; her gross tonnage is 237 & net tonnage 161. She has a crew of 12 all told, including U. P. Boucher, who is in charge of the steamer & directs her movements. The sailing captain is S. Savaugau. The Shamrock is used entirely in the buoy service in the ship canal between Montreal & Quebec. She was constructed specially for this service at Quebec, & was launched in 1898. She was purchased in the spring of 1899 for \$21,500, which included equipment & furnishings.

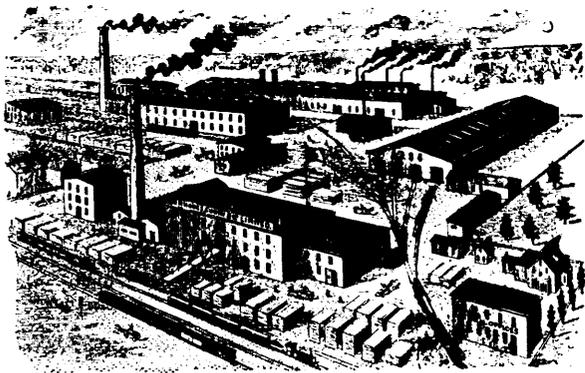
The cost of maintaining the Dominion steamers for the year was \$145,270.75.

The total number of casualties to British & Canadian sea-going vessels reported to the Department, as having occurred in Canadian waters & to Canadian sea-going vessels in waters other than those of Canada, during the year ended June 30, 1899, was 255, representing a tonnage of 88,820 tons register, & the amount of loss, both partial & total, to vessels & cargoes as far as ascertained, was \$542,890. The number of casualties to inland vessels was 15, tonnage 3,861, loss \$106,750. The number of lives reported lost in connection with the casualties was 53.

The number of steamboats reported in the Dominion is 1,427. Of these 112 are new, the gross tonnage being 236,257.93. Owing to the increase of tonnage of steamers, mainly caused by the Yukon trade, & the additional work of inspecting steamers without certificates, not registered in the Dominion, the work of inspection has been increased in most of the divisions. A new inspector of machinery, who is also inspector of hulls, was appointed in British Columbia.

Several attempts were made at Hazel Hill, N.S., where the pigeon loft is now situated, to train & fly some of the birds for use in the Sable Island service. The results were not satisfactory, as a number of pigeons were lost & others returned to the loft in a dying condition. This service will be discontinued.

By the provisions of the Consolidated Statutes, chap. 83, an Act respecting the Coasting Trade of Canada, no goods or passengers can be carried by water from one port in Canada to another except in British ships, but the Governor in Council may, from time to time, declare that the Act shall not



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J. R. Booth Elevator, Depot Harbor, Ontario	"	1,000,000	"
Cleveland Elevator Company's Elevator, Cleveland, O.	"	500,000	"
Erie R. R. Transfer & Clipping House, Chicago, Ill.	100 cars in 10 hrs.		
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Burlington Elevator Co., Peoria, Ill.	"	500,000	"
Canada Atlantic Railway Elevator, Coteau Landing, Que.	"	500,000	"
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apply to ships or vessels of any foreign country in which British ships are admitted to the coasting trade of such country, & to carry goods & passengers from one port or place to another in such country. The Parliament of Canada was empowered to pass the Act alluded to under the provisions of the Imperial Act, 32 Vic., chap. 11, intitled: "An Act for amending the Law relating to the Coasting Trade & Merchant Shipping in British Possessions," which came into operation in this country on its proclamation by the Governor General, Oct. 23, 1869. It was ascertained that the following countries, viz., Italy, Germany, the Netherlands, Sweden and Norway, Austro-Hungary, Denmark, Belgium, & the Argentine Republic, allowed British ships or vessels to participate in their coasting trade on the same footing as their own national vessels, & these countries were by order in council admitted to the coasting trade of Canada.

The hydrographic survey of the Canadian shores of the great lakes has made fair progress during the past season. Mr. Stewart, with his assistants & the str. Bayfield completed the survey of the south shore of Manitoulin Island, making connection with the work done by Capt. Boulton, R.N., in 1884, at the entrance to Georgian Bay. He then surveyed the north-east shore of Lake Huron between Cape Hurd & Loyal Island at the entrance to Stokes Bay. A fair sheet of the work done between False Detour Channel & Duck Islands, Lake Huron, was drafted last winter & forwarded to the Hydrographer of the Admiralty. No new engraved charts of the work done have been issued since my last report. The old Admiralty chart of Lake Erie has been revised and all our recent work engraved thereon. The U.S. Hydrographic Office has issued a very complete new chart of Lake Erie, embodying all our recent survey. During the coming season it is hoped to complete the survey of Lake Huron as far as necessary at present.

Mr. Stewart says in his report—"Stokes Bay is really the only safe harbour on the Canadian shore of Lake Huron from St. Clair River to Tobermory, a distance of 160 miles. It is quite large, the anchorage is both good & safe, and were the beacons replaced by lights it could be made by any ordinary vessel in any weather. I also placed buoys to mark the south end of the shoal off Duck Islands, Lake Huron; the south end of Bears Rump shoal, Georgian Bay; and the entrance to South Bay, Manitoulin Island.

### A Canada Atlantic Freighter.

The steel bulk cargo steamer mentioned in our last issue as under construction for the Canada Atlantic Ry., will be of the following dimensions:—Length, forward side of stem to after side of stern post, 245 ft. 6 ins.; length over all, 257 ft.; beam moulded, 43 ft.; depth moulded at side, 25 ft. 6 ins. She will be built with a complete steel upper deck, & with main deck beams fitted, but no deck laid except from the bow to 6 ft. past collision bulkhead, & from 2 ft. forward of fire hold bulkhead to extreme stern of vessel. A steel plated fore-castle deck will extend about 42 ft. aft of stern. A double bottom 4 ft. deep in centre of boat for water ballast will extend from collision bulkhead to engine room bulkhead on frame no. 93, to be divided by centre keelson & solid floors into 6 water tight compartments. The boiler & engine will be in the stern, the boiler on main deck with coal bunker on each side. The engine will be of the vertical triple expansion jet condensing type, with 3 cylinders working on 3 cranks, cylinders to be 17 ins., 28 ins., 46 ins. x 32 ins. stroke, to pass government inspection for a working pressure of 170 lbs. per sq. in., & for a speed of not over 100 revolutions a minute.

There will be 1 main boiler fitted with hot draft, boiler to be 13 ft. 6 ins. mean diameter, by 12 ft. over heads, to have two 50 ins. inside diameter furnaces, combustion chamber separate for each furnace. There will also be a small donkey boiler 5 ft. 6 ins. diameter by 6 ft. long, with 1 furnace. Both boilers to pass government inspection for 170 lbs. working pressure of steam.

The steamer will have 1 mast & 1 hoisting engine for shifting purposes. The captain's office & sleeping room will be on the fore-castle deck aft of pilot house, the cabin below fore-castle deck will have 2 spare rooms & toilet room, mates' & wheelmen's rooms, mates' locker & sitting room for mates & wheelmen. The deck house amidships will contain watchmen's, deck hands', firemen's & lamp room. Deck house aft of boiler house will contain dining room, kitchen, pantry, mess room, steward's, engineer's, & 2nd engineer's rooms, spare state room, toilet room and stairway to 'tween decks.

The hull will be built on the transverse system, with solid channel cross floors, with longitudinals to be run on top of floors supporting the inner bottom, the 2nd longitudinal being intercostalled to shell. The hull plating will be carried up to fore-castle rail forward & to main rail from abreast of boiler house aft. The hull will be of open hearth steel throughout, except the rudder frame, which will be hammered iron forging, & the stern post to be steel casting.

Steam steering gear will be placed in stern. The auxiliaries will include a duplex donkey pump 7½ ins. x 4½ ins. x 10 to feed boiler; a steel plate fan with 6 ins. x 6 ins. vertical engine to furnish air for the hot draft; 2 deck hoisting engines 6 ins. x 8 ins. There will be an electric light plant of 120 lights capacity.

The steamer, which will be called the Ottawa, is expected to be completed early in May.

### Notices to Mariners.

The Dominion Department of Marine has issued the following notices:—

No. 6. Feb. 6, Nova Scotia, sunken wreck in Halifax Harbor.

No. 7. Feb. 19, British Columbia, 1. Brocton Ledge beacon lighted; 2. Walker Rock light.

No. 8. Feb. 21, Nova Scotia, shoal in north entrance to Canso Harbor.

No. 9. Feb. 23, British Columbia, 1. Disappearance of Sturgeon Bank beacons; 2. State of Washington, signal station removed from Tatoosh Island to Neah Bay.

The U.S. Hydrographic Office has issued the following notices relating to the Great Lakes:—

No. 201. Mar. 3, Lake St. Clair, 20 ft. channel, lights damaged, caution.

No. 202. Mar. 3, Lake Ontario, St. Lawrence River, Tibbets Point light station, intended alteration in fog signal.

No. 257. Mar. 17, Lake Superior, Wisconsin, Portwing (Flag River), general information.

### Canadian Pacific Steamships.

Following is a list of the C.P.R. Co.'s steamships as at Dec. 31, 1899:

Ocean steamships—Empress of China, Empress of Japan, Empress of India, Athenian, Tartar.

Lake steamers—Alberta, Athabasca, Manitoba.

Ferry steamers—Ontario, Michigan.

River steamers—Ogilvie, Hamlin, McConnell, Schwatka, Dalton, Walsh, Dawson, Kootenay, Rossland, Lytton, Kokanee, Slo-can, Illicilwaet, Aberdeen, Trail, Nelson, Moyie, Minto, Wm. Hunter.

Tugs—Columbia, Sandon, Ymir.

### CANADA LIFE ASSURANCE CO.

#### Fifty-third Annual Report.

The applications for assurance during 1899 were 4,176 for \$8,662,924.83, of which 401, for \$695,298, were either declined or not carried out, leaving the actual issue of the year 3,775 policies for \$7,967,626.83. This is the largest amount of business ever transacted by the Company in its history of over half a century, & it is also a matter of satisfaction that the increase is due almost entirely to purely Canadian business, which exceeded that of any other Company doing business in the Dominion. The total business in force now amounts to \$80,229,688.25, under 37,100 policies, being an increase of almost \$5,000,000 over that of a year ago. This is the largest increase ever made by the Company in any one year. The total payments to policy-holders during the year (details of which will be found in the Financial Statement), were \$1,357,350.85, which is \$61,980.40 greater than for the previous year. A careful revaluation of the properties owned by or mortgaged to the Company has been made, not only by our own valuers, but also by independent valuers, & after making all reasonable provision against loss, the assets now stand at \$21,364,062.06, being an increase of \$1,325,244.73 over the amount as reported a year ago.

A valuation of the Company's policy liabilities has been made by the Actuary upon the Actuaries' Table of Mortality & interest at 4 per cent., this being the basis of valuation required by some of the States in which the Company does business. This valuation, which amounts to \$18,964,390.00, has been confirmed by certificate of the Commissioner of Insurance for Michigan. After providing for these & all other liabilities, there is a surplus of \$1,968,712.85, but last year it was decided, on the recommendation of the President, to set aside a special reserve of \$225,000 towards a 3½ per cent. standard. Since then the Dominion Government, recognizing the permanent fall in interest rates, has wisely amended the Insurance Act, so that all companies must now proceed to make provision for placing their policy liabilities upon a 3½ per cent. basis. Until the transition is effected it will be necessary for the companies to apply a considerable percentage of their surplus on old policies in this way. The Directors have, therefore, recommended that an additional sum of \$275,000 be set aside for this purpose, making in all a special reserve of \$500,000 in excess of the Actuaries' 4 per cent. basis. Deducting this amount from the above-mentioned surplus there remains a surplus over all liabilities of \$1,468,712.85. Of this amount it is proposed to credit to policy-holders \$1,381,132.05 as surplus to them, and to shareholders \$87,580.80, out of which dividends for the next five years may be paid.

The Directors, keeping in view the unusually large amounts of profits distributed to policy-holders in the past, & the fact that interest rates have so fallen as to make it imperative that the Canada Life should be placed upon an actuarial valuation basis relatively comparable with that of leading companies in the United States, Australia & Great Britain, have unanimously recommended that at this quinquennial division the permanent interests of the policy-holders would be conserved by declaring a Bonus Addition of ¼ of one per cent. per annum, and a slightly less amount upon life policies which have been paid up for a period of ten years. This decision has been arrived at only after the most careful investigation into, & deliberation upon, the many phases of this extremely important matter. It is believed that within the present quinquennial period this decision will be heartily approved by any who may not at present recognize its importance. Indeed

the opinions of two distinguished actuaries, who were independently consulted, would have supported an immediate adoption of the new Government basis of  $3\frac{1}{2}$  per cent. upon all business.

It is further recommended that the usual Quinquennial Bonus to Shareholders be dispensed with.

#### SYNOPSIS OF FINANCIAL STATEMENT.

Premium Income (net).....	\$2,199,262 21
Interest, Rents, etc.....	853,297 52
	\$3,052,559 73
Payments to Policy-holders.....	\$1,357,350 85
All other payments.....	475,666 28
	\$1,833,017 14
<b>ASSETS: January 1st, 1900.</b>	
Ledger Assets.....	\$20,365,202 36
Other Assets.....	997,859 70
<b>TOTAL ASSETS.....</b>	<b>\$21,363,062 06</b>
<b>LIABILITIES:</b>	
Assurance Reserve Fund—Actuaries' 4 per cent.....	\$18,964,390 00
Special Reserve towards $3\frac{1}{2}$ per cent. basis.....	500,000 00
All other liabilities.....	19,895,349 21
	\$1,468,712 85
<b>SURPLUS OVER ALL LIABILITIES.....</b>	<b>\$21,364,062 06</b>

At the annual meeting in Toronto, Feb. 28th, the President, Hon. George A. Cox, in moving the adoption of the report, said:—"It is a matter of satisfaction that the new business of the year just closed largely exceeds that of the best year in the Company's history. From every part of the Dominion came these evidences of approval & confidence. While this increased business was to a certain extent due to the fact that new premium rates were to go into effect at the beginning of the year in this & other companies, still the fact that the Canada Life received a much larger volume of new business in the Dominion than any other company is the best evidence of the wisdom of the departures just referred to.

I think it proper, however, to say that it is not my intention, nor of those responsible for the management of the Company to depart from the conservative principles by which it has been so long conducted. I believe in building on foundations that will stand the strain & stress of years. Whether in the securing of business or in making investments, I prefer to look at the matter as it is likely to appear ten, twenty, thirty years hence, & I am content to sacrifice transient success for absolute security, & the permanent welfare of those whose interests are

wrapped up in this institution. At the same time I think we should not be doing our duty if we did not seek to keep the Canada Life thoroughly abreast of the times, both in its agencies & at head office. "Conservative Progress" will, therefore, be our motto.

The most important matter dealt with in the report is the quinquennial investigation. That is always an eventful period, but especially so on this occasion, for the reason that the life companies are now brought face to face with a most serious practical problem, viz., the readjustment of their finances, due to the permanent fall that has taken place in the rate of interest. Many persons who are not familiar with life assurance finance do not realize the important place which interest holds in the foundations of a life company. Without its interest income a life company would soon become insolvent. It is not alone from the premiums, but from the interest as well, that claims must be met, & if interest is likely to fall below what has been assumed, then the security of a company's contracts is endangered. Moreover, the securing of a rate of interest larger than that assumed in a company's calculations is one of its main sources of profit. Hence it is of the highest importance that the margin of interest for profit should be maintained.

I will illustrate in two ways the effect of a fall in the rate of interest. Within a period of twelve years the rate of interest has fallen 2 per cent. Now, taking the assets of a company like the Canada Life at \$21,000,000, this means an annual shrinkage in its interest income of \$420,000, or in five years the accumulated loss would amount to almost \$2,300,000. This clearly demonstrates the effect of a fall in the rate of interest.

My second illustration shows what annual premium would be required to insure a man for \$1,000 at age 30 upon the Whole Life plan, supposing no interest were assumed as procurable. The gross annual premium would be \$32.75, whereas the rate which we now charge for a non-profit policy on that plan is only \$20.50, or \$12.25 per year less. The difference is accounted for by assuming the benefit from interest.

These illustrations prove the almost criminal negligence that would be involved in blissfully closing one's eyes to facts before us, & gently drifting either into ultimate insecurity, or into a condition devoid of earning power. Hence, in face of a rate of interest that has permanently fallen, & that will, in all probability, continue for some time to fall, the advocates of an immediate division of a nominal

surplus may defeat their own object & prejudice their own interest by impairing the stability of a company from which their children may obtain little because they themselves have already eaten the fruit. Therefore, it becomes at times the bounden duty of those charged with the administration of a great trust to maintain people's interests, even against their opinions.

Under the amended Insurance Act of last session, all the companies must now hold their reserves on new business upon a  $3\frac{1}{2}$  per cent. interest basis, & must further proceed to bring the reserves on all existing business to the same basis. As generous creditors sometimes do for respectable debtors, the Government has granted an extension of time in which any company, however weak, might easily meet its obligations under existing contracts. But a law which is framed to aid the weak should not be used to bind the strong.

In order to place before our directors just what was involved in passing to the higher standard, it was decided during last year to ask our Actuarial Department to make a detailed valuation of our \$37,000 policies upon the Hm.  $3\frac{1}{2}$  per cent. basis. In addition to this, two other full detailed valuations were made, viz., one upon the Actuaries' Table & interest at 4 per cent., & the other upon American Experience 4 per cent. Table. Never has such an exhaustive investigation of its policy liabilities been undertaken by the Company. But the results proved of great value & interest. While the Actuarial Department was busily engaged in measuring up the policy liabilities on different bases, the newly-appointed Treasurer was hard at work taking stock of our assets. When the two sides of our balance sheet came together, therefore, it was a matter of great satisfaction that the Company was found in possession of a substantial surplus over all liabilities, even upon the high standard of Hm.  $3\frac{1}{2}$  per cent.—the new Government basis.

In order to have the benefit of independent expert opinion as to how far the Company should now go towards meeting the new Government standard, it was decided to lay the whole situation before two distinguished Actuaries, one English & the other American. The gentlemen selected were H. W. Manly, F.I.A., London, England, the President of the Institute of Actuaries of Great Britain, & Mr. David Parks Fackler, Consulting Actuary of New York, ex-President of the Actuarial Society of America. Mr. Manly, who, by the way, holds the highest office in the gift of

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British actuaries, is so strongly convinced of the necessity & advantages of the adoption of the new 3½ per cent. basis, that he did not hesitate to recommend its immediate adoption. "After weighing," he says, "all the arguments in favor of or against either of the courses open, I am strongly of the opinion that it would be better for the Company & for the policy-holders generally to make the change at once even if you have to pass a bonus altogether." Mr. Manly's exhaustive report, as well as that of Mr. Fackler, will be printed for the benefit of our policy-holders.

Mr. Fackler's opinion would have supported a like conservative course, but he also looked favorably upon a proposal that was under consideration by the Directors, viz., the paying of a moderate bonus to policy-holders upon this occasion, & then during the present quinquennial period passing to the full 3½ per cent. standard.

MR. F. W. GATES, Vice-President, said:—I suppose no one anticipated that the fall would have been so continuous. I am free to say that if ten, fifteen or twenty years ago the Directors could have foreseen what remarkable reductions would occur in interest rates, they would undoubtedly have applied a portion of the profits at each quinquennial period toward strengthening the Company's reserves, & thus have enabled us to pass to a 3½ per cent. basis with less variation in our rate of bonus than must now arise. It may interest you to know that if we had at each quinquennial period, from 1870 to 1890, paid the same rate of bonus as in 1895—that is 2 per cent.—we would now have had more than enough accumulated surplus to have enabled us to pass to a 3½ per cent. standard, & still to pay a 2 per cent. bonus on this occasion.

MR. B. E. WALKER, General Manager Canadian Bank of Commerce, said:—This Company has been at the end of a long administration put through the crucible, a thing which to any company, bank, or other institution, whether it results in a disappointing statement or not, is of enormous value, because in that we have a supreme test, & that test has been responded to, & the Company has been able to stand it. That is a thing every agent, every policy-holder, every shareholder of the Company, everyone concerned in the Canada Life, might bear in mind, that after a long period of administration, largely by one man, whose administration we all respect, it has been put to the supreme test, & has answered to it splendidly. There is this point to remember in addition, that if it hadn't been necessary to make this adjustment of interest, we would have presented after the examination a statement practically not different from the statements of the past. The great thing in a company after all is to know whether we are really doing the right thing, the wisest thing. No bank, no insurance company, no mercantile company, & no business concern of any kind has ever yet suffered from doing the thing that was the right thing. And I believe that is what we are doing to-day.

**Robert Gillespie Reid.**

The directors of the Bank of Montreal have elected R. G. Reid to succeed the late W. W. Ogilvie as a director. Mr. Reid was born at Coupar Angus, Perthshire, Scotland, & went to Australia in 1865, engaging principally in gold-mining & public works. In 1871 he came to America, & had charge of the building of the international bridge crossing the Niagara River at Buffalo. In 1874 he had charge of the building of the bridges between Montreal & Ottawa, on the line of the Montreal, Quebec & Ottawa Ry., which is now a portion of the C.P.R. He contracted for & built the bridge across the Colorado River at Austin, Texas, & also furnished the iron & masonry

on the first 250 miles of the Southern Pacific Ry., west from San Antonio. He also built the International Ry. bridge between Texas & Mexico in 1882, & the railway bridge across the Delaware River at Delaware Water Gap, Pa. His largest work was the building of the heaviest section of the C.P.R. north of Lake Superior, which included a 450-ft. tunnel through solid granite. He constructed permanent & temporary bridges on 250 miles of the C.P.R. line east of Port Arthur. Near Montreal is a monument to his handiwork in the C.P.R. bridge at Lachine, & it stands to-day one of the finest structures on the continent. This bridge, built in 1886, is three-quarters of a mile in length, & was completed in six months. In 1887 he constructed the "Soo" bridge across the St. Mary's River, & the Sudbury branch of the C.P.R. In 1889 & 1890 he devoted his attention to 45 miles of railway for the Government, & the bridge across the Grand Narrows, C.B. It was in this year that he became interested in Newfoundland. He took the contract to build the Hall's Bay Ry., some 260 miles, & completed it in 1893. In the same year he contracted with the Newfoundland Government to build the Western Ry., which extended to the west coast of the island, some 250 miles. This work was completed in 1897. Under his contract with that colony Mr. Reid has the right to operate the whole road for a term of years. He is a member of the Canadian Society of Civil Engineers, a fellow of the Royal Colonial Institute, & a Governor of the Royal Victoria Hospital. He has an office in the Canada Life Building, Montreal, & his residence is on Drummond Street.

**ELECTRIC RAILWAYS.**

**Maritime Provinces & Newfoundland.**

**Halifax Electric Tramway.**—Railway earnings:—

	1900	1899	Increase.
Jan. ....	\$11,475.40	\$8,704.78	\$2,770.62
Feb. ....	8,922.41	7,531.43	1,450.98
	\$20,457.81	\$16,236.21	\$4,221.60

At the annual meeting Feb. 12, the following were elected directors:—Hon. D. McKeen, J. G. Payzant, W. B. Ross, B. F. Pearson, A. Haley, F. Paul, A. Kingman.

**Quebec Electric Railways.**

**Montreal Park & Island Ry.**—A second suit has been entered by M. Connolly to set aside the deed of trust purporting to secure the 2nd series of bonds, to compel the Co. to execute and register in favor of the trustees for the 1st series of bondholders a new trust deed which shall be free from the defects alleged against the first trust deed by the Co. & its directors. (June, 1899, pg. 189.)

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

	1899-1900.	1898-1899.	Increase.
Oct. ....	\$145,877.20	\$133,619.63	\$12,257.57
Nov. ....	133,489.12	125,125.09	8,364.03
Dec. ....	137,681.19	127,768.38	9,912.81
Jan. ....	136,086.33	125,276.04	10,810.29
Feb. ....	122,509.64	113,838.02	8,671.62
	\$675,643.48	\$625,627.16	\$50,016.32

The directors have voted \$1,000 to the Canadian Patriotic Fund.

The Co. has paid the City of Montreal \$81,354.88 as percentage on its earnings of \$1,641,955.96 for 1899. Under the agreement between the Co. & the city the percentage payable is as follows: 4% of gross earnings up to \$1,000,000. 6% of gross earnings from \$1,000,000 to \$1,500,000. 8% of gross earnings from \$1,500,000 to \$2,000,000. 10% of gross earnings from \$2,000,000 to \$2,500,000. 12% of gross earnings from \$2,500,000 to \$3,000,000. 15% of gross earnings from \$3,000,000.

The Co. has erected an oven for drying sand. It consists of a rectangular brick

chamber, about 5 x 10 ft. inside, with a V-shaped boiler plate bottom, which is placed immediately over the fire-grate. To prevent undue warping & buckling of this plate, it is stiffened with T irons and protected inside by a firebrick arch, in which there are openings at intervals to permit the heated gases to reach the plate. The sand as it dries falls by gravity through openings in the outside of the brick wall into screens, on which it is sifted & prepared for use. The furnace is large enough to permit old waste wood to be used as fuel.

At a recent meeting of the Roads Committee, the question of putting the Co.'s feed wires under ground was considered. The preamble of the draft contract submitted by the Co. declared that it was not advisable to combine street railway, telephone & telegraph & other wires in one conduit. The Co. proposed to take, in the laying of the conduits, the shortcut way from the power-houses to the points where power would be needed. The conduits would be built & the wires insulated according to the best methods. The Co. in no case would obstruct the streets any longer than needed for the execution of the work. The paving & materials that the Co. would remove in laying the conduits would be replaced by the Co., but the latter would have to get the approval of the City Surveyor, & a permit from the contractors of the paving that would be satisfactory to the Surveyor. If the Co. could not secure that permit, or certificate, the Surveyor would estimate the cost of removal & replacing, & the Co., before commencing excavations, would deposit the amount of the estimates in the city treasury. Once the work was all done, the accounts would be balanced between the city and the Co.

Manager Wanklyn, in explaining the proposal, said the Co. had been asked to improve its service, & intended to do so. But in order to accomplish the contemplated improvements it would be necessary to treble the present capacity of the feed wires. The acceptance of the proposed plan would give the work a permanent nature. The Co. was also anxious to avoid interruptions to the service from fires, etc. The conduits would be built first on the streets where the overhead wiring was the thickest. The work would cost \$200,000 or more & would last 9 or 10 months. The committee was requested to act quickly, as the Co. wished to begin the works in the spring. What was proposed was not unlike the conduit system of the Bell Telephone Co. The manholes on the street would be 350 ft. apart, & the cables about 2½ ins. in diameter, with copper wires. The area to be covered by the system would probably include Notre Dame, St. James & St. Catherine Sts. Conduits would be laid along William St., beginning at McGill, up Guy St., around St. Antoine & Lagachetiere Sts. In that way the only asphalt to be broken would be at the Notre Dame & Guy Sts. crossing. Mr. Wanklyn had made a special study of the joint conduit system in U. S. cities, & knew that such a system was bad, as high tension wires, such as those of a railway, were bound to disturb low tension wires, such as telephone & telegraph wires. He could promise, however, that the railway wires, in this case, would be so well insulated that no electricity would wander away from them to damage water and other pipes.

**Ontario Electric Railways.**

**Central Ontario Power Co.**—Hon. R. Harcourt, E. Coste, J. A. Culverwell, F. W. Barrett, Dr. E. Adam, Toronto; R. J. McLaughlin, Lindsay; J. Kendry, Peterboro'; H. J. Taylor & H. E. Larkin, St. Catharines; & Hon. P. McLaren, Perth, have been incorporated under this title, to develop water power at Burleigh Falls, Peterboro' county, to sell electric power for all purposes, & to con-

struct & operate an electric railway in Peterboro' & Ashburnham, & in the townships of Smith & North Monagan.

**Grand Valley Ry.**—At a meeting in Berlin, Feb. 10, the charter held by the original provisional directors was transferred to a new organization with the following officials:—President, D. W. McNair, New York City; Vice-President & Managing Director, J. S. Clarke, Ayr; 1st Vice-President, W. J. Briethaupt, Berlin; 2nd Vice-President, W. J. Clarke, Toronto. Other directors: J. Ellis, Port Dover; S. Snyder, Waterloo; Dr. Bowlby, Simcoe; F. Colquhoun, Berlin; C. A. Austin, Simcoe; A. Brant, St. Mary's; Sec'y., H. J. Bowman, Berlin; Engineer, E. H. Darling, Hamilton. The Co. is applying to the Dominion Parliament for an amendment to its charter. The project is to build an electric railway from Port Dover through Simcoe, Waterford, Boston, Mt. Pleasant, Brantford, Paris, Ayr, Galt, Preston, Doon, Berlin, & Waterloo to Goderich. Mr. Clarke has been holding meetings along the route for the purpose of obtaining bonuses, which are asked as follows: from Port Dover \$155,000, Simcoe \$10,000, Brantford \$35,000, Galt \$10,000, Preston \$4,000, Berlin & Waterloo \$30,000. (Dec., pg. 371.)

### The Canadian Pacific Railway Company.

Dividends for the half-year ended 31st December, 1899, have been declared as follows:—

On the Preference Stock two per cent.  
On the Common Stock three per cent.

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

The Preference Stock dividend will be paid on Monday, and April, to Shareholders of record at the closing of the books at the Company's London Office, 1 Queen Victoria Street, London, E.C.

The Common Stock Transfer books will close in London at 3 p.m. on Tuesday, 27th February, and in Montreal and New York on Friday, 9th March. The Preference Stock books will close at 3 p.m. on Tuesday, February 27th.

All books will be reopened on Thursday, 5th April.  
By Order of the Board.

CHARLES DRINKWATER,

Montreal, 12th February, 1900. Secretary.

### THE FIRSTBROOK BOX CO., LIMITED.

CROSS ARMS, TOP PINS,  
AND SIDE BLOCKS,  
TORONTO.

**Hamilton Consolidated Lines.**—In regard to the proposed extension of the Hamilton Radial Electric Ry. to Oakville, we are informed that it is not very probable the work will be gone on with this year, although possibly it may be if the price of rails & material should go down a little. The extension was proposed last year, but the idea was abandoned for the time being, owing to the high prices. (Feb., pg. 56.)

Manager Green denies that night cars are to be started in Hamilton. The Hamilton St. Ry. Co. paid the city \$3,824.80 as percentage & mileage for the last 3 months of 1899, against \$3,577.21 for the same period of 1898.

**The Niagara Falls Park & River Ry. Co.'s** annual meeting was held in Toronto Feb. 28. The following are the officers for the current year:—President, W. C. Ely; Vice-President, W. B. Rankine; General Manager, B. Van Horn, all of Buffalo; other directors: E. B. Osler, T. G. Blackstock, W. H. Beatty, Toronto; W. Hendrie, Hamilton; Sec.-Treas., R. F. Rankine, Buffalo.

### The Canadian Pacific Railway Company.

#### NOTICE TO SHAREHOLDERS.

The Nineteenth Annual Meeting of the Shareholders of this Company for the election of Directors and the transaction of business generally will be held on Wednesday, the fourth day of April next, at the principal office of the Company at Montreal at 12 o'clock noon.

The Common Stock transfer books will close in London at 3 p.m. on Tuesday, 27th February, and in Montreal and New York on Friday, 9th March. The Preference Stock books will close at 3 p.m. on Tuesday, February 27th.

All books will be reopened on Thursday, 5th April.

By Order of the Board,

CHARLES DRINKWATER,

Montreal, 12th February, 1900. Secretary.

### UNIFORM CAPS

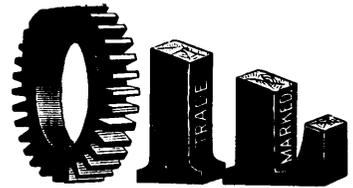
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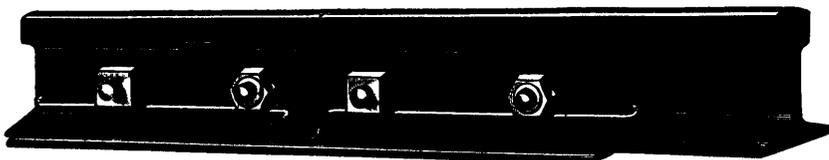
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J. DRINKWATER, - Winchester, Ont.

The International Traction Co., which controls this line as well as a number of others in & around Buffalo, has ordered 100 open cars for April delivery, & will, it is said, place orders for 150 or 200 more later in the year, in view of the heavy traffic expected in connection with the Pan-American Exposition at Buffalo.

**Ottawa Electric Ry.**—The extension to Britannia is now practically completed, but will probably not be operated until early in May, as the traffic before then would not be of a paying character, & the equipment is not yet completed. A promenade to extend about 800 feet into the river is being erected at Britannia Bay by the Co. (Jan., pg. 29.)

The **Sarnia St. Ry. Co.**'s proposition to the town council there, in connection with changing the road to an electric one & extending it, appears to be at a standstill, as an application for a franchise has been made by a rival company. (Dec., pg. 371.)

#### Toronto Railway.—Gross Earnings:

	1900	1899	Increase.
Jan. ....	\$113,793.96	\$95,690.12	\$18,013.84
Feb. ....	103,954.19	91,860.10	12,094.09
	\$217,658.15	\$187,550.22	\$30,107.93

The Co. is appealing to the Judicial Committee of the Imperial Privy Council against the decision of the Court of Appeal of Ontario in reference to the mileage chargeable to the Co. under the agreement between it & the city.

The Co. is building 20 motor cars, each with a carrying capacity of 80 passengers, for summer traffic; 2 similar cars with capacity for 108 passengers are being built for the Toronto & Mimico line.

In reply to a letter from the Chairman of the City Works Committee, suggesting the extension of the Toronto railway system as radial railways within a radius of 50 to 100 miles of Toronto, by extending its eastern line to Oshawa & thence to Rice Lake; the northern route from Little York to Lake Simcoe, making connection at Beaverton; the extension of the western route to Oakville, & north-west of same, & another line to some north-western point, for the concentration of trade at St. Lawrence market, President Mackenzie recently wrote that the directors would be pleased to meet the committee at any time with the object of discussing a proposition in regard to this matter that would be both acceptable & beneficial to the city, & one that the city would assist to a successful issue.

#### Electric Lines in Western Canada.

**British Columbia Electric Ry.**—The London Stock Exchange Committee has ordered this Co.'s 12,000 5% preference shares of £10 each fully paid, nos. 25,001 to 37,000, to be quoted in the official list.

The net earnings from Apr. 1, 1899, to Jan. 31, 1900, were \$173,063, against \$140,975 for corresponding period of 1898-9.

The Secretary has issued the following circular:—"In consequence of the continued prosperity & extension of the Co.'s business, the directors have been able to make a reduction in price of 10, 15, & 20%, respectively, in the various classes of lighting. This reduction came into force on Jan. 1, & covers the period of the enclosed traffic. The step has been taken with a view of further popularizing the Co.'s light, & it is expected that, in a few months, the increased business arising from it will fully compensate for the reduction. The present rates compare favourably from the consumers' point of view with those in force in other cities in Canada & the U.S.

The **Suburban Park Ry. Co.** was incorporated by the Manitoba Legislature in 1899, with power to build a railway from St. Boniface along the east side of the Red River to St. Norbert, with a branch to St. Anne, also to cross

a bridge from St. Boniface to Winnipeg, to build a railway from St. Norbert on the west side of the Red River to the boundary of the city of Winnipeg, & from St. Boniface east of the Red River to Elm Park. The Co. has given notice of application to the Legislature to amend its charter by giving power to extend the proposed railway to a point within the city of Winnipeg, also to build lines from some point between Winnipeg & St. Norbert to the southern boundary of Manitoba between ranges 9 & 13 east, to extend its lines on the west side of the Red River northerly to Winnipeg, & from a point between Winnipeg & St. Norbert to the southern boundary of the Province between ranges 1 & 6, also giving power to the town of St. Boniface to grant a bonus of \$40,000, & to the city of Winnipeg to grant a bonus of \$20,000, towards building a bridge over the Red River between St. Boniface & Winnipeg.

**Detroit, Mich.**, is contemplating an extension of the use of the trolley. It is proposed that the street railways of the city be allowed to carry packages, merchandise & other light freight, milk, farm produce & garden truck, between 8 a.m. & 8 p.m. each day. In the proposed ordinance it is provided that each freight car must be as nearly like the passenger cars as the character of the business will permit, & must be approved by the Board of Public Works before being permitted to enter the business. Only single trolley freight cars may be run, & they shall not be stopped on the street for the purpose of receiving or discharging freight, & shall not interfere in any way with passenger traffic. Suitable freight depots shall be provided where all freight shall be received or discharged. The freight cars must transport materials & supplies for the various city commissions, & the company must pay the city a certain sum for every car of freight hauled over the lines.

The **San Paulo Tramway, Light & Power Co.**, of which W. Mackenzie, of Toronto, is President, is equipping San Paulo, in Brazil, a city of 250,000 population, with an up-to-date electric railway system. For many years the citizens of San Paulo have put up with a mule road, and, although it paid pretty well, the accommodation was not first-class. Finally, the failure of one of the chief shareholders drove this concern into liquidation. The new & improved system, which is the product of Canadian enterprise & capital, will have 40 miles of track; there are 15 miles down now, & the equipment for poles & cars is already on the spot, so no great delay in getting the system in complete running order is likely to take place. Water power to the extent of 18,000 horse power will be obtainable, some ten thousand being now in process of development by the Canadian company. The hydraulic works are exceedingly well situated, & are located about eighteen miles from the city of San Paulo. A large number of wealthy coffee planters from all over the state make San Paulo their headquarters, while it is also true that all the coffee shipped from the important harbour of Santos, 40 miles away, passes through San Paulo, & this is nearly four-fifths of all the coffee exported from the Republic of Brazil.

#### General Telegraph Matters.

The annual meetings of the Canada Mutual Telegraph Co., & of the Mutual Telegraph Co., will be held in Montreal Mar. 29.

The Uganda Railway telegraph line reached the Nile at Ripon Falls Feb. 18, & was carried across the river next day, thus establishing telegraphic communication between London & the sources of the Nile.

The telegraph line on the Great Northwest Central Ry., in Manitoba, has been transferred to the C.P.R. Co.'s Telegraph, & a tariff

of 25c. for 10 words has been put into effect between offices on that line & other offices on the Co.'s lines in Manitoba. Offices have been opened at Crandell & Miniota, on the extension of the railway built last year.

The Western Union Telegraph Co. has decided to ask authority of its stockholders to issue \$20,000,000 of 4½% 50-year gold bonds, \$10,000,000 of which to be negotiated at once. These will be known as "funding & real estate mortgage bonds." The immediate purpose of the issue is to make provision for the Co.'s bonds maturing this year & in 1902, & also to provide means for construction purposes, the demand for special wires being constantly growing. The new bonds will be specifically secured upon the real estate of the Co. in New York & Chicago, & will contain a provision that no mortgage shall hereafter be placed upon any part of the Co.'s system without first securing a prior lien to the present issue of bonds. Ten million dollars of bonds will be held in the treasury for future use.

Few outside of those directly interested are aware of the volume of business that passes through the cable office at North Sydney, N. S. The average number of cablegrams is over 8,000 a day, although 11,000 is not an uncommon record. Over 50 people are employed in the office, which is one of the most important in the control of the Western Union Telegraph Co. In addition to the quadruplex & duplex circuits previously in use, there have been introduced lately in the North Sydney station 2 Muirhead automatic recorders, working 40 or 50 words a minute over the cables. A Wheatstone automatic duplex system is being installed between North Sydney & New York over the land lines, & it is expected that a speed of 100 words a minute will be attained. W. E. Earl is Manager at North Sydney, vice W. F. Snyder, lately deceased.—Telegraph Age.

A. C. Terry, assistant chief operator of the Western Union at Buffalo, N.Y., has been promoted to the position of electrician of the fifth district, with headquarters at Syracuse, N.Y. He was born in Wellington, Ont., in 1855, learned telegraphy at Brighton, Ont., & a year later was promoted to a position with the Montreal Telegraph Co., the duties of which required him to open new offices & instruct the recently appointed agents who were to be placed in charge. In 1873 he was transferred to Toronto, & in 1875 secured a position with the Dominion Telegraph Co., in Toronto. In 1876 he was transferred to Buffalo, & shortly afterwards secured a position with the American Union Telegraph Co., at that place, as chief operator. In 1881, when the American Union & Western Union companies consolidated, he went with the Western as assistant chief operator.—Telegraph Age.

The Commercial Cable Co.'s report for 1899 presented at the annual meeting in New York, Mar. 5, says: "The net traffic earnings from cables & land lines increased \$319,097.96 over the previous year. Out of the balance to the credit of revenue account there has been set aside, \$350,000 as an addition to the reserve fund & also \$150,000 to the fund for insurance of stations, apparatus & repair steamer, & these sums will be invested in first-class securities. The reserve fund amounts to \$3,475,631.05, & the insurance fund to \$356,419.60. After providing for all operating expenses & reserves the balance of net revenue, including the amount brought forward from the previous year, amounts to \$1,748,063.26, out of which have been paid interest on the bonds & debenture stock (\$720,000) & dividends & bonus on the capital stock (\$800,000), leaving \$228,063.26 to be carried forward in the present year. There have been added to the Co.'s land line system 1,013 miles of poles, 13,253 miles of wire & 118 new offices."

ASSESSMENT SYSTEM.



THE BEST FRATERNAL BENEFIT SOCIETY IN THE WORLD.  
THE SPLENDID RECORD OF THE I. O. F.

Cost to Join the I.O.F.	
(For \$1,000 Mortuary Benefit.)	(For more than \$1,000 Mort. Benefit.)
Initiation fee (minimum).....\$1 00	Cost to take \$2,000 Mort. Benefit..\$6 00
Certificate fee.....1 00	" " \$3,000 " " 7 00
Registration fee.....1 00	" " \$4,000 " " 9 00
Medical Examination fee.....1 50	" " \$5,000 " " 10 00
Total minimum cost.....\$4 50	Sick benefits, when required, cost extra.

The Members, the Benefits, and Their Assurance  
At 31st December Each Year.

- Benefits given by the I.O.F.**
- 1.—Social and Fraternal Privileges of the Court Room.
  - 2.—Free Medical Attendance by Court Physician where not dispensed with by Court by-law; also trained nurses in certain cases.
  - 3.—A Sick Benefit of \$3 to \$5 per week, subject to provisions of the Constitution and Laws of the Order; optional, and when taken costs extra.
  - 4.—A Total and Permanent Disability Benefit of one-half of face value of policy, with exemption from further payment of premiums or Court Dues.
  - 5.—An Old Age Benefit consisting of exemption from payment of premiums and Court dues after age 70.
  - 6.—An Old Age Disability Benefit of one-tenth of face value of policy payable yearly for ten years, on being declared totally and permanently disabled by infirmities of age after the seventieth birthday.
  - 7.—An Old Age Pension payable during disability, which may be taken as a substitute for the Old Age Disability Benefit.
  - 8.—A Burial benefit of \$100 at death of a Pensioner.
  - 9.—A Funeral Benefit of \$50 at death of a member enrolled in Sick and Funeral Benefit Department.
  - 10.—The Mortuary Benefit of \$500, \$1,000, \$2,000, \$3,000 \$4,000 or \$5,000.

Year.	Total Membership.	Benefits Paid.	Total Surplus.	Surplus per Capita.	Death Rate per 1,000.
1881	1,019	\$ 1,300 00	\$ 4,568 55	\$ 4 48	4.50
1882	1,134	12,058 86	2,967 93	2 61	11.00
1883	2,210	9,493 68	10,857 65	4 91	4.73
1884	2,558	13,914 31	23,081 85	9 01	4.23
1885	3,642	26,576 99	29,802 42	8 18	7.76
1886	5,804	28,499 82	53,981 28	9 30	4.85
1887	7,811	59,014 67	81,384 41	10 44	5.78
1888	11,800	89,018 16	117,821 96	9 98	6.43
1889	17,349	116,787 82	188,130 36	10 84	5.85
1890	24,604	181,846 79	283,967 20	11 54	5.18
1891	32,303	261,436 21	408,798 20	12 65	6.40
1892	43,024	344,748 82	580,597 85	13 49	6.25
1893	54,484	392,185 93	858,857 89	15 76	5.47
1894	70,055	511,162 30	1,187,225 11	16 94	5.47
1895	86,521	685,000 18	1,560,783 46	18 03	5.67
1896	102,838	820,941 91	2,015,484 38	19 60	5.50
1897	124,685	992,225 60	2,558,832 78	20 52	5.56
1898	144,000	1,176,125 14	3,186,370 96	22 12	5.67

For Further Information Respecting this Great Fraternal Benefit Society, Apply to  
 Oronhyatekha, M.D., S.C.R., Toronto, Ont. John A. McGillivray, Q.C., S.S., Toronto, Ont.  
 James Marshall, 24 Charing Cross, London, Eng. A. E. Stevenson, 6436 Kimbark Ave., Chicago, Ill.  
 Or Any Officer or Member of the Order.

### Dominion Government Telegraph Lines.

In speaking in the House of Commons recently in reference to the improvement of the St. Lawrence navigation, the Dominion Minister of Public Works said that he hoped that the telegraph line to Belle Isle would be completed by July or Aug.

The Dominion estimates for the year ending June 30, 1901, provide \$10,000 to complete the extension of the telegraph line on the north shore of the St. Lawrence eastward to Belle Isle Island, & \$1,000 to improve roadway, repair & increase operating facilities generally between Godbout & Pointe aux Esquimaux eastward.

The following items appear under the head "Public Works chargeable to the collection of revenue," in the Dominion estimates for the year ending June 30, 1901:

Telegraph line between Prince Edward Island & the mainland .....	\$ 2,000 00
Land & cable telegraph lines of the sea-coasts & islands of the lower rivers & gulf of St. Lawrence & Maritime Provinces, including cost of working str. Newfield or other vessels when required for cable service .....	34,000 00
Telegraph lines, Northwest Territories .....	20,000 00
Telegraph lines, British Columbia .....	12,000 00
Telegraph & signal service generally .....	2,750 00

In the House of Commons recently the Dominion Minister of Public Works stated that the cost of constructing the Government telegraph line between Bennett, B.C., & Dawson was reported by the Superintendent of Construction as \$146,937.99, an average of \$223.63 a mile. Wire was purchased from different persons at \$2.50 & at \$2.74 per 100 lbs. The Minister also stated that connection between the Bennett-Dawson telegraph line & Atlin City had been made by the construction of a line from Tagish to Atlin, at a cost of \$15,500, & that the line was in full operation.

J. B. Charleson arrived at Vancouver early in Feb., in connection with the construction of the remaining sections of the Yukon telegraph line. At present a government line runs from Ashcroft to Quesnelle, B.C., & the work now undertaken is to build a line from Quesnelle to Atlin, B.C., where connection will be made with the line to Dawson, Yukon, built last year. A party was despatched from Vancouver, via Skagway, to Atlin, to commence building from there towards Quesnelle, & Mr. Charleson went with another party to Quesnelle to start building from there towards Atlin. The 1st stretch from Quesnelle to Hazelton will be about 300 miles, the 2nd from Hazelton to Telegraph Creek will be about 400 miles, & the 3rd from Telegraph Creek to Atlin about 344 miles, a total of 1,044 miles, which it is expected to complete this year. At present messages from Dawson have to be brought from Skagway by steamer to Vancouver, & vice versa. While in Vancouver Mr. Charleson stated that the Minister of Public Works had authorized him to also build a 50 mile line from Dawson to the International Boundary, to meet a line which is to be built from St. Michael's to Circle City by a U.S. company, but the Postmaster General has since stated in the House of Commons that this is not at present contemplated, as there is no vote out of which to take the cost of construction.

### The Bell Telephone Company.

At the annual meeting in Montreal Feb. 22, the 20th annual report was presented as follows:—2,841 subscribers have been added during the year, the total number of sets of instruments earning rental being 34,923. The Co. now owns & operates 343 exchanges & 450 agencies; 1,686 miles of wire have been added to the long distance system in 1899; of these 318 miles are in the Ontario department & 1,368 are in the eastern department. The long distance lines owned & operated by the company comprise 18,920 miles of wires on 6,229 miles of poles.

In Dec. the directors, acting under the power conferred upon them, offered to the shareholders at par 9,900 shares of new stock, in the proportion of 1 share of new for each 4 of old, practically all of which have been subscribed for.

Since the last report, the building in London has been completed, a building has been erected in Parkdale, & a building for the stores department has been erected on Mountain st., Montreal, all of which have been paid for. There is no encumbrance whatever on any of the company's real estate.

### REVENUE ACCOUNT DEC. 31, 1899.

RECEIPTS.	
Exchanges .....	\$1,025,858.88
Long distance lines .....	303,374.04
Private lines .....	12,111.08
Miscellaneous .....	115,339.06
	<u>\$1,456,683.06</u>

EXPENSES.	
Operating .....	\$1,025,215.31
Legal .....	10,924.55
Insurance .....	14,605.62
Bond interest .....	47,642.65
Miscellaneous .....	4,987.53
	<u>\$1,103,375.66</u>

Net revenue for 1899 .....	\$ 353,307.40
Less dividends (inc. Jan. 15, 1900) .....	312,920.00
	<u>\$ 40,387.40</u>

Balance revenue from 1898 .....	149,735.98
	<u>\$ 190,123.38</u>

Carried forward to 1900 .....	\$ 190,123.38
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### BALANCE SHEET, DEC. 31, 1899.

Stock account .....	\$3,960,000 00
Bond account .....	1,010,000 00
Contingent fund .....	800,000 00
Revenue account .....	190,123 38
Unearned rental reserve .....	185,614 83
Insurance reserve .....	77,897 27
Accident reserve .....	19,745 76
Bond interest reserve .....	12,625 00
Sundry creditors .....	579,518 01
	<u>\$6,835,524 25</u>

Plant and patents, Dec. 31,	
1898 .....	\$4,576,276 35
Do. added in 1899 .....	668,159 98

Plant and patents, Dec. 31, 1899 .....	\$5,244,436 33
Stores on hand .....	238,851 39
Real estate .....	756,743 06
Stock in other companies .....	405,981 50
Sundry debtors .....	120,429 40
Due from Agencies .....	55,632 58
Cash .....	13,449 99
	<u>\$6,835,524 25</u>

The following directors were elected:—C. F. Sise, R. Mackay, J. E. Hudson, R. Archer, W. R. Driver, H. Paton, C. Cassils & T. Sherwin.

The Co. has recently made improvements in its exchange at Acton, Ont., including a new combined local & long distance switch-board.

T. Jackson, for 14 years manager at Stratford, Ont., for the Co., has retired, owing to advanced years, & has been succeeded by J. H. Martin.

The Co. has placed with the Acton Burrows Co., Toronto, a large order for enameled iron signs for its local & long distance stations. They will be 19½ x 18 ins., made double with flange so as to project from buildings & to be readable from either side. They will bear the well-known sign of a bell, & will be lettered "Public Station, Local & Long Distance Telephone." The ground will be white & the device & lettering in blue.

### General Telephone Matters.

A sleet & snow storm which raged in Halifax Feb. 23, is said to have caused the Nova Scotia Telephone Co. a loss of about \$100,000.

The Victoria Telephone Co., with headquarters at Woodville, Ont., which operates in the county of Victoria, will, it is said, build into Lindsay.

Application is being made to the British Columbia Legislature for the incorporation of the Western Telephone & Telegraph Co. with power to build from Vancouver to the Boundary Creek district.

The Union Telephone Co., of Musquodoboit, N.S., has elected the following officers: President, E. Archibald; Vice-President, J. Annand; Sec.-Treas., H. C. Taylor. Last year's business is reported to have been most satisfactory.

It is said to be the intention of the Vernon & Nelson Telephone Co. to extend its lines as far as Camp McKinney, B.C., via Rock Creek, & from Rock Creek to Bolster, Wash., where the system will connect with that of the Inland Telephone Co., which will build up from Republic to Chesaw & Bolster. It is understood, too, that it is the intention of the latter Co. to extend its lines into the Okanagan country, taking in Loomis, Oro & other points of importance.

At the recent annual meeting of the Winnipeg Board of Trade, President Drewry said in his report: "Another evidence of our progress is found in the wonderful development of our telephone system. May 1, 1881, witnessed the opening in this city of the first telephone exchange, with 25 subscribers. Since then there has been a steady annual increase in the number, & at present 1,250 subscribers enjoy, either in their homes or business places, this really indispensable convenience; 1,745 miles of wire on poles & 502 under ground; a total of 2,247 miles is required in the installing of these instruments. There are, within the city's boundaries, 65 miles of poles. The system employed is known as the metallic circuit system, i.e., 2 wires to each subscriber. Winnipeg was the first city in Canada to generally adopt this system. The long distance telephone, now recognized in the large business centres as practically invaluable for the rapid transaction of business, is also showing marked development here. I understand not less than 200 miles will be constructed during the coming season, connecting Winnipeg with Portage la Prairie, Carberry, Brandon, Minnedosa, Neepawa & intermediate points."

### Among the Express Companies.

M. M. Perl has been appointed General Agent for the Alaska Pacific Ex. Co., with headquarters at Cape Nome, Alaska.

The Western Ex. Co.'s service has been placed on the Hancock & Arcadian Mine stage route, & an office opened at Arcadian Mine, Mich.

The Dominion Ex. Co.'s stationery & supply department at Winnipeg has been closed, & requisitions for stationery & supplies are now made on the supply department at Toronto.

The Dominion Ex. Co. has opened the New Westminster & Chilliwack steamboat route, between New Westminster & Chilliwack, B.C., distance about 65 miles, service tri-weekly.

Plans are being prepared for additions to the Toronto Union station to accommodate the Canadian & the Dominion Express Co's. the present quarters being found inadequate for the increased business.

The Alaska Pacific Ex. Co. has entered into an exclusive contract for operating on the White Pass & Yukon Ry. from Skagway to Lake Bennett, B.C., at which point connection is made for Dawson by sleds & dog teams. There is now a daily messenger service between Skagway & Bennett.

The Alaska Pacific Ex. Co. has completed arrangements for extending its service to Cape Nome, Alaska, & will be prepared to handle all business for Cape Nome & St. Michaels as soon as navigation opens. It will have service on the Pacific Clipper line of

steamers, as well as those operated by the British-American line. The average time for steamers between Seattle & Cape Nome will be about 10 days, with a boat leaving Seattle every 7 days.

Merchandise.—Tariff between Seattle, Cape Nome, St. Michaels & intermediate points:

1 lb. (minimum charge)	\$ 1.50
1 lb. to 2 lbs.	2.00

# STEEL

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**FINE TOOL STEEL**  
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THE Book of the century. Handsomely illustrated by thirty-two of the World's Greatest Artists

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But for the noble contribution of the world's greatest artists this book could not have been manufactured for less than \$7.00.

The fund created is divided equally between the family of the late Eugene Field and the fund for the building of a monument to the memory of the

2 lbs. to 5 lbs	2.50
5 lbs. to 7 lbs.	3.00
7 lbs. to 10 lbs.	3.50
10 lbs. to 15 lbs.	4.00
15 lbs. to 20 lbs.	5.00
20 lbs. to 25 lbs.	6.00
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45 lbs. to 50 lbs.	10.00
Over 50 lbs., per pound.	20c

On merchandise, when valued over \$50, the regular money rate—as quoted below—will be charged on valuation as additional. On bullion, specie, jewelry, currency, &c., 2%, or \$20 per \$1,000; minimum charge \$1. The above rates do not include marine risk. Charges on all matter for St. Michaels & intermediate points must be prepaid.

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For Doors, etc., in Stations, Steamships, Ferries, Hotels, Offices, etc., carried in Stock for Prompt Delivery.

Any of these Plates can be shipped on the day an order is received.

## SMOKING ROOM

Size 23 x 3½ inches. Oblong, fancy ends, white ground, blue letters, lined & tipped:

Agent's Office.	Waiting Room.
Express Office.	General Waiting Room.
Freight Office.	Ladies' Waiting Room.
General Offices.	Men's Waiting Room.
Private Office.	Dining Room.
Ticket Office.	Lunch Room.
Telegraph Office.	Restaurant.
Baggage Room.	Ladies' Toilet.
Smoking Room.	Men's Toilet.
Smoking Prohibited. No Admittance.	Trespassers Prosecuted.

## NO ADMITTANCE

Size 10 x 2½ inches. Oblong, oval ends, white ground, blue letters, lined & tipped, hollowed:

Bar Room.	Men.
Luggage Room.	Private.
Office.	No Admittance.
Refreshments.	No Road.
Exit.	Boarding House.
Fire Escape.	Private Board.
Lavatory.	Dressmaking.
Ladies.	Fresh to Day.
Women.	Teas Provided.
Gentlemen.	Please Shut the Gate.

Size 14 x 3 inches. Oblong, oval ends, white ground, blue letters, lined and tipped.

No Admittance.

## STICK NO BILLS

Size 18 x 3½ inches. Oblong, square ends, white ground, blue letters, lined & tipped.

Furnished Apartments. Stick no Bills. Please Shut the Door.

## PUSH PULL

Oval, size 2 x 3 inches, white ground, blue letters, tipped, hollowed, lettered Push, Pull, as above.

Oblong, square ends, size 3 x 1½ inches, white ground, blue letters, tipped, lettered Push, Pull, as above.

Perpendicular, square ends, size 12 x 3 inches, white ground, blue letters, lined & tipped, lettered perpendicularly, Push, Pull.

Oblong, square ends, size 12 x 3 inches, white ground, blue letters, lined and tipped, lettered horizontally, Push, Pull.

Oblong, fancy ends, size 3 x 1½ inches, white ground, blue letters, lined and tipped, lettered Push, Pull.

## ENAMELED IRON SIGNS.

For Steam & Electric Railways, Steamship, Express, Telegraph, Telephone & Advertising Purposes, of every description, size & color, made to order.

Railway Station Names, Switch Targets, Semaphore Arms, Whistle & Diamond Crossing Signs, Numbers for Railway Bridges, Sections, Mileage Signal Houses, etc.; Street Car Route Signs; Steamship & Ferry Signs; Express, Telegraph & Telephone Office Signs; Agency, Office, Store, Wagon, Cart & Advertising Signs; Street Names & Numbers; Door Numbers.

These signs last practically for ever, they never fade or tarnish, they are ever bright and attractive, they are absolutely impervious to heat or cold, they are the only signs that will withstand the effects of weather in all climates.

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**THE ACTON BURROWS COMPANY,**  
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## Sale One Hundred Millions a year. R.I.P.A.N.S.

### THE WONDERFUL MEDICINE

They relieve Distress from Dyspepsia, Indigestion and Too Hearty Eating; are a perfect remedy for Dizziness, Nausea, Drowsiness, Bad Taste in the Mouth, Coated Tongue, Pain in the Side, TORPID LIVER.

They regulate the Bowels.  
They Cure Sick Headache.  
A Single One Gives Relief.

### WANTED

A case of bad health that R.I.P.A.N.S. will not benefit. R.I.P.A.N.S., 10 for 5 cents, or 12 packets for 48 cents, may be had of all druggists who are willing to sell a low-priced medicine at a moderate profit. The banish pain and prolong life One gives relief. Accept no substitute.

Note the word R.I.P.A.N.S. on the packet. Send 5 cents to Ripans Chemical Co., No. 10 Spruce St., New York, for 10 samples and 1,000 testimonials.

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THE RAILWAY AND SHIPPING WORLD:  
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<b>Accident Insurance</b> Travelers' Insurance Co. .... Montreal.	<b>Grain Elevators</b> John S. Metcalfe Co. .... Chicago, Ill.	<b>Ship Carpenters' Tools</b> Rice Lewis & Son. .... Toronto.
<b>Aerated Waters</b> E. L. Drewry ..... Winnipeg.	<b>Groceries</b> The Hudson's Bay Company.....	<b>Ships</b> Polson Iron Works ..... Toronto.
<b>Air Brakes &amp; Fittings</b> Westinghouse Mfg. Co. .... Hamilton, Ont.	<b>Half Tones</b> Acton Burrows Co ..... Toronto.	<b>Shovels</b> James Cooper ..... Montreal. The Fairbanks Co. .... Montreal. The Hudson's Bay Company Rice Lewis & Son. .... Toronto.
<b>Ales</b> E. L. Drewry ..... Winnipeg.	<b>Hand &amp; Push Cars</b> F. E. Came ..... Montreal. The Fairbanks Co. .... Montreal.	<b>Signal House Numbers</b> Acton Burrows Co ..... Toronto.
<b>Anchors</b> Rice Lewis & Son. .... Toronto.	<b>Hardware</b> Rice Lewis & Son. .... Toronto. The Hudson's Bay Company.....	<b>Signals</b> Noah L. Piper & Sons. .... Toronto.
<b>Axles</b> James Hutton & Co. .... Montreal. Rhodes, Curry & Co. .... Amherst, N.S.	<b>Headlights</b> Noah L. Piper & Sons. .... Toronto.	<b>Signs</b> Acton Burrows Co ..... Toronto.
<b>Babbit</b> Rice Lewis & Son. .... Toronto.	<b>Hose</b> Rice Lewis & Son. .... Toronto.	<b>Snow Ploughs</b> Rhodes, Curry & Co. .... Amherst, N.S.
<b>Beams</b> Rice Lewis & Son. .... Toronto.	<b>Illustrations</b> Acton Burrows Co ..... Toronto.	<b>Spikes</b> Rice Lewis & Son. .... Toronto.
<b>Bells</b> Rice Lewis & Son. .... Toronto.	<b>Iron</b> Rice Lewis & Son. .... Toronto.	<b>Station Name Signs</b> Acton Burrows Co ..... Toronto.
<b>Blankets &amp; Bedding</b> The Hudson's Bay Company.....	<b>Iron Signs</b> Acton Burrows Co ..... Toronto.	<b>Steamboats</b> Polson Iron Works ..... Toronto.
<b>Block &amp; Tackle</b> Rice Lewis & Son. .... Toronto.	<b>Japans</b> McCaskill, Dougall & Co. .... Montreal.	<b>Steamboat Signs</b> Acton Burrows Co ..... Toronto.
<b>Boat Fittings &amp; Hardware</b> Rice Lewis & Son. .... Toronto.	<b>Lager Beer, &amp;c.</b> E. L. Drewry ..... Winnipeg.	<b>Steam Shovels</b> James Cooper ..... Montreal.
<b>Boiler Covering</b> Mica Boiler Covering Co. .... Montreal.	<b>Lamps</b> Rice Lewis & Son. .... Toronto. Noah L. Piper & Sons ..... Toronto. The Hudson's Bay Company.....	<b>Steel</b> W. G. Blyth ..... Toronto. James Hutton & Co. .... Montreal. Rice Lewis & Son. .... Toronto.
<b>Boilers</b> Polson Iron Works ..... Toronto.	<b>Lanterns</b> Rice Lewis & Son. .... Toronto.	<b>Steel Castings</b> F. E. Came ..... Montreal.
<b>Bolts</b> Rice Lewis & Son. .... Toronto.	<b>Launches</b> Polson Iron Works ..... Toronto.	<b>Switch Targets</b> Acton Burrows Co ..... Toronto.
<b>Brake Shoes</b> F. E. Came ..... Montreal.	<b>Life Insurance</b> Independent Order of Foresters..... Toronto. Travelers' Insurance Co. .... Montreal.	<b>Switches</b> F. E. Came ..... Montreal.
<b>Bridge Numbers</b> Acton Burrows Co ..... Toronto.	<b>Linoleum and Floor Coverings</b> The Hudson's Bay Company.....	<b>Telegraph Office Signs</b> Acton Burrows Co ..... Toronto.
<b>Buckets</b> Rice Lewis & Son. .... Toronto.	<b>Locomotives</b> Baldwin Locomotive Works. Philadelphia, Pa. Richmond Locomotive & Machine Works. Richmond, Va.	<b>Telegraph Spoons</b> Rice Lewis & Son. .... Toronto.
<b>Bunting</b> Rice Lewis & Son. .... Toronto. The Hudson's Bay Company.....	<b>Lubricators</b> Rice Lewis & Son. .... Toronto.	<b>Telephone Office Signs</b> Acton Burrows Co ..... Toronto.
<b>Carpets</b> The Hudson's Bay Company.....	<b>Matches</b> E. B. Eddy Co. .... Hull, Que. The Hudson's Bay Company.....	<b>Tires</b> James Hutton & Co. .... Montreal.
<b>Cars</b> Rhodes, Curry & Co. .... Amherst, N.S.	<b>Milepost Numbers</b> Acton Burrows Co ..... Toronto.	<b>Tobacco and Cigars</b> The Hudson's Bay Company.....
<b>Car Wheels</b> Rhodes, Curry & Co. .... Amherst, N.S.	<b>Mohair</b> The Hudson's Bay Company.....	<b>Toilet Paper</b> The Hudson's Bay Company.....
<b>Castings</b> Rhodes, Curry & Co. .... Amherst, N.S.	<b>Numbers</b> Acton Burrows Co ..... Toronto.	<b>Tools</b> Rice Lewis & Son. .... Toronto.
<b>Chains</b> Rice Lewis & Son. .... Toronto.	<b>Oakum</b> Rice Lewis & Son. .... Toronto. The Hudson's Bay Company.....	<b>Track Jacks</b> Duff Manufacturing Co. .... Allegheny, Pa. A. O. Norton ..... Coaticook, Que.
<b>Cross Arms, Top Pins &amp; Side Blocks</b> The Firstbrook Box Co. .... Toronto.	<b>Oils</b> Galena Oil Co. .... Franklin, Pa.	<b>Track Tools</b> F. E. Came ..... Montreal. James Cooper ..... Montreal. Rice Lewis & Son. .... Toronto.
<b>Curtains</b> The Hudson's Bay Company.....	<b>Office Signs</b> Acton Burrows Co ..... Toronto.	<b>Trucks</b> The Fairbanks Co. .... Montreal. Rice Lewis & Son. .... Toronto.
<b>Cuts</b> Acton Burrows Co ..... Toronto.	<b>Packing</b> The Fairbanks Co. .... Montreal.	<b>Typewriters</b> Creelman Bros. Typewriter Co. .... Georgetown. Creelman Bros. Typewriter Co. ....
<b>Door Signs</b> Acton Burrows Co ..... Toronto.	<b>Pipe Covering</b> Mica Boiler Covering Co. .... Montreal.	<b>Uniform Caps</b> W. H. Coddington. .... Hamilton, Ont.
<b>Drills</b> The Fairbanks Co. .... Montreal.	<b>Plushes</b> The Hudson's Bay Company.....	<b>Union Couplings</b> E. M. Dart Manufacturing Co. Providence, R.I.
<b>Dry Goods</b> The Hudson's Bay Company.....	<b>Pneumatic Tools</b> F. E. Came ..... Montreal.	<b>Valves</b> Rice Lewis & Son. .... Toronto.
<b>Electric Car Route Signs</b> Acton Burrows Co ..... Toronto.	<b>Porter</b> E. L. Drewry ..... Winnipeg.	<b>Varnishes</b> McCaskill, Dougall & Co. .... Montreal.
<b>Emerg. Wheels</b> The Fairbanks Co. .... Montreal.	<b>Portland Cement</b> Rice Lewis & Son. .... Toronto.	<b>Vessels</b> Polson Iron Works ..... Toronto.
<b>Enameled Iron Signs</b> Acton Burrows Co ..... Toronto.	<b>Printing</b> The Hunter, Ross Co. .... Toronto.	<b>Waste</b> Rice Lewis & Son. .... Toronto. Noah L. Piper & Sons. .... Toronto.
<b>Engines, Stationary &amp; Marine</b> Polson Iron Works ..... Toronto.	<b>Pumps</b> Rice Lewis & Son. .... Toronto.	<b>Water Meters</b> Westinghouse Mfg. Co. .... Hamilton, Ont.
<b>Engraving</b> Acton Burrows Co ..... Toronto. Toronto Engraving Co. .... Toronto.	<b>Rails (New)</b> James Cooper ..... Montreal. Rice Lewis & Son. .... Toronto.	<b>Water Tanks</b> The Fairbanks Co. .... Montreal.
<b>Express Office Signs</b> Acton Burrows Co ..... Toronto.	<b>Rails (for relaying)</b> James Cooper ..... Montreal.	<b>Wheelbarrows</b> James Cooper ..... Montreal. The Fairbanks Co. .... Montreal. Rice Lewis & Son. .... Toronto.
<b>Fencing</b> Page Wire Fence Co. .... Walkerville, Ont.	<b>Rail Saws</b> F. E. Came ..... Montreal.	<b>Window Blinds</b> The Hudson's Bay Company.....
<b>Ferry Signs</b> Acton Burrows Co ..... Toronto.	<b>Rivets</b> Rice Lewis & Son. .... Toronto.	<b>Wines and Liquors</b> The Hudson's Bay Company.....
<b>Flags</b> Rice Lewis & Son. .... Toronto. The Hudson's Bay Company.....	<b>Rope</b> Rice Lewis & Son. .... Toronto. The Hudson's Bay Company.....	<b>Wire &amp; Wire Rope</b> Rice Lewis & Son. .... Toronto.
<b>Foghorns</b> Rice Lewis & Son. .... Toronto.	<b>Scales</b> The Fairbanks Co. .... Montreal.	<b>Yachts</b> Polson Iron Works ..... Toronto.
<b>Gas &amp; Gasoline Engines</b> The Fairbanks Co. .... Montreal. Northey Manufacturing Co. .... Toronto.	<b>Semaphore Arms</b> Acton Burrows Co ..... Toronto.	
<b>Gates</b> Page Wire Fence Co. .... Walkerville, Ont.	<b>Shafting</b> Rice Lewis & Son. .... Toronto.	
<b>General Supplies</b> The Hudson's Bay Company.....	<b>Shipbuilders' Supplies</b> Rice Lewis & Son. .... Toronto.	

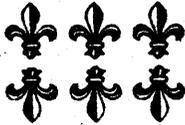
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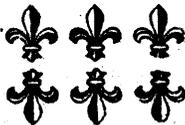
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