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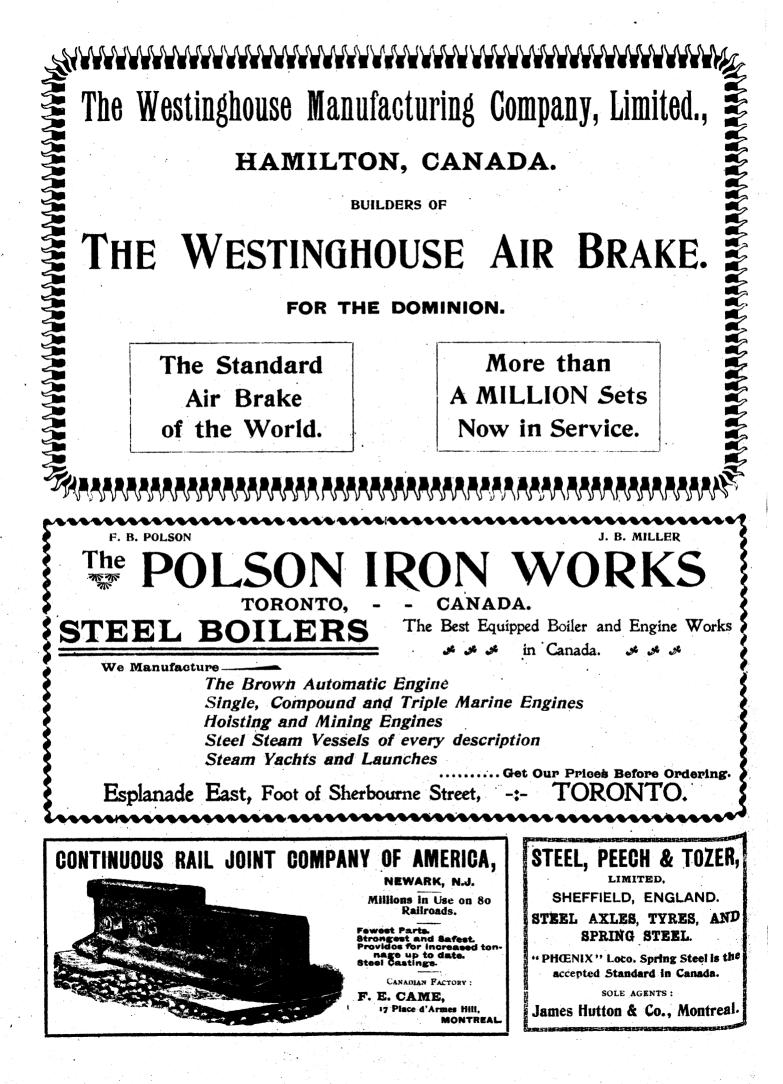
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THE

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Devoted to Steam & Electric Railway, Shipping, Express, Telegraph & Telephone Interests.

OLD SERIES, NO. 108.TORONTO, CANADA, APRIL, 1900.10 CENTS ANew Series, No. 26.\$1 A YEAR.	Сору,
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Canadian Pacific Annual Meeting.

The annual meeting was held in Montreal April 4, Sir Wm. Van Horne, Chairman of the Board, presiding. Among those present were T. G. Shaughnessy, Senator Forget, Hon. I. & Ward, Carl Sundford Fleming, R. B. Were T. G. Shaughnessy, Senator Forget, Fron. J. K. Ward, Sir Sandford Fleming, R. B. Angus, G. M. Clarke, Senator Drummond, J. Ross, C. R. Hosmer, J. Joseph, J. F. Risley, E. B. Osler, J. Morrison, J. T. Davies, C. Meredith, H. Beatty, G. Olds, Senator Mac-Innes, W. H. Evans, W. D. Matthews. In maximum the adoption of the report Pre-

In moving the adoption of the report Pre-sident Shaughnessy said : "It is very gratify-ine to the state of ing to be able to congratulate the

shareholders on the excellent results from the operation of the railway during the past year, & upon the pros-pects of continued prosperity. While, of course, the progress of the agricultural & mining interests tributary to your lines is most marked, the large improvements in your revenue is due to the growth of traffic in every section of the Dominion. The Government reports indicate that in Manitoba & Northwest Territories there will be under crop this season about 500,000 acres of land in excess of 1899, so that with favorable weather conditions, the tonnage to be carried by the railway after the next harvest ed. You will have observed that the rate per ton mile received by your Co. for the carriage of freight is still further reduced, & is lower than that received by any company in the U.S. similarly situated. In view of the remoteness from eastern markets of producers on some sections of your system, it has been the settled policy of your directors to reduce rates as circumstances might warrant, in order to encourage the maximum development of every section of the country, with a With the purpose of securing increased revenue from the growth of tonnage rather than the maintenance of high rates. The long distances that you are are enabled to haul traffic, because of the situation of your railway, & economy in the working of your lines, are, of course, important factors in the successful carrying out of this policy. Apart from some short branch lines

any construction work involving an importthe directors do not at present contemplate ities in Manitoba & the Northwest Territories, that that are required to serve growing commun-ant expenditure of capital. The present earn-incompared to a serve growing of ings of the two railway lines, the leasing of which which you will be asked to approve at this meeting, are already sufficient to meet any interest liability that may be involved, & the contributed traffic to the main line will be permanently secured. Another gratifying feature of the Co.'s affairs is the fact that d_{max} been an adduring the past year there has been an ad-dition of 150% to the list of shareholders of re-

cord in Canada, & the number is still increasing. The return to the basis of 5% dividends on your common shares is assurance of the conviction of your directors that in the absence of unforeseen commercial disaster, no lower standard will be necessary.

The report, as published in our last issue, having been adopted, the President submitted for approval & explained a lease from the Great Northwest Central Ry. Co. to the C.P. R. Co. The lease demises to the C.P.R. Co. in perpetuity all the railway lines, including branches, which the G.N.W.C. Co. has been empowered to construct & operate & their

lease demises to the C.P.R. Co. for 999 years all the railway lines, including branches, which the M. & N.W.Ry. Co. has been empowered to construct & operate, & their ap-purtenances, & sub-lets to the C.P.R. Co. the Saskatchewan & Western Ry., which is under lease for 99 years to the M. & N.W. Ry. the C.P.R. Co. to pay as annual rent for the S. & W. Ry. £2,220 stg. & for the M. & N.W. Ry. £24,280 stg., & any additional sum which may be necessary to satisfy the interest on any bonds or other pecuniary obligation which the M. & N.W.R. Co. may issue with the consent of the C.P.R. Co.

It was resolved that the Dominion Parliament having authorized the Co. to construct & operate certain branch lines & to issue securities in respect of them, it is desirable to provide for the completion of the following lines : Miles

.5110	
The Waskada branch	
The Snowflake branch	
The McGregor Varcoe branch.	>
The Lac du Bonnet branch	ı
The West Selkirk & Lake Winnipeg	
branch2	1
The New Westminster & Vancouver	'
1	

And it was resolved that the Company may issue, in lieu of bonds, consolidated debenture stock, not to exceed in the aggregate \$15,000 a mile, bearing interest at 4%. The expenditure on capital account

during 1899 of \$1,070,315.36 for rolling stock in addition to the amount authorized at the last annual meeting was approved.

The following further expenditure on capital account was authorized :

Additional station & terminal facili-ties at Montreal & Winnipeg\$ Wharves & other terminal works at

Vancouver	98,817
Improvements to permanent way Increased yards & other facilities at	978,744
various points on the system	461,928
Additional rolling stock	975,000

\$3,264.489

A number of by-laws passed by the directors were approved, providing for an office to be known as the Chairman of the Board to be held by one of the directors who shall ex officio be one of the executive committee of the

directors & shall, when present, pre-side at meetings of shareholders, directors & the executive committee, the office of the Chairman of the Board & the office of President of the Company not to be held at any time by the same director; that the President or executive committee may appoint an Assist-ant Secretary of the Co.; establishing tolls for passengers & freight between Lethbridge, Alta., & Nelson, B.C. ; providing that at the first meeting of the directors after each election they shall elect from their own number a Chairman of the Board, a President & a Vice-President, & that the board may also appoint two or more additional Vice-Presidents, to be

C. R. PALMER,

General Storekeeper, Intercolonial Railway.

appurtenances, the C.P.R. Co. to pay as rental interest at 5% on bonds which the G.N.W. C. Co. may issue to the extent of \$875,000, & on any additional bonds which the G.N.W.C. Co. may issue with the consent of the C.P.R. Co., the latter Co. being entitled also to the net proceeds of all lands which the G.N.W.C. Co. may be entitled to from the Dominion. The lease was approved.

The meeting approved of a lease from the Manitoba & Northwestern Ry. Co. to the C.P. R. Co. of its property & franchises, including a sub-lease of the Saskatchewan & Western Ry. under lease to the M. & N.W.R. Co. The

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ronto. CLASSIFICATION COMMITTEE.—E. Tiffin, J. H. Hanna, F. Zimmerman, C. A. Jaques, S. P. Howard, F. J. Watson, J. Hardwell, W. P. Hinton, W. Woollatt; J. Earls, Chairman. INSPECTION COMMITTEE.—G. Collins, F. Conway, J. N. Sutherland, F. F. Backus, J. Hardwell, C. A. Jaques, C. E. Dewey, W. B. Lanigan; J. Earls, Chairman. CAR SERVICE COMMITTEE.—J. B. Morford, M. C. Sturtevant, G. S. Cantlie, W. P. Hinton, J.J. Mossman, E. 2Fisher, W. Woollatt, J. F. Chapman; J. Earls, Manager.

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PRESIDENT, J. Graham, Ottawa, Ont.; VICE-PRESI-DENT, R. Shanks, Mattawa, Ont.; SECRETARY-TREAS-URER, J. Drinkwater, Winchester, Ont. EXECUTIVE COMMITTEE.—The above & J. Yeo, Riviere du Loup, Que.; J. R. Brennan, Ottawa, Ont.; A. N. McLennan, Glace Bay, N.S.; F. J. Holloway, Toronto, Out

Ont, Official Organ.—The Railway & Shipping World, Toronto NEXT ANNUAL MEETING at Montreal, Oct. 17 & 18, 1900.

Canadian Ticket Agents' Association.

PRESIDENT, F. W. Churchill, Collingwood, Ont.; 1st VICE-PRESIDENT, W. Jackson, Clinton, Ont.; and VICE-PRESIDENT, M. McNamara, Walkerton, Ont.; ard VICE-PRESIDENT, W. H. C. McKay, St. John, N.B.; SEC.-TREAS., E. de la Hooke, London, Ont.; AUDITOR, S. H. Palmer, St. Thomas, Ont. EXECUTIVE COMMITTEE, W. H. Harper, Chatham, Ont.; C. E. Morgan, Hamilton, Ont.; T. Long, Port Hope, Ont.; J. W. Tierney, Arnprior, Ont.; C. C. Young, London, Ont. NEXT ANNUAL MEETING at Hamilton, Ont., Oct, 10, 1000

1000

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-

HON. SECRETARY-TREASURER. - Acton Burrows, 33 Melinda Street, Toronto. NEXT ANNUAL MEETING at Montreal, Oct. 16, 1900.

called Second Vice-President, Third Vice-President & so on, no one of whom need necessarily be a director; providing that after 1900 the annual general meeting of share-holders shall be held on the 1st Wednesday of October.

The following were unanimously elected directors: Lord Strathcona, Sir Wm. Van Horne, T. G. Shaughnessy, R. B. Angus, E. B. Osler, Sir Sandford Fleming, G. R. Harris, W. D. Matthews, Hon. D. MacInnes, T. Skinner, J. W. Mackay, General S. Thomas, C. R. Hosmer.

At a meeting of the Board held subsequently, Sir Wm. Van Horne was re-elected Chairman, & T. G. Shaughnessy President, & the following were appointed the Executive Com-mittee : Sir Wm Van Horne, T. G. Shaughnessy, Lord Strathcona, R. B. Angus, E. B. Osler. The Executive Committee heretofore consisted of 4 members, Mr. Osler having now been added. No election was made to the office of Vice-President. D. McNicoll was appointed Second Vice-President & General Manager.

G.T.R. SEMI-ANNUAL MEETING.

The semi-annual meeting was held at the Cannon St. Hotel, London, Eng., April 5, the President, Sir C. Rivers Wilson, in the chair. The report for the 1-year ended Dec. 31, 1899, was presented as follows :

Following is a comparison of the $\frac{1}{2}$ -year's revenue account with that of the corresponding 1/2-year, ended Dec. 31, 1898:-

Dec. 31,	1898.	Dec. 31, 1	899.	
£2, 140, 580 1,428,000	Gross receipts			
	pared with 66.71% in 1898	1,594,750	4	9
712,580	Net traffic receipts Add received from Interna-		12	9
4,742	tional Bridge Co Interest on Toledo, Saginaw	12,930	12	9
3.087	& Muskegon bonds Interest on Central Vermont		-	
64,781	Ry. bonds Interest on securities of con- trolled lines & on St. Clair Tunnel bonds ac-		10	8
20, 1 38	quired by issue of G.T. 4% debenture stock Balance of general interest ac-	64,781	·	
	count	21,924	14	5
£818,259	Net revenue receipts	£936,187	17	11
Follow the ½-yea	ring are the net revenue ar :	charge	s f	or
Rents (lea	sed lines) debenture stocks & bonds of	£73,174	8	3
the Co	debenture stock & bonds of	443,578	18	8
lines con	solidated with the G.T. Co Michigan Air Line bonds	72,406		
Interest on	Michigan Air Line bolids	7.750		0
go & C traffic ag payment bonds, ½ for which are held. Less Detro	Ivanced to Chica- 5.T. Co., under reementstowards of interest on its -year to Dec. 31. interest coupons interest c	596,909	11	9
⅓-year t	o Dec. 31 5,088 7 8			-
		14, 169	17	
Leaving a	net revenue balance for the	£611,079	8	9
½-year c	of	325, 108	9	2

£936,187 17 11

The above amount of £325,108 9s. 2d.,
added to the balance from last 1/2-year of
£2,052 6s. od., makes a total of £327,160 155.
2d., from which the directors recommend the
declaration of the following dividend, viz :-
fat on the 19 guaranteed stude from or 17 6

42% on the 4% guaranteed stock **4%** on the 1st preference stock....... (making with the £1% paid for the ½-year to June 30, 1899, the full dividend for 1899)..... 136,673 4 0

 $\pounds_{3,55.}$ / on the 2nd preference stock 82,173 0 5

£323.242 III

leaving £3,918 13s. 3d., to be carried forward to next $\frac{1}{2}$ -year's accounts.

The net revenue balance for the $\frac{1}{2}$ -year The result of the past $\frac{1}{2}$ -year's working is, therefore, more favourable by £116,266 165-11d. For the 12 months ended Dec. 31, 1899 the net revenue balance was £461,512 185 od., compared with £315,493 108. 10d., for 1898, an improvement of £146,019 7s. 2d. This table gives a comparison of receipts

for the 1/2-years ended Dec. 31, 1899 & 1898.

Description of receipts.	1899.	1898.	Increase.
Passengers Mails and express Freight & live stock Miscellaneous	£ 685,249 110,281 1,561,672 66,597	£ 581,429 104,632 1,388,711 65,808	£ 103,820 5,649 172,961 789
	2.423,799	2,140,580	283.219

TRAFFIC STATISTICS.

	¹ ⁄ ₂ year, Dec, 31, 1899.	1⁄2 year, Dec. 31, 1898.	In- crease	De- crease
Passengers car-	3,761,262	2 822 614		72,352
Average fare per	3,701,202	3.033.014		12130
passenger	3s. 7åd.	3s. ozd.	71d.	
Tons of freight and live stock.	5,422,537	4,756,205	666,332	
Average rate per ton	5s. 9d.	55. 10J.		ıd.
Earnings per train mile	63.71d.	59.92d.	3.79d.	

The average receipt per ton per mile on the entire freight business was 0.62 of a cent, compared with 0.68 of a cent in the corresponding ½-year.

The working expenses, including taxes, amounted in the $\frac{1}{2}$ year to $\pounds_{1,594,750}$, or 65.80% of the gross receipts, as compared with £1,428,000, or 66.71%; an increase in amount of £166,750, but a decrease in the proportion to the gross receipts of 0.91%

This table gives a comparison of the re-venue expenditure, including taxes, for the 1-year ended Dec. 31, 1899 & 1898 :

Description of expenditure.	1899.	1898.	In- crease.	De- crease
Maintenance of way, & struc-		£	£	£
tures Maintenance of	421,461	397,110	24,351	-
equipment Con d u c t i n g	- 283,393	213,143	70,250	_
transportation General ex-	802,501	731,247	71,254	_
penses	55,884	55,042	842	_
Total Percentage of	£1,563,239	£1,396,542	£166,697	
gross receipts Expenditure per		65.24		0.74
train-mile	41.09d.	39.09d.	2d.	
			1	

The train mileage of the 1/2-year compares with that for the 1/2-year ended Dec. 31, 1898, as follows :--

Description of mileage.	1899,	1898.	Increa
Passenger. Freight. Mixed trains.	3.356,870 5.218,334 555,947	3,270,604 4,758,402 544,519	86,20 459,93 11,44
Total	9,131,151	8.573.525	557,6

The gross receipts for the $\frac{1}{2}$ -year show an increase of £283,219, or 13.23%; the working expansion of £283,219 or 13.23%; the working expenses, including taxes, an increase of £166,750, or 11.68%; & the train mileage an increase of 557,626, or 6.50%. This following table exhibits the gross re-ceints monthly and traffic receints

ceipts, working expenses, & net traffic receipts for the past 8 years :

c,		Working	expenses.	
Year.	Gross re- ceipts.	Amount.	Percentage of gross re- ceipts.	Net traffic receipts.
892 893 893 895 895 895 895 895 895 895 895 895 895	£ 4.028,865 4,062,217 3.649,957 3.637,055 3.819,074 4.003,717 4.012,313 4.407,015	£ 2,914,876 2.942,548 2,625,476 2,610,862 2,713,667 2,631,447 2,671,883 2,892,994	72.35 72.43 71.93 71.78 71.06 65.72 66.59 65.65	£ 1,113,989 1,119,669 1,024,481 1,026,193 1,105,407 1,372,270 1,340,430 1,514,021

No additions to the rolling stock have been made at the expense of capital during the 2-year. Ten passenger engines were built, 9 freight engines purchased on revenue at Dec ar uning the ¹/₂-year, & there remained at Dec ar uning the ¹/₂-year, & there remained at Dec. 31, 1899, 11 engines in excess of the official stock. There have been built in the Co.'s shops, by way of renewal, 5 passenger, 2 baggage, & 215 box cars, & there was, at $D_{ec.}^{aggage}$, & 215 Dox cars, & the credit of the car renewal fund, to be applied to the replacement of cars out of service. There Was also at that date £21,291 os. 2d. at the credit of the engine renewal fund.

£93,238 18s. 6d. was expended on capital 33,230 185. od. was expended the during the $\frac{1}{2}$ year, of which $\pounds 22,714$ 8s. 7d. was on account of the construction of additional difference points on the ditional double track at various points on the line; $\pounds_{27,163}$ os. 11d. for the further equipment of engines & freight cars with air-brakes & automatic couplers in compliance with the U.S. "Safety Appliance Act"; & £41,189 los. 11d. on account of the purchase of additional land, mainly for the purpose of improving the terminal accommodation at Montreal by which the increased traffic will be more promptly & economically handled. The Intercolonial Ry., under the agreement of Feb., 1, 1898, participates in the use of the Co.'s terminal facilities at Montreal, & a pro-Portion Feb. Portion of the cost of acquiring this additional property, or interest at the rate of 4% thereon, will be Will be payable by that line in the terms of the agreement.

It addition to £30,805 being the proportion chargeable to the revenue of the $\frac{1}{2}$ year of the cost of reconstructing the Victoria Jubilee bridge, & of the expenditure for renewing the bridges between Montreal & Portland, & on the Southern division on the plan mentioned in Previous reports, £20,000 has been specially included in the maintenance of way charges & placed to the credit of the renewal of bridges Suspense account, which now stands at £46,-

754 128. od. The gross receipts of the Chicago & G.T.R. Confection of the Chicago & G.T.R. The gross receipts of the Chicago & G. 1.1. Co. for the $\frac{1}{2}$ year to Dec. 31, 1899, amounted to £406,786, against £373,555 in 1898, an in-were £333,796, against £299,355, an increase of £33,441, the net profit being £72,990, of \pounds 333,796, against \pounds 299,355, an \dots of \pounds 34,441; the net profit being \pounds 72,990, **Against** \pounds 74,200, a decrease of \pounds 1,210. The net report of \pounds vear were \pounds 22,-⁴Kainst £74,200, a decrease of £1,210. 100 net revenue charges for the $\frac{1}{2}$ year were £92,-248, against £88,755 in 1898, so that there was a deficiency in meeting the net revenue charges in 1899 of £19,258, compared with a deficiency for $\frac{29}{200}$ of £14,555. The above deficiency for 1899 of £19,250, comp deficiency for 1898 of £14,555. The above deficiency of £19,258 is payable by the G.T. Co., under traffic agreements. The number of recongress carried during the $\frac{1}{2}$ number of passengers carried during the 1 year man of passengers carried during the 1 year was 659,223, against 622,847, an increase of 36,376, or 5.84%, and the passenger train were free from the form of the for Were $\pounds_{13^{2},165}^{19^{19},10}$, against $\pounds_{115,068}^{190}$, an increase of $\pounds_{11}^{13^{2},165}$, against $\pounds_{115,068}^{190}$, an increase of $\mathfrak{L}_{17,097}$, or 14.86%. The quantity of freight moved 97, or 14.86%. Moved during the 1 year was 1,241,316 tons, against against 1,005,054 in 1898, an increase of 236,-

262 or 23.51%, & the receipts from this traffic were £274,012, against £258,175 in 1898, an

increase of £15,837, or 6.13%. The gross receipts of the Detroit, Grand Haven & Milwaukee Ry. for the $\frac{1}{2}$ year to Dec. 31, 1899, were £115,907, against £106,-379 in 1898, an increase of £9,528; the work-ing expenses were £73,769, against £72,492, In crease of $f_{1,277}$; leaving a balance of $f_{2,138}$, against $f_{2,3887}$, and showing an increased net revenue of $f_{2,251}$, compared the transformation of $f_{2,251}$, compared to the transformation of $f_{2,251}$, compared to the transformation of $f_{2,251}$. with the corresponding $\frac{1}{2}$ year of 1898. The net revenue charges for the $\frac{1}{2}$ year were £37,o50, against $\pm 37,768$ in 1898, so that there was a surplus for the $\frac{1}{2}$ year after meeting the net revenue charges of $\pm 5,088$, as compared with a deficiency of $\pounds_{3,881}$ for the corresponding period of 1898. The deficiency for the year 1899 amounted to $\pounds 17,280$. The number of passengers carried during the $\frac{1}{2}$ year was 365,965, against 330,357, an increase of 35,-608, or 10.78%, & the passenger receipts, including mails & express receipts, were £57,-098, against £51,153, an increase of £5,945, or 11.62%. The quantity of freight moved was 351,469 tons, against 285,202 in 1898, an increase of 66,267 or 23.24%, & the receipts from freight traffic were £56,992, against £54,318 in 1898, an increase of £2,674, or

4.92%. The proprietors were informed at the general meeting in Oct. last, that the Chicago & G.T. board had intimated its intention of promulgating, at an early date, a scheme for the rearrangement of the capital of that Co. This proceeding was rendered indispensable by the maturing of a large amount of 1st mortgage bonds on Jan. 1, 1900, together with the urgent necessity of arranging for the settlement of the Co.'s large floating debt, & of providing means for improving the physical condition of the line & its equipment, thus placing the Co. on a more equal footing with the other competing railways out of Chicago. With a view of effecting these objects the C. & G.T. Co. formulated a plan of re-organization, to the terms of which your directors have considered it desirable, in the interest of the G.T. Co., to assent, & inasmuch as the traffic agreement between the two companies in connection with the C. & G.T. 1st mortgage bonds maturing on Jan. 1, 1900, terminated on that date, the directors, in further support of the scheme, have expressed their willingness, subject to the approval of the proprietors, to enter into a new agreement for the interchange of traffic with the C. & G.T. Co. when re-organized, whereby the interest at 4% on the bond capital of \$15,000,000, proposed to be created by that Co., will be fully secured. Proceedings have been instituted in the U.S. courts for carrying this scheme into effect, & in the meantime E. W. Meddaugh & H. B. Joy have been appointed, by the Circuit Court of the U.S., joint receivers, & they are now in charge of the property. The interests of the G.T. Co. in these proceedings are be-ing carefully watched, & are receiving the special attention of the board.

The Central Vermont line was taken over by the new management on May 1, last, & the directors are pleased to report that the net revenue of that Co. was considerably in excess of the fixed charges for the 8 months ended Dec. 31, 1899, & therefore no liability was incurred by the G.T. Co. in respect to the traffic agreement between the two companies. Securities of the C.V.R. Co. have been received in substitution of those of the former Co. held by the G.T. Co., & in settlement of traffic balances & advances. The securities now held consist of \$2,185,100 common stock & \$1,583,300 of 4% 21-year 1st mortgage bonds.

A patriotic fund having in Jan. last been organized in Canada, under the patronage of the Queen, for the relief of her Canadian subjects disabled in the war in South Africa, or their dependents, the directors authorized, on

behalf of the Co., a subscription of \$15,000 thereto, which they feel confident will receive the cordial approval of the proprietors.

The work in connection with the erection of the new general offices at Montreal, on the site granted to the Co. by the municipality, has been retarded by the difficulty of obtaining delivery of the necessary material. £17,-465 15s. 1d. on this account is included in the The retiring directors are G. Von Chauvin,

Col. F. Firebrace, A. W. Smithers, & Sir W. L. Young, all of whom are eligible, & offer themselves for re-election. F. Whinney, one of the auditors in London, & T. Davidson, one of the auditors in Canada, retire at the They are eligible & offer ensuing meeting. themselves for re-election.

Following are extracts from the appendices to the report :

The mileage of the G.T.R. on Dec. 1898, including lines east of St. Clair & Detroit rivers & the Detroit & Michigan Air Line, was, length of roadway, 3,506 miles; 2nd track, 4263/ miles; sidings, 8191/ miles; total, 4,752 miles. The Superintendent of Motive Power re-

ports the expenditure, mileage, etc., as follows: п.,

per Mile.	. Car.	Cents.	.1.60	1.50
Rate of Expenses per Mile.	Engine.	Cents.	21-44	19.80
Rate	Train	Cents.	26.50	24.29
Train	5		9,131,151	8,573,525
	Expenditure	Dollars.	2,419,652	2,082,913
4-vear	ended		Dec., 1899	. 1898

An increase in expenditure of \$336,739, or 16.17%, compared with an increase in train miles of 557,626, or 6.5%, & with an increase in the ton miles of 227,615,197, or 22.8 %.

The average number of cars moved per	Passenger trains.	Freight trains.	Mixed trains.
train was And for the correspond-	4.6	24.8	10,5
ing period	4.6	24.8	10. 5

The comparative cost of repairs per train, engine & car mile was :--

		renewals como- es.	includi machine & marii	ng charges, ng shop ry, tools, ne equip- , &c.
	1899.	1898.	1899.	1898.
Train Engine Car	Cents. 6.07 4.91 0.37	Cents. 4.81 3.92 0.30	Cents. 7.53 6.09 0.46	Cents. 6.19 5.04 0,38

The superintendent of the car department reports expenditure, mileage, &c., as follows :-

Enameled Iron Station Names.

Guaranteed not to fade or in any way to perish from exposure.

As used on the Canadian Pacific & Canadian Northern Railways. Sign 12 ins. high. Letters 9 ins. high. Length according to number of letters in name. The sign shown is 45 ins. long.



I wenty-nine of these signs supplied the C.P R Co. for the Crow's Nest Pass Ry. averaged 6½ ft. in length, the longest being 11 ft. 2 ins. & the shortest 3 ft. 9 ins.

Style no. 1, White letters on blue ground.

Mr. Wm. Whyte, Manager of the Canadian Pacific Railway Co.'s lines west of Fort William, writes,—" I have pleasure in stating that I am very well satisfied with the enameled iron signs supplied by the Acton Burrows Co. for station names on the western lines of this Company. They have now been in use for some time & have proved very satisfactory. The lettering is clear & distinct & the signs have proved to be impervious to the weather. They have a brighter & neater appearance & are very much more satisfactory than painted wooden ones, & considering their lasting qualities will be found more economical."

Mr. H. P. Timmerman, General Superintendent of the Atlantic Division of the Canadian Pacific Ry., writes,—" The enameled iron station names supplied by the Acton Burrows Co., in 1898, for a number of stations on this division, have proved very satisfactory. The letters are well formed & distinct, & the signs present a clean, bright appearance, being just as good now as when they were new."



Style no. 2, as used on the Grand Trunk Ry. System. Black letters on white ground. This sign is 14 ins. high by 7 ft. long. Length varies with number of letters in name of station.



Style no. 3, as used on the Pennsylvania Railroad. White letters on black ground. This sign is 12 ins. high by 6 ft. long Length varies with number of letters in name of station.



Style no. 4, as used on the Northeastern Railway of England. Dark brown letters on light ground, framed in wood. This sign is 6 x 18 ft.

These signs have long been used on most European railways, & for a number of years on the Pennsylvania R.R., the New York Central & Hudson River R.R., the Manhattan Elevated R.R., the Long Island R.R., & many other lines in the United States. They are also being extensively used in Canada & are giving complete satisfaction as the best outdoor signs produced. They can be made in any color, size, or shape. Estimates promptly furnished on application.

The Acton Burrows Co., 29 Melinda Street, Toronto.

Sole Agents for Canada for The Imperial Enamel Co. of Birmingham, England.

	· · ·	
	• /	
	^{7/2} -yea Dec. 31,	ar ended Dec. 3 ¹ ,
Total cost re	1898.	1899.
Passon	Milles	run by cars.
Freight.	Miles 	16,907,628 133,896,424
Τ.,		000 9 14-4
Cost per mil	al 138,687,922 e car	.458c
		7.57C
³⁶ .4%, wit	ease in expenditure of \$ h an increase in car mile	184,430, or
¹³⁰ , or 8.7	i%.	2,110,
as follows	bital expenditure for the	½-year was
Instal	-	£s.d.
Sundry stati	n Portland city elevator loan on and buildings, (new works) k	445 9 7 1,685 18 7
Union Stati	k	22,714 8 7
air brat	on and buildings, (new works) k	40 9 11
Land at M	tes and automatic couplers; tles for passenger cars, &c	27,163 0 11
Tor	tles for passenger cars, &c ntreal	40,834 1 7 355 9 4
Det		93,238 18 6
rails, Ch	ount received for sale of old emong branch	
		1,128 3 11
ጥ		£92,110 14 7
follows :	enue account for the $\frac{1}{2}$ -	year was as
	RECEIPTS.	
Passengers.	£ s. d. £ s. d.	
*4(ern		
St. C. 9	18. oxfo o 6	
Toledo	nnel 4,791 12 3 ag- usk- nder	
inaw, & M	ag- usk-	
"alfic of		
Cincinnati	147 9 5	
inaw, & M	ack-	
ment Cincinnati, S inaw, & M inaw R.R. der tra agreement	ffic	
ent	131 5 11	
Mails & exp		685,249 7 3
Loock		
Internati Bridge toll	onal 8 10,168 5 9 nel	
St. Clair Tu tolls	^{nnel}	
inc. Sa	·····10,749 8 4	
egon Ry, der tra	un-	
Cincinnet	3.347 10 10	
inaw,& M	ag.	
Under K		
s. cement	1,036 12 0	
Miscella n e c receipts, ro	82,121 14 9	1,561,671 7 5
receipts, re tolls, &c	ints,	
	•••• ••••	66.597 6 5
	£.	443.798 17 6
Mainte	EXPENDITURE,	<u> </u>
Maintenance Cond.	EXPENDITURE. c of Way & Structures c of Equipment Transportation	£ s.d. 421,460 18 5
General Ex-	of Equipment Fransportation	283,392 17 3 802,500 16 11
Total	1	55,884 14 8
Taxes	Working Expenses 64.50%	1,563,239 7 3 31,510 17 6
		.594.750 4 9
watance to n	et revenue account	829.048 12
r.		2,423,798 17 6
Dec. 31, 1898.	STATEMENT OF TRAIN	Dag
	MILEAGE.	Dec. 31. 1899.
3.270.604	D	
4.758,402	Passenger trains	3.356,870
544.519	Freight trains	5,218,334
	Mixed trains	555-947
8,573,525		
		9,131,151

In moving the adoption of the report Sir Rivers Wilson praised the ability & energy of General Manager Hays & his staff. He regretfully announced the retirement of G. B. Reeve, General Traffic Manager, after long, successful & faithful services, quite exceptional in character, in which he had brought to bear intelligence of a very high order & said the position would be filled by promo-tions in the staff. He believed the reorganisation of the Chicago & G.T. would be carried out though one-third of the 1st bond-holders still dissented. There was no indication of better freight rates, such powerful interests as those of the Pennsylvania R.R., & the Vanderbilts being unable to maintain the tariff, nor could the great financial interests of New York enforce fixed rates. This was difficult to explain, but it seemed to him that the great shippers were able to compel reductions. Some ship-pers were never known to pay full rate, & the smaller & weaker struggling shippers were obliterated. The remedy was legalised pool-The bridges of the Portland division ing. would be reconstructed in time for the winter traffic. The Central Vermont was doing most satisfactory work, the Detroit & Grand Haven was doing fairly well & the Chicago & G.T. was doing badly. The meeting applauded Sir Rivers Wilson's tribute to the noble & patriotic action of Canada in connection with the war, & said the G.T. had contributed \$15,000 to the Patriotic Fund. The meeting cheered the unanimously endorsed resolution for the reorganization of the Chicago & G.T. road & unanimously adopted everything.

Free Passes for Bridge Directors.

In the Court of Appeal at Toronto, April 4, in the case of the Niagara Falls Suspension Bridge Co. vs. the G.T.R. Co., the defendant appealed from judgment of Meredith, C.J., in favor of plaintiff, & directing a reference as to damages Action by above-named Bridge Co. & the Niagara Falls International Bridge Co., incorporated respectively in Canada & in New York State, under an agreement made in October, 1853, between the plaintiff & the

Great Western Ry. Co. (and confirmed Vict. (D) ch. 72), now amalgamated with defendant, to have it ascertained to what companies & persons the defendant & the Great Western Ry. Co. have extended the privileges of crossing the plaintiff's bridge over the Niagara River near Niagara Falls, as provided by the agreement, & to have it declared that the plaintiff is entitled to annual free tickets for its directors & officers to pass over the respective railways crossing the bridge, & for an order directing defendant to supply such annual free tickets in future, & for an account for refusal to supply them in the past. The trial judge refused specific performance, but directed an account for damages for non-supply of free tickets in the past, holding that he was bound by Niagara Falls, etc., Co. v. G. W. R. Company, 25 U.C.R. 313, to decide that upon the true construction of the 11th clause of the agreement the defendant was bound to procure annual free tickets. It was contended inter alia for appellant that upon the proper construction of an agreement made between the parties in 1875, all liability to procure these tickets was discharged, & an increased annual rent fixed for the use by the defendant of the railway floor of the bridge, that the measure of damages was not the amount paid by plaintiff for free tickets since defendant refused to supply them, & that the above case was a special case, & therefore nothing in it can be held to be res judicata except the precise question stated for the Court & determined by the judgment. After argument judgment was reserved.

C.P.R. Earnings & Expenses.

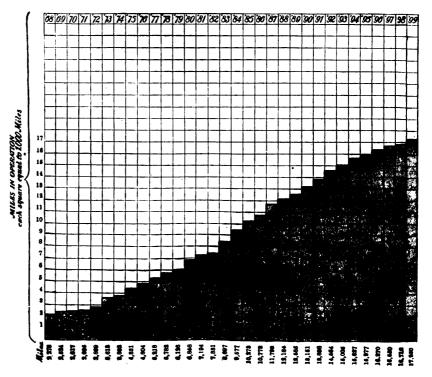
Gross earnings, working expenses, net prof-. its and increases over 1899, from Jan. 1, 1900 : Earnings. Expenses. Net Profits. Increase. [an..\$2,152,071.32 \$1,460,501.71 \$ 691,569.61 \$ 74,035.75 Feb. 1,954,087.59 1,331,355.34 622,732.25 23,030.77

\$4,106,158.91 \$2,791,857.05 \$1,314,301.86 \$ 97,066.52

Approximate earnings for Mar., \$2,280,000, against \$2,098,000 in Mar., 1899; increase, \$182,000.

Mileage of Canadian Railways,

The following diagram shows the miles of railway in operation in the Dominion on June 30 of each year from 1868 to 1899.



SUBSIDIARY LINES.

DULUTH, SOUTH SHORE & ATLANTIC.— Approximate earnings for Mar., \$210,474; increase over Mar., 1899, \$49,567. Net earnings for Jan., \$63,230, against

\$51,849 for corresponding period.

MINERAL RANGE, HANCOCK & CALUMET.— Approximate earnings for Mar., \$40,258; increase over Mar., 1899, \$13,538.

MINNEAPOLIS, ST. PAUL & SAULT STE. MARIE. — Approximate earnings for Mar., \$417,752; increase over Mar., 1899, \$81,228. Net earnings for 6 months to Dec. 31, 1899, \$1,487,278, against \$1,111,017 for corresponding period.

Canadian Pacific Railway Land Sales.

Acr	Acres.		ount.
1900	1899	1900	1899
Jan31,486	14.718	\$ 100,857.85	\$ 46.411.35
Feb23,613	13.747	75,771.19	43.371 69
Mar31,183	24,045	97,777.79	75.460.76
86,282	52,510	\$274,406.83	\$165,243.80

Grand Trunk Earnings, Expenses, &c.

The following statement of earnings supplied 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	
Mar 1,830,834	1,798,968	31,866	•••••
\$ 5,238,745	\$ 4,910,582	\$ 328,163	
The fallening	6	a locuad	from the

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

GRAND TRUNK RAILWAY. Revenue statement for Feb., 1900: 1900 Gross receipts....£314,100 Working expenses. 236,700 1899 Increase Decrease £297,600 £16,500 222,700 14,000 Net profit.....£ 77,400 74.900 £ 2,500 Aggregate Jan. 1 to Feb. 28, 1900: 1900 Gross receipts£672,200 1899 Increase Decrease £613,000 £59,200 Working expenses. 493,900 450,100 43,800 Net profit.....£178,300 £162,900 £15,400 DETROIT, GRAND HAVEN AND MILWAUKEE RY. Revenue statement for Feb., 1900: 1900 Gross receipts.... £12,200 Working expenses. 11,100 1899 Increase Decrease 1899 1 £11,700 11,600 £ 500 • • • • 500 Net profit.... £ 1,100 £ 100 £1,000

Aggregate Jar	i. i to l	reb. 28,	1900 :	
	1900	1899 In	crease D	ecrease
Gross receipts		£26,300	£1,700	• • • • • •
Working expenses	24,100	24,100	• • • • • •	••••
Net profit	£ 3,900	£ 2,200	£1,700	· · · · ·

RAILWAY FINANCE, MEETINGS, &c.

The Buffalo & Lake Huron Ry. Co. gives notice that it is prepared to receive the 1st mortgage bonds for examination, prior to issuing, free of charge, new sheets of coupons for the next 20 years, in accordance with the provision contained in the mortgage.

Calgary & Edmonton net earnings for Feb., \$7,962.20, against \$9,201.58, in Feb. 1899.

Chignecto Marine Transport Ry.—The directors have issued a circular to those who have invested money in the undertaking stating that, in view of further negotiations with the Dominion Government to obtain a reinstatement of the Co. or compensation for being deprived of the subsidy, it is desirable that there should be united action on the part of all the holders of the Co.'s issues—viz, debentures, preference shares, & ordinary shares. In order to effect this, arrangements have been made to deposit the whole of the issues at Martin's Bank, London, Eng. The following will act as trustees for all the investors, & represent the Co. in the negotiations with the Dominion Government, in furtherance of which Mr. Provand will shortly again proceed to Ottawa :—R. B. Martin, M.P., E. Bond, M.P., & J. Van Raalte. (Oct. '99' pg. 287.)

Columbia & Kootenay Railway & Nav¹gate Co.—The annual meeting will be held ⁱⁿ Vancouver May 2.

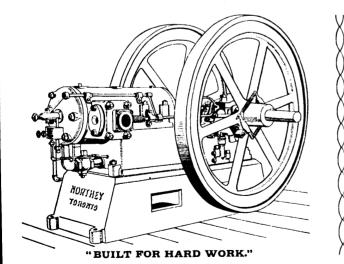
Dominion Atlantic net earnings for ² months to Feb. 28, \$85,200, against \$75,267, for corresponding period.

The annual meeting was held in London, Eng., Mar. 30, President C. F. Kemp in the chair. A cablegram says there was a large attendance of shareholders. The policy of the Co. was clearly indicated in the various directors' speeches & unanimously approved. The retiring directors were re-elected as follows: C. F. Kemp, T. R. Ronald & A. Denny, the Dumbarton shipbuilder. After the announcement of the dividend a vote of thanks to the Superintendent, Secretary & other leading officers was passed.

Fitchburg.—The proposed lease of this line to the Boston & Maine was ratified Mar. 27, at a meeting of the stockholders of the former road by an overwhelming vote. The result was reached after a four hours' contest, in which every new proposition for delay was, defeated by the "Protective Committee. The Fitchburg road is about 475 miles long, & runs from Boston to Rotterdam Jct. through the Hoosac tunnel. The charter for the building of this road was let in 1842, & the line was opened three years later from East

The Northey Gas or Gasoline Engine.

In Connection with Pumping Machinery for Tank Duty.



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, KINGWAY, Toronto, Ont.

Cambridge to Fitchburg. Three years after that it was extended to Boston, & since that time to Rotterdam Jct. The Fitchburg Co. owns a large grain elevator, & this with the road comes under the control of the Boston & Maine by the terms of the lease. This will make the Boston & Maine a freder for all the steamship lines plying between Boston & European ports, & with one or two exceptions the steamers of all the lines will have to tie up to the Boston & Maine docks to receive their grain.

Great Northern (U.S.A.)-The New York Stock Exchange has listed \$9,000,000 additional preferred stock offerd to stockholders, making the total stock listed to date \$99,000-000. The new issue was made for the purpose of acquiring \$3,500,000 additional capital stock of the Eastern Ry. Co. of Minnesota & \$5,500,000 additional of the capital stock of the Witten and the capital stock of the Willmar & Sioux Falls Ry. Co. This acquisi-tion gives to the G.N. Co. "the ownership of the entire capital stock of each of the said companies, & the shares so acquired will then become an asset of this company, subject to the disposition of its stock-holders by their direct action or through their board of directors. The mileage of the Eastern Ry. Co. of Minnesota is as follows :-- main single track, 412.48 miles; 2nd main track, 17.28 miles. It also operates leased lines, 7.65 miles. The main track mileage of the Willmar & Sioux Falls Ry. Co. is 430.41 miles."

Great Northwest Central Ry.--Notice was given some time since that this Co. would apply to the Minister of Railways on Mar. 3, for the sanctioning of a lease of its line to the C.P.R. Co., & we are officially informed that the sanction has been given. The lease was approved at the recent annual meeting of the C.P.R. Co. (Feb., pg. 35.)

Hannaford vs. G.T.R.-The case of E. P. Hannaford, ex-Chief Engineer of the G.T.R., claiming \$6,000 damages for alleged wrongful dismissal, was resumed after an interval of two years in the Superior Court at Montreal, April 5. Mr. Hannaford sues for a year's salary, to which he claims he was entitled on being removed from that office on April 1, 1896. The chief point in the case seems to he will be an an an arriver and the second be whether, by the rules of his engagement & his status, he was entitled to a month's notice or to a year's notice. The Co. claims that he was given 2 months' notice, & the plaintiff alleges that the rule of 1 month's notice only annial applied to servants of the Co., & not to general officers. The Co. also claims that his dismissal was justified because among other reasons he had violated the Co.'s rules by employing the servants of the Co. for his own Personal service at his house & that of his son, & that material, the property of the Co., had been used for his benefit at those places; that the plaintiff did not give satisfaction, & that he had recommended increased salaries to relatives & friends, & not in the Co.'s interests. Mr. Hannaford denies all these allegations, & states that all his actions were confirmed by the General Manager. On the reopening of the case evidence was taken on behalf of Mr. Hannaford in rebuttal of the G testimony already heard in support of the G. T.R.'s plea that he was in the habit of using the Cthe Co.'s men & materials for his private purposes at the Co.'s expense. Mr. Hannaford & several other witnesses were examined in this connection. Judgment was reserved.

Lake Erie & Detroit River.—The annual general meeting will be held at Walkerville May I, to consider the proposed terms for amalgamation with the Erie & Huron Ry. Co., for the election of directors, etc.

The Montreal Incline Ry. Co. will not agree to the City Council's propositions in regard to the fares to be charged, in case its franchise should be renewed for another five years. The Council decided to notify the Co. it would

extend its franchise for the period mentioned upon condition that the rates charged should be 3c up & 3c down, or a return fare for 5c, children from 2 to 10 years half price, & under 2 free. Speaking of the reasons why the Co. would not accept the offer of the city, the Managing Director recently said: "The Council is not treating the Co. fairly in all the franchise for five years. If we had to charge the fares demanded the Co. would be out of pocket. In no year have the gross earnings of the Company amounted to \$7,000. During the 15 years we have been operating the road, only 9 dividends have been paid. But comparatively little is paid out in wages & we can only afford to pay our secretary \$200 a year. If the city would guarantee 400,000 passengers a year we would agree to the 5c rate, but we have never carried 200,000 paid fares in a year. Were the Co. ever so willing it is not able to reduce its fares lower than they are at present. The road has cost the Co. \$56,ooo, but we would be willing to sell, if the city desired, at \$46,000. Some time ago a proposition was made that we should take \$25,-This we will never do. We asked that 000. a 25 years' renewal of contract should be given us at our present rates. The Council now wants us to reduce our fares a third & take a renewal for 5 years. There is no jus-tice in such an offer. During the many years the Co. has been operating the road, an acci-dent has never occurred, & I think this should be taken into consideration." The Co.'s contract expires May 1 next.

Montreal Warehousing Co. —At the annual meeting at the G.T.R., offices Montreal, Mar. 9, the following were elected :—C. M. Hays, President ; W. M. Ramsay, Vice-President ; G. H. Hanna, Secretary-Manager ; C. Percy, G. B. Reeve, & T. Davidson, Directors.

Qu'Appelle, Long Lake & Saskatchewan net loss in operating for Feb. \$1,408.57 against net earnings of \$290.53 in Feb. 1899.

Quebee Central earnings for Feb., \$31,-853.12, against \$27,187.48 in Feb., 1899; working expenses, \$23,877.86, against \$21,-673.44; net earnings, \$7,975.26, against \$5,-514.04.

Earnings, Jan. 1 to Feb. 28, \$60,513.06, against \$54,392.91 for corresponding period; working expenses, \$48,302.80, against \$44,-025.65; net earnings, \$12,210.26, against \$10,-367.26.

The Quebec & Lake St. John Ry. has obtained power from the Quebec Legislature to issue bonds for $\pounds 170,000$ on the Quebec-Roberval section of the road. The proceeds are to be used in improving the roadbed & terminals of this division, rolling stock, & in paying certain debts. The Co. is also authorized to issue 1st mortgage bonds, ranking after the prior lien bonds for £400,000, to redeem the £780,000 of 1st mortgage bonds, now out & in default, through non-payment of interest, due on July 1, 1899. The Co. may also issue £500,000 income bonds, ranking after the 1st mortgage bonds, bearing interest at 6%. These income bonds, together with the 1st mortgage bonds, will be used to exchange for the £780,000 of bonds to be retired, the excess being to cover the accrued interest on the old bonds.

Saskatchewan & Western.—The adjourned annual meeting was held at Winnipeg Mar. 15, when an agreement altering the terms of the lease of the Co.'s line to the Manitoba & Northwestern Ry. Co. was approed.

Shuswap & Okanagan.—The gross earnings for the six months ended Dec. 31, 1899, were \$20,889; expenses, \$12,533.

Temiscousta.—Armstrong & Co., London, Eng., recently announced that they have received a remittance for the payment of the guaranteed interest, due March I, on the bonds of the St. Francis Branch of this line,

& that they were prepared to pay the same on behalf of the Treasurer of the Province of Quebec. This is the last payment under the guarantee arrangements. On the main line bonds default took place on Jan. 1, 1899.

Dominion Atlantic Railway Meeting.

A brief notice of this meeting appears on page 102. Following are fuller particulars-C. F. Kenp, who presided, referred with great regret to the resignation by Mr. Tot-hill, through ill health, of his seat at the board after about 30 years' zealous service to the Co. In proposing the adoption of the report he stated that the gross increase in the receipts in the past year had been over £27,000, a fact which showed a vitality in the Co. which would, he hoped, work out in the future with a more satisfactory result than the directors could show on the present occasion. During the whole of the past year while their three steamers had been running, they had been subjected to a very strong & unfair competition, which had greatly depleted the profits. The Co. had the main line of railway from Halifax to Yarmouth, & the board has always felt-& their policy had been approved by the proprietors-that for the proper development of the Co.'s undertaking they must tap the American continent by means of a service of steamers between Yarmouth & Boston. Nova Scotia was a country of limited extent, & the Co. had to depend largely on the natural products of the soil; but if they could tap the American continent, & thus obtain from the enormous population of Boston & its neighborhood a large increase in goods & passenger traffic, as the directors believed might be done, they were satisfied not only that the future of the line was assured, but that the Co.'s undertaking would become a very important one. This was the directors' policy, & their experi-ence of the past year had not caused any change in their views. What they intended to do was to see if an arrangement could be come to to put the competition on a healthier & better footing, so that they & their competi-tor might both be benefited; but if no arrangement could be come to he was distinctly of opinion that the matter should be fought Their railway was in first-rate order, & out. their ships had all been recently built, & were equipped with the most modern appliances. The expenses this year had increased very nearly to the same extent as the receipts, but the working of the steamers had added largely to the costs as well as to the traffic. The Co. had also been severely handicapped by the great advance in the price of coal. The expenses of working the line generally had been within a few pounds the same as they were in the previous year. In the exceptional circumstances of the past year, the directors had felt justified in taking £8,500 from the reserve at their disposal in the suspense account of £20,500, & in recommending a dividend of 3% on the preferred stock. They were convinced that the debenture interest was perfectly safe, & they believed that with fair & favourable conditions in the coming year, they would be able to present a very different statement of accounts to that submitted on the present occasion. He afterwards referred with satisfaction to the election as a director of Mr. Denny, of Dumbarton, & stated that that gentleman's special knowledge of shipping would be of great service to the Co. T. R. Ronald seconded the motion.

In the discussion which followed dissatisfaction was expressed at the result of the year's working & it was contended that further information ought to be given in the accounts as to the working of the railway & the steamers. The Chairman, in reply, stated that whatever further information could be given should be given in the future. A system had now been instituted by which the receipts



We claim to be the oldest manufacturers on the continent, and for twenty-five years the sole manufacturers in the Dominion.

No. 325.

No. 238.

Recent additions to plant and premises put us in a position to meet competition from any quarter, either as regards price, style or finish.

No experiment with us. No bad fitting joints. All beds well proportioned, and enameled and lacquered in the best manner.

We are now manufacturing an extensive line of **ALL BRASS BEDS**, finished in the finest possible manner, and we defy competition in this line. We carry a large stock of the most desirable patterns at all times, and can make prompt shipments. Our beds are all quick sellers and carried by the most progressive dealers. Inspection solicited.



105

& expenses of the ships would be dealt with separately from those of the railway, & this information the shareholders would have in the future. They had, however, always regarded the working of the railway & of the steamers as having one common result in every way. The directors had absolutely nothing to con-ceal from the proprietors. Mr. Ronald stated that the unfavourable result of the past year's working was entirely owing to the steamer competition, but the directors were absolutely convinced that this must be continued, unless an arrangement could be come to; & the expenses that might be incurred must be regarded as necessary in order to create a goodwill. The railway itself was worked very cheaply. The motion was adopted, & after the re-election of the directors, all of whom retired, a resolution was passed adopting bylaws as altered to meet the requirements or the Dominion Government, which, it was stated, desired to assimilate as far as possible the by-laws & regulations of the several Canadian railways.

Ventilation of Passenger Cars.

The drawing on this page shows the general plan of the Pennsylvania R.R. system of

ventilation of passenger cars. It follows somewhat the principle of the old Spear stove system of car heating. Fresh air is taken in through a hood or intake at diagonally opposite corners of the car, allowing it to pass through a conduit underneath the floor of the car into the space bounded by the outside sill, the first intermediate sill & the floor & false bottom—this space extending the whole length of the car. From this space the air passes up through apertures in the floor into heater boxes situated alongside the rock plank, where it is warmed, & from which it passes out underneath every seat into the body of the car, & thence passes up through the globe ventilators in the deck to the outside air.

The handle directly above the instruction card, as shown on the left-hand section, controls an ordinary damper of the butterfly-valve type, which is either set open or set shut. The hood contains inside of it a flat valve hinged at the top, which is operated by a horizontal shaft below, protruding through the side of the box towards the centre of the car.

The instructions for operating the ventilating system are simple. In both corners of the car, the upper lever on the instruction box controls the flap valves in the hood & must always point in the direction in which the car is moving. The lower lever on this box must normally be kept "open." This lever controls the admiring of air to the car is

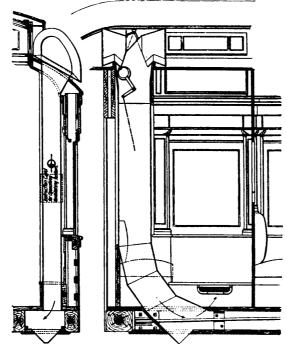
The lower lever on this box must normally be kept "open." This lever controls the admission of air to the car & must only be moved to "shut" position when it is necessary to exclude foul or cold air. The instruction card also contains directions for regulating the globe ventilators at the top of the car.

Early in the consideration of the question of the ventilation of passenger cars, the engineers of the Pennsylvania R.R. were convinced that it should be worked out in the system now in use is the result of a careful study of the problem of passing through car during all seasons of the year a sufficient quantity of fresh air to maintain a wholesome atmosphere for, say, 60 persons, & free from smoke, cinders & dust at all times.

It is generally agreed that perfect ventilation requires 3,000 cu. ft. of air for each person an hour, which for 60 persons would amount to 180,000 cu. ft. an hour. It is impracticable to pass such a quantity of properly warmed air through a passenger car, & it was

not attempted. The calculations were made on the basis of 90,000 cu. ft. of air a car per hour, but this amount could not be properly warmed. After careful study & many experiments for the purpose of determining the correct number, size & location of the intakes, the openings for admitting the air to the heating system, & the ventilators in the deck, in order to secure the proper balance between their respective capacities to take in air, to warm it, & to remove it positive analyses show that good results are being obtained & that a car with the present system receives & rejects about 60,000 cu. ft. of air an hour. The system operates very satisfactorily when the car is standing as well as when it is in motion.

For nearly a year, the Pennsylvania R.R. has had under constant observation cars equipped with this system, & during the most extreme cold of last winter it was found that with all the ventilating apparatus open, it was quite possible to keep the car warm. During the warm weather when there was no heat on the cars, it was found that the cars fitted with this system were better ventilated than the cars that did not have it.—Railroad Gazette.



VFNTILATION OF PASSENGER CARS ON THE PENNSYLVANIA R.R.

Amendments to the Railway Act.

The bill introduced in the House of Commons by the Minister of Railways to amend the general Railway Act is of such importance that its provisions are given in full as follows :

1. The Railway Act, chap. 29 of the statutes of 1888, is amended by inserting after sec. 6 the following sec. :

"6A. Street railways & tramways, while hereby expressly declared to be subject to such of the provisions of this Act as are referred to in sec. 4, shall not by reason only of the fact of crossing or connecting with one or other of the lines of railway mentioned in section 306 be taken or considered to be works for the general advantage of Canada, nor to be subject to any other of the provisions or this Act."

2. The said section 6A shall also apply to all electric railways (as distinguished from electric street railways) passing through or over the Queen Victoria Niagara Falls Park, or through or over the property of the province of Ontario lying upon or along the Niagara River & known as the Chain Reserve.2. The said Act is further amended by in-

serting after section 25 the following sections : "25A. In case it appears to the Railway Committee expedient or necessary for the public convenience that a station should be located at any point on any railway subject to the legislative authority of the Parliament of Canada, & subsidized in money or in land under the authority of an Act of that Parliament, the Committee may by its order, confirmed by the Governor in Council, direct the company for the time being owning or operating such railway to erect, maintain & operate a station at such point, & may define the facilities or accommodation to be provided by the company in connection therewith.

"2. In the case of a railway not subject to the legislative authority of the Parliament of Canada, but subsidized in money or in land under the authority of an Act of that Parliament, the payment & acceptance of such subsidy shall be taken to be subject to the covenant or condition (whether expressed or not in any agreement relating to such subsidy) that the company for the time being owning or operating such railway shall, when

thereto directed by order of the Railway Committee, confirmed by the Governor in Council, erect, maintain & operate a station, with such accommodation or facilities in connection therewith as are defined by the Committee, at such point or points on the railway asare designated in such order.

"25B. The Railway Committee may, from time to time, make rules & regulations, not inconsistent with this Act, for the operating of all or any of the railways now or hereafter subject to the legislative authority of the Parliament of Canada, & such rules & regulations shall supersede all rules & regulations made by the company operating any of such railways in so far as they differ therefrom.

"2. Such rules & regulations shall be subject to the approval of the Governor in Council, & shall be published in the "Canada Gazette" for weeks.

"3. The Railway Committee may, from time to time, appoint competent persons to advise or assist the Committee in the preparation or revision of any of such rules or regulations, or any other matter coming before the Committee; & any person so appointed may be paid out of the unappropriated funds in the hands of the Receiver General."

3. The said Act is further amended by inserting after section 89 the following section : "89A. Whenever a company, con-

"89A. Whenever a company, constructing or operating a line of railway

which is situate wholly within the limits of one province, & with respect to which, or any part of which, the Government of such province has previously granted & paid a subsidy to such company or any other company, fails to comply with the requirements of its charter as regards the commencement or completion of its work within the times therein specified, or fails, for a longer period than ten days, to continue in an efficient manner the running, operating, or working of its railway, or any part thereof, the Lieutenant Governor in Council of such province, upon the report of the Railway Committee of the Executive Council thereof, may, at any time (even though the company is incorporated by the Parliament of Canada, or the railway is otherwise within the legislative authority of such Parliament), authorize the Commissioner of Public Works of such province, or other proper officer therein, to cause the railway, the road bed, & all the rolling stock & equipment thereof, to be sequestrated or sold.

"2. All proceedings to be had after the granting of authority for sequestration or

sale, as provided by this section, whether concerning or incidental to the appointment of the sequestrator, the duties, rights, or powers of the sequestrator, the operation or sale of the railway, the distribution or application of the proceeds of such sale, or otherwise, shall be in accordance, as nearly as may be, with the procedure in similar matters in force in such province with respect to the sequestration or sale of railways within the legislative authority of the legislature of such province.

"3. This section shall have force & effect only with respect to such companies as are designated from time to time by proclamation of the Governor General; & it shall cease to have effect with respect to any such company on & after a day to be mentioned by proclamation of the Governor General."

In regard to the last amendment proposed by the bill, the Minister, in introducing it, said: "It appears that there are, or is, at all events, a railway company which has been in the receipt of aid from one of the provinces, which has operated a part of its line, but which does not choose to operate the remainder of its line, & the non-operation of which is a great detriment to that section of the community. The object is to enable some tribunal to deal with such a condition of things, & to insist, by the exercise of the pressure which an authority of this kind will confer on the tribunal, upon its being operated. It operates a part of its line profitably alreadv."

Snow on the White Pass & Yukon.

The fall of snow in Alaska & Yukon during the past winter has been unusually deep & the operation of the White Pass & Yukon Ry. has been attended with greater difficulties than was the case during the winter previous. The exact snowfall during the entire winter we have not been able to ascertain, but during Dec., 1899, the snowfall at Glacier, on the line of the road, was 901/2 ins.; the fall at the summit of White Pass was 55 ins.; & at Log Cabin, between the summit & Lake Bennett, it was 74 1/2 ins. The snowfall during Jan. was heavy, although not quite as much as during Dec. During Feb. & up to Mar. 10 there were snow storms at occasional intervals, with more or less obstruction to the passage of trains. In anticipation of trouble from deep snow a narrow gauge snow-plow of the ordinary rotary type, specially constructed for the road, had been provided in season, & owing to the drifting of the snow, which has been the

principal source of trouble, the services of this machine have been indispensable to train operation. Except during times of temporary blockade two passenger trains have been run each way, daily, all winter, besides freight trains, the necessity for keeping the traffic moving being more urgent than otherwise for the reason that construction work on the extension of the road beyond Lake Bennett has been carried on all winter with a force of about 500 men. The greatest difficulties were encountered during a few days ending with Mar. 10, when, in a determined effort to raise the blockade, the rotary was kept continuously at work for 105 hours. The experience with the rotary plow under the conditions which have prevailed on this road, has shown some of the weak points in rotary plows as ordinarily constructed for narrow gauge lines, the result of which is that specifications have been drawn, & work is now proceeding on the construction of a new plow along improved lines, for service next winter .- Railway & Engineering Review.

Nova Scotia Legislation.

Among the acts passed at the recent session of the N. S. Legislature were the folowing :-

To encourage manufacturing & ship building.

ing. Relating to the Stewiacke Valley & Lansdowne Ry. Co.

Relating to the re-appraisement of lands in the Municipality of Barrington required for track & station purposes of the Halifax! & Yarmouth Ry.

To amend the act to incorporate the Canso & Louisburg Ry. Co.

To confirm the contract between the Government & the Inverness & Richmond Ry. Co.

To amend the act to incorporate the Liverpool & Milton Tramway Co., hereafter to be

called the Liverpool & Milton Ry. Co. To incorporate the Nova Scotia Coal, Iron, Copper & Ry. Co.

To amend the act incorporating the Valley Telephone Co.

To amend the act incorporating the Bar rington & Cape Island Steam Ferry Co.

To amend the act respecting the N. S. Southern Ry. Co

To incorporate the Cape Breton Electric Tramway Co.

Relating to the Inverness & Richmond Ry. Co., & to the act incorporating the Co. & the acts in amendment thereof. To incorporate the Weymouth Terminal Ry. Co. To amend the act incorporating the Cape

Breton Ry. Extension Co. To amend the act incorporating the Liver-

To amend the act incorporating the Sydney

Ferry Co.

Snow Hedges for Semi Arid Plains.

A Reinisch, Lawrence, Kan., writes : Eleagnus angustifolia, or Russian olive, deserves to be placed first in the list of trees for snow It was brought to this country by the hedges. Russian Mennonites, who settled in Kansas & Nebraska since 1837, & has proven to be perfectly hardy in its new home, adapts itself to nearly all situations & soils, & transplants easily. The wood is hard & heavy ; bark shining brown ; leaves willow shape, dark green, glossy, silvery white underneath; flowers small, deep yellow, very fragrant & appear abundantly in May & June; fruit a small nut, with a whitish downy covering, ripening in October. It is one of the prettiest lawn trees on account of its contrast with trees of heavier foliage. Its value as a snow hedge consists in its adaptability to the most varying conditions of climate, remaining green when other trees become parched with drouth & hot winds, & coming out of the severest winters unhurt. It naturally grows bush-like & quickly makes a dense hedge, &, by trimming, a fine ornamental hedge. Its value as a contruction timber has not been fully tested, as it takes some time to prove its durability in the ground as a tie or post.-Railroad Gazette.

C.P.R. Reports Wanted.

Wanted copies of the annual reports for 1881, 1882, 1883, 1884 & 1886 in pamphlet form. Any one having copies is requested to communicate with The Manager, RAILWAY & SHIPPING WORLD, Toronto.

C.P.R. Prizes for Live Stock.—The C.P.R. Co. has donated 15 cash prizes, to be awarded at the Winnipeg Twentieth Century Industrial Exhibition next July, for thoroughbred cattle, bred & raised in Manitoba or the N.W.T. This is in line with the Co.'s policy in encouraging the live stock industry of the Canadian West by the importation of thoroughbred sires recently.



CURRENT TOPICS.

Worthless Express Orders.

If the press despatch stating that a Dawson newspaper proprietor, who also carried on an express business & operated a money order department, has left the Yukon, & that payment of the orders cannot be obtained, is true, the matter should occupy the very serious consideration of the Government & such legislation should be enacted as will prevent the re-Petition of such frauds. It might be well to provide that none but chartered companies may engage in the business of issuing express money orders.

Amending the Railway Act.

The bill introduced in the House of Commons by the Minister of Railways, the full text of which is given on page 105, should be closely watched by the railway companies. On the motion for the first reading, Sir Chas. Tupper suggested its submission to the Railway Committee of the House, but Mr. Blair would not give any promise that this would be done. It seems only reasonable that a bill of such importance should be considered by that Committee, & that the railway companies should have every opportuby of being heard in regard to it. Without touching on other clauses of the bill, we would specially draw attention to the one which proposes to empower the Railway Committee of the Privy Council to make rules for the operating of the railways, which shall one of the railway comshall supersede the rules of the railway com-Panies where they differ therefrom. We see no reason whatever for such an innovation. It is of the first importance to the railway companies to operate under such rules as will secure the maximum of safety. No one is so vitally interested in this as the companies themselves. Following the plan adopted in the ty the United States, the principal Canadian rail-Ways are already moving in the direction of uniformity. The St. Lawrence & Adirondack & the Northern Pacific companies have been using the standard code of the American Railway Association for some time past, the Grand Trunk & the Canada Atlantic railways have recently adopted it, & the Canadlan Pacific is preparing to do so at an early date. And there is every reason to believe that other lines, seeing the advantages of the code referred to, will fall in line, & that within a reasonable time nearly the whole of the railways of the Dominion will be operated under it, which means that they will be using a system evolved by the concentrated efforts of the best operating men on the American continent. The Railway Commit-tee of the Privy Council already has the Down of the Privy Council already has the power of approving or disapproving of the operating rules of the various railways. Anything further would be unnecessary & dangerous. Last year Mr. Blair secured an appropriation for a commission to frame rail-Way operating rules, & he is evidently still Roins going on the same tack, as his bill provides that the Railway Committee of the Privy Council may appoint persons to advise it in the preparation of such rules. No commission that the Committee can appoint will be in any respect as competent as the Train Rules Committee of the American Railway Association. Unless Mr. Blair is prepared to adopt the standard code & make it obligatory on all railways, the increased power which he council to the Railway Committee of the Privy Council should be refused.

Nationalization of Telegraph Lines.

The preamble of a bill introduced by Mr. Casey in the House of Commons to provide for the establishment of a government system of telegraphs, asserts that the present telegraph rates charged in Canada are unduly high & that as the telegraph lines are owned by pri-vate of the telegraph lines are owned by private Corporations the same rates, etc., are not

extended to the public generally. In speaking on his motion for the first reading of the bill Mr. Casey did not state any facts to justify the assertion that the present rates are unduly high. The local rate of 25c for 10 words, which is in force in every province, & between Ontario & Quebec points east of Sudbury, is a reasonable one when the volume of business it is possible to secure is considered & the night rate of 25c for 25 words is a very advan-The higher rates for longer tageous one. distances are not excessive when the cost of maintenance is considered. In regard to the second allegation that there is discrimination in rates, Mr. Casey admitted that this was not the case with messages for the general public, & the only fact he could cite was that large newspapers, which take a tremendous amount of press despatches, get a lower rate than small papers which take but few despatches. We fail to see that there is anything unfair in this, on the contrary the wholesale user should have an advantage over the retail one.

Mr. Casey's proposal is that the rates for messages from one part of Canada to another shall not exceed 10c for 10 words & that press messages shall be carried for 10c per 100 These rates would apply even from words. Cape Breton to Dawson. We have no hesitation in saying that a system of government lines could not be made self-supporting at any such rates, & we do not think the great majority of the population, who do not use the wires at all, should be taxed for the benefit of those who do.

What has been accomplished in Great Britain does not apply here. There the civil service is non-partisan, here where every postmaster is appointed for political services the case is very different & there would be a decided objection to allowing telegrams to pass through the hands of such officials. Now the services of the different commercial telegraph companies are manned by the best people that can be got for the work, and as a consequence satisfactory service is performed. With government management it would be entirely different. An example of this is to be seen in the management of the government railways which, no matter what party is in power, are exploited for party purposes & in their services are necessarily inferior to lines under private management, which depend for their success largely on the excellence of their accommodations, services, etc.

Prince Edward Island Telegraph Service.

In referring a short time since to the complaints about this service we pointed out that there are two sides to the question, that the Anglo-American Telegraph Co. is not entirely to blame for the high rates on messages to points outside the Island, owing to the fact that these have to be handed over to other Companies, necessitating the charging of an extra toll, & that the telegraphic business of the Island is small, owing to its population being almost entirely an agricultural one. But there is no doubt that the service is inadequate and that an improvement is necessary. During a recent discussion in the House of Commons several of the Island members complained very forcibly about the service, being supported by the Minister of Marine, whose home is in Charlottetown. The Anglo-American Co. has its head office for the Island in that city, yet it is closed daily at 8 p.m. and not opened until between 8 & 9 a.m., so that no messages can be transmitted during the night. As Sir Louis Davies pointed out, during the South African war the morning paper published in Charlottetown has not been able to secure any despatches arriving later than 8 p.m., & in consequence, most of the trains leaving Charlottetown in the morning, the people outside that city always get their news 24 hours late. There is no doubt such a position of affairs is intolerable, & if the Anglo-American management values its

P. E. Island business at all we would strongly advise it to provide a more up-to-date service by keeping its offices in Charlottetown, & possibly Summerside & Georgetown, open at least until midnight, & to endeavor to make arrangements with the lines with which it connects in New Brunswick so that through rates may be somewhat reduced. Unless the management does this another service will undoubtedly have to be provided.

The impression has prevailed that the Anglo-American Co. has the sole right of landing telegraph cables on P. E. Island, but the Minister of Marine contends that this is not the case. He says that the Co., which was established in 1853, had a partial monopoly granted it, but that this merely prohibits the laying of a cable between Europe & P.E.Island, or between any island off the coast of the American continent & P. E. Island, say from Cape Breton or from Newfoundland, & that it does not prevent the laying of a cable between P.E. Island & the American continent, for instance to Nova Scotia or New Brunswick. If this interpretation of the position is correct there is nothing to prevent competition, save the question of the expense of laying another cable, & whether there is sufficient business to justify it as a commercial enterprise, which we much doubt. But this might be got over by the adoption of wireless telegraphy between Cape Tormentine, N.B., & Cape Traverse, P.E.I., where Northumberland Strait is only about 9 miles wide. The Anglo-American directors, who are in Eng-land, will do well to realize the situation before it is too late for them to save their P.E.I. business. The Co. gets a subsidy of \$2,000 a year from the Dominion towards the maintenance of the connecting cable, & the Minister of Marine has clearly intimated that unless the service is improved this will be withdrawn & that steps will be taken to secure another line, possibly one to be built by the Dominion.

bricating Oils for the Intercolonial.

Senator Fergusson, of Prince Edward Island, has again brought this question up in the Senate, by moving for papers, &c., in connection with the contract made between the Minister of Railways & the Galena Oil Co. The Senator charges that a representative of the Co. assisted the Minister in an election contest, that the contract was given in return for such assistance, & that the cost of lubricating oils under the present contract exceeds the previous cost. With the political phase of the question we have nothing to do, the party papers can thresh that out, but in the absence of unquestionable evidence in support of Mr. Fergusson's allegation, we have no hesitation in saying that we do not believe it. There remains the question of cost. We have gone thoroughly into this, & find that the Galena Co. offered to supply the Intercolonial with the best quality of lubricating oil, at a cost of 10% less per 1,000 miles than the cost for the year preceding that in which the contract was made, & also offered to allow any additional saving that might be effected by the economical use of oil. If the cost is reduced below the amount named in the guarantee, the Galena Co. does not receive more than the prices named in the contract for its oils, but the I.C.R. gets the full benefit of the reduction, whatever it may be. The Galena Co. further agreed to furnish experts free of charge to the railway to co-operate with the mechanical department in an effort to reduce the cost of lubrication to the lowest possible point consistent with good service. The railway's management is authorized to withhold payment of a sufficient amount of money to make good at all times the Galena Co.'s guarantee. The system of accounting is similar to that adopted on other lines supplied by the Galena Co. The mechanical & supply departments make up state-ments showing locomotive & car mileage,

numbers of gallons of oils consumed, & average cost per 1,000 miles, which are examined by the auditors of the railway & the Galena Co. If it is found that the cost has exceeded that guaranteed, the Galena Co. either pays the excess to the railways by cheque, or receipts vouchers for oils furnished to balance the amount of the excess, as the railway management may prefer. This form of con-tract, guarantee & settlement is the same as the Galena Co. has with the managements of 95% of the total railway mileage of Canada, the United States & Mexico, which would seem to be a sufficient justification of the action of the Minister of Railways in making the contract. The Canadian Pacific management, on the expiration of a three years' contract with the Galena Co., recently entered into another contract for five years; the Grand Trunk, the Canada Atlantic & other lines in the Dominion, have similar contracts, & enquiries we have made of the managements enable us to state that they are in every way satisfactory. Of course the gen-eral public never hear of these contracts when entered into with roads under private ownership, but directly a contract is made with a government line it is taken up for political purposes. We may add that the Galena Co. states that during the first year its contract on the I.C.R. saved the Government over 13% of the previous cost per 1,000 miles, instead of the 10% guaranteed, that it is never possible to do as well during the first few months of a contract as later, when those using the oils have become accustomed to their use, & that it is believed the future will show a still greater saving.

Repudiation in British Columbia,

The remarks made in our last issue as to the effect of Jos. Martin's participation in public affairs in B.C. are fully borne out by a special correspondent of the Toronto Globe, who, writing from Victoria, says that the effect may be best understood by comparing the state of affairs when he entered into active political life with present conditions. At the former time the country generally was prosperous & the outlook very hopeful. After showing that legislation pushed through by Martin, especially the alien law relating to the Atlin district & the eight hour law relating to mining, has had a disastrous effect on the mining industry, the correspondent shows the effect on investments. He says :-- "At the beginning of last year the mines in the Kootenay district were becoming a favorite field for

the investor of British capital, but immediately the labor troubles began all that capital was diverted & it was almost impossible to obtain any investment of British capital in British Columbia mines. The fact that such an act could be passed & a Government found ready to carry it created so much alarm that mining interests became also paralyzed. A general policy of repudiation was also inaugurated with reference to several bonuses which had been passed by the Legislature & on the faith of which considerable capital had been invested. There was a railway, known as the Ashcroft & Cariboo, which had been incorporated with a considerable land grant. The pro-moters of this road, after much effort, had made arrangements for obtaining the necessary capital. For this purpose they had invested a good deal of money & spent a good deal of time & labor. The wording of the act provided that upon the completion of the railway the Government 'may' grant bonuses. It was generally understood that under the circumstances the word 'may' was equivalent Mr. Martin took the opposite to 'shall.' view, & although he was acquainted with the circumstances, repealed the act granting the subsidy. The result was that the promoters lost the benefit of all the money they had expended, & great alarm was caused among those London capitalists who had been prepared to invest in provincial enterprises.

The Turner Government, in the last session before it resigned, brought in a subsidy act providing for the building of a railway from the coast to Penticton & Midway, in the Boundary country. This undertaking was divided into two sections. In accordance with the provisions of the act, two separate contracts had been entered into by the Govern-ment for construction. The subsidy act in each case provided that in every contract a provision should be inserted that the work should be done to the satisfaction of the Lieutenant-Governor-in-Council, & should be commenced on a certain day. With reference to one of the sections it was agreed between Mr. Turner & Mr. Eberts, the Attorney-General, representing the Government, & the contractors, that certain specified work should be performed during 1898 & 1899, and that that work, when done, should be deemed to be work done to the satisfaction of the Lieutenant-Governor. On the faith of that understanding a contract was signed by the contractors, & they duly performed their part of the work. When Mr. Martin took office he declared that this work, although done under the agreement referred to, was not work done to the satisfaction of the Lieutenant-Governor-in-Council, & cancelled the contract.

"On the other contract the time for the beginning of the work had not arrived, & this contract wascancelled, althoughno default had been made. In furtherance of this executive act Martin brought in a bill repealing the subsidies to this road. As a result of this action a petition of right, on the part of the contractor, has been laid & a suit is now pending with the Government, in which the contractors claim large damages for repudiation of contract.

"These things have had a very unfortunate effect on the country. Business has been demoralized, capital has been turned away. It would be scarcely possible to believe that it was in the power of any one man to accomplish so much evil as has been done in one year."

This plain statement of facts, from a paper on the same side of politics as Martin, fully justifies all we have said. Until British Columbiaus repudiate him & show unmistakably that they will not endorse him or his methods, no one would be justified in investing in any enterprise there which can be in any way affected by provincial legislation. This may be hard on the province, but the remedy is in the hands of the people there.

Legislation in Quebec.

Among the acts passed at the session of the Quebec Legislature, which closed Mar. ²³, are the following :--

Respecting a grant to the Quebec Bridge Co. & subsidies to certain railway companies. Respecting the construction of telephone lines.

To further amend the charter of the Quebec Central Ry, Co.

To confirm an agreement between the C.P. R. Co. & the Hull Electric Co.

To incorporate the St. Hyacinthe Electr^{ic} Ry, Co.

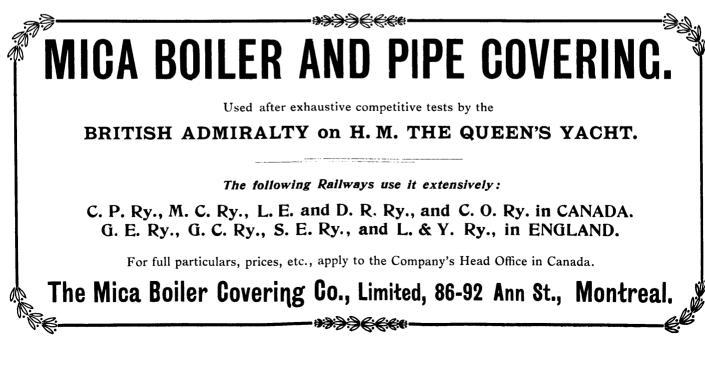
Ry. Co. To incorporate the Great Northern Elevator Co.

To amend the charter of the Napierville Jct. Ry. Co.

To give additional powers to the People's Telephone Co.

To confirm certain by-laws of the town of Joliette, & a deed of agreement between the town & the Great Northern Ry. Co.

To amend acts relating to the Quebec & Lake St. John Ry. Co.



Canadian Freight Association.

The 17th annual meeting was held at Montreal April 5.

The following were elected members :-Active-G. W. Hardisty, D.F.A., Northern Pacific Ry., Montreal ; F. G. J. Comeau, G. Reduc Ry., Montreal; r. G. J. Comeau, C. F.A., Dominion Atlantic Ry., Halifax (vice W. Fraser); H. E. Fowler, G.F.A., Central Ry. of N.B., Hampton, N.B. (vice E.G. Evans); L. B. Howland, Irondale, Bancroft & Out & Ottawa Ry., Irondale; W. B. Rosevear, Algoina Central Ry., Sault Ste. Marie. Honorary-R. T. Haskins, G.T.M., Metropolitan S.S. Co., Pier 11, North River, N.Y.; J. Hickson, West Shore R.R., Toronto.

The following copy of a resolution of several Boards of trade was read :--- "That this Board recognizes the necessity for, & recommends to all shippers, that package freight should be addressed in full instead of, as is free frequently the case, by numbers or initials, to assure its prompt & safe carriage to its intended destination by the transportation company to whom entrusted." It was decided that all agents be instructed by cicular to have this resolution carried out on all practical occasions.

The question of admitting representatives of electric railways handling freight as members of the Association, in order that car service rules might be put in force on said roads, was left over for future action.

Article 4 of the constitution was amended by adding the following :- "Any person directly interested in freight transportation may become an honorary member of this Association by a vote of two-thirds of the active members present at a regular meeting, on being pro-Posed & seconded by active members.

The election of officers & standing committees for the ensuing year resulted as follows : -

President, W. B. Bulling; 1st Vice-President, W. Woollatt; 2nd Vice-President, M. T. Donovan; Secretary-Treasurer & Chairman of Committees, J. Earls.

CLASSIFICATION COMMITTEE. - E. Tiffin, S. P. Howard, F. J. Watson, J. Hardwell, W. P. Hinton, W. Woollatt, J. Hanna, F. Zim-merman, C. A. Jaques; J. Earls, Chairman, J. INSPECTION COMMITTEE.—G. Collins, F. Conway, J. N. Sutherland, F. F. Backus, J. Hardwell, C. A. Jaques, W. B. Lanigan, C. E. Dewey; J. Earls, Chairman.

CAR SERVICE COMMITTEE. -- J. B. Morford, J. F. Chapman, M. C. Sturtevant, G. S. Cantlie, W. P. Hinton, J. J. Mossman, E. Fisher, W. Woollatt; J. Earls, Manager.

EXECUTIVE COMMITTEE.-J. W. Loud, C.

J. Smith, W. B. Bulling.

Claim on Superannuation Fund.—The following question was recently asked of the $e_{p_{2}}$, f_{1} railway employe who has heretofore contri-buted is leaving buted to the superannuation fund, is leaving the the employment of the company. Can he claim what he paid into the superannuation fund?" The following answer was given :-"A railway employe who has paid into a superan superannuation fund has such rights with resard to that fund as are provided by the rules & regulations under which the fund is established & maintained. If the rules provide that a member shall be at liberty to withdraw money from the fund when he leaves the employment of the company, then he can with dr_{aw} h: draw his money. If he can show that he was unineed to be a show that he was unjustly discharged from the employment of the company, he may still have a claim upon the company, he may still have a having the the fund. But I cannot, without having the fund. regulations under which the fund is establish-what the method is governed, say definitely what the method is complete are, who leave what the rights of members are, who leave m_{ssed} , ""," the employment of the company or are dis-

Grand Trunk Betterments, Etc.

The total charges for maintenance & renewals on the G.T. system east of the Detroit & St. Clair rivers, & on the Detroit & Michigan Air Line division, in Michigan, for the year ended Dec. 31, 1899, were \$3,001,109.81, or \$158,505.69 more than for 1898. This is more than accounted for by an expenditure of \$85,000 on the Co.'s new general offices, now in course of erection at Montreal; & by the additional cost, amounting to \$94,484.14, of repairs and renewals of buildings & fixtures. Apart from these two items, the charges for maintenance & renewals were \$20,978.45 less than in 1898. The replacement of the old bridges, which are too light for the present loads & rolling stock, by others sufficiently strong to meet all probable future requirements, has been carried on more slowly than was expected, by reason of the impossibility of obtaining the necessary steel for superstructure. All the bridges between Montreal & Island Pond, 147.83 miles, have been finished, & trains of maximum weight are now run over them. Between Island Pond & Portland, 149.42 miles, the renewal of the bridges is being pushed forward as rapidly as the short supply of material will admit of. The Victoria Jubilee bridge has been completed, including roadways, footpaths & approaches, & was opened for public service on Dec. 1 last. The total expenditure upon it during the year was 3391,521.44. Excepting across the bridges, which are unfinished for want of steel, a 2nd main track has been laid between Ste. Anne's & Vaudreuil, 3.70 miles; & also from Sidney to Murray Hill, 7.75 miles. Both the bridging & earthwork on these two sections were exceptionally heavy. The gradients have been greatly improved, & the level crossing of the Central Ontario Ry. at Trenton has been superseded by a bridge. The only single track portion of the railway now remaining between Montreal & Toronto is from Port Hope to Port Union, 46.26 miles. The masonry of the Co.'s new general offices at Montreal has been built to about 8 feet above street level. The round houses at Sarnia & Port Huron, which were in course of erection at the end of 1898, have been finished. New stations have been built at Cardinal, Vaudreuil, Ste. Anne's, St. Lambert, St. Hyacinthe, Arthabasca, Somerset & Bright.

The Co. has recently placed some large orders for iron for bridge material.

General Manager Hays has informed the Montreal Harbor Commissioners that if they raise the wharf on the northwest side of Windmill Point basin some 7 ft. from its upper end where it connects with the G.T.R. tracks, in order to allow of the access of railway cars during all ordinary stages of the water in winter as well as in summer, the Co. will raise its tracks to connect with the tracks on the proposed higher level of the wharf.

Work in connection with the general office building in Montreal is again in full swing. Building operations had to be suspended in Dec. last owing to the impossibility of securing The Co. now has in Montreal 1,000,000 iron. lbs. of iron, which has been imported for the most part from Germany. The price of iron is still high, but the Co. is determined that its great structure, which it aims at making one of the finest architectural features of Montreal, shall be pushed on with the greatest rapidity. It is expected that the walls will be constructed & the building roofed by Oct. Work was stopped in Dec. just at the first tier of beams, but the stone cutting & the moulding operations have been in progress all the winter. The architect is now making full-sized drawings of all the mouldings for the five-storey structure. These are of the most chaste & beautiful character. The angles & curves are exceeding artistic-modelled from ancient Greece. Tasteful & artistic, the designs worked out on Canadian granite are most charming. The design is called "angular curvelinear," a seeming contradiction in terms, 'a seeming contradiction in terms, but most aptly applied to the flowers & shields & berries which make up the pictorial repre-sentations of pure classic Greek. (Mar., pg. 71.)

The double tracking of the main line between Port Hope & Port Union, Ont., a disdouble track between Montreal & Toronto, will probably be gone on with this year, though this as well as other contemplated improvements have yet to be approved by the Board. (Dec., '99, pg. 348.)

The question of erecting an improved station at Queen St. East, Toronto, has not yet, we are informed, been definitely decided upon.

The surveys for double tracking the line between Hamilton & Niagara Falls have been completed, & if present plans are carried out the work will be completed this year. It will be necesary to build a double track swing bridge across the new Welland Canal, as it is impossible to build a second track under the canal near Merritton. It is said that from Niagara Falls to Merritton there will be a great deal of rock cutting, besides the grading & bridge work to get over the new canal. Between St. Catharines & Beamsville there will be several big bridges to build. The Fifteen, the Sixteen & particularly the Twenty or Jordan creek, will require expensive bridges. The distance from Niagara Falls to Hamilton is only about 46 miles, but it is an expensive piece to build, when the mountain, the two canals, & the many creeks & ravines are taken into consideration. (Dec., '99, pg. 348.)

Station improvements are contemplated at Goderich, but it has not been decided whether to rebuild the present station, or to erect a new one.

The Mammoth coal shute, near the new roundhouse in freight yards west of Sarnia tunnel, which has only been completed some months, was burned to the ground April 11. The Michigan Railroad Commissioner has

approved a route for a line proposed to be built by the Chicago & G.T.R. through Genesee County & the city of Flint, with an overhead crossing of the Pere Marquette road in the city of Flint. This is merely a diversion of the present line, in order to secure better grades & alignment.

A Duluth-Montreal Scheme.--A Duluth despatch, dated Apl. 16, is given for what it may be worth. It says: "The announcemay be worth. It says: "The announce-ment of the proposed incorporation of the Canada National Ry. & Transport Co. is the most interesting piece of news of the week. It is another proposed Duluth-Montreal route, & there are two Duluth men named in the list of incorporators, G. G. Barnum & W. Buchan-an. F. Kraus, of Milwaukee, & J. G. Keith, of Chicago, are also among the incorporators. G. F. Piper, of Minneapolis, who is among the incorporators, is of the American Linseed Oil Co., & closely associated with a new corporation, which proposes to erect a system of grain elevators in Duluth. The advantages claimed for the proposed new route from Duluth to Montreal is that it will be the shortest possible route which affords a minimum of rail & a maximum of water haul. The route is, Duluth to Collingwood, Collingwood to Toronto by rail, & Toronto to Montreal via Lake Ontario & the St. Lawrence River. The authorized capital of the Co. will be \$5,000,000."

Sicamous Hotel.-The hotel at Sicamous, B.C., built by the C.P.R. Co., which was fully described & illustrated by us some time since, has been completed & furnished by the Co. with standard C.P.R. furnishings of the very best, complete in every detail, the cost of the equipment alone being upwards of \$10,000. The hotel has been leased to F. W. Padmore, for The merly in the hotel business at Vernon, B.C.

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

New Lines. - During a recent visit to Ottawa, President Shaughnessy stated to J. M. Douglas, M.P., that the Co. will be glad to build any railways that it may consider necessary, without subsidies, provided the Government discontinues the practice of granting subsidies.

Atlantic Division .- Work has been commenced on the new station at McAdam Jct., N.B. The contractor is J. McVey, of St. Stephen, N.B.

Toronto Terminals .- A siding is being built on the Esplanade extending between York & Lake streets.

Ottawa Connecting Line, &c.-There is no truth in a report which has appeared widely in the daily press to the effect that the Co. is about to tunnel under Nepean Point, at Ottawa, to secure a western entrance to the Central station. (Mar., pg. 71.) Ottawa-Arnprior Cut Off.—The rumor that

the Co. is going to build a short line between Ottawa & Arnprior, which comes to the front every spring, is again on deck. An engineer went over the ground some time ago, & it is probable that the line, which would shorten the distance between the two points about 10.5 miles, will be built sooner or later, but it does not appear that any decision has yet been arrived at in regard to it.

Algoma Mining Branch.—It is probable that a short line will be built from the Algoma branch to the Victoria mines recently pur-chased by Dr. L. Mond.

Port Arthur. – The Co.'s passenger & freight dock at Port Arthur is being re-built

in view of the large trade in prospect. Fort William.—The building of a grain-cleaning elevator at Fort William is under

10 Ton Automatic Lowering Jack.

40 Ton Jack.

consideration, so as to obviate the delay caused by shipping grain to Port Arthur to be cleaned.

A number of cottages are about to be built at Fort William for the Co.'s employes.

Rat Portage .- The new station has been completed. (Feb., pg. 39.) Western Branch Lines.—Particulars as to

the construction of these, as authorized at the recent annual meeting of the Co., are given on page 97.

Bonnet Lake Branch.-The first 5 miles of grading has been completed, & the location has been finished to Bonnet Lake, 28.8 miles from Molson. The branch will be completed

winnipeg Terminals, &c. – It is proposed to build a spur line from the old track at Fon-seca st., Winnipeg, along the lane between Princess & Stanley streets as far as Alexander Ave., so as to accommodate the wholesale houses in that vicinity.

The plans for the Winnipeg station & hotel have been completed. The building will have a frontage of 180 ft, on Main St. & 280 ft. on Higgins Ave. Tenders have been invited, & it is expected that work will be started at an early date. The tenants occupying buildings on the site have been notified to vacate by May 1. (Feb., pg. 39.)

Manager Whyte recently had a conference with the works committee of the Winnipeg City Council in reference to the crossing of Main St. At present the Co. has 2 tracks running across that street, & desires to lay 4 additional ones in connection with the erection of the new station & hotel building. As such a number of tracks would, of course, be a great inconvenience to the vehicle & pedestrian traffic on the street, it is proposed to construct either a subway or an overhead bridge. Mr. Whyte favors a subway, as an overhead bridge would require to be 21 ft. clear of the rails, while the depth of a subway need not be more than 12 ft. from the under side of the girder. The matter is still under consideration. (Feb., pg. 39.)

West Selkirk Branch.-The survey for an extension from Selkirk to the west shore of Lake Winnipeg, 24 miles, has been complet-The extension runs from Selkirk northed. westerly through the river settlements to Clandeboye, thence due north to the lake shore in township 17, except that a slight dethe east side of Netley Lake. As far as can be ascertained, it has not been decided whether the extension will be built this year. The settlers in the Gimli district are urging the Provincial Government to assist in getting the branch further extended to that point, some 10 miles further than is now proposed. (Feb., pg. 39.)

Pipestone Branch Extension.-When work closed down for the winter grading had been completed for 23.24 miles west of Antler & track had been laid 14.07 miles west of Antler, the latter point being 18 miles west of Reston, the previous year's terminus. It is the inten-tion to continue the branch this year to a point between Arcola & Clair,' Assa., south of Moose Mountain, but the final location has not been determined. (Mar., pg. 71.)

Great Northwest Central.-Before deciding on any further extension of this line some surveys will be necessary to determine whether the country can be best served by acontinuation of the G.N.W.C. or by other branch lines. (Jan., pg. 8.)

Norton's Ball Bearing Jacks. Standard Wherever Jacks are Used. 8 TO 70 TONS CAPACITY. 50 STYLES. Ton Jack. **Guaranteed in every Respect.** Complete Illustrated Cat- 5 alogue and Discount on application. MADE IN CANADA BY

15 Ton Track Jack.

A. O. NORTON, Coaticook. Prov. Ouebec.



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

Lands were of the statistical including the Carg-District, generally \$3 per acre. Lands in Northern Alberta and the Lake Dauphin District, \$3 per acre.

TERMS OF PAYMENT.

TERMS OF PAYMENT. The aggregate amount of purchase money and in-terest 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 pay-able in one year, except in case of an actual settler who breaks up at least one-sixteenth of the land within that itime. No rebate of interest is allowed on hay or The following table shows the amount of the annual instalments on a quarter section of 160 acres at different up one part acre, us instalment \$r_1 on and

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

160 acres at \$1.00 per acre, 1st instalment \$71.90, and nine equal instalments of \$60.
160 acres at \$3.00 per acre, 1st instalment \$83.90, and nine equal instalments of \$50.
160 acres at \$4.50 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 \$50.
160 acres at \$5.00 per acre, 1st instalment \$107.85, and nine equal instalments of \$100.
160 acres at \$5.00 per acre, 1st instalment \$119.85, and nine equal instalments of \$100.
160 acres at \$5.00 per acre, 1st instalment \$131.80, and nine equal instalments of \$100.
160 acres at \$5.00 per acre, 1st instalment \$131.80, and nine equal instalments of \$120.
160 acres at \$6.00 per acre, 1st instalment \$143.80, and nine equal instalments of \$120.
1050 acres at \$6.00 per acre, 1st instalment \$143.80, and nine equal instalments of \$120.
1050 acres at \$6.00 per acre, 1st instalment \$143.80, and a per acre, 1st instalment \$140.80, and biscourt por CASH. If land is paid for in full at time of purchase, a reduction from price will be allowed acres out on the date of maturity, will be allowed acros out on the amount of the instalment, or more, one full year before the date of maturity, will be allowed acros paid at the rate of six per cent, per annum. Interest at six per cent, will be charged on overdue instalments.
Write for mans and full narticulars

instalments. Write for maps and full particulars.

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

Crow's Nest Pass Ry .-- When at Nelson recently Manager Whyte made the following announcement as to the improvements to be made there. A large station & office building will be erected at the foot of Baker St. where it intersects Slocan St. The plans for the depot have not been finally decided upon. Superintendent Troup & Engineer Gutelius, as well as the train master & despatchers, will have offices in this building, & the telegraph, ticket & district freight agent's offices will be in an uptown block. All the other buildings will be north & west of the station, the latter being on the south side of the main line & the other buildings on the north. The public will, therefore, cross no tracks in visiting the station or offices. The freight shed will be as large as the Co. deems will be required for years to come & will be over twice as large as the present one. It will be located on the high ground across the flat from the station site. The round house will be nearer the lake & in it will be included a machine shop, which will be used for car repairing until such time as the traffic demands a building for this work alone. Coal pockets will also be erected. The sidetracks will cover the whole flat. They will be laid above the level of the flat in order to avoid trouble from high water. (Jan., pg. 7.)

Columbia & Western Ry.—The C.P.R. annual report for 1899 shows that during the year there was expended on the construction of the extension of this leased line from West Robson to Midway \$2,320,470.16.

On the extension from West Robson to Midway, stations have been built at Cascade, Grand Forks, Eholt & Greenwood, & are yet to be erected at Midway, Phœnix & Hartford Jct. (Mar., pg. 71.)

Pacific Division.—Large gangs are at work covering the line from Vancouver to Field, ballasting & otherwise improving the whole road in readiness for the Imperial Limited service which is expected to be reinaugurated this spring. (Feb., pg. 39.)

Shuswap Lakes. - It is said the management has decided to put some house-boats on these lakes for the accommodation of tourists.

The Vancouver & Lulu Island Ry. is to run directly south from Vancouver to the north arm of the Fraser River, a distance of $5\frac{1}{2}$ miles. The work will be very light, the grades not exceeding $2\frac{1}{2}\%$ & the curves not exceeding 5° . On Apr. 4 we were informed that the work of clearing had been let & that grading contracts were about being entered into. The ultimate destination of the railway will no doubt be Steveston, but it is only intended to build as far as the north arm of the Fraser this summer, & no decision has been come to as to the extension beyond that point. The road will be run by electricity at the outset & probably permanently. (Feb., pg. 40.)

Mineral Range.—Maps have been approved by the Railroad Commissioner of Michigan showing a proposed extension of this line in Ontonagon County, with a crossing of the line of the Copper Range R.R., near Mass City.

RAILWAY DEVELOPMENT.

Projected Lines, Surveys, Construction, Betterments, Etc.

Algoma Central Ry.—Contractor Conmee has commenced work on the main line at Sault Ste. Marie, his contract requiring the completion of 12 miles by June 1. This will carry the line to the township of Awares. It is expected that the main line will be completed for 40 miles to the township of Gaudette by Nov. 1, & that the first 50 miles of the main line will be completed by Dec. 31. The point of connection between the main line & the Michipicoton branch cannot be given at present, as the region is entirely unsurveyed. (Mar., pg. 72.)

In speaking before the Toronto Board of Trade recently on "An instance of industrial evolution in northern Ontario," President Clergue, of the Algoma Central, said : "We have found there, as everybody finds, that you cannot get on without a railway. We found that the watershed of Hudson's Bay came down very close to the streams tributary to Lake Superior, which were, therefore, abrupt & rapid, & the region was so rocky as to be very unproductive of timber, & it is a fact that the pulp factory to-day is drawing wood by rail from North Bay. So you can So you can see how necessary it is for an industrial enterprise of this character to be in close touch with its raw resources. We find plenty of wood there, but we cannot get it down the rivers through this inaccessible region. We found that it was necessary to have railway admittance into the region which furnishes our raw resources, so we conceived the idea of building a railway into that region, & began an investigation of the possible routes into the various reserves. We found it practicable, & we have now applied to the Government for certain concessions, under which we expect to build a railway during the next two years, about 300 miles into that country. I wish I had now before me a large map, illustrating what that region is like, for I have an opportunity now of impressing on the Board of Trade of Toronto the great importance to them, and to the citizens of the southern part of Ontario generally, of a railway system centering towards southern Ontario. With all due respect for the C.P.R., which I admire as the most important enter-prise in Canada—so far as Ontario is concerned, it had better never have been built. The timber & minerals can never pay the long rail haul to Montreal. But there must be developments by systems running north & south. Yes, even so far north as son's Bay there are the most valuable resources. And, what Toronto, & what the whole of Ontario should insist upon & urge night & day upon the Government, is not to allow a railway to be built in Ontario that does not come down to the lake system.

• We found iron mines 12 miles from Lake Superior. The only trouble was to build a railway. We began last summer to build it, & we have now spent \$500,000 upon it. The road is laid with 85 lbs. rails.

The Ontario Legislature has given the Co. a land grant of 7,400 acres a mile for 200 miles of railway from Sault Ste. Marie to Missanabie & Michipicoton. The Co. binds itself to bring 1,000 settlers a year for 10 years into the district; to provide special railway rates for settlers; to build & operate a fleet of steel steamers on the upper lakes, beginning with 4 this year, for the purpose of carrying ore; to build large reduction works, a sulphide paper mill, & to double the capacity of its pulp mills. It has also to buy the pine on the lands conceded at current market rates.

Atlin Lake to Lake Arm.—It is reported that Capt. J. Irving, of Victoria, B.C., & others, will build a line of about 3 miles over the portage between these points, so as to be ready for use in June.

Boundary Rapid Transit Co.-R. A. Dickson & P. T. McCallum give notice of application under the B.C. Tramway Co. Incorporation Act, to incorporate a company under this name to build & operate a tramway & telephone & telegraph lines in connection therewith. Commencing without the distance of 1/2 mile from the International Boundary Line, at or near Cascade City, following the valley of the Kettle River to Grand Forks; following the valley of the North Fork of Kettle River to a point on the North Fork 50 miles from Grand Forks; & beginning at a point without the distance of $\frac{1}{2}$ mile from the International Boundary, at or near Carson City; thence northerly & easterly to Grand Forks & from Grand Forks, or from some point on the line extending up the North Fork, by way of Phœnix & Greenwood, to a point without the distance of $\frac{1}{2}$ mile from the International Boundary, at or near Midway.

Canada Atlantic.—It is not expected that work will be started on the Central station in Ottawa this year, as it is not likely that the Department of Militia will vacate the military stores building in time. (Feb., pg. 41.)

stores building in time. (Feb., pg. 41.) An item is again going the rounds of the daily papers stating that this Co. has decided to erect a second grain elevator at Depot Harbor, with a capacity of 1.500,000 bush. We contradicted this report in Feb., and are again officially informed that it has no foundation. The Co. has all the storage & transhipping facilities at present required at Depot Harbor.

The Ontario Legislature has voted a subsidy to the Central Counties Ry. Co., whose line is leased to the C.A.Ry., to extend its Rockland branch, which now runs from South Indian on the main line to Rockland, 21 miles, a further distance of about 7 miles to Clarence Creek, the subsidy being at the rate of \$1,200 a mile.

Canadian Northern.—The settlers of the Lake Frances district are urging the Manitoba Government to arrange for the 40 miles of line built by the Winnipeg & Hudson's Bay Ry. Co. some years ago to be put in running order & to connect the same with an extension of the Canadian Northern eastward from Gladstone which would give that line an entrance to Winniper. (Mar., pg. 72.)

trance to Winnipeg. (Mar., pg. 72.) Arrangements are being made to recommence construction at last year's terminus, 220 miles from Gladstone Jct., & it is expected that the line will be carried as far as the Great Saskatchewan this year. (Feb., pg. 41.) The station names on this line are to be put

The station names on this line are to be put up in enameled iron plates, supplied by the Acton Burrows Co., Toronto, instead of painted wooden signs.

Superintendent Hanna & R. J. Mackenzie recently waited on Premier Macdonald at Winnipeg to request that the aid alleged to have been promised by the late Manitoba Government to the Gilbert Plains branch should be given by the present Government. Mr. Macdonald promised that the matter would be brought up at the first full meeting of the executive council, but gave no assurance that the request would be favorably entertained.

Central Ontario.—The Ontario Legislature has granted this Company a subsidy of \$3,000 a mile for 40 miles of line to be built from Bancroft to which point the line is now being extended from Ormsby to the Canada Atlantic Ry. between Madawaska & Whitney. (Mar., pg. 72.)

Comox & Cape Scott.—When this bill came up before the Railway Committee of the House of Commons recently it was amended by reducing the stock from \$10,000,000 to \$6,000, 000, & a clause giving power to bond the road by sections was dropped. Mr. McInnes, M.P., endeavored to have inserted a clause forbid-

Quality of Rails.—At a recent meeting of the American Railway Engineering & Main-Engineer Peterson, of the Canadian Pacific, asked Capt. Hunt who is the authority on steel rails, why it is that the railways do not get as good rails as they did in the olden on the C. P. R., laid in 1875, & which have been subjected to the heaviest use, which are better than the 80 lbs. rails the road can buy nowern rail does not give as good results as obmade in the earlier days of the Bessemer manufacture, because the same care is not expended in its construction.

ding the employment of Chinese in construction or operation of the road, but this was defeated both in the Committee & in the House. (Nov., pg. 333.)

Daiton Trail to Kluckwan.—Robertson & Robertson, solicitors, Victoria, give notice of application to the B.C. Legislature to incorporate a company to build & operate a railway from the northern boundary of the province at or near the point of intersection of the Dalton Trail; southerly, to or near the Indian village of Kluckwan, Cassiar district, or to that point of the boundary line between B.C. & the U.S. which is nearest to the shores of Lynn Canal.

Edmonton, Yukon & Pacific.—A press item states that the Mayor of Edmonton, Alta., recently received a letter saying that Mackenzie, Mann & Co. would immediately begin building 4 miles of this line, connecting Strathcona with Edmonton, preparatory to work on the 50 miles subsidized from Edmonton westward. We are unable to verify this & cannot ascertain that any immediate construction is intended. (Mar., pg. 72.)

The Fort Eric Ferry Railway Co. is applying to the Ontario Legislature to extend the time for the completion of its line.

Gaspe Short Line Ry.-A bill is before the Dominion Parliament to incorporate a line from Gaspe Basin, following the valley of the York River for about 30 miles, thence through the interior of the Gaspe Peninsula to the I.C. R. north of Causapscal, with branch lines to Paspebiac or to any point on the Baie des Chaleurs Ry., the applicants being Hon. S. Hanbury & H. Higgins, London, Eng.; L. K. Joncas, Quebec; C. E. A. Carpenter, Gaspe Basin; J. X. Lavoie, Percy. The bill was warmly discussed in the Commun. D. " warmly discussed in the Commons Railway Committee. One clause gave the Co. power to acquire & operate the Baie des Chaleurs Ry. Dr. Sproule remarked that this looked like a job. Mr. Fitzpatrick retorted that the like a job. Mr. Fitzpatrick retorted that the Baie des Chaleurs Ry. was the worst job in Canadian history, that the line had only been built to Paspebiac, that it had been closed since last Jan. as being unsafe, that the Co. had received from the Provincial & Dominion Governments \$1,000,000 in cash, that there was now a suit against it for \$160,000 by one of the contractors (Mr. Macfarlane), that there were about \$60,000 due to workmen on the line, & that the promissory notes of the Co. were being sold in Montreal at 20c. on the dollar. The object of this clause was simply to give the Gaspe Short Line Ry. Co. power to buy the road when it was sold by the sheriff. The clause passed. Mr. Tisdale wanted to know what would become of the Baie des Chaleurs bondholders when the line was sold. Mr.

Patrick told him that the line would be sold subject to the claims of the workingmen & Mr. Macfarlane. Whatever the sheriff has eft, when these claims are satisfied, will go to the bondholders.

Great Northern of Canada.—Contractor Ross says the line will be completed between Shawenegan, Que., & Hawkesbury by Aug. I. The remaining bridges will be completed early in the summer. About 20 miles of the ballasting has been completed, leaving 65 miles of ballast & about 30 miles of track yet to be put down. Forty miles of the road between St. Jerome & Ste. Elizabeth have been operated by the contractors during the winter. (Mar., pg. 72.)

ter. (Mar., pg. 72.) Great Northern (U.S.A.)-A resident of Killarney, Man., states that President J. J. Hill, writing to him recently, stated that his Co. did not care to consider any proposition looking to the extension of its lines into Manitoba.

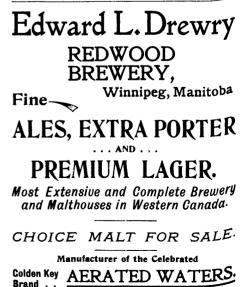
When in Seattle, Wash., recently President Hill stated that improvements to be undertaken by this Co, will involve the expenditure of between \$2,000,000 & \$3,000,000 in the State of Washington during the coming summer. The tunnel through the Cascades will be finished sometime in Sept., boring being now in progress at the rate of 500 ft. a month. Several spur lines will be built to accommodate the rapidly increasing lumber business. Mr. Hill says 140 shingle mills are now in operation along the line of the Great Northern in Washington. The wooden bridges on the Coast lines are to be replaced with steel. Perhaps his most interesting statement is that relating to his preparations for Oriental trade. Three great steam freighters have been ordered & are to be completed in Nov., 1901. It will take 1,500 freight cars to fill one of these freighters, & for this purpose 12 miles of trackage will be needed at the terminal point. This will call for very extensive additions to the facilities which the railway now has at Smith's Cove, Seattle. While at Whatcom Mr. Hill spoke very encouragingly of the prospects of the Bellingham Bay towns, & gave more than colorable ground for the belief that he contemplates, as Oriental business expands, to utilize the excellent harbor there in connection with this commerce.

Hallfax & Yarmouth.—M. Murphy, Nova Scotia Government Engineer, reports as follows on the Coast Ry. of Nova Scotia, the name of which has recently been changed to the H. & Y. Ry. :—" The construction of this railway has proceeded slowly for the last two years. In Jan., 1898, 30 miles was sufficiently advanced towards completion to warrant the payment of subsidy on that distance. To-day it is not sufficiently advanced to warrant the payment of subsidy under the conditions of contract for the additional 20 miles over which the rails are laid. In the present unfinished condition of the 20 miles from Pubnico to Barrington Passage, I could not undertake to give an approximate estimate of the cost to comin the construction of the Coast Ry. is the class & character of its structures. All are of a durable type, well proportioned & well adapted to their requirements. The bridge substructure is of granite, ashlar masonry, in regular courses; the superstructure is of steel, & of ample size & strength for heavy traffic. All culverts, where split granite could be obtained at a reasonable distance, are built of that material. If granite or good building stone for substantial & permanent structures could not be had within easy distance, concrete work was employed as a substitute. The workmanship is good throughout & fairly up to the requirements of specification. The rails are 56 lbs. to the yard, & are laid with ordinary fish-plates on sleepers or ties placed 2 ft. apart. In the first 4 miles proceeding easterly from East Pubnico station, there are yet some ties wanting to reach the standard of 2640 to the mile of track, not many, but still sufficient to warrant remark. The ballasting over the 2 last sections of 20 miles, 10 miles each, so far as it has proceeded, has been attended with unusual trouble & expense. The haul has been long & the material coarse, concretionary, expensive to excavate & to handle. Prospects for better ballast pits are said to present themselves along the extension of the next section of 10 miles easterly. If so, it might be advisable to run no more ballast easterly from the pits at Pubnico, but to ballast westerly from those that look better on the next section as soon as the track will be extended to reach them." (Feb., p. 41.)

Intercolonial.—A number of round-houses on the line will be erected this year. The present one at Stellarton being too small, an other will be built, with a 70 ft. turn-table, & the round-houses at Truro, Campbellton, Riviere du Loup & Hadlow, will be enlarged to accommodate 65 ft. turn-tables, necessitated by the use of larger engines. It is also probable that larger round-houses may be built at St. John & Halifax. All of the roundhouses will be equipped with ball-bearing turn-tables.

In view of the largely increased traffic to Cape Breton, the question of improved accommodation for crossing the Strait of Canso, is being considered, & it is probable that the present place of crossing from Port Mulgrave





to Point Tupper, will be abandoned for another site, where increased yard room & other accommodation can be secured. The present system of transferring passengers by steamer, & freight cars on a barge towed by a tug, is very unsatisfactory, & a change to a steam car ferry is most desirable.

The water service on the Cape Breton lines is being improved to accommodate the increased traffic.

Rest-houses for train men, provided with dining-room & sleeping quarters, are to be built this year at Hadlow, Riviere du Loup, St. Flavie, Campbellton, Newcastle, Moncton, Truro, Halifax & St. John, work having already commenced on some of them.

Tenders have been asked for improving & extending the station at Levis, Que.

Interprovincial Bridge, Ottawa & Hull.— On April 4, we were informed as follows :— "The centre portion of the spans between piers 4 & 5, & between 5 & 6, are in place, & the cantilever arm between piers 2 & 3 is being erected, but owing to the expected break up of the ice, very little more will be done before it goes out. The approach on the Ontario side is being pushed, & in a very short time the north approach on the Quebec side will be commenced & rushed to completion." (Feb., pg. 41.) When the Ontario Legislature granted \$50,-

When the Ontario Legislature granted \$50,ooo towards the erection of this bridge it was on condition that the Province of Quebec should also grant \$50,000. This condition was removed at the recent session, provided other conditions are fulfilled & that \$800,000 or more be expended on the work.

Inverness & Richmond.—When track laying was suspended at the beginning of winter, steel had been laid from Port Hastings for 30 miles. During the winter about 500 men have been at work grading. This force will be doubled by May 1, & it is intended to recommence track-laying in June. (Mar., Pg. 73.)

P8. 73.) M. Murphy, Nova Scotia Government En-Sineer, reports on this line as follows :--"The prospects arising from the success attending the development of the collieries, their incidental expansion & creative agencies on the south-east coast of the island of Cape Breton, lent influence & encouragement to similar organizations to open up & develop the no less productive coal-fields of the north-west coast. At Port Hood, Mabou, Broad Cove & Chimney Corner, & likely further north & South, following the north shore of Inverness County, coal seams known to be of great commercial value crop to the surface. So \log_{R-2} as the collieries of the adjoining Cape Breton County were operated by different companies that supplied all the output then in demand, the Inverness properties received little attention, not because of the quality or the coal, or the cost of mining it, or its commercial value when mined, but simply because of it being more distant from the point of shipment than its more southern prototype. For, although the remarkable success attending the Dominion Coal Co.'s organization & growth gave inspiration & encouragement to the investment of capital in kindred enterprises, the long-felt want of railway facilities for transport still acted as a barrier to the introduction of similar enterprise in the investment of capital, & the opening up & development of the Broad Cove, & adjacent coal fields. But apart from the development of mineral products, other & no less important considerations favored the construction of the Inverness & Richmond Ry. Inverness is chiefly an agricultural county; every member of it. of its community is practically interested, & rightly regarded the construction of the railway as an essential adjunct of material progress. Thrifty farming settlements succeed each other in continuity without an interven-ing break or ridge from Port Hawkesbury to Chetical and the set of about 80 miles, with Cheticamp, a distance of about 80 miles, with spurs of rich intervale dispersed at Judique, Mabou, Strathlorne & Margaree. About midway is the county town, Port Hood, at present of little commercial importance, as the produce of the county finds more convenient market at the extreme ends or over the hills to the adjacent county. The railway has been recognized in all civilized communities as an essential element of progress. In a country like our own, so exclusively dependent upon the importations of many articles required in manufacturing industries, in works of construction, & in the sustentation of life itself, the functions to be performed by the railway are of the most important character. Apart from all else, the influence it will create by enhancement in value of local production, ready intercourse & concentration of trade in the county towns & throughout the county itself, is sufficient incentive to immediate action, more especially so when supplemented by the prospect of a continuous traffic of coal. Several ineffectual attempts had been made, extensive surveys had been conducted, & contracts agreed upon promising liberal subsidies for immediate construction, but, up to 1899, not a mile of the railway had been built. Meantime, stimulated by the boom proceeding in the Cape Breton county collieries, the Inverness coal properties assumed a new phase; the prospector, the promoter, & the speculator made their appearance in rapid succession, property changed hands, but the prospects of railway construction seemed as remote as ever. However, events since then have moved with greater rapidity. The door was now open; more reassuring pros-pects entered through it, & greater conces-sions were offered. The enterprising firm of Mackenzie, Mann & Co. was early in the field; the Inverness Coal & Ry. Co. was reorganized; a new contract granting more than the usual subsidy, & providing not only for the construction of the railway, but for the development of the Broad Cove colliery as well, was entered into, infusing new life into the project under more favorable conditions. "The contract provides for the construc-

tion & equipment of 60 miles of railway from a junction with the Intercolonial Ry. at Port Hawkesbury to Broad Cove, & to put into operation on or before June 15, 1901, open & bona fide work, a coal mine or coal mines at Broad Cove, & equip the same with approved plant & machinery sufficient for the production of 250,000 tons of coal per annum, time to be material & the essence of the contract, & in default of such commencement or vigorous prosecution, or of such completion as aforesaid, the Co. to forfeit all right or claim or demand to any & every part of the subsidy to be paid. The contract was executed May 23, 1899; location surveys were made, submitted & approved, & actual construction commenced in June following. The progress, so far, has been very satisfactory. Within the last 6 months, June to Dec., an average of 1,000 men have been daily employed. Construction plant of the most approved form has been imported and set to work, and about 30 miles of the excavation, bridge substructure & culverts within that distance have been completed. The rails have been laid from Port Hastings to Port Hood, & some ballasting introduced to enable the working trains to run over the road-bed with safety. Owing to the great demand for bridge superstructure of steel, & the rush with which the works were being hurried, contracts for speedy delivery could not be effected, temporary trestles had to be constructed instead to carry the permanent way. The provisions, however, made to receive the metal by the construction of concrete abutments & pier substructure are alone sufficient to assure the Co.'s intention to erect steel bridges over them as soon as they can be supplied. The whistle of the locomotive already enlivens the precincts along the Strait of Canso & beyond Port Hastings to Port Hood. At the same rate of progress it is not too much to expect the Inverness & Richmond Ry. to be completed this year. The ground is better prepared; the material is more ready to hand; the Government initiated the recent vigorous movement, & have a large ultimate pecuniary interest in its success.

"The strong, energetic & forcible manner in which the construction of this line, between Port Hastings & Port Hood, has been pushed forward during the summer & fall months of 1899, would warrant the assumption that the 60 miles from Port Hawkesbury to Broad Cove Mines would be completed in the ensuing summer & fall seasons of 1900. In my preceding remarks I have already referred to the expeditious & satisfactory way the construction has been proceeded with so far. Mr. Earle, the Co.'s Chief Engineer, has been revising & completing the final location of the line between Port Hood & Broad Cove ; the result of which will be submitted for the approval of the Governor-in-Council in due course. An amended plan of location, showing some slight changes of alignment between Port Hastings & the junction with the I.C.R. near Port Hawkesbury, has been already submitted, but is awaiting consideration until the usual book of reference giving the respective quantities of land to be expropriated is also furnished, as provided by statute. Work in rock cuttings, in clearing of wooded lands, & such other works as can be conveniently proceeded with in winter, is being carried on & general provisions are being made by A. Sinclair, C.E., General Agent for Mac-Kenzie, Mann & Co., to ensure an early start. "Following is a table of alignment from Port Hastings to end of 30th mile :-

Fangents no.	Curves no.	Degrees of Curves.	Miles.
77			19.30
	6	1 to 2°	0.58
	11	2 " 3	1.28
	14	3 4	2.38
	14	4 " 5	1.55
	8	5° ** 6°	0.93
	20	5° * 6°30'	3.12
	5	7° "	0.69
	1 1	i o	0.17
			30.00

GRADIENTS FROM PORT HASTINGS TO END OF 30TH MILE.

Denomination of Grade.	Ascending from Hastings.	Descending from Hastings.	Miles.
Under 10 ft. per mile From 10 to 20 ft. per mile 30 "30" """""""""""""""""""""""""""""""	0.34 2.64 2.08 0.74 2.25 0.68 1.69	0.81 2.15 0.83 1.00 1.38 4.24	0.81 2.49 3.47 3.08 2.12 6.49 0.68 1.99
" 70 " 80 " " Level miles	0.95		0.25 8,62 30.00

Kettle River Valley Ry.—The bill to incorporate a company under this name to build a line in the Boundary district of B.C., was thrown out by the Railway Committee of the House of Commons April 6. (Nov., '99, pg. 333.)

Kingston & Pembroke. — In reference to the application of this Co. to the Dominion Parliament for power to extend its line from Renfrew, Ont., across the Ottawa River to Bryson, Que., & also northward to the eastern branch of the Ottawa River, we are informed that it is not expected any construction will be undertaken this year. (Feb., pg. 42.)

Kitimat Arm to Hazelton, &c.—In our Jan. issue, pg. 16, particulars were given of an application to the Dominion Parliament to incorporate a company to build & operate a railway from Kitimat Arm to Hazelton, etc. Bodwell & Duff, solicitors, Victoria, now give notice of application to the B. C. Legislature to incorporate a company to build & operate a railway from Kitimat Inlet to Hazelton, & F. Higgins, solicitor, Victoria, gives notice of application to the B.C. Legislature to incorporate a company to build & operate a wagon road between the same points.

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Kootenay Ry. & Navigation Co.—The new line between Kuskanook, B.C., & Bonners Ferry, Idaho, is being thoroughly ballasted. No definite information is obtainable as to when the operation of the line will be commenced. (Feb., pg. 41.)

when the operation of the line when we conmenced. (Feb., pg. 41.) Lake Bennett By.-F. Higgins, solicitor, Victoria, gives notice of application to the B. C. Legislature to incorporate a company under this name, to build & operate a railway from the Dyea River, on or near the provisional boundary between B.C. & Alaska, to Lake Bennett, thence to the 60th parallel of latitude.

Lake Erle & Detroit River. – Progress on the survey for the extension of this line from Ridgetown to St. Thomas has been somewhat delayed by unfavorable weather, but it is expected to be completed very soon. As at present laid out the line runs pretty close to the Michigan Central track, which it follows on the south side. A deputation from Elgin County recently waited on the Minister of Railways, asking that the line be built through the southern part of the county, instead of paralleling the M.C.R., & the Minister is reported to have promised to send a Government engineer to look the ground over. (Mar., pg. 73.)

73.) **The Manitoba & Northwestern** recently bought a 55-ton steam shovel, which is to be used in filling up large trestles at the Assiniboine River crossing this year.

boine River crossing this year. Manitoba & Southeastern.—The U.S. Congress has passed a bill empowering the Minnesota & Ontario Bridge Co. to build a railway bridge over the Rainy River, to connect the Minnesota & Manitoba Ry., a subsidiary of the Manitoba & Southeastern, with the Ontario & Rainy River Ry., which is being built from Port Arthur westward. The bill was passed as amended by the Committee on Commerce. (Feb., pg. 42.)

Commerce. (Feb., pg. 42.) The U.S. House of Representatives has passed a bill granting the Minnesota & Manitoba Ry. right of way through the Red Lake Indian reservation in Minnesota. (Feb., pg. 41.)

41.) The Acton Burrows Co.'s enameled iron plates are to be used for station names at all stations on the M. & S.E. Ry., instead of painted wooden signs.

Michigan Central.—A recent press item states that the Co. will double-track its line from Dutton 25 miles west, which will bring the double track about to Ridgetown; from Essex 25 miles east; from Springfield 25 miles, & from Cayuga 25 miles west. An official informs us that it is not the intention to do this work this year.

The Chatham Board of Trade is taking steps to urge the Co. to build a line from Petrolea to Dresden.

Midland of Nova Scotia. — M. Murphy, Nova Scotia Government Engineer, reports as follows: "Works have been pushed forward during 1899 with the same degree of energy that characterized the progress of construction in the preceding year. From the start to the present advanced state of completion, operations have been conducted in a very satisfactory manner. There has been no stint or disposition to curtail expenditure at the cost of durability or permanency. The works have been necessarily heavy, owing to heavy & expensive bridge work adapted to the

movements of heavy trains & high rates of speed. The aims of the Co., evidently, have been the abridgment of time & space, easy & economical movement of traffic, & the establishment & control of through traffic between Windsor & Truro. It will be a 'main line from the start, & must become an important factor in connection with the through railway system of the Province. From the progress made during the summer and fall seasons of 1899, we might infer that with the same rate of progression the M.R. could be opened for traffic in the ensuing summer months, the only drawback being the backward state of the Shubenacadie bridge. There is yet considerable ballasting to be done, but with the steam shovel working day & night, same as last season, that work might be speedily effected. There are three piers yet to be built to com-plete the substructure of the bridge, after which the metal superstructure has to be erected, all of which must delay the opening of the line for traffic operation.

of the line for trainc operation. "The M.R. is favorably located for heavy freight traffic operations. It begins & terminates at about the same level, just above the littoral of the Bay of Fundy. Its greatest elevation is on the summit of the water shed dividing the Kennetcook & Five Mile Rivers, & that is only 145 ft. above tide. Of the 57 miles in its extent, 22 miles will be operated on level rails; there is no heavy gradient anywhere on the line. The curvature is also very favorable for traffic. Beginning within the station ground of the Dominion Atlantic Ryat Windsor, the route follows the St. Croix River, crossing it at 3¼ miles. It follows the Hibert River Valley from the 5th to the 8th mile. It follows the Kennetcook River from the 11th to the 34th mile, & from thence descends the Valley of the Five Mile River to its confluence



with the Shubenacadie River at the 41st mile, thence along the foot hills bounding the river to near Black Rock; from here it runs through Clifton, following the Salmon River to Truro."

Denomina	ition c	of G	rade	Ascending	trom Truro. Miles.	Descending from Truro. Miles.	Total Miles.
Under 10 ft. per From 10 to 20 ft 30 '' 30 40 '' 50 55 '' 55 55 '' 60 Level miles	mile . per 	mile		 . 1	.18 .57 .12 .78 .98	5-35 4-49 3-43 1.59 0.66 6.35	5.35 6.67 5.00 2.71 2.44 13.33
ALIGNN		····		 			21.90 57.40

Total Miles. Degree of Tangents no. | Curves no. Curvature, 121 36.73 Under 1° 2.33 3.06 3.64 5.03 2.08 11 • • • • 1° to 2° 2° '' 3° 3° '' 4° 4° '' 5° 5° '' 6° 6° '' 6° 30' · · · · · 17 23 32 13 23 23 · · · 4.27 0.26

57.40

There are 108 cedar box culverts, 30 cedarbeam culverts, 23 structures of hard pine, 14 ft. openings; 13 pipe culverts, 12 to 18 ins. diam.; 8 structures of 2nd class masonry in cement, & the following larger structures :- St. Croix bridge.-3 concrete piers with stone coping. Two 130 ft. through, & one 34 ft. deck spans of steel superstructure; Little River bridge. -Two 1st & 2nd class masonry abutments in cement, with 30 ft. deck span of steel superstructure; Lacy's Brook bridge .- Two 1st & 2nd class masonry abutments in cement, with 25 ft. deck span of steel superstructure; 1st Crossing, Kennetcook River bridge.- 1 pier & 2 abutments of 1st class masonry in cement, with two 75 ft. through spans of steel superstructure; 2nd Crossing, Kennetcook River bridge.-2 abutments of 1st class masonry in cement, with one 90 ft. through span of steel superstructure; 3rd Crossing, Kennetcook River bridge.-2 abutments of 1st & 2nd class masonry in cement, with one 25 ft. through span of steel superstructure; 1st Crossing, Five Mile River bridge.—2 abut-ments of 1st class masonry in cement, with one 90 ft. through span of steel superstruc-ture; 2nd Crossing, Five Mile River bridge. ² abutments of 1st class masonry in cement, with one 50 ft. deck span of steel superstructure ; McCleur's bridge.-2 abutments of 1st class masonry in cement, with one 50 ft. through span of steel superstructure; the Shubenacadie River bridge has 4 pedestals of Concrete, & 2 abutments, & 3 piers of con-Crete, with granite copings, all in readiness to receive go lin. ft. of steel trestle, & 2 steel spans of 2091/2 ft. each.

Stations have been erected at Brooklyn, Scotch Village, Kennetcook Corner, South Maitland.

The Maritime Merchant says: "Ever since Christmas last, negotiations have been in progress between the Midland Ry. Co. & R. G. Hervey, regarding the consolidation of the interests of the Midland & the N.S. Southern railways. The Southern is being pushed forward with vigor, & the Co. expects to have it completed this year from Shelburne & Liverpool to New Germany, & has had a large party of engineers in the field for some months endeavoring to get a line from Halifax to connect with the line it is now building. The negotiations with the Midland have proceeded so far, that W. G. Reid of that line, ***** P. S. Archibald, formerly Chief Engineer

of the I.C.R., have gone over the proposed route of Mr. Hervey's road, as well as inspecting the work done on the New Ross-New Germany section. It is said that the intention of the Midland Co. is to build a through line from Shelburne, on the Western coast of N.S., to Brule, on the Gulf of St. Lawrence. This would necessitate the building of a branch of the Midland from Truro to Brule, 22 miles, & continue the road from Windsor to New Ross, thence direct to Shelburne."

Newfoundland.—Ice floes in the Exploits River recently swept away the railway bridge.

Northern Pacific.--A number of delegations from different parts of Manitoba waited on the Provincial Government in Mar. to urge that steps be taken to get the N.P. to extend some of its present branch lines & to build others. One delegation urged the extension of the Portage la Prairie branch, which now ends at Beaver, to the Birtle district. Premier Macdonald stated that if the N.P. would make any fair terms he was willing to meet it, & he had no doubt that they could arrange terms without interfering with the plank in his plat-form re railways. If the N.P. would not build, the question of the advisability of the Government building would come up & become a live issue. There was no doubt that the Government could secure running powers over the C.P.R. or N.P.R. if it wished. The engineering difficulties were not great & it would not take long to build 50 or 75 miles. He had every reason to believe that he would be able to do something this season.

Another delegation urged that a line of about 50 miles be built from Indian Springs or Marieapolis on the Morris-Brandon branch, going southerly to Marringhurst around Rock Lake, thence northwesterly into the Pelican Lake district.

President Mellen visited Winnipeg & Brandon early in April & in reply to a delegation which waited on him at Brandon, he promised to build a short extension of the Morris-Brandon branch as far as the exhibition grounds. Beyond this his Co. would do nothing & would build no more branches under existing circumstances. He said the Dominion Parliament had lately given the C.P.R. power to parallel every line the N.P. had in Manitoba & every line it had proposed building & his Co. would therefore do nothing further. He advised the people to build the roads they wanted with their own money. The charter of the N.P. provided for running powers over that Co.'s roads, & in addition he would promise them fair dealing & finally if the people wanted it his Co. would sell to them all or any portion of its Manitoba roads.

In reference to Mr. Mellen's statement Premier Macdonald said in an interview: "As there has been no meeting of the Executive Council since Mr. Mellen's visit, I have not discussed the matter with my colleagues yet, but personally I may say that there is only one thing left for us to do, & that is to accept Mr. Mellen's hint of buying out the branch lines of the N.P. or any other lines we can secure as Government roads, or else to build the roads for ourselves & have them operated under Government control. That is Government ownership according to the plank in our platform." It is said that Mr. Mellen's statement did

It is said that Mr. Mellen's statement did not refer to the branch which was built north from Portage la Prairie last year, 9 miles towards Lake Manitoba, & that it will be completed to the Lake, some 4 or 5 miles, this year. (Nov., '99, pg. 327.) At Winnipeg Mr. Mellen said it was not probable the Co. would rebuild the Manitoba

At Winnipeg Mr. Mellen said it was not probable the Co. would rebuild the Manitoba Hotel, as it did not pay. The Co. had bought some property south of the hotel site & would build a station in any event. (Oct., pg. '99, 295.)

Nova Scotla Southern.—Chief Engineer A. Mitchell reported as follows on Mar. 12: The heaviest work on the line is at the extreme

ends, Shelburne & New Germany. From Shelburne to the crossing of Sable River, (15 miles east of Shelburne,) the line has been cleared & at least half of the grading is done, & the stone is being delivered on the ground, & cut, for the bridge across the Jordan River, the steel superstructure for which is purchas-At New Germany, the track has been ed. laid to the LaHave River bridge, which consists of 4 steel spans on 5 granite piers, 45 ft. high, all of which is now complete, & we have on hand at New Germany 6 steel spans for other bridges, which are to be taken to their respective sites as fast as the track is laid to The road-bed is completed to North them. Brookfield, except the erection of the bridges ered along the line, & the culvert & bridge masonry is all completed except the abutments for Pleasant River bridge, which are not fully completed. From North Brookfield, west, to & beyond Caledonia, a considerable force is at work grading. At New Germany some rails, splice bars, spikes, frogs & switches are piled, waiting for resumption of track laying, & our President shows me receipted invoices for 12,600 tons rails & the splice bars for them. Between Liverpool & Indian Gardens the clearing has been done to within about 2 miles of the Indian Gardens, & in the town of Liverpool the filling in along the waterfront to permit the removal of the tramway track from the main street, is about two-thirds completed." (Mar., pg. 73.) North Lanark.—B. W. Folger recently ad-dressed the Kingston City Council in the in-

North Lanark.—B. W. Folger recently addressed the Kingston City Council in the interest of this railway, which is projected to run from the Kingston & Pembroke Ry. at Flower, to Arnprior, to connect with the C.P.R. & Canada Atlantic. (Mar., pg. 78.)

Ontario & Rainy River.—Track has been laid from Stanley, westward 40 miles to Lake Shebandowan. (Mar., pg. 74.) Ottawa & Gatineau.—The extension of this

Ottawa & Gatineau. — The extension of this line from Gracefield, 60 miles north of Ottawa, to Maniwaki, will be proceeded with this season. It is said stations will be established at Blue Sea Lake, Bouchette, & Maniwaki. (Mar., pg. 42.)

Ottawa & New York.—Materials are being placed in position preparatory to the resumption of work on the bridges over the St. Lawrence at Cornwall. A strong effort will be made to have the structure completed & through traffic between the terminal points of the road established by July 1. (Feb., pg. 43.) ParrySound Southerly.—The Ontario Leg-

Parry Sound Southerly.—The Ontario Legislature has granted a cash subsidy of \$3,000 a mile for a railway, not exceeding 5 miles, to connect the town of Parry Sound with the Canada Atlantic Ry.

Pontiae Pacific Jet.—When this Co.'s bill authorizing it to build & operate a railway from or near Quyon or Shawville, Que., to Pembroke, Ont., came before the Railway Committee of the House of Commons recently objection was taken to granting the power unless the Co. would agree to extend its main line from its present terminus at Waltham to Ferguson's Point. It was agreed that this extension should be made within 2 years after the line reaches Pembroke or in default the charter to Ferguson's Point to be forfeited. (Dec., '90, pg. 350,)

(Dec., '99, pg. 359.) **Prince Edward Island.**—W. B. Mackenzie, Chief Engineer of the I.C.R., has reported on the proposed bridge over the Hillsborough River, at Charlottetown, for the Murray Harbor branch of this line. Borings & surveys were made opposite Cumberland St., also on the shipyard & Mutch's Point site. It is proposed to build a bridge for both railway, vehicular & foot traffic. The width of the bridge will be 17 ft., exclusive of thesidewalks. It is proposed to support 7 piers on piles driven to the rock, & to extend 4 others down to bed-rock by the pneumatic process, as at these 4 places the mud is not sufficiently deep or firm to warrant the use of piles. The piers

are designed to be of cement concrete, laid in dry up to 4 ft. below low water & from this point freestone masonry to the top. The difference in cost in favor of the shipyard site as estimated by Mr. Mackenzie is \$88,360.99, not considering the cost of the right of way necessary to reach the Charlottetown end of the bridge on the Cumberland St. site. Mr. Mackenzie reports that on the shipyard site all the pneumatic tubes would be in shallower water than on the Cumberland St. site, that on the latter site an additional depth of 49 vertical feet of pneumatic work would be necessary & that the two piers on this site would almost reach the extreme limit of this class of work & consequently the danger & uncertainty would be largely increased, so much so indeed that a slight accident to the machinery supplying the workmen with compressed air at the highest limit of pressure would probably lead to loss of life & much extra expense. The railway approach to the Charlottetown end of the bridge on the Cumberland St. site, from its close proximity to the station, would be on a very heavy grade, 0.92 ft. per 100 ft., & the sharply-curved approach would begin immediately at the end of the station, a very incon-venient arrangement for trains & passengers. The Cumberland site is unsuited for future extension of the railway yard, the draw on that site would be opened more frequently than on the shipyard site, delaying railway & highway traffic, & the ship-room of the harbor would be much reduced. The report therefore condemns the Cumberland St. site & recommends the adoption of the shipyard one. The report was very fully considered at two meetings of the business men of Charlottetown held recently, & while there appeared to be a preponderance of opinion in favor of the Cumberland St. site from the city's standpoint, it was decided to recommend the Government to proceed on Mr. Mackenzie's report & to have the work gone on with at the earliest possible date.

The Minister of Railways recently stated in the House of Commons that the following amounts had been expended on the construction of the Belfast & Murray Harbor branch since June 30, 1899: Construction, \$12,693.20; surveys, \$3,031.37; right of way, \$2,864.54, & that \$9,938.19 had been expended altogether for surveys & location. He further stated that 11½ miles had been surveyed & located, that the Government had not decided as regards proceeding with the survey of the cross line from Cardigan, passing at or near Montague bridge & Caledonia, as proposed by the late Government in 1896, that the placing under construction before June 30 next, of any further distance beyond the $11\frac{1}{2}$ miles now under contract would depend upon the Department obtaining the information necessary to enable it to do so, & that no materials had been purchased for construction. (Mar., pg. 74.)

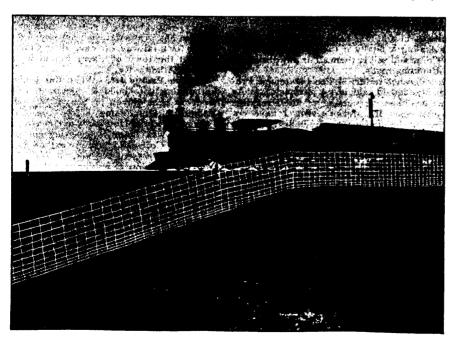
Quebec Bridge.-During a recent discussion in the Quebec Legislature on the Provincial aid to this bridge, which is to be paid at the rate of not more than \$30,000 a year, Mr. Nantel, M.L.A., said the Co. had a subscribed capital of \$250,000, of which 25% was paid up. Plans had been made & approved for the construction of a bridge at Chaudiere, but it might be built elsewhere, though the Chaudiere site was the most advantageous & certainly the least costly. Tenders had been called for, & of the three received, that recommended for adoption was from a firm in the U. S. for \$3,600,000, exclusive of the approaches, which would cost \$400,000 more, making the total cost \$4,000,000. Outside of its stock subscription the other resources of the company were the \$1,000,000 subsidy of the Dominion Government, the authorization obtained by the city of Quebec to contribute \$500,-000 & the \$250,000 proposed to be voted by the Legislature. The Company had been by no means inactive, but it had been awaiting the action of the Legislature, & when this \$250,000 was voted it would be in a position to issue debentures & proceed with its work. He could not say exactly what the city of Quebec would vote, but it would scarcely be less than the subscription of the province.

An unverified despatch from Quebec says the directors have succeeded in concluding arrangements for the early commencement of work, that the steel contract has been awarded to a firm in the U.S., a portion of which, forming part of the foundations, has been ordered, & will be delivered in Quebec in Nov. next, & that the masonry work has been let to a firm at Cardinal, Ont., who will at once order their quarry work & begin to deliver material on the spot by June next.

Restigouche & Western.-It is expected construction will be resumed this spring, but no definite information is obtainable. (Mar., pg. 74.)

Toronto, Lindsay & Pembroke.—The Ontario Legislature has granted a subsidy to this Co. of \$3,000 a mile for 36 miles from 15 miles east of Bancroft to or near Golden Lake.

White Pass & Yukon. - The following official information has been furnished us under date of April 12: "The line between Caribou Crossing & the new town of White Horse, formerly called Closeleigh, is practically graded. Track-laying began April 10 & will be pushed immediately to the 2 long trestle bridges on the 15th mile, across the canyon at the outlet of Lewis Lake. This canyon was caused by an attempt to lower the water-level in this lake. The water cut back on the river channel through the alluvial deposit of sand & gravel & drained about 80 ft. of water out of the lake. This made a great flood down the Watson river & washed.out a number of the camps, causing considerable damage, but no loss of life. One locomotive, 9 flat cars & 25 miles of rails are at Caribou ready for the work. The balance of the rails will be shipped immediately upon the opening of naviga-tion on Lake Bennett. This lake opens about 10 days sooner than Lake Marsh, giving us time to finish the track-laying to White Horse by the opening of navigation on the main river. This will admit of our immediately engaging & handling freight around White Horse Rapids. The work around Lake Bennett has been opened up for 7 miles & several new camps will be established this week down as far as the 13th mile. This is about the end of the heavy rock work. From the 14th mile on to the 27th, at Caribou Crossing, the work will be left until the snow is off the ground, then a large force of teams & men will be put on with the expectation of finishing the work by the latter part of July or beginning of Aug., giving us a through railway service from Skagway to White Horse, a distance of 112 miles. In the meantime the transfer of goods & passengers will be made on Lake Bennett by means of steamers. It was at one time thought advisable to put on large ferry barges & transfer the cars without unloading, but as this section is to be so soon completed this idea was abandoned. Plans for the drawbridge at Caribou Crossing have been approved by the Department in Ottawa & some of the material has already gone forward. This



Page Fencing on Grand Trunk Railway, near Clinton, Ont. THE PAGE WIRE FENCE CO., LTD., WALKERVILLE, CANADA.



bridge will be put in in June & July. Another quite extensive improvement is under way across the big ravine at the switchback. steel arched cantilever form of bridge will cross the deeper portion of the canyon. The approaches, which are on 16° curves, will be of trestle. The steel span is 400 ft. in length. The outlook for mining in Atlin, White Horse & down the Yukon is very favorable for the future. We have made an extremely low rate on copper & other ores from White Horse to the smelters on Puget Sound. Upon the completion of the road to White Horse we will take the ore for \$15 a ton from White Horse to the smelters on the Sound, a distance of over 1,100 miles." (Feb., pg. 43.) Alarge coal bunker is to be built at Skagway.

Winnipeg, Selkirk, & Lake Winnipeg Ry. -R. R. Sutherland, solicitor, Winnipeg, gives notice of application to the Manitoba Legislature to incorporate a company under this name, to construct & operate a railway from Winnipeg via West Selkirk, to a point on the Red River at or near Selkirk, or on the western shore of Lake Winnipeg, & with other powers.

RAILWAY APPOINTMENTS, Etc.

Canadian Pacific .-- D. McNicoll, heretofore Assistant General Manager, has been appointed Second Vice-President & General Manager, under the provisions of a by-law approved at the recent annual meeting, which authorizes the Board to appoint 2 or more additional vice-presidents, to be called second vice-president, third vice-president, & so on, no one of whom need necessarily be a director. The position of Vice-President has not been filled.

L. A. Hamilton has intimated to the President his desire to resign the position of Land Commissioner, owing to the serious illness of his only daughter, whose removal to another climate is considered necessary to restore her health. No action has been taken in the matter, & it is understood that the Executive is very unwilling to accept Mr. Hamilton's re-signation. Should it be accepted it is expected he will be succeeded by F. T. Griffin, who has occupied the position of Assistant Land Commissioner for a number of years. At present Mr. Hamilton is in Cuba in connection with Sir Wm. Van Horne's interests there.

R. Atkinson, heretofore Mechanical Superintendent, has been appointed Superintendent of Rolling Stock, with office at Montreal.

As some misapprehension appears to exist as to the position to which J. G. Sullivan has been appointed, it may be stated that he is Divisional Engineer in charge of all construction work in British Columbia, reporting to the Chief Engineer of Construction, W. F. Tye. He has nothing to do with the mainten-ance of way on the Columbia & Western Ry. & is not in any way connected with the operating department.

W. Cross, heretofore General Master Mechanic of the Western lines at Winnipeg, has been appointed Assistant to the Manager, Mechanical Department, with headquarters at Winnipeg. C. R. Ord, heretofore in charge of the instructing & training car, succeeds Mr. Cross as Master Mechanic of the Western division with office at Winnipeg.

Several changes have recently been made among the roadmasters on the Western division. Jas. Horner, heretofore Roadmaster at Rat Portage, has been transferred to the Crow Foot section, with office at Calgary, Alta., replacing D. Black, retired. F. W. Green, heretofore Roadmaster at Ft. William, has succeeded Mr. Horner in charge of the Rat Portage section, Rat Portage to Winni-peg Jct., including Rat Portage yard. Mr. Green is succeeded as Roadmaster of the Thunder Bay section, Ft. William to Ignace, including Ft. William yard, by J. Esselmont,

for 9 years extra gang foreman on the divis-The jurisdiction of Roadmaster A. J. ion. Megrund, in charge of the Wabigoon section, has been extended to include Ignace yard.

The roadmasters in the Kootenay district of the Pacific division are now as follows : Columbia & Kootenay & Slocan Lake branches, Roadmaster Lewis, office at Nelson ; Nakusp & Slocan branch, P. J. Gallagher, Rosebery; Rossland branch of Columbia & Western, J. T. Sullivan, Smelter Jct.; Boundary Creek branch, Columbia & Western, Røadmaster Johnston, Grand Forks.

Grand Trunk .- D J. O'Connor has been appointed Chief Train Despatcher of 15th district ; 16th district, Hamilton to Port Dover ; 20th district, Buffalo to Goderich ; 21st, 22nd, 23rd & 24th districts, vice J. Baxter, assigned to other duties. Office at Stratford, Ont.

W. W. Ashald has been appointed train master of the 4th & 5th districts & 2nd district west of Richmond, including Bonaventure terminals, in place of X. H. Cornell, who has accepted service elsewhere. The jurisdiction of C. St. Bevington, train master, Island Pond, is extended over the 1st district, vice W. W. Ashald, transferred.

J. R. Donelly, heretofore Locomotive Foreman at York, has been transferred to a similar position at Montreal, succeeding G. Blackbird, who will not leave the employ of the Co., but who has not yet been located elsewhere. W. Newcombe, Road Foreman of Engines, is temporarily acting as Foreman at York.

B. Stimson, who has been Locomotive Foreman at Stratford for about 16 months, has resigned and is succeeded by B. Leikie, hereto-fore Locomotive Foreman at Fort Erie. J. Wright, of Stratford, succeeds Mr. Leikie at Fort Erie.

Ino. Murray, one of the oldest G.T.R. despatchers, recently located at Montreal, has resigned. He was stationed in Kingston a number of years ago.

The G.T.R. will be represented at the Paris Exposition by Jos. Quinlan, the Travelling Passenger Agent. During his absence his duties will be assumed by J. E. Malone, the Montreal City Passenger Agent.

W. H. Mourer, of Chicago, has been appointed Yardmaster of the Toronto yards between Don & Parkdale.

Mainly About People.

W. Stitt, Assistant General Passenger Agent of the C.P.R. at Winnipeg, left April 8 for Little Rock, Ark., for the benefit of his health. He has been suffering from rheumatism.

The late G. E. Tuckett, of Hamilton, held 1,010 shares in the Hamilton Steamboat Co., which are valued at \$90,900, & 460 shares in the Hamilton & Barton Incline Ry., valued at \$18,400.

President Shaughnessy, of the C.P.R., ac-companied by Directors R. B. Angus & C. R. Hosmer & H. McDougall, of Montreal, visited Washington & other points south towards the end of Mar., the visit being purely for re-creation. Mr. Shaughnessy did not visit Cuba as reported.

At the first annual meeting of the American Railway Engineering & Maintenance of Way Association in Chicago, Mar. 15, P. A. Peterson, Chief Engineer of the C.P.R., was elected 1st Vice-President to serve two years, & F. H. McGuigan, General Superintendent of the G.T.R., was elected a director to serve two years.

C. R. Palmer, General Storekeeper of the Intercolonial Ry., whose portrait appears on pg. 95, was born & brought up on a farm at Dorchester, N.B., on which was situated a stand of mills, consisting of lumber, grain & carding mills, all of which he learned to operate. He was educated at the village school

& at Mount Allison Academy, served as clerk in a ship yard for 2 years, & taught school for 121/2 years, the last 10 being in the superior school of Sussex, N.B. He was station master on the I.C.R. at Dorchester for 13 years, & was Secretary of the Board of School Trustees & Superintendent of the Moncton city schools for 11 years, resigning in Aug., 1897, on being appointed to his present position.

The Great Northwest Central Ry. has been taken over by the C.P.R. & is being operated as the Northern Central section of the Western division, being placed under the jurisdiction of Supt. James, whose district in-cludes the main line from Winnipeg to Brandon & the various branches in Manitoba. C.P.R. Roadmaster Panser has charge of the track, & the jurisdiction of the general officers of the Western division has been extended over the North Central section. As far as possible the services of the G.N.W.C. employes on the line will be retained.

New York & Ottawa R.R.-The U.S. Court at New York City has appointed H. W. Gays Receiver of the New York & Ottawa R.R. Owing to the delay experienced in reconstructing the bridge over the St. Lawrence River at Cornwall, the N.Y. & O. R.R. Co., was not in financial condition to carry the interest charge that was accumulating on its bonded indebtedness and at the same time take care of the cost of reconstructing its road between Moira & Tupper Lake. The reconstructing of the bridge will be completed during the coming summer and the reconstructing of the railway will be prosecuted under the receivership. The appointing of a Receiver for the N.Y. & O. R.R. has no ef-fect on the Ottawa & New York Ry., the latter being a separate & distinct organization, & is the Canadian road over which the N.Y. & O. will reach Ottawa on completion of the Cornwall bridge.

SHIPPING MATTERS.

More Privileges for U.S. Vessels.

The regulations recently made by the Department of Customs respecting the entry of Canadian goods into the Yukon district, when carried in foreign vessels via St. Michael, are as follows :-

Collectors of customs in the Yukon provisional district are instructed that goods purchased in Canada (duty paid or the produce of Canada) may be admitted free of duty into the said district during 1900, unless otherwise ordered, when carried by St. Michael & the Yukon River from a port of Canada or of the U.S., notwithstanding that the transportation by water is partly or wholly by a foreign vessel, subject to the following regulations prescribed by the Minister of Customs :-- A manifest or invoice, duly certified, and containing a particular description of the merchandise, by packages, marks, numbers & contents, shall be presented to the customs officer at the Canadian port of entry in the Yukon district. When the goods are shipped from a port in British Columbia, the certificate of a Canadian customs officer may be endorsed on the manifest or invoice, to the effect that the goods described have been shipped duty free from a port in B.C. When goods purchased in Canada as aforesaid are forwarded through the U.S., it is directed that the manifest or invoice shall have thereon a certificate of the Canadian exporter or his agent, attested before a customs officer in Canada. The identity of the goods shall be established to the satisfaction of the customs officer at the port of entry in the Yukon district, & shall be attested by the oath of the importer or his agent. Although one invoice only is required for Canadian customs purposes, it will be advis-

WINNIPEG.

able for parties purchasing goods in Canada to provide themselves with invoices in dupli cate, duly certified, so as to avoid trouble & delay in passing entries, in case of lost or stray invoices. Customs officers in the Yukon district are required to examine the marks & numbers on the packages landed, comparing the same carefully with the invoices, & opening such packages as may be necessary for examination. The foregoing regulations are temporary, applying only to the entry of Canadian goods via St. Michael & the Yukon River.

Richelieu & Ontario Navigation Co.

The str. Toronto will begin her season June 1, with Capt. Esford in charge. Throughout the summer she will connect at Kingston with the str. Bohemian, which will ply between that point & Montreal. The Bohemian is being lengthened 20 ft. in the Co's yard at Sorel. The Hamilton & Algerian will be commanded by Captains Baker & Mills, & will start May 1. They will run between Hamilton & Montreal, calling at Toronto, Cobourg & Port Hope. The Spartan & Corsican will be in charge of Captains Granger & Mc-Graw, & will ply between Toronto & Montreal, beginning June 1. Extensive repairs have been made to some of the boats, new feathering wheels being placed in the Hamilton & new woodwork in the Spartan above the iron hull.

The Co.'s str. Columbian has been chartered by the Lake Ontario Navigation Co., which owns the steamers Hero & North King, to ply between Charlotte, Port Hope & the Thousand Islands during the summer months. The R. & O. Co. retains the right to use the Columbian from June 9 to Aug. 27, to run the Monday trip between Kingston & Montreal, the steamer returning to her route between Charlotte & Port Hope during the balance of the week between the dates named.

Montreal City Council has accepted the Co's tender for the St. Helen's Island ferry service.

The str. Kingston, which is to be built at Toronto, will be similar in character to the str. Toronto built last year, but will be some-

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Average yield per acre. WHEAT......27.86 bushels OATS......46.73 " BARLEY.....36.69 " FLAX......16.08 " An Unfavorable Season. Average yield per acre. WHEAT.....14.33 bushels OATS......28.25 " BARLEY....24.80 " FLAX.....12.30 "

CROP OF 1896.

Over 10,000,000 acres in Manitoba that have never been cultivated. Price of land from \$2.50 to \$6.00 per acre. On easy terms.

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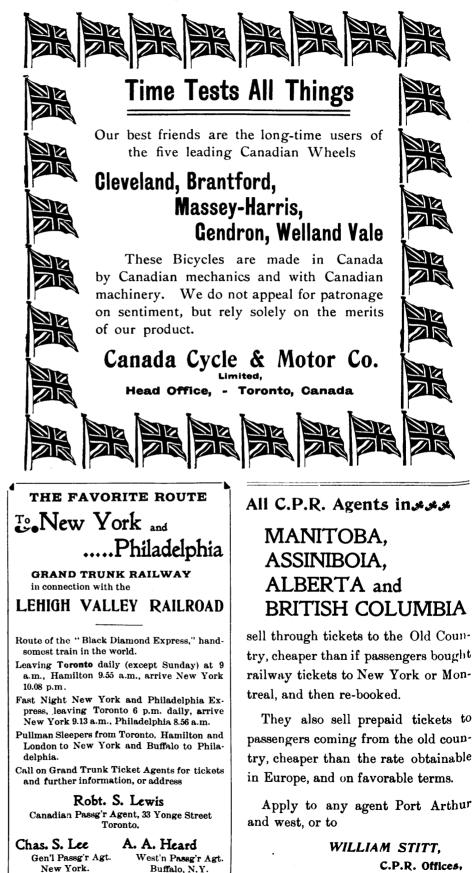
thements, free homesteads and lands for sale, from the heads of departments located in Winnipeg. For latest nformation and maps, all free, address

JOHN A. DAVIDSON,

Minister of Agriculture and Immigration. Or WINNIPEG, MANITOBA.

C. H. JEFFERYS,

Manitoba Immigration Agent, Union Station, Toronto, Ontario what longer & with greater accommodation. She will run on alternate days with the Toronto, on the route between Toronto & Prescott, & will be ready for June, 1901. Her length over all will be 290 ft.; breadth of hull, 36 ft.; depth of hull, 14 ft.; draught of water, $8\frac{1}{2}$ ft. The hull will be of open hearth steel with 4 water-tight bulkheads; the main deck also will be wholly of steel. The hull will have considerable dead rise on the bottom, the general shape being based on that of the Toronto. The increased length will enable the lines to be somewhat easier & finer than those of the Toronto.



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The boilers will be 4 in number, of Scotch pattern, 11 ft. in diameter & $11\frac{1}{2}$ ft. long. Each boiler will have 2 furnaces, 40 ins. in diameter, fitted with hot draft. The engine will be inclined triple expansion, with 3 cranks & 3 cylinders, respectively 28, 44 & 74 ins. in diameter, and 6 ft. stroke with a working pressure of 175 lbs. steam per square inch, capable of making 40 revolutions, with feathering paddle-wheels, 22 ft. in diameter, with curved steel buckets, 10 ft. 4jin. long, & $3\frac{1}{2}$ ft. wide. The average time-table speed will be 17 miles an hour, with capacity for 20 miles when required. The general outfit, including steam windlass & capstan forward, steam capstan aft, fire & life-saving apparatus, water tanks for trimming purposes, steam steering gear, steam-heating & waterworks system, artificial ventilation & electric light plant of 1,000 lights, will all be of the latest & most approved design.

With the exception of a limited space for a small amount of express freight, & the space necessary for crew & propelling purposes, the entire steamer will be given up to passenger accommodation. On the main deck, aft, will be the smoking & correspondence rooms, barber shop, bar saloon, entrance hall, purser's office & baggage-room. In the middle will be the engines & boilers & a portion of the crew space ; & forward the dining-room & pantries, extending out the full width of the sides, & lit from both sides, & a raised glass canopy in the ceiling. This position of the dining-room is admirably adapted for pur-This position of poses of observation, as well as for convenience with the kitchen below. It will cause a large gain in passenger accommodation, as on most steamers this space is devoted to freight. With the exception of the open seating space at the bow-sides & stern; the saloons & staterooms will occupy the whole of the 1st & 2nd decks, above the main deck, arranged in the form usual on the large inland steamers. An exceptional feature, however, will be a large, handsome skylight in the roof, immediately over the glass canopy in the ceiling of the dining-room. There will be 165 state-rooms & 8 parlor-rooms with bath-rooms attached. The 3rd deck, above the main deck, will have the pilot-house for-ward, & behind it the rooms for the captain, mates & wheelmen; all the rest of this deck will be an immense promenade for passengers. Following the principle adopted in the case of the str. Toronto, the ornamental Work will be of original design & finish throughout.

Canadian Inland Transportation Co.

A prospectus has been issued in connection with the transfer of the privileges, &c., of the Conners Syndicate to the Canadian Inland Transportation Co., by which it appears that the promoters are to receive \$1,500,000 of stock for their services, &c. The prospectus reads as follows :—

"The Canadian Inland Transportation Co., by its charter, is authorized to issue stock to the amount of \$4,000,000. It may also from time to time issue its bonds in aid of the acquisition of property, the bonds to be secured by mortgage, This Co. now proposes to Purchase from the so-called Conners Syndi-cate the allotment & franchises recently Montreal, & to pay for the same by issuing 3,000,000 of its stock, & \$1,000,000 bnds. The Conners Syndicate shall turn over to trus-tees, for the benefit of the Co., \$1,500,000 of its stock ; also the \$1,000,000 bonds. The remaining \$1,000,000 of stock is offered for subsubscription at par. Each subscriber for these shares shall receive in addition to his subscription at part of the construction of the subscription of the subscriptio subscription from the Conners Syndicate bonds to the amount equal to his subscription. The avails of the sale of this stock to be used in the erection of elevators, warehouses &

general equipment of its plant. To provide for the future expansion of the Co. it is proposed to authorize a total bond issue of $\$_4$,000,000 for 20 years at 5%, but of which only $\$_1$,000,000 is to be now issued to the syndicate as aforesaid, & which is to be distributed among subscribers of stock; the remaining $\$_3$,000,000 to be issued only by the corporation as the necessities of the Co. may require for the enlargement of its plant. Thus the subscribers of stock will hold bonds secured by a 1st mortgage on all the Co.'s property, including the franchise & all rights under it.

"In Nov., 1899, the Canadian canals were deepened to accommodate boats drawing 14 ft. of water, from Port Colborne to Montreal, completing what is known as the St. Lawrence route. Heretofore no ship drawing this depth could go below Prescott, & from this point to Montreal 9 ft. was the maximum depth of the water. This would permit ships to carry but from 25,000 to 30,000 bushels of grain. Vessels of the latest design, 85% box, 250 ft. long, 43 ft. beam, will carry through the Canadian waterway an average cargo of 85,000 bushels on a 14 ft. draft. One steamer & two barges constitute a tow, & handling them in this way gives the greatest earning power with the greatest economy in the operating expenses. The 3 ships will carry 250,000 bush. of grain.

"The lowest average rate on grain for any one month during the last 10 years from Duluth to seaboard was 4c a bush. A steamer & 2 barges operating between Duluth & Montreal will carry 250,000 bush. At 4c a bush. this would result in gross earn-ings of \$10,000. The charges against this would be : Operating expenses, \$200 a day, 20 days for round trip, \$4,000; shovelling charges, \$3 per 1,000 bush, \$750 ; elevator charges, Montreal, 1/2c a bush, \$250 ; towing through canals, 2200 ; total, 6,200 ;net earnings per trip, \$3,800. Estimating 7 months for a season of navigation, which is very conservative, a tow could easily make 10½ trips each year, which would show an earning capacity of \$39,900 for each tow, & 7 tows would earn \$279,300, or 10% interest on the cost of ships, viz., \$2,695,000, as below. As shown above, our elevators will be paid for the use of steam shovels, & the charges will not be less than \$1 per 1,000 bush. of grain the first year at Montreal. Estimating conservatively, we will handle 30,000,000 bush. The revenue from this will be \$30,000, or more than the entire cost of operating the elevator. The charges of ½ c a bush. for elevating at Montreal would bring the Co. \$150,000. At Port Colborne we would handle 20,000,000 bush of grain, & the earnings from elevating at $\frac{1}{2}c$ a bush would be \$100,000 net, the revenue from the shovelling charges paying for the cost of operating. At Montreal we would haul through the warehouses of the Co. not less than 500,000 tons of merchandise or package freight. The earnings would not be less than 20c a ton, or \$100,000 for a season, making the net earn-

ings in the aggregate \$830,300. "The total cost of our plant would be as follows: Seven steamers, at \$165,000, \$1,155,-000; fourteen barges, at \$110,000, \$1,540,000; elevator & warehouse at Port Colborne, \$400,-000; elevator & warehouse at Montreal, \$900,000; total, \$3,995,000. The above figures are all based on the lowest freight rates on record. The terminals in Montreal will be in better shape to give despatch to ocean liners than any other seaport terminus. The distance from Liverpool is 300 miles less than to New York, thus saving 600 miles to ocean steamers each trip. Every trans-Atlantic steamer coming to our terminals will be guaranteed a 48-hour clause for loading & unloading. This also will effect a saving from 5 to 8 days in the time required to load & unload at other ports. This will result in

bringing to Montreal more ocean steamers in the coming 5 years than have put in there during the past to years. The sailings from Montreal last year were 808 ships, during 1898, 866 ships. There are no permanent structures in Montreal used for the purpose of elevating grain. Those in use there now are floating houses. The lowest known rate from the head of Lake Superior to ocean points is 121/2c per 100 lbs. Assuming that we could get 10c or \$2 a ton, our ships will carry 2,500 tons, a tow carrying 7,500 tons would bring earnings : gross, \$15,000. The charges against this would be: Operating expenses, \$200 a day, 20 days for round trip, \$4,000 ; towing through canals, \$200 ; freight handling charges, 50c a ton, \$2,250; total, \$6,450; total earnings, \$8,550. Ten & a half trips each season, each tow would earn \$89,-775, seven tows would earn \$638,425, thus showing that boats in the package freight business would earn \$148,225 more than if engaged in carrying grain. This would put engaged in carrying grain. This would put the freight sorted & piled in the warehouse at Montreal, & we can load the transatlantic steamers at one-third less cost than is charged at any seaport in the U.S. The earnings on grain shown previously are based on a 4c. rate, while the average rate for the last 3 months of navigation of 1899 was 7c. a bush. from Duluth to seaboard. At the same cost of operating, etc., as show this rate of 7c. would give a net earning of \$830,550, as against \$276,500 earned on a 4c. rate. One of the competitors of the St. Lawrence route is the Erie canal. This waterway begins at Buffalo & ends at New York, & is composed of 352 miles miles of canals (Buffalo to Al-bany), & 154 miles of Hudson River (Albany to New York), total, 506 miles. This canal has always and now is a competitor of the railway trunk lines between Buffalo & New York. The maximum capacity of its boats is 8,000 bush., & it requires 18 to 20 days to make a round trip. The proposed ships of this Co. will be many times the capacity of the Erie Canal boats & will make the round trip in less than one-half the time. The foregoing propositions are based on no return cargo from Montreal to western ports, but several ocean lines are endeavoring to enter into traffic arrangements whereby hundreds of thousands of tons of freight will be delivered to us at Montreal each year."

A recent despatch from Chicago stated that the American Shipbuilding Co. had received the contract for the construction of half-adozen vessels for a new company which will operate a line between the lakes & Montreal. This is in accord with the programme mapped out by the Connors syndicate. While the representative of the Connors syndicate in Montreal will make no official statement, it is pretty well understood that the syndicate is interested in the new concern, & that the object is the transportation of grain from the great lakes down the St. Lawrence to Montreal. The ships, says the despatch, are to be ready in the autumn. The new line will be the first in the field since the Dominion Government completed its great waterway around the rapids of the St. Lawrence, by which boats drawing 14 ft. of water cansteam directly from Duluth, Chicago, & to the ocean steamships at Montreal. A. B. Wolvin, ot Duluth, is at the head of the new company, but with him are associated many of the most successful vessel-owners on the lakes, who have faith in the Montreal trade. The boats will carry about 75,000 bush. of wheat each, & will be of steel construction. Specifications are now being prepared. In order to have the capacity already mentioned the vessels will be 250 ft. long, 40 ft. beam, & have a draught of 14 ft. The favorite method of bringing these vessels down the canal is in tows of 3 vessels, 1 steam & 2 consorts. The steam vessel has a capacity of about 75,000

bush. of grain, & the consorts of 80,000 bush.

each. W. G. Conners, before leaving Montreal for Buffalo, April 13, said that the ice would cause some delay in the construction of the elevators, but despite this the syndicate would begin work as soon as the Harbor Commissioners had examined & approved of the plans. The syndicate would endeavor, he said, to do business next fall with oceanliners, or at least to secure grain for winter storage.

The Marine Insurance Outlook.

The business outlook for the coming season of navigation, as viewed through the glasses of the marine insurance men, is very promising. A representative of a Toronto company recently said it was almost too early to talk rates. The U.S. underwriters, desiring to keep the season in check until the ice was all gone, deferred the declaration of their rates, & the Canadians followed in their wake. It was practically assured, however, he said, that there would be no change in the rates or alteration in the terms of agreements of last year. Some slight change in classification would make things a little better for owners of large first-class boats.

Losses last year, he said, were numerous on hulls, but comparatively light in the aggregate, & on cargoes were light. But they were not low enough to affect insurance rates. Totals had not been prepared last year. For a' considerable time the losses on the lakes totalled about \$1,250,000, but in 1895 they

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CORRESPONDENCE INVITED THE BRADSTREET COMPANY

Toronto Office-Corner Melinda and Jordan Streets. Hamilton Office-No. 30 James Street South, London Office-No. 36 Richmond Street. Winnipeg Office-No. 398 Main Street, Vancouver Office-Cor. Hastings & Hamilton Sts, Victoria Office-Board of Trade Building. THOS. C. IRVING, Gen. Mgr. Western Canada, TORONTO, ONT.

went \$2,000,000, & in 1898 over \$3,000,000. The underwriters, he said, were hoping for light losses this year, because a busy season

was in prospect, & vesselmen were always more cautious when their boats were in great demand. Freight rates would probably be slightly lower this season than last. Many season contracts had already been made, shippers being afraid that rates might jump up during the term of navigation, as they did last year.

Red River Navigation Improvements.

The plans for the works at St. Andrews Rapids, between Winnipeg & Selkirk, call for a dam across the Red River 800 ft. in length, a canal 1,900 ft. in length, one set of locks 215 ft. in length, & dredging in the river for some 400 ft. The lock will be 215 ft. long, 45 ft. broad & the solid concrete will be 38 ft. deep, giving the locks a high-water depth of 30 ft., while at low water the depth will be 11 ft. The gates of the lock will be of steel. The approach to the locks will be by a canal from a point on the west bank of the river, a distance of 1,500 ft. The canal will be 100 ft. wide, & have a depth of 11 ft. The distance to the canal from the river will be partly wooden crib work, filled in with stone & will be 290 ft. in length. The canal extends 400 ft. north of the lock to the river, which will be dredged to a depth of 9 ft. for about 100 yards. The dam to regulate the river will extend from the east side of the locks 800 ft. to the east bank of the river. It will be of concrete, granite faced, 32 ft. at the base

& 18 ft. 5 ins. at the top. The dam is provided with 7 piers & 2 abutments, & also with sluice gates. The piers & abutments can be used as the base of a service bridge, & from this could be worked a system of shutters & movable frames, by which the height of the dam could be increased $12\frac{1}{2}$ ft. The bridge & shutters will form a separate contract.

Notices to Mariners.

The Dominion Department of Marine has

issued the following notices : No. 10, Mar. 6, Nova Scotia, 1. Lurcher shoal buoy disappeared. 2. New Brunswick, Zephyr rock light ship only to be maintained in autumn.

No. 11, Mar. 10, Nova Scotia, Northwest Lodge buoy adrift.

No. 12, Mar. 15, Prince Edward Island, change in North Rustico lights.

No. 13, Mar. 22, Ontario, 1. Snake Island light. 2. U.S.A., New York, Tibbet's Point fog alarm.

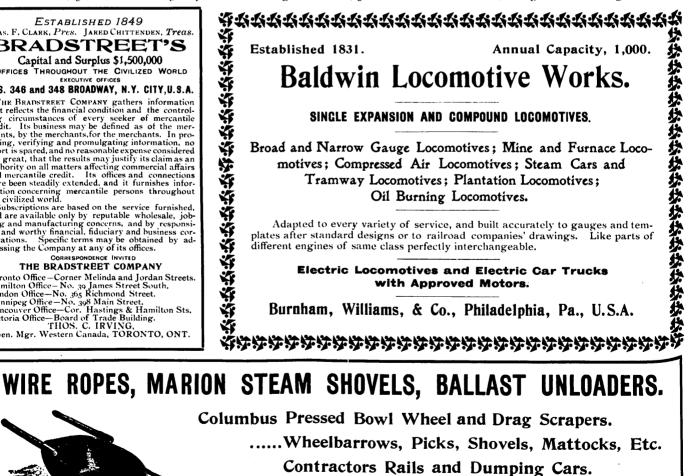
No. 14, Mar. 22, British Columbia, 1. Rock in Tricomali Channel. [2. Canoe reef, Portier Pass buoy

The U.S. Hydrographic office has issued the following notices for the Great Lakes :

No. 279, Mar. 24, Lake Superior, Superior Bay, improvement in Superior Front Channel-

No. 280, Mar. 24, Lake Michigan, Sturgeon Bay Canal, pierhead light increased in intens-

ity. No. 305, Mar. 31, Lake Erie, Erie Harbor entrance, changes in aid to navigation.



Saddle Tank Locomotives.

JAMES COOPER, 299 ST. JAMES ST., MONTREAL.

No. 306, Mar. 31, Detroit River, Ballard Reef Channel, changes in aids to navigation.

No. 332, Apr. 7, Lake Superior, Grand Marais Harbor, life-saving station established. No. 333, Apr. 7, St. Mary's River, additional spar buoys established.

Maritime Provinces & Newfoundland.

F. S. Cormier, of the I.C.R., at Moncton, has invented an emergency steering gear which was recently tested on the Government str. Lansdowne near Halifax.

The Pickford & Black Steamship Co., Ltd., has been incorporated under the Dominion Companies Act, with a capital of \$600,000, the incorporators being R. & C. S. Pickford, W. Anderson Black, G. W. C. Hensley & W. Allan Black, of Halifax.

The Government str. Stanley is running between Charlottetown & Pictou, the Minto still running on the Georgetown-Pictou route, carrying the mails. The past winter is the first on record in which mails have not been carried in open boats between Cape Tormentine & Cape Traverse.

The annual report of W. Bell Dawson, Engineer in charge of the survey of tides & currents in Canadian waters, for 1899, has been issued in pamphlet form by the Department of Marine, Ottawa. Tide tables for Halifax, Quebec & St. John, N.B., for 1900, with tide differences for the Atlantic coast of Nova Scotia, & for the St. Lawrence River from Three Rivers to Gaspe, have also been issued in pamphlet form.

Province of Quebec Shipping.

Montreal Harbor Commissioners have asked the Dominion Government to advance \$110,000 to enable them to start the important improvements at the harbor front which have recently been decided on, & to conduct the ordinary business of the port till the port revenues are available.

The Quebec Board of Trade has adopted a report, insisting upon the practicability of winter navigation from Quebec to the ocean, & claiming that it is perfectly safe to navigate the Lower St. Lawrence for 11 months in the year. The real difficulty in the way is the almost prohibitory rates of insurance charged in winter by the underwriters. The board urges that the Government should pay the difference between ordinary & winter rates of insurance, while experiments are made by a line of vessels in the winter navigation of the St. Lawrence. The board supports the compulsory inspection of deck loads in different Canadian ports, in order that the discriminating rates of insurance imposed by Lloyds may be reduced.

The allotment of berths in Montreal harbor has been completed. The Elder, Dempster Co. will occupy 450 ft. on the outside of the Island Completed State Island wharf for its Bristol service, & 800 ft. at sections 21 & 22 for the Liverpool & London lines. D. Torrance & Co. receive 850 ft. at sections 16 & 17 for their Liverpool service. H. & A. Allan got 400 ft. on the east side, & upper end of the new pier, & the whole of the west side. The Richelieu & Ontario Naviga-tion C tion Co. will occupy the whole outside of the Victoria pier. The McLean, Kennedy Co. go to Hochelaga, where they receive 400 ft. at sections 37 & 38. The Robert Reford Co. have the inside of the Victoria pier, 800 ft. at sec-tion tion 23, & too ft. at the east side of the new p_{iac} 23, & too ft. at the east side of the new pier. The Johnston Line will have the owner berth, at the C.P.R. elevators, as it had last year, until another pier has been finished. The Leyland line gets 500 ft. at section 23, & the M the Manchester boats go to section 25. The greater part of the upper end of the harbor will be left free for the carrying on of the pro-Posed improvements during the coming summer.

Ontario & the Great Lakes.

It is expected that the Calvin Co.'s tug Reginald will again tow the Standard Oil Co.'s tank barges between Port Huron & Montreal.

J. R. Roy, of the Dominion Department of Public Works, is to co-operate with W. T. Jennings, who has been appointed by Toronto City Council to report on Toronto harbor.

In our last issue it was stated by a typographical error that the Muskoka Navigation Co.'s str. Nipissing was having steel "sponsors" fitted to her sides to steady here. Obviously "sponsons" was intended.

Our last issue contained a full description of the Canada Atlantic Ry. Co.'s str. Ottawa, now being built. It has been decided to put in between decks, & to make her a full package boat. She will have two masts instead of one.

The Penetanguishene Navigation Co. has been incorporated under the Ontario Companies Act with a capital of 40,000 & head office at Penetanguishene. The provisional directors are W. McM. Thompson, C. E. Wright & A. B. Thompson.

Blasting has been going on during the winter in Goderich harbor. It is expected to have an 18-foot channel to the new elevator by May 1, & the dredging will be carried on until vessels of 22 ft. draught can go from the lake to the dock.

The hull of the str. Welshman has been rebuilt at Ottawa. Two dredges for the Dominion Government are being built there. The tug S. T. Easton is being overhauled, & the Ottawa Sand & Gravel Co.'s barges & steam dredge are being refitted.

In the enforcement of St. Mary's river navigation rules this season three men of the U. S, revenue cutter service will be stationed at Sailors' Encampment, three at the dyke & three at the island cut, & a watch will be maintained day & night.

A claim of \$2,000 has been made on Mc-Arthur Bros. of Toronto, owners of the str. Tecumseh, by the owners at Chicago of a cargo of grain taken to the M. T. Co.'s elevator at Kingston last fall by the above-named steamer, & damaged, partially owing to stress of weather, & also by leakage in the hull.

New rates have gone into effect in connection with the Government graving dock at Kingston. Sunday rates will be one-half regular; the second day of occupany, if under 5 hours, will be charged half day instead of full day as heretofore. Electric lights are being installed in the dock, enabling work to be carried on all night.

The outlook for lake navigation this season is very favorable. In good times the travel is always large & the picturesque Canadian lake & river tourist routes are sure to be largely patronized this year. Arrangements are being made to handle a larger traffic, both passenger & freight, by inland navigation companies the present season.

The Cleveland, Toledo & Put-in-Bay route will be operated jointly by the Cleveland & Buffalo Transit Co. & the Detroit & Cleveland Navigation Co. again this season. The C. & B. steamers, State of New York & State of Ohio & the D. & C. line str. City of the Straits will take care of the business. General Manager Newman, of the C. & B. line, states that an early start is out of the question. There is more ice in Lake Erie than there was a year ago, & it will be pretty close to May 1 before the port of Buffalo is open.—Marine Record. A return brought down in the House of Commons sets forth the recent literature upon the Montreal, Ottawa & Georgian Bay Canal project. It includes a favorable resolution passed by the Liverpool Chamber of Commerce last year, & a memorandum to the Minister of Railways & Canals from McLeod Stewart, which, after reciting the grounds upon which the promoters base their request for Government aid, asks that Parliament guarantee interest at $2\frac{1}{2}$ % upon \$25,000,000 of the Co.'s bonds for 25 years. Parliament last year made a grant for a survey of the proposed route, which has been made during the recess.

The Kingston Board of Trade has passed a resolution urging the Dominion Government to complete the dredging of Kingston harbor this year. It endorses improvements at Port Colborne, but claims that Port Colborne is not the place for elevators; they must be at the foot of lake navigation, so that grain may be called for & reach Montreal for ocean shipment at the shortest notice & in all weathers, that it is a mistake to suppose that grain can be carried across Lake Ontario in barges, & whereas grain has been carried there at $3\frac{1}{2}c$ a bush., with the improvements named by the Kingston board it could be carried at 3c & no other water route could establish a competitive paying rate.

Judge Falconbridge recently gave judgment in Toronto in the case of Craig vs. Montreal & Cornwall Navigation Co., an action tried at Kingston for \$1,000 commission on sale of the str. Rocket for \$20,500. The Judge finds that the vessel was sold through the instrumentality of plaintiff, but that, as the defendant did not realize the full price named, he is not entitled to the whole amount. Toulmin v. Miller, 58 L. T. N. S. 96, followed. Judgment for plaintiff for \$300 & costs, unless a reference as to the amount is desired by either party, in which case such party must elect within 10 days to take a reference, & further directions & subsequent costs will be reserved. Entry of judgment stayed for 30 days.

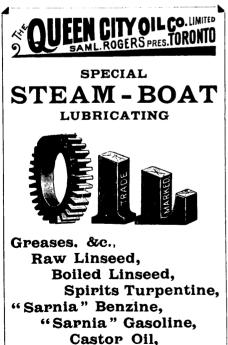
The grain-carrying fleet of the great lakes is to be materially augmented this summer by vessels built in England & Scotland. Two are being built for the Hamilton & Fort William Navigation Co., one at Dundee & the other at Newcastle-on-Tyne. Several other big barges are being secured in Great Britain by the Consolidated Lake Superior Power Co. for carrying iron ore from Michipicoten. The boats for the Hamilton & Fort William Navigation Co. are being built of steel, & will be fitted with the most modern machinery & equipments. They are 225 ft. long. Their capacity will be 36,000 tons each, or about 120,000 bush. of grain. These loads will be carried with a draught of 18 ft. They will be able to carry about 20,000 tons through the Welland canal. Both vessels are expected out before the end of June, & will be christened the Winona & the Strathcona.

A Detroit despatch says : In all probability a second steamer will be put on the Windsor Sault Ste. Marie line, operating along the Canadian shore & Georgian Bay. Manager W. J. Brown is negotiating with the Northern Navigation Co. for the str. Majestic. The N. N. Co. has just purchased the Beatty Line, & is understood to be willing to sell. Last year the str. Carmona maintained a weekly service between the Soo & Windsor, but the passenger & freight demands were more than she could meet, & during the winter her engines were put in a new & much larger hull, & by the opening of navi-gation the Pittsburg, as the new steamer is named, will be ready for use. Still the Pitts-burg will not be able to handle all the business of the line, & the need of a second steamer is imperative. The Majestic is 250 ft. long, & will accommodate about 300 persons besides a great deal of freight.

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The str. Rideau Queen, being built at Kingston by the Rideau River Navigation Co., is expected to be ready for service by June 1. The saloon, state-rooms, & diningroom will be finished in fine wood, & will be handsomely furnished & upholstered. There will be single state-rooms & family suites, lights. The dining-room will be large, well ventilated & furnished with handsome electric fixtures. It will be much larger than that on the str. James Swift. A smokingroom will be situated on the upper deck near the wheel-house. The Co. intends advertising the Rideau extensively this season, & with the two vessels, the Rideau Queen & the James Swift, in use, expects to improve the service. The Rideau Queen has been designed chiefly for passenger traffic. She is 1111/2 ft. long, 28 ft. 4 ins. beam, $7^{1/2}$ ft. deep, 4/2 ft. draught aft & $3^{1/2}$ ft. forward. It is likely the two vessels will be run so as to arrive in Kingston in the morning, instead of at night, as formerly.

The Northern Navigation Co. of Collingwood, which last season absorbed the "White" & the "Black" lines of steamers running on Georgian Bay, Lake Huron & Lake Superior, has taken over the Beatty line of boats, which has been run by the North-western Transportation Co. of Sarnia. The Beatty line steamers will go on the route from Sarnia to Duluth, while the other steamers belonging to the Co. will ply on the other lakes. President Jas. Scott, of the Northern Naviga-tion Co., says : "We have purchased a controlling interest in the Beatty Line, & hereafter it will be operated in conjunction with our steamers. The Northern is now the chief factor in the lake passenger trade on the Canadian side of the upper lakes. It is a trade that is developing very rapidly & that is but in its infancy. We expect that it will have a great future & wish to hold it in Canadian channels, knowing how difficult it is to change routes after they are once established. Plans are being prepared for a steamer to be built at a Georgian Bay Port, & we expect to have them before us for action very soon. It is our expectation that at least two new vessels will be required at once to handle the Co.'s business.



Lubricators, &c., &c.

British Columbia Shipping.

M. Martin, of Vancouver, is building the hull of a steamer there for the Canadian Canning Co. She will be 90 ft. long over all, 17 ft. beam & 8 ft. deep.

The steamer for Fraser River service, which is being built at New Westminster for Capt. McKean, is about completed. The machinery is being supplied by the Polson Iron Works, Toronto.

The Canadian Pacific Navigation Co. has created a new issue of debenture bonds amounting to \$250,000, bearing interest at 6% & repayable in 13 years from Feb. 15, 1900. Bonds to the amount of \$100,000 are for sale by the Bank of British Columbia.

T. W. Paterson, of the Victoria & Sidney Ry., has had a passenger & freight steamer, the Iroquois, built at Port Moody, to give a daily service to the islands between Sidney & Nanaimo. She is 82 ft. long, 21 ft. beam & 8 ft. deep, tonnage 94 net. The boiler & enft. deep, tonnage 94 net. The boiler & en-gines were built by the Polson Iron Works, Toronto. The engines are compound condensing, 22 x 16 & 10 x 16, giving a speed of 10 to 12 knots. Capt. Cavin, late of the Lapwing, has been appointed to her.

Yukon & Northern Navigation.

The Dominion Government has granted permission for goods destined for Dawson to be carried in U.S. bottoms via St. Michael's.

The str. Cutch arrived at Vancouver from Skagway April 9 with the news that the Yukon river is open, the breaking-up taking place three weeks earlier than usual.



Northwest Grain Storage Capacity.

Following is the elevator & grain storage capacity in Manitoba & the Northwest Territories, including Port Arthur, Fort William & Keewatin :-

Canadian Pacific Ry	17,243,000	bush.
Northern Pacific Ry	1,641,000	• •
Manitoba & Northwestern		
Ry	1,302,500	**
Great Northwest Central Ry.	492,000	" "
Canadian Northern Ry	230,000	"
Manitoba & Southeastern		
Ry	40,000	* *

Total.... 20,908,000

The largest elevators are those of the C.P. R. Co. at Fort William, viz., A, B, & D, 1,-250,000 bush. each, & C, 1,500,000 bush. ; Lake of the Woods Milling Co., Keewatin, 750,000 bush.; Ogilvie Milling Co., Winnipeg, 320,000 bush.; C.P.R., Port Arthur, 315,000 bush.; Northern Elevator Co., Winnipeg, 140,000 bush.; Alexander, Kelly & Co., Brandon, 125,000 bush.; Farmers' Elevator Co., Portage la Prairie, 110,000 bush.

The following figures showing the storage capacity on Jan. 1 of each year since 1891, shows its rapid growth :--

1891	 7,628,000 bush.
1892	 10,366,800 ''
1893	 11,467,100 "
1894	 11,817,100 ''
1895	 12,000,000 ''
1896	 13,873,600 ''
1897	 14,999,300 ''
1898	 18,378,500 ''
1899	 19,958,000 ''
1900	 20,908,000 ''
T1	

The daily capacity of the flour mills in Manitoba & the Territories is 10,230 barrels, & of the oatmeal mills 750 barrels.

The following table shows the Manitoba wheat export, including flour, the export of the Territories being included during the last years :--

Crop	1886	4,000,000	bush.
" "	1887	10,500,000	* *
· · ·	1888	4,000,000	**
" "	1889	4,500,000	44
" "	1890	11,500,000	" "
• •	1891	11,000,000	••
" "	1892	14,000,000	" "
" "	1893	12,000,000	
" "	1894	15,000,000	• •
" "	1895	29,000,000	"
••	1896	14,000,000	" "
" "	1897	22,000,000	" "
••	1898	23,000,000	" "
" "	1899	35,000,000	• •

ELECTRIC RAILWAYS.

Maritime Provinces & Newfoundland.

The Cape Breton Electric Tramway Co. has been incorporated by the Nova Scotia Legislature.

Quebec Electric Railways.

Montreal Park & Island Ry.-On Mar. 30 Judge Charland rendered judgment in the case of the town of St. Louis against this Co. & D. Morrice & others, intervenants. The case arises out of contract existing between the town & the Co. for the operation of an electric road on certain streets, viz., St. Lawrence, St. Urban, Park avenue, St. Louis & Mount Royal. The town asked that the franchise be annulled on the ground that the Co. had not fulfilled its obligations of giving an electric service similar to that given by the Montreal St. Ry. in the city. A by-law was adopted by the Council in 1893, in favor of A. Corriveau & others, & transferred by the latter to the defendant, granting the franchise

in question. The electric road on Park avenue & St. Lawrence St. was to be in operation in 1893; the fares & timetable were to be the same as those of the Montreal St. Ry.; tickets were to be sold at the rates of the latter company, & transfer tickets to be accepted by both companies were to be given. emption from taxation was granted for a term of years, & the Council reserved the right to cancel the contract if the Co. failed to carry out its contract, which the town alleged it did. A notarial contract was passed, & later the Co. was substituted to Corriveau et al. in all the rights of the latter. After quoting the clauses in the contract between the city & Montreal St. Ry. as to service, fares, etc., the town proved that these conditionshad not been fulfilled, & asked that the contract be annulled. A judgment was rendered at the instance of the town on Mar. 15, 1898, giving the defendant two months in which to carry out its obligations. An intervention was subsequently produced to the effect that the road had been declared a road to the general advan-tage of Canada, & placed under the control of the Railway Committee of the City Council, & that the Co. had mortgaged all its property to the intervenants as trustees for the bondholders who had secured the Co.'s debentures in good faith. It has been proven that the Co. has not complied with its obligations as defined by the judgment of Mar. 11, 1898, which was confirmed in appeal on June 17, 1898, ordering the Co. to carry out its contract & remove the grievances of which the town complained. In consequence the Co. is now declared to have forfeited the privileges granted it in its contract with the town & by the by-law adopted by the Council, but this without prejudice to the acquired rights of third parties. The Court held there was no reason to grant the \$6,000 damages asked for by the town on the ground that these damages are not the direct result of the inexecution of the Co.'s obligations. The annulment of the bylaw & contract does not either carry with it the obligation on the part of the Co. to reimburse to the town \$18,559 which the town claimed it had incurred in expenses for reasons set forth in the town's demands. Nor is the town justified in asking that the penalty of \$20 a day from the date of the institution of the action until final judgment be imposed. The judgment concludes by stating that the annulment pronounced cannot affect the acquired rights of the intervenants, & for this reason rejects the pleas of the Co. & the intervenants' intervention & maintains the action in part, declares the contract of April, 1893, dissolved & authorizes the Council to repeal the by-law of Mar. 27, 1893, the whole without prejudice to acquired right of third parties & condemns the defendant & intervenants respectively to the costs of action & intervention & rejects the surplus of plaintiff's conclusions. The judgment is unsatisfactory both to plaintiff & defendant & is being appealed from.

Montreal St. Ry .- The gross earnings are :

1898-1899.	Increase.
\$133,619.63	\$12,257.57
125, 125.09	8,364.03
127.768.38	9,912.81
125,276.04	10,810.29
113,838.02	8,671.62
123 754.11	3,458.07
\$749,381.27	\$53.474.39
	\$133,619.63 125,125.09 127.768.38 125,276.04 113,838.02 123.754.11

The shareholders have authorized the issue of \$1,000,000 additional stock to provide for extensions of the line, power plant, rolling stock, etc. It will be issued to the shareholders at par, 1 share for each 5 held.

It is said negotiations between the M.S.R. Co. & the Royal Electric & Chambly Power Companies for an advantageous contract to all concerned are nearing completion.

The Co. has been fined \$25 & costs for not maintaining a proper service on Amherst St. It is rumored that the Co. will provide special cars for smokers.

Quebec Ry., Light & Power Co.—Notice is given that the Co. has deposited in the office of the Secretary of State two mortgage deeds to the Montreal Trust & Deposit Co., executed for the purpose of securing bonds issued by the Co.

Ontario Electric Railways.

The Belleville Electric Ry. was advertised to be sold on Mar. 1, but no bids were made for the property. The Bank of Montreal is said to control it & is now offering it by private sale. (Feb., pg. 55.) The Central Ontario Power Co., recently

The Central Ontario Power Co., recently incorporated, has elected the following officers: President, Hon. R. Harcourt; Vice-President, F. A. Hall; Managing Director, J. A. Culverwell; other directors, Hon. P. Mc-Laren, E. Coste, M.E., J. Kendry, M.P., R. J. McLaughlin, F. W. Barrett, E. T. Adams, M.D., H. J. Taylor & H. E. Larkin. The company has opened its head offices at Peterborough. (Mar., pg. 91.) Electric & Street Rallway Mortgages.-

The Attorney-General has introduced a bill in the Ontario Legislature, providing that every mortgage made by any company incorporated under the provisions of The Electric Railway Act, or of The Street Railway Act, whenever the deed creating such mortgage encumbrance may have been executed may be enforced by judgment for foreclosure or sale in the same manner & to the same extent as such mortgage could be so enforced if the same had been made by a company not incorporated for any public purpose; & that effect shall be given to this act as well in any action now pending as in any which may be hereinafter brought. In moving the second reading of the bill the Attorney-General said its object is to enable mortgages securing the bonds of such companies to be enforced by judgment for foreclosure or sale in the same manner & to the same extent as the mortgages of other rail-way companies. The spirit of recent English decisions is where a public franchise is concerned no proceedings shall be taken upon the mortgage which shall lead to the breaking up of the undertaking or have the effect of depriving the public of any benefit resulting from the enterprise. The same principle is now sought to be applied to electric railways & street railways in Ontario. Mr. Whitney said the bill was of great importance & should be carefully considered. He cited the case of the Sun Life Insurance Co. of Montreal & the Cornwall St. Ry. The former company held a mortgage on the railway, & the result of foreclosure proceedings under this act would be that a Quebec or Dominion company would be operating an Ontario street railway. The Attorney-General said that with reference to the case pointed out, next session a new charter might issue providing for the operation of the Co. under the proper legislative jurisdiction.

When the House went into committee on the bill the Attorney-General amended it by providing that the purchaser of such a company under any lawful proceeding shall transmit to the Provincial Secretary a full statement of the company, & until he does so he may not operate the road; the Provincial Secretary will grant a license to run, & at the first following session of the Legislature application will be made for incorporation or authority to operate the railway, unless incorporation has meantime taken place under the general act.

Fort Erle to Chippawa.—It is impossible to get any information as to what the people who have arranged with the commissioners of the Niagara Falls Park intend to do in connection with the construction of this line. T. C. Frenyear, of Buffalo, who is interested in the scheme, replies to an inquiry that there is nothing to be said on the subject at present. (Jan., pg. 26.)

Grand Valley Ry.-In our last issue it was stated that this Co. was asking for a bonus of \$155,000 from Port Dover. The amount \$155,000 from Port Dover. The amount asked is \$15,000, and other towns are asked for the following amounts :-Simcoe, \$10,000; Brantford, \$35,000; Galt, \$10,000; Preston, \$4,000; Berlin & Waterloo, \$30,000. The promoter, J. S. Clark, of Ayr, recently ad-dressed a meeting in Goderich & asked \$30,-000 from that town. The meeting endorsed the scheme. The Co. has a bill before the Dominion Parliament to chauge its name to Dominion Parliament to change its name to the Port Dover, Brantford, Berlin & Goderich Ry. Co., with a capital stock of \$4,000,000 & head office at Galt, & empowering the Co. to construct & operate a standard gauge line from Port Dover via Simcoe, Brantford, & Berlin to Goderich ; with branches from Ber-lin to Elora, from Waterloo to Listowel, & from Berlin to Stratford, also with power to operate steamships, etc. (Mar., pg. 91.)

Hamilton, Grimsby & Beamsville Electric Ry.—The conductors & motormen have asked for increased wages. At present they are said to receive 10c. an hour for the 1st year, 11c. for the 2nd, & 12c. for the 3rd. There are 10 men employed on the Co.'s cars just now, but about 20 will be on during summer. Manager Nelles statesthat the motormen & conductors average \$43.76 a month, & are as well paid as any other electric railway employes.

Hamilton Street Ry .-- A night car is being run as an experiment between 11.30 p.m. & 1.30 a.m. Double fares are charged.

A letter has been received by the City Council from J. Patterson announcing the Co.'s desire to make some changes in its system,

To Los Angeles and Southern California.

Every Friday night, at 10.35 p.m., a through Tourist Car for Los Angeles and Southern California leaves the Chicago, Milwaukee & St. Paul Railway Union Pas-senger Station, Chicago, via Omaha, Colorado Springs and Salt Lake City, for all points in Colorado, Utah, Nevada and California. In addition to the regular Pullman porter, each car is accompanied by an intelligent, competent and courteous "courier," who will attend to the wants of passengers traveling alone. Particular attention is paid to the care of children, who usually get weary on a long journey. These tourist cars are sleeping cars supplied with all the accessories necessary to make the journey comfort-able and pleasant, and the berth rate (each berth will accommodate two persons) is only \$6.00 from Chicago to California. Ask the nearest ticket agent for a tourist car folder, or address A. J. Taylor, Canadian Freight and Passenger Agent, 8 King Street East, Toronto, Ont.

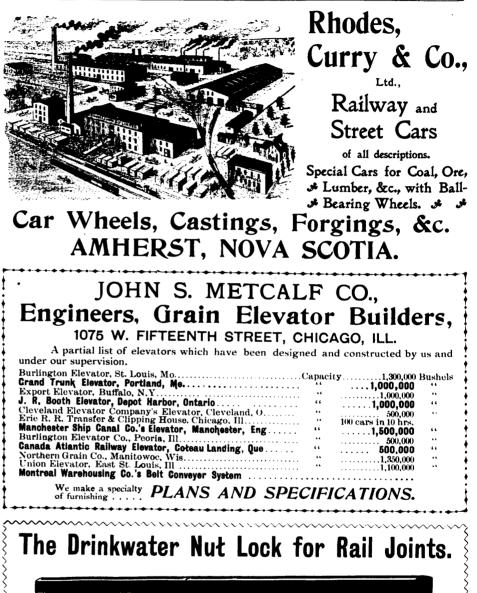


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with a possible rearrangement of its mileage & percentage. Mr. Patterson suggests that the rails be removed from Macnab & Hannah streets, & that the city allow therefor a reduction of the mileage charge & percentage to the extent of the tracks taken up. The Co. is also considering the question of a loop line in the southeast portion of the city as well as other matters of importance. The letter suggested that these matters be discussed between the representatives of the City Council & the Co. as soon as possible, & this will likely be done.

Metropolitan Ry .- The bill introduced in the Ontario Legislature in the interest of this Co., particulars of which were given in our Feb. issue, pg. 57, is being opposed by the Toronto Ry. Co.

In the Exchequer Court at Ottawa Apl. 15 the M.R. Co. moved to have the order of the





Be sure you have the best. It is not the price you pay, but what you get for your money that constitutes a good or bad bargain. The above cut shows the simplest, the most effective, and the most durable Nut Lock for Rail Joints in existence. It is fully protected by patents, and the right to use and manufacture it is for sale, or it will be manufactured and sup-plied on order. It is the result of 28 years' practical experience with Joint Bolts and Nut Locks. No Railway Company can afford to let a thousand pounds of rail and joint fastenings go to ruin when a pound of this Nut Lock will save them. This Lock makes it a mechanical impossibility for nuts to get loose, and derailed wheels will pass over joints with this Nut Lock on without breaking bolts, which should be sufficient merit to make it the Standard Nut Lock for Rail Joints the world over. A trial is solicited. For further particulars apply to-

J. DRINKWATER, - Winchester, Ont.

Railway Committee of the Privy Council, permitting the Metropolitan line to be connected with the C.P.R. track, made a rule of the Exchequer Court, so that the Co. could immediately enforce it. The application was opposed on behalf of the city of Toronto on the grounds that the order was ultra vires of the Railway Committee, & secondly, that the jurisdiction of the Exchequer Court being merely concurrent with that of the Superior Courts, the Exchequer Court could not now interfere, the Ontario Superior Court being already seized of the case. Judgment was reserved on both points. (Feb., pg. 57.)

Niagara Falls & Wesley Park Tramway.-The town council of Niagara Falls has passed a by-law granting the Sutherland Construction Co. of New York a franchise to convert this horse-car line into an electric line. The franchise extends the old franchise 14 years, making the life of the new franchise from date 20 years. It gives the Co. exclusive rights over specified streets & 5 months' option on all other streets within the municipality. The clause covering the entrance of trunk electric lines into the town, was amended to suit all parties interested, as follows : That all electric trunk lines, after receiving permission of the Town Council to enter the municipality, can use the tracks of the local company less than one mile, remuneration, failing amicable traffic arrangements, to be settled by arbitraoitn. (Dec., '99, pg. 371.)

The Magara Falls Park & River Ry. has a considerable force at work reballasting & renewing ties where necessary.

Port Stanley Electric Street Ry.—The Ontario Legislature has refused to pass a bill to empower this Co. to build a line from Port Stanley via St. Thomas to London. The bill was strongly opposed by the City of London, which owns the London & Port Stanley Ry., now under lease to the L.E. & D.R. Ry. (Feb., pg. 58.)

Preston & Berlin St. Ry.—At a shareholders' meeting at Preston Mar. 20 the following were elected : President, J. Patterson, Hamilton; Vice-President, M. M. Todd; Sec.-Treas., C. R. Hanning, Preston; other directors, F. Clare, Preston; J. Fennel & W.Rose, Berlin. It is said the Co. will build a line this year between Berlin & Preston, connecting at the latter point with the Galt, Preston & Hes-Peler Electric Ry., thus affording a through line between Berlin & Galt, giving Berlin connection with the C.P.R. at the latter place. (July, '99, pg. 218.)

Toronto Elevated Ry. Co.—S. H. Janes, S. F. McKinnon, L. M. Jones & J. A. Towell are seeking incorporation from the Ontario Legislature under this name to construct & operate a system of elevated railways in Toronto & adjoining municipalities, & in conjunction therewith a system of surface street rail-ways in Toronto & other municipalities within a radius of 30 miles of Toronto. Since the bill was introduced it has been redrawn. The title has been changed to "an act to incor-Porate the Toronto Rapid Transit Co." & instead of asking for power to construct & operate elevated railways & surface street railways within a radius of 30 miles of the city, as well as in Toronto itself, the promoters now do not seek to go beyond one mile from the city limits. In the first bill power was ask-ed to operate by "either steam or electric power or any other motive power, or partly by steam & by partly by electricity." This is now restricted to "by electric power or any other power." Provision is made for the submission to the people of the question of the expediency of operating elevated railways in Toronto. Should the vote be favorable the Co, can operate, subject, however, to such agreement as may be made with the munici-Pality.

Since the above was written thr bill has been withdrawn.

Toronto	RailwayGross	Earnings :
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an eb Iar	103,954.19	1899 \$95,690.12 91,860,10 103,234.88	Increase. \$18,013.84 12,094,09 14,396.33
	\$335,289,36	\$290,785.10	\$44.504.26

The Co. has declared a dividend of 1% for the quarter ended Mar. 31. A bill is before the Ontario Legislature to

A bill is before the Ontario Legislature to incorporate a company to construct & operate a radial railway system from Toronto through the counties of York, Peel, Halton, Wentworth, Durham & Simcoe. This is in the interest of the Toronto Ry. Co.

Negotiations are in progress for the settlement of a number of matters in dispute between the Co. & the city. Night transfers are to be given, the Manager of the Co. & the City Engineer are to decide on a form for the annual statements, & the Co. is to put on a number of new cars. The over-crowding question is still under discussion.

Toronto Suburban St. Ry.-W. B. Close has resigned from the managership.

It is alleged that the cars are in very poor condition, & the Co. is being urged to provide better accommodation.

The Co. has a bill before the Ontario Legislature, the chief provisions of which legalize agreements between the Co. & the Village of Weston, the Township of York & the Town of Toronto Junction. The bill proposes to change the name to the Toronto Suburban Ry. Co. & allows conductors to eject passengers refusing to pay their fare. The agree-ment with the Village of Weston allows the construction of a railway on the Weston road. This franchise exists for 20 years. It may be extended for 10 years if the Legislature will legalize the extension. The motive power is to be electricity, & the Council of the village is to be satisfied with the fenders which may be used, & the Co. is to have the right to carry freight, express or mail matter, within or through the village. One provision which is unusual is that the Co. shall pay the village & such engineer as may be employed by the village, & such solicitor as may be employed by the village, for all services given by them for or on behalf of the Co. The agreement with the Township of York gives the right to maintain a railway from the northern limit of Toronto to the eastern limit of Toronto Jct., & provides for it running on the Weston road & Dundas st. to the eastern limit of Etobicoke, crossing the Humber, & northerly along the old toll road leading to Woodbridge. The old toll road leading to Woodbridge. fares shall not exceed 3c. a mile, the lowest fare being 5c. unless tickets are bought. The agreement with the Town of Toronto Junction is the same as with Toronto Junction.

Electric Lines in Western Canada.

British Columbia Electric Ry. net earnings Apl. 1, 1899 to Jan. 31, 1900, \$173,063, against \$140.075 for corresponding period

against \$140,975 for corresponding period. The case of Yates & the City Corporation of Victoria against this Co. was recently heard, the action being for a declaration that the Co. was bound to operate its railway line between the northern limits of the city & Hillside Av. The facts were agreed on, but the Co. contended that the operation of the road entailed a loss, & therefore it was closed up. Judge Drake decided in favor of the Co.

Crow's Nest Pass Electric Light & Power Co.—Application is being made to the B.C. Legislature to incorporate a company under this name. Among its objects are the construction & operation of tramways & electric railways in Kootenay district. Davis, Marshall, & McNeil, Vancouver, solicitors for applicants.

Selkirk Electric Co.—F. Heap, solicitor, Selkirk, gives notice of application to the Manitoba Legislature to incorporate a company under this name, to construct & operate a railway & telegraph line from Winnipeg to Selkirk.

Electricity or Steam for Branch Lines.

At the Cape May convention of the American Society of Civil Engineers, Col. H. S. Haines proposed the above topic for discussion. In a recent issue of the Proceedings, C. H. Davis treats the topic at great length. Reversing the usual order, some of his conclusions are given prior to the discussion, in order that each step may be followed more readily. The figures & tables may be found to have some errors &, in many cases, are only approximate. His conclusions are,—

Steam railroads will, in the near future, handle their suburban & short-distance interurban passenger traffic & mail, express, baggage & light local freight carried in said suburban & interurban passenger trains, by electric motive power; & this, irrespective of whether operating expenses are affected favorably or unfavorably.

Steam railroads will not, in the near future, handle their freight traffic (other than mail, express, baggage & light local freight carried in suburban & interurban passenger trains), & long-distance passenger traffic by any other motive power than steam locomotives.

Steam railroads may, under exceptional conditions of large volume & great density of passenger traffic over comparatively short distances, handle it by electric motive power, but such cases will be infrequent.

New railroad lines, connecting very large centers of population, where frequent service at much higher speeds than can be attained now by steam locomotives on existing lines are conditions of success, will be operated by electric motors.

There are three conditions under which suburban & short-distance interurban traffic will be handled profitably by steam railroads converting to electric traction:

Where units can be light & frequent, & operated over comparatively short distances.

Where gross receipts can be so increased by the change of system & mode of operation as to pay for the increased investment & possible increase in operating expenses.

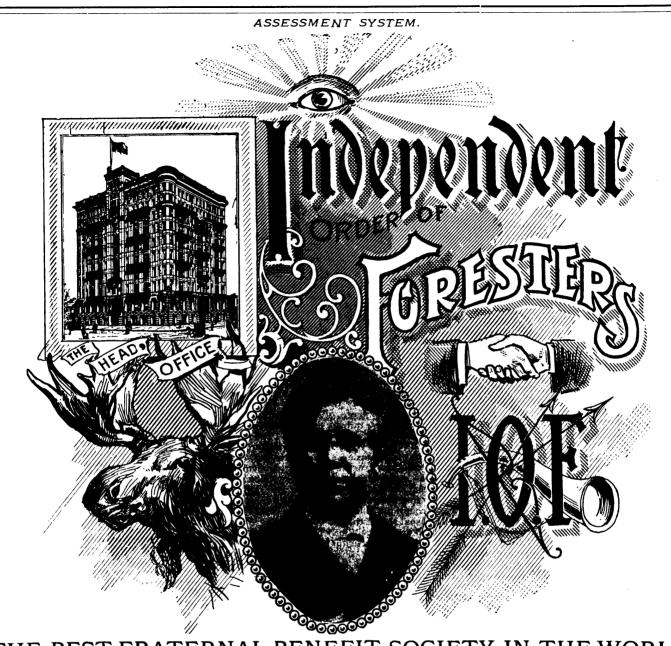
Where competition of parallel electric roads compels the change, to save what traffic there is, irrespective of how operating expenses are affected.

In the future development of steam railroad systems they will eventually be operated jointly with surface electric railways, either through actual mutual ownership, or by traffic contracts, leases, etc.

The above conclusions are obviously dependent upon what Mr. Prout properly defines as "traffic conditions," & not primarily engineering details or operating expenses-Railroad Gazette.

Port of Spain Electric Ry.-A Montreal despatch says: "Sir Wm. Van Horne & J. Hutchison, of Montreal, B. F. Pearson & C. H. Cahan, of Halifax, & other Canadian capitalists interested in the Demerara Electric Co., have gone into another similar, but larger enterprise. Mr. Cahan, who has spent some months in the south, says that after inspecting the progress of the work in Georgetown he went to Trinidad & obtained an exclusive franchise to operate electric railways & furnish electric light & power to the City of Port of Spain & the suburbs to the distance of 5 miles. The necessary legislation is now about through the Legislature, & operations will begin at once. The capital of the Trini-dad company will be \$1,000,000. Mr. Cahan expresses himself as well pleased with the progress of the Demerara Co.'

City of Birmingham Tramways Co.—The directors of the City of Birmingham Tram-



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(For \$1,000 Mortuary Benefit.)	(For more than \$1,000 Mort. Benefit.)		
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Total minimum cost	extra.		

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BENELLS GIVEN DY CLOANNELLS 1.—Social and Fraternal Privileges of the Court Room. 2.—Free Redical 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.—A Old Age Benefit consisting of exemption from payment of Premiums and Court dues after age 70.

policy, with exemption that the second secon

9. - A Funeral Benefit of \$50 at usation of \$2,000, \$2,000 \$4,000 or \$5,000, Benefit Department. 10. - The Nortuary Benefit of \$500, \$1,000, \$2,000, \$3,000 \$4,000 or \$5,000.

For Further Information Respecting this Great Fraternal Benefit Society, Apply to

Oronhyatekha, M.D., S.C.R., Toronto, Ont. James Marshall, 24 Charing Cross, London, Eng.

The Members, the Benefits, and Their Assurance

At 31st December Each Ye	a r
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Year.	Total Membership.	Benefits Paid.	Total Surplus,	Surplus per Capita.	Death Rate per 1,000.
1881 1882 1883 1884 1885 1886 1887 1888 1889 1891 1891 1891 1892 1893 1894 1895	1,019 1,134 2,210 2,558 3,642 5,804 7,811 11,800 17,349 24,604 32,303 43,024 54,484 70,055 86,521	 \$ 1,300 12,058 865 9,493 68 13,914 31 26,576 99 26,499 82 59,014 67 89,018 16 116,787 82 181,846 79 261,436 21 314,748 82 392,185 93 511,162 30 685,000 18 	 4.568 55 2.967 93 10,837 65 23.081 85 29.802 42 53.981 28 81.384 41 117.821 96 1288,130 36 283.967 20 408,798 20 580.597 85 858,857 89 1.187,225 11 1.560.733 16 	\$ 4 48 2 61 4 91 9 01 8 18 9 30 10 44 9 98 10 84 11 54 12 65 13 49 15 76 16 94 18 03	$\begin{array}{c} 4.50\\ 11.00\\ 4.73\\ 4.23\\ 7.76\\ 4.85\\ 5.78\\ 6.43\\ 5.85\\ 5.18\\ 6.40\\ 6.25\\ 5.47\\ 5.47\\ 5.67\end{array}$
1896 1897 1898	$ \begin{array}{r} 50,521 \\ 102,838 \\ 124,685 \\ 144,000 \\ \end{array} $	$\begin{array}{r} 820.941 & 91 \\ 892,225 & 60 \\ 1,170,125 & 14 \end{array}$	2,015,484 38 2,558,832 78 3,186,370 36	$ \begin{array}{c} 10 & 50 \\ 19 & 60 \\ 20 & 52 \\ 22 & 12 \end{array} $	5.50 5.56 5.67

John A. McGillivray, Q.C., S.S., Toronto, Ont. A. E. Stevenson, 6436 Kimbark Ave., Chicago, Ill. Or Any Officer or Member of the Order.

ways Company, Limited, have issued their report & accounts for the year ended Dec. last. The profit for the year amounted to £68,668 (an increase of £8,772 over 1898), which, with the amount set aside against accrued dividend on the preference shares, makes a total of £70,751. Of this, debenture interest took £12,-000, preference dividend £10,000, interim dividend of $2\frac{1}{2}$ % on ordinary shares £2,104, dona-tion to the Birmingham University fund £500, contribution to employes' sick & provident fund £105, & contribution towards maintenance of families of army reservists £80, leaving an available balance of \$45,961. It is now proposed to carry forward £2,083 to meet the dividend on the preference shares accrued since Oct. 15, to pay a further dividend of $2\frac{1}{2}$ %, & a bonus of $2\frac{1}{2}$ % on the ordinary shares, making $7\frac{1}{2}$ % for the whole year, & that the balance of £39,668 should be carried forward to reserve (thereby raising the fund to £107,-128) to provide for depreciation of assets, redemption of debentures, & for general pur-poses. W. Mackenzie has ceased to be a director of the Company, & G. Farrer has been elected in his stead. G. C. Cuningham has resigned the Managing Directorship to accent the measurement of the Central London accept the management of the Central London Ry., but still retains a seat on the board, & J. K. L. Ross has been elected an additional director.

The Metropolitan & District Railway Companies of London, Eng., are about to work experimentally a line between Earl's Court & High St. by electricity. A third-rail is to be used, current being supplied at 500 volts.

General Telegraph Matters.

The government of the Congo Free State has decided to adopt wireless telegraphy for the transmission of official despatches in the Upper Congo region.

A bill is before the House of Commons respecting the Northern Commercial Telegraph Co., Ltd., which was incorporated in 1898, to increase its capital to $\pounds_{500,000}$.

J. G. Smith, first President of the National Telegraphers' Union, died in New York Mar. ¹⁵ He was widely known for his invention, in conjunction with S. B. Stern, of the duplex system of telegraphy.

Some idea of the immense growth of the telegraphic industry during the past halfcentury can be gathered from the fact that the receipts of the first line for 1846 were \$4,-000, whereas to-day the Western Union Co. alone does a business of \$23,000,000 annually, & the Postal Co.'s receipts reach many millions, this representing a business of more than one hundred million messages.

S. S. Dickinson, Superintendent of the Commercial Cable Co. at Canso, N.S., has gone to the Azores to arrange for the reception of the Co.'s German cable, which will land there. This cable will make a direct connection between New York & Germany. Six hundred miles of it have just been completed off the coast of Nova Scotia, & the intention is to now begin paying out the cable from the Island of Fayal, running northwestward until a connection is made with the part already referred to off the N.S. shore.

A number of questions were asked in the House of Commons recently in reference to the telegraph line on the north shore of the St. Lawrence, which were answered by the Postmaster General as follows:--L. P. De Corval has been paid \$37,431.50 in connection with the construction of the line, which leaves nothing owing. The line has been built 231 miles from Pointe aux Esquimaux east, or 60 miles east of Grand Romaine. It is the intention to extend the line to Chateau Bay, 320 miles east of Grand Romaine, & it is expected to complete it in July. P. A. Perron is Inspector of Construction. F. X. Genderean

has the contract this year for the construction of the line, for which tenders were invited. The price being paid is \$125 a mile.

The C.P.R. Co.'s Telegraph has leased 53 & 55 St. Francois Xavier St., Montreal, for temporary quarters, & the head offices, operating rooms, &c., will be removed there early in May from the building at the corner of St. Francois Xavier & Hospital streets, which has been occupied since the establishment of the department. Duplicate instruments, &c., are now being installed in the temporary premises. A 5 storey building is to replace the present one at the corner of St. Francois Xavier & Hospital, and it is said the Co. is negotiating for the purchase of the Montreal Club building, & should these terminate satisfactorily the new telegraph structure will extend along Hospital St. to the corner of Stock Exchange Court, an extent of frontage which will make the proposed building decidedly imposing.

The G.N.W. Telegraph Co.'s Suit.

The long-pending suit of Morrow et al vs. the G.N.W.T. Co., the Western Union Telegraph Co. & others, was heard at Toronto April $_3$ & 4 by Judge Meredith. The plaintiff, H. N. Morrow, an accountant in Boston, holds 700 shares of G.N.W. stock, the other plaintiff, W. A. Clark, Jr., being described as a banker in Boston. Plaintiffs sought to set aside an agreement dated Aug. 17, 1881, by which the G.N.W. Co. took over the control of the Montreal Telegraph Co., while the Western Union guaranteed the payments to the M.T. Co.

The following charges were made against the W.U.T. Co.: That it had no power to guarantee payment by the G.N.W.T. Co. of the rental to the M.T. Co., & further to guar-antee the performance by the G.N.W. Co. of certain covenants contained in the agreement of 1881. That the W.U. Co. having no power to give the guarantee, is at liberty to withdraw therefrom whenever it may suit its purpose to do so. That the W.U. controlled the G.N. W. at the time of making the agreement, still controls it in every respect, & that such control was & is exercised in a manner prejudicial to the G.N.W. & its shareholders. That the guarantee given by the W.U. is void, as no consideration was received by it. That the charter of the W.U. expires in 1951, & the guarantee continues for 27 years after the ex-piry of the charter. That the W.U. had no power to acquire any of the stock of the G N. W. All these points, excepting the question of control, turned, it was contended, upon the law of the State of New York, & were covered by the evidence taken.

The following charges were made against the G.N.W.T. Co.: That it had no power under its act of incorporation to enter into the agreement of Aug. 17, 1881. That the arrangement is so obviously disadvantageous to the G.N.W. that it should be set aside. That a majority of the directors of the G.N.W. are not British subjects. That the G.N.W. had no power under its act of incorporation to place the direction of a final state. place the direction of affairs in the hands of a foreign corporation. That the agreement amounts to an attempted delegation by the G. N.W. to the M.T. Co. of its franchises & powers. That the agreement is a misuse & abuse of the statutory powers & franchises. That the act of incorporation of the G.N.W. did not authorize such a dealing with its franchises & powers as in effect a sale, surrender or delivery up of the same. That the sublease of the lines of the Dominion Telegraph Co. was never brought before a meeting of the shareholders of the G.N.W. That the bonded debt of the D.T. Co. (\$285,000) was assumed by the G.N.W. without the knowledge of the shareholders. That the G.N.W. had no power under its charter to enter into an agreement with the W.U. Co. whereby the latter Co. could acquire an interest in the lines of the G.N.W. or obtain the management or control of the G.N.W. That the G.N.W. had no power to sell or dispose of its stock or any portion of it to the W.U. Co. or to sell or dispose of any interest in its lines to the W.U. Co., or to have any dealings, other than an agreement by which connection might be made, between the lines of the companies. That the agreements are against public policy.

The defendants not only answered more or less directly the allegations of plaintiff, but replied as follows to the statement of claim : Apart from the guarantee given by the W.U. Co., the agreement of Aug. 17, 1881, is supportable & is valid & binding as regards the G.N.W. & the M.T. companies. The plain-tiffs, not being stockholders in the W.U. Co. have no status to attack the agreement so far as the W.U. Co. is concerned. If the fact is that the G.N.W. is now largely indebted to the W.U. Co., this is due to the action of the shareholders of the G.N.W. Co. in receiving the large dividends paid by that Co. (The plaintiffs deny the truth of this statement, & say that the amount of the dividends was only \$325,000. The indebtedness to the W.U. Co. amounts to over \$700,000.) Even if the agreement of Aug. 17, 1881, is not strictly within the powers of the parties, the court cannot now interfere, as the parties cannot be restored to their original positions. As a condition precedent to the setting aside of the agreement, the plaintiffs should repay the benefits received by them under it. The plaintiffs are estopped by their own action & by the action of their predecessors in title from attacking the agreement, & also by their delay & acquiescence. The shares held by the plaintiff Morrow were voted on in favor of the agreement; they are tainted by that action, & cannot be used as a basis of an attack upon the agreement. It is also claimed by the defendants that it is a question whether a shareholder can ask the assistance of the court to set aside an agreement entered into by the company in which he holds stock, unless that agreement is either fraudulent or ultra vires of the company in the very strictest sense of the term; also that there is doubt as to whether as a matter of comity a Canadian court will adjudicate upon the powers of a New York company to enter into an agreement where this question must be wholly dealt with & decided upon the interpretation of New York statutes & the application of New York law, & where the position is one which clearly a New York court would not be compelled to pay attention to.

Very little evidence was taken & after the argument of counsel, the Judge dismissed the action with costs on ground of acquiescence & delay of plaintiffs, the question of the validity of contract not being considered. Thirty days' stay was granted.

General Telephone Matters.

The Bell Telephone Co. has declared a dividend of 2% payable in April 17.

A. T. Smith, District Superintendent of the Bell Co. for Western Ontario, has removed his headquarters from Kingston to Toronto.

J. Wilson, Superintendent of the Pacific division of the C.P.R. Co.'s telegraphs, has charge of the work of converting the Nicola telegraph line into a telephone line.

The Bell Co. will build another story to its Winnipeg exchange, & will install a new exchange system. The Co. expended a considerable amount in Winnipeg last year, & will do the same again this year.

Harvey & McCarter, solicitors, give notice of application to the B.C. Legislature to incorporate a company to construct & operate telephone lines. electrical works, power houses, generating plant, etc., in East Kootenav district.

The City Engineer of Toronto has reported in regard to the application of the London & Berlin Banking Corporation for a telephone franchise, that he considers the proposition a good one, and if the Co. is in a position to commence operations he thinks it might be considered.

W. J. Gilmour, who for the past ten years has been Manager of the Brockville ex-change of the Bell Co., & Superintendent of district no. 6, has been appointed Superintendent of Agencies in the eastern department at Montreal, the district including the territory east of Kingston, Ont., & the whole province of Quebec. He is succeeded at Brockville by W. V. B. Earle, of Lachute.

Among the Express Companies.

The Western Ex. Co. has opened a route on the Minneapolis, St. Paul & Ste. Marie Ry., between Rapid River & Trenary, Mich.

The Dominion Ex. Co. has opened offices at Chilliwack, B.C., Cross Lake, Man., Raith, Man., Sifton Jct., Man., Wood Bay, Man., & Snelgrove, Ont.

The Dominion Ex. Co. has extended its service to the extension of the Columbia & Western Ry., between West Robson & Greenwood, B.C., with the following way-bill offices: Cascade, Coryell, Eholt, Grand Forks, Greenwood.

The Dominion Ex. Co. has closed its route on the Newfoundland Steamship line. Routes have been re-opened for the navigation season on the Northern Navigation Co.,

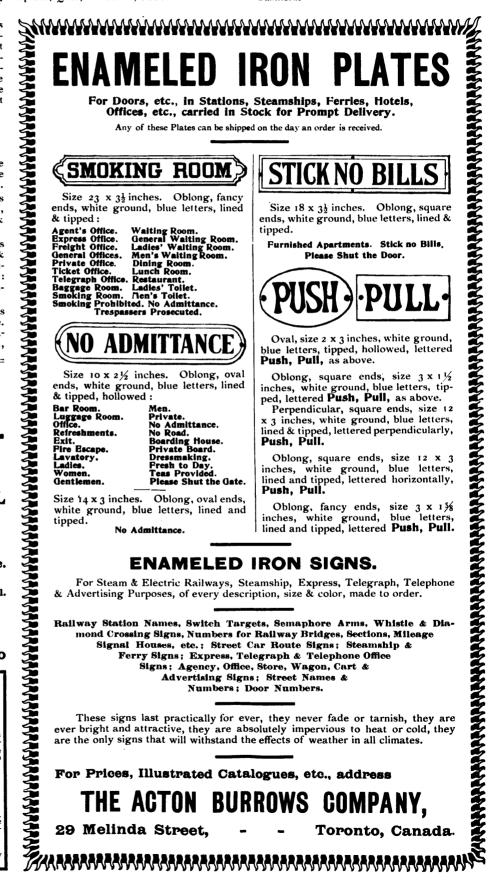


A case of bad health that RTP:A:N'S will not benefit. R:I-P:A:N'S, 10 for 5 cents, or 12 packets for 48 cents, may be had of all druggtats who are willing to sell a low-priced medi-cine at a moderate profit. They banish pain and prolong life One gives relief. Accept no substitute. Note the word R:IP:A:N'S on the packet. Send 5 cents to Ripans Chemical Co., No. 10 Spruce St., New York, for 10 samples and 1,000 testimonials.

the Lakeside Navigation Co., & the Deseronto Navigation Co.'s boats.

The Canadian Ex. Co. has opened offices at Aston Jct., Que., Caplin, Que., Drew, Ont., Notre Dame, N.B., St. Michel, Que. The following offices have been closed :-Erin, Ont., Sidney, Ont., Whitebread, Ont., Causapscal, Que., Eel River, N.B.

A Victoria, B.C., despatch of Mar. 21, says :---- E. C. Allen, founder of The Dawson Nugget Express, has assigned all his personal property for the benefit of his creditors & left the Yukon country. It is intimated he defrauded the public out of large sums through the express money order department of his business.



Toronto, Canada

The Purchasing Agents' Guide

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

Accident Insurance
Travelers' Insurance CoMontreal. Aerated Waters
E. L. Drowry
Westinghouse Mfg. Co
E. L. Drewry
Rice Lewis & Son
James Hutton & Co
Babbit Rice Lewis & SonToronto. Beams
Canada Foundry Co
The Hudson's Bay Company
Block & Tackle Rice Lewis & Son
Boat Fittings & Hardware
Rice Lewis & Son
Mica Boiler Covering CoMontreal. Boilers
Polson Iron Works
Rice Lewis & Son
Brake Shoes F. E. Came
Canada Foundry CoToronto. Bridge Numbers
Acton Burrows Co
Rice Lewis & Sou
Carpets The Hudson's Bay Company
Cars Rhodes, Curry & CoAmherst, N.S.
Car Wheela Rhodes, Curry & CoAmherst, N.S.
Castings
Canada Foundry Co
Chains Rice Lewis & Son
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Cross Arms, Top Pins & Side Blocks The Firstbrook Box Co
Cross Arms, Top Pins & Side Blocks The Firstbrook Box Co Toronto. Curtains The Hudson's Bay Company
Cross Arms, Top Pins & Side Blocks The Firstbrock Box CoToronto. Curtains The Hudson's Bay Company Cuts
Cross Arms, Top Pins & Side Blocks The Firstbrook Box CoToronto. Curtains The Hudson's Bay Company Cuts Acton Burrows CoToronto. Door Signs
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Cross Arms, Top Pins & Side Blocks The Firstbrook Box Co
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Cross Arms, Top Pins & Side Blocks The Firstbrock Box Co

Grain Elevators John S. Metcalfe CoChicago, Ill.
Grocerica The Hudson's Bay Company
Half Tones Acton Burrows Co
Hand & Push Cars
F. E. Came Montreal. The Fairbanks Co. Montreal. Hardware
Rice Lewis & Son
Noah L. Piper & Sons
Rice Lewis & Soc Toronto.
Acton Burrows Co
Canada Foundry Co
Iron Signs Acton Burrows Co
McCaskill, Dougall & CoMontreal. Lager Beer, &c.
F. L. Drewry
Rice Lewis & Son
Launches
Polson Iron Works
Independent Order of ForestersToronto. Travelers' Insurance CoMontreal. Linoloum and Floor Coverings
The Hudson's Bay Company
Baldwin Locomotive Works Philadelphia, Pa.
Richmond Locomotive & Machine
Riće Lewis & Son
i he Hudson's Bay Company Milepost Numbers Acton Burrows Co
Acton Burrows Co
Nunibers Acton Burrows Co
Oakum Rice Lewis & Son
Olls
Galena Oil CoFranklin, Pa. The Queen City Oil CompanyToronto. Office Signs
Acton Burrows Co
The Fairbanks Co,
Pipes Canada Foundry CoToronto. Mica Boiler Covering CoMontreal.
Plushes
The Hudson's Bay Company Pueumatic Tools F. E. Came
F. E. CameMontreal. Porter E. L. Drewry
Portlaud Coment Rice Lewis & Son
Printing The Huster, Rose Co
Pumps Rice Lewis & Son
Ralls (New) James Cooper
Dalla (for mala when w)
James Cooper
F. E. Came
Rice Lewis & SonToronto.
Rice Lewis & Son
Scales The Fairbanks Co
Semaphore Arms Acton Burrows Co
Shafting Riče Lewis & Son
Riče Lewis & SonToronto,

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Shipbuilders' Tools & Supplies Rice Lewis & Son	
Ships Polson Iron Works	Ĵ.
Shovels	
James Cooper	•
Rice Lewis & Son,	
Signal House Numbers Acton Burrows Co	
Signals North L. Piper & Sons	
Signs Acton Burrows Co	
Snow Ploughs Rhodes, Curry & Co	
Spikes	
Rice Lewis & Son	
Acton Burrows Co	
Steamboats Polson Iron Works	
Steamboat Signs Acton Burrows CoToronto.	
Steam Shovels	
James Cooper	
W. G. Blyth	
Rice Lewis & Son. Toronto.	
Steel Castings F. E. Came	
Switch Targets Acton Burrows Co	
Switches	
F. E. Came	
Telegraph Office Signs	
Acton Burrows Co Torento. Telegraph Spoons	
Rice Lewis & Son	
Telephone Office Signs Acton Burrows Co	
Tires James Hutton & CoMontreal.	
Tobacco and Cigars	
The Hudson's Bay Company	
The Hudson's Bay Company	
Tools Rice Lewis & Son	
Track Jacks Duff Manufacturing Co Allegheny, Pa.	
A. O. Norton	•
Frack Tools F. E. CameMontreal	
James Cooper	
Trucks The Fairbanks Co	•
The Fairbanks Co	
W. H. Coddington	
Union Couplings E. M. Dart Manufacturing Co., Providence, R.I.	
Varnishes	
McCaskill, Dougall & CoMontreal.	
Polson Iron Works	
Rice Lewis & Son	
Rice Lewis & Son	
Water Meters Westinghouse Mfg, Co	
Water Tanks	
The Fairbanks Co Montreal.	
James Cooper	
Rice Lewis & Son 1 oronto.	
Vindow Blinds The Hudson's Bay Company	
Vines and Liquors The Hudson's Bay Company	
Vire & Wire Rope	
Rice Lewis & Son	
Polson Iron WorksToronto.	





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