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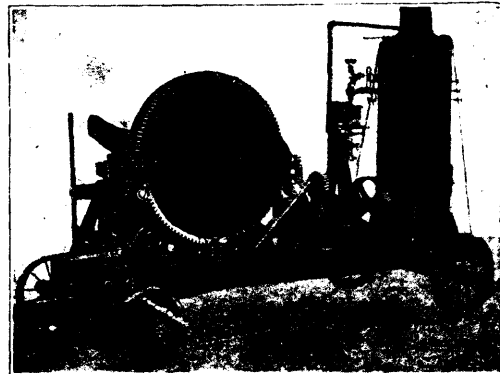
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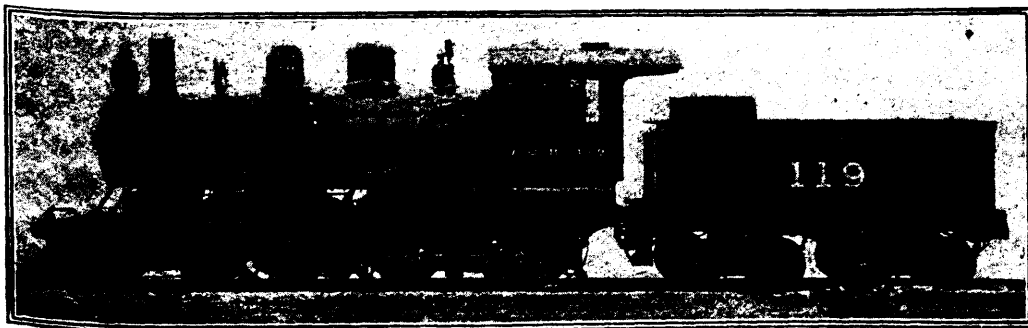
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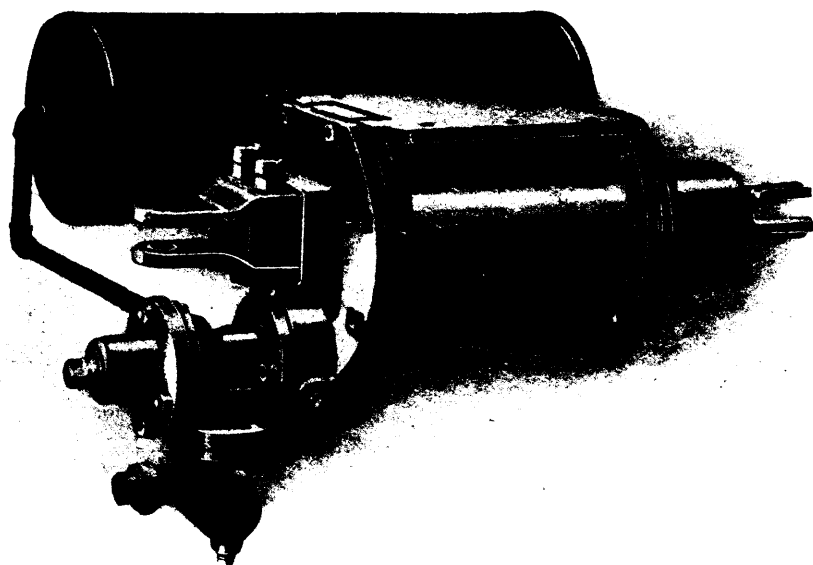
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Mutual Benefit Associations

By W. G. Ross, Managing Director Montreal Street Railway.

The formation of mutual benefit associations among the employes of large railway and industrial companies, started within the last few years, has proven very successful from the point of view of the employes as well as the employer, for the reason that the object of such associations is to better the general condition of the employes and in so doing improve their standard and create a better feeling between them and the management. This, I consider, is essential to the proper management of a company, particularly street railways, which, being public service corporations, are continually in touch with the public, and when the public know that the management of a company is looking after the needs of its employes, their general attitude is materially different in times of trouble. You will agree that this in itself is worth attention, also that the success of a street railway depends to some extent upon its popularity with its employes and the general populace which it caters to.

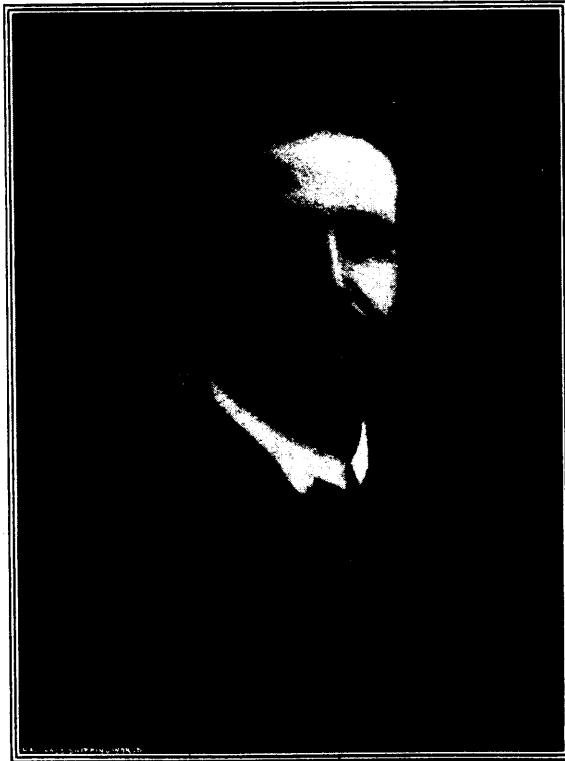
The introduction of the employes' mutual benefit association in Canada was brought about in 1884, when the Grand Trunk Ry. Co. established, under the provisions of several acts of Parliament, the G.T.R. Insurance and Provident Society. The objects of this Society are, to provide benefits or allowances to members unable, through sickness or bodily injury, to follow their usual occupation in the company's service; and to assist the legal representatives of deceased members. All except salaried employes, who contribute to a special superannuation fund of the company, are compelled to join, paying monthly contributions, the company paying an amount equal to 50% of the amount paid in by the members. The management of the Society is controlled by a board of directors, composed of an equal number of officials and employes, the latter of whom are elected by members of the Society. The G.T.R. Company experienced some trouble in the first few years of its organization in getting the employes to join, principally owing to the fact that they were not thoroughly conversant with the many advantages to be obtained, but now that they have familiarized themselves with the many benefits from membership in the Society, it has turned out a complete success.

The Canadian Pacific Ry. Co. organized, within the last few years, a pension fund for its employes. It has no society to provide allowances for its employes in case of disability, either through sickness or bodily injury. In the spring of 1903 the writer suggested

the formation of a mutual benefit association among the employes of the Montreal Street Ry. Co., and in Aug., 1903, the company requested the employes to elect two of their number from each of the various departments to meet the officials of the company, to discuss the advisability of forming such an association. This meeting took place at the head office of the company on Aug. 17. Rules and by-laws were drawn up and proofs distributed to the representatives of the men for careful consideration and discussion among their fellow-employes, the meeting then adjourning until Aug. 20 to give the men time

to explain to their fellow-employes the objects of the association and enrol applicants for membership. Forms of application, rules and by-laws, in the English and French languages, were at once printed and in the short period of two months the membership of the association had reached 600. Since then the membership has increased, until to-day it has reached the 1,500 mark, or about 80% of the total number of employes.

The objects of the Montreal Street Railway Mutual Benefit Association are to afford relief to such employes of the Montreal Street Ry. Co. and the Montreal Park & Island Ry. Co., as may become members of the said association; by providing allowances, medical attendance and medicine to members when incapable of following their usual vocation in the service of the companies, by reason of illness or bodily injury; by providing a pension for old and disabled members, and by providing allowances in case of death to the representatives of the deceased members. Members, upon admission, pay \$1 as initiation fee, and thereafter 50c. a month, for which they receive in cases of disablement for sickness and bodily injury, 60c. a day, including Sundays, for the first 90 days, and 30c. a day, including Sundays, for the next 90 days, including medical attendance and medicine. In cases of sickness the payment starts from the seventh day of illness, no payment being allowed for the first six days and monthly dues are not exacted during disablement. Members over 65 years of age, and having served in the company's employ for 25 years, are also entitled to a pension for life at the rate of 50c. a day, or may commute the daily payment for an immediate payment of a total sum, provided that if the employe temporarily, at any time thereafter, shall return to work or engage in any other work, at a rate of daily wages exceeding 50c., the payment of the pension shall be suspended during the continuance of such re-employment or period of actual work. Upon the death of a member, from whatever cause, \$500 is paid, providing the deceased member was under 40 years of age when admitted to membership; \$333.33 when between the age of 40 and 50, and \$166.66 when 50 years and over. In addition to the above sum \$50 is allowed to cover funeral expenses. Leaving the service of the companies severs membership, and no member leaving during the first five years of his membership in the association has any claim to insurance benefits or refunds, or a refund of any fees paid during such membership. After five years and up to ten, members severing membership are



W. E. FOWLER,
Master Car Builder, Canadian Pacific Ry.

to consider the same. On the latter date all the representatives were present, as well as the officials of the company, and after reading the clauses, the rules and by-laws were passed, as amended, and a temporary board of directors was elected, composed of four members elected by the directors of the company, and four elected by the representatives present, with the General Manager of the company as chairman. The newly elected board then elected a Secretary-Treasurer and Medical Officer, and in order to expedite matters, ten of the representatives were instructed to devote their whole

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Mutual Benefit Associations.

(Continued from page 133.)

allowed a refund of one-third of the fees paid during membership. After ten years members are allowed a refund of two-thirds, without interest in every case. Any amount paid to such members for benefits during membership is, however, deducted from the funds. The Montreal Street Ry. Co. and the Montreal Park & Island Ry. Co. jointly contribute to the funds of the association a sum annually equal to 100% of the annual amount collected from members as admission fee, and 50% of the annual amount collected for monthly dues, and in addition furnish necessary office accommodation and defray all other expenses of management.

From the above, you will admit that the benefits to be derived by being a member are numerous and inviting to the employes, yet when one considers that the association was formed immediately after a general strike and that the employes were more or less suspicious, one can realize to some extent the labor experienced in bringing the same to a successful issue. This, however, was accomplished by conscientious work on the part of the company and the men. Under the powers of incorporation, granted in May, 1904, the board of directors was increased from 9 members to 15, of which 8 are elected by the directors of the Montreal Street Ry. Co., and 7 by the members. The increase in the directorate allows the various departments to have a representative upon the board, which prevents jealousy existing among the employes of the various departments. Meetings of the board are held monthly, at which a statement of the revenue and expenses for the previous month, the benefit claims and other bills paid, as well as all applications for admission are submitted for approval, and all other matters of interest to the association are taken up and discussed. The annual meeting is held in June in each year, and after the usual business is transacted, a smoking concert is held, the talent being selected from the members present. During the course of last year a picnic under the auspices of the association was held at one of our leading parks, lasting for four days, and netted a profit, in spite of the unsatisfactory weather conditions, of \$1,361.88. During the month of January, through the courtesy of the Montreal Street Ry. Co., the members and their families were given a theatre day, each member receiving two tickets and the necessary transportation tickets, in order to attend the entertainment without expense. This proved a great success and was very much appreciated by the members. These acts of kindness and attention on the part of the company have greatly assisted in the good results obtained. The members who, as I said before, represent over 80% of the total number of employes, feel that they are being considered and are in consequence interested in the welfare of the association.

During the period of 16 months the association has paid out the following amounts, which go to show the great necessity for such an association:—Sickness and injury claims, \$6,866.85; death and burial, \$3,517.67; medical, \$384.78; medical examination, \$971.50; medical attendance, \$1,385.24; total, \$13,146.04.

The revenue from all sources for the same period has been as follows:

From members—Fees.....	\$1,657.00	
Dues.....	8,749.00	\$10,406.00
From Company—Fees.....	1,657.00	
Dues.....	4,374.50	
Special Donations.....	\$ 6,031.50	
Picnic.....	6,000.00	12,031.50
Interest.....	1,361.88	
	97.01	1,458.89
		\$23,896.39

leaving a surplus for 16 months of operation of \$11,780.35. In addition to the company's contribution of \$12,031.00, the expenses of management and organization for the same period amounted to \$10,292.79, making a total cost to the company of \$22,232.79. During the last nine months of operation, the following work has been done by the medical department:—Number of consultations, 2,902; number of visits, 388; number of prescriptions, 1,147.

In view of the large increase in membership arrangements were completed on Feb. 1 last to open medical offices at the different depots of the company, where physicians would be in attendance daily, excepting Sundays and holidays, between 11 a.m. and 12 noon, this being in addition to the office of the chief medical officer and examiner, whose office is at the head offices of the association. This additional accommodation has been much appreciated by the members. Sick committees of four to visit the sick have been formed in the various depots and departments of the company, of which the director representing the depot or department acts as chairman, and the duties of such committee consist in visiting disabled members and reporting thereon.

Our requirements for the pension and death funds have been carefully passed on by a life insurance expert, and every precaution has been taken to secure the complete success of the association.

April Birthdays.

- Many happy returns of the day to—
- J. A. Armstrong, Chief Dispatcher C.P.R., Ottawa, born at South Durham, Que., April 6, 1863.
 - Adam Brown, formerly President Wellington, Grey and Bruce Ry. (now G.T.R.), Vice-President G.N.W. Telegraph Co., and Postmaster of Hamilton, born at Edinburgh, Scotland, April 3, 1826.
 - A Buchanan, Superintendent of Motive Power and Car Department, Central Vermont Ry., St. Albans, Vt., born at New York city, April 3, 1870.
 - W. J. Camp, Electrical Engineer C.P.R. Telegraphs, Montreal, born at Oakville, Ont., April 22, 1855.
 - A. H. Clark, Master Mechanic, Irondale, Bancroft and Ottawa Ry., Irondale, Ont., born April 5, 1867.
 - A. P. Cockburn, Manager and Secretary Muskoka Lakes Navigation and Hotel Co., Gravenhurst, Ont., born in Finch tp., Stormont, Ont., April 7, 1837.
 - J. H. Flock, K.C., Honorary Counsel Canadian Ticket Agents' Association, London, Ont., born at Toronto, April 6, 1834.
 - B. W. Folger, Manager Niagara Navigation Co., Toronto, born at Kingston, Ont., April 8, 1872.
 - G. H. Garden, C.E., Chief Engineer Alberta Ry. and Irrigation Co., Lethbridge, Alta., born at Woodstock, N.B., April 5, 1849.
 - J. P. Gay, Manager G. T. Despatch Fast Freight Line, Detroit, Mich., born at Hamilton, Ont., April 26, 1857.
 - E. A. Geiger, ex-Superintendent Brockville, Westport and Northwestern Ry., Brockville, Ont., born at Newark, N.J., April 10, 1863.
 - B. C. Gesner, formerly Air Brake Inspector I.C.R., now travelling representative, Galena-Signal Oil Co., born at Cornwallis, N.S., April 23, 1859.
 - A. L. Hertzberg, Division Engineer C.P.R., Toronto, born in Norway, April 30, 1855.
 - E. J. Hilliard, Commercial Agent G.T.R., Buffalo, N.Y., born at Montreal, April 14, 1870.
 - J. M. Horn, city freight agent Canadian Northern Ry., Winnipeg, born at Schotts, Lanarkshire, Scotland, April 12, 1880.
 - E. A. James, Manager Canadian Northern

Ry., Winnipeg, Man., born in London, Eng., April, 1865.

B. S. Jenkins, General Superintendent C.P.R. Telegraphs, Winnipeg, Man., born April 8, 1859.

J. S. Lawrence, Superintendent C.P.R., Nelson, B.C., born at Toronto, April 9, 1863.

D. McNicoll, Vice-President C.P.R., Montreal, born at Arbroath, Scotland, April, 1852.

W. A. Ritchie, District Superintendent, The Pullman Co., Montreal, born at Edinburgh, Scotland, April 13, 1854.

E. V. Skinner, Assistant Traffic Manager C.P.R., New York, born in London, Eng., April 22, 1849.

J. W. Smith, General Assistant Canada Atlantic Ry., Ottawa, Ont., born at St. Albans, Vt., April 16, 1866.

A. M. Sutherland, Assistant Superintendent, Duluth, South Shore and Atlantic Ry., Thomaston, Mich., born at Hartford, Conn., April 2, 1844.

J. E. Schwitzer, Resident Engineer, Central Division, C.P.R., Winnipeg, Man., born at Ottawa, Ont., April 19, 1870.

J. R. VanCleve, Master Mechanic, White Pass and Yukon Route, Skagway, Alaska, born at Little Falls, Minn., April 6, 1859.

W. Wainwright, General Assistant and Comptroller, G.T.R., Montreal, born at Manchester, Eng., April 30, 1840.

J. J. Wallace, General Freight Agent, I.C.R. Moncton, N.B., born in Albert Co., N.B., April 20, 1847.

Hon. J. Wood, President and General Manager, New Brunswick and Prince Edward Island Ry., Sackville, N.B., born at Sackville, N.B., April 18, 1843.

W. Woollatt, ex-General Superintendent Buffalo division Pere Marquette Rd., Walkerville, Ont., born at Weedon, Hertfordshire, Eng., April 2, 1855.

Place Names in Canada—The Dominion Geographic Board was organized in 1898 by Order-in-Council, and has issued five reports, the fifth bringing the work of the Board down to June 30, 1904. During that time the Board has given decisions in regard to the spelling of the names of 2,494 places in Canada, distributed among the different provinces and territories as follows:—Alberta, 106; Assiniboia, 21; Athabasca, 24; British Columbia, 604; Franklin, 100; Keewatin, 47; Mackenzie, 12; Manitoba, 37; New Brunswick, 95; Nova Scotia, 80; Ontario, 639; Prince Edward Island, 11; Quebec, 319; Saskatchewan, 40; Ungava, 78; Yukon, 282. The report gives the authorized spelling with the location of the place in alphabetical form, the old name or the old spelling being given in italics, with a reference to the authorized name or spelling. A new feature has been added to the fifth report in the shape of a list of the names in respect of which decisions have been given, arranged alphabetically, under the separate districts or provinces. The by-laws provide for monthly meetings of the Board, and for the presentation of an annual report, but the latter by-law appears to have been overlooked, as the fourth report was issued in 1903, and gave the decisions up to June 30, 1902. A more frequent publication of decisions should be made, either by special bulletin, or by notice in the Canada Gazette after each meeting.

In the report of the passenger meetings at Buffalo, in our Feb. issue, we stated that a gavel was presented to President A. A. Shantz on behalf of Poole Bros., Chicago, by C. H. Nicholson. We should have said that T. Henry, Traffic Manager of the Richelieu & Ontario Navigation Co., made the presentation on behalf of Poole Bros.

The screen cloth painting tower at the B. Greening Wire Co.'s Works, Hamilton, Ont., was destroyed by fire Mar. 3. The fire did not affect any other branch of the company's business.

STEAM RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1904.

In this table the minus mark (-) before figures in the net earnings column shows that there was a deficit in the operations of the line to the extent of the figures given. The numbers in brackets—thus (1)—after the name of a railway refer to notes on page 141.

Name of Railway	Mileage	Gross Earnings	Net Earnings	Proportion of earnings to working expenses	Earnings per train mile	Operating per train mile	Train Mileage	Engine Mileage	Passengers Carried	Freight Carried
				p. c.	Cts.	Cts.	Miles	Miles		Tons
Alberta Ry. and Coal Co.	66.72	\$ 129,822.67	\$ 28,342.99	128	3.09	2.42	41,892	127,798	14,304	79,356
Algonia Central and Hud. Bay	91.75	160,007.28	34,301.24	127	5.31	4.17	30,125	119,975	16,032	294,484
Atlantic and Lake Superior (1)	100.00	57,345.77	11,662.98	125	0.88	0.70	65,000	65,000	14,416	26,957
Bay of Quinte (2)	93.37	233,635.78	74,336.96	145	1.35	0.92	172,496	172,496	102,258	300,845
Bedlington and Nelson (3)	15.30	537.02	- 8,821.27	6	0.25	4.34	2,156	2,180	887	448
British Yukon	90.32	348,991.45	170,031.02	195	4.77	2.45	73,044	73,932	11,264	32,361
Brockville, Westport & N.W.	45.00	48,431.25	17,638.59	157	1.05	0.66	46,074	46,074	59,457	17,899
Bruce Mines and Algoma	16.62	4,661.73	- 5,404.60	46	0.86	1.86	5,400	5,400	5,400	22,120
Buctouche and Moncton	32.00	19,080.06	- 1,681.73	92	1.04	1.13	18,368	19,836	11,382	23,518
Calgary and Edmonton (4)		229,637.52	40,197.04	121	1.85	1.52	124,442	148,808	32,975	48,019
Canada Atlantic (5)	458.60	1,761,300.07	423,611.47	133	1.34	1.01	1,313,637	1,741,073	411,385	1,324,913
Canada Coals and Ry. Co.	12.00	37,246.33	12,152.73	149	1.74	1.17	21,389	28,389	11,139	80,666
Canada Eastern	136.00	116,912.59	1,422.56	101	0.69	0.68	170,130	170,130	58,169	85,944
Canada Southern (6)	382.19	6,364,056.17	591,454.15	110	1.81	1.64	3,514,791	4,807,020	711,097	5,280,046
Canadian Northern (7)	1,343.30	3,242,702.69	1,121,931.26	153	1.91	1.25	1,697,986	1,776,782	358,133	1,109,585
Canadian Government Rys.:										
Intercolonial (8)	1,310.26	6,339,231.43	- 900,751.61	88	0.97	1.11	6,503,579	8,224,858	2,663,156	2,664,149
Prince Edward Island	209.00	234,390.03	- 101,305.41	70	0.75	1.08	310,785	406,007	224,567	86,286
Canadian Pacific (9)	8,062.00	45,790,572.42	14,308,290.69	145	1.95	1.34	23,510,139	32,019,394	6,224,177	11,112,514
Cape Breton	31.00	6,196.73	- 7,869.28	44	0.37	0.85	16,554	16,982	5,279	3,742
Caracquet	68.00	35,188.75	- 7,584.00	82	0.46	0.56	75,240	75,240	8,009	22,055
Carillon and Grenville	13.00	1,936.93	- 1,909.38	50	0.26	0.52	7,367	7,887	6,421	80
Central Ontario (10)	134.60	225,347.17	91,550.88	169	1.74	1.03	129,330	176,020	105,540	277,088
Crow's Nest Southern (11)	43.38	42,108.94	- 15,128.39	73	2.29	3.11	18,359	24,208	2,594	61,320
Cumberland Ry. and Coal Co.	32.00	121,975.75	20,714.05	120	1.70	1.41	71,443	139,624	36,673	456,159
Dominion Atlantic (12)	220.50	1,074,644.28	269,557.99	133	1.89	1.42	566,626	566,626	303,716	306,556
Edmonton, Yukon and Pacific	4.50	13,543.88	- 4,126.18	77	1.98	2.58	6,850	6,850	17,487	31,706
Elgin and Havelock	28.00	9,615.82	- 2,709.53	78	0.64	0.82	14,996	14,996	6,882	8,523
Esquimaux and Nanaimo	78.00	311,518.51	89,133.84	140	1.09	0.78	284,284	284,284	183,156	192,112
Fredericton and St. Mary's Ry.										
Bridge Co. (13)	1.33	4,858.87	3,427.34							
Grand Trunk (14)	3,143.60	25,786,963.14	8,072,704.81	145	1.53	1.04	16,855,706	21,856,461	8,376,140	11,668,672
Gt. Northern Ry. of Can. (15)	208.10	338,276.63	2,291.69	101	1.30	1.32	259,969	338,915	145,037	286,671
Gulf Shore	16.78	5,236.46	2,364.81	182	0.99	0.54	5,300	5,300	710	8,714
Halifax and Yarmouth	50.20	39,884.24	9,530.13	131	0.82	0.63	48,100	50,315	51,477	9,540
Halifax and Southwestern (16)	96.00	80,731.66	13,861.36	119	1.36	1.14	59,337	92,348	62,746	41,328
Hampton and St. Martins (35)	29.00	4,261.70	44.45				10,800	10,800	3,749	3,732
Hereford (17)	53.30	56,539.67	- 29,054.06	66	0.85	1.30	66,059	66,059	21,883	133,892
Inverness Ry. and Coal Co.	61.00	135,300.62	37,483.42	138	1.55	1.12	87,365	91,733	21,052	194,021
Irondale, Bancroft & Ottawa	48.00	21,702.19	- 3,492.88	86	0.66	0.39	32,786	33,000	8,673	21,928
Kaslo and Slocan	31.80	24,683.50	- 18,480.31	57	1.22	2.13	20,237	34,776	6,698	10,270
Kent Northern (18)	27.00	17,170.74	3,605.84	126	0.95	0.75	18,000	18,250	7,110	18,049
Kingston and Pembroke	112.85	183,075.89	33,564.98	122	1.11	0.91	164,752	165,532	43,570	99,620
Kettle River Valley (19)	3.86	5,395.30	- 330.73	94	2.17	2.30	2,485	2,485	1,447	33,810
Lake Erie and Detr. Riv. (20)	223.41	1,008,621.10	168,393.81	120	1.26	1.05	796,787	1,110,641	609,265	1,339,966
Lenora, Mount Sicker (35)	11.50	6,934.75	- 21,012.71				15,050	15,050	725	1,307
Liverpool and Milton	5.00	9,267.40	3,288.08	155	1.12	0.72	8,300	8,300	25,160	22,678
Lotbiniere and Megantic	30.34	20,751.90	2,844.11	116	1.02	0.89	20,200	25,000	10,440	29,109
Manitoulin and North Shore	16.00	30,255.27	9,941.08	149	2.68	1.79	11,294	16,788	3,205	134,333
Massawippi Valley (21)	35.46	156,936.01	35,553.64	130	0.95	0.73	165,084	227,449	136,077	353,039
Midland of Nova Scotia	57.87	65,314.92	15,151.73	130	0.60	0.46	108,228	108,228	55,612	33,867
Montreal and Atlantic (22)	163.50	412,040.16	- 54,271.88	88	1.11	1.25	372,124	536,621	211,546	844,123
Montreal and Prov. Line (23)	58.60	74,498.40	- 6,039.20	92	0.93	1.01	79,920	90,884	108,475	78,785
Montreal and Verm't Jct. (23)	23.60	188,090.85	70,420.96	159	1.31	0.82	143,378	150,591	101,874	964,856
Morrissey, Fernie and Michel	4.73	24,862.72	3,284.63	115	1.41	1.22	17,603	18,560	7,250	135,743
N. Bruns. and Fort Sheppard (24)	55.42	92,816.36	- 4,195.06	95	2.11	2.21	43,940	48,531	20,523	31,500
N. Bruns. Coal & Ry. Co. (35)	37.50	24,277.26	6,505.65	136	0.65	0.48	36,902	44,590	18,759	33,021
New Brunswick Southern	44.66	9,117.72	196.96				25,470	25,470	3,674	5,200
New Westminster South'n (25)	82.50	- 38,905.38	- 3,761.03	91	0.70	0.60	55,536	55,536	14,276	22,596
Nosbonsing and Nipissing	24.10	22,921.87	- 15,927.68	59	0.90	1.52	25,543	26,693	22,203	24,844
Nova Scotia St. & Coal Co.'s Ry.	5.50	49,040.64	5,086.72	111	3.20	2.86	15,325	16,857		28,606
Orford Mountain	12.50	17,203.57	- 704.24	96	1.15	1.19	15,000	35,000	7,367	145,321
Ottawa and New York	26.50	24,165.26	531.96	102	0.68	0.67	35,202	35,202	7,446	36,439
Ottawa North. & Western (26)	56.79	102,192.01	2,688.03	103	0.95	0.92	108,151	108,151	106,216	60,059
Phillipsburg Ry. & Q. Co.'s Ry.	7.50	87,186.36	19,314.87	128	1.44	1.12	60,408	60,438	58,416	20,669
Qu'Ap., Long Lake & Saskat.	253.96	4,926.82	1,948.94	165	6.78	4.10	726	726		4,608
Quebec Central (27)	213.50	409,087.30	- 50,145.58	89	1.78	2.00	229,555	278,834	40,141	123,364
Quebec and Lake St. John	240.00	726,649.22	215,874.50	142	1.16	0.82	625,563	636,346	221,795	433,759
Quebec Ry. Lt. and Pr. Co. (28)	30.00	477,994.54	151,432.07	146	1.33	0.90	359,232	518,967	247,905	318,730
Quebec Southern (29)	143.50	43,833.42	10,049.54	130	1.11	0.85	39,318	39,668	155,980	35,313
		168,653.37	- 17,177.65				234,930	236,011	78,309	141,755

(Continued on page 141).

Montreal Steel Works, Ltd.—The annual report for 1904 shows that the net earnings for the year, after providing for all contingencies, were \$116,090.59. Four quarterly dividends on preferred stock at the rate of 7% per annum, amounting in all to \$56,000.00, were paid at due dates. The plant and buildings have been fully maintained out of revenue, and the sum of \$19,235.40 has been set aside and carried to the credit of reserve account to provide for depreciation and extinguishment of buildings and plant, and for such other purposes as the directors may determine. Directors' and auditors' fees for 1903 have been paid, leaving \$40,205.19 at the credit of profit and loss account, which, with \$37,936.00 already at the credit of the account at the beginning of the year, made the total balance at the credit of the account at Dec. 31, 1904, \$78,141.19. Quarterly dividends on common stock at the rate of 5% per annum were paid for 1903, and the directors declared a dividend of 5% on com-

mon stock for the year 1904, payable Mar. 15, 1905. The iron and steel business during 1904 was generally unsatisfactory, both as to volume and prices, but the outlook for 1905 is more encouraging. The new plant, as expected, has resulted in reducing the cost of production and is working in a satisfactory manner.

The John Bertram & Sons Co., Ltd., Dundas, Ont., has recently supplied the Dodge Manufacturing Co., of Toronto, with one of its new patent head, high-speed turret manufacturing lathes, for the rapid production of duplicate work.

The Transportation Club of Buffalo, N.Y., had a membership of 600 as reported at its recent annual meeting, the list including several members resident in Canada. The general fund showed a balance on hand of \$4,242.97, and the benefit fund \$801.05. During 1904 four benefits of \$500 each were paid to the families of deceased members.

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89 PRINCESS STREET, - WINNIPEG, MAN.
403 CORDOVA STREET, - VANCOUVER, B.C.

STEAM RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1904—(Continued from page 139.)

Name of Railway	Mileage	Gross Earnings	Net Earnings	Proportion of earnings to working expenses	Earnings per train mile	Operating per train mile	Train Mileage	Engine Mileage	Passengers Carried	Freight Carried
				p. c.	Cts.	Cts.	Miles	Miles		Tons
Red Mountain.....	9.59	61,221.87	11,119.89	122	3.68	3.02	16,615	30,849	14,391	239,614
Rutland and Noyan (30).....	3.39									
Salisbury and Harvey.....	45.00	28,142.22	539.59	102	1.14	1.11	24,742	30,729	12,775	35,780
Schomberg and Aurora.....	15.00	2,395.04	-753.67	76	0.24	0.31	10,000	10,000	4,320	
Stanstead, Shefford & Cham. 23	43.00	77,098.97	22,417.31	141	1.09	0.77	70,597	86,840	143,191	1,049,961
St. Clair Tunnel (31).....	2.25	219,778.68	84,728.96	162						
St. Lawrence & Adirond'k (32)	32.82	221,727.27	90,872.98	169	1.27	0.75	173,393	184,584	249,835	312,355
St. Mary's River (33).....	47.00	36,195.79	16,448.42	183	0.96	0.52	37,467	45,030	8,321	29,420
Sydney and Louisburg.....	48.67	665,423.18	276,789.32	171	3.22	1.88	206,233	556,027	48,549	3,152,027
Temiscouata.....	113.00	136,223.65	17,383.75	115	0.87	0.76	155,578	155,578	58,863	90,636
Thousand Islands.....	35.33	23,360.95	-3,972.87	87	0.51	0.58	55,120	55,120	26,200	25,709
Tillsonburg, Lake Erie & Pacific	6.33	34,361.25	9,446.71	137	0.95	0.69	36,014	36,014	46,801	30,599
Toronto, Ham. & Buffalo (34)	87.78	673,311.96	224,051.18	149	0.94	1.30	345,545	620,083	281,628	1,026,945
Vancouver, Vict. & East. (25)	16.50	27,434.62	13,003.86	190	2.03	1.07	13,486	14,522	17,383	15,013
Victoria and Sidney (25).....	16.26	26,729.23	-2,477.00	92	1.00	1.10	26,424	26,424	41,694	23,633
Victoria Term. Ry. & F.Co. (25)	18.40	12,058.14	-12,888.86	48	0.45	0.94	26,645	26,645	53,038	33,108
Wellington Colliery Co.....	10.75	4,402.20	-16,789.20	21	0.21	0.99	21,296	21,296	3,776	216,231
York and Carleton.....	5.75	3,307.00	419.00	114	4.72	4.12	700	700	4,500	3,200
	19,430.99	*\$100,219,436.22	*\$25,656,274.49				*61,312,002	*80,508,064	*23,640,765	*48,097,519

Notes to Steam Railway Statistics.

(1) The Atlantic and Lake Superior Ry. mileage refers to the Baie des Chaleurs Ry., 100 miles. The Great Eastern Ry., 23 miles, and the Ottawa Valley Ry., 7 miles, are not under traffic. The railway is in the possession of the bondholders, and is operated by them.

(2) The Bay of Quinte Ry. includes the old Kingston, Napanee and Western Ry.

(3) The Bedlington and Nelson Ry. has running powers over the C.P.R. from Creston Jct. to Sirdar Jct., 8.67 miles. It is operated in the interests of the Great Northern Ry., U.S.

(4) The Calgary and Edmonton Ry. returns are up to Sept. 30, 1903, only, on which date the C.P.R. took over the line under lease. Its mileage is included in the C.P.R. mileage.

(5) The Canada Atlantic Ry. mileage, including the Ottawa, Arnprior and Parry Sound Ry., is 400.30 miles. It operates under lease the Central Counties Ry., 37.40 miles, and the Pembroke Southern Ry., 20.90.

(6) The Canada Southern Ry. mileage includes the Leamington and St. Clair Ry., Erie Ry., and the Sarnia, Chatham and Erie Ry., 7 miles, operated under lease. It has 149.34 miles of double track. The C.S. Ry. is controlled by the Michigan Southern Rd.

(7) The Canadian Northern Ry. mileage includes the old Northern Pacific and Manitoba and Portage and Northwestern Ry.s., 354.65 miles, operated under lease from the lines: Winnipeg, Great Northern, Port Arthur, Duluth and Western, Lake Manitoba Railway and Canal Co.'s line, Manitoba and Southern, and Ontario and Rainy River Ry., 998.65 miles. It also operates 56 miles of R.R. Ry. which connects the O. and G.R. Ry. with the Man. S. Ry. The figures given in the table refer to the Canadian lines only.

(8) The Intercolonial Ry. mileage, 1,310.26, includes the Drummond County Ry., but not the Windsor Branch, 32 miles, which is leased to the Dominion Atlantic Ry. It has running powers over the G.T.R. from Point Levis to Hallow, Que., 1.50 miles; from

Chaudiere Curve to Chaudiere, Que., 1.18 miles, and from Ste. Rosalie Jct. to Montreal, 37.62 miles, a total of 40.30 miles.

(9) The C.P.R. mileage includes lines owned 4,742.40 miles, and the following leased lines: Calgary and Edmonton, 296.20 (from Sept. 30, 1903); Fredericton, 22.10; New Brunswick, 174.80; New Brunswick and Canada, 117.20; St. John and Maine, 91.80; St. John Bridge and Ry. Extension, 2.00; St. Stephen and Milltown, 4.60; Tobique Valley, 28.00; Cap de la Madeleine, 2.30; Montreal and Lake Maskinonge, 11.00; Atlantic and Northwestern, 200.70; Montreal and Ottawa, 93.50; Ontario and Quebec, 471.40; St. Lawrence and Ottawa, 58.30; Credit Valley, 175.70; Guelph Jct., 15.00; Toronto, Hamilton and Buffalo, 2.20; Toronto, Grey and Bruce, 191.10; West Ontario Pacific, 26.60; Manitoba and Northwestern, 294.60; Manitoba Southwestern Colonization, 215.70; Kootenay and Arrowhead, 33.40; Columbia and Kootenay, 59.50; Nakusp and Slokan, 36.30; Shuswap and Okanagan, 50.80; Ottawa, Northern and Western, 158.70 (from Oct. 31, 1903); Columbia and Western, 157.10; Great Northwest Central, 111.70; British Columbia Southern, 200.40; Vancouver and Lulu Island, 16.90. It has also running powers over the G.T.R. from Toronto to Hamilton Jct., 35.80 miles; and over the Canada Atlantic Ry. from Montreal and Ottawa Jct. to Ottawa, 0.90 miles; total, 36.70 miles. It has 35.70 miles of double track.

(10) The Central Ontario mileage includes the Marmora Ry. and Mining Co.'s line, formerly known as the Ontario, Belmont and Northern Ry., 9.60 miles.

(11) The Crow's Nest Southern Ry. is operated in the interests of the Great Northern Ry., U.S., connecting at the International boundary with a branch line from Jennings, Mont.

(12) The Dominion Atlantic Ry. mileage includes the Windsor and Annapolis Ry., 87.50 miles; Cornwallis Valley Ry., 14.00 miles; Yarmouth and Annapolis Ry., formerly the Western Counties Ry., 87.32 miles, and the Windsor branch, 32.00 miles, the latter of which is operated under lease from the Intercolonial Ry. It has also running powers over the Intercolonial Ry. from Windsor Jct. to Halifax, 14 miles.

(13) The Fredericton and St. Marys Ry. and Bridge Co. has running powers over the Canada Eastern Ry. for 0.17 miles. It has not made any return for the year, the figures quoted being for the year ended June 30, 1903.

(14) The G.T.R. mileage includes the following lines: G.T.R., 880.35 miles; Wharf branch, Montreal, 3.44 miles; Great Western Ry., 561.80 miles; Brantford, Norfolk and Port Burwell Ry., 34.39 miles; Buffalo and Lake Huron Ry., 162.00 miles; Grand Trunk, Georgian Bay and Lake Erie Ry., 172.62 miles; Owen Sound branch, 12.42 miles; London, Huron and Bruce Ry., 68.00 miles; Waterloo Jct. Ry., 10.25 miles; South Norfolk Ry., 17.00 miles; Wellington, Grey and Bruce Ry., 168.18 miles; Northern Ry., 172.10 miles; North Simcoe Ry., 33.00 miles; Hamilton and Northwestern Ry., 172.00 miles; Northern Pacific Junction Ry., 111.32 miles; Toronto Belt Line, 12.79 miles; Midland Ry., 166.00 miles; Grand Junction Ry., 82.51 miles; Toronto and Nipissing Ry., 85.00 miles; Lake Simcoe Junction Ry., 26.00 miles; Victoria Ry., 53.00 miles; Whitby, Port Perry and Lindsay Ry., 46.00 miles; Jacques Cartier Union Ry., 6.50 miles; Montreal and Champlain Ry., 61.73 miles; Beauharnois Junction Ry., 19.50 miles. It has running powers over the Chaudiere branch of the Intercolonial Ry., 5.77 miles. It has 561.50 miles of double track.

(15) The Great Northern Ry. of Canada includes the Lower Laurentian Ry., and the Montreal and Gatineau Colonization Ry.

(16) The Halifax and Southwestern Ry. includes the old Nova Scotia Central Ry., and the Nova Scotia Southern Ry.

(17) The Hereford Ry. is operated by the Maine Central Rd.

(18) The Kent Northern Ry. mileage does not include the St. Louis and Richibucto Ry., 7 miles, which is not now being operated.

(19) The Kettle River Valley Ry. also operates in the State of Washington, from the boundary to Republic, Wash.

(20) The Lake Erie and Detroit River Ry., including the Erie and Huron Ry., is 199.41 miles in length; it also operates the London and Port Stanley Ry., 24.00 miles. The line is owned by the Pere Marquette Rd.

(21) The Massawippi Valley Ry. is leased to the Boston and Maine Rd., and has run-

ning powers over the G.T.R. from Lennoxville to Sherbrooke, Que., 2.95 miles.

(22) The Montreal and Atlantic Ry. includes the old Southeastern Ry., 103.00 miles; and the Lake Champlain and St. Lawrence Junction Ry., 60.50 miles. The first named has 5.50 miles of double track.

(23) The Montreal and Province and Montreal and Vermont Jct. lines and the Stanstead, Shefford and Chambly lines are leased by the Central Vermont Ry.

(24) The Nelson and Fort Sheppard Ry. has running powers over the C.P.R. from Five Mile Point to Nelson, B.C., 4.70 miles. It is operated in the interests of the Great Northern Ry., U.S.

(25) The New Westminster Southern Ry., the Red Mountain, Vancouver, Victoria and Eastern Ry., Victoria and Sidney, and Victoria Terminal Ry. and Ferry Co. are operated by or in the interests of the Great Northern Ry., U.S.

(26) The Ottawa, Northern and Western Ry. returns are up to Oct. 31, 1903, on which date it was taken over by the C.P.R. under lease. It has running powers over the Hull Electric Ry., 2.50 miles. The mileage is included with that of the C.P.R.

(27) The Quebec Central Ry. has running powers over the Intercolonial Ry. from Harlaka Jct. to Levis, Que., 5.00 miles.

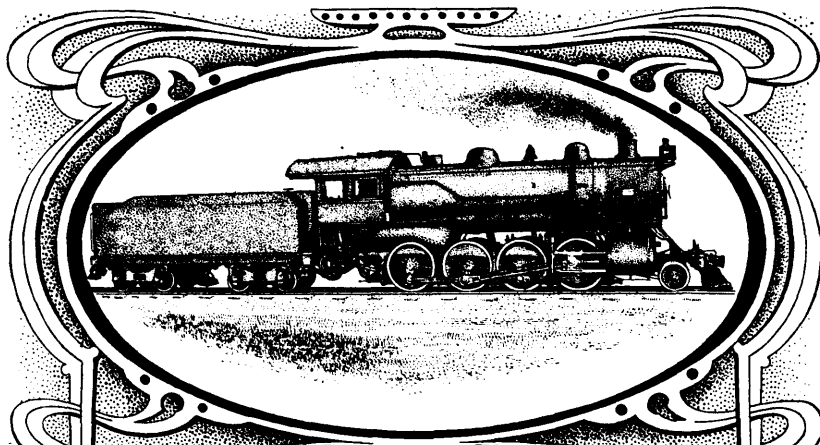
(28) The Quebec, Montmorency and Charlevoix Ry. is operated as a steam and electric railway by the Quebec Ry., Light and Power Co. The returns given are for the operation by steam. It has 6.00 miles of double track.

(29) The Quebec Southern Ry. comprises the United Counties, the East Richelieu Valley, and the South Shore railways. It is being operated by a receiver, and no report of traffic for the year has been received, the figures given being those for 1902-03.

(30) The Rutland and Noyan Ry. is operated by the Rutland Rd., a U.S. company, and a report of its operations has not been received.

(31) The earnings of the St. Clair Tunnel are from tolls on vehicles hauled through the tunnel.

(32) The St. Lawrence and Adirondack Ry. has running powers over the G.T.R. from Valleyfield to Beauharnois, Que., 13.30 miles; and over the C.P.R. from Adirondack Jct. to Montreal, 8.70 miles. It is operated by the New York Central and Hudson River Rd.



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Algoma Central and Hudson Bay Ry.—In a recent interview at Toronto, F. H. Clergue is reported as having stated that the line would be completed to a junction with the main line of the C.P.R., and that the operations would be commenced at an early date and conducted with energy, and that assurances to that effect had been given to the Ontario Government. Enquiry of members of the Government fails to confirm this. We are advised the matter is under the consideration of the directors, and will be dealt with definitely in the near future. (Mar., pg. 89.)

Algoma Copper Range Ry.—R. D. Perry, Toronto; F. M. Perry, Jno. McKay, Sault Ste. Marie, Ont.; G. Kemp, F. Perry, Sault Ste. Marie, Mich., are the applicants at the current session of the Dominion Parliament for an act incorporating a company with this title, with a capital of \$500,000, and power to issue securities not exceeding \$25,000 a mile of railway constructed. The railway proposed will extend from Batchawana Bay, on Lake Superior, easterly to the Superior Copper Mines, thence easterly for about 120 miles to the C.P.R. transcontinental line between Cartier and Biscotasing, Ont. (Mar., pg. 89.)

Athabasca and Northern Ry.—F. H. Markey, H. E. Smith, Montreal; J. K. Mackenzie, Selkirk, Man.; M. Burton, Barrie, Ont., and O. E. Fleming, Windsor, Ont., are applying at the current session of the Dominion Parliament for an act incorporating a company with this title, to construct a railway from Edmonton, northerly to Athabasca Landing, Alta. (Feb., pg. 45.)

Bessemer and Barry's Bay Ry.—A meeting of shareholders was held at Bessemer, Ont., Mar. 31, to authorize the issue of bonds to the extent of \$100,000 for the purpose of constructing the proposed railway, or such part thereof as may be agreed on, and to authorize the placing of a mortgage upon the company's property to secure the same. (Jan., pg. 9.)

Bruce Mines and Algoma Ry.—The Ontario Legislature will be asked at its current session to pass an act authorizing the construction of a line from the C.P.R. between Chapleau and Biscotasing stations on the C.P.R. transcontinental line, northerly to Hannah Bay, on Hudson's Bay. Power is also asked to operate steam and other vessels on waters opened up by the company's lines. The company has its line in operation from the shore of Lake Huron to Rock Lake, and is authorized to extend it from Rock Lake to the C.P.R. transcontinental line, near Biscotasing. (Aug., 1904, pg. 275.)

Canada Central Ry.—The Ontario Legislature will be asked at its current session for an act extending the time for the commencement and completion of this projected line, from the boundary of Quebec to the boundary of Manitoba. There is a Dominion charter covering the whole line from Quebec to the Pacific coast.

Canadian Yukon Western Ry.—Application will be made by L. A. Herdt, C. Archer and R. Auzias-Turenne, of Dawson, Yukon, at the current session of the Dominion Parliament, for an act extending the time within which the projected line may be begun and completed, and rearranging its bonding powers, etc. The company was incorporated in 1903, with power to construct a railway from Dawson to the International boundary through the Forty Mile district.

Cape Breton Coal, Iron and Ry. Co.—The report that Sir C. Rivers Wilson, President G.T.R., had acquired a controlling interest in this company is, we are officially informed,

untrue. J. F. Case, of Pittsburg, Pa., is in charge of the construction of the line. (Jan., pg. 11.)

Central Canada and Hudson Bay Ry.—Application will be made at the current session of the Ontario Legislature for an act incorporating a company with this title to construct a railway from Heron Bay, on Lake Superior, northerly and easterly to the Albany River, thence to Fort Albany on James Bay. Jas. B. O'Brian, Toronto, is solicitor for the applicants.

Central Vermont Ry.—An arrangement has been reached by which the C. V. Ry. will rebuild, as a standard gauge line, the narrow gauge line between Brattleboro and South Londonderry, Vt., 35 miles.

Detroit River Bridge.—Detroit papers state that it is definitely announced that the Michigan Central Rd. will construct a double tunnel under the Detroit River between Detroit, Mich., and Windsor, Ont., and that all the plans for the same are completed. A later report states that if the Michigan Central Rd. constructs such a tunnel, it is likely that the G.T.R., the C.P.R., the Wabash Rd. and the Pere Marquette Rd. will combine to construct a joint tunnel or bridge. (Mar., pg. 93.)

Edmonton, Yukon and Pacific Ry.—The Dominion Parliament is being asked at its current session for an extension of five years within which the company's authorized lines may be constructed. (Feb., pg. 49.)

Esquimalt and Nanaimo Ry.—The sale of the E. and N. Ry. to the C.P.R. has revived the prospects of the construction of additional lines on Vancouver Island. General Superintendent Marpole, of the C.P.R., stated recently at Vancouver, that as soon as the line was transferred the C.P.R. would make a general survey of the Island, with a view of finding out its resources and the possibility of opening it up more extensively by railways.

French River Ry.—Application will be made at the current session of the Ontario Legislature for an act incorporating a company with this title, with power to construct a railway, to be operated by steam, electricity or other motive power, or partly by steam and other motive power, from French River Harbor, on Georgian Bay, easterly to Cross Narrows, on the Pickereil River, then southeasterly to Kidds Landing, Magnetawan and Burk's Falls, Ont. Power is also asked to construct branch lines and to carry on a general navigation business. Lindsey, Lawrence & Wadsworth, Toronto, are solicitors for the applicants.

Haliburton, Whitney and Mattawa Ry.—Application will be made at the current session of the Ontario Legislature for an act extending the time for the commencement and completion of this projected line from Haliburton to Mattawa, Ont.

Halifax and Southwestern Ry.—A return presented Feb. 24 to the Nova Scotia Legislature showed that the plans for the line between Bristol and Sable River had been deposited Aug. 3, 1904, but had not been approved. There was a dispute between the company and the Government as to the proper place to construct the railway, in the interests of the road and the people of the country. A number of conferences had taken place between the company, its managers and engineers and the Government, and the Government had heard numerous delegations from the people of the locality. The plans for the line between Sable River and Barrington Passage were approved Sept. 13. (Mar., pg. 93.)

Hamilton to Galt.—Application will be made at the current session of the Ontario Legislature for an act incorporating a company to construct a railway from Hamilton to Galt, Ont., passing through Ancaster,

(33) The St. Mary's River Ry. is operated by the Alberta Ry. and Coal Co.

(34) The Toronto, Hamilton and Buffalo Ry. has 4.69 miles of double track.

(35) No returns for the year ended June 30, 1904, have been received from the following lines: Hampton and St. Martin's Ry.; Lenora, Mount Sicker Ry.; New Brunswick Coal and Ry. Co. The figures given are for the year ended June 30, 1903.

*The totals given are not strictly accurate, as they include returns for a number of lines for the year ended June 30, 1903, the figures for the year ended June 30, 1904, not having been received in time to be included.

The Dominion Wire Rope Co., Ltd., held its 19th annual meeting in Montreal recently, when the following were elected for the current year:—President, F. W. Fairman; Vice-President and Managing Director, F. H. Hopkins; Secretary-Treasurer, J. J. Rose. This business was established in 1882, as the Dominion Wire Rope Works, by the late firm of Cooper, Fairman & Co., in the old Grey Nunnery on Normand St., Montreal, and was taken over by the present company on its incorporation in 1886. The works are now at Lachine, where a modern plant turns out practically all varieties of steel and iron wire ropes.

Engineers' Club of Toronto.—A suggestion that the Club should amalgamate or affiliate with the Canadian Society of Civil Engineers was discussed at a recent meeting, when it was decided to take a general vote of the members on the question. The result of the vote was opposed to the suggestion. At other recent meetings a paper on "The Present Condition of the Metrics" was read by Arthur Harvey; R. P. Wolsey gave a talk on Jamaica, and the possibilities of New Ontario in the Abitibi Valley was discussed under the leadership of T. P. Speight. Business luncheons for the members are held at the Club rooms every Wednesday.

The Canadian Westinghouse Co. has issued booklets on its self-contained direct current multi-polar generators, and the Westinghouse type N. transformers.

We are advised that the G.T.R. has placed an order with the Dominion Iron and Steel Co., Sydney, N.S., for 25,000 tons of steel rails to be delivered during 1905.

The Continental Heat and Light Co., Montreal, has created a special department for its heating and ventilating business, in charge of F. W. Richardson, formerly of New York.

In the article headed Railways and Special Freight Rates, appearing on pg. 97 of our March issue, the word "exhaustive" in the fifth line from the bottom of the column should read "exhausted."

Following are the officers and directors of the Montreal Warehousing Co. for the current year: President, C. M. Hays; Vice-President, W. M. Ramsay; other directors: J. W. Loud, F. W. Morse and W. Wainwright. Manager and Secretary, G. H. Hanna.

The Canadian Westinghouse Co., Hamilton, Ont., has issued circulars respecting its Bi-Polar Motors, type K. Motors; Westinghouse Oil Circuit Breakers; type R.; Oil Switches and Oil Circuit Breakers; and Points for consideration when purchasing Series A.C. Arc Lamps.

Babcock & Wilcox, Ltd., Montreal, have received a contract from the city of Winnipeg, for the installation of two of their 250 h.p. forged steel, patent water-tube boilers, fitted with B. & W. patent steam superheaters and chain grate automatic stokers. This is an addition to the power plant of the same water-works system, in which five of the same type of boiler were installed some five years ago.

West Flamboro, Beverly, Wentworth and North Dumfries townships. Barwick, Aylesworth, Wright & Moss, Toronto, are solicitors for the promoters.

Hermia Mining Co. (Ltd.)—Application will be made at the current session of the Ontario Legislature for an act authorizing the company to construct and operate a railway from Lake Huron northerly through the townships of Victoria, Salter, and Tennyson, Ont.

Intercolonial Ry.—The Minister of Railways and Canals, in referring to the estimates for the I.C.R. in the House of Commons recently, stated that the traffic would soon require a double track between Halifax, N.S., and Moncton, N.B. The line between Richmond and Rockingham, N.S., had been double-tracked, and the section between Rockingham and Bedford, N.S., was now under contract. A contract had also been let for double-tracking between Windsor Jct.

and Bedford Bridge to R. McManus. The total expenditure for improvements at Halifax, N.S., was estimated at about \$1,000,000, of which about \$200,000 would be required this year for a number of improvements, including an engine house, new sheds, new tracks to the elevators and other works. The following sums have been voted, chargeable to capital:—

Original construction.....	\$ 2,000
Strengthening bridges.....	142,000
Double-tracking parts of line.....	100,000
Additional sidings and spur lines.....	135,800
Semaphores at stations.....	1,000
Improving grades on line.....	22,000
Increasing water supply.....	2,400
Steel rails and fastenings.....	380,000
Increased accommodation, Sydney.....	81,500
Improvements, North Sydney.....	23,200
Extension to Sydney Mines.....	50,000
Dredging and blasting rock at deep water terminus, Halifax.....	18,000
Increased accommodation, Halifax.....	200,000
New station at Windsor.....	11,000
Increased accommodation, Stellarton.....	30,000
" " Pictou.....	57,500

Protection to Grand Narrows bridge.....	\$35,000
Increased accommodation, Truro.....	50,000
To reduce curve at Birch Cove.....	60,000
Increased accommodation, Antigonish.....	29,500
" " New Glasgow.....	28,000
" " Amherst.....	35,000
" " St. John.....	110,000
" " Moncton.....	25,000
Improvements, Newcastle.....	12,000
" " Campbellton.....	4,000
" " Sackville.....	7,000
Increased accommodation, Memramcook.....	5,200
" " Levis.....	14,500
Improvements, Little Metis.....	36,000
Engine-house, etc., Riviere du Loup.....	32,000
" " Chaudiere Jct.....	32,000
Increased accommodation, St. Flavie.....	12,000
Diversion of line, St. Leonard Jct.....	15,000
" " Mitchell.....	23,000
Improvements at Drummondville.....	2,500
Diversion of public road near St. Cyrille.....	2,300
Station at St. Moise.....	7,600
Subway near St. Fabien.....	7,600

(Mar., pg. 93.)

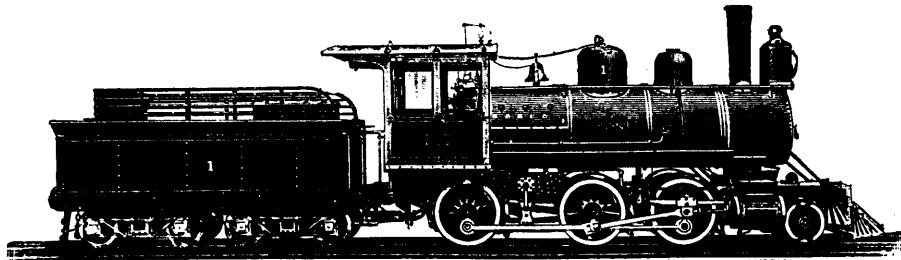
Irondale, Bancroft and Ottawa Ry.—Application will be made at the current session of the Ontario Legislature for an act extending



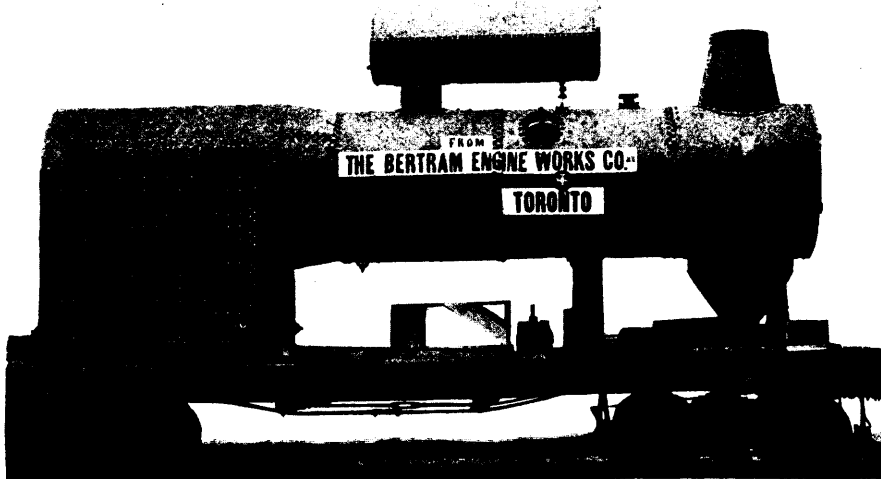
The Saxon Engine Works, late Rich. Hartmann, Limited
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Carry on the construction of **LOCOMOTIVES** of every description.

Number of Workmen, 5,200.



Capital, \$3,000,000.



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ing the time for the construction of the line easterly from its present terminus at Bird Creek to Renfrew, Ont.; and also authorizing the construction of a line westerly from the junction with the G.T.R. near Kinmount, to Georgian Bay.

Lake Superior, Long Lake and Albany River Ry.—The Ontario Legislature will be asked at its current session to pass an act authorizing the extension of time for the commencement of this projected railway from Peninsula Harbor, on Lake Superior, to the Albany River; increasing the capital stock to \$5,000,000 and for other purposes.

Lebonk and Thunder Bay Ry.—R. H. Flaherty, H. E. Knobel, Port Arthur, Ont.; G. A. Elliott, Winnipeg, Man., are applying at the current session of the Dominion Parliament for an act incorporating a company with this title to construct a railway from Lake Superior, following the valley of the Blende River to Lebonk mine, thence westerly to the south shore of Loon Lake, Ont. Power is asked to sell the line to or amalgamate with the G. T. Pacific Ry., or the Thunder Bay, Nepigon and St. Joe Ry. (Feb., pg. 49.)

Midland Terminal Ry.—The Ontario Legislature will be asked at its current session for an act extending the time for the commencement and completion of this projected railway in the town of Midland, Ont. H. T. Canniff, Toronto, is solicitor for the company.

New Ontario Ry.—Application will be made at the current session of the Ontario Legislature for an act continuing in force the act incorporating the N.O.Ry. Co., and extending the time for the commencement and completion of its projected railway. The company has power to construct a rail-tinental line, to Lac Seul, and to operate it by steam or electricity.

Nicola, Kamloops and Similkameen Coal and Ry. Co.—The controlling interest in the company recently passed into the hands of several Canadian and U.S. people, the new directorate consisting of C. E. Loss, New York; G. A. Begy, St. Catharines, Ont.; H. S. Osler, W. B. Raymond, B. M. Osler, C. E. Loveys, Toronto. The coal lands, which were owned by the original company, still remain in the old company's hands, and a new company has been formed with H. E. Larkin as President, and W. S. McNamara as Secretary, to develop the coal fields, so as to be ready to ship coal as soon as the railway is completed. The company which will construct the railway expects to make a start at construction as soon as the legislation, now before the Dominion Parliament, which are being asked for will enable the company to construct a line to Grand Forks, B.C., where a connection will be made with the Vancouver, Victoria and Eastern Ry. A connection will also be made with the Columbia and Western Ry. (C.P.R.) at Midway. (Jan., pg. 13.)

Ottawa Valley Ry.—The application to extend the line from St. Andrew's, Que., via Ottawa to Georgian Bay, with branches, was thrown out by the Railway Committee of the House of Commons, the standing orders as to publication of notices not having been fully complied with. (Feb., pg. 51.)

Penetanguishene to Udney.—Application will be made at the current session of the Ontario Legislature for an act incorporating a company to construct a railway from Penetanguishene, through the townships of Tay or Tiny, Medonte, North Orillia, South Orillia, Brechin, Ont., and passing through the towns of Midland and Orillia. Royce & Henderson, Toronto, are solicitors for the promoters.

Prince Edward Island Ry.—A vote for \$650,000 for the Murray Harbor branch has been passed by the House of Commons. The branch was projected in 1898, when it was estimated that the cost would be \$472,000. Up to Nov. 30, 1904, the line had cost \$870,121, and it is now estimated that the total cost will be \$1,031,000. The original contract with W. Kitchen was for 11 miles, but he was given the construction of the rest of the line at the same prices. The bridge across the Hillsboro River was originally estimated to cost \$800,000, but owing to changes in the plans, adopted on the recommendation of the engineers, the cost of the work when completed will be \$1,474,000. (Mar., pg. 94.)

Quebec Bridge and Ry. Co.—C. Schriber, Deputy Minister of Railways and Canals, accompanied by the members of the Transcontinental Ry. Commission, recently visited Quebec, and inspected the progress of work on the bridge. It was reported that the shipment of steel for the bridge would be commenced by the end of March, the material in stock at the works in Pennsylvania being sufficient to fill about 700 cars. (Mar., pg. 95.)

Rouse's Point to St. Constant, Que.—A press report states that the Delaware and Hudson Co. proposes to construct a line from the International boundary at Rouse's Point, N.Y., to St. Constant, Que., under an old charter, which it controls.

Salmon River and Northern Ry.—Application will be made next session of the Quebec Legislature for an act incorporating a company with this title to construct a railway from the Ottawa River to a junction with the Grand Trunk Pacific Ry., near the La Lievre River, Que. (Mar., pg. 95.)

Saskatchewan Bridge Co.—C. M. Hays, W. Wainwright, H. A. Allan, J. Hobson, W. H. Biggar, H. A. Wood, H. Phillips, Montreal; F. Oliver, K. W. Mackenzie, Edmonton, Alta., are applying at the current session of the Dominion Parliament for an act incorporating a company with this title to construct a railway and general traffic bridge across the Saskatchewan River between Strathcona and Edmonton, Alta. (Mar., pg. 95.)

Temiskaming and Northern Ontario Ry.—The construction of this line, heretofore in charge of a commission consisting of R. Jaffray (chairman); B. W. Folger, Kingston, Ont.; F. Leonard, London, Ont., and M. J. O'Brien, Renfrew, Ont., will in future be in charge of a commission of three, consisting of C. B. Smith, C.E., Toronto; D. Murphy, Ottawa; J. L. Englehart, Petrolia, Ont. C. B. Smith has been appointed chairman. Hon. J. P. Whitney, the premier, states that it has been decided by the Government to proceed with the work and carry it through to completion. (Mar., pg. 95.)

Vancouver, Victoria and Eastern Ry.—The extension from Grand Forks to Phoenix, B.C., was inspected by W. McCarthy, Dominion Government Inspecting Engineer, at the end of Feb., and a passenger train service was placed in operation Mar. 5. (Mar., pg. 95.)

Yukon Trust and Loan Co.—Application will be made at the current session of the Quebec Legislature for an act incorporating a company with this title to construct tramways and other works in the Yukon Territory, in connection with a real estate and loan business. Beaubien and Lamarche, Montreal, are solicitors for the applicants.

The Locomotive and Machine Co. of Montreal has received orders for a large amount of bridge work for the C.P.R. It has also in hand contracts for the steel work for the new post office at Winnipeg; the Royal Victoria Museum and the Dominion Mint at Ottawa.

Orders by the Railway Commissioners.

The following orders have been issued by the Board of Railway Commissioners:—

Approving of plans for the crossing of the Algoma Central and Hudson Bay Ry. under the tracks of the C.P.R. in Sault Ste. Marie, Ont. (Feb. 9.)

Sanctioning change in the location of the located line of the extension of the Alberta Ry. and Irrigation Co.'s line between mileage 13 and mileage 17. (Feb. 13.)

Authorizing the construction of a spur line from Sprague station on the C.P.R. Sault Ste. Marie line, for a distance of 1,347 ft. (Feb. 14.)

Granting permission to the Toronto City Council to extend Wallace Avenue across the tracks of the G.T.R., northern division, the city to provide whatever protection may be required for the crossing, and to consent to the laying of an additional track or tracks by the G.T.R. across the street should such be necessary. (Feb. 18.)

Approving of an extension of time fixed in the order of Dec. 19, 1904, for the use by the Canadian Northern Ry. of its crossing of the C.P.R. tracks at Emerson, Man. (Feb. 20.)

Granting permission to the Berlin, Ont., Light Commissioners to lay a gas main under the G.T.R. tracks in that city. (Feb. 20.)

Extending to Dec. 31, 1905, the time for the use by the Vancouver, Westminster and Yukon Ry. of a crossing of the British Columbia Electric Ry. at Park Ave., Vancouver, B.C. (Mar. 1.)

Granting permission to the Consumers' Gas Co., of Toronto, to lay a gas main under the G.T.R. tracks near Jones Ave., Toronto. (Mar. 2.)

Authorizing the construction of a bridge across the Blackstone River, at a point 10 miles from Parry Sound, Ont., by the James Bay Ry. (Mar. 2.)

Sanctioning a change in the location of the Quebec, New Brunswick and Nova Scotia Ry. through Portneuf county, Que., between mileage 15.6 and mileage 57.4. (Mar. 2.)

Authorizing the town of Rat Portage, Ont., to construct a bridge over the tracks of the C.P.R. at Julius St., Rat Portage. (Mar. 2.)

Sanctioning a change in the location of the Canadian Northern Ry. through township 10, ranges 15, 16, 17 and 18, west of the principal meridian, Manitoba, to a junction with the Northern Pacific and Manitoba Ry., near Brandon, Man., between mileage 51.35 and mileage 76.90. (Mar. 2.)

Authorizing the crossing of the G.T.R. tracks at Milverton, Ont., by the Guelph and Goderich Ry., by an overhead bridge. (Mar. 6.)

Approving of a rail level farm crossing of the Canada Southern Ry. at Brigid, Ont., on terms set out in an agreement between G. Miller and the company. (Mar. 7.)

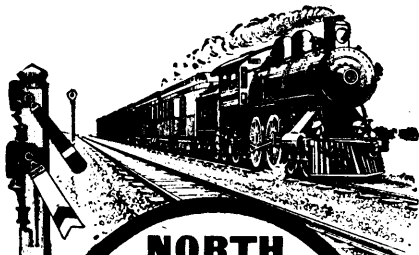
Authorizing the laying of a sewer under the C.P.R., the G.T.R. and the Toronto Belt Line Ry. tracks at Eastern Avenue, Toronto. (Mar. 10.)

Sanctioning a change in the location of the Tillsonburg, Lake Erie and Pacific Ry., from Wornham Road to the northern boundary of Ingersoll, Ont. (Mar. 11.)

A bill has been laid before the Senate providing that senators and members of the House of Commons shall be provided with a form provided by the clerk of each house, the production of which shall be accepted by railway conductors in lieu of the production of a pass. Under the terms of the Railway Act senators and members of the House of Commons are entitled to passes from all the railways in Canada, and the promoter of the bill evidently wants to be dead-headed without having to take the trouble to sort over his bundle of passes to find the one for the particular line he may be travelling over.

New Union Station for Toronto

The Board of Railway Commissioners made an order, dated Feb. 23, with respect to the application of the G.T.R. for authority to expropriate certain lands, additional to those it now occupies, lying north of Esplanade St. and between Yonge and York streets, Toronto, and required for the purposes of the company. The following parties were interested in the application and appeared before the Board by counsel at the different hearings: G.T.R., C.P.R., James Bay Ry., Toronto City Council, W. W. Baldwin Estate, Eckardt Co., A. R. Williams, M. McLaughlin, Land Security Co., Dominion Transport Co., Toronto General Trusts Corporation, J. B. Smith Estate, H. W. Petrie Co., and the own-



NORTH WEST AND NORTH-WEST VIA THE NORTH WESTERN LINE

Fast through train service to all points from Chicago, Milwaukee and Peoria on the East, to Omaha, Denver, the Black Hills, Salt Lake City and the Pacific Coast on the West, and northward to St. Paul, Minneapolis, Duluth, Superior, Ashland, Marquette and Sault Ste. Marie.

The Best of Everything.

W. R. Kniskern,
P. T. M.,
Chicago, Ill.

NW372

1905
ONTARIO JOCKEY CLUB
TORONTO, CANADA

SPRING MEETING
MAY 20th to JUNE 3rd
(Inclusive)

RACING AND STEEPLECHASING

THE KING'S PLATE
WILL BE RUN ON
SATURDAY, MAY 20th

SIX OR MORE RACES EACH DAY

WM. HENDRIE President W. P. FRASER Sec.-Treas.

GOD SAVE THE KING

N. CURRY, President. N. A. RHODES, Vice-President. J. M. CURRY, Sec.-Treas.

CAPITAL, \$1,000,000.

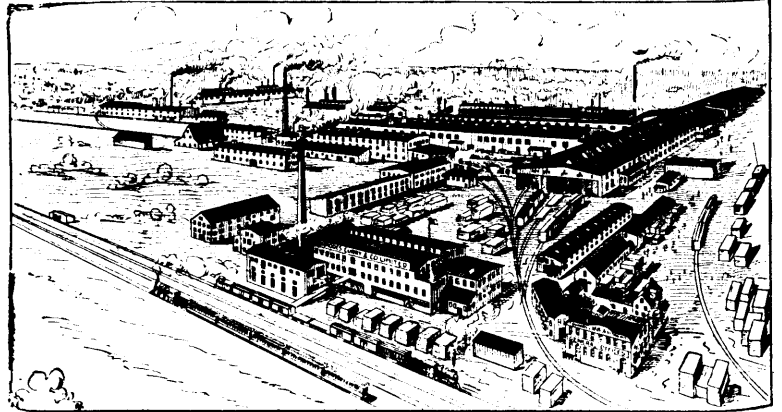
RHODES, CURRY & CO.

AMHERST, NOVA SCOTIA

LIMITED

RAILWAY and STREET CARS

Special Cars for All Purposes.



Car Wheels, Axles, Forgings, Castings, Etc.

CAPACITY PER MONTH

300 Freight Cars	4 Passenger Cars	4 Snow Plows	3,000 Car Wheels
2,500 Car Axles	500 tons Castings	1,000 tons Forgings	

CANADIAN NORTHERN RAILWAY

THE NEW CANADIAN HIGHWAY FROM PORT ARTHUR, THE HEAD OF LAKE SUPERIOR, TO—

FORT FRANCES	MORRIS	GLADSTONE
WINNIPEG	EMERSON	NEEPAWA
PORTAGE LA PRAIRIE	GARMAN	DAUPHIN
BRANDON	HARTNEY	SWAN RIVER

Line surveyed and now under construction to:—

PRINCE ALBERT BATTLEFORD EDMONTON

FREIGHT:—Shipments are handled from points in Eastern Canada, either Trunk or Canadian Pacific Railways, via North Bay to Port Arthur, thence Canadian Northern Railway.

PASSENGER:—Passengers destined to points on the Canadian Northern Railway north, south and west of Winnipeg, can purchase through tickets via Chicago and St. Paul, where connection is made with the Canadian Northern Flyer for Winnipeg via Great Northern Railway, also with Northern Pacific Railway.

Freight Rates, Folders and other Information furnished on application to:—

R. H. BELL, T. F. & P. A., Board of Trade,
MONTREAL, QUE.

WM. PHILLIPS, G. E. A.,
TORONTO, ONT.

GEO. H. SHAW, Traffic Manager,
WINNIPEG, MAN.

Railway Equipment Notes.

Among the liabilities of the Dominion Coal Co. is included Dominion Rolling Stock debentures, \$298,559.47.

The Winnipeg City Council has asked tenders for five gondola hopper cars for use on its line to the city quarries.

The Intercolonial Ry. has not placed any orders for equipment since Dec. 15, 1904, and is not in the market for any at the present time.

The G.T.R. has recently added to its equipment two 10-wheel passenger locomotives from the Locomotive and Machine Co.'s works, Montreal.

We are advised that the Great Northern Ry. of Canada is not at the present time in the market for any passenger equipment, as recent press despatches stated.

The Pere Marquette Rd. has placed orders for 70 locomotives, the distribution of which on the different lines has not yet been determined. Seven of the locomotives have been delivered at St. Thomas, and others are expected.

motives are increased equipment, and the cars are to replace an equal number which had been condemned.

The 3,000 box cars which the C.P.R. is about to build at its Angus shops, Montreal, will be of 60,000 lbs. capacity, M.C.B. standard dimensions, and will be equipped with Westinghouse air-brakes, Simplex trucks, with inside brake-beams and Susemihl roller side bearings. It will only be necessary to build 1,677 trucks for these cars, as the company now has 1,323 trucks for 30-ton cars on car bodies having a 40-ton capacity. These 30-ton trucks will be transferred to the 30-ton car bodies to be built, and 1,323 new trucks for 40-ton cars will be built and placed under the cars now running on 30-ton trucks.

At the annual meeting of Rhodes, Curry & Co., Ltd., held at Amherst, N.S., Mar. 1, a dividend of 6% on the new stock was declared. The report showed the volume of business for 1904 to have been \$2,300,000, the receipts for the construction of cars being \$1,400,000. The number of cars built was 1,600. It was stated that the company has already booked orders for cars to be constructed during the current year to the value of over \$1,000,000.

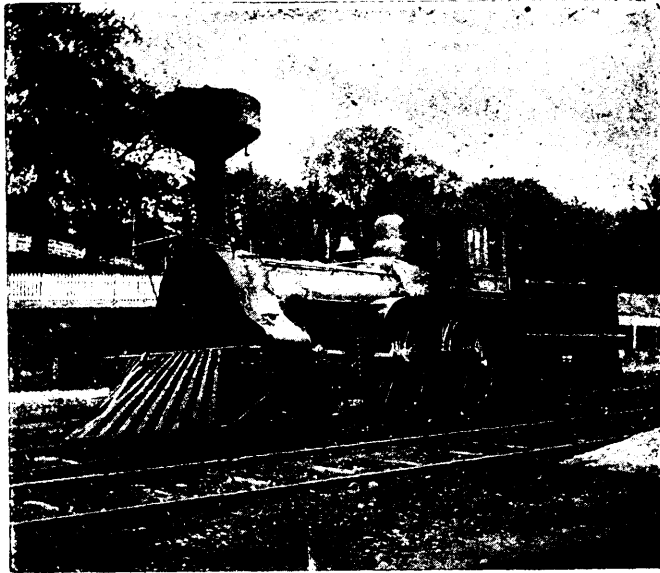
J. R. Douglas was elected a director to succeed the late J. M. Townsend, K.C., and B. F. Pearson, of Halifax, N.S., and Senator Mitchell, of Drummondville, Que., were added to the directorate. The officers and directors for the current year are: President, N. Curry; Vice-President, N. A. Rhodes; other directors: C. T. Hillson; Senator Black, J. R. Douglas, Senator Mitchell, B. F. Pearson, J. C. Robertson. Secretary and Treasurer, J. M. Curry; Solicitor, E. M. Rhodes.

The Lima Locomotive and Machine Co. is building for the Holly River and Addison Ry. a 10-wheel locomotive, cylinders 13 in. diameter, 18 in. stroke. It is also building a double end locomotive, with separate tender, for the Crowell and Spencer Lumber Co., Long Leaf, Ia. This locomotive has cylinders 15 in. diameter, 20 in. stroke, and will be equipped with the Lima Locomotive and Machine Co.'s own make of steam brake.

This locomotive, as well as the one for the Holly River and Addison Ry., will be furnished with all modern fittings. The company also has orders on its books for a 12 x 16 in. cylinder four driver saddle tank, for the Puget Sound Navy Yard at Bremer, Wash., and a small mine locomotive for the Margaret Mining Co., Welsh, W. Va. The company reports business good in its geared locomotive department, and has recently shipped a number of plantation type locomotives to Mexico. Orders are coming in rapidly, and it is running its shops full time, night and day force, and the outlook for the current year's business is most promising.

The Temiskaming and Northern Ontario Ry. has placed orders with the Canadian Locomotive Co., Kingston, Ont., for four additional locomotives. Following are the specifications for two of them:—

Type of engine	.....	10 wheel
Fuel used	.....	Bituminous coal
Weight in working order, drivers	.....	107,000 lbs.
..... total	.....	133,000 lbs.
Wheel base of engine, rigid	.....	12 ft. 6 ins.
..... and tender	.....	22 ft. 6 ins.
..... total	.....	50 ft. 6 1/2 in.
Length over all, engine and tender	.....	59 ft. 1 1/2 in.
Width	.....	10 ft. 0 3/4 in.
Height	.....	14 ft. 3 1/2 in.
Heating surface, firebox	.....	1,155 sq. ft.
..... tubes	.....	1,536 sq. ft.
..... total	.....	1,691 sq. ft.
Grate area	.....	30 sq. ft.
Diameter of driving wheels	.....	56 ins.



CARILLON AND GRENVILLE RAILWAY LOCOMOTIVE.

The Crossen Car Manufacturing Co., Cobourg, Ont., and the Rhodes, Curry & Co., Amherst, N.S., have each received an order for 200 standard 30-ton box cars, which will be distributed to the various Mackenzie, Mann & Co. lines as conditions warrant.

The Dominion Parliament has voted \$698,500 for additional rolling stock, \$25,000 for applying air brakes to freight cars, \$46,000 to exchange draw-bars of freight cars, \$92,000 for new machinery for locomotive and car shops, and \$6,000 for a new track pile driver, for the Intercolonial Ry. to be charged to capital account.

The applications of the Canada Car Co. and the Goodwin Car Co. at the current session of the Dominion Parliament for acts to extend the time within which they may import wheels and other portions of cars, covered by a number of patents, until 1907, and setting forth that the want of construction in Canada within that period shall not invalidate the patents, have been withdrawn.

The Intercolonial Ry. added to its equipment recently 157 platform cars, 60,000 lbs. capacity; 82 hopper cars, 30,000 lbs. capacity; 8 box cars, 60,000 lbs. capacity, from Rhodes, Curry & Co., Amherst, N.S.; seven consolidated freight locomotives from the Canadian Locomotive Co., Kingston, Ont. The loco-

ers of the Walker House. From the facts laid before the Board it appeared that the G.T.R. requires for the convenient accommodation of the public and the traffic on the railway more ample space than it now possesses, or might take under section 138 of the Railway Act, and authority was given to expropriate the lands mentioned, subject to certain conditions set out in the order.

The lands to be expropriated are specifically set out in the order, which reserves to the public such portions of the lands named as are now enjoyed as public highways. It then recites that the lands taken are to be used only for a passenger station, and passenger station yard therefor, and for such purposes as are necessarily or usually connected therewith. The lands and the buildings to be erected thereon shall be a union passenger station, and shall be available for use by all steam railways which now enter the city or may hereafter do so; the terms and conditions of such use shall be settled by the railway companies interested and approved of by the Board; and if a dispute shall arise between the companies as to terms the same shall be determined by order of the Board.

The amount to be expended on the building and its appurtenances shall be at least \$1,000,000; construction work shall be commenced within a year, and completed within three years, the Board reserving power to extend the term should it be necessary so to do. The plans are to be approved of by the Board; all disputes between the companies, or between the G.T.R. and the city with regard to plans, to be determined by the Board. The G.T.R. shall make provision in the present Union Station and yards for the passenger trains, and traffic of the James Bay Ry., as soon as necessary, until the new Union Station is completed and ready for use, on terms to be agreed upon. The value of the land is to be ascertained by arbitrators as at the date of the notice to expropriate, and 5% interest is to be paid from that date. In connection with the construction of the station the G.T.R. is authorized to carry across York St., York St. diversion, Bay St., Lorne St., and Esplanade St., such number of tracks as may be necessary, the plans of which are to be approved by the Board, which also may impose conditions. If the company closes Bay St., south of Front St., a bridge shall be erected between Front and Lake streets for foot passengers. The question of the closing of Station St., and the placing of tracks thereon was reserved.

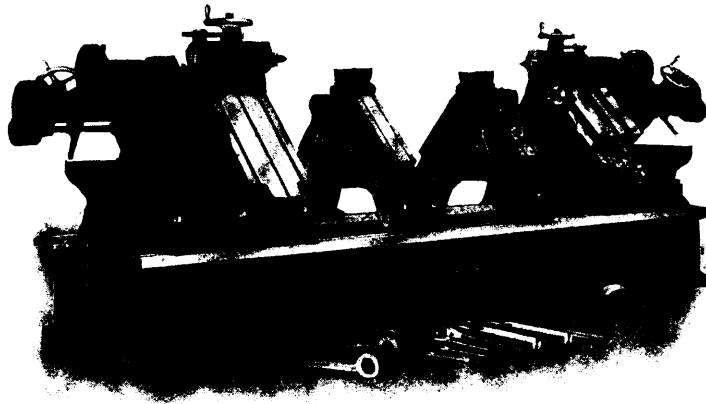
The Eckardt Co. appealed to the Privy Council and the sub-committee, appointed to consider the case, heard arguments and reserved judgment. A despatch from Ottawa, dated March 20, stated that the appeal had been dismissed.

The agreement between the city and the G.T.R. was formally ratified by the City Council, Mar. 13. It has been decided that the new station will be placed on the plot of ground on the south side of Front St., and lying between Bay and York streets, and set back from the street line a distance of 25 ft.

On the east side of Bay St., fronting on Front St., the Government is to erect a postal distributing station, and this building will be set back 25 ft., thus putting it on a line with the proposed new station.

Capt. John Malcolmson of the Welland House, St. Catharines, Ont., has been appointed chief steward of the R. & O. Co.'s str. Kingston.

BERTRAM QUARTERING MACHINE



With Outboard Support for Boring Spindles and Removable Rest for Turning Crank Pins.

This 90" Quartering Machine is designed for quartering and boring crank pin holes in locomotive driving wheels having right hand lead and wheels having left hand lead up to 85" in diameter on the tread. The boring spindles have 15" travel and two changes of power and rapid hand movement. The saddles are graduated and have angular adjustment for any length of stroke from 12" to 36". The axles are held on their centres and supported by adjustable V bearings, the wheels being clamped to the side of the frame. Each head is arranged to be driven by a 5 H.P. electric motor.

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

JAS. W. PYKE & COMPANY

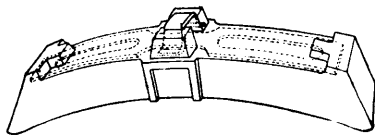
CANADIAN REPRESENTATIVES

FRIED. KRUPP, ESSEN, GERMANY.

Steel Rails.
Wrought Iron Steel-Tyred Disc Wheels
Locomotive and Car Wheel Tyres.
Axles, Crank Pins, Forgings, Etc.

FOR STEAM AND
ELECTRIC RAILWAYS.

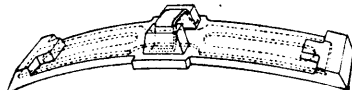
OFFICE: MERCHANTS BANK BUILDING **MONTREAL.**
205 ST. JAMES STREET,



New, 25 Pounds

STEEL BACK CAR BRAKE SHOE

Can be applied to any type of shoe.
The **Steel Back** doubles the life of the shoe.



Scrap, 5 Pounds

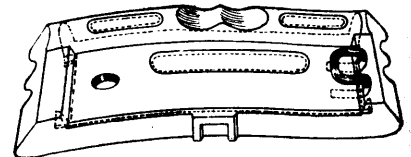
Steel Back Brake Shoe

ONLY SAFE SHOE FOR HIGH SPEED BRAKES

More dense and durable than common Cast Iron

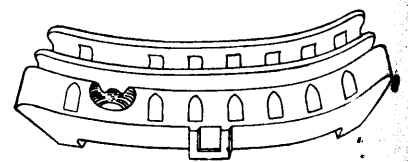
Perfecto Driver Brake Shoe

THE BEST SHOE FOR GENERAL LOCOMOTIVE SERVICE



Back View

PERFECTO DRIVER BRAKE SHOE



Contact Surface

AMERICAN BRAKE SHOE & FOUNDRY CO.

N. J. HOLDEN, Agent, 18 ST. PETER ST., MONTREAL

MISCELLANEOUS IRON AND
STEEL CASTINGS

Material of driving wheel centres.....	cast iron
Diameter and length of driving journals.....	8 in. dia. x 9 in. long
" of cylinders.....	19 ins.
Stroke of cylinders.....	24 ins.
Working pressure of boiler.....	180 lbs.
Number of tubes.....	2,339
Diameter of tubes.....	2 ins.
Length of tubes.....	12 ft. 4 ins.
Kind of packing.....	Westinghouse American
Truck wheels.....	cast iron, double plate
Weight of truck wheels.....	28 ins.
Capacity of tender, loaded.....	96,000 lbs.
Capacity of tank.....	4,000 imp. gallons
Style of tank.....	U shape
Coal capacity.....	8 tons
Diameter of wheel.....	4 wheel
Kind of wheel.....	33 in.
Diameter and length of journal.....	5 ins. dia. x 9 in. long, M.C.B.

The specifications of the other two locomotives are similar in every respect, except that the weight in working order on drivers will be 111,000 lbs., and the total weight, 137,500 lbs.

The locomotive of which an illustration is given on page 147, is probably the oldest in active service in Canada. It is used on the Carillon and Grenville Ry., a 5 ft. 6 in. gauge line operated during the season of navigation by the Ottawa River Navigation Co. between Carillon and Grenville, Que., 13 miles, to connect the upper and lower stretches of navigation on the Ottawa River. The locomotive was built at Birkenhead, Eng. for the G.T.R. in 1857, and has been but slightly altered in general appearance since then. J. E. Halsey, General Superintendent of the line at Carillon, has supplied the following description:—"The cylinders are inclined up 15 in. diameter by 20 in. stroke; cylinders are outside, with valves of the old-fashioned D pattern, inside smoke box, and so placed as to work on their edges, as they were with their backs facing each other. They are connected direct to the pulling link. The link on this engine does not lift; the pulling link is connected to the reversing shaft, and as the shaft reverses the link block moves up and down in link. She has a good steady valve gear, as the link is supported on both sides by hangers, and works on a permanent shaft. The boiler is 48 in. diameter at smoke box end, and there are 180 brass flues 1 1/2 in. diameter, 10 ft. 6 in. long; fire box 3 ft. 6 in. by 3 ft. 10 in. and 4 ft. high. The fire box and boiler are both made of Low Moor iron; flue sheet 1/2 in. thick; fire box sheets 3/4 in. thick. The rigid wheel base is 7 ft.; total length of engine 21 ft. The tender is 17 ft. 6 in.; total length of engine and tender 38 ft. 6 in. The diameter of driving wheels is 60 in.; truck of the bogie type, with 26 in. wheels. This engine is a good steamer, and very economical in fuel, and can go a steady speed of 30 miles an hour."

The Intercolonial Ry. has been awarded a gold medal and diploma for its display at the Louisiana Purchase Exposition last year.

The Supreme Court of Canada has rendered a decision on the questions submitted to it by the Dominion Government, as to the respective powers of the Dominion and the Provinces in the matter of legislation for the better observation of Sunday. The court held that it was not within the powers of the provinces to pass acts similar to the terms of the draft bill submitted, such bill being undistinguishable from that which the Imperial Privy Council had already pronounced against in the case of the Hamilton Street Ry. The Privy Council held that such an act as was brought before its notice was ultra vires of the Provincial Legislature. The court added that legislation having as its object the compulsory observance of Sunday, or the fixing of rules of conduct (with the usual sanctions) to be followed on that day, was legislation falling within the jurisdiction of the Dominion Parliament.

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

Gross earnings, working expenses, net profits, increases or decreases over 1903-04, from July 1, 1904:—

	Earnings.	Expenses.	Net Profits.	Increase or Decrease.
J'ly	\$4,398,833.95	\$2,949,181.81	\$1,449,652.14	\$131,125.02+
Aug.	4,474,237.64	2,946,307.21	1,527,930.43	93,827.91+
Sept.	4,220,876.03	2,952,068.47	1,268,807.56	66,541.75+
Oct.	4,743,961.93	3,177,848.02	1,566,113.91	87,913.10-
Nov.	4,751,970.43	3,082,395.69	1,669,574.74	191,593.56+
Dec.	4,562,142.45	2,899,473.62	1,662,668.83	81,523.57+
Jan.	3,252,501.93	2,829,833.46	422,668.47	65,016.44+

\$30,404,524.36 \$20,837,108.28 \$9,567,416.08 \$541,715.17+

Approximate earnings for Feb., \$3,022,000 against \$2,506,000, for Feb., 1904.

DULUTH, SOUTH SHORE AND ATLANTIC RY.—Gross earnings for Jan., \$199,901.29; net earnings, \$59,235.32 against \$178,356.22 gross and \$44,316.07 net for Jan., 1904. Net earnings for seven months ended Jan. 31, 1905, \$529,168.09, against \$508,089.73, for same period, 1903-04. Approximate earnings for Feb., \$183,736 against \$165,780 for Feb., 1904.

MINERAL RANGE RY.—Approximate earnings for Feb., \$52,241, against \$46,051 for Feb., 1904.

MINNEAPOLIS, ST. PAUL AND SAULT STE. MARIE RY.—Gross earnings for Jan., \$662,827.76; net earnings \$355,403.79 against \$307,423.97 gross and \$181,023.42 net for Jan., 1904. Net earnings for seven months ended Jan. 31, 1905, \$2,771,763.51 against \$2,308,651.67 for same period 1903-04. Approximate earnings for Feb., \$520,199, against \$402,007 for Feb., 1904.

Canadian Pacific Railway Land Sales.

	Acres.		Amount.	
	1904-05	1903-04	1904-05	1903-04
July	36,425.75	267,647.32	\$177,473.94	\$1,020,404.70
Aug.	15,669.90	263,339.45	88,735.88	1,217,529.81
Sept.	16,470.02	60,441.12	73,642.96	268,757.99
Oct.	23,792.84	15,950.07	104,843.47	236,611.59
Nov.	23,392.84	22,563.95	112,261.70	107,365.21
Dec.	32,196.59	30,146.00	142,583.40	125,676.00
Jan.	34,500.41	116,840.78	141,750.50	386,649.88
Feb.	27,503.56	14,729.69	116,278.76	73,428.94
	209,951.91	791,659.38	\$957,570.61	\$3,490,424.12

Grand Trunk Ry. Earnings, Expenses, &c.

The following statement of earnings, supplied from the Montreal office, includes the G.T. of Canada, the G.T. Western, and the Detroit, Grand Haven & Milwaukee Rys.

	1905.	1904.	Increase.	Decrease.
Jan.....	\$2,556,340	\$2,253,378	\$302,962	.....
Feb.....	2,163,683	1,649,525	514,158	.....
	\$4,720,023	\$3,902,903	\$817,120	.....

GRAND TRUNK RY. CO.

Revenue for Jan.:	1905.	1904.	Increase.	Decrease.
Gross receipts.....	\$412,000	\$355,300	\$56,700	.....
Working expenses.....	321,000	317,000	4,000	.....
Net profit.....	\$91,000	\$38,300	\$52,700	.....

GRAND TRUNK WESTERN RY. CO.

Revenue for Jan.:	1905.	1904.	Increase.	Decrease.
Gross receipts.....	£ 87,000	£ 83,500	£ 3,500	.....
Working exp'ses.....	77,400	77,000	400	.....
Net profit.....	£ 9,600	£ 6,500	£ 3,100	.....

DETROIT, GRAND HAVEN & MILWAUKEE RY. CO.

Revenue for Jan.:	1905.	1904.	Increase.	Decrease.
Gross receipts.....	£26,100	£24,100	£2,000	.....
Working expenses.....	18,000	16,600	1,400	.....
Net profit.....	£ 8,100	£ 7,500	£ 600	.....

TRAFFIC RECEIPTS OF THE SYSTEM.

The following figures relate to the individual lines, and are made out in sterling:

	Aggregate from Jan. 1 to Feb. 28:		Increase.	Decrease.
	1905.	1904.		
Grand Trunk.....	£762,699	£616,276	£146,423	.....
G. T. Western.....	162,276	145,792	16,484	.....
D. G. H. & M.....	44,894	39,899	4,995	.....
Total.....	£969,869	£801,967	£167,902	.....

The C.P.R. and the G.T.R. have asked Toronto wholesale merchants to confer together and agree upon an arrangement whereby they would bring all their shipments of goods from Great Britain by way of one or other of the systems, with a view of benefiting the steamer lines trading to Canada.

Canadian Northern Ry. Construction.

Winnipeg Terminals.—The Manitoba Legislature last session passed an act guaranteeing bonds to the extent of \$1,000,000 to provide for the construction of adequate terminals in Winnipeg, Man. The present terminal facilities in Winnipeg are those formerly used by the old Northern Pacific and Manitoba Ry., and have been regarded as being only temporary, pending the completion of arrangements for the construction of a new station and yards. In connection with its plans the company has secured Fort Garry Park, and has arranged with the city council for the closing of Broadway from Main St. to the Red River. The probability is that the new station will be erected on Broadway at Main St., and that there will be an hotel in connection with it. The plans involve the construction of a double-track bridge over the Assiniboine River, and a line to connect the terminals with the branch to Oak Point. The package freight sheds will remain as at present, at Water St., the larger freight being handled at the Fort Rouge yards. The plans, however, are not yet finally completed, and nothing definite can be said as to when construction will be proceeded with, though it is likely to be started in the spring.

Branch Line Construction.—An act was passed at the recent session of the Manitoba Legislature guaranteeing the company's bonds at the rate of \$10,000 a mile for the construction of 180 miles of branch lines in the province as follows:—

From Carberry to Brandon, thence generally westerly to the westerly boundary of the province, about 100 miles.

From near Winnipeg generally easterly for 25 miles.

From some point on the last mentioned line northerly to Bird's Hill, about 7 miles.

From between Winnipeg and Oak Point, crossing the Assiniboine River and connecting with the company's line between St. Charles and Winnipeg, about seven miles.

From the present terminus of the line running east from Emerson easterly to connect with the main line from Port Arthur to Winnipeg, between Woodridge and Sprague, about 50 miles.

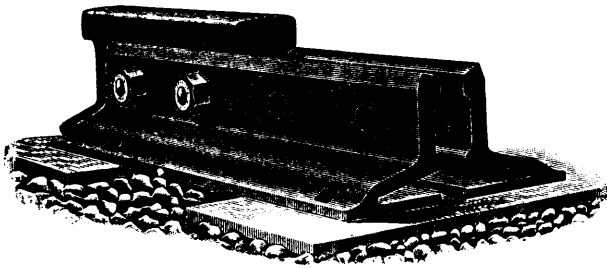
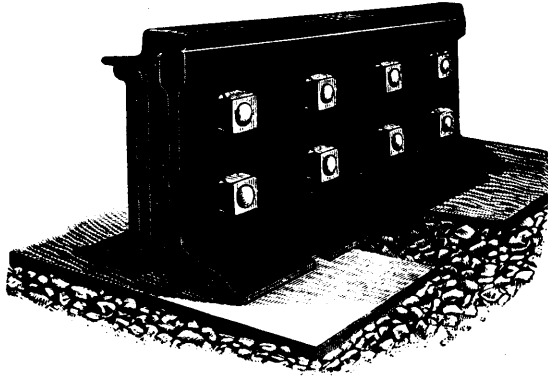
Oak Point Branch.—This line at present has its southern terminus on the C.P.R. main line about 3 miles west of Main St., Winnipeg. It is intended to extend the line south, across the Assiniboine River, and to connect it with the old Northern Pacific Ry. line to Portage la Prairie, which is now part of the C.N.R. main line.

Grand View Extension.—The first C.N.R. train crossed the North Saskatchewan River, Feb. 17, and tracklaying is being pushed towards Battleford.

Prince Albert Extension.—The Board of Railway Commissioners has approved of the plans for the construction of a bridge across the South Saskatchewan River. The point of crossing is in sec. 5, tp. 47a, range 25, west of the second principal meridian, about 15 miles east of Prince Albert. The bridge will consist of six steel deck spans, each 180 ft. long, with about 600 ft. of trestle approaches. The piers will be of concrete, faced with steel plate. The height from low water to the top of the piers will be 48 ft.; and to base of rail, 85 ft. The contract for the erection of the piers and abutments has been let to J. Gunn & Sons, Winnipeg, Man.

New Branch Lines in Alberta and Assiniboia.—The C. N. Ry. is applying at the current session of the Dominion Parliament for an act authorizing the construction of the following railways: From Regina, Assa., to the Red Deer River, Alta., with a branch west of the Saskatchewan River to tp. 45, range 4, west of the third meridian; from Regina to Humboldt, thence via the Carrot River to

Railroad Essentials.



The day has passed when men of finance are willing to place their money into bad material in railroad construction only to be compelled to replace it by renewals or reconstruction after very little use. Many of the best and most successful steam and electric railroads use the rail joints of the Continuous patent type for standard track work, insulated joints, step joints, and electric bonding joints for the reason that experience has proven it to be the best appliance of its kind ever put upon the market, as evidenced by the fact that it is used in all parts of the world on over 20,000 miles of track.

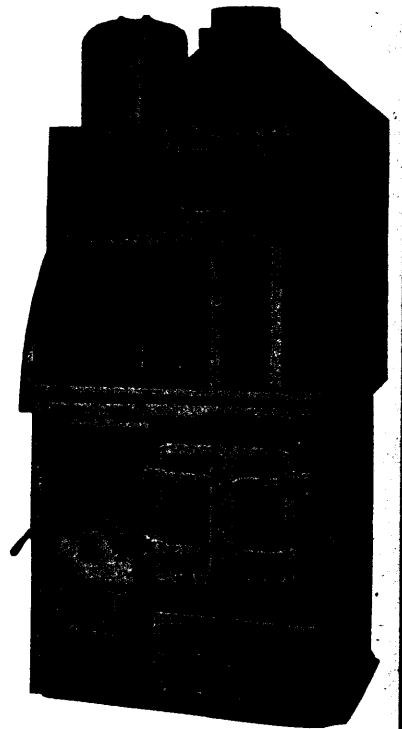
MADE BY

The Continuous Rail Joint Company of Canada Limited

WM. E. CLARK, Manager.

216 Board of Trade Bldg., - MONTREAL, CANADA

Medals awarded at Paris and Buffalo Expositions.



STEEL RANGES

FOR
RAILWAY

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

Atlantic Division.—The whole of the main line having been relaid with heavy steel rails, it is proposed to commence placing 72 lb. steel on the branch lines, and a commencement will be made by relaying the Carleton branch from Bay Shore yard to Sand Point, St. John, N.B. A number of new steel bridges will be erected to complete the rebuilding of those on the main line. Some small changes will be made in the way of reducing gradients and eliminating curvature; new sidings will be constructed at various points, and additional ballast will be put on the line, particularly on the Moosehead, Brownville and St. John sections.

Eastern Division Improvements.—A press report states that it is proposed to construct a new piece of line to follow the valley of the St. Francis River, passing about a mile east of East Angus, going towards the north up to the township of Bury and passing through Gould and Stornoway before reaching Lake Megantic. This would give a better line than is now operated over between Lennoxville and Megantic, Que. We are advised that the report is premature.

Place Viger Yards Extension.—A settlement has been arrived at between the C.P.R. and the owners of some of the properties affected by the proposed extension of the Place Viger yards, Montreal, and the matter is again being considered by the city council.

Northern Colonization Ry.—A further extension of this line is in contemplation, the proposal being to construct from the present terminal at Nominique to Rapide de l'Original, Que., about 35 miles.

Ottawa, Northern and Western Ry.—The company's application for an extension of five years for the construction of the projected lines from Shawville towards Pembroke and other points on the upper Ottawa River, has been approved by the Railway Committee of the House of Commons.

A New Don Valley Line.—The C.P.R. has filed plans showing a line along the Don valley in Toronto, for the purpose of serving the industries located along the river. The Board of Control has decided to oppose the construction of such a line, it being considered that if undertaken at all it should be owned by the city.

Toronto-Sudbury Line.—The section of this line now under construction is from Romford in the Transcontinental line, southerly to Byng Inlet, about 60 miles, and considerable progress is being made. As there is a lot of rock work to be done, blasting operations have been carried on all winter. There will be a number of bridges on the line, the largest of which will be at the crossing of the French River. The maximum gradient is $\frac{1}{8}$ of 1%, or about 16 ft. to the mile. The contractors are Foley Bros.

Guelph and Goderich Ry.—The grading for this line from Guelph to Goderich, Ont., 80 miles, is reported to be practically completed. Tracklaying will be commenced early in the spring.

Fort William to Kaministikwia River.—We are advised that although the question of constructing a line from Fort William to the Kaministikwia River near the Kakabeka Falls has been discussed, no decision has been

reached as to whether or not anything will be done.

Otterburn to Stuartburn.—Application is being made at the current session of the Dominion Parliament for an act extending the time for the construction of a line from Otterburn on the Emerson branch, south-easterly to Stuartburn.

Winnipeg Station.—The office buildings at the new station were expected to be completed by the end of March, and that the staffs of the various departments would take possession immediately the whole building was completed.

Manitoba Branches.—The C.P.R. is applying at the current session of the Dominion Parliament for an act extending for five years the time within which it may complete the construction of the branch lines authorized by its act of 1900. These include a number of branch lines in Manitoba, which have been partially constructed. A deputation from Lauder, Man., attended before the Railway Committee of the House of Commons and opposed the granting of any further extension of the branch from Napinka.

Reston-Wolseley Line.—In reference to the proposed branch line from Reston, Man., to Wolseley, Assa., we are informed that it has not been definitely decided whether it will be built this year or not.

Darlingford to Kaleida.—A line from Darlingford, on the Pembina Mountain branch, to Kaleida, Man., about 6 miles southwest, will be constructed during the year. A contract for the grading has been let to Jackson and McMenemy, Winnipeg.

Brookdale to Varcoe.—A contract has been let for the construction of an extension of the Brookdale branch, which extends from McGregor to Brookdale, Man., 36 miles, to Varcoe on the Rapid City section. The extension is 18 miles in length. J. D. McArthur, Winnipeg, Man., is the contractor.

Pheasant Hills Branch.—The extension of this branch from Lipton to Strassburg, Assa., 56 miles, is under construction, the contractors being Foley Bros., Larson & Co., St. Paul, Minn.

Moose Jaw-Swift Current Diversion.—During the past year the company completed the construction of a diversion on this section, about 65 miles of new track having been laid. The old line will be abandoned.

Columbia and Western Ry.—The House of Commons has given a second reading to the bill providing for an extension of time for the construction of the line. Of the lines projected there has been constructed a line from Nelson to Midway, B.C., 126.7 miles, and some branch lines. The C.P.R., which operates the line under lease, proposes to extend the line from Midway to Penticton.

Kootenay Central Ry.—The surveys for the location of this projected railway have not, we are advised, been completed, and it is impossible at present to state whether there will be any construction this year on the line, which is to extend from Fort Steele to Golden, B.C.

New Westminster to Vancouver.—The C.P.R. is applying at the current session of the Dominion Parliament for an act extending the time for the construction of its projected branch from New Westminster to Vancouver, B.C.

The Temiskaming and Northern Ontario Ry. issued time table No. 1, effective Mar. 5. It shows passenger trains leaving North Bay (C.P.R. station), Mondays, Wednesdays, and Fridays, and New Liskeard, Tuesdays, Thursdays, and Saturdays; mixed trains leave North Bay Tuesdays, Thursdays, and Saturdays, returning Mondays, Wednesdays, and Fridays.

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

Notre Dame de Grace Yards.—The Board of Railway Commissioners has authorized the company to expropriate some land owned by the corporations of Ste. Cunegonde and St. Henri, for further yard extensions. We are advised the plans are not yet matured, and it has not been decided what work will be undertaken during the coming year. Press reports, however, state that the work will involve the expenditure of \$1,000,000, and that the yards when completed will have a capacity of 7,500 cars, with round-houses, etc.

The Mimico Yards.—The plans of the new yards and terminals at Mimico, Ont., are not completed, and we are advised that nothing further will be done until after the spring has opened up. The purpose is to make the Mimico yards the point for handling the freight trains for places west of Toronto, and to use the East Toronto yards for the freight trains for eastern points, retaining the Toronto yards for the receipt, delivery and handling the freight to and from the city only.

Niagara-Sarnia Double-Track Work.—With the exception of a portion of the second track between Lynden and Hamilton, Ont., the work taken in hand last year on this section of the line has been completed. A contract has been let to Ross and McRae, who have been engaged on similar work on other sections of the line, to construct a second track on the section between Kingcourt Jct. and Komoka, Ont., 27 miles, the work to be completed during the summer. The Company's road department will, as usual, lay ties and rails, and do the ballasting, etc.

Stratford Shops.—The additions to the locomotive repair shops at Stratford, Ont., have been completed.

London Improvements.—The new round-house at London, Ont., has been taken over from the contractors and placed in use. The coal chutes at the east end are to be enlarged so as to coal double the number of locomotives which its present capacity will allow.

Grand Trunk Western Second Track.—The second track work between Port Huron, Mich. and Chicago, Ill., 335 miles, has been completed, with the exception of about $\frac{1}{2}$ miles at Valparaiso, Ind. The gradients on the line have been reduced from $\frac{1}{4}$ to $\frac{1}{8}$ of 1% eastbound, and to $\frac{1}{8}$ of 1% westbound, and all the temporary bridges, etc., have been replaced by permanent structures.

Battle Creek Improvements.—We are advised that the press reports that the G.T.R. proposed to spend in the neighborhood of \$1,500,000 upon locomotive and car shops at Battle Creek, Mich., are altogether incorrect. It is intended, however, to build a new station there in the near future, and land has been purchased for the erection of shops. The plans and specifications for these works have not been prepared, and until this is done it is impossible to state what the improvements will cost.

The Railway Committee of the House of Commons has thrown out the bill which proposed to provide for the better protection of railway crossings in cities, towns and villages. F. H. Chrysler, K.C., who appeared before the committee on behalf of the railway companies, said the railway Act covered every imaginable case, and the bill was unnecessary and mischievous. The C.P.R. had 805 crossings, and the G.T.R., 783, so that it could be seen that there must be about 2,000 crossings in Canada, and if each had to be protected, as the bill proposed, it would mean a very large expenditure, as the gates and watchman at each crossing cost about \$1,000 a year.

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Grand Trunk Pacific Railway.

Survey parties are in the field over the whole country between Moncton, N.B., and Winnipeg, Man., described as the Eastern Division of the Transcontinental Ry. The projected route is divided into six districts, the headquarters and division engineers in charge being:—Fredericton, G. C. Dunn; Quebec, A. E. Doucet; Ottawa, A. N. Molesworth; New Liskeard, Ont., appointment not made; Nipigon, Ont., C. E. Perry (acting); Winnipeg, Man., Major Hodgins. It is not likely that any tenders will be asked for until the fall so that work may be gone on with during the winter. Construction, according to Sec. 10, Chap. 24, 1904, must be commenced simultaneously at Moncton, N.B.; Quebec; at the point of junction of the Eastern Division with the branch southerly to a point at, or near, either North Bay or Nipissing, Ont., and at Winnipeg, and shall be carried on westerly from Moncton, eastward and westward from Quebec, and from the point of junction with the North Bay branch, and eastward from Winnipeg, in order that the whole line between Moncton and Winnipeg shall be completed as nearly as practicable at the same time. The specifications for construction are being prepared, a considerable portion of the work being completed. H. A. Wood, Assistant Chief Engineer G.T.P. Ry., is acting with the commissioner's engineers in arranging the specifications, etc., in conformity with the provisions of section seven of the agreement between the Government and the G.T.P. Ry., confirmed by Chap. 71 of the Statutes of 1903. This section sets forth that in order to protect the interests of the lessees of the Eastern Division, it is agreed that the specifications be submitted to, and approved of by, the G.T.P. Ry. before the commencement of work, and that the work shall be done according to the specifications, and shall be subject to the supervision and inspection of the chief engineer appointed by the Government and the chief engineer of the company. In the case of differences between these engineers an arbitrator is to be chosen by them, or appointed by the Chief Justice of the Supreme Court, if the engineers cannot agree on one.

In connection with the surveys upon the eastern section of the Grand Trunk Pacific Ry. between Moncton, N.B., and Winnipeg, Man., which is to be constructed by the Transcontinental Railway Commissioners, the annual report of the Department of Public Works contains the following paragraph:—“The despatching of so many engineering parties at the same time as the surveying work of the Transcontinental Ry. was being commenced has given employment to a large number of Canadian engineers. It has been found on the formation of parties that the engineering profession in Canada was fully equal to the demand made upon it for the explorations and studies necessitated by the extensive surveys for those two great works. All the engineering staff has been supplied by Canadian intelligence and professional training, and there is no doubt that the profession in Canada is fully able to render a good account of itself in the performance of the arduous duties connected with the examinations now under way.”

Answering questions in the House of Commons the Minister of Railways stated recently that no accurate information was available as to the progress of surveys. The Commission was directed to present an annual report, and, although interim reports had probably been sent in, no final reports had been presented to the department. The survey parties on the whole of the route from Moncton to Winnipeg are in the field. Reports of the engineers between Quebec and

Moncton state that a route has been found round the shoulder of the State of Maine giving a grade of 4-10 of 1% going east, and 6-10 of 1% going west.

A return made to the House of Commons shows that there are 30 persons on the staff of the Transcontinental Railway Commission, exclusive of the Commissioners:—Their salaries are: H. D. Lumsden, \$500 a month; M. J. Butler, \$375; A. W. H. Sampson, \$125; C. J. Jones, \$80; Fred Dillon, \$80; A. L. Ogilvie, \$150; R. L. Landry, \$70; Alice Seed, \$25; R. M. J. McGill, \$125; Jos. Clement, \$100; R. H. Lang, \$60; H. A. Collins, \$85; John Meghorn, \$75; R. Ronan, \$70; D. Lefebvre, \$20; P. E. Ryan, \$208.33; R. F. Omacke, \$150; J. H. Roy, \$100; O. P. Schreiber, \$60; F. McCourt, \$70; P. Wright, \$30; F. W. White, \$100; G. O'Reilly, \$15 a week; A. T. Gow, \$150 a month; W. R. Saults, \$75; R. Lagimodiere, \$60; A. Beaudry, \$70; C. Heidmann, \$80; R. Larocque, \$70; J. O'Malley, \$50. No allowances are made except for actual travelling expenses. The engineers in charge of parties are appointed by the Board upon the recommendation of the Chief Engineer. The engineering parties were made up in the first place by the Board on the recommendation of the chief and district engineers, and changes in same are made upon the recommendation of the chief of parties and the district engineers and approved of by the chief engineer. The engineers in charge of parties report to the district engineers, who report to the Chief Engineer, and he reports to the Board. Interim reports are received from time to time from the parties in the field and district engineers.

The plans submitted to the Department of Railways by the G.T. Pacific Ry. provide for large terminals at both Port Arthur and Fort William, Ont., and on the Pacific coast. These plans, it has been explained, were deposited to secure available sites from which the final sites would be selected. The Minister of Railways, replying to a question in the House of Commons recently, stated that certain plans had been deposited, but they were not available. The surveys are being prosecuted from Winnipeg to the coast by a large number of parties, and a report from A. S. Going, who has been in the mountains since August, 1904, states that nine passes are available for a line in northern B.C. These are Yellowhead, Peace River, Pine River, Smoky and North Smoky, Porcupine, two in the Red Deer district, and the Wapti pass. F. M. Morse, Vice-President and General Manager, and other officials are expected to return to Montreal, April 1, from a trip to Victoria and intermediate points. At Port Arthur he stated that construction would be commenced in the spring at Winnipeg, as well as on the line from Lake Superior northerly. The money for the construction of the line, he said, had been raised in a lump sum, so that construction would not be delayed no matter what economic conditions the market may have in store. So far as the Lake terminals are concerned, the Government has approved of the expropriation of 1,600 acres of the Indian Reserve at Fort William, Ont., for this purpose, but has not taken any action in regard to the proposed terminal at Port Arthur.

The visit of the Vice-President to the west was largely for the purpose of carrying on negotiations with the B.C. Government with the view of obtaining a subsidy in aid of the construction of the 480 miles of line to be constructed in that province. Reports state that the Provincial Government was asked to set aside approximately 7,000,000 acres of land as a subsidy, and that the proposition is not viewed with much favor by the Cabinet. Speaking at Victoria, Mar. 10, before leaving for the east, Mr. Morse stated that it had been decided to construct the line from east to west as being the more eco-

nomical plan. Should a start be made on the Pacific coast the cost would be much greater and the company could not change its policy without assistance from the Provincial Government either in land or cash. The financial arrangements for the construction of the line from Winnipeg to the Rocky Mountains had been completed, and it was important that the company should arrange for the balance of the line while the money market was in its present condition. No portion of the road would be suspended while others were being constructed; every section must bring its returns as soon as ready for traffic. The line would have connection with Vancouver Island and the southern portion of the province.

TRANSPORTATION APPOINTMENTS.

Canadian Northern Ry.—H. J. Cowie has been appointed European Freight Agent with offices at Liverpool, Eng.

Canadian Pacific Ry.—W. M. Kirkpatrick, heretofore Assistant General Freight Agent at Vancouver, B.C., is acting Export Agent at Montreal, on account of the illness of A. E. Cook.

W. T. Robson has been appointed Advertising Agent, vice C. A. Bramble, resigned. Office, Montreal.

F. O'Hara, heretofore bridge and building foreman at Sherbrooke, Que., has been appointed Bridge and Building Master at Ottawa, succeeding E. Best.

W. McIlroy, heretofore C.P.R. ticket and passenger agent and Dominion Ex. agent at Galt, Ont., has been appointed C.P.R. town ticket agent at Peterboro, Ont., succeeding T. E. Boddy, resigned.

J. W. Leonard, Manager of Construction Toronto and Sudbury branch, and President Guelph and Goderich Ry., is about to remove his office from the Union Station to 118 King St. West, Toronto.

F. S. Darling, Division Engineer of Construction, is about to be removed from Montreal to Toronto, where his office will be at 118 King St. West.

W. Malcolm has been appointed C.P.R. ticket and passenger agent and Dominion Ex. agent at Galt, Ont., succeeding W. McIlroy, his former chief, transferred to Peterboro, Ont.

D. G. McKay, heretofore station master, has been appointed General Yard Master at Winnipeg, succeeding F. G. Arnold, transferred.

W. R. Hogarth has been appointed station master at Winnipeg, succeeding D. G. McKay, promoted.

W. C. Bowles, heretofore Assistant General Freight Agent, Western Division, has been appointed Assistant General Freight Agent, Pacific Division, succeeding W. M. Kirkpatrick, promoted. Office, Vancouver, B.C.

G. H. Smith, heretofore chief clerk in the Freight Traffic Manager's office, Montreal, has been appointed Assistant General Freight Agent, Western Division, succeeding W. C. Bowles. Office, Calgary, Alta.

The operation of the Esquimalt and Nanaimo Ry. is expected to be taken over by the C.P.R. April 1, and will be in charge of J. Goodfellow, heretofore Trainmaster C.P.R. at Vancouver, with the title of Assistant Superintendent. Office, Victoria, B.C.

Grand Trunk Pacific Ry.—H. A. Wood has been appointed Assistant Chief Engineer, and it is stated that his duties will be to act in conjunction with the Transcontinental Railway Commission for the eastern division from Moncton, N.B., to Winnipeg, Man.; and in connection with the branch line to North Bay, the Lake Superior branch and any other branch lines from the Eastern Division. J. R. Stephens, who has been Assistant Chief Engineer for some time past, will,

it is said, have charge of the line from Winnipeg west. The company has engineering offices at North Bay, Ont.; Winnipeg, Man., and Edmonton, Alta.

Grand Trunk Ry.—F. L. C. Bond, heretofore Acting Resident Engineer, has been appointed Resident Engineer, Eastern Division. Office, Montreal.

J. R. Melville, heretofore excursion clerk,

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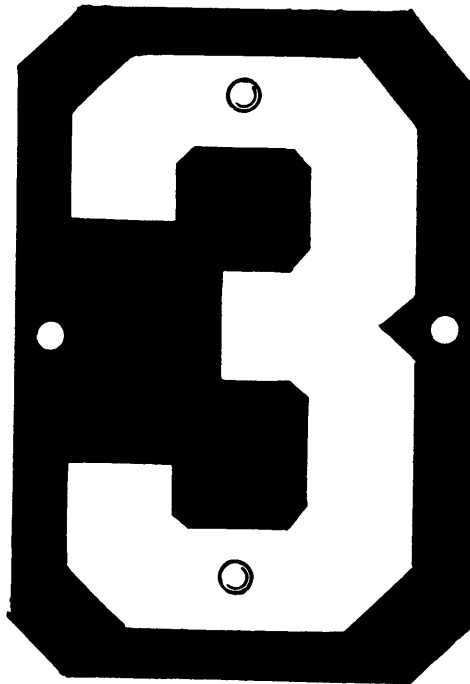
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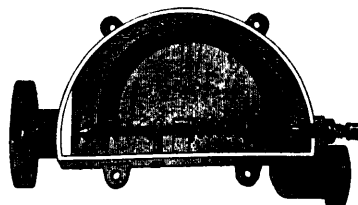
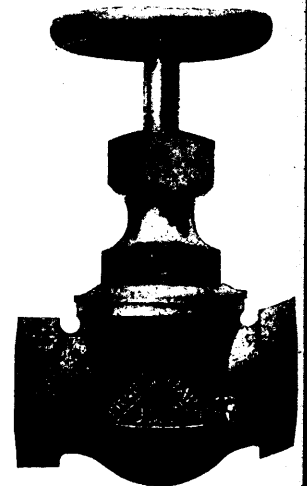
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has been appointed chief clerk in the General Passenger and Ticket Agent's office, Montreal, succeeding G. A. Morency, resigned on account of ill-health.

C. W. Johnston, heretofore Travelling Passenger agent, Montreal, has been appointed excursion clerk, succeeding J. R. Melville, promoted.

A. E. Duff, heretofore agent at St. Lambert, Que., has been appointed Travelling Passenger Agent, succeeding C. W. Johnston, promoted. Headquarters, Montreal.

J. J. Connolly has been appointed Chief Train Dispatcher 2nd district west of Richmond, Que., and 4th and 5th districts, Eastern Division.

The following agents have been appointed: St. Catharines, Ont., G. D. Baxter; Thorold, Ont., S. J. Roy; Buffalo Freight, N.Y., J. Gray.

London Street Ry.—H. Smith, heretofore Assistant Superintendent, has been appointed Claims Agent.

E. Whittaker, of Toronto, has been appointed Assistant Superintendent, succeeding H. Smith, promoted.

New York Central and Hudson River Rd. and Fifth Vice-Presidents have been abolished by these titles will be called Vice-Presidents, and whenever it is necessary to distinguish one from the other the name of the department will be added to the title. N. Guilford has been appointed a Vice-President, bringing the number up to six.

Niagara Navigation Co.—W. E. Tibbitts has been appointed General Freight and Baggage Agent, and not General Baggage Agent, as stated in our last issue.

Quebec Central Ry.—Thos. Lindley, heretofore Secretary, has been appointed a director, succeeding the late Jos. Price, and is succeeded as Secretary by C. D. Brassey. Offices, London, Eng.

Richelieu and Ontario Navigation Co.—M. Cussen, heretofore Auditor of Passenger Receipts, has been appointed Auditor of Freight and Passenger Receipts. The office of Auditor of Freight Receipts has been abolished.

The following changes in territorial assignments have been made:—H. Foster Chaffee, Western Passenger Agent. Headquarters, Toronto. In charge of passenger business in the cities of Toronto and Hamilton, and the province of Ontario west and north thereof, also in the state of Pennsylvania west of but not including the line from Cleveland to Pittsburg, also states of Ohio, Michigan, Indiana and Illinois. W. F. Cloney, Travelling Passenger Agent. Headquarters, Niagara Falls, N.Y. Territory, United States, west, north-west and southwest of Western Passenger Agent's Territory, also the cities of Cleveland and Pittsburg, and points between Buffalo and these cities. T. Glynn, Travelling Passenger Agent in same territory as Mr. Chaffee, to whom he will report. J. W. Canvin, Travelling Passenger Agent. Headquarters, Alexandria Bay, N.Y. Territory, state of New York east of Rochester, the New England states and cities of Philadelphia, Baltimore and Washington.

R. A. Carter has been appointed Division Freight and Passenger Agent, in charge of all freight traffic west of Montreal, and in charge of passenger business on company's line between Montreal and Toronto, but not including those cities. Office, Toronto.

H. Dubois has been appointed Travelling Freight and Passenger Agent for Montreal and east on company's line. Headquarters, Montreal.

Temiskaming and Northern Ontario Ry.—In March, E. Gurney, M. J. O'Brien, F. E. Leonard and B. W. Folger, resigned their positions as members of the Commission. The Chairman, R. Jaffray, resigned in Feb-

ruary. The Ontario Government has appointed C. B. Smith, C.E., Toronto; D. Murphy, Ottawa, and J. L. Englehart, Petrolia, Ont., members of the Commission. Premier Whitney subsequently stated that no further appointments would be made to the Commission. C. B. Smith has been elected Chairman of the Commission, and it is stated that the Government will ask for an amendment to the act constituting the Commission in order that the honorarium of the Chairman might be made \$3,000 a year, and that the two other Commissioners will receive the same honorarium as their predecessors, \$1,000 a year each. The new Commissioners, at their first meeting, decided not to make any changes in the staff at present.

J. H. Black, who was first appointed General Freight and Passenger Agent, was subsequently appointed Superintendent and Traffic Manager by the Commissioners, who have since resigned.

The officials having charge of the operations of the line are: Superintendent and Traffic Manager, J. H. Black; Trainmaster, Jno. Judge; Chief Dispatcher, D. H. Campbell. Offices, North Bay.

MAINLY ABOUT PEOPLE.

E. A. James, Manager Canadian Northern Ry., has returned to Winnipeg after a trip to Mexico.

D. L. Lockerby, who died in Montreal Feb. 26, was a director of the Midland Ry. of Nova Scotia.

E. Egg, brother of W. F. Egg, formerly C.P.R. city ticket agent, Montreal, died there Mar. 3, aged 32.

J. W. Aston, of Collingwood, has been appointed Chief Engineer of the Toronto Ferry Co.'s ferry boats.

H. Cleveland, Chief Engineer, Orford Mountain Ry., dropped dead at the C.P.R. station, Sherbrooke, Que., Feb. 24.

Mrs. McPeake, wife of the Superintendent of the New Brunswick Southern Ry., died at St. John, N.B., Feb. 23.

A. C. Burgess, who died at Lansdowne, Ont., recently, for some years conducted a number of refreshment rooms on the C.P.R.

W. F. Egg, ex-city passenger agent, C.P.R., at Montreal, left there Mar. 9, to spend a few weeks at Mount Clemens, Mich.

G. R. Harris, who died at Brookline, Mass., Mar. 13, was a director of the C.P.R., having been first elected to the Board in 1885.

Senator G. T. Fulford is G.T.R. city ticket agent at Brockville, Ont., and not C.P.R. city ticket agent as stated in our last issue.

G. I. Gwilliam, of the Cumberland Ry. and Coal Co., was married at Springhill, N.S., Feb. 23, to Miss B. Day, of Lockport, N.S.

E. F. Phillips, of the Eugene F. Phillips Electrical Works, Montreal, died recently at Phillipsdale, R.I., where he had a factory.

Miss Hardisty, who died in Montreal, Feb. 26, was a sister of G. W. Hardisty, Passenger Agent at Montreal for the Northern Pacific Ry.

S. Fraser, who died at Amherstburg, Ont., Feb. 26, aged 70, was in early life a contractor on the construction of the Great Western Ry.

W. Robinson, Superintendent Niagara, St. Catharines and Toronto Ry., had his right arm broken recently by the brake handle of a snow plow.

Alex. Mackenzie, who died in Marine City, Mich., recently, was a civil engineer, and for some years was engaged in construction work for the C.P.R.

H. J. Beemer, contractor, formerly of Montreal and Ottawa, is now mining in Arizona,

and is building a railway from Congress Junction to the mine.

W. C. McGreevy, an engineer employed by the Canadian Northern Ry. in connection with its land grant, died suddenly at Winnipeg, Man., Mar. 12.

W. Luxton was presented recently with an address and a purse of money on leaving Sydney, N.S., where he had been Superintendent of the Cape Breton Electric Co.

Lord Strathcona, who arrived at Montreal from London, Eng., recently, has contributed \$1,000 towards the building fund of the Royal Jubilee Hospital, Rat Portage, Ont.

D. A. Story, Division Freight Agent, Intercolonial Ry., Halifax, N.S., has been off duty for some time owing to illness, but was reported on Mar. 8 to be recovering.

Jno. Hall, formerly G.T.R. locomotive foreman at Hamilton, Ont., is recovering from the effects of injuries sustained from a fall down the cellar steps in his house.

G. A. Morency, who recently resigned his position as chief clerk of the G.T.R. General Passenger Agent's office, on account of ill-health, is staying at Saranac Lake, N.Y.

Hugh Sutherland, Executive agent Canadian Northern Ry., is interested in a proposal to take a supply of water to Winnipeg, from a point on the Winnipeg River, 54 miles distant.

A. W. Smithers, Vice-President G.T.R., has been elected Chairman of the English Association of American Bond and Shareholders, London, Eng., succeeding the late Jos. Price.

H. K. Seltzer, who had charge of the construction of the Fraser River Bridge at New Westminster, B.C., for Waddell and Hedrick, Kansas City, Mo., the designers, has returned to the U.S.

H. N. Frith was presented with some jewellery by his colleagues, Mar. 1, on his retiring from the position of book-keeper for the British Columbia Electric Ry., at New Westminster, B.C.

W. Mackenzie, President, and D. B. Hanna, Third Vice-President Canadian Northern Ry., have returned to Toronto after a trip to London, Eng., in the financial interests of the company.

It is announced that a marriage will shortly take place between B. J. Clergue, of the Lake Superior Corporation, Sault Ste. Marie, Ont., and Miss M. M. Roscoe, of Rickmansworth, Hertfordshire, Eng.

Foley Bros., who are carrying out large contracts on the C.P.R., have sent a donation of \$40,000 towards the building fund of the proposed new Roman Catholic Cathedral at St. Paul, Minn.

J. S. Reynolds, of the C.P.R. city passenger office, Quebec, was presented recently with a travelling case by Quebec friends, on leaving for Boston, Mass., where he will also be in the C.P.R. service.

W. M. Kirkpatrick was presented with a travelling case by the C.P.R. office staff, on leaving Vancouver, B.C., for Montreal, recently, to take charge of the company's export freight department.

Col. Burke, U.S. consul at St. Thomas, Ont., who died there Mar. 15, was at one time engaged as an operator on the Montreal Telegraph Co., at Montreal, and later with the Western Union Telegraph Co.

A. Bruce, who died at Stratford, Ont., recently, was roadmaster on the G.T.R. at Island Pond, Vt., from 1874 to 1879, and held a similar position on the line between Toronto and Sarnia, Ont., from 1879 to 1902.

A. Miscampbell, who died in Toronto Mar. 25, aged 57, was at one time Manager of the Northern Navigation Co., and subsequently of the Algoma Steamship Co. For some

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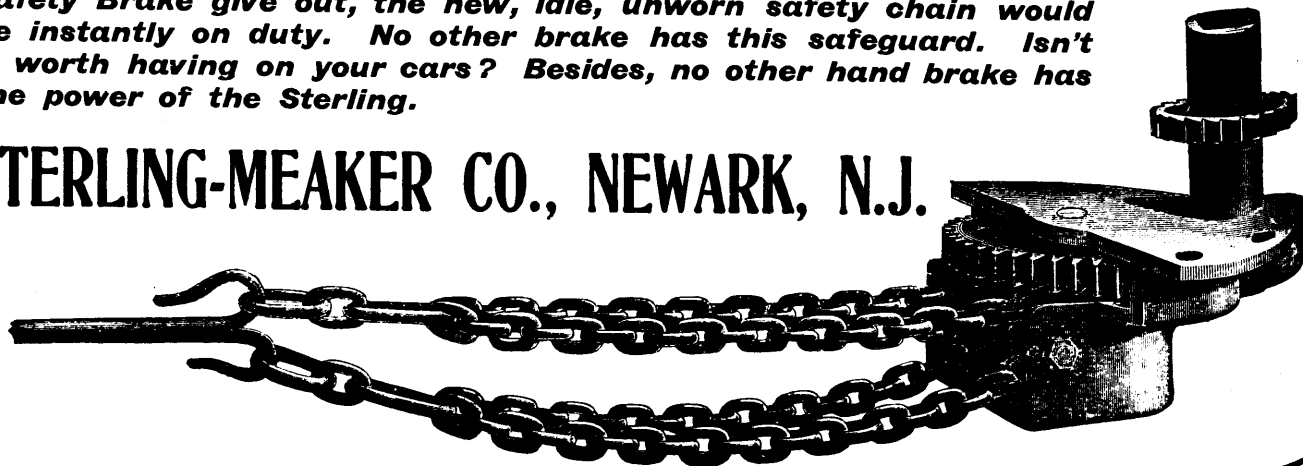
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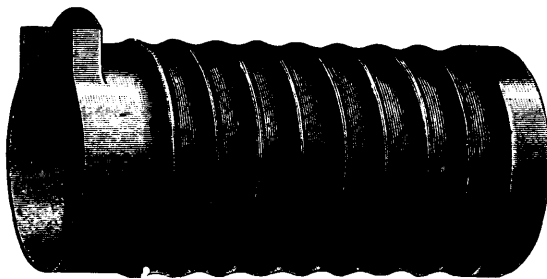
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years he was a member of the Ontario Legislature.

The press reports recently current that E. J. Chamberlin, General Manager, and J. W. Smith, General Assistant, Canada Atlantic Ry., had resigned to engage in construction work on the G. T. Pacific Ry. are, we are informed, untrue.

P. S. Archibald, C.E., Moncton, N.B., has been appointed a referee by the Exchequer Court of Canada, to report on certain matters of difference between the Quebec Southern and South Shore railway companies, and the Bank of Hochelaga.

R. Watchorn, recently Inspector of Immigration, at Montreal, who has been appointed to a similar position at New York, was entertained recently at a dinner by the railway and steamship passenger and freight agents, in connection with his promotion.

W. Whyte, Second Vice-President C.P.R., and Mrs. Whyte, arrived in the City of Mexico, Feb. 28, on a holiday tour, accompanied by the Lieutenant-Governor of Manitoba, Sir Daniel McMillan and Lady McMillan. They are expected to return to Winnipeg early in April.

Hon. S. N. Parent, who was nominated by the Dominion Government as its representative on the directorate of the G. T. Pacific Ry. Co., did not accept the position, according to the statement of the Secretary of State in reply to a question in the Senate as to his resignation from the directorate.

Jas. A. Manning, C.P.R. operator at Deux Rivieres, Ont., was recently sentenced to 15 days' imprisonment at North Bay, for drinking intoxicating liquor while on duty, in contravention of the company's rules, and in violation of Sec. 296 of the Railway Act. The maximum penalty imposed by the act is a fine of \$400 and imprisonment for five years.

Charles Cameron, who died in Toronto, Mar. 23, aged 67, after an operation, from the effects of which he never rallied, was resident in Collingwood, Ont., for many years, and was a well-known lake mariner. He was connected with the old Great Northern Transit Co., which was subsequently merged in the Northern Navigation Co. of Ontario, of which he was elected a director, and in 1893 he was Vice-President.

Mrs. Wainwright, wife of W. Wainwright, Comptroller and General Assistant, G.T.R., Montreal, died on Mar. 16, at Saxonhurst, Weston-Super-Mare, Eng., the residence of her brother-in-law, Jas. Stephenson, formerly General Superintendent, G.T.R. Mrs. Wainwright left for England for a complete change early in Feb., but her illness took a serious turn, and Mr. and Miss Wainwright were sent for and left Montreal Feb. 24.

J. W. Higgins, who in Dec. last resigned his position as Assistant Superintendent of the G.T.R. at London, Ont., and was appointed Inspector of Transportation, Missouri Pacific Ry., was on Mar. 1 appointed Assistant General Manager of that system, in charge of transportation, with office at St. Louis. The general superintendents report to and receive instructions from him in matters relating to the transportation service. The Missouri Pacific lines are practically all west and south of St. Louis, and embrace 6,182 miles in operation.

G. E. Hall, who has been appointed Assistant Storekeeper C.P.R. at Montreal, was born at Napanee, Ont., Oct. 18, 1878, and entered transportation service in 1898, serving in that year and in 1899 as purser on one of the Richelieu and Ontario Navigation Co.'s

steamers between Montreal and Toronto. His record since has been: May, 1900, to Sept., 1901, clerk in the office of the Chief Engineer, C.P.R.; Sept., 1901, to Feb., 1902, clerk in office of Second Vice-President and General Manager, C.P.R.; April, 1902, to Feb., 1905, private secretary to Vice-President, C.P.R.

W. M. Kirkpatrick, who has been appointed acting Export Freight Agent C.P.R., Montreal, is a son of the late Sir George A. Kirkpatrick, formerly one of the C.P.R. directors. He was born at Kingston, Ont., Oct. 8, 1874, and entered railway service Mar. 7, 1892, in the office of the Vice-President of the C.P.R., since which time he has filled various positions in the Chief Engineer's office, foreign freight office, Montreal; General Freight Agent's office, Toronto; from July, 1899, to Dec., 1902, he was clerk in the office of the Fourth Vice-President, and from Dec., 1902, to the date of his present appointment Assistant General Freight Agent Pacific Division, at Vancouver.

Jno. Paul, who has been appointed General Freight Agent, Niagara, St. Catharines and Toronto Ry., was born in Euphrasia township, Grey county, Ont., Sept. 13, 1853,



J. F. CHAPMAN.

General Freight and Passenger Agent, Bay of Quinte Ry., Thousand Islands Ry., Oshawa Ry., and Deseronto Navigation Co.

entering railway service with the Northern Ry. at Meaford, Ont., his record since 1879 being: Aug., 1879, to May, 1881, agent Northern Ry., at Creemore, Ont.; May, 1881, to Oct., 1883, agent same company at Thornbury, Ont.; Oct., 1883, to Aug., 1885, in private business; Aug., 1885, to April, 1890, G.T.R., successively as relieving operator, ticket clerk at St. Catharines, Ont., and at London, Ont.; April, 1890, to Feb., 1905, city passenger and ticket agent, Michigan Central Rd., at London, Ont.; in Nov., 1894, the duties of city freight agent were added.

A. Buchanan, who has been appointed Superintendent of Motive Power and Car Department Central Vermont Ry., was born in New York City, April 3, 1870, and entered railway service in 1885, his record being: 1885 to 1891, machinist's apprentice, New York Central and Hudson River Rd.; 1891 to 1893, machine shop foreman same road, West Albany, N.Y.; 1893 to 1894, engine house foreman, same road, Dewitt, N.Y.; 1894 to 1897, erecting shop foreman, same road, West Albany, N.Y.; 1897 to 1900, general foreman locomotive department, same road, West Albany, N.Y.; Jan., 1900, to Dec., 1903, Master Mechanic, Delaware and Hud-

son Co., Green Island, N.Y.; Dec., 1903, to Feb., 1905, Superintendent Motive Power, Central Vermont Ry., St. Albans, Vt.

W. E. Fowler, whose portrait appears on the first page of this issue, has been engaged in railway car construction since 1880, his record being: Mar., 1880, to Sept., 1882, car builder in shops of St. Louis, Iron Mountain and Southern Rd., Baring Cross, Ark.; Oct., 1882, to Nov., 1883, car builder in shops of the Union Pacific Co., Denver, Colo.; Nov., 1883, to the end of 1889, car foreman, same company, at Denver; 1890 to 1891, general car foreman Denver, Texas and Fort Worth Rd., Denver, Colo.; 1891 to 1893, car foreman, Union Pacific Rd., at Denver, Colo.; 1894 to 1900, Master Car Builder, Union Pacific, D.G. and Colorado Southern Rd.; 1900 to April, 1902, General Car Inspector and Master Car Repairer, Southern Pacific Rd., at Sacramento, Cal.; 1902 to date, Master Car Builder, C.P.R. He was elected Second Vice-President of the Master Car Builders' Association in 1904.

Cecil B. Smith, the newly appointed chairman of the Temiskaming and Northern Ontario Ry. Commission, was born at Winona, Ont., Mar. 13, 1865, and is a Master of Engineering of McGill University, where he was awarded the Governor-General's medal. Since graduation his record has been:—1884 to 1886, Resident Engineer on construction Nipissing and Pacific Junction Ry., in the Parry Sound district; 1886 to 1887, transitman C.P.R., London to Windsor, Ont.; 1887 to 1888, Resident Engineer St. Catharines and Niagara Ry.; 1888 to 1889, Resident Engineer, C.P.R., London, Ont.; 1889 to 1890, Resident Engineer, Chief Draughtsman and Division Engineer on lines in Tennessee and South Carolina; 1890 to 1892, Chief Assistant Engineer, Roanoke and Southern Ry., Virginia; 1892 to 1893, Resident Engineer, Baltimore and Ohio Ry., in Pennsylvania; 1893 to 1898, Assistant Professor Civil Engineering, McGill University, Montreal; 1898 to 1899, locating engineer C.P.R., Sudbury to Toronto surveys; 1901 to 1905, Resident Engineer Canadian Niagara Power Co.; and from 1902 Consulting Engineer International Railway Co. He is a member of the Canadian Society of Civil Engineers, of which he has been three times elected a member of the Council; a member of the American Society of Civil Engineers, and is author of a work on railway engineering. As a consulting engineer he has advised on canal, harbor and other works. From 1889 to 1901 he was Assistant City Engineer, Toronto.

The C.P.R. added to its equipment during the current year to Mar. 21, one freight locomotive from the Canada Foundry, Toronto; nine switching locomotives, four first-class cars, one baggage car, 12 snow ploughs, 11 flangers, 629 box cars, and 17 flat cars, from its Angus shops; and one wrecking crane from the U.S.

E. de la Hooke, G.T.R. city ticket agent, London, Ont., in a card soliciting business, says: "The telephone is a lively customer, but cash customers increase revenue. The latter are to the former what the proverbial leg of mutton is to the caper sauce—an improvement. As units, the joint is preferable, as being the more nutritious."

The C.P.R. during the current year to Mar. 21, placed the following orders for equipment: 30 freight and passenger locomotives, with the Locomotive and Machine Co. of Montreal; one wrecking crane in the U.S.; 40 vans at its Farnham, Que., shops; 10 freight and passenger locomotives, 3,000 box cars, 200 Hart convertible cars, and one dynamometer car at its Angus shops.

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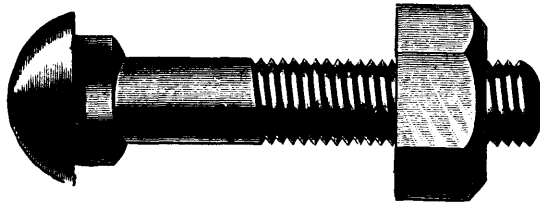
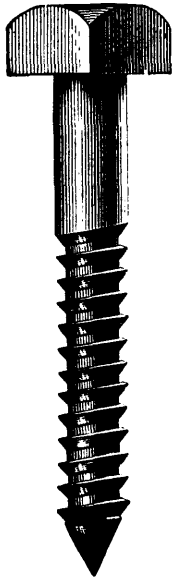
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IMPROVED FARMS in all districts of the province can be purchased at from \$10 to \$40 per acre. These prices are advancing every year.

A FEW POINTERS.

On arrival at Winnipeg the wisest policy for any new settler to adopt is to remain in Winnipeg for a few days and learn for himself all about the lands offered for sale and to homestead.

There are districts that have been settled for many years in which land can be purchased. Some of this may be unbroken prairie which still possesses all the richness and productive powers of our virgin prairies. Other lands, cultivated and having comfortable farm buildings, are ready for immediate possession.

There are Provincial Government lands, Dominion Government homesteads, and railway lands to be secured.

The price of land varies from \$3 to \$40 per acre. Location with respect to railways, towns, timber and water determines the price of land.

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

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

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

For lands owned by private individuals apply to the various real estate agents in the city.

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Eastern Canada Passenger Association.

The following lines were represented at a meeting of passenger lines in Toronto, Feb. 28:—Canada Atlantic, Canadian Pacific, Central Ontario, Grand Trunk, Intercolonial, Quebec Central, Toronto, Hamilton and Buffalo, and Wabash railways, Muskoka Lakes Navigation and Hotel Co., Niagara Navigation Co., Richelieu and Ontario Navigation Co. W. P. Hinton, G.F. & P.A., Canada Atlantic Ry., presided; J. D. McDonald, D.P.A. Grand Trunk Ry., acting as Secretary.

It was decided that the women's social officers, engaged in Salvation Army rescue work, be given the same reduced fares as nuns, sisters of charity and deaconesses, to become effective when the Commissioner of the Salvation Army advises that these officers have been provided with distinctive costume. The Chairman, and G. T. Bell and C. E. Ussher were appointed a committee to confer with the Commissioner regarding the matter. An application from the Commissioner for a rate of 1c. a mile for eight prison gate officers was referred to the same committee for enquiry, and to report at a subsequent meeting. Convention plan arrangements were fully discussed and it was decided to personally notify the Commissioner of the Central Passenger Association that the formation of a passenger association for Canadian lines was contemplated. It was the sense of the meeting that for international conventions held in the U.S., the Canadian lines should co-operate with other associations on their agreed convention plan arrangements, and that for international conventions held in Canada, the terminal lines should be consulted by other associations before reduced rates are authorized from the U.S.

It was agreed that the action of this meeting be presented to a meeting to be held in Montreal Mar. 9, to form a Canadian passenger association. Pursuant to this decision all passenger transportation companies operating in Canada east of Port Arthur, Sault Ste. Marie, Port Huron and Detroit were invited to attend a meeting in Montreal to receive the report of the committee which was appointed Sept. 21, 1904, to prepare a report as to the advisability of forming a Canadian passenger association.

At the meeting in Montreal, Mar. 9, 38 representatives of 32 lines were present. T. Henry, Traffic Manager Richelieu and Ontario Navigation Co., was elected chairman, and E. C. Cleary, of the G.T.R. Passenger Department, Secretary. After a full discussion as to the advantages of the proposed association it was decided to establish one, and the articles of organization, as submitted by Messrs. Ussher, Bell and Hinton, were adopted after being amended in certain particulars, upon the understanding that final action thereon would be taken at the first regular meeting of the association to be held in Montreal April 4.

An executive committee, consisting of C. E. Ussher, G. T. Bell, and T. Henry were appointed to consider and report on April 4, on the following questions: appointment of a Chairman, his salary, etc.; whether proxies be allowed at regular and special meetings, and if so, how many; office, etc., for the Chairman.

F. Backus, J. M. Lyons, G. Collins, G. E. King and W. P. Hinton were appointed a committee to prepare rules and submit them on April 4.

The secretary was instructed to send a copy of the minutes to all Canadian transportation lines not represented, who were invited to the meeting, asking their concurrence in the action taken, and inviting them to attend the meeting on April 4, to complete the organization.

Meetings of the executive committee and of the committee on rules have since been held and their reports will be presented at a

meeting to be held in Montreal, April 4. It is reported that the original intention has been somewhat changed and that instead of a paid chairman being appointed this position will probably be an elective one and that the work of the Association will be performed by a paid Secretary.

Dominion Marine Association.

The second annual meeting was held at Ottawa, Ont., Mar. 23, with a good attendance of members, the President, C. F. Gildersleeve, of Kingston, Ont., occupying the chair.

The report of the executive committee dealing with its work during the past year was adopted, and a number of matters of considerable importance to the marine interests were fully discussed.

It was resolved that the Association is of the opinion that arrangements with the United States Government for reciprocal steamboat inspection with Canada would be to the interest of both countries, and that the Association respectfully requests the Department of Marine to take immediate steps with that object in view.

It was decided that the membership assessment for 1905 be at the rate of 2c. per ton on steam vessels and 3c. per ton on sailing and barge property, the executive committee being given power to consider special rates, such as that of a company owning a large number of vessels.

The following were elected as an executive committee:—C. F. Gildersleeve, President Lake Ontario and Bay of Quinte Steamboat Co.; H. C. Hammond, President Northern Navigation Co. of Ontario; J. H. Hall, Ottawa Transportation Co.; J. A. Cuttle, Managing Director Montreal Transportation Co.; H. W. Richardson, Kingston, Ont.; C. J. Smith, General Manager Richelieu and Ontario Navigation Co.; R. O. Mackay, Hamilton, Ont.; A. A. Wright, Victoria Harbor Lumber Co.; D. Murphy, Ottawa Forwarding Co.; S. Crangle, St. Lawrence and Chicago Navigation Co.; Capt. T. Donnelly, Donnelly Wrecking and Salvage Co.; F. Plummer, Canadian Lake and Ocean Navigation Co.

C. F. Gildersleeve declined to accept reelection as President, and a vote of thanks was enthusiastically passed for his untiring efforts in the interest of the Association. The executive committee elected J. A. Cuttle President; H. C. Hammond, 1st Vice-President, and A. A. Wright, 2nd Vice-President.

In the afternoon the members attending the meeting, accompanied by W. Harty, M.P., had interviews with the Minister of Marine and Fisheries, the Minister of Railways and Canals, the acting Minister of Public Works, and the Commissioner of Customs, and urged a number of matters in the interest of the Association.

At the Canadian Railway Club's meeting on Mar. 7, a paper was read by A. A. Maver, Master Mechanic G.T.R., Montreal, on "A System of Hot Feed Water for Stationary Boilers and Shop Heating."

The names of the following steamers of the Richelieu and Ontario Navigation Co.'s fleet have been changed:—Algerian to Cornwall, Bohemian to Prescott, Canada to St. Irene, Cultivateur to Varennes, Corsican to Picton Saguenay to Chicoutimi, Virginia to Tadoussac, Spartan to Belleville. The change in the names of the steamers has been made in pursuance of a decision of the company to have all its vessels named after the principal cities, towns and rivers on their routes. The steamers which the company has had built in recent years, Kingston, Toronto, Montreal, have been named in this way.

Regulations Respecting Freight Tariffs.

J. Hardwell, Chief Traffic Officer, and A. D. Cartwright, Secretary of the Board of Railway Commissioners, have issued the following circular:—

Section 266 of the Railway Act of 1903 reads as follows:—"Where traffic is to pass over any continuous route in Canada operated by two or more companies, the several companies may agree upon a joint tariff for such continuous route, and the initial company shall file such joint tariff with the Board, and the other company, or companies, shall promptly notify the Board of its, or their, assent to and concurrence in such joint tariff. The names of the companies whose lines compose such continuous route shall be shown by such tariffs."

A circular issued by the Secretary of the Board on Sept. 16, 1904, prescribes the form of certificate of concurrence to be filed with the Board, separately for each and every joint tariff, by each carrier named as party thereto. In lieu of these individual certificates, the Board is prepared to receive from each company one general notice of concurrence in all joint tariffs to which it has been, or may be, made a party, excepting those which it may repudiate by filing a special notice of non-concurrence with the Commission. The form of certificate of general concurrence is prescribed as follows:—

TO THE BOARD OF RAILWAY COMMISSIONERS FOR CANADA, OTTAWA, ONT.

This is to certify that the..... Railway Co. assents to and concurs in all joint tariffs, also all supplements or amendments to joint tariffs, or other issues which in any way affect joint rates, which have been, or may hereafter be, issued by other carriers, associations or committees, and in which the said..... Railway Co. is named as a party thereto, unless the said..... Railway Co. shall give the Commission notice to the contrary.

The certificate is to be signed in person by the official designated in section 251 of the Act and mailed to the Chief Traffic Officer, Railway Commission for Canada, Ottawa. Should a receipt be required, a carbon copy, marked "duplicate," may be enclosed with the filed certificate, to be receipted and returned. This general form of concurrence will be accepted from parties to international joint tariffs, but it is to be understood that no carrier participating in a joint international tariff is hereby relieved of the obligation of seeing that the tariff is duly filed by the initial company. This arrangement will continue in force until further notice from the Board.

TARIFF CHANGES.—It is ordered that the occasion for the issue be shown in future at the top of the front page (in centre, or near the C. R. C. no.) of all tariffs, supplements, amendments, etc., thus: "Advance," "Reduction," "Re-Issue," or "New Rate (or Rates)" as the case may be.

Esquimalt and Nanaimo Ry.—A Victoria, B.C., despatch dated Mar. 27, refers to Jas. Dunsmuir, the President, as stating that the proposed purchase by the C.P.R. is off. The sale was made subject to necessary legislation being obtained, and a difficulty is said to have arisen in connection with the passage of a clause providing for the retention of the land grant by the Dunsmuir estate with all the rights and privileges attaching to it under the original grant. The principal advantage sought to be obtained was exemption of the land from taxation.

The Board of Railway Commissioners recently completed a series of sittings at various points in Ontario. Among the places visited were Toronto; Guelph, where the question of the acquisition of some park lands by the G.T.R. for station extension was considered; Windsor, where the question of the bridging of the Detroit River was looked into; and Niagara Falls, where a number of matters were considered.

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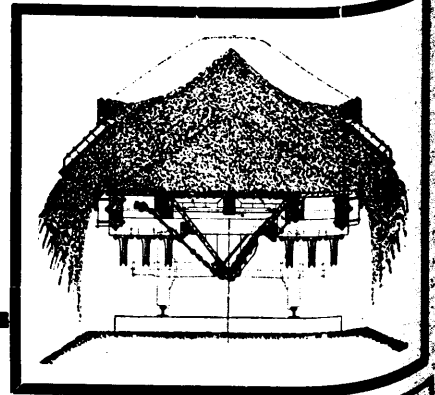
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ELECTRIC RAILWAYS.

Projects, Construction and Betterments.

British Columbia Electric Ry.—In connection with the leasing of the Vancouver and Lulu Island Ry. to the B. C. E. Ry., from July 1, we are informed that the work of electrifying the line will be done by the lessees. The work is now in progress and it is expected that cars will be running over it about July 1. The plans for the work include a power station of steel and concrete, the main building being 50 ft. square. About 150 miles of wire will be used in the transmission circuits and the feed wire. It is also proposed to use an electric locomotive in connection with the freight traffic on the line. The agreement calls for an hourly service between April 1 and Oct. 31, and a two hourly service during the winter months, with at least three freight trains a day.

The extension to Kitsilanto Beach embraces a part of the C.P.R. line, and consists of a spur line from Granville St., Vancouver, to Kitsilanto Beach. The electric equipment has been provided, and a car service will be operated as soon as the approval of the Railway Commission has been given to certain wire crossings. (Mar., pg. 109.)

Canada-Middlesex Ry.—G. C. Thompson, W. Meredith, W. M. Smith, Jos. Montgomery, Jas. Haywood, Toronto, are applying at the current session of the Dominion Parliament, for an act incorporating a company with this title to construct a railway from the Niagara River, north of the Welland River, to London, Ont. The capital is fixed at \$500,000 and bonds to the extent of \$35,000 a mile may be issued. Steam may be used as a motive power during the construction of the line, but shall not be used as being asked to make agreements with all steam and electric railways between the two points named. (Jan., pg. 11.)

Edmonton Street Ry.—Contracts are reported let for the construction of an electric railway in Edmonton, Alta., about five miles long. The cost of the rails and ballast is placed at \$15,000 a mile, the bonding and overhead work at \$2,000 a mile, and the equipment of the power house at \$16,000. It is expected to have the line completed by Sept. 1. J. M. Campbell, Kingston, Ont., has been appointed Chief Engineer.

Hamilton.—A proposal has been made for the establishment of a union station for the use of the different radial railways entering the city. The Hamilton, Grimsby and Beamsville Electric Ry. recently purchased a lot on Main St. East, opposite its present station, and reports state that this purchase has something to do with the proposal.

Hamilton, Ancaster and Brantford Ry.—Application will be made at the current session of the Ontario Legislature for power to increase the capital stock, and to increase the bond issue to \$25,000 a mile. The Hamilton City Council has passed a by-law granting a right of way along James and Main streets. It is announced that a formal start was made with the grading at Ancaster Mar. 16, in order to comply with the terms of the act. A suggestion has been made for the construction of a union station in Hamilton for the radial railways. (Mar., pg. 111.)

Hamilton Radial Ry.—Work has been started getting in the cribwork for the abutments of the bridge over the river at Oakville, Ont. The steel work for the bridges at Bronte and Oakville is ready for delivery, and the rails and other material for the line are in course of delivery. It is expected that grading and tracklaying will be completed so as to permit the running of cars early in the summer.

London to Galt.—Application will be made

at the current session of the Ontario Legislature for the passing of an act incorporating a company for the purpose of constructing a railway from London through the counties of Middlesex, Oxford, Perth, Waterloo and Wellington, to Guelph, Ont. A. T. Drummond, Toronto, is solicitor for the applicants.

Niagara, St. Catharines and Toronto Ry.—We are advised that the recent press reports that all arrangements had been completed for the extension of the line to Hamilton, Ont., are not correct, as nothing definite has yet been decided.

F. Nicholls, President, met the St. Catharines City Council Mar. 16, and stated that if the company's application for an extension of time for the construction of the line to Hamilton and Toronto was granted, a survey of the route would be immediately started. If the application was refused, the interests controlling the company would fall back on the authority giving the Toronto and Niagara Power Co. to construct an electric railway on its right of way, which had been intentionally made sufficiently wide to provide for a double track. In the projected electric railway between Toronto and Buffalo it was proposed to make St. Catharines the only large point outside Toronto. It was intended to carry the main line across Hamilton Beach, and to run a spur line from Stoney Creek into Hamilton. "We will," added Mr. Nicholls, "make any railway extensions in the Niagara peninsula which will pay us, because we are here for a dual purpose. We will build railways which will develop the Niagara district, and thus create a market for the power we are generating at Niagara Falls. We have nearly all our towers up, and are just about ready to distribute power." (Mar., pg. 111.)

Southwestern Traction Co.—An agreement has been reached with the St. Thomas City Council for the use of the city's electric railway. The company has practically completed its railway from London to St. Thomas, and will extend it to Port Stanley, Ont. Its tracks will connect with the city lines, and it has secured a right to run over the city lines to the point of departure for Port Stanley, for fifty years, at a rental starting at \$1,200 a year, and increasing every five years to \$1,750 a year at the end of the 25th year, when the matter of price is to be again considered. It will not collect any fares in the city, but will pay the cost of power and half the cost of the maintenance of the tracks used. The company is now installing the machinery in its power house situated at the southern limits of the city of London. Preparations are being made for the continuation of construction work as soon as the weather is sufficiently open. The extension of the line to be gone on with is between St. Thomas and Port Stanley, and it is expected that the construction company will sublet contracts for portions of the grading. (Mar., pg. 111.)

Toronto Railway.—An arrangement has been completed for the extension of the lines in the Rosedale district, for the purpose of completing a belt line there.

Toronto and Hamilton Ry.—Tenders will be received to May 1 for the grading, culverts, masonry, bridges and other works required on this projected line between Toronto and Niagara Falls, Ont. The route to be followed is substantially the same as that of the pole line of the Toronto and Niagara Power Co. F. Nicholls, Toronto, is President, and W. T. Jennings Chief Engineer, of the company. (Mar., pg. 111.)

The Canadian Freight Association met at Montreal, Mar. 7, when it was decided to maintain the same rates for lake and rail business as were in force for the season of 1904, with one or two minor exceptions.

Canadian Street Railway Association.

The first quarterly meeting of the Canadian St. Ry. Association was held in Ottawa, Mar. 7, the following being present: Dr. S. Ritter Ickes, President; A. J. Pattison, Vice-President; W. R. Turnbull, Director Grand Valley Electric Ry.; C. E. A. Carr, General Manager London St. Ry.; W. G. Ross, Managing Director; L. Macdonald, Manager; P. Dubee, Secretary Montreal St. Ry.; T. Ahearn, Vice-President; W. Y. Soper, Director; J. D. Fraser, Secretary-Treasurer; J. E. Hutcherson, Superintendent; J. Murphy, Electrician Ottawa Electric St. Ry.; E. G. Evans, General Manager Quebec Ry., Light and Power Co.; Col. H. H. McLean, K.C., Director St. John Ry.; W. H. Moore, Assistant to the President Toronto Ry., and Manager Toronto & York Radial Ry.; J. D. McArthur, Superintendent Toronto & York Radial Ry.; A. H. Royce, Vice-President Toronto Suburban Ry. C. Archer, Solicitor Montreal St. Ry.; and Acton Burrows, Publisher of the RAILWAY & SHIPPING WORLD, were also present by invitation. The President, W. G. Ross, occupied the chair.

Papers were read by C. E. A. Carr, on the transportation of mails and postmen; by W. H. Moore, on his recent inspection of electric railways in the U.S.; by W. G. Ross, on mutual benefit associations, and by Dr. S. Ritter Ickes, on Sunday legislation in Ontario as affecting electric railways. Papers were to have been read by W. C. Hawkins, General Manager of the Hamilton Cataract Power, Light and Traction Co., and by E. F. Seixas, General Manager of the Niagara, St. Catharines & Toronto Ry., but they were unable to be present.

W. H. Moore stated that with other officials of the Toronto Ry., he intended inspecting electric railways in districts they had not already visited, and that he would be glad to have any other members of the association accompany them.

The executive committee was authorized to appoint sub-committees to consider the questions of the transportation of mails and postmen, freight rates, and the best form of fender for suburban lines. Dr. Ickes, Col. McLean and A. H. Royce were appointed a committee to consider the Sunday observance legislation as affecting Ontario lines.

After the meeting a number of those present were taken by special car on the Ottawa Electric St. Ry. to inspect the company's power house, car barns, etc., and also the Ottawa Car Co.'s works.

The executive committee subsequently appointed the following sub-committees:—Transportation of Mails and Postmen, T. Ahearn, C. E. A. Carr, E. G. Evans, Col. H. H. McLean; Freight Rates, E. G. Evans, W. H. Moore, E. F. Seixas; Fenders, W. C. Hawkins, J. E. Hutcherson, S. Ritter Ickes.

The paper on Mutual Benefit Associations, read at the meeting at Ottawa, will be found on the first page of this issue.

Halifax Electric Tramway Co.

The report presented at the recent annual meeting showed gross earnings for 1904, of \$379,464.81, an increase of \$14,009.85 over 1903. The operating expenses were \$211,941.57, a reduction of \$28,871.10. This result was obtained by the economics attending the use of the new machinery and modern appliances installed in 1903, and the lessened consumption of fuel. A further expenditure of \$31,209.17 was made on capital account on the completion of the new power house and plant, etc.

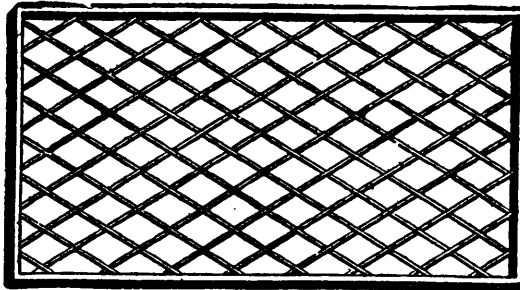
ASSETS		LIABILITIES	
Property.....	\$2,119,659 10	Capital stock.....	\$1,350,000 00
Accounts receivable.....	31,407 77	5% Bonds.....	600,000 00
Supplies.....	19,703 95	Accounts payable.....	40,502 60
Suspense accounts.....	10,597 44	Notes payable.....	30,000 00
Deposit with city.....	500 00	Bond interest.....	15,000 00
Cash on hand.....	33,870 20	Dividend due Jan. 2nd, 1905.....	16,875 00
	<u>\$2,215,738 46</u>	Tickets outstanding.....	1,345 13
		Surplus account.....	162,015 73
			<u>\$2,215,738 46</u>

Following are particulars relating to the railway part of the company's business:

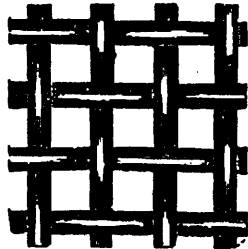
Earnings.....	\$158,187.23	1904	\$150,865.00
Passengers carried.....	3,540,310		3,369,700
Car mileage.....	711,578		715,470

The officers and directors for the current year are: President, Hon. D. McKeen; Vice-Presidents, Jno. Y. Payzant, W. B. Ross; other directors, A. Kingman, J. Hutchison, J. C. Mackintosh, H. S. Poole, W. M. Doull; Manager, J. W. Crosby; Secretary, W. J. DeBlois.

WIRE GUARDS



FOR ELECTRIC CAR



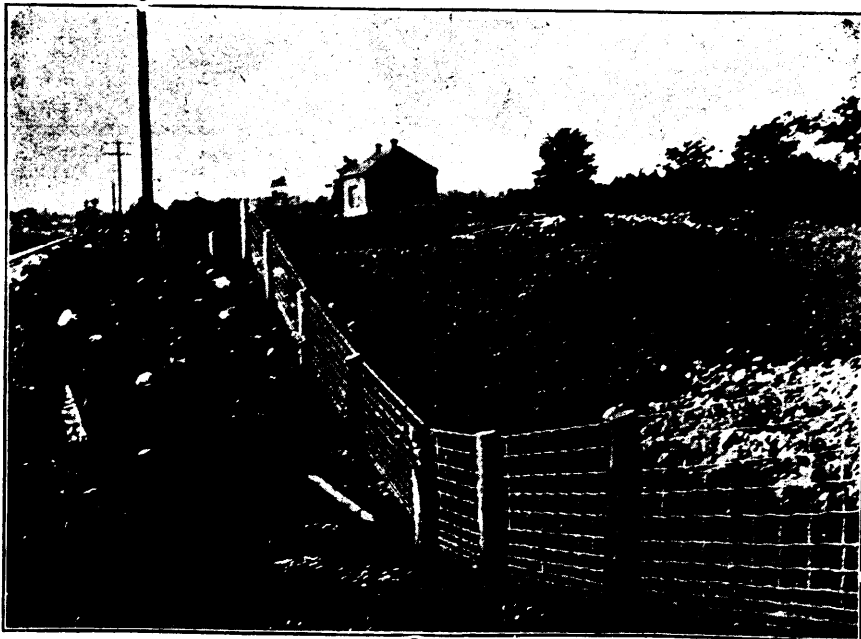
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TRUSTEES

ELECTRIC RAILWAY STATISTICS FOR YEAR ENDED JUNE 30, 1904.

The following abbreviations are used in the names of railways:—E., electric; E. R., electric railway; E. S. R., electric street railway; Ry., railway; S. R., street railway. The minus mark (-) in the column for net earnings shows that there was a deficit in the operations of the line to the extent of the figures given. The numbers in brackets—thus (1)—after the name of a railway refer to notes below.

Name of Railway	Mil'ge	Gross Earnings	Net Earnings	Proportion of earnings to working expenses	Earnings per train mile	Operating per train mile	Freight Mileage	Car Mileage	Passengers Carried	Freight Carried
				p. c.	cts.	cts.				Tons.
Berlin and Waterloo S. R. (1)	5.52	\$ 23,467.76	\$ -1,048.78	96	25	26		94,180	536,000	
Brantford S. R.	7.00	18,158.63	-3,441.96	84	22	26		80,400	228,810	
British Columbia E. R. (2)	48.00	454,508.42	159,824.11	154	23	15	43,732	1,911,312	8,869,486	6,066
Cape Breton E. Co.	11.80	73,012.05	6,034.96	109	25	22		294,354	1,266,862	
Cornwall E. R.	6.00	19,958.14	476.17	102	11	10	12,109	184,342	278,761	
Galt, Preston and Hespeler S. R.	16.00	41,017.14	2,273.89	105	28	26	12,350	147,660	382,901	30,831
Grand Valley Ry. (3)	6.00	25,084.85	5,405.76	127	36	28		68,664	203,134	15
Guelph Radial Ry. (4)	5.50	19,889.41	1,800.00	109	09	08	1,400	211,400	488,932	8,000
Halifax E. Tramway	12.13	150,865.60	39,931.97	136	21	15		715,470	3,369,280	
Hamilton and Dundas S. R. (5)	7.25	36,722.38	19,202.23	209	49	23		74,483	337,273	1,310
Hamilton, Grimsby and Beamsville E. R.	27.50	65,766.36	31,271.41	190	28	15	18,970	234,632	355,622	6,644
Hamilton Radial E. R. (6)	12.00	67,292.04	32,969.19	196	33	17		203,473	715,235	2,600
Hamilton S. R. (7)	22.00	220,100.35	80,811.22	158	17	11		1,261,984	5,265,748	
Hull E. Co. (8)	14.50	84,873.32	14,365.89	120	17	14		489,942	869,201	27,753
International Transit Co.	3.30	48,439.60	2,630.95	105	29	28		163,648	556,206	883
Kingston, Portsmouth and Cataract E. R.	7.50	32,766.62	7,569.98	130	41	31		80,011	641,121	
Levis County Ry.	10.25	35,094.04	11,993.04	152	16	10		219,388	978,992	
London S. R. (9)	31.00	165,006.20	46,926.83	139	14	10		1,198,642	4,104,719	
Metropolitan (Toronto) Ry. (10)	29.00	79,396.63	24,415.35	144				250,000	521,083	
Montreal Park and Island Ry. (11)	37.99	160,486.02	-9,081.14	94	23	25	10,920	686,423	1,745,598	13,340
Montreal S. R. (12)	123.67	2,412,763.32	939,561.83	163	20	12		12,080,791	59,595,886	
Montreal Terminal Ry. (13)	18.34	83,686.64	18,968.59	129	15	11		564,080	935,419	49,167
Nelson Tramway Co.	3.00	4,712.85	-10,365.86	31	14	43		34,330	88,933	
Niagara Falls Park and River Ry. (14)	13.68	124,201.58	70,583.96	231	39	17	18,580	319,838	1,100,008	77,900
Niagara, St. Catharines and Toronto Ry.	19.94	123,433.46	37,335.28	143	28	16	297,673	514,455	733,045	109,565
Niagara Falls, Wesley Park & Cliff Ry. (15)	4.50	26,959.60	15,911.12	244	18	08		141,835	512,062	
Oshawa Ry.	8.02	40,183.02	3,686.45	110	72	65	19,356	55,772	134,228	66,087
Ottawa E. R. (16)	22.87	362,411.75	143,415.16	165	15	09		2,353,729	7,649,850	
Port Arthur S. R.	9.00	36,723.85	9,165.33	133	23	17		157,223	646,295	
Pt. Dal., St. Cath. and Thorold E. S. R.	6.82	17,706.10	7,284.41	169	17	09		104,829	359,593	
Quebec Ry. Light and Power Co. (17): Citadel Division	17.22	190,217.50	54,029.45	139	17	12		1,138,546	4,457,761	
Montmorency Division	25.00	86,498.31	37,716.64	170	51	30		170,849	721,330	
Sandwich, Windsor and Amherstburg Ry.	23.15	117,672.00	48,945.81	171	22	13		541,779	1,984,663	
Sarnia S. R. (18)	7.00	27,000.00	11,225.00	171	07	04		370,353	800,000	
Sherbrooke S. R. (19)	13.00	106,880.88	37,831.79	154	20	13		520,173	1,396,389	
St. John Ry.	4.50	29,449.67	6,648.65	129	35	27		82,632	510,502	
Sydney and Glace Bay	18.80	92,173.02	27,073.62	141	28	20		331,900	2,008,180	
Toronto Suburban Ry.	8.50	21,080.99	1,172.54	105	13	12		163,748	478,590	
Toronto and Mimico Ry. (18)	5.87	28,916.96	8,864.87	144	16	11		175,580	543,889	
Toronto Ry. (20)	46.75	2,310,620.14	1,008,393.20	177	19	11		11,808,389	56,675,490	
Toronto and Scarboro (18)	5.07	19,619.76	5,014.38	134	11	08		179,702	478,868	
Winnipeg S. R. (21)	28.00	338,503.82	162,000.76	192	22	12		1,513,458	7,763,562	
Woodstock, Thames Val. and Inger. E. R.	11.50	19,648.29	9,659.40	196	21	11		91,805	224,424	
Yarmouth S. R.	2.06	10,640.11	638.78	106	13	12		79,920	176,067	
	766.50	\$8,453,609.18	\$3,127,092.23					42,066,124	181,689,998	400,161

Notes to Electric Railway Statistics.

- (1) The Berlin and Waterloo mileage includes the Berlin and Bridgeport E.S.R., 2.5 miles, which is operated under lease. It obtains its power from the Berlin Light Commissioners.
- (2) The B.C. Electric Ry. has 7.50 miles of double track.
- (3) The Grand Valley Ry. obtains its power from the Brantford St. Ry.
- (4) The Guelph Radial has 1.58 miles of double track.
- (5) The Hamilton and Dundas Ry. obtains its power from the Cataract Power, Light and Traction Co.
- (6) The Hamilton Radial has 10.50 miles of double track.
- (7) The Hamilton St. Ry. has 10 miles of double track. It obtains its power from the Cataract Power, Light and Traction Co.

- (8) The locomotive mileage over the Hull Electric Co.'s line was 14,628 miles.
- (9) The London St. Ry. has 11.68 miles of double track.
- (10) The figures given are for the year ended June 30, 1903.
- (11) The Montreal Park and Island Ry. has 12.75 miles of double track.
- (12) The Montreal Street Ry. has 49.24 miles of double track.
- (13) The locomotive mileage over the Montreal Terminal Ry. was 20,576 miles.
- (14) The Niagara Falls Park and River Ry. has 11.43 miles of double track.
- (15) Power supplied by the Niagara, St. Catharines and Toronto Ry.
- (16) The Ottawa E.R. has 17.95 miles of double track.
- (17) There are 5 miles of double track on the Citadel division and 6 miles of double

- track on the Montmorency division of the lines of the Quebec Ry., Light and Power Co.
- (18) The Sarnia St. Ry., the Toronto and Mimico Ry., and the Toronto and Scarboro Ry. lease their power.
- (19) The returns from the Sherbrooke St. Ry. are incomplete.
- (20) The Toronto Ry. has 44.77 miles of double track.
- (21) The Winnipeg St. Ry. has 5 miles of double track.

Electric Railway Notes.

The London Street Ry. has voluntarily raised the wages of its motormen and conductors from a maximum of 16½ to 17 cents an hour.

The Port Arthur Street Ry. has started running its cars in the town of Fort William, Ont., on Sundays, despite the protest of the mayor of the latter town.

The Winnipeg Electric Street Ry. has ordered three large forged steel patent water tube boilers, aggregating 2,000 h.p., from Babcock & Wilcox, Ltd., Montreal. The company installed two boilers of the same type about two years ago.

The Southwestern Traction Co. will be in the market shortly for 60 lb. steel rails, and angle plates for same; copper wire; standard ties; 30 ft. poles, six inch and eight inch tops; spikes, bolts, etc., for 15 miles of track. Material for two or three bridges will also be required, and the company is also looking for a heavier locomotive in exchange for the 10 ton one now in work upon construction work.

In the case against the Grand Valley Ry., for operating its cars on Sundays, the question will be raised whether the Dominion Parliament had power to enact Sec. 2, Chap. 32, 1904, which provides that all railways, whether steam or electric, situated entirely

within one province, but, either entirely or in part declared to be for the general advantage of Canada, shall be under the jurisdiction of the provincial acts relative to Sunday labor.

Electric Ry. Finance, Meetings, Etc.

British Columbia Electric Ry.—Railway earnings for Jan.:—Vancouver, \$18,507; Victoria, \$10,449; Westminster, \$9,657; total, \$38,613, against \$34,095 for Feb., 1904; total railway and lighting earnings \$80,028, against \$73,902. Working expenses, \$40,088; renewal funds, \$6,695; net income, \$33,245, against \$40,599 working expenses, \$5,988 renewal funds, and \$27,315 net income for Jan., 1904. Net earnings for seven months ended Jan. 31, \$205,667, against \$183,404.

The Cape Breton Electric Co. owns the electric lighting plant, ferry service and electric railway in Sydney, and the electric rail-

way connecting Sydney and North Sydney. It also owns one-half of the bonds and common stock of the Sydney and Glace Bay Ry. Gross earnings for year ended Dec. 31, 1904, \$202,018.84; operating expenses, \$155,668.38; net earnings, \$46,350.46; fixed charges, \$43,470.27; net profit, \$2,880.19.

Halifax Electric Tramway Co.—Railway earnings for Feb., \$7,188.71, against \$9,804.47 for Feb., 1904.

Hamilton Cataract, Power, Light and Traction Co.—The annual meeting held Mar. 1 was a formal one, the only business transacted being the presentation of the annual report and the election of directors. The officers and directors for the current year are: President, J. M. Gibson, K.C.; Vice-President, Jas. Dixon; Treasurer, J. R. Moodie; Secretary, W. C. Hawkins; other directors: Jno. Dickenson, J. A. Kammerer, J. W. Sutherland. The gross earnings of the traction department for 1904 were \$335,560.12.

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D. L. WHITE, Vice-President.

J. W. BENSON, Sec'y-Treas.

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Grain Elevator Notes.

The Point Edward Elevator Co., Point Edward, Ont., has renewed a chattel mortgage for \$100,000 to the London and Western Trusts Co.

The Canadian Malting Co. of Toronto has purchased two acres of land at Winnipeg, upon which it proposes to erect an elevator of 150,000 bush. capacity, and malting houses.

In regard to the proposed Government elevator at Port Colborne, Ont., the Minister of Railways and Canals stated in the House of Commons recently that it would be constructed of concrete and iron, and would be of the most modern design. The total cost would be \$1,100,000, and a vote of \$310,000 on account was passed. Replying to questions as to the general policy of the Government upon elevators at this point the Minister stated that the construction of the elevator was the natural sequence of the construction of the breakwater and the other improvements at Port Colborne. The Government deemed it in the interests of the Dominion, in order to prevent one or two transportation companies getting control of the waterway. Only a limited number of elevators could be provided there, and if one or two private companies constructed elevators there they would obtain exclusive control. Several applications had been made for sites from private corporations, and it was deemed to be imperative in the public interest that the Government should construct a large elevator there, which would be open to the general public upon conditions laid down by regulations. By this means all interested in the transportation question would have an opportunity of availing themselves of the elevator facilities.

SHIPPING MATTERS.

River and Lake Officers for 1905

The following appointments have been made by the principal navigation companies interested in the St. Lawrence River and Great Lakes trade, for their various vessels for the season of 1905. In the first column is given the name of the vessel, in the second that of the captain, and in the third that of the chief engineer:—

CALVIN CO., GARDEN ISLAND, ONT.

Burma (schooner)	J. Ferguson	Jno. Kennedy
Ceylon (schooner)	J. Achee	T. C. Smith
D. D. Calvin	H. N. Smith	R. H. Veech
India	Chs. Coons	
Simla	A. H. Malone	

CANADA ATLANTIC TRANSIT CO., OTTAWA, ONT.

Arthur Orr	H. Jaenke
George N. Orr	W. Baxter
Ottawa	Alex. Birnie

CANADIAN LAKE AND OCEAN NAVIGATION CO., TORONTO

A. E. Ames	E. L. Stephen	S. Gillespie
H. M. Pellatt	G. A. Brian	W. Byers
J. H. Plummer	G. W. Mackey	R. Chalmers
Turret Cape	A. McIntyre	W. H. Durham
Turret Chief	M. McPhee	R. Dugia
Turret Court	Jas Black	C. J. McSorley

CANADIAN NORTHWEST STEAMSHIP CO., TORONTO.

Needing	Jno. Ewart	A. F. Foote
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C.P.R. UPPER LAKE FLEET, OWEN SOUND, ONT.

Alberta	L. Payette	A. Cameron
Athabasca	Geo. McDougall	W. McKay
Manitoba	E. B. Anderson	W. Lewis

CENTRAL CANADA COAL CO., BROCKVILLE, ONT.

Samuel Marshall	Jno. Bouchard	H. Gerrow
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J. AND T. CONLON, THOROLD, ONT.

Erin	P. Sullivan
F. L. Danforth (schooner)	B. McIntyre

J. B. FAIRGRIEVE & CO., HAMILTON, ONT.

Arabian.	J. V. Trowell	W.H.Cunningham
----------	---------------	----------------

G.T.R. CAR FERRIES, WINDS O R, ONT.

Great Western	M. Bausetto	W. Belson
	Baillargeon	
Huron	H. Oldenberg	Jos. Ladds.
	O. Lalonde	
Lansdowne	F. D. Forrest	Jos. Taylor
	Jno. Jackson	

HAMILTON AND FORT WILLIAM NAVIGATION CO., HAMILTON, ONT.

Donnacona	J. W. Mawdsley	J. S. Dugeid
Strathcona	Jno. Irving	W. Harman

HAMILTON AND MONTREAL NAVIGATION CO., HAMILTON, ONT.

Lake Michigan	J. H. Fitzgerald
---------------	------------------

LAKE ONTARIO AND BAY OF QUINTE STEAMBOAT CO., KINGSTON, ONT.

Aletha	J. A. Roys	C. McSorley
Caspian	W. Bloomfield	
North King	J. J. Jarrell	O. J. Hickey

J. & J. T. MATHEWS, TORONTO

Haddington	Jas. Delaney	R. W. Ross
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MERCHANTS' LINE, MONTREAL.

City of Montreal	A. Lefebvre	F. Hamelin
Cuba	A. Monpitt	E. Hamelin
Melbourne	H. Vaughn	

MIDLAND NAVIGATION CO., MIDLAND, ONT.

Midland King	W.H.Featherstonehaugh	E. Abney
Midland Queen	F. Burke	

MIDLAND TOWING AND WRECKING CO., MIDLAND, ONT.

Magnolia	Jos. Clarke	Jno. Doran
Menodora	C. Gould	H. Chester
Metamora	E. Burke	F. Chester
Minitaga	Geo. Kinnel	Jno. Kinnel
Reliance	R. Burke	Jas. McGregor
Traveler	Jas. Tyndal	F. Goodwin

NEW ONTARIO STEAMSHIP CO., HAMILTON, ONT.

Neepawah	O. Pattenade	Jas. Smeaton
Wahcondah	H. Zealand	Jno. Waller

NIAGARA NAVIGATION CO., TORONTO.

Chicora	R. Clapp	H. Parker
Chippewa	J. McGiffin	G. Arnold
Corona	H. Solmes	A. F. Woodward
Ongiara	H. McIntyre	C. Merriman

NORTHERN NAVIGATION CO. OF ONTARIO, COLLINGWOOD, ONT.

Britannic	M. McLean	I. Boyd
City of Collingwood	A. M. Wright	C. Robertson
City of Midland	F. G. Moles	S. Burgess
City of Toronto	P. Dusome	B. F. Osborne
Germanic	W. G. Cox	J. W. Aston
Huronic	R. D. Foote	F. Brisbane
Majestic	G. H. Playter	W. Whippes
Monarch	E. Robertson	A. Morton
United Empire	A. L. Campbell	H. Myler

ST. LAWRENCE AND CHICAGO STEAM NAVIGATION CO., TORONTO.

Algonquin	W. H. Wright	J. W. Taylor
Iroquois	Jas. McNaught	W. Harwood
Rosedale	P. J. Shaw	Jas. Findlay
W. D. Matthews	Jas. Ewart	E. J. O'Dell

W. J. PULLING, WINDSOR, ONT.

Juno	A. McInnes	S. Kerby
Sligo (schooner)	Jno. McPherson	
Vesta	N. McDonald	

VICTORIA LUMBER CO., TORONTO.

Charlton (tug)	D. Burke	J. Ridinim
Reginald (tug)	F. Lunan	
Tadousac	S. Hill	J. G. Fisher

Suspension of Canal Tolls.

We are advised by the Department of Railways and Canals that the abolition of the canal tolls is to be continued for this year's season of navigation. The council of the Montreal Board of Trade recently took the matter up and wrote the Government asking that the free canals be maintained, and further, that a deputation would be sent to Ottawa to urge the contention if it were necessary. In reply, the Premier wrote:—"All I can say at present is that this subject is well known to us, and there is no necessity for any deputation." All tolls on the canals were, by orders-in-council of April 27, and May 19, 1903, abolished for the seasons of 1903 and 1904. In the fiscal year ended June 30, 1902, the amount of tolls collected was \$236,942.72, and from July 1, 1902, to the end of that season of navigation the tolls amounted to \$159,959.56. The total tonnage passing through the canals during the season of navigation of 1903 was 9,203,817 tons, against 7,513,797 tons in 1902. These figures include the tonnage passing through the Sault Ste. Marie canal, which was 5,511,868 tons in 1903, and 4,729,268 tons in 1902.

Hamilton, Grimsby and Beamsville Electric Ry.—The annual meeting adjourned on Feb. 22, from Jan. 23, was further adjourned until Mar. 23, when it was announced that the majority stock purchased in 1904 by the G.T.R. had been acquired by the Hamilton Cataract, Power, Light and Traction Co. The new officers and directors are: President, J. W. Nesbitt, K.C.; Vice-President, J. Dickenson; Treasurer, Jno. Moodie; other directors: J. M. Gibson, W. C. Hawkins, J. W. Sutherland, J. G. Gauld; Secretary, G. Waller; Auditor, W. E. Boyd.

International Ry. Co.—Owing to a change in the controlling interests of the International Traction Co., which is the holding company of the International Ry., and other electric railways in the Niagara peninsula, on the Canadian as well as the U.S. side of the Niagara River, new directors and officers have been elected. The new board and officers of the I. Ry. Co. are as follows: President, H. J. Pierce, Buffalo, N.Y.; Vice-President, D. S. Lamont; other directors: E. B. Osler, T. G. Blackstock, Toronto; G. L. Boissevain, P. White, A. Robinson, T. E. Mitten, T. D. Culyer, C. Steele, R. L. Freyer, H. M. Watson, D. O'Dey, E. T. Stotesbury, A. M. Robinson. Secretary-Treasurer, J. F. Slocum.

The Kingston, Portsmouth and Cataract Electric Ry. has been closed down, the bondholders having taken possession, and being unable to obtain power from the Kingston, Ont., City Council at a rate which the council said to be about \$150,000, and it is stated that the bondholders have not received any interest for some years.

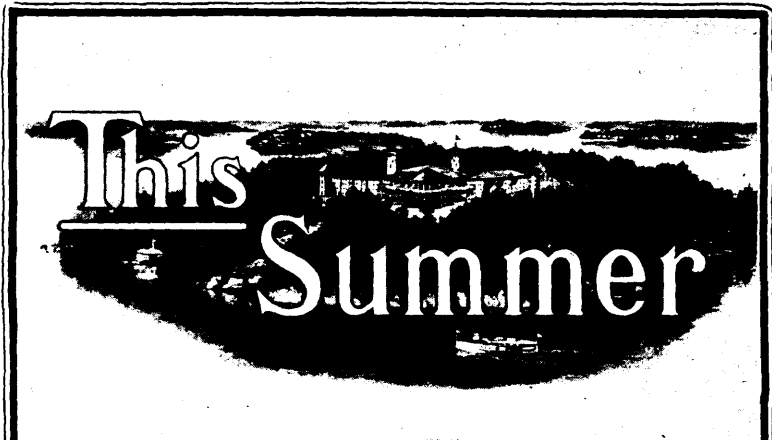
Levis County Ry.—The financial difficulties in which this company are involved culminated Mar. 11 in the failure to carry out the arrangement with the company supplying the power. The power supply was cut off and the service is suspended pending an adjustment of the financial position. We are advised that there is no truth in the press reports that the line was to be taken over by the Messrs. King.

Montreal Street Ry.—Gross earnings for Feb., \$185,864; net earnings, \$37,968.38; fixed charges, \$20,477.54; surplus, \$17,490.84, against \$168,685.29 gross; \$37,264.70 net; \$16,940.05 fixed charges; \$20,324.65 surplus for Feb., 1904. Gross earnings for five months ended Feb. 28, \$1,027,214.06; net earnings, \$325,335.59; surplus, \$229,530.28; against \$937,821.56 gross; \$319,563.75 net, and \$233,775.30 surplus for same period 1903-04.

Niagara, St. Catharines and Toronto Ry.—Gross earnings for year ended Dec. 31, 1904, \$223,924; net earnings, \$141,497; interest charges, \$49,462; surplus, \$32,965; against \$214,823 gross, \$139,556 net, \$43,867 interest charges, and \$31,400 surplus for 1903.

Sandwich, Windsor and Amherstburg Ry.—Following are the officers and directors for the current year: President, H. A. Everett; Vice-President and Treasurer, J. C. Hutchins; Assistant Auditor, Jos. Bampton; other directors: E. W. Moore, R. B. Van Courtlandt, C. B. King, A. Pack, M. Brennan; Secretary, A. E. Peters; Auditor, I. Fullerton; Manager, Jas. Anderson.

Toronto Ry.—Car earnings for Feb., \$185,377.08, against \$169,904.33 for Feb., 1904. The Toronto City Council has given notice that it will apply at the current session of the Ontario Legislature for an act authorizing it to take over and expropriate the property, rights and franchises of the Toronto Ry. Co., upon the terms and conditions in which the agreement with the company providing for the city's taking over the undertaking. It is asked that the expropriation shall not be made until it has been approved of by the ratepayers.



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MONTREAL, CANADA

MUSKOKA

C.P.R. LANDS

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

TERMS OF PAYMENT.

An actual settler may purchase not more than 640 acres, on the ten instalment plan by paying a cash instalment at time of purchase, interest at six per cent. on the unpaid purchase money at the end of the first year, and the balance of the principal with interest in nine equal instalments annually thereafter as shewn in the following table:—

160 Acres at \$3.00 per acre, cash payment \$71.90, first year's interest \$24.49 and nine instalments of \$60.00	
" " 3.50 " " " " " " " " " " " "	83.90, " " " " " " " " " " " "
" " 4.00 " " " " " " " " " " " "	95.85, " " " " " " " " " " " "
" " 4.50 " " " " " " " " " " " "	107.85, " " " " " " " " " " " "
" " 5.00 " " " " " " " " " " " "	119.85, " " " " " " " " " " " "
" " 5.50 " " " " " " " " " " " "	131.80, " " " " " " " " " " " "
" " 6.00 " " " " " " " " " " " "	143.80, " " " " " " " " " " " "

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

DISCOUNT FOR CASH.

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

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

F. T. GRIFFIN,

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

CANADA NORTH-WEST LAND CO.

This Company has 750,000 acres of selected lands in Manitoba and Assiniboia which offer excellent opportunities to settlers and investors who desire to secure good lands in well-settled districts. These lands are on sale at the Company's Office at Winnipeg, and at the various land agencies of the Canadian Pacific Railway Company.

Established 1849

BRADSTREET'S

Capital and Surplus \$1,500,000

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EXECUTIVE OFFICES

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THE BRADSTREET COMPANY gathers information that reflects the financial condition and the controlling circumstances of every seeker of mercantile credit. Its business may be defined as of the merchants, by the merchants, for the merchants. In procuring, verifying and promulgating information, no effort is spared, and no reasonable expense considered too great, that the results may justify its claim as an authority on all matters affecting commercial affairs and mercantile credit. Its offices and connections have been steadily extended, and it furnishes information concerning mercantile persons throughout the civilized world.

Subscriptions are based on the service furnished, and are available only by reputable wholesale, jobbing and manufacturing concerns, and by responsible and worthy financial, fiduciary and business corporations. Specific terms may be obtained by addressing the Company at any of its offices.

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OFFICES IN CANADA:

Halifax, N.S. Hamilton, Ont. London, Ont.
Montreal, Que. Ottawa, Ont. Quebec, Que.
St. John, N.B. Toronto, Ont. Vancouver, B.C.
Winnipeg, Man.

THOS. C. IRVING,

Gen. Man. Western Canada, Toronto.

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THE GRAND TRUNK RAILWAY COMPANY OF CANADA

NOTICE is hereby given that the ordinary general half-yearly meeting of the Grand Trunk Railway Company of Canada will be held at the City Terminus Hotel, Cannon Street, London, E. C., on Thursday, the 13th day of April, 1905, at 12.00 o'clock noon, precisely, for the purpose of receiving a report from the Directors, for the election of Directors and Auditors, and for the transaction of other business of the Company.

Notice is also given that a resolution will be submitted to the meeting for the purpose of reducing the number of the Directors.

Notice is also given that the Transfer Books of the Company in London and Montreal will be closed from Monday, the 13th day of March, to the day of meeting, both days inclusive.

By order,

C. RIVERS WILSON, President.
H. H. NORMAN, Secretary.

Dashwood House,

9 New Broad Street, London, E.C.,
3rd March, 1905.

Niagara Navigation Co.'s New Steamer.

The Niagara Navigation Co. has placed an order for the construction of a new steel steamer, specially designed and arranged for the express passenger service between Toronto and Lewiston, N.Y. The new steamer has been designed on the same general lines as the Chippewa and Corona, but differs from them in that she will be propelled by twin screws instead of paddle wheels, and will have her internal arrangements planned on the most modern lines to afford the greatest accommodation and comfort for passengers.

The steamer will have the following dimensions:—length, 317 ft. 6 in. over all; beam, 51 ft., 8 ins.; depth, 15 ft., moulded; draught, 10 ft. She will be driven by twin screws, power being supplied by two sets of engines of the vertical inverted, direct acting, quadruple expansion type, balanced on the Yarrow, Schlick and Tweedy system, having cylinders 17½ in., 25 in., 36 in., and 52 in. diameter, by 30 in. stroke. Steam will be supplied by six Scotch marine boilers at a working pressure of 210 lbs. The Ellis & Eaves suction system of forced draught will be fitted. The steamer is to have a guaranteed speed of 22½ miles an hour, so that in all probability the engines will be capable of making a speed of about 20½ knots an hour. The hull will be constructed of steel, and will be divided into eight compartments by seven watertight bulkheads, thus rendering her practically unsinkable. The steamer will have two smoke stacks similar to the other vessels of the line.

The vessel is planned on the lines of the day service observation type of steamers, having four principal decks, namely, main deck, promenade deck, upper promenade deck, and lower or orlop deck below the main deck. There will be three gangways on each side, the forward ones for passengers and express, the middle ones for passengers' baggage and the aft one for passengers only. This latter will lead directly into the entrance hall on the main deck, at the forward end of which will be found the purser's office, a parcel checking room and other offices with which passengers have to come in contact. At the aft end will be the ladies' retiring room, which will be specially fitted for the comfort and convenience of ladies, and will include a number of new features. At the forward end a staircase 7 ft. wide will connect the entrance hall with the promenade deck above. The dining-room will be forward on the main deck, and will be fitted with large observation windows on each side, so that an uninterrupted view may be had. It will have a seating capacity for 150. The main deck will be of steel covered with wood, and interlocked rubber tiling will be used as a flooring in several parts of the vessel devoted to passenger accommodation. On the promenade deck the principal feature will be the general saloon, which will extend the full width of the steamer. It will be a particularly handsome apartment, and the sides, instead of being straight, will consist of a series of bow windows, so that views may be had ahead and astern as well as straight out. At each bay seats will be provided so that small parties may keep together. Two of the bays will be finished as private parlors, which will be available for letting to parties who desire to be alone. The upper promenade deck, which will be reached by a stairway from the general saloon, as well as by stairways from outside on the promenade deck, will extend over the whole vessel, instead of ending just forward of the wheelhouse as in most vessels of this type. The rail will be inside the lifeboats, and the entire width of the deck will be available for passengers. The captain's quarters, the wheelhouse, and the pilot's room will be on this

deck. A light shade deck amidships will give shelter over this deck. The space over the engine room, instead of being closed in with steel plates, will be surrounded with a framework in which plate glass sides will be fixed so as to enable passengers to have a view of the machinery. On the lower or orlop deck will be found the crews' quarters, kitchens, smoking room, engines and boilers, etc. The whole of the interior has been planned so as to provide the greatest accommodation for the passengers, and for the convenience of the crew in working the steamer.

The decorations will be particularly striking. The entrance hall will have a heavy beam ceiling; the main stairway will be in cathedral oak; the dining-room in mahogany, and other portions of the passenger accommodation in weathered and quartered oak. The designs show some very fine effects and will present a rich and artistic appearance. The furnishings of the various rooms will be in harmony with the general decorative design and color scheme.

The steamer will be constructed by the Canadian Shipbuilding Co., Toronto, of which F. Nicholls is President, and A. Angstrom, General Manager. It will be ready for service in 1906.

The Lake Freight Outlook

A Winnipeg correspondent writes us as follows:—"The outlook for the coming season is for a fair business for the bulk freighters, as stocks of wheat, etc., at Port Arthur and Fort William will be about the same as last year at the opening, and reports from the twin ports are that the opening this season should be fully three weeks earlier than a year ago, which would bring it about the middle of April, as the past winter has been comparatively mild and short, and the ice is a great deal lighter than in former years.

"Stocks of wheat, etc., will probably amount to 10,000,000 bush., and first trip rates of 2 cents a bushel to Georgian Bay and Lake Huron ports are already being quoted by vessel owners, with ¼c. over for Buffalo. Montreal rates will be 5½ to 6c., and vessel men expect to hold these rates until at least the second month after opening, but as there are now less than 8,000,000 bush. of wheat left in the interior, according to the Northwest Grain Dealers' Association, rates will have a tendency to drop after the first month, especially the Buffalo rate, which will be in competition with U.S. vessels, which handle a large percentage of coal into the twin ports and which will be eager for return cargoes.

"The coal tonnage will show a decided increase during the coming season as the past winter has left the docks with but a small reserve, and owing to the vast increase in population west of the lakes which is expected this spring, the coal handlers are all figuring on increasing their facilities fully 25%. Rates on coal have in the past been considered unsatisfactory by the vessel interests, owing to the delays in discharging at this end, and an effort is being made to place rates on a higher level during 1905.

"The package freighters are watching with considerable interest the advent of a U.S. line of package freighters between Buffalo and Fort William, in connection with the C.P.R., as this business has in the past been the cream of the Montreal-Fort William liners, but as the package business has been rapidly on the increase during the past three years the new line will probably prove a successful venture and will not affect the Canadian liners to any great extent. The export flour trade should show a decided increase the

coming season, as wheat values are slowly reaching the export level, and the Canadian millers are again figuring on securing their share of this trade, which in view of the shortage of milling wheat now prevailing in the Western States will keep the Minneapolis millers out of this trade for some time.

"The U. S. Treasury Department ruling on the matter of milling Canadian wheat in bond has not had the effect of cleaning up the Canadian surplus, as considerably less than 1,000,000 bush. were diverted from Canadian channels in this manner."

In connection with the above it may be mentioned that the grain carriers section of the Dominion Marine Association have agreed on a minimum rate from Fort William and Port Arthur to Georgian Bay ports of 2c. a bushel, and from Fort William and Port Arthur to Montreal of 6c. a bushel. The latter rate may include marine insurance.

The Montreal Transportation Co. is reported to have chartered three of its boats to carry grain cargoes on the opening of navigation from Fort William to Montreal, at 6c. a bush., including marine insurance.

Notices to Mariners.

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

No. 7. Feb. 4.—British Columbia—Washington—18. Submarine telephone cable laid between Vancouver Island and the mainland.

No. 9. Feb. 8.—Ontario—24. Lake of the Woods, mouth of Rainy River, new range lighthouses.

No. 10. Feb. 13.—Ontario—27. Lake Ontario, Simcoe Island, Nine Mile point light-station, change in fog alarm. 28. Niagara River mouth, Niagara-on-the-Lake, fog alarm established.

No. 11. Feb. 22.—New Brunswick—30. South coast, Bay of Fundy, Passamaquoddy Bay, St. Andrew's bar, Navy Island, lighthouse established. Nova Scotia—31. Strait of Northumberland, Pictou Island, west end, character of new light.

No. 12. Feb. 23.—British Columbia—32. Fisher Channel, Walbran rock, buoy established. 33. Chatham Sound, Inskip passage, Port Simpson entrance, harbor reef, buoy established.

No. 13. Feb. 28.—British Columbia—34. Strait of Georgia, Entrance Island, temporary light.

The United States Hydrographic Department has issued an index to the notices to Mariners issued by it during 1904.

Maritime Provinces and Newfoundland.

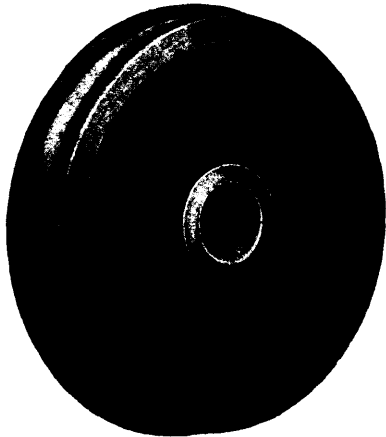
The Reid Newfoundland Co., we are advised, has no present intention of placing another steamer on the route between Sydney, N.S., and Port-aux-Basques, Nfld., as stated in recent press reports.

We are advised that while plans and tenders have been under consideration, the Canada Atlantic and Plant Steamship Co. has not arrived at a decision respecting the new steamer which it is proposed to order.

The Eastern Steamship Co. has placed an order in the U.S. for two turbine steamers, 300 ft. long, and to have a speed of 20 knots an hour. One of the steamers is intended for the run between Boston, Mass., and St. John, N.B.

The marine railway at North Sydney, N.S., has been purchased for \$25,000 by a local syndicate, the composition of which has not

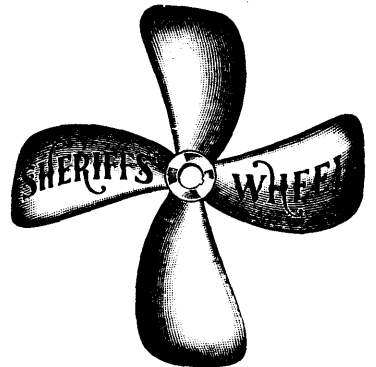
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SHERIFFS MANUFACTURING CO.



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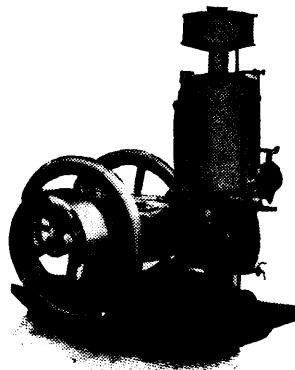
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 IGNITERS

No danger of getting STUCK



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ONTARIO WIND ENGINE & PUMP CO., Ltd.
 TORONTO

(SOLE AGENTS FOR CANADA)

The Northern Electric and Manufacturing Co., Limited

MONTREAL

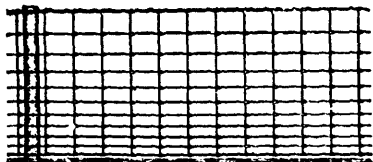
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STEAM
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 MENTS

been disclosed. The purchasers, it is stated, will improve the plant and make it available for larger vessels.

The report of the Eastern Steamship Co. shows earnings for 1904 of \$1,447,783; operating expenses, \$1,165,099; charges, \$72,177; surplus, \$210,505. A dividend of 3% was paid, leaving a balance of \$120,000. The company has a capital of \$3,000,000.

The Tidal and Current Survey Branch of the Department of Marine has issued tide tables for Charlottetown, P.E.I.; Pictou and St. Paul Islands, N.S., with tidal differences for Northumberland Strait, the southwestern side of the Gulf of St. Lawrence, the north coast of Prince Edward Island and Cabot Strait.

The Strathern Shipping Co. has been incorporated under the Dominion Companies' Act, with a capital of \$16,000 and offices at Halifax, N.S., to acquire the barque Strathern, and carry on a general shipping business in Canada. The provisional directors are: H. McInnes, W. H. Fulton, J. B. Kenny, T. W. Murphy, H. McK. Mosher, of Halifax.

The winter steamers, Minto and Stanley, operating between Pictou, N.S., and Georgetown, P.E.I., were unable to leave port for over a month prior to Mar. 3, on which date they got within two miles of each other, a heavy ice field lying between. The Stanley's passengers and freight were transferred across the ice to the Minto, and so reached Pictou. The service was maintained in this way for some days until the steamers were frozen in.

The fleet of the Dominion Coal Co. for 1905 will consist of its own steamers Cobban, Louisbourg, Cape Breton, Bonavista and Caccouna; the chartered steamer Turpin for the coasting trade alone; and the following chartered coal carrying steamers: Catalone, Mystic, Dominion, Troudegold, Tancred, Britanic, Harrod, Ovidia, Smyrna and James Ross. The latter is a new steamer now being built at Middlesboro-on-Tees, Eng., and will have a capacity of 7,000 tons.

The Interprovincial Navigation Co. of Canada is composed of residents of Campbellton, N.B., and the counties of Bonaventure and Gaspé, Que., and is managed by F. S. Blair and D. E. Richards, of Campbellton. The company proposes to develop the Baie de Chaleur route, upon which the str. Admiral plied for years with Dalhousie, N.B., as the westerly terminus. The eastern terminus will be at Gaspé, Que. The company's str. Lady Eileen will leave Campbellton every Wednesday and Saturday, upon the arrival of the I.C.R. Maritime express from Montreal, but later in the season the Saturday trip will be run in connection with the Ocean Limited. The tourist travel into this district has been growing for some years, and a more modern and commodious steamer was necessary in order to provide the accommodation demanded. The Lady Eileen is a steel twin screw steamer, built at Glasgow, Scotland, having the following dimensions:—length, between perpendiculars, 168 ft.; overall, 185 ft.; breadth, 31 ft.; depth, moulded to main deck, 11 ft., 6 in.; draught, 9 ft., 6 in. She is fitted with steam steering gear and capstan, steam winch aft, steam elevator for handling cargo quickly; steam heated; is equipped throughout with electric light and is provided with a 5,000 candle power search light. She has sleeping accommodation for 100 first-class and 50 second-class passengers, and a hold capacity for 350 tons of cargo. She has two sets of triple expansion engines, cylinders, 12 in., 20 in. and 32 in. diameter, by 24 in. stroke, steam being supplied by two Scotch marine boilers 12 ft. 6 in. diameter by 10 ft. long, at a working pressure of 180 lbs. The Lady Eileen will be commanded by Capt. L. J. Pouliott, who for the past 20 years commanded the str. Admiral on the route.

Province of Quebec Shipping.

The Montreal Transportation Co. has chartered two of its barges to carry pulpwood.

The new str. Montreal will be placed in service by the Richelieu and Ontario Navigation Co. May 23, on the run between Montreal and Quebec.

A movement has been inaugurated in Montreal to have that port declared to be a free and national port under Government supervision, and a petition asking for this is being arranged for.

The Quebec Steamship Co. has been voted a subsidy of £4,500 for the first year and £2,500 for the second year, from the Bermuda Legislature, in connection with the improvement of the New York-Bermuda service, by the addition of the new twin screw str. Bermudian.

The Richelieu and Ontario Navigation Co. has offered to sell to the Montreal City Council the ferry steamer Le Cultivateur, and the whole ferry outfit for \$40,000, so that the city could operate the ferry between Montreal and St. Helen's Island, or the company will continue to operate the ferry for a bonus of \$2,000 a year.

The Dominion Government is being asked to continue the subsidy of \$10,000 a year to Davis & Son, of Levis, Que., in consideration of their keeping the wrecking steamer Lord Strathcona and plant in readiness to assist vessels stranded above or below Quebec, on such conditions of service as the Government may deem reasonable.

Cunningham and Wells (Ltd.) has been incorporated under the Dominion Companies' Act, with a capital of \$250,000, and offices at Montreal, to acquire the business of Cunningham & Wells, carters and carriers, and in connection therewith to operate barges, tugs and steamers. The provisional directors are: Jno., F. E., and W. N. Cunningham; W. J. Wells and M. Armstrong, of Montreal.

G. Greene, jr., a New York engineer, has been engaged by the Department of Marine to examine the plans of the sheds which it is proposed to erect at Montreal. The plans were prepared by J. Kennedy, the Harbor Commissioner's engineer, and after having been approved by that body, some objection was taken to them by certain of the shipping interests, and a good deal of friction resulted.

The Gulf Whaling Co. has been incorporated under the Dominion Companies' Act, with a capital of \$295,000, and offices at Montreal, to purchase and operate steam and other vessels, construct wharves, docks, etc., and to engage in whaling and general trading operations in Canada. The provisional directors are T. Gauthier, P. Galibert, Rolland Prefontaine, Montreal; B. Sawyer, N. Smellie, Westmount, Que.

The str. China, hitherto operated in the Anchor Line of Buffalo, N.Y., has been purchased by Canadian owners, and will be run during the coming season in the line of steamers operated by G. A. Jaques & Co., Montreal. The China will be run between Cleveland, Toledo, Ohio, and Montreal. The China is an iron screw steamer, built at Buffalo, N.Y. in 1871, having the following dimensions: length, 210 ft.; breadth, 32 ft.; depth, 14 ft.; gross tonnage, 1,239 tons; net tonnage, 931 tons. The steamer will be overhauled and refitted with new boilers, and a new fore and aft engine, before being put on the route.

Ontario and the Great Lakes.

F. S. Spence has been elected Chairman, and J. T. Matthews, Vice-Chairman, of the Toronto Harbor Commissioners for the current year.

The steam tug Queen, heretofore engaged on Lake Nipissing, has been purchased by W.

B. McLean & Co., and has been transferred to Trout Lake.

The Dominion Government is preparing to erect a dock, wharf, storehouses and other buildings at Windsor, Ont., as a permanent depot for the lake cruiser Vigilant.

Negotiations are reported in progress with the Thousand Islands Steamboat Co. for the purchase of its str. Pierrepont, at present laid up at Cornwall, Ont. The price offered is reported to be \$12,000.

The str. City of Grand Rapids has been purchased by Capt. Averill, of Cleveland, Ohio, who purposes placing her on the run between that city and Port Stanley, Rondeau and other points on the Ontario shore of Lake Erie.

The Ontario and Quebec Navigation Co. has been incorporated under the Ontario Companies' Act, with a capital of \$50,000, and offices at Picton, Ont., to carry on a general transportation business. The provisional directors are B. R., Jas. DeC., and R. G. K. Hepburn, of Picton, Ont.

The Farrar Transportation Co., Collingwood, Ont., declared a dividend of 10% for the year 1904, and decided to purchase a second steamer of full canal size. The directors for the current year are: Capt. Scott, F. A. Bassett, and Pearson, T. Wylie, — Ferris, W. R. Roland, W. Carmichael, G. E. Fair, and — McCallum.

The Marine Transportation Co. of Ogdensburg has been incorporated under the laws of the State of New York, with a capital of \$20,000, to operate steamers on the Great Lakes and on the St. Lawrence River, from Ogdensburg, New York, to Prescott, Ont. The directors include G. L. Ryan, of Ogdensburg, N.Y., and H. J. Bartlett, of Orillia, Ont.


The Canadian Ore Dock Co. has been incorporated under the Ontario Companies' Act, with a capital of \$500,000, and offices at Toronto, to construct docks, wharves, etc., at Port Arthur, Ont. The company is being organized in connection with the blast furnaces, etc., which it is proposed to construct at Port Arthur, in which Mackenzie, Mann & Co. are interested.

W. P. Hinton, General Freight and Passenger Agent, Canada Atlantic Ry., Ottawa, writes that the "actual result of elevation to boats from Fort William and Port Arthur to Depot Harbor, Ont., during last season of navigation was 7,310,213 bush., or half of the entire quantity of Canadian grain moved to Canadian ports." This is in correction of figures published in our last issue.

A clam dredge was launched at the Polson Iron Works, Toronto, Mar. 4, for use at Toronto Island. It is 87 ft. long, 35 ft. beam, and 7.1 ft. deep. The hull is divided into seven bulkheads, three of which are watertight; and is planked with 6 in. boards on the sides, and 4 in. boards on the bottom. The dredge will carry a 40 ft. dipper crane, operated by an independent hoisting engine.

The Montreal and Lake Erie Steamship Co. has been incorporated under the Dominion Companies' Act, with a capital of \$180,000 and offices at Toronto, to carry on a general navigation business, wreckage and salvage operations, and to construct wharves, etc. The provisional directors are: James Carruthers, C. A. Jaques, Montreal; J. H. Hall, Ottawa; W. D. Matthews, F. D. Benjamin, S. Samuel, C. W. Bond, and Geo. Summerville, Toronto.

The Algoma Central and Hudson Bay Ry. has decided to operate a line of steamers between Toledo, Ohio; Owen Sound, Parry Sound and intermediate ports along the north shore of Georgian Bay, to Sault Ste. Marie, Ont., during the summer. The King Edward will run from Toledo to Sault Ste Marie; and the Ossifrage and Minnie M. will run between




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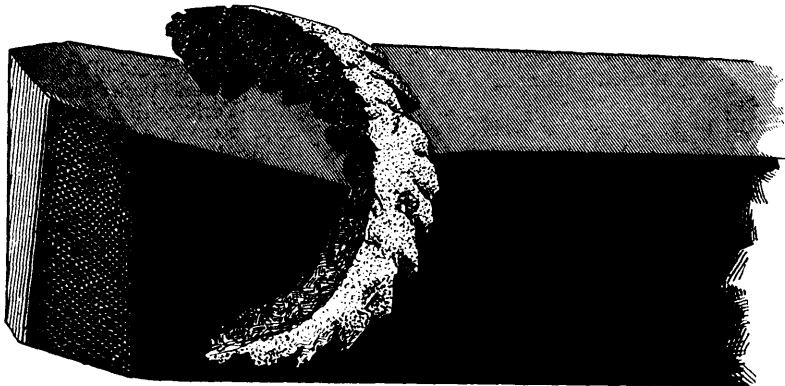
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The Ottawa Transportation Co. is building, at its Hull, Que., yard, two barges, each about 120 ft. long, 24 ft. beam, and 9 ft. depth of hold. The hulls are being built of B.C. fir. The barges will be ready for the opening of navigation, and are for the company's trade between Ottawa and Montreal. The company's fleet this year will consist of five tugs and 64 barges. Its principal freight from Ottawa to Montreal consists of lumber, and the return freight is mainly coal and sulphur.

A syndicate represented by J. J. Boland & Co., Buffalo, N.Y., has purchased the steamers Eben Ward and J. M. Nicol of the old Ward Line, and the str. Juniata of the old Anchor Line, and it is stated that they will be operated as the Canadian Fort William line. The starting point of the line will be at Buffalo, calling at Cleveland, Detroit and St. Clair River ports, or any other ports where a sufficiency of package freight business may be picked up; Sault Ste. Marie, Mich., and Fort William, Ont., where connection will be made exclusively with the C.P.R. The Juniata is the only steamer which requires much in the way of repair, and when the repairs are completed she will be named the Winnipeg.

The annual meeting of the Rideau Lakes Navigation Co. was held at Kingston, Ont., Mar. 8, after adjournment from Feb. 8. The officers and directors for the current year are:—President and General Manager, Capt. D. Noonan, Kingston; Vice-President and Secretary-Treasurer, C. Adams, Toronto; other directors: Jno. Foley, Westport, Ont.; J. H. Adams, Toronto, and E. E. Fleming, Kingston. The capital of the company is \$100,000, of which \$60,000 has been paid up. It owns two steamers—Rideau King and Rideau Queen—and carries on a regular passenger and freight business between Kingston and Ottawa, via the Rideau Canal and lakes. A press report states that the company has decided to run its steamers to Clayton, N.Y., this season, to meet the trains of the New York Central and Hudson River Rd.

The Northern Navigation Co.'s officers and agents met in Collingwood recently, and discussed plans for the forthcoming season. The services to be given include the following:—from Collingwood to Sault Ste. Marie, via Meaford and Owen Sound, returning by the same route, Tuesdays, Thursdays and Saturdays, to be made by the steamers City of Collingwood, City of Midland, and Germanic; from Collingwood to Parry Sound, Byng Inlet and French River, regular trips will be made by the Britannic; from Collingwood to Penetanguishene and Parry Sound, continuing to Point au Baril, three days a week, daily trips by the City of Toronto; from Sarnia to points on Lake Superior, regular trips by Huronic, United Empire and Monarch; and a new route will be opened between Toledo and Sault Ste. Marie, calling at Windsor, Detroit, Sarnia, Goderich, Killarney and other ports, by the str. Majestic.

Petitions have been presented to the House of Commons on behalf of the York County Council and the City of Toronto, protesting against the passing of an act to incorporate the Canadian Canals Corporation to construct a canal and portage railways from Georgian Bay to Lake Ontario. Opposition is being given to the passing of the bill through committee by the Toronto City Council. A deputation representing various municipalities in York County, and the Trent Valley Canal Extension Association, recently waited on the Government to urge a project of canal extension in the county. The plan advocated is the construction of a canal from Lake Simcoe, about nine miles to Aurora, by way of Holland Landing, Newmarket and Aurora, so as to enable the products of these towns to enter

the Trent Valley Canal at Beaverton, and get an outlet by water transport. Other projects which are suggested are to extend a canal from Lake Simcoe to Schomberg, to connect Sutton by a canal with the lake, and to deepen the Holland River.

An examination of the Ottawa-Georgian Bay navigation route has been undertaken by the Public Works Department and surveys are now under way. This is the first thorough examination of the project ever undertaken. W. Shanley made a partial survey and submitted a report to the Legislative Assembly of Canada in 1858, and T. C. Clarke made another partial survey and reported in 1860. Both of these surveys were for a 12 ft. barge navigation. The present examination is to determine the excavation and structures necessary and the right-of-way required for a navigation of not less than 22 ft. in depth. The line from Montreal to Georgian Bay, 430 miles, is divided into three districts, the first of which is from French River to Des Joachines in charge of S. J. Chapeau, District Engineer; the second district extending to Ottawa is under E. J. Rainboth, District Engineer, and the third extending to Montreal under C. R. Coutlee, District Engineer. A. St. Laurent is Engineer in charge at Ottawa, and E. D. Lafleur, Chief Engineer of Public Works, is the President of the Board, which is constituted of the engineers named. It is hoped to complete the field work this year. The route of the proposed canal extends from the mouth of the French River to Montreal. It follows the French River and Lake Nipissing; passes, at the height of land, through Trout, Turtle and Talon Lakes; follows the Mattawan River to its junction with the Ottawa, thence down the Ottawa as far as Montreal, leaving the bed of the river occasionally to evade difficult points. Sixty-two miles of this route having been carefully surveyed in 1901, there remained 368 miles to be covered by the new survey. It was decided from the beginning that the information gathered to study the feasibility of the route, to prepare plans and make a close estimate of the cost of the whole route, should be entirely original, and that old plans from old, partial surveys should be used only as preliminary information and for general guidance.

Manitoba and Northwest Territories.

A deputation from Winnipeg, Brandon and other points in Manitoba, recently waited on the Dominion Government urging the dredging of the Assiniboine River between Winnipeg and Brandon.

P. Paradis, Dominion Government engineer, has concluded an inspection of the Saskatchewan River at Prince Albert, Sask., with a view of reporting as to the work necessary to be done in order to improve the navigation.

The Hudson's Bay Co.'s str. Stork, which left Moose Factory, Ont., on Hudson's Bay, for London, Eng., in Sept., 1904, and on which re-insurances at 75 guineas per cent. premium were effected, owing to her non-arrival, was caught in the ice in Hudson's Straits, and returned to the bay to winter. Direct news of the vessel reached Winnipeg by a courier from the ship, Feb. 27. The last occasion on which the company's steamer had to winter in the bay was in 1891.

B.C. and Pacific Coast Shipping.

The Dominion Government steamer Quadra is being given a pretty general overhaul at Esquimalt, B.C.

A large railway car ferry has been built at Vancouver, B.C., for transporting railway cars between Comox, B.C., and a nearby smelter.

The property acquired by the C.P.R. by its purchase of the Esquimalt and Nanaimo Ry. includes the steamers City of Nanaimo, Joan and Czar.

The Dominion Government has placed a contract at New Westminster, B.C., for the construction of a new snag boat. The new steamer will be 150 ft. long, 30 ft. beam, and 6 ft. depth of hold, and will replace the Sampson, now in operation on the Fraser River.

The British Columbian Steamship Trading and Agency Corporation, a London, Eng., company, owning the barque Perseverance, and engaged in general trading along the B.C. coast, has assigned. Its liabilities are stated to be £1,990 to creditors, with no assets; and to shareholders there is a deficiency of £2,942.

The official report on the affairs of the Victoria and Esquimalt Pilotage Board, which resulted in the cancellation of the appointment of E. C. Baker as Secretary-Treasurer, recommended that the Secretary-Treasurer should not be a member of the board as at present, and that the accounts of the board should be audited annually.

Following are the officers of the Pacific coast division of the Merchants' Service Guild of Canada:—President, Capt. W. Cox, Victoria; First Vice-President, Capt. T. H. Brown; Second Vice-President, Capt. G. Robertson, Nelson; Secretary-Treasurer, J. J. Martin, Victoria; Trustees, Capts. C. Eddie, Vancouver; G. Robertson, Nelson; T. H. Brown, Atlin; J. T. Walbran, W. Cox, D. G. Macaulay and J. M. Newcomb, Victoria.

The present Seamen's Act contains a provision allowing a shipping master 50 cents for shipping a seaman for a vessel's crew, which applies to British Columbia only. Some difficulty was experienced in the operation of the act, and as a result vessels have been obliged to go to U.S. ports to engage crews. It is proposed to amend the act in such a way as to enable shipping masters to delegate their powers, and to charge what is regarded as a reasonable price for the work. The bill, however, has been postponed for further consideration.

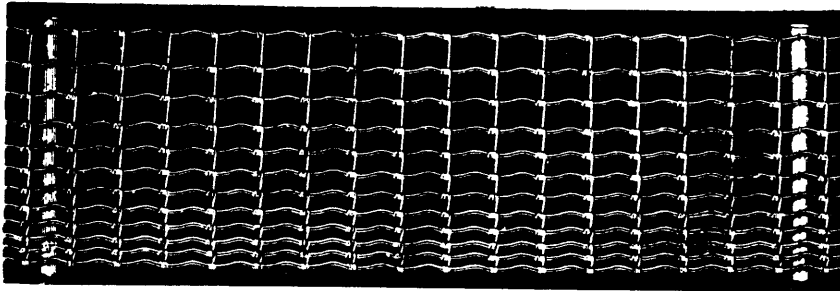
The Steamboat Inspection Act.

The bill to amend the Steamboat Inspection Act, introduced this session by L. McCarthy, M.P., was referred by the House of Commons to a special committee. Deputations representing the Dominion Marine Association, and the National Association of Marine Engineers of Canada, appeared before the committee and discussed the proposed new provisions at length. The principal point on which there was a difference was upon the question of the class of engineers to be employed on tug boats, and after some discussion a compromise was effected between the Marine Engineers' Association and the tug owners, the terms of which were laid before the special committee Mar. 1. The agreement provided for the insertion of a clause by which the act would not come into force until Jan., 1906, so as to leave the traffic for the present year uninterrupted. In substitution of the words, "Provided, however, that if any of the vessels mentioned in this section—except the steam yachts therein mentioned—carries passengers for or without hire, such vessel shall be deemed to be a passenger steamboat for the time being and shall be subject to all the provisions of the act from which by this section such vessel is exempt," in sub-section 1, section 3 of the act of 1898, it was arranged to insert the following words:—"No steam yacht used exclusively for pleasure or private use, without hire or remuneration of any kind, no tug boat and no steamboat having an engine under 11 nominal horse-power single

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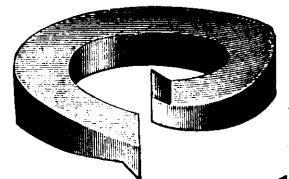
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engine and 21 nominal horse-power compound engine, shall be subject to the requirements of this act." Words were also to be added bringing yachts and tug boats of that horse-power and over under the provisions of the act respecting qualifications of engineers. It was also provided that fourth-class engineers might act as chief engineers on tugs or assistant engineers on passenger steamboats under 100 nominal horse-power, and that any engineer now in charge of a tug boat engine may receive a permanent engineer's certificate on furnishing testimony as to character and proof of 24 months' service as engineer on a tug boat. The proposed arrangement met with opposition from the members of the committee from the Maritime Provinces, and the whole question was adjourned for the purpose of obtaining further information.

Steamboat Inspection Taxes. An Order-in-Council was passed Feb. 14, abolishing the steamboat inspection tax upon U.S. steamboats plying to and from Canada from and after April 1, and instructions have been issued to the collectors of customs throughout the Dominion authorizing them to cease to collect the inspection tax heretofore imposed. U. S. steamers plying to and from Canada will, however, be subject to the Canadian steamboat inspection as heretofore, but without charge. The Dominion Government having abolished the steamboat inspection tax on U.S. steamers coming to Canada, it is expected that the U.S. Department of Labor and Commerce will at once abolish the U.S. tax imposed on Canadian steamers trading to and from the United States, as it is authorized to do by Act of Congress.

Huntsville, Lake of Bays and Lake Simcoe Navigation Co.—The adjourned annual meeting was held in Toronto recently. The report presented has not been made public, but we are advised by the management that it showed increased freight and passenger earnings for the season of 1904, no increase in the operating expenses, and considerable improvements in the equipment. The report was adopted and the directors were authorized to provide a new passenger steamer for the Lake of Bays at an estimated cost of from \$18,000 to \$20,000. The proposed new steamer will be 120 ft. long, with a width of 23 ft., and will be provided with ample dining room and stateroom accommodation. Following are the officers and directors for the current year: President, Dr. J. H. Webb, Waterloo, Ont.; Vice-President, W. H. Patton, Toronto; General Manager and Secretary, Treasurer, W. Duperow, Huntsville, Ont.; other directors: E. J. B. Duncan, Toronto; and Capt. F. Marsh Huntsville.

The official trial trip of the Allan Line turbine str. Victoria, at Belfast, Ireland, Mar. 4, was reported to be satisfactory. The steamer left Liverpool for Halifax, N.S., and St. John, N.B., Mar. 23.

The announcement has been made that the C.P.R. Upper Lake steamers will call at Sault Ste. Marie, Ont., as well as at Sault Ste. Marie, Mich., which heretofore has been the only calling place between Owen Sound and Port Arthur, Ont.

J. P. Mabee, K.C., is to be chairman of the Canadian Section of the International Waterways Commission. The first meeting of the section was held at Ottawa, Mar. 6, when preliminaries were arranged and a programme laid down as to what should be accomplished prior to a meeting with the U.S. section of the Commission. It is expected to arrange for a first joint meeting either at Buffalo, N.Y., or Detroit, Mich., at an early date.

The Dominion Government has entered into a contract with the Allan Steamship Co. by which it will guarantee a line of steamers

between Canada and France. The Canadian ports will be Montreal and Quebec in summer and St. John, N.B., or Halifax, N.S., in winter, the French port to be either Cherbourg or Havre, at the option of the company. Four steamers will be placed on the line and not less than 18 round trips are to be made in the year. The contract extends for three years.

The new Canadian rules for the navigation of the Great Lakes, including Georgian Bay, their connecting and tributary waters, and the St. Lawrence River as far east as the lower exit of the Lachine Canal and the Victoria Bridge at Montreal, have been issued by the Department of Marine. A notice to mariners has been issued stating that the new rules come into effect April 1, and that copies can be obtained by all interested on application to the Department at Ottawa, at the Custom House, Montreal, or from the Collectors of Customs at the principal ports on the Great Lakes. A statement showing the principal changes from the old rules appeared in our March issue. The new rules are put in force by Order-in-Council, under the provisions of an Act of 1904, amending Chap. 79 of the Revised Statutes in that way. The rules contained in Chap. 79 remain in force on all waters in Canada, except those specifically mentioned in the new rules. The reason for retaining the old rules in the waters, other than those covered by the new rules, was that it was considered unwise to change the customs of navigation on waters where Canadian vessels did not come into contact with U.S. vessels.

Among the Express Companies.

The Canadian Northern Ex. Co. has opened offices at Holmfeld, Melfort, Roblin and Wakopa.

The Canadian Ex. Co. has closed its offices at Amherstburg, Ont.; Rougemont, St. Marie Salomee, St. Norbert, Que.; and Canaan, N.B.

J. C. Cummings has been transferred from the Quebec to the Montreal office of the Dominion Ex. Co., and was given a hearty send-off by his friends at Quebec, Mar. 3.

The proposal made by W. F. Maclean, that the express companies should be brought under the provisions of the Railway Act, has again been defeated in the House of Commons.

The Canadian Northern Ex. Co. is now operating on the Oak Point section of the Canadian Northern Ry., including the following points:—Grosse Isle, Woodlands, Lake Frances, St. Laurent, Oak Point, Man.

The Canadian Ex. Co. has opened offices at Port Carling, Ont.; Salmon Lake, Que.; and St. Anthony, N.B. During the winter season express matter to Port Carling is subject to a stage charge from Falkenberg, Ont.

As work progresses on the Greenway extension of the Canadian Northern Ry., the Canadian Northern Ex. Co. is installing its service, covering the following points:—Glenora, Neelin, Louise, Holmfeld, Enterprise, Lena, Wakopa.

The Canadian Northern Ex. Co. has placed its service on the Prince Albert section of the Canadian Northern Ry., accepting matter for Etiomami, Greenbush, Prairie River, Bannock, Mistatim, Peesane, Crooked River, Tisdale, Star City, Wentworth and Melfort.

We are advised that the Canadian Ex. Co. will commence operating over the Prince Edward Island Ry. upon the opening of navigation, and that the additional territory will be operated from St. John, N.B. Offices will be opened at the principal places on the line, but just where they will be located had not been determined.

The main line of the Canadian Northern Ry. being now in full operation to Humboldt, 425 miles west of Winnipeg, the Canadian Northern Ex. Co. is accepting shipments for Veregin, Mikado, Canora, Tiny, Buchanan, Rama, Invermay, Margo, Kuroki, Kylemore, Wadena, Paswegin, Englefeldt, Lally, Wimmer, Watson, Clairvaux, St. Gregor, Muenster and Humboldt.

The Great Northern Ex. Co., which has a capital of \$1,000,000 and head offices at St. Paul, Minn., has been registered in British Columbia as an extra-provincial company. The offices in British Columbia are at Rossland, and A. H. MacNeill is the company's attorney. The Great Northern Ex. Co. operates over the lines in British Columbia controlled by the Great Northern Ry., U.S.

"The express business of to-day is a separate and distinct branch of the commercial traffic of railway and other transportation lines, and constitutes that part of the merchandise traffic of the country which the railroad companies have found it inexpedient to handle to the satisfaction either of the public or of themselves. This business does not, as it is sometimes erroneously believed, consist alone of the parcel traffic and of shipments of money and valuables and of packages and boxes of inconsiderable weight, but it embraces that part of the shipments of nearly every weight and description for which producers, merchants, manufacturers or dealers require especially expedited transportation and a complete and effective agency and custody. Its transactions are not confined to local or prescribed territory."—Railway World.

Telegraph and Cable Matters.

The C.P.R. Telegraph Department has opened a town telegraph office in Saskatoon, Sask.

Residents in the vicinity of Saskatoon, Sask., state that the service on the Government telegraph line is not satisfactory.

We are advised that the C.P.R. Telegraph Department expects to extend its line to Yarmouth, N.S., some time, but that nothing definite has been yet done in regard to it.

The Canadian Northern Telegraph Co. has opened offices at Canora, Fork River, Humboldt, Holmfeld, Invermay, Mafeking, Melfort, Neelin, Roblin, St. Laurent, Sanford, Wakopa, Wadena, and Watson.

The C.P.R. Telegraph Department has completed arrangements for carrying underground the wires from its present terminus at Little St. Antoine St., Montreal, to Windsor St., as soon as possible in the spring.

The Canadian Northern Telegraph Co. is pushing its construction work westward. Communication is now established with an office at the second crossing of the North Saskatchewan river, over 500 miles west of Winnipeg.

The Pacific Wireless Telegraph Co. has opened a station at Victoria, B.C. The present mainland station is at Seattle, Wash., but it is expected to arrange for the establishment of one at Vancouver, B.C., at an early date.

The thickly settled district through which the Oak Point section of the Canadian Northern Ry. is built now has a telegraph service given it by the Canadian Northern Telegraph Co., which has opened a commercial office at St. Laurent.

The Marconi Wireless Telegraph Co.'s officers state that the Canadian station is superior to that at Poldhu, Cornwall, Eng., which accounts for the fact that the service between Canada and England is more satisfactory than that from England to Canada.

The C.P.R. telegraphers on the western lines recently sent representatives to Winnipeg, to discuss wages and other matters with

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HAULAGE
GUYS,
TRANSMISSION
SEMAPHORES

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SWITCH
ROPE
BLOCKS
CLIPS
TURN-
BUCKLES
THIMBLES
ETC.

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GENERAL RAILWAY SIGNAL CO.

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Works, Buffalo, N. Y., and Rochester, N. Y.

New York Office, Broad Exchange Building. Chicago Office, Monadnock Block. St. Louis Office, Frisco Building.

The General Railway Signal Company has acquired the American assets and properties of the Taylor Signal Company, of Buffalo, N. Y., and of the Pneumatic Signal Company, of Rochester, N. Y., and is prepared to furnish and install approved forms of mechanical, pneumatic, electro-pneumatic and electric interlocking devices, track circuit appliances, motor signals, railway gates, etc.

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Electric Light Line Wire, Incandescent and Flexible Cords,

RAILWAY FEEDER AND TROLLEY WIRE

Americanite, Magnet, Office and Annunciator Wires,
Cables for Aerial and Underground Use.

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STEEL AXLES, TYRES, AND
SPRING STEEL.

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accepted Standard in Canada.

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EMPLOYES OF

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HAMILTON, ONT.

FIRE NOTICE

We are pleased to inform our customers that the fire on March 3rd did not destroy any of our works except the tower used in painting Screen Cloth. All other departments have been and are running as usual. Orders for Screen Cloth will be filled promptly from stock in Hamilton and Montreal.

THE B. GREENING WIRE CO. Limited

THE PLACE VIGER
MONTREAL.

A beautiful new hotel built by the Canadian Pacific Ry., in connection with their new passenger station. The building occupies an entire block and the style of architecture is that of the Chateau period of the French Renaissance. The hotel faces the Viger Gardens, and is thoroughly up-to-date in all its appointments. Tourists will find the Place Viger a most delightful hotel home.

RATES: \$3 UPWARDS.

Special arrangements with large parties and those making prolonged stays. For further information address, Manager, Place Viger Hotel, Montreal.

the management. As a result, an agreement was reached by which some advances were given and other differences settled.

The Canadian Northern Telegraph Co. has taken over from the Canadian Northern Ry. Construction Department the wires west of Erwood on the Prince Albert extension, and has opened a commercial office at Melfort. Communication with Prince Albert is expected before July 1 next.

The Dominion DeForrest Wireless Telegraph Co. has been incorporated under the Ontario Companies' Act, with a capital of \$1,200,000 and offices at Ottawa, to establish wireless telegraph stations. The provisional directors are: L. J. Lemieux, F. J. Humphrey, Joe. Cardinal, A. and E. Brassard, Montreal.

The Fessenden Wireless Telegraph Co. of Canada is the title under which the incorporation of a company is sought at the current session of the Dominion Parliament, to establish and operate a business of telegraphic or other electric or magnetic communication by means of a wireless or other system."

The proposal to extend the British-West India cable now operated between Halifax, N.S., and Bermuda, to Barbados and St. Lucia, is being regarded with favor in those islands, and a movement has been started in British Guiana, on the mainland of South America, to have the extension carried to Georgetown.

Following are statistics of the telegraph lines of the Dominion for the year ended June 30, 1904:—

	Length of line miles.	Length of cond'rs miles.	No. of offices
G.N.W. Telegraph Co.	18,286	35,721	1,455
C.P.R. Telegraphs.	10,018	45,943	1,152
Western Union Teleg. Co. . .	2,784	13,069	221
Dominion telegraph lines . .	6,270	6,270	327

The Commercial Cable Co. has obtained the approval of the Dominion Government to the landing of an additional cable at its station at Canso, N.S. The first of the company's cables was laid by the cable steamer Faraday in 1881, and the proposed cable will be the fifth it will own. The new cable, which will be used principally for stock exchange work, will be made and laid by one of the British cable construction companies.

The first report of the Mackay Companies, which owns the Commercial Cable Co., and shares in other cable, telephone, and telegraph companies in the United States, Canada and Europe, has been issued. Its capital is \$100,000, one-half preferred and the other half common stock, of which there are outstanding \$35,968,700 of preferred, and \$41,380,400 of common stock. It has \$820,323.70 in cash and cash assets, and has no debts. The income from investments is more than sufficient to pay quarterly dividends of 1% on the preferred stock, and semi-annual dividends of 1% on the common stock. The profit and loss account shows receipts of \$1,643,676.93 from investments including the Commercial Cable Co., and from 14,692 shares in 30 other cable, telegraph and telephone companies, of which the dividends paid absorbed \$1,559,843.28, and expenses \$20,035.01, leaving a balance in hand of \$63,798.69.

The C.P.R. Telegraph Department has arranged to complete its underground system between its main office at Montreal and the Windsor Street station, and will also carry out the following construction work during the year: String an additional wire from Montreal to St. Agathe, Que., 60 miles, for commercial business. Install a complete storage battery plant at Fort William, Ont. String additional copper wire from Winnipeg to Swift Current, Assa., 511 miles. String iron wires from Brandon, Man., to Broadview, Assa., 132 miles; Calgary, Alta., to Cranbrook, B.C., 275 miles; Cranbrook to Crow's Nest, B.C., 99 miles, and from Sicamous to Revel-

stoke, B.C., 46 miles. String a copper wire from Dunmore to Laggan, B.C., 302 miles; and from Laggan to Revelstoke, B.C., 146 miles. String two copper wires from Winnipeg to Emerson, Man. This will give a total of 1,089 miles of new copper wire and 612 miles of new iron wire. In addition to this there will be new pole lines and wires erected along new lines of railway under construction as fast as the rails are laid. These lines include the Guelph and Goderich Ry., the line between Toronto and Sudbury, Ont.; and the extensions in the Northwest. In addition to the new work a large amount will be expended for construction and general repairs to existing lines.

General Telephone Matters.

The telephone system at Prince Albert, Sask., is being converted to a metallic circuit system.

The Vernon, B.C. Board of Trade is promoting the formation of a local company to establish a telephone system there.

The Merchants' Telephone Co., Montreal, denies the press reports that it is about to dispose of its business to the Bell Telephone Co.

The Manitoba Government is investigating the idea of establishing a system of telephones in the province, to be owned by the Government.

The British Columbia Telephone Co. has submitted a proposition to the various towns in the Okanagan Valley to establish a telephone system there.

The Telephone Company of Prince Edward Island has constructed a steel bridge on which to carry all the cables coming into its exchange building at Charlottetown.

The local telephone system at Nanaimo, B.C., has been absorbed by the British Columbia Telephone Co. It is proposed to put in a metallic circuit and to otherwise improve the line.

The Brantford, Ont., city council has decided to re-open the local telephone question by calling for offers for the establishment of a telephone system there to compete with the Bell system.

The bill incorporating the Northwest Telephone Co. has been passed by the House of Commons, a clause being inserted compelling the company to deliver messages originating on any connecting lines.

The Kamarouska Telephone Co. has had its capital increased to \$74,000, and has been given authority to issue bonds to the extent of two-thirds of its immovable property, under the provisions of the Quebec Companies' Act.

A company has been formed at New Liskeard, Ont., with a capital of \$25,000, to construct telephone lines throughout the Temiskaming district. The company has not yet been registered. D. Stewart, New Liskeard, is Secretary-Treasurer of the provisional organization.

The Department of Marine has issued a notice detailing the marks placed to show the position of the telephone cable recently laid between Vancouver Island and the mainland of Washington, U.S., and cautioning mariners against anchoring their vessels in the vicinity.

The Fort William, Ont., town council will apply at the current session of the Ontario Legislature for an act confirming a number of by-laws, among them being one for the purpose of raising \$11,500 on debentures for the purpose of improving and extending the municipal telephone system.

The Crow's Nest Pass Electric Light and Power Co., which operates a telephone system

in Fernie, B.C., has purchased the rights of the British Columbia Telephone Co. to operate in that district. This will end the litigation which had been initiated by the Fernie town council to stop the B.C.T. Co. erecting its poles in the town.

The Bell Telephone Co. is offering to establish a rural telephone system in Waterloo county, Ont., at \$15 an instrument, and 5 cents a call to telephones on the Berlin and Waterloo exchanges, if an instrument is guaranteed for every mile of line built. The farmers who met the company's representative expressed an opinion that there should not be any charge for the calls to Berlin and Waterloo.

The People's Telegraph and Telephone Co., Ltd., has been incorporated under the Ontario Companies' Act, with a capital of \$40,000, and offices at Maynooth, Ont., to carry on a telegraph and telephone business in the northern part of Hastings county, and the southern portion of Nipissing district. The provisional directors are: W. J. Sergeant, S. Harryett, Bancroft, Ont.; W. J. Fitzgerald, T. P. Netterville, D. Smith, Maynooth, Ont.

The large number of petitions which have been presented to the House of Commons asking that an act be passed giving telephone companies power to erect poles on streets only with the approval of the local municipality, initiated a discussion in the course of which the Premier stated that perhaps the time had come when they should have some general law to regulate telephone companies and especially to guarantee and protect the interchange of traffic.

The House of Commons has appointed a committee, of which Hon. Sir Wm. Mulock has been appointed chairman, to investigate the telephone question in Canada. At the opening meeting of the committee, the Postmaster-General suggested the consideration of a plan along the lines of that adopted in Great Britain, where the trunk lines are owned and operated by the Government. He also suggested the consideration of a plan for providing telephones by local municipalities somewhat on the lines adopted in Sweden, where in certain towns telephones are provided in every house, the cost being met out of rates.

Bell Telephone Company of Canada.

The report for the year 1904 presented at the annual meeting in Montreal, Feb. 23, stated that 8,988 subscribers were added during the year, the total number of sets of instruments now earning rental being 66,160. The company owns and operates 475 exchanges and 789 agencies. 1,242 miles of wire were added to the long distance system in 1904. The long distance lines owned and operated by the company comprise 32,211 miles of wire on 7,866 miles of poles. 20,000 shares of new stock were offered to the shareholders at 25% premium, with the option of paying for them in full or in quarterly instalments. 16,845 shares were paid up in full. \$1,916,960 was received during the year on account of stock, and \$479,240 for premium thereon. The latter amount in accordance with the company's usual custom, has been carried to contingent account. From the balance of revenue account, \$154,323.96, \$35,565.26 was carried to insurance reserve account; \$23,958.25 to accident insurance reserve account, and \$50,000 to contingent account; leaving balance of revenue to be carried to 1905, \$44,800.45.

RECEIPTS.	
Exchanges (less unearned rentals)	\$1,980,185.51
Long distance lines	761,991.15
Private lines	14,735.48
Miscellaneous	176,741.57
	<hr/>
	\$2,933,653.71

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Burlington Elevator, St. Louis, Mo.....	Capacity.....	1,300,000 Bushels
Grand Trunk Elevators, No. 2 and No. 3, Portland, Me.....	"	2,500,000 "
Export Elevator, Buffalo, N.Y.....	"	1,000,000 "
J. R. Booth Elevator, Depot Harbor, Ontario.....	"	1,000,000 "
Southern Pacific Terminal Co.'s Elevator, Galveston, Texas.....	"	1,000,000 "
Erie R. R. Transfer & Clipping House, Chicago, Ill.....	"	100 cars in 10 hrs.
Manchester Ship Canal Co.'s Elevator, Manchester, Eng.....	"	1,500,000 "
Burlington Elevator Co., Peoria, Ill.....	"	500,000 "
Canada Atlantic Railway Elevator, Coteau Landing, Que.....	"	500,000 "
Northern Grain Co., Manitowoc, Wis.....	"	1,350,000 "
Union Elevator, East St. Louis, Ill.....	"	1,100,000 "
Montreal Warehousing Co.'s Belt Conveyor System.....		

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at the Louisiana Purchase Exposition on account of its superiority over other makes of its type. It is adapted to service on main and branch railroads having heavy grades and curves. Weights, 10 to 150 tons. Built for all gauges. Catalogue No. 12 free. LIGHT LOCOMOTIVES FOR CONTRACTORS, Plantations, Yards, Mills, and Furnaces are shown in our catalogue No. 10 free.

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Reserve Fund - - - 3,000,000

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E. HAY - - - Asst. General Manager.
W. MOFFAT - - - Chief Inspector.

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Sterling exchange bought and sold. Letters of credit issued available in any part of the world.
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A general Banking business transacted.

New Cars on The Overland Limited

Two new composite-observation cars have just been placed in service on The Overland Limited between Chicago and Omaha, by the

Chicago, Milwaukee and St. Paul Railway

The Overland Limited leaves Union Passenger Station, Chicago, 6.05 p. m. Arrives Omaha 7.35 a. m., and Denver 10.00 p. m. the next day, and San Francisco the third day in time for dinner.

A. J. TAYLOR,
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ANY PART OF MICHIGAN

You Will

FIND THAT THE PERE
MARQUETTE, FROM PORT
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MICHIGAN POINTS.

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THE FIRSTBROOK BOX CO., LIMITED.

CROSS ARMS, TOP PINS,
AND SIDE BLOCKS,

TORONTO.

EXPENSES.	
Operating.....	\$2,073,492.35
Legal.....	19,963.52
Insurance.....	25,409.14
Bond interest.....	100,000.00
Miscellaneous.....	12,883.27
	\$2,231,748.28
Net Revenue for 1904.....	701,905.43
Less dividends (Inc.) Jan. 15, 1905.....	588,117.60
Balance Revenue from 1903.....	\$ 113,787.83
	40,536.13
	\$ 154,323.96
Carried to insurance reserve.....	\$ 35,565.26
Carried to accident reserve.....	23,958.25
Carried to contingent account.....	50,000.00
	109,523.51
Carried forward to '05.....	\$ 44,800.45

BALANCE SHEET.	
Stock account.....	\$7,916,960.00
Bond account.....	2,000,000.00
Contingent fund, 1903.....	\$1,316,170.24
Add prem. on stock.....	479,240.00
Add from rev. acct.....	50,000.00
	1,845,410.24
Revenue account.....	44,800.45
Unearned rental reserve.....	397,087.86
Insurance reserve.....	200,000.00
Accident reserve.....	100,000.00
Bond interest reserve.....	25,000.00
Sundry creditors.....	320,253.80
	\$12,849,512.35
Plant and patent account, Dec. 31, 1903.....	\$8,098,314.23
Plant and patent account added in 1904.....	1,175,441.67
Plant and patent account, Dec. 31, 1904.....	9,273,755.90
Stores on hand.....	389,789.71
Real estate.....	1,284,930.89
Stock in other companies.....	927,056.50
Due from agencies.....	149,265.37
Debtors.....	249,011.46
Cash.....	575,702.50
	\$12,849,512.35

President C. F. Sise gave statistics relative to the growth of the corporation. Twenty-five years ago the company began business with a capital of \$397,000. To-day the capital is just a trifle short of \$8,000,000 in stock, and the bond issue \$2,000,000. In 1885 the long distance mileage was 2,000 miles; to-day it is 32,000 miles. Ten years ago there were 69,000,000 exchange connections during the 12 months; now there are 128,000,000 during the same period. Ten years ago the subscribers throughout Canada numbered 29,000; to-day there are 66,000 instruments earning rental. The 20,000 shares of new stock which had been issued during the year were readily taken up at a premium of 25% in spite of the poor money market which prevailed, and this he considered gratifying. A portion of the money accruing from this source, \$500,000, was utilized in paying off a loan from the banks. Eight years ago the company had installed apparatus in Montreal under the delusion that it was large enough for all time; now they had been obliged to abandon this for larger switchboards. The company under its charter had the right of issuing \$2,000,000 additional stock, a total of \$10,000,000 in all. This was insufficient for future contingencies, but he very much doubted if Parliament could be persuaded to grant additional powers without a great deal of trouble, owing to the opposition of some of the people of Toronto. Referring to suffer on that score, appreciably. There were many small concerns in the business but none of them were paying dividends. In the neighborhood of Quebec were a number of small corporations which had extended lines into the rural districts; they were more of a convenience to the farmer than a commercial enterprise. As regards the Merchants in Montreal, they served a class of customers who did not care to pay the price for the Bell service. Some 30 municipalities in Canada have given the Bell Co. exclusive rights. The company now owned, through process of gradual acquisition, a number of valuable buildings through-

out Canada and, on May 1, the company would move into its new building in the east end of Montreal. Much criticism had been caused by the introduction of the slot telephone. These had been introduced for the reason that certain subscribers had not lived up to their contract, which does not permit a use of the telephone by the general public. Within three days of the time the slot machine was introduced into saloons, cigar stores, etc., different firms on St. James street had come and subscribed, indicating that they had for years been conducting their business over their neighbors' phones.

The directors were re-elected. The board for the current year is President, C. F. Sise; Vice-President, Hon. R. Mackay; other directors, F. P. Fish, R. Archer, W. R. Driver, H. Paton, C. Cassils, T. Sherwin.

PURCHASING AGENTS' GUIDE.

(Continued from third page of cover.)

- Car Wheels**
Jas. W. Pyke & Co..... Montreal.
Rhodes, Curry & Co..... Amherst, N.S.
- Castings**
Crossen Car Mfg. Co..... Cobourg, Ont.
- Castings (Steel)**
Montreal Steel Works..... Montreal.
Rhodes, Curry & Co..... Amherst, N.S.
- Cast-Steel Hammers**
American Brake Shoe & F'dry Co..... Mahwah, N.J.
- Cast-Steel Track Tools**
American Brake Shoe & F'dry Co..... Mahwah, N.J.
- Cast-Steel Wrenches**
American Brake Shoe & F'dry Co..... Mahwah, N.J.
- Cement**
Thorn Cement Co..... Buffalo, N.Y.
- Cement Machinery**
Jas. W. Pyke & Co..... Montreal.
- Coal Haulage Ropes**
The B. Greening Co..... Hamilton, Ont.
- Concrete**
Thorn Cement Co..... Buffalo, N.Y.
- Concrete Mixers and Rock Crushers**
F. H. Hopkins & Co..... Montreal.
W. H. C. Mussen & Co..... Montreal.
- Conduit Contractors**
F. T. Ley & Co..... Springfield, Mass.
- Contractors**
F. T. Ley & Co..... Springfield, Mass.
- Contractors' Plant**
F. H. Hopkins & Co..... Montreal.
T. A. Morrison & Co..... Montreal.
W. H. C. Mussen & Co..... Montreal.
- Cooking Apparatus**
Geo. R. Prowse..... Montreal.
- Copperware**
Geo. R. Prowse..... Montreal.
- Corrugated Furnaces**
Continental Iron Works..... Brooklyn, N.Y.
- Cross Arms, Top Pins and Side Blocks**
Canadian General Electric Co..... Toronto.
The Firstbrook Box Co..... Toronto.
- Cross Arm Braces**
Canadian General Electric Co..... Toronto.
Toronto Bolt and Forging Co..... Toronto.
- Crossing Gates**
General Railway Signal Co..... Buffalo, N.Y.
The N. L. Piper Railway Supply Co..... Toronto.
- Crowbars**
Toronto Bolt and Forging Co..... Toronto.
- Culvert Pipe (Cast Iron)**
Gartshore-Thompson Pipe & F'dry Co..... Hamilton.
- Cuts**
Acton Burrows Co..... Toronto.
- Derrick Ropes**
Dominion Wire Rope Co..... Montreal.
The B. Greening Co..... Hamilton, Ont.
- Derricks**
F. H. Hopkins & Co..... Montreal.
W. H. C. Mussen & Co..... Montreal.
- Diving Outfits**
W. H. C. Mussen & Co..... Montreal.
- Door Signs**
Acton Burrows Co..... Toronto.
- Drawing Materials**
Eugene Dietzen Co..... New York.
- Dredges**
The Bertram Engine Works Co..... Toronto.
- Drilling Machines**
The John Bertram & Sons Co..... Dundas, Ont.
- Drills**
W. Abbott..... Montreal.
- Dry Goods**
The Hudson's Bay Co.....
- Dynamo and Electric Castings**
American Brake Shoe & F'dry Co..... Mahwah, N.J.
- Economizers**
Babcock & Wilcox (Ltd.)..... Montreal.
- Electric Car Fenders**
The G. B. Meadows Wire, etc., Co..... Toronto.
- Electric Car Route Signs**
Acton Burrows Co..... Toronto.
- Electric Car Wire Guards**
The G. B. Meadows Wire, etc., Co..... Toronto.
- Electric Cranes**
Canada Foundry Co..... Toronto.
Dominion Bridge Co..... Montreal.
W. H. C. Mussen & Co..... Montreal.
- Electric Ry. Brake Shoes**
American Brake Shoe & F'dry Co..... Mahwah, N.J.
- Electric Railway Builders**
F. T. Ley & Co..... Springfield, Mass.
- Enameled Iron Signs**
Acton Burrows Co..... Toronto.
- Engineers' Supplies**
The Canadian Rubber Co. of Montreal.
The James Morrison Brass Mfg. Co..... Toronto.
Williams & Wilson..... Montreal.
- Engines, Hoisting**
The Bertram Engine Works Co..... Toronto.
- Engines, Stationary and Marine**
The Bertram Engine Works Co..... Toronto.
Canada Foundry Co..... Toronto.
Polson Iron Works..... Toronto.
- Engines, Steam**
Erie Heating Co..... Chicago, Ill.
Williams & Wilson..... Montreal.
- Engraving**
Toronto Engraving Co..... Toronto.
- Express Office Signs**
Acton Burrows Co..... Toronto.
- Feedwater Heaters**
Babcock & Wilcox (Ltd.)..... Montreal.
Williams & Wilson..... Montreal.
- Fencing**
Canada Foundry Co..... Toronto.
Canadian Steel and Wire Co..... Hamilton, Ont.
Page Wire Fence Co..... Walkerville, Ont.
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Garden Sand Co..... Chicago, Ill.
W. H. C. Mussen & Co..... Montreal.
- Fire Escapes**
The G. B. Meadows Wire, etc., Co..... Toronto.
- Fire Insurance**
Dale & Co..... Montreal.
- Flags**
The Hudson's Bay Co.....
- Flour**
The Hudson's Bay Co.....
- Forgings**
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General Railway Signal Co..... Buffalo, N.Y.
- Gas and Electric Fixtures**
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- Gas Pipe (Cast Iron)**
Gartshore-Thompson Pipe & F'dry Co., Hamilton.
- Gates**
Canada Foundry Co..... Toronto.
Page Wire Fence Co..... Walkerville, Ont.
- Gauges, Steam and Vacuum, etc.**
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- Grain Elevators**
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- Handcars**
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- Hardware**
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N. L. Piper Railway Supply Co..... Toronto.
- Headlinings**
Crossen Car Mfg. Co..... Cobourg, Ont.
- Heaters**
Erie Heating Co..... Chicago, Ill.

(Continued on page 179.)

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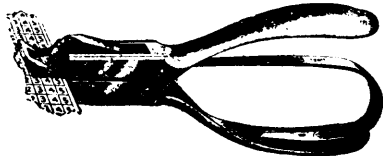
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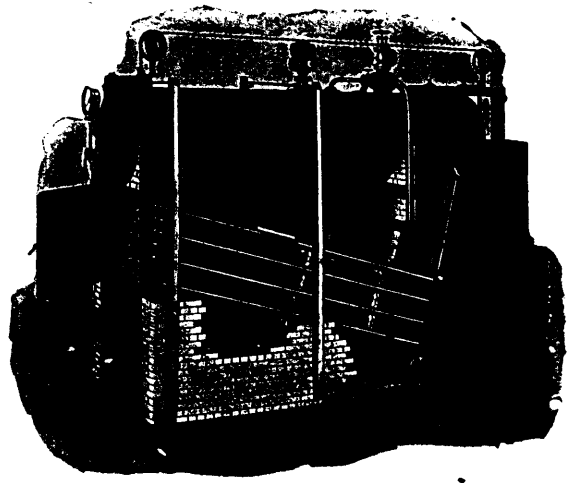
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(Continued from page 177.)

- Heating for Power Plants**
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- Rose, Fire**
The Canadian Rubber Co. of Montreal.
- Rose, Suction**
The Canadian Rubber Co. of Montreal.
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- Injectors**
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- Interlocking Signals**
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- Iron Fencing**
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American Brake Shoe & F'dry Co. Mahwah, N.J.
- Iron Signs**
Acton Burrows Co. Toronto.
- Japan**
McCaskill, Dougall & Co. Montreal.
- Journal Bearings**
Canada Foundry Co. Toronto.
- Crossen Car Mfg. Co.** Cobourg, Ont.
- Jas. W. Pyke & Co.** Montreal.
- St. Thomas Brass Co.** St. Thomas, Ont.
- Lager Beer, &c.**
E. L. Drewry Winnipeg.
- Lamps, Incandescent**
Canadian Westinghouse Co. Hamilton, Ont.
- Lamps and Lanterns**
The Hudson's Bay Company. Toronto.
- N. L. Piper Railway Supply Co.** Toronto.
- Lathes**
The John Bertram Sons Co. Dundas, Ont.
- Williams & Wilson** Montreal.
- Launches**
The Bertram Engine Works Co. Toronto.
- Polson Iron Works** Toronto.
- Lights, Contractors' and Wrecking**
F. H. Hopkins & Co. Montreal.
- W. H. C. Mussen & Co.** Montreal.
- Locomotive Boller Washer, Automatic**
Erie Heating Co. Chicago, Ill.
- Locomotive Brass Works**
The James Morrison Brass Mfg. Co. Toronto.
- Locomotive Driver Brake Shoe**
American Brake Shoe & F'dry Co. Mahwah, N.J.
- Locomotives (Compressed Air)**
Baldwin Locomotive Works. Philadelphia, Pa.
- Locomotive and Machine Co. of Montreal.**
- Locomotives (Electric)**
Baldwin Locomotive Works. Philadelphia, Pa.
- Canada Foundry Co.** Toronto.
- Locomotive and Machine Co. of Montreal.**
- Locomotives (Logging)**
Lima Locomotive and Machine Co. Lima, Ohio.
- Locomotives (Rack)**
Baldwin Locomotive Works. Philadelphia, Pa.
- Locomotive and Machine Co. of Montreal.**
- Locomotives (Steam)**
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- Canada Foundry Co.** Toronto.
- Canadian Locomotive Co.** Kingston, Ont.
- F. M. Hicks & Co.** Chicago, Ill.
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- Locomotive and Machine Co. of Montreal.**
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- Machine Tile**
Garden City Sand Co. Chicago, Ill.
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- The Saxon Engine Works** Chemnitz, Germany.
- Williams & Wilson** Montreal.
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John Morrow Machine Screw Co. Ingersoll.
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- Mills, Boring and Turning**
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- Nuts, Square and Hexagon**
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- Office Fittings**
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- Office Signs**
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- Packing, Piston**
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- Paints, Asphaltum**
American Asphaltum & Rubber Co. Chicago, Ill.
- Paints, Bridge**
American Asphaltum & Rubber Co. Chicago, Ill.
- Paints, Locomotive Front end**
American Asphaltum & Rubber Co. Chicago, Ill.
- Paints, Mineral Rubber**
American Asphaltum & Rubber Co. Chicago, Ill.
- Paints, Structural Iron**
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- Pipe and Pipe Coverings**
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- Pipe Covering**
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- Mica Boiler Covering Co.** Montreal.
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Thorn Cement Co. Buffalo, N.Y.
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- The Mail Job Printing Company** Toronto.
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- Dominion Bridge Co.** Montreal.
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- Roofing Pitch**
American Asphaltum & Rubber Co. Chicago, Ill.
- Roofing, Ready**
American Asphaltum & Rubber Co. Chicago, Ill.
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- Semaphores**
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(Continued on page 177.)

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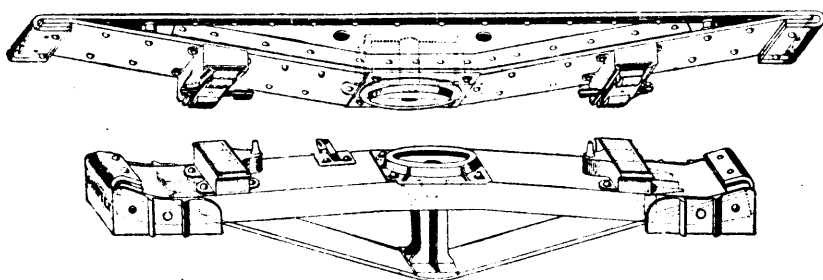
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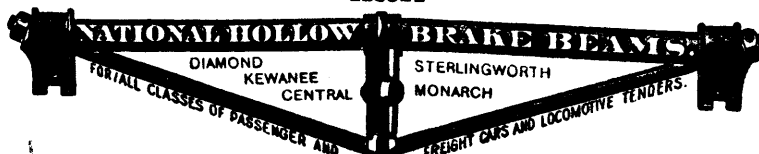
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