

tion of the arched ribs under the action of a moving load intensifies the action of the elasticity of the track."

We submitted Mr. Eayrs' remarks to the Manager of the C.P.R. western lines, W. Whyte, who writes us as follows:—"I expect the article refers to the creeping track on the Barclay muskeg, at bridge 223, about 217 miles east of Winnipeg. When the track at this point was laid with 56 lbs. steel, it used to move under every train, rendering it necessary for the Co. to keep a watchman on duty there day & night with short pieces of rails to meet the expansion & contraction. I myself, in 1887, saw the track creep while a train was passing over it, 2 ft. 4 ins. To stop this creeping, the length of the ties was increased from 8 ft. to 12 ft., & a slot cut in the base of the rail over each tie, the slots being staggered, that is the slot in the rail over one tie would be on the inside of the rail & over the next tie on the outside of the rail, & two slots were not cut in the rail over one tie, to prevent weakening the rail too much. When the track was laid with 72 lbs. steel, 44 in. angle bars were used, & the steel laid with even or square joints, so that the ties would not slew with the creeping. The rails were not notched as above set forth, but angle bars used on the centre of every second rail, which were spiked to the ties. This is the practice we have been following on muskegs where track creeps. This has had to be done at Oxdrift & Telford with our 73 lbs. steel & 26 in. angle bars, which have spike holes punched through them, & which give far better service than the 44 in. angle bar with the slotted holes, as the shoulder was continually wearing off on the latter, rendering the bar useless for holding the rails, & by slipping past the spikes, destroyed the gauge of the track. By this means we have been able to stop creeping track, but the joint ties still churn on the muskeg. By laying the rails with even or square joints we have prevented the joint ties from slewing, & kept the track in gauge.

"In addition to my own personal observations, as mentioned above, measurements have been taken of the distance the track crept under a moving train, & these show that a movement occurred in the track of from 2 to 37 ins., depending on the temperature, weight of engine & train, & softness of bottom. Where the grade descends to these muskegs, & is in the direction the heavy traffic is moving, the creeping was always greater."

Recent Ontario Legislation.

Among the Acts passed at the recent session of the Ontario Legislature were the following:—

- To confirm an agreement between the commissioners for the Queen Victoria Niagara Falls Park & the Fort Erie Ferry Ry. Co., & relating to the said Co.
- Respecting certain railways.
- Respecting aid to certain railways.
- Respecting aid by land grant to the Algoma Central Ry. Co.
- To amend the street railway act.
- Respecting mortgages by electric railway companies or street railway companies.
- Respecting the Town of Port Arthur.
- Respecting an agreement between the City of Stratford & the G.T. Ry. Co.
- To incorporate the Bracebridge & Trading Lake Ry. Co.
- To incorporate the Camp Bay & Crow Lake Ry. Co.
- To amend an act respecting the Fort Erie Ferry Ry. Co.
- Respecting the Hamilton Radial Electric Ry. Co.
- To incorporate the Huntsville & Lake of Bays Ry. Co.

To revive, extend & amend an act to incorporate the Ingersoll Radial Electric Ry. Co. Respecting the Manitoulin & North Shore Ry. Co.

Respecting the Metropolitan Ry. Co. To incorporate the Nickel Belt Ry. Co. Respecting the Ontario, Belmont & North-ern Ry. Co.

To incorporate the Ottawa & Dundas Ry. Co.

Respecting the Pacific & Atlantic Ry. Co. To incorporate the Queenston, St. Catharines & Port Dalhousie Electric Ry. Co.

Respecting the Sudbury & Nipissing Ry. Co.

To incorporate the Superior & James Bay Ry. Co.

Respecting the Toronto Suburban St. Ry. Co.

To incorporate the Victoria Mines Ry. Co. To incorporate the Wabigoon, Manitou & Rainy Lake Ry. Co.

To incorporate the Woodstock, Thames Valley & Ingersoll Electric Ry. Co. Respecting the Algoma Commercial Co.

C.P.R. Financial Statements.

The balance sheet appended to the recent annual report contained an item of \$1,272,477.44 as an asset under the head of "miscellaneous securities & advances." Following are the details:—

Chateau Frontenac (Quebec hotel), stock	\$280,000 00
Canada Northwest Land Co., stock (cost). (Taken by this Co. in 1882, as one of the terms of the sale of a 2,200,000 acres of land to the C.N.W.L. Co.)	518,087 27
Niagara Bridge & Real Estate. (Acquired in 1890, with view to extension of line from Woodstock & Hamilton to Niagara Falls)	96,823 57
Dominion Express Co., stock. (This Co.'s Express, the stock of which is all held in the treasury. Amount paid up represents cost of original equipment & organization.)	113,750 00
Insurance Premiums prepaid. (On contract to secure advantageous terms)	193,566 60
South Ontario Pacific Ry. Stock. (This Co.'s organization for line, Woodstock, Hamilton & Niagara Falls)	20,000 00
Nakusp & Slocan Ry. Stock	35,000 00
Miscellaneous Securities and Advances	15,250 00
	\$ 1,272,477 44

NOTE.

Amount advanced Minn. St. Paul & Sault Ste. Marie Ry for interest under guarantee	\$963,846 89
Less amount repaid	325,000 00
	\$ 638,846 89

LAND SALES IN 1898 & 1899.

	Acres.	Amount realized.	Average per acre.
C.P.R. Land Grant, 1899	326,280	\$1,016,081	\$3 11
1898	222,135	757,792	3 13
Manitoba S.W.R. Grant 1899	90,526	311,586	3 44
1898	106,473	363,982	3 42
Total sales	416,806	1,327,667	3 19
1898	348,608	1,121,774	3 22

POSITION OF LAND GRANTS AT DEC. 31, 1899.

	Acres.	Acres.
Canadian Pacific—		
Original grant	25,000,000	
Surrendered to Government under agreement of Mar. 30, 1886	6,793,014	
	18,206,986	
Souris branch land grants	1,611,520	
	19,818,506	
Sales to Dec. 31, 1899	4,228,284	
Less cancelled in 1899	19,841	
	4,208,443	
Quantity unsold		15,590,063
Manitoba South Western—		
Total grant	1,396,800	
Sales to Dec. 31, 1899	417,690	
Less cancelled in 1899	5,084	
	412,606	
Quantity unsold		984,194
Columbia & Kootenay—		
Total grant	190,000	
Sales to Dec. 31, 1899	6,208	
	183,792	
Total land owned by the Co.		16,758,049

In addition to the foregoing the Co. will receive through the B.C. Southern Ry. about 3,350,000 acres. 4,228,443 acres sold, amounting to \$13,697,269 88 6,793,014 acres taken by Dominion Government 10,189,521 00

\$23,886,790 88
Less—Expenses, cultivation rebate, and 10% on land grant bonds retired and cancelled 2,998,631 52

\$20,888,159 36
Add—Proceeds Col. & Koot. Ry. land sales 1,895 45

Proceeds M.S.W.C. Ry. land sales 70,195 93

\$20,960,250 74

Comparative statement of earnings & expenses 1890 to 1899:—

	1899.	1898.	1897.	1896.	1895.	1894.	1893.	1892.	1891.	1890.
Passengers	\$7,098,096 70	\$6,538,589 58	\$5,796,115 12	\$4,820,143 30	\$4,683,137 74	\$4,840,412 33	\$5,656,204 90	\$5,556,316 40	\$5,459,789 46	\$4,774,713 76
Freight	18,738,884 96	16,231,444 93	15,257,896 94	13,187,560 31	11,877,851 95	11,445,377 78	12,673,075 38	13,330,540 19	12,665,540 26	10,106,644 02
Mails	618,385 19	609,974 57	603,210 49	607,543 98	540,116 18	498,129 16	496,134 49	483,922 61	516,098 45	356,038 61
Express	663,960 52	615,631 43	530,749 65	460,201 90	387,605 93	342,472 20	333,975 39	302,259 34	288,633 25	260,268 43
Parlor & sleeping cars	441,647 54	455,345 07	361,777 38	303,688 48	302,637 63	331,719 69	380,470 10	331,202 73	303,545 09	268,096 76
Telegraph, grain elevators & miscellaneous, including profits on Pacific steamships	1,669,063 35	1,687,991 55	1,499,785 07	1,302,458 87	1,149,687 44	1,204,956 46	1,422,457 18	1,405,110 53	1,007,489 47	786,767 40
Total	\$29,230,038 26	\$26,138,977 13	\$24,049,534 65	\$20,681,596 84	\$18,341,036 87	\$18,752,167 71	\$20,962,317 44	\$21,409,351 77	\$20,241,095 98	\$16,552,598 98
Expenses	16,999,872 77	15,663,605 51	13,745,738 76	12,574,015 10	11,460,085 88	12,328,838 69	13,220,901 39	12,989,004 21	12,231,436 11	10,252,828 47
Net earnings	\$12,230,165 49	\$10,475,371 62	\$10,303,795 89	\$8,107,581 74	\$7,480,950 99	\$6,423,309 08	\$7,741,416 05	\$8,420,347 56	\$8,009,659 87	\$6,299,700 51

W. Whyte, Manager of the C.P.R. Western Lines, sailed from Vancouver May 7, on the R.M.S. Empress of China for Yokohama, on a pleasure trip. He is accompanied by John Burns, of Toronto.