Hose	29	21
Iron, common bar	146	103
Iron, black sheet	337	3441/2
Iron, galvanized	255	26216
Joints, rail	65	7216
Knuckles, car and locomotive	67	67
Lead, nig	150	15714
Leather helting	110	66
Lumber oak car engine	20	20
Lumber, vellow nine	30	20
Metal habbitt	45	100
Naile wino	110	150
Netting locomotyo stack	110 69	140
Nute however	110	140
Nuta assagon	119	287
Point white her line it	90	270
Pine Link white lead in oil	66	79
Die, black	118	180
Pipe, cast iron	144	97
Fipe, galvanized	44	115
rotash, prussiate	600	862
Rings, packing and piston	54	53
Rivets, boiler	171	114
Roofs, car metal	50	571/2
Roofs, plastic	50	571/2
Rope, Manilla	111	97

## **Reduce Car Shortage by Filling Cars.**

Following up the bulletin published in Canadian Railway and Marine World for May the management of the Eastern Lines, C.P.R., has issued the following bulletin, under the above heading:

The object in issuing these bulletins is not to start a controversy with the public. not to shift responsibility to the public but to secure the co-operation of the public. Bulletin 1 contained the following information for the period from 1907 to 1915:

tons of dead car tare hauled one mile.

By increasing now the average load by 5 tons per car the public would improve the efficiency of the equipment, facilities, and man power of the railways to an extent equal to: 54,800 additional freight cars, 482 additional freight and yard locomotives, 415 additional miles of yard trackage and 13.5% increase in man power employed in train and yard service. A car saved is a car gained.

## Periscopes in C. P. R. Interlocking Towers.

The C.P.R. has had periscopes installed in its interlocking signal towers at Mile End, Montreal, and at Iberville Jct., on

<u>A 1915 Typical Train</u>						
						Comparison
Typical Train 1915 Proposed	23	18-4 Tons 23-4 Tons	860 848	Tons Tons	423 Tons 468 Tons	45 more tons carried in 3 less Cars

ocrews, brass wood	308	260
Screws, iron	121	157
Scoops, shovels	29	61
Spikes, track	155	
Springs, car and locomotive	183	177
Stationery	88	100
Stationery, printed matter	25	25
Steel bars	200	147
Steel billets	317	3241/2
Steel firebox plates	285	2021/2
Steel plates, angles, etc	300	3071/2
Steel tool, high speed	400	4071/2
Tie plates	110	11716

The present heavy volume of traffic will no doubt continue so long as the war Additional cars and locomotives lasts. are needed, but they cannot be secured in large numbers for many months. There is also a serious shortage of labor and in some places of yard trackage. The only way to improve the conditions therefore is to secure greater efficiency in the present equipment, terminal trackage.

the Montreal-St. John, N.B., line, 30.6 miles east of Montreal, to enable the sig-nal men to get views of portions of the track adjacent to the interlocking limits, track adjacent to the interlocking limits, which are obscured by buildings in the direct line of vision. The periscope is located at a window opening, and the mirrors, one at the top and one at the bottom of the upright tube, are adjust-able, the adjustment of the bottom mirror



Periscope on Signal Tower. C.P.R., Mile End. Montreal.

m:		
Tr. · · · · · · · · · · · · · · · · · · ·	54	611/2
Tes	170	295
Tubes, boiler.	147	1541/2
Tubes, superheater	119	1261/5
Vellng, copper	135	14215
Valves	94	67
Weitriol, bluestone		120
Washers, wrought	60	95
Whaste, cotton and wool	44	51
Zineels	77	841/2
sincs, battery		131
BL Stationery Items.		
Conting papers	100	100
Inlying pencils	140	160
Pop	80	80
aper fasteners	100	200
Provide the state of the state		

The Canadian Northern Ry. carried 706,414 tons of coal from Alberta coal mines for the year ended April 30, against 476,718 for the year ended April 30, 1916.

and man power. The railways alone cannot develop the maximum efficiency; the railways and the public co-operating can. Consignees can help by ordering full car loads instead of minima authorized in the tariffs and classifications, and consignors can help by loading cars to their full au-thorized cubical or carrying capacity.

	The average train		
		Proposed	
A comparison—	1915	for 1917	
Average weight of contents			
of cars	18.4 tons	23.4 tons	
Total weight of cars	503 "	448 "	
Total weight of contents	344 "	399 "	
Total weight of train	847 "	847 "	
Had the average load	per car	in 1915	
been 23.4 tons instead or	f 18 1 +1	10 00000	
occur mora voulog insucau 0.	1 10.4. 11	ie same	

traffic would have been handled with: 6.947.588 less trains hauled one mile, 1.568,765 less car trips, 29,806,535 less

being convenient to enable signalmen, when either sitting or standing, to obtain the view. The apparatus was built and installed at each place by the company's own forces. The accompanying illustra-tion shows the periscope installed on the interlocking signal tower controlling the various main line tracks and sidings at Mile End, Montreal, by means of which the signalmen are enabled to see trains coming up the grade long before they could do so without it.

Vancouver Transportation Club.-J. A. Cunningham, in addressing the club on June 1, urged the development of the natural resources of the province as being necessary to make the railways pay.