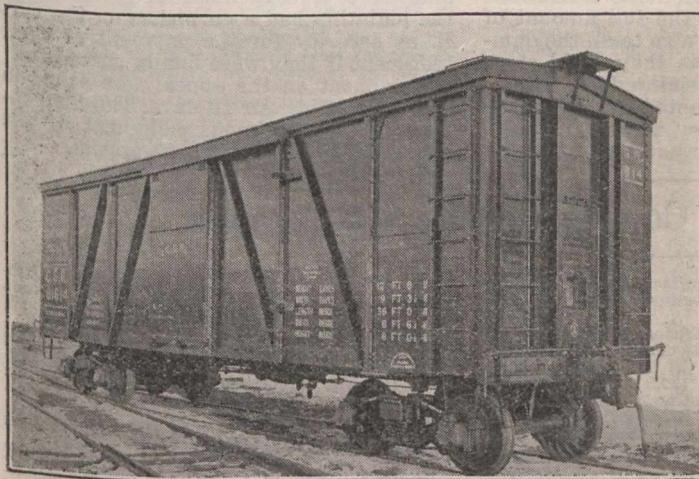


## Forty-Ton Box Cars for Canadian Government Railways.

The 5,000 forty-ton box cars which the Canadian Government Railways have ordered from Canadian Car and Foundry Co. during the past few weeks have the following general dimensions: Length inside, 36 ft.; width inside, 8 ft. 6½ in.; length inside, from pulling face of couplers, 40 ft. 1¼ in.; from centre to centre of truck, 26 ft. 10 in.; height from rail to top of running board, 13 ft. 4¾ in.

The cars are of the inside sheathed steel frame type, underframe consisting of two 15 in. channels and 8 in. side sill channels, having bolsters and crossbearers built up of pressed steel diaphragms, with top and bottom cover plates, together with Z bar floor supports, conveniently spaced; all of which in turn support Z bar stringers, running from end sill to end sill, forming support for wooden floor. The side framing is built up from structural shapes, securely riveted to side sill and side plate. The cars have an exceedingly strong end frame consisting of two 5 in. Z bars and two 3 in. Z bars, together with 5 x 5 in corner post; the Z bars being



Forty-ton inside sheathed box cars for Canadian Government Railways.

riveted to the inside face of end sill and top of the pressed steel end plate. All of the cars are being equipped with one rail end door, located 2 ft. 1½ in. from top of floor, to centre of door, facilitating easy loading of rails, also door at top of car at ends for loading lumber.

Four thousand of the cars will have a special application of brakes. The truck bottom connection, instead of passing under spring plank, as in ordinary cases, is connected to the centre hole truck lever connection, passing through the truck directly above the truck bolster tension plate. By this arrangement all the truck brake rigging is located above the bottom of the spring plank. This arrangement also allows for an adjustment of brakes to take place at the fulcrum lever instead of the old system at the top of the dead lever, and instead of having two points for adjustment, it will be only necessary to take up any slack or make any adjustments to the brakes at one point.

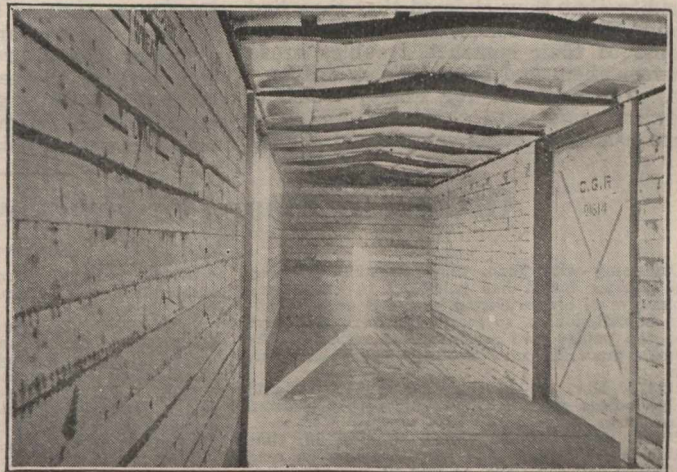
**Oil Fuel on Indian Railways.**—The Indian Government has entered into a contract with the Anglo-Persian Oil Co., for a supply of fuel oil for locomotives on the Karachi section of the North Western Ry. Only a small percentage of the locomotives on this section have been converted into oil burners, but it is intended to convert all of them.

## Track Section Prize Competition on Eastern Lines, Canadian Pacific Railway.

For the past five years an annual track section prize competition has been carried out on the Eastern Lines. C.P.R., which has aroused a healthy spirit of rivalry and keen competition among the officers and section forces of the different divisions and districts. Sixty-two prizes are awarded in the competition, as follows:—A General Manager's prize to the foreman having done the best season's work on Eastern Lines. Four general superintendent's prizes, to the foreman on each district who has done the best season's work, exclusive of the winner of the General Manager's prize. Fourteen division superintendent's prizes, to the foreman on each division who has done the best season's work, exclusive of winners of higher prizes. Forty-three roadmaster's prizes, to the foreman on each roadmaster's territory who has done the best season's work, exclusive of winners of higher prizes.

Under this system no man can win

son is usually a criterion of the amount and quality of the work done thereon throughout the season. Where special conditions affect such work they are taken into consideration. Some idea of the care exercised in judging a foreman's work can be formed by following the work in connection with the selection of a prize section. Towards the end of the season, on each of the 43 roadmasters' territories, a section is picked out as the most deserving in point of work done during the season with the material and labor available. These are carefully inspected by the superintendent and resident engineer, who select the best one on each district for inspection by the general superintendent and division engineer. All divisions of a district are covered by these two officers, and the section selected which they consider eligible for the General Manager's prize. The judging for the General Manager's prize is done personally by the General Manager, the Engineer,



more than one prize, and all foremen have an equal chance, as the quality of the work done throughout the season is the deciding factor, and not the actual physical condition of the section at the end of the season. The basis on which the sections are judged is entirely efficiency, and careful consideration is given throughout the season to the condition of, and work done on, ditches, gauge, spiking, line, surface, bolts, rail wear, so far as it can be controlled by the section forces, switches, sidings, right of way and station grounds, track signs, cattle guards and fences. The amount of work done and the hours of labor put in, both by regular force and extra gang, are also carefully considered, and the foreman accomplishing the best work with the least amount of labor—the physical condition of the section, as to grades, alignment, drainage, and character of roadbed being taken into consideration—wins the first prize.

The number of hours of regular labor and the number of hours of extra labor on the section are figured against the number of ties renewed, tie plates installed or changed, rails changed over on curves and ditching done, etc. The amount of track handled, right of way, spikes and bolts is fairly uniform on all sections, so that the condition with respect to these items at the end of the sea-

Maintenance of Way, the Assistant Engineer, Maintenance of Way, and district officers.

The following are the successful section foremen for 1917: General Manager's prize, H. Hoyst, section 6, Havelock Subdivision, Ontario District. General Superintendents' prizes: New Brunswick District, Wm. Hunter, section 12, St. John Subdivision; Quebec District, T. Mattingly, section 3, Chalk River Subdivision; Ontario District, Geo. Muma, section 11, Galt Subdivision; Algoma District, J. Purich, section 6, White River Subdivision.

**Railway Lands Patented.**—Letters patent were issued during October, in respect of Dominion railway lands in Manitoba, Saskatchewan, Alberta and British Columbia, as follows:

	Acres.
Calgary and Edmonton Ry. ....	2,560.00
Canadian Northern Ry. ....	478.00
Canadian Pacific Ry. grants ....	196.43
Canadian Pacific Ry roadbed and station grounds . . . . .	3.03
Edmonton, Dunvegan and British Columbia Ry. ....	368.94
QuAppelle, Long Lake and Saskatchewan Rd. and Steamboat Co. ....	2,075.90
Total . . . . .	5,682.30

The Board of Railway Commissioners has approved the Elgin and Havelock Ry. standard maximum freight mileage tariff C.R.C. 3, cancelling its C.R.C. 1.