

Seventy-Five Ton Pit Car for Canadian Pacific Railway.

The accompanying illustrations show a 75 ton pit car, which the C. P. R. has had built recently to handle heavy structural and machinery parts. The Canadian General Electric Co. had requisitioned the C.P.R. for special cars to transport electrical machinery, such as transformers, etc., designs for which were prepared. Before actual work on these cars had commenced, the St. Lawrence Bridge Co. also applied to the C.P.R. for some heavy cars to handle the heavy steel members to be used in the Quebec bridge, all of which are being fabricated in the bridge company's shops at Lachine, Que., and must be transported to Quebec. The initial designs for the heavy cars were therefore modified so as to produce a car that would meet the requirements of both services, and are now such that they may be employed in ordinary heavy traffic when the special requirements for which they have been built are met. An order of six has been completed.

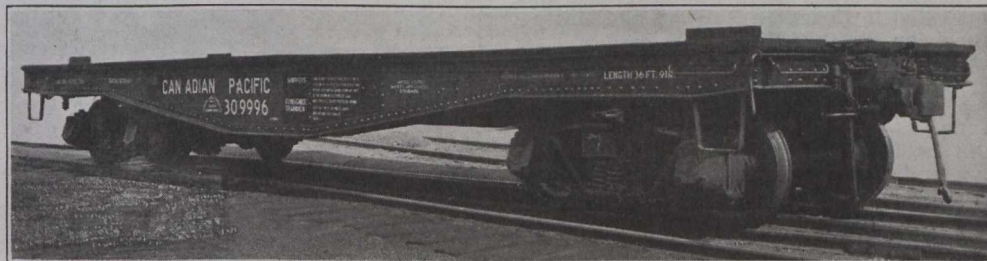
The bridge requirements called for a car that would carry members weighing 130,000 lbs., and 16 ft. high. The clearance limit made necessary the pit construction. Following are the principal dimensions:—

Length	36 1/4 ft.
Width	10 ft.
Top of rail to top of deck	4 ft. 2 1/4 ins.
Truck centres	26 1/2 ft.
Truck wheel base	5 1/2 ft.
Length of pit	18 ft. 1 in.
Width of pit	6 ft.
Wheels	33 in. rolled steel
Journals	6 by 11 ins.
Draft gear	Twin M.C.B. class G springs
Load limit	150,000 lbs.
Average tare weight	48,000 lbs.

The pit cover is made in two pieces, and

data on which the foregoing information was compiled, and they were built by the Canadian Car and Foundry Co.

We are officially advised that the four 75 ton pit cars, which the Intercolonial Railway has ordered from the Eastern Car Co., Ltd., will be exactly the same as the C.P.R. cars above described.



C.P.R. 75 Ton Pit Car for Carrying Heavy Bridge Members Up to 16 ft. Deep.

Work Train Service at a Gravel Pit.

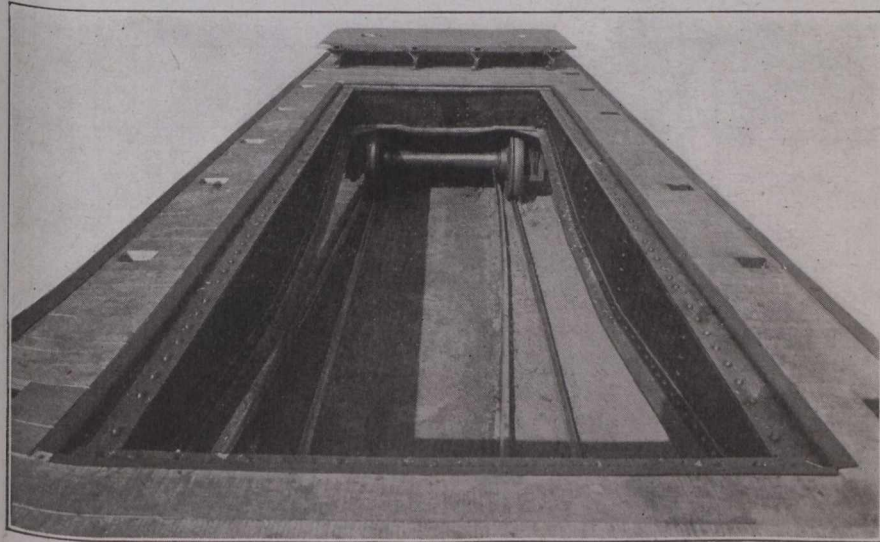
By T. Hickey, Roadmaster, Michigan Central Road,
St. Thomas, Ont.

The cars and appliances necessary for proposed work should be switched on some track together, where they can be readily picked up by the work train crew at the time ordered. Cars are liable to get blocked in large yards, causing serious delay both to the train crew and to laborers expected to do the work. I arrange, when necessary, for an auxiliary tank to be attached to the work train locomotive, to serve as an additional water supply. I find this to be a saving in time, that may otherwise mean

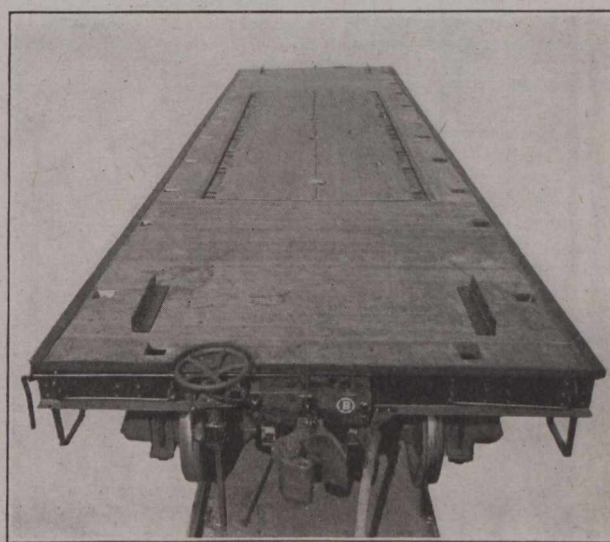
plant is provided at the pit sufficient to supply the steam shovel and pit locomotive, and occasionally one of the road locomotives, when necessary. A telegraph office is also located in the pit, from which all conductors leaving the pit receive train orders. A car repairer is stationed here to do the necessary oiling of cars and make other light repairs. One locomotive and crew is stationed in the pit with the steam shovel and two crews are assigned to haul-

ing, each train containing 50 cars. The shovel loads 150 cars each day, or about 2,250 cu. yds. There is scarcely any failure in making this daily average, and each hauling crew makes 135 miles a day, or a trip and a half.

The time that the first train leaves the pit each morning, as well as the place of unloading, is well understood, not only by the train crews, but by all others interested in the work, with the result that each crew makes its trips regularly. The pit conductor is in full charge of the work in the pit. He makes a daily inspection of material and supplies on hand and orders additions in sufficient time to prevent the



Open Pit in C.P.R. 75 Ton Pit Car.



C.P.R. Pit Car as Ordinary Flat Car.

when the open pit is required, the two parts of the cover are carried on the ends of the car, where they are held in place by stakes and large steel angles rivetted to the deck. The covers are composed of heavy wooden decking attached to steel I beams, the ends of which are equipped with cast steel lugs, resting on the top of longitudinal sills. The entire top of the car is covered with heavy wooden decking, and is provided with holes for bolting down blocking for the loads. When the pit covers are in place, the car presents the appearance on top of the ordinary flat car.

Each car has two complete sets of brakes, one for each truck. They are of the Canadian Westinghouse Co.'s schedule K.D. 812. The cars were designed in the office of R. W. Burnett, General Master Car Builder, to whom we are indebted for the

considerable delay to the work. All work should be done under the direction of an assistant roadmaster, or an experienced foreman, understanding fully the work to be done.

The proper handling of the work and work trains depends primarily upon the amount and kind of work to be done, as well as the length of haul of material and other general conditions. I have a gravel pit, 2 1/2 miles from the main track, from which a great deal of material has been taken for the past 12 years, and more particularly during the past 4 years. The haul on this material was 45 miles, over 15 miles of single and 30 miles of double track.

A certain class of locomotives suitable for the work are requested and also certain enginemen and train conductors who have been tried before in this service. A water

supply becoming entirely exhausted.—Railway Age Gazette.

Life of Locomotives and Passenger Cars.—It is estimated by the Pennsylvania Rd. that passenger cars and locomotives have a useful life of 20 years, at the end of which time their value as scrap will be only about 20% of their original cost. An allowance of 3% for depreciation and renewal is made for freight cars and of 4% for locomotives and passenger cars. Because of the absence of sufficiently lengthy experience in steel cars, an allowance of 4% is made for depreciation and renewal.

The Royal Canadian Humane Association's medal was presented recently to L. B. O. Wakelam, a C.P.R. employe, for saving two lives at a railway crossing accident at Port Burwell, Ont., in January last.