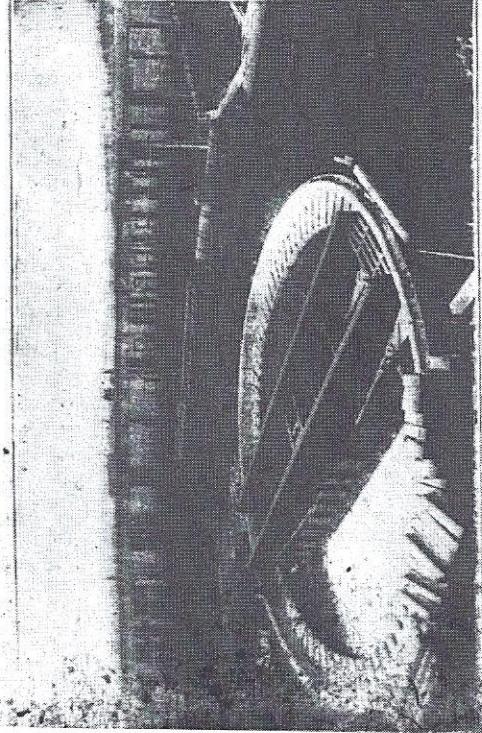


Betterments, Construction, Etc. so that if an excessive load were placed upon any one portion the same would be distributed over the adjoining panels. Anchors were used for carrying steam pipes and controlling individual smoke stacks over locomotives were placed in the concrete while the same was green. The machine shop roof is constructed with Kahn trussed bars, using a series of beams about 12 ft. (see) spanned with a 4 in. concrete slab. These are reinforced with Kahn trussed bars. The illustrations on this page show the method of construction.



THE ROUND HOUSE AT MIMICO, ONT., IN PROCESS OF CONSTRUCTION.

Assessment fixed before the work commenced.

Round House, etc. The round house machine shop recently built at Mimico, near Toronto, contains 30 stalls, each provide at the inner circle, and 20 ft. at outer circle. Each stall is 82 ft. long, divided into three sections, and carried on columns. The entire structure is built eccentric, reinforced with Kahn trussed bars. The interior columns are 14 in. square, and each four 1 x 1 in. trussed bars, longitudinal of these steel members are horizontal in order to obtain the effect of cantilevering. Angle girders were placed in all directions in order to prevent chipping. The squares in the outer circle are "T" shape, and a plaster on the outside, and at the time of applying recesses for keeping the walls between columns. The at these points allow for expansion.

In designing the columns interior circle, it was feared that floors striking the outside would overheat crossing of the Park road, lay a heavy load on the columns which carried them. For this reason these columns

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

St. John to Montreal.—Surveys are being made with a view of reducing gradients on the Eastern and Atlantic Divisions between St. John, N.B., and Montreal.

Toronto-Sudbury Line.—The contract for the construction of the portions of the Toronto-Sudbury branch between Bolton and Coldwater, and between Severn Bridge and Parry Sound has been let to G. S. Deeks & Co., of Toronto, and the section between Coldwater and the Severn River, 12 miles, to Battle, Condon and Armstrong, of Thorold, Ont. The total distance covered by these contracts is 128 miles. It is expected that the line between Bolton and the Severn River will be in operation by Dec. 1, and the rest of the line into Parry Sound next summer. It was expected to have the grading between Rontford and Byng Inlet completed by the end of July, but it had not been decided July 10 when track-laying would be commenced. No contracts have been let for the portion of the line between Parry Sound and Byng Inlet, but it is intended to let contracts for this to enable work to be proceeded with in the fall. (July, pg. 307).

Guelph Improvements.—The rail level of the line in the vicinity of Walmapiae, Ont., is being raised several feet in connection with the gradient improvement along the G.T.R. to appropriate Jubilee Park Commission's to allow the G.T.R. to proceed it before July 1, the decision of the Board of Railway

Port William to Winnipeg Second Track.

The company has decided to proceed at once with the construction of a second track from Port William to Winnipeg, about 320 miles. Some years ago the work of lengthening sidings and adding new ones was taken in hand, and most of these latter were so constructed that they could be worked up with a second track when such became necessary. Later on some preliminary track work, etc., in the vicinity of Kenora (Rat Portage), Ont., was taken in hand, the contractors being Foley Bros., Larson & Co., which firm has now secured the contract for the second track construction. A good deal of the work such as widening existing embankments and train work will be done by the C.P.R. itself, but such work as the widening of existing cuts and the construction of new lines where better alignment and easier gradients can be obtained, will be done by the contractors. The heaviest work will be the 60 miles east and the 40 miles west of Kenora. The new

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