

The Railway and Marine World

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The National Transcontinental Railway Shops at Transcona.

Progress in the construction of the N.T.R. shops at Transcona has been noted in *The Railway and Marine World* as the work advanced. These descriptions in the various stages of completion were published in Aug., 1909, Aug. and Sept., 1910, and July, 1911. A number of changes, some of which involved considerable rearrangement, have from time to time been made so that the completed scheme, more particularly as it relates to the car department, is materially different from that at first outlined. In view of these changes, and the fact that the shops are now nearing completion, a complete illustrated article describing them in detail has been prepared.

These shops, located at Transcona, some six miles east of Winnipeg, on the

mechanical Engineer and Machinery Expert, and has since then had entire control of the completion of the locomotive shops and construction of the car shops, together with the selection and location of machinery and equipment placed in the locomotive shops, and to be placed in the car shops, and also of all mechanical equipment along the N.T.R. line. D. A. Evans, who is one of his assistants at Winnipeg, has done very good work in connection with the locomotive shop plant.

As above stated, the original purpose of the shops is to provide for repairs for the N.T.R. east of Winnipeg, which line on completion will be operated by the Grand Trunk Pacific Ry. Co. They will also be used for repairs for G.T.P.R. lines west of Winnipeg, though later on

would be capable of a further extension of 100% when traffic conditions should require it.

The various buildings are arranged along a midway running north and south across the property, and are served by a series of standard gauge and industrial tracks. The standard gauges branch off from the yard tracks to the south of the property. Additional communication between the buildings is obtained through the overhead travelling crane shown in fig. 1, which runs the whole length of the midway, serving all the main shops. This crane has 10 tons capacity, and is electrically operated, all exposed parts being covered by hoods in the usual manner. The operator's cage is electrically heated with a heater of the street car type. The runway is of

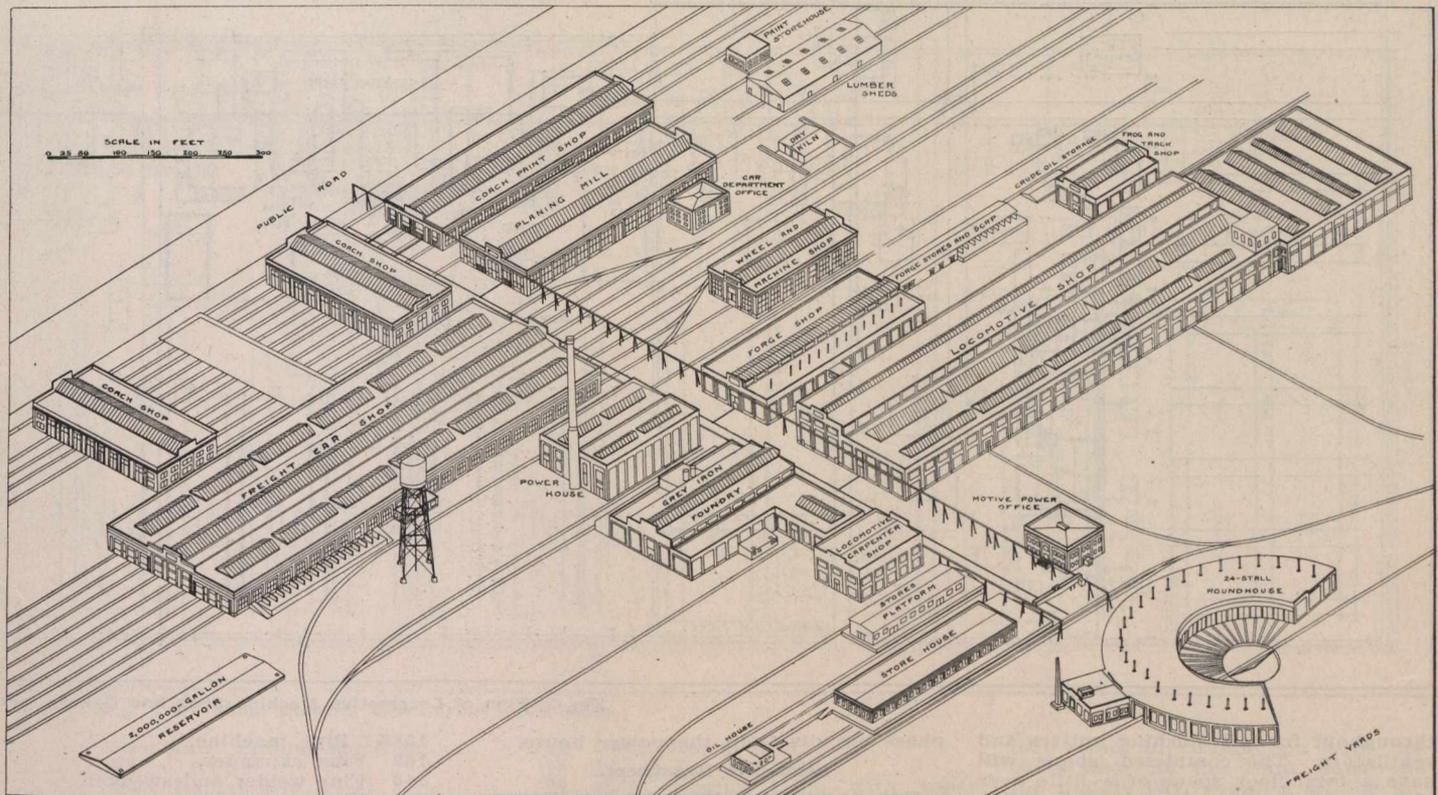


Fig. 1. Isometric Projection of Locomotive and Car Departments. (Copyright.)

N.T.R. main line, are intended to look after the general repairs of 1,800 miles of road, and have been designed with that object in view. In conjunction with the shops to be constructed at Quebec, the whole line from Winnipeg east to Moncton, will be provided for. An idea of their extent may be gained from fig. 1, an isometric scale projection of the shops. It is said that next to the C.P.R. Angus shops at Montreal, they will be the largest in Canada.

The details of the locomotive shop plant were partially developed and constructed under the supervision of F. W. Walker, M.E., Superintendent of Terminal Shops, N.T.R., who, however, resigned on July 1, 1911. W. J. Press, M.E., was, in May, 1910, appointed Me-

chanical Engineer and Machinery Expert, and has since then had entire control of the completion of the locomotive shops and construction of the car shops, together with the selection and location of machinery and equipment placed in the locomotive shops, and to be placed in the car shops, and also of all mechanical equipment along the N.T.R. line.

The site chosen is the prairie, and in order to avoid any trouble from flooding during the spring freshets, the floor level of the shops has been raised about 4 ft. above that of the existing prairie by a heavy gravel fill over the whole area occupied by the buildings.

The various buildings have been grouped together as closely as possible to facilitate intercommunication during the severe winter, the intervening distances being made as short as possible. As will be noted from fig. 1, this feature has been carried out very successfully, considering the fact that the designers had in mind the building of a plant that

steel construction, the steel columns supporting the girders being carried on concrete piers. Wherever possible, this runway is made a part of the adjoining building, dispensing with columns at these points.

As indicated in fig. 1, the car shops are to the north, and the locomotive shops to the south, the midway passing through each group of buildings. The divisional line is the through track running to the north of the power house, the latter being as centrally located as is feasible to reduce power and heat transmission losses to a minimum. The foundry and forge shops, being used by both departments are also centrally located between the groupings, the buildings that are distinctively car or loco-