

be included in the group designated by the numeral. Thus, in group M, there are say three different designs, 1, 2 and 3. Being the first of the group, there would be no subdesigns, so each group would have the subletter a. The first batches of the three designs would be designated respectively, M-1-a, M-2-a, and M-3-a. Now, suppose it was found that one of these designs was better than the other two, and it was decided to perpetuate that type with slight modifications, the next design would be given the subletter b. Thus, the next one in group 2 would be M-2-b. In some of the different groups, there are a great number of designs, running up to 16 in the G portion of the 10 wheeler group. The subgroups do not run as high, the highest being g in the H-6 class, the type of larger size 28% 10 wheelers that is being perpetuated for heavy passenger service.

The renumbering of the locomotives was made the occasion of the general change in the character of labelling the locomotives, the nature of which is shown in the accompanying two illustrations. Instead of printing the words "Canadian Northern" along the side of the cab as formerly, in the centre of the space the number of the locomotive is painted in letters 12 ins. deep,

advisable to continue the practice of so locating the number. The present practice is to have the words "Canadian Northern" painted along that space in block letters 12 ins. high, utilizing to advantage a fine stretch of advertising space. The number of the locomotive is painted in letters 6 ins. high near the top of the rear end of the tender, in a place that would not be conspicuous in the event of a tender interchange. Below the number are letters 3 ins. high, giving the capacity in imperial gallons. All painted lettering on both loco-

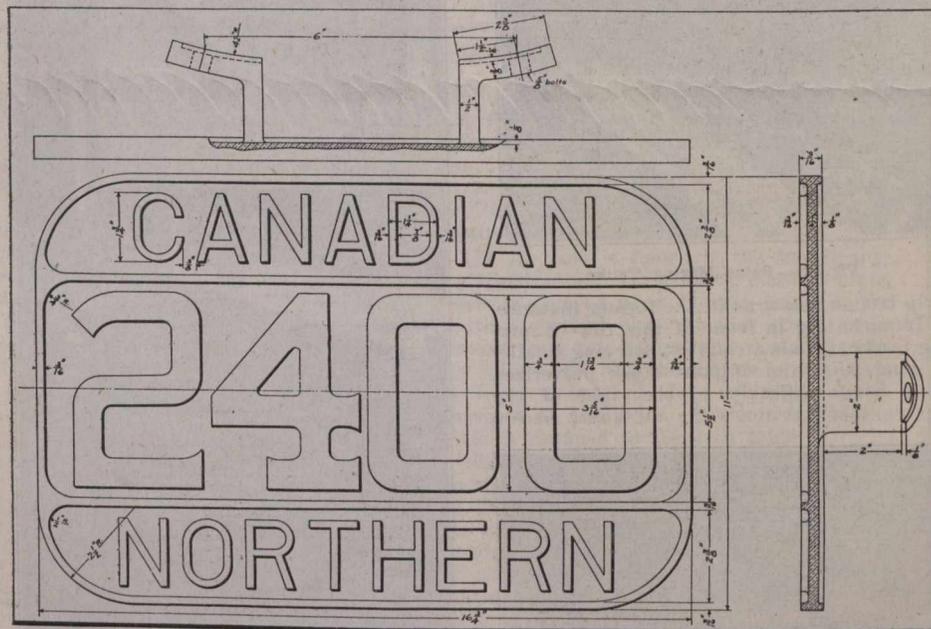
motive and tender is in the company's standard golden yellow.

This policy of classifying and rating locomotives has been generally adopted all over the Mackenzie-Mann lines. With but single modifications, the standard lettering and numbering has also been adopted on the other lines, the modifications for the most part occurring through the difference in names. This standard method of classifying and rating, involving the scheme of renumbering in a standard manner, was only introduced during the past year.

Oil and Paint House of Grand Trunk Railway Port Huron Shops.

The oil and paint house of the G.T.R. car shops at Port Huron, Mich., labors under peculiar difficulties, from the fact that it does not possess an up to date equipment with self measuring oil tanks and automatic paint mixers such as are to be found in many recently constructed plants, or in old plants where a modern equipment has been introduced. Lacking these modern adjuncts of a well planned oil and paint shop, J. L. Hodgson, the Master Car Builder, was compelled to make shift with such facilities as could be readily improvised. Just how

The oil room at the northerly end of the building is the longest of the three front rooms. In it there are three rows of tanks as in figs. 1 and 2, one row as in fig. 1, down the rear wall of the room, and the other two back to back down the centre as in fig. 2. There are 16 tanks, ranging in size from 2½ to 25 barrels capacity each. They are all labelled with the oil contained, and have drawing off faucets near the bottom, the sides and bottom sloping to this point so as to completely



Standard Front End Number Plate.

and to the left of the number, in letters 4 ins. deep, there is painted "C.N.R.," and on the opposite side to this, the classification of the locomotive, as for instance the one shown, the "N-1-a" class. The locomotive is further labelled on the smoke-box door by a projecting brass plate 11 ins. deep and 16¾ ins. wide, on which the legend stands out in raised brass letters, the surface of which is buffed, and the background painted black. Along the top, in letters 1¾ in. high, is the word "Canadian," with the word "Northern" in corresponding letters along the bottom. Between the two words, in figures 5 ins. high, is the number of the locomotive, as instanced in the illustration, "2400." The top sides of the headlight have the number also in letters, cut out of tin, 4 ins. high, with corresponding letters of the same height in the top front of the headlight, above the glazing.

The locomotive number formerly graced the sides of the tenders, but owing to the exigencies of the service sometimes requiring that the tenders be interchanged temporarily, (made possible by the standard type of tender used), it was deemed in-

good a substitute for a modern installation he has been able to introduce will be seen from the ensuing description, and doubtless all will agree that a splendid means for handling the large quantities of oil and paint used in such a plant has been planned.

The oil and paint house is about 60 by 30 ft., parallel to the river, on to which it backs. All the buildings of the plant are located parallel to the St. Clair river. A partition wall the length of the building divides off the rear third of it, this portion being used as a rough store room for the paint and oil products, and is entered by doors from either end. The front two thirds of the building, facing across the rear of the freight car shops, is divided into three rooms, about 10, 20 and 30 ft. long, respectively. The 10 ft. room is used for a store for the finer paint and oil products, the central or 20 ft. end for a paint-mixing and distributing room, and the long room for the oil storage tanks. These rooms communicate with each other through end doors, and each has an entrance from the outside, the middle one through the front wall and the outer ones through the end walls.

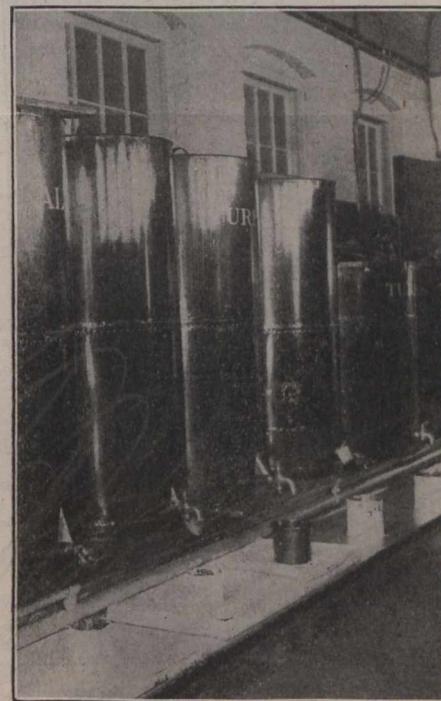


Fig. 1.—Oil Storage Tanks.

drain the tank when necessary, an operation that is performed periodically, the interior being thoroughly cleaned out at the same time by washing.

The tanks are all raised a few inches from the ground, on platforms. Below the platforms, on the floor, there is a drainage trough, with perforated stands on which the receptacle to be filled is placed. Beneath each of the faucets there is a drip can, which is always placed to one side when filling a can, and then replaced immediately afterwards, keeping the surface of the drain trough free from sticky oils and similar dirt. The reader will notice how clean and tidy the whole place appears, and it may be mentioned that the illustrations were made from photographs taken as it appeared under normal operating conditions, with no previous preparation to make it presentable. All the tanks are painted dark red, and are varnished over top. The drain troughs are painted white. Both tanks and trough are repainted at frequent intervals, and in consequence always present a neat appearance. Along in front