

property at an early stage rather than wait until it has increased in value to prohibitive prices; and in this country of rapid growth future extensions of every kind of plant have to be properly provided for.

The general design of terminal sheds will be found to be different in almost every terminal examined, as they are always governed by such local conditions as the general topography of the surrounding neighborhood, the property limits, location of the streets in the immediate vicinity, direction of traffic, nature of the commodities to be handled, and numerous other factors.

surface or else with some standard paving block, care being taken to provide sufficient drainage facilities, as a muddy and heavy teamway is very detrimental to the business. Team tracks, as a general rule, should not be made excessively long, as this increases the cost of switching and making up the trains; the most convenient length has been found by experience to be about 400 to 600 feet in the clear, giving a car capacity of from 10 to 15 cars on each track.

For handling heavy machinery, boilers, lumber, etc., it is usual to provide one or more overhead travelling cranes. These are frequently made to span a teamway and the two

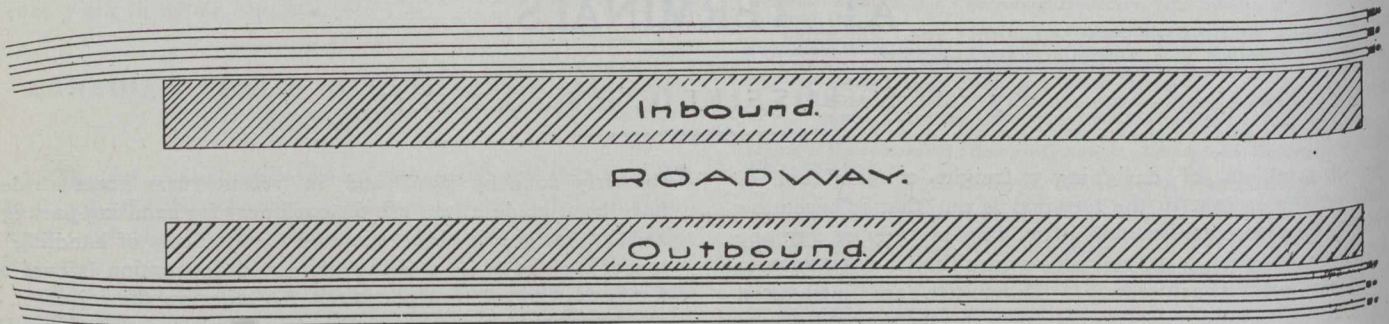


Fig. 2.—Typical Freight Shed Layout.

Mechanical Handling.—Mechanical handling of freight has not been adopted except in some of the most modern of large terminals, although various systems are being largely used at steamship piers where freight, both package and in bulk, has to be moved over longer distances and over more definite route than are obtainable in the average freight shed for handling freight from the cars to drays and storage spaces and vice versa. There are various systems, however, which are adaptable to the mixed requirements of the freight terminal, which will be described later.

Team Yards.—In addition to the freight sheds where L.C.L. freight is handled, a freight terminal is hardly complete without a team delivery yard for delivering car-load freight direct from the cars to the teams. A typical layout of a team yard is shown in Fig. 1, and this type of yard is

adjacent tracks, or the teamway and each pair of adjacent tracks, or the teamway and one pair of tracks. In fact there are numerous different ways of locating the crane which, again, may be fixed or travel on its own track in the same direction as the team tracks.

Freight Sheds.—The freight sheds most commonly encountered are those which are situated with the tracks and sheds on the same level as the roadways. In some of these one shed is used for both the inbound and outbound freight—it should perhaps be mentioned here that inbound freight refers to the freight brought in by the railway and outbound that taken out by the railway—but in other cases where a greater quantity of merchandise is handled the two sheds are kept separate, and although it is not done in every case it is distinctively advisable to have the inbound shed considerably

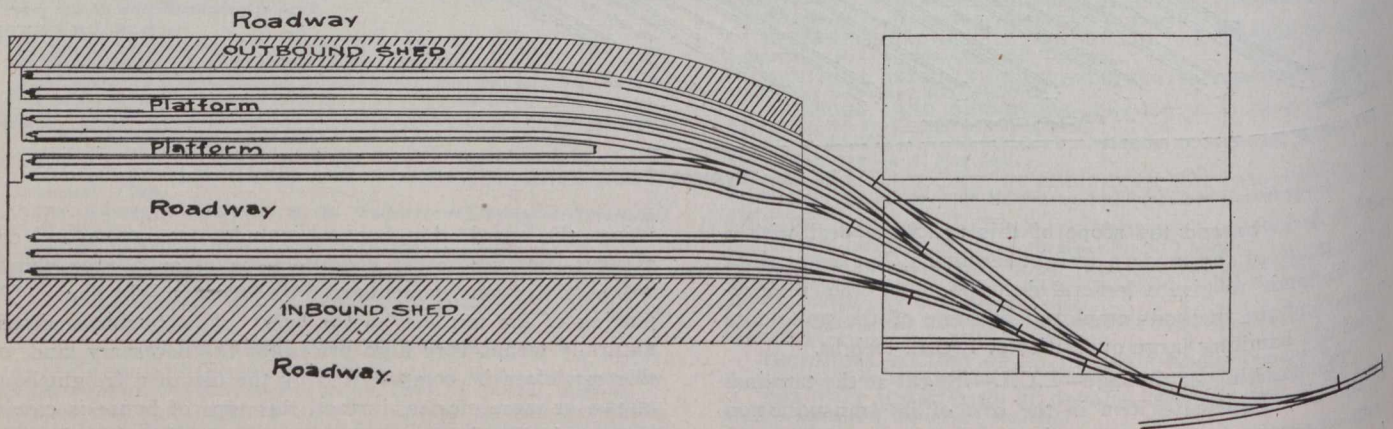


Fig. 4.—Freight Sheds and Transfer Platform, Rock Island Railway, St. Louis.

usually employed, modified in some form or other to suit the local conditions.

As will be seen in Fig. 1, the tracks are laid in pairs, with from 11 ft. 6 in. to 13 ft. centres between them. The width of the teamway is frequently made 40 ft. clear between the tracks, but in cases where a more economical layout is required and land is high priced, they can be narrowed down to 30 ft., but this latter is very apt to cause crowding and congestion, hence delays in the handling of the freight. The teamways should always be well made, either with a macadam

larger than the outbound because a fair percentage of the inbound freight has to be stored pending the arrival of the consignee's wagons to take it away, whereas in the outbound shed the merchandise deposited by the wagons can usually be taken direct to the cars. A certain quantity, however, has to be stored as frequently cars destined to certain points are only placed at the sheds on alternate days in order to insure a full load instead of shipping small loads, or having the goods transferred at some division point or transfer station.