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TERMINAL PASSENGER STATIONS; THEIR DESIGN AND OPERATION.

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(Continued from last issue.)

Another interesting feature which is quite prevalent in British railway terminals is the cab and carriage driveway between the two inbound platforms. This enables passengers to step right from the train to the cabs and carriages without any delay. The platform may also be reached by means of stairways from a footbridge in the middle of the station. The baggage is handled from the baggage room to the train platforms by means of subways and elevators.

The American Railway Engineering Association have designed a typical track layout suitable for a dead-end station of medium size. This layout is illustrated in Fig. 5, and it is of interest to look into the general requirements and conditions met with in a terminal of this type.

to permit trains to enter the station at the same time as other trains are leaving and to fill vacant tracks with the least delay. This will insure maximum efficiency and a minimum of installation cost.

The number of trains that can be handled at a platform or, in other words, the track capacity, depends largely on the rapidity with which the baggage and express can be handled while the train is at the platform, so that in order to have the maximum number of trains operated on the minimum number of tracks the baggage and express handling facilities must be the best possible, and arranged to give the minimum amount of interference to the movement of passengers. This feature is best obtained by handling all the

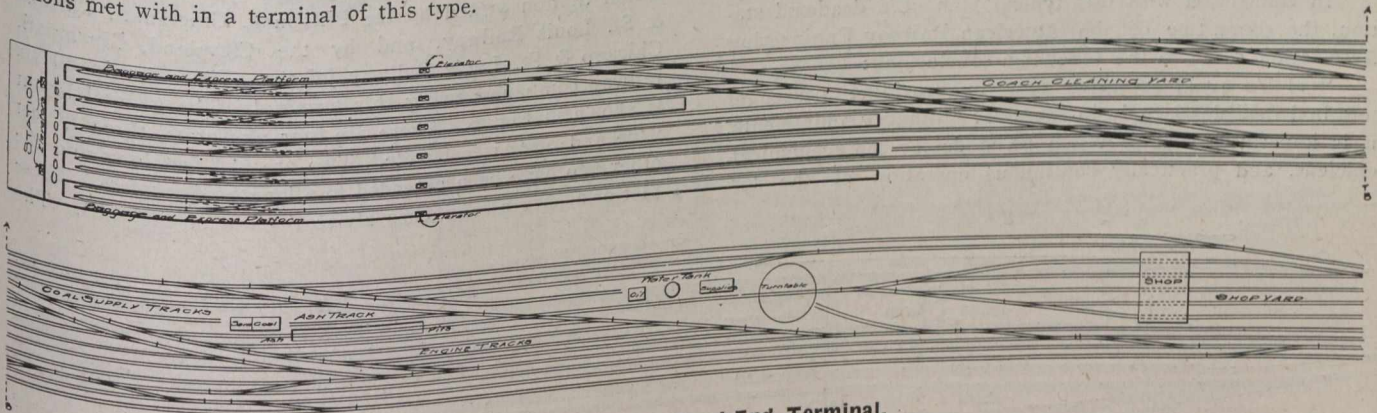


Fig. 5.—Typical Dead-End Terminal.

In order to secure the maximum efficiency of tracks and facilities and the minimum installation expense, the terminal facilities must be designed so as to provide such an arrangement of tracks and platforms that will permit the greatest freedom of movement with the least interference, so that incoming and outgoing trains may be handled without delay.

In most terminal stations facilities have to be provided for hauling the majority of the trains out of the station proper and placing them in a special cleaning yard, and frequently after they have been cleaned they have to be placed in a storage yard, previous to their being placed in the train shed ready for the outgoing journey.

It is sometimes necessary to arrange for trains at a terminal to arrive and depart in rapid succession, and it is in this case that great care must be taken in designing the track layout so that there will be the minimum of interference between the inbound and outbound movements. If the track layout is properly designed it will be possible in many cases

baggage and express either below or above the train floor and transferring it to the platforms by elevators. This method eliminates the annoyance and discomfort to passengers which results from trucks on long and busy platforms.

The time required to handle a train in the terminal, i.e., to load and unload passengers, baggage and express, depends largely on the nature of the train, as it takes longer to put the baggage and express on to a main line train than it takes the passengers to embark, while in the case of a local train the conditions are exactly reversed, but it has been found that the number of trains that can be conveniently handled per hour per track varies from two for main line trains up to a maximum of eight for locals, with an average of 4.1 trains per hour. These averages were obtained from a number of large terminals, but they are naturally liable to large variations, depending on the nature of the traffic.