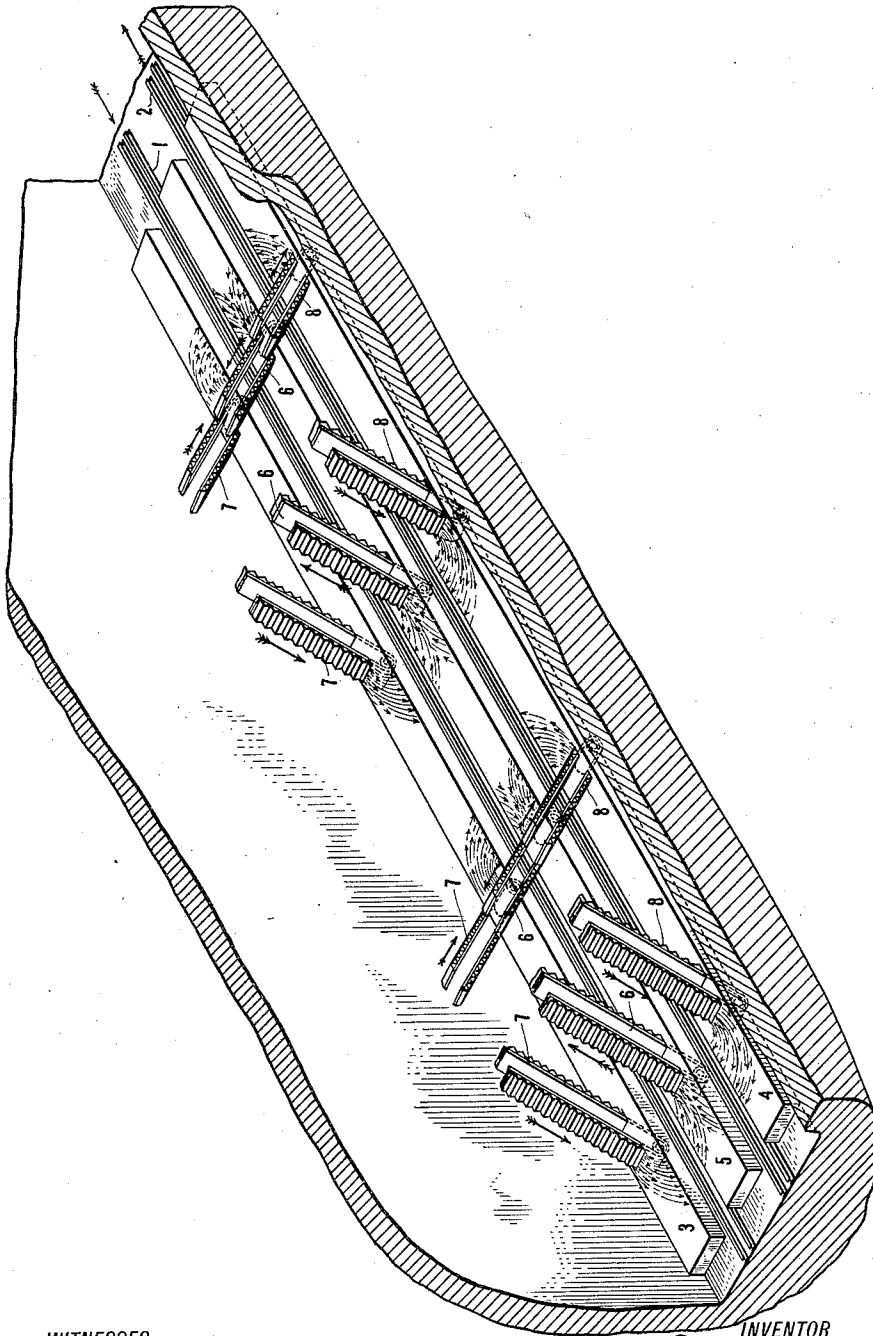


A. L. DRUM.
STATION CONSTRUCTION.
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1,057,626.

Patented Apr. 1, 1913.



WITNESSES:

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STATION CONSTRUCTION.

1,057,626.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ALPHONSUS L. DRUM, a citizen of the United States, residing at Highland Park, in the county of Lake and State of Illinois, have invented certain new and useful Improvements in Station Construction, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to the construction of railway stations and ancillary devices, and more particularly to the stations of intra-urban railways, such as subways, elevated roads and the like.

One of the objects thereof is to provide a simple and practical arrangement of parts and of appurtenances of a station of the above nature whereby a maximum passenger traffic may be smoothly and expeditiously handled.

Other objects will be in part obvious and in part pointed out hereinafter.

The invention accordingly consists in the features of construction, combinations of elements and arrangement of parts which will be exemplified in the construction hereinafter set forth, and the scope of the application of which will be indicated in the following claim.

The accompanying drawing is a semi-diagrammatic perspective of one of various possible embodiments of this invention.

As conducive to a clearer understanding of the principles of my invention, it may be noted that in railways of the above type the passenger traffic entering and leaving a station is generally greatest in portions of the city where the least space can be spared for station construction, as in the congested business districts. It may also be noted that the capacity of a station of this type is determined by the rate at which passengers can be moved therethrough, and I have found that a vital factor in this rate is the establishment of smooth currents of traffic which under no circumstances interfere with, or tend to break up, each other. It is also to be noted that in the case of a two-track railroad, it is an undue hardship upon the few passengers who wish to transfer from the trains of one track to the trains of the other to prevent their so doing. Another important factor to be noted is that the trains may be of considerable length and with ordinary station constructions there is

interference not only between the incoming and outgoing passengers of a car, but between the passengers coming from, or going toward, the various parts of a single train. The latter is especially important if the trains are to be evenly loaded and their full carrying capacity utilized. The provision of a station construction in which the passenger traffic is directed in smooth currents and in which the above and other advantageous features are attained without interference between these currents is the dominant aim of this invention.

Referring now to the drawing, there is diagrammatically shown a subway station in which the tracks 1 and 2 are preferably arranged for opposite train traffic. Respectively disposed on the outer sides of these tracks are a pair of platforms 3 and 4 so formed and positioned as to permit passengers to pass directly therefrom to standing trains. Between these tracks is an island platform 5 adapted to receive passengers from trains in the station, and this platform is provided with one or more devices adapted exclusively and at all times to guide or direct passengers away from the platform, as to a cross platform or the street level. The device here shown is an escalator 6, continuously driven as indicated by the arrow. In like manner, the platforms 3 and 4 are provided with escalators 7 and 8, so driven as at all times to direct passenger traffic toward these platforms. It will thus be seen that the platforms 3 and 4 serve at all times and exclusively as loading platforms for trains upon the tracks 1 and 2, and that the platform 5 is maintained exclusively as an unloading platform to receive passengers and discharge them from the station. This platform, moreover, provides a means whereby the few passengers who have taken a train in the wrong direction may rectify their mistake without leaving the station. Although the latter class of passengers are almost negligible in number, nevertheless, it is important that they be accommodated in this manner from practical considerations, as the avoidance of criticism of the railway,

The action and method of use of a station of this type will, it is believed, be clear from the above description in view of the drawing in which the main currents of passengers are diagrammatically indicated. It will be seen that the currents from escalators 7 and 8 to the corresponding tracks are evenly dis-

tributed throughout the length of the train and are entirely free from interference one with another. The latter is of the greatest importance, as I have found that relatively slight interference of two currents of passengers will bring them almost to a standstill and immediately result in extreme congestion. Within the cars themselves these even non-interfering currents are maintained, as the unloading traffic passes from each train directly to the island platform and the loading traffic coming from the adjacent platform 7 or 8 passes directly to the cars, avoiding all interference or confusion and reducing to a minimum the requisite time of stoppage for the train. Furthermore, upon the unloading platform 5, the centrally disposed escalators 6 receive the converging currents from the trains upon either side and remove them from the station.

It will thus be seen that there is provided a construction in which the objects of this invention and advantages hereinbefore noted are achieved, and that this construction is of an essentially simple, practical and inexpensive nature, provides for the uniform and expeditious loading of trains and is well suited to meet the requirements of actual practical use.

As many changes could be made in the above construction and many apparently

widely different embodiments of this invention could be made without departing from the scope thereof, it is intended that all matter contained in the above description or shown in the accompanying drawing shall be interpreted as illustrative and not in a limiting sense.

Having described my invention, what I claim as new and desire to secure by Letters Patent is:

In station construction, in combination, a pair of through tracks having train traffic in opposite directions thereon, a pair of platforms respectively disposed upon the outer sides of said tracks and contiguous thereto, the station being free from tracks outside of said platforms, an island platform positioned between said tracks and adapted to receive passengers from either, and oppositely disposed traffic directing means formed and adapted to positively guide all traffic toward said first two platforms and away from said island platform, whereby said first two platforms are used exclusively as loading platforms and said island platform as an unloading platform.

In testimony whereof I affix my signature in the presence of two witnesses.

ALPHONSUS L. DRUM.

Witnesses:

ANDREW E. PEDERSON,
E. LOUISE PALMER.