To whom it may concern:  

Be it known that I, ANDREY SCHELEST, of Kholm, Russia, have invented certain new and useful Improvements in Moving-Train Transfer Device, of which the following is a specification.

At unimportant railway stations, especially those situated on lines having two tracks, the passenger and goods trains stop from 1 to 5 minutes so as to allow the passengers to enter the cars and to alight or to deal with the goods. For instance in case 8 trains pass daily a station with an average stop of 3 minutes, the total stopping time during a day is 24 minutes and during a year 8760 minutes or 146 hours. This is inconvenient and objectionable not only for the railway company but also for the travelers and in case of war even dangerous to a certain extent for the army. The same may be said of tramways.

The device forming the subject matter of this invention has for its object to remedy these drawbacks by allowing the passengers to enter the cars and to alight while the train passes the railway or tramway station and outside this station.

In the accompanying drawings: Figure 1 is the top plan view of a railway plant; Fig. 2 shows the vertical profile of the secondary track; Fig. 3 is the back view of the carriage, the abutments of which are brought out in Figs. 4, 5 and 6, show respectively a top plan view, a side elevation view and a back view of another form of embodiment of the device. Fig. 7 is a part of the back view with the platform of the modified form lowered.

While a train is running through the station, the passengers of the next following station a go to meet the train as far as the guard's cottage b where the movable platform g with the brakes set stands on the slightly elevated end e of the track d which gradually lowers parallelly to the main track e in 4 5 and 6 show respectively a plan view, a side elevation view and a back view of another form of embodiment of the device. Fig. 7 is a part of the back view with the platform of the modified form lowered.

Before the train f reaches the platform g which is rolling away, its speed is slacked down until it nearly equals that of the platform. Now, the piece of steel i of the platform g is advanced toward the train f by means of the lever h so that the piece of steel k projecting from one of the train carriages or mounted on the latter, engages it like an abutment whereby the platform g is connected with the train f. Then a gangway allowing of the passage of the 65 passengers is slid out of the platform by means of the lever l. If several platforms g would be provided on the station for instance one with a restaurant and the other for goods service, the platforms are connected with the corresponding carriages of the train so that the passengers are able to make use of the platform carrying the dining convenience while at the same time, the goods are shipped into the trains and unshipped. If the distance covered in common be for instance 2 kilometers, one kilometer in either direction from the station a, the above operation would require 8 minutes for a train speed of 15 kilometers an hour. The gangway is removed at the bottom of the incline m situated at the opposite end of the auxiliary track d. The platform g owing to its momentum and the fact that it is connected with the train, climbs the incline m and the piece of iron i is gradually separated from the one k which must be done before the summit of the incline m is reached. The platform g set free in the manner described is braked either on the incline m or after having rolled back to the station building a so that the passengers may leave it and the goods be taken off from it. If it is desired to board a train coming from the opposite direction, the passengers step in the train from m.

The manner of the passengers' stepping in and alighting described above might also be obtained by a device actuated in another manner and substituted for the platform g.

To this end use is made between the stations of the platform g (Figs. 4-7) which is adapted to freely move on the side of the track or of the tramway carriage along the wires a through the medium of rollers or the like; the said wires a extend laterally under the roof of the carriages over the whole length of the train and are secured at the train's head (locomotive) and at the train's end (last carriage) to yielding rods not shown which allow of the stress of the wires being equally distributed when the
train passes curves or when the wires are pulled down in the manner described hereafter.

This device is employed in the following manner: The passengers which have the intention to leave the train or the tramway, preferably go to the car following immediately the locomotive and therefrom step on the platform \( g \) which has been brought to the said place. Now the wires \( a \) are pulled down by the lever \( o \) (Fig. 3) in the middle of the length of the train or a little further forward so that an incline is produced which allows the platform to roll downward until it reaches the part of the wire which rises toward the last carriage. The speed of the platform when rolling down is slackened down or the platforms stop entirely and allow the passengers to alight or to board the train.

When the platform \( g \) again rises on the wires toward the last car, it gradually takes up the train's speed thus allowing the passengers carried by it to step on the train which when the device is used must of course run a little slower. After use the platform \( g \) is again pulled forward by a cord secured to the front carriage. For the purpose of a more rapid stop of the platform, one may provide a sail \( r \) adapted to be rolled upon the roller \( p \) provided above the wires and which sail is set by the passengers of the platform by pulling the cord \( s \). It opposes a resistance to the current of air running in an opposite direction. After use the sail is again rolled up. For shortening the time required for stopping the platform one may make use of wheels \( t \) by means of which the platform lowered down rolls on the bottom and which wheels may be braked by the passengers so as to obtain the complete stop.

Having now fully described my said invention, what I claim and desire to secure by Letters Patent, is:

1. In combination, a track and a train, a short auxiliary track, alongside the first mentioned track, the ends of the auxiliary track being oppositely inclined and the central portion thereof being substantially level with the first mentioned track, a platform operating on the short auxiliary track, the said platform adapted to move down the inclined portions by gravity in the direction of the movement of the train, and means between the train and the platform to cause the moving train to engage with and move the platform.

2. In combination, a track and a train, a projection on the train, an auxiliary track alongside the first mentioned track, a platform movable on the auxiliary track, a slidably mounted projection on the platform to cooperate with and engage the projection on the train, means for operating the projection on the platform to place it in the path of movement of the projection on the train, whereby the train will move the platform with it, and means to impart initial movement to the platform before the projections contact.

3. In a device of the kind described the combination with the main track and the train of a secondary track arranged parallel to said main track, an incline at the end of said secondary track, a platform adapted to roll on said incline and secondary track, means for connecting said platform with the said train while running, a removable gangway between the said platform and the train and means for separating the said platform from the train.

4. In a device of the kind described the combination with the train of a platform, wires carried by the said train on its sides near the roof of the cars and adapted to receive the said platform through the medium of rollers, and means for pulling the said wires downward substantially as and for the purpose set forth.

5. In a device of the kind described the combination with the train of a platform, wires carried by the said train on its sides near the roof of the cars and adapted to receive the said platform through the medium of rollers, means for pulling the said wires downward, a resisting sail connected with said platform, means for hoisting said sail and taking it in and rollers at the bottom of said platform, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand in presence of two witnesses.

ANDREY SCHELEST.

Witnesses:

H. A. LOVIAGUINE,
H. L. MALCURYNSKI.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."