E. C. RUDD.

AUTOMATIC PLATFORM FOR STREET CARS.

APPLICATION FILED SEPT. 25, 1916.

1,221,908. Patented Apr. 10, 1917.

Fig. 1.

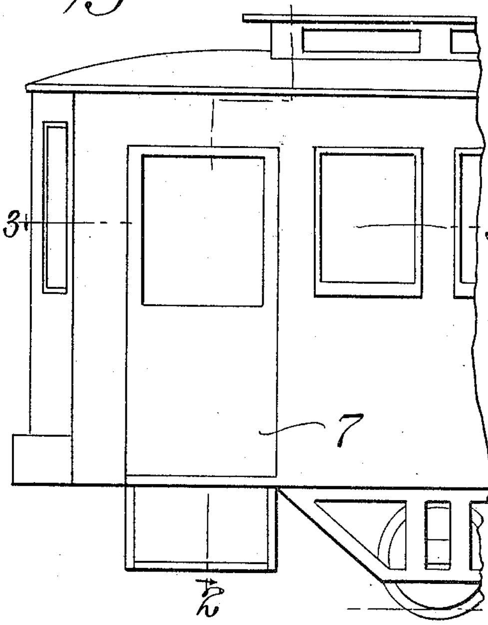


Fig. 2.

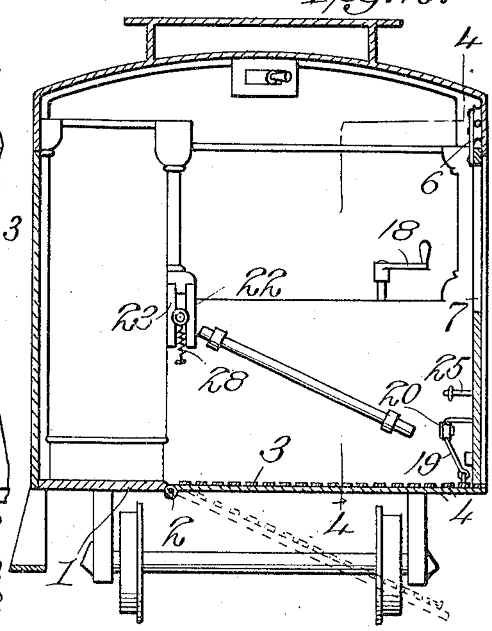


Fig. 3.

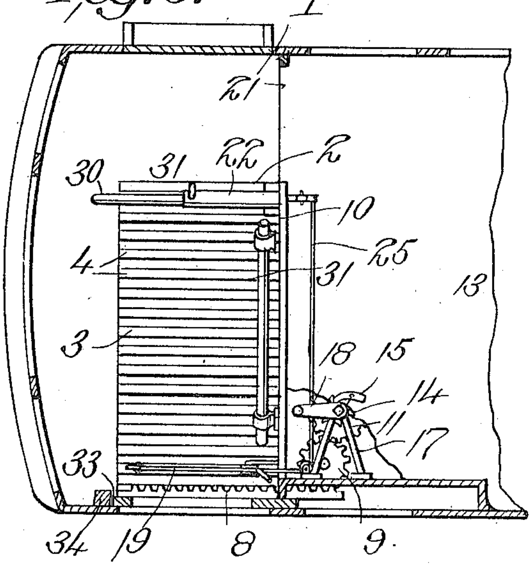
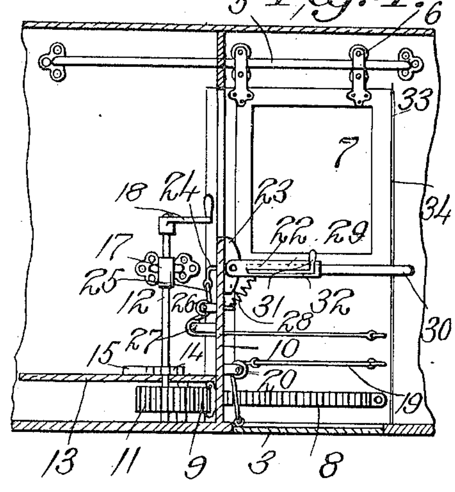


Fig. 4.



Witnesses

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AUTOMATIC PLATFORM FOR STREET-CARS.

1,221,908. Specification of Letters Patent. Patented Apr. 10, 1917.

Application filed September 25, 1916. Serial No. 122,027.

To all whom it may concern:

Be it known that I, EVERETT C. RUDD, a citizen of the United States, residing at Mount Vernon, in the county of Westchester, State of New York, have invented certain new and useful Improvements in Automatic Platforms for Street-Cars; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

The present invention is directed to improvements in automatic platform sections which constitute the steps for street cars, and more particularly to that type of car known as "pay as you enter".

The invention has for its object to provide a platform which is so mounted that it will automatically open when the entrance door of the car is opened, and will close when the door is closed.

A further object of the invention is to provide a platform section which is controlled by the door of the car, said section when in its inoperative position being in a plane with the platform of the car and elevated to a height to permit the car to readily pass over snow drifts or obstructions without injuring the section.

With these and other objects in view, this invention resides in the novel features of construction, formation, combination and arrangement of parts to be hereinafter more fully described claimed and illustrated in the accompanying drawing, in which:—

Figure 1 is a fragmentary side elevation of a car equipped with the device.

Fig. 2 is a sectional view on line 2—2 of Fig. 1.

Fig. 3 is a sectional view on line 3—3 of Fig. 1.

Fig. 4 is a sectional view on line 4—4 of Fig. 2.

Referring to the drawing 1 indicates the platform of the car, which is provided with an opening 2 and pivotally mounted in said opening is a platform section 3, said section being normally in a plane with the platform 2, and is provided with cleats 4.

Supported by one side of the car is a track 5 which is engaged by the hangers 6, said hangers serving to slidably support the door 7, said door being similar to the type used on "pay as you enter cars".

Fixed to the inner surface of the door 7, and adjacent the lower end thereof is a rack bar 8, said rack being engaged with the pinion 9 which is rotatably supported interiorly of the car and adjacent the partition 10, said pinion being in mesh with a pinion 11 which is fixed to the lower end of the shaft 12. The pinions 9 and 11 are located beneath the floor 13 of the car. Fixed to the shaft 12 and above the floor 13 is a ratchet wheel 14 which is normally engaged by the pivotally mounted pawl 15, said pawl being supported by the floor. The shaft 12 is rotatably engaged in the bracket 17 which is supported by the side of the car. Removably engaged with the upper end of the shaft is a crank handle 18 which when operated will rotate the pinions 9 and 11 to slide the rack 8 in the desired direction.

Having one end fixed to the door 7 is a cable 19, said cable being engaged over a pulley 20 supported by the partition 10, and has its other end fixed to one corner of the platform section 3. Thus it will be seen that when the door 7 is open that the section 3 will swing downwardly, as shown in dotted lines in Fig. 2, whereupon passengers can walk thereover and enter the doorway 21. It is of course obvious that when the door 7 is closed that the section 3 will be in the position shown in full lines in Fig. 2, and will be firmly held in its closed position as long as the pawl 15 is engaged with the ratchet wheel 14.

To prevent passengers crowding upon the section 3 a bar 22 is provided, said bar being pivotally connected between blocks 23 carried by the partition 10, the inner of said bar having an angle arm 24 carried thereby which is engaged with the inner end of the cable 25, said cable being trained around pulleys 26 and 27 and is passed through an opening in the partition 10 and has its forward end connected to the door 7 so that when the door is opened the bar will be swung downwardly, adjacent the partition 10. A coil spring 28 has one end connected to the partition and the other end to the bar, said spring serving to pull the bar down to a perpendicular position when the door is opened. Cable 25 will pull bar 22 up to a horizontal position, when the door 7, is closed.

The bar 22 is provided with a socket 29 in which is slidably mounted a rod 30, said rod having a handle 31 carried thereby which operates in the bayonet slot 32 formed in the bar 22, whereby said rod can be slid

outwardly when desired. The forward edge of the door is provided with a strip of rubber 33 which is adapted to be compressed between the door and jamb 34 which will exert a backward pressure upon the door so that the ratchet wheel 14 will be held in firm engagement with the pawl 15, after which the crank handle can be removed from the shaft 12 and is engaged with the rod on the other platform of the car.

Thus it will be seen that the motorman can stand upon the platform section 3, and when the bar 22 is in a horizontal position passengers will be prevented from crowding the motorman, it being of course understood that the conductor controls the movement of the section 3.

What is claimed is:—

1. In combination with the sliding door of a car, the platform of the car having an opening formed therein, a platform section pivotally mounted in the opening, a cable connecting the section and door and serving to hold the section in a plane with the paltform when the door is closed, and permitting the section to swing downwardly when the door is opened.

2. In combination with the sliding door of a car, the platform of the car having an opening formed therein, a platform section pivotally mounted in the opening, a rack bar carried by the door, a pinion in mesh with the rack bar, means for rotating the pinion to slide the door and rack bar simultaneously, a cable connecting the platform section and door to normally hold the section in a plane with the platform, and a bar pivotally associated with the car and capable of being swung downwardly when the door is opened as and for the purpose set forth.

3. In combination with the sliding door of a car, the platform of the car having an opening therein, a platform section hingedly mounted in the opening, means connecting said section and door whereby opening and closing of the latter will serve to lower and raise the section, and means preventing access to the platform section when the same is raised, said means being connected with and operable by the door to permit of access between the car and said platform section when the latter is in lowered position.

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

EVERETT C. RUDD.

Witnesses:
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