C. O. BIRNEY.

STREET CAR.

APPLICATION FILED APR. 2, 1908.

924,420. Patented June 8, 1909.

FIG. 1.

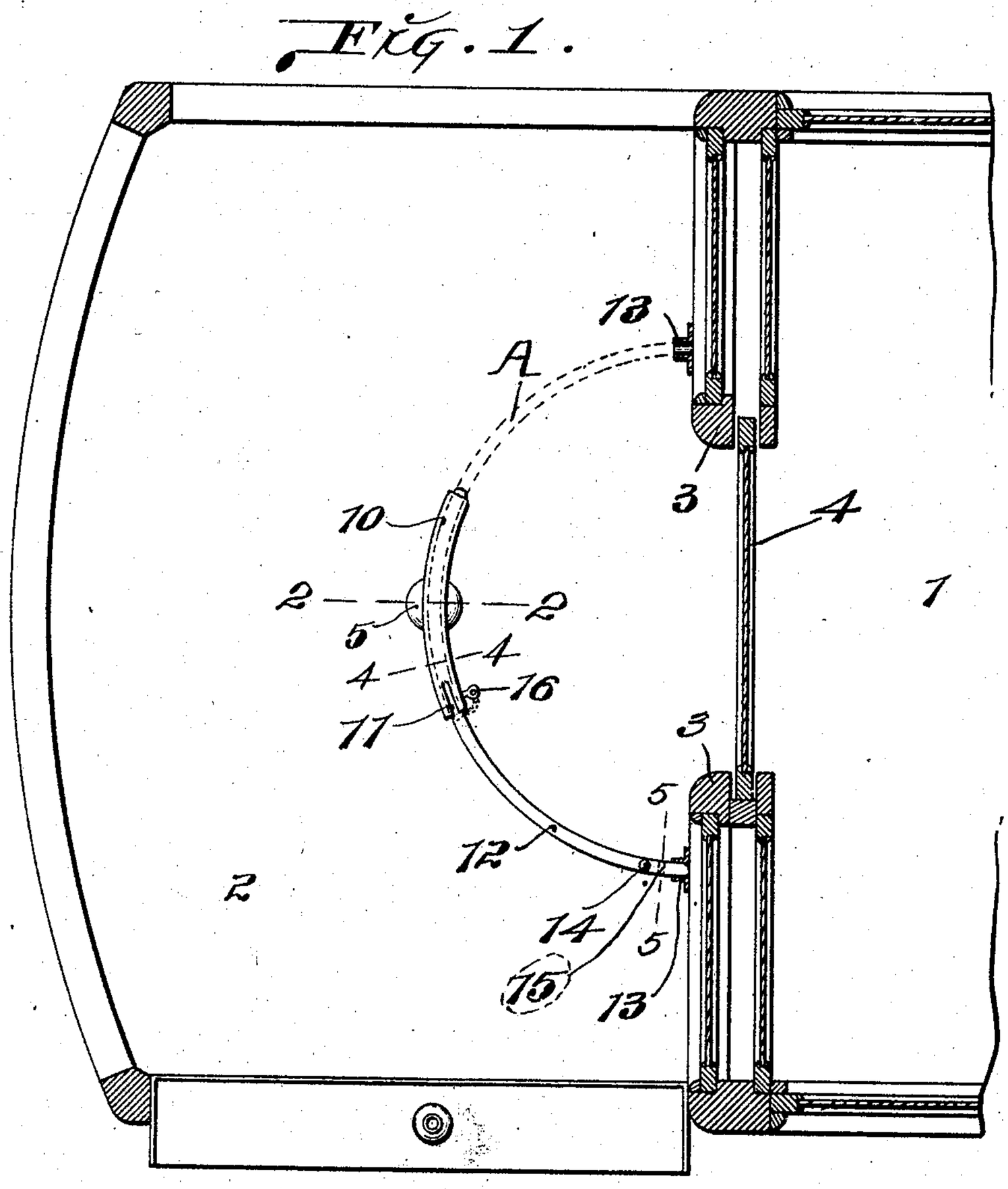


FIG. 2.

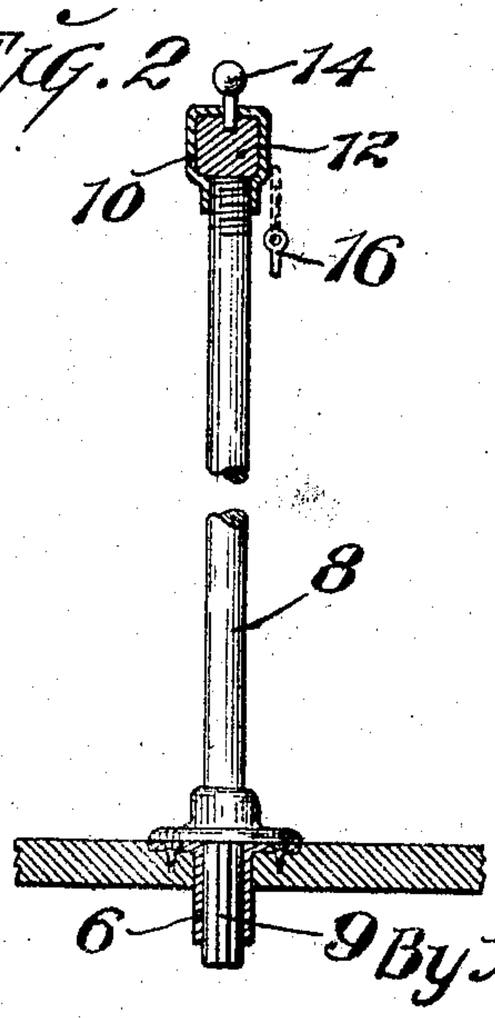


FIG. 3.

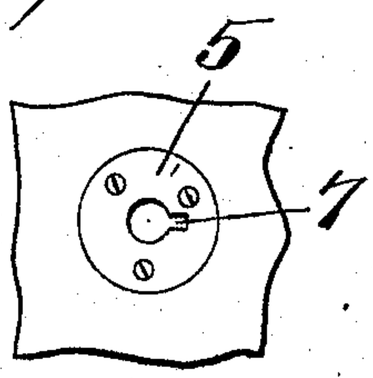


FIG. 4.

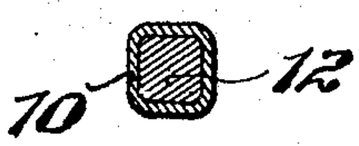
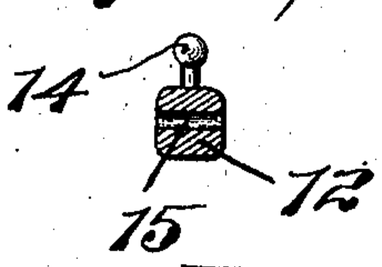


FIG. 5.



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STREET-CAR.

No. 924,420. Specification of Letters Patent. Patented June 8, 1909.

Application filed April 2, 1908. Serial No. 424,852.

To all whom it may concern.

Be it known that I, CHARLES O. BIRNEY, a citizen of the United States, and resident of St. Louis, Missouri, have invented certain new and useful Improvements in Street-Cars, of which the following is a specification, containing a full, clear, and exact description, reference being had to the accompanying drawings, forming a part hereof.

My invention relates generally to street cars, and more particularly to a car platform and the entrance door, my object being to construct a car platform so as to embody what is commonly known as the pay-on-platform principle, which arrangement provides a fixed station for the conductor who is in position to receive the fares of all the passengers entering the car and can readily observe the movements of the passengers entering and leaving the car, and thereby properly signal the motorman, or car driver.

A further object of my invention is to provide a post on the car platform, and to arrange a sliding rail on the upper end of said post, thus providing means for permitting the entrance and exit of all passengers and preventing any crowding and confusion of said passengers at the car door.

To the above purposes, my invention consists in certain novel features of construction and arrangement of parts, which will be hereinafter more fully set forth, pointed out in the claims, and illustrated in the accompanying drawings, in which:—

Figure 1 is a horizontal section taken through the center of one end of a car body and platform constructed in accordance with my invention; Fig. 2 is an enlarged vertical section taken on the line 2—2 of Fig. 1; Fig. 3 is a plan view of a socket plate located in the car platform in which the lower end of the post is positioned; Fig. 4 is an enlarged cross section taken on the line 4—4 of Fig. 1; Fig. 5 is an enlarged cross section taken on the line 5—5 of Fig. 1.

Referring by numerals to the accompanying drawings:—1 designates the car body, 2 the platform, 3 the door posts at the end of the car body, and 4 the sliding door which normally closes the opening between said door posts.

Fixed to the car platform, at a point immediately in front of the center of the door opening, is a plate 5, with which is formed integral a depending tube 6; and there being a vertically disposed notch formed in said tube.

8 designates a post, the lower end of which is adapted to fit in the tube 6, and being provided with a rib 9 which enters the notch 7, thus preventing said post from rotating; and formed on or fixed to the upper end of the post is a horizontally disposed curved tube 10, in the top of one end of which is formed a slot 11.

12 designates a curved rail, non-circular in cross section, and which is adapted to slide through the tube 10; and the ends of said rail are adapted to engage in sockets 13 fixed on the end of the car body adjacent the door posts 3. Fixed to the top of this rail 12, adjacent one end, is a handle 14, by means of which said rail is shifted from one side to another; and formed through said rail are the horizontally disposed apertures 15, in which are adapted to engage a latch pin 16, which passes through one end of the tube 10. The rail 12 is of such length as that when one end is engaged in one of the sockets 13, the opposite end portion thereof is moved into the tube 10, thereby leaving a space between this end of the tube and the adjacent door post 3.

When a car of my improved construction is in use, the various parts are in the positions shown in Fig. 1, with the conductor occupying a station immediately in front of the post 8. Passengers entering the car get on the rear portion of the platform and pass to the rear of the post, and then enter the car by passing between the end of the tube 10 and the adjacent door post 3, during which time the conductor receives the fares of the entering passengers; and thus the fares of all of the passengers entering the car are readily collected by the conductor; and the movements of the entering passengers can be readily observed by the conductor, thus permitting him to readily and properly signal the motorman, or car driver. When a passenger desires to leave the car, the conductor removes the pin 16 from the apertures in which it is normally engaged and by means of the handle 14 the curved rail 12 is shifted into the position shown by dotted lines A, Fig. 1, thus opening the exit space on the platform, and the passenger moves to the step at the side of the platform and alights from the forward portion of said step. Thus all crowding and confusion resulting there-

from between the passengers entering and leaving the car is avoided at the car door, and the conductor remains at a fixed station on the car platform, where he may readily observe the movements of the passengers entering and leaving the car; and where he may readily shift the rail 12 to correspond with the movements of the passengers.

The post 8 and parts carried thereby can be readily removed from the platform and shifted to the opposite end of the car, thus leaving a perfectly clear platform for the motorman or car driver.

It will be seen that the guard that separates the conductor's station from the balance of the platform comprises a rail that is formed of two sections, one stationary and the other movable, and one arranged to slide within the other so that when the movable part is projected or extended beyond the other it operates to close a passageway into the car, and when moved into its other position, the stationary section and the part of the movable section that was projected, as just stated, come into position one within the other, and the said passageway is opened.

I claim:—

1. The combination with a car and platform, of a post arranged on the platform in front of the center of the door opening, and a curved rail arranged to slide on said post and to alternately close the passageways between said post and the end of the car body.

2. The combination with a car and platform, of a post arranged on the platform in front of the center of the door opening, a curved rail arranged to slide on said post and to alternately close the passageways between said post and the end of the car body, and means whereby said rail is locked after movement.

3. The combination with a car and platform, of a post detachably arranged on the platform in front of the door opening in the front of the car body, and a curved rail loosely held on the post and adapted to be shifted so as to close either one of the spaces between the post and the door posts.

4. The combination with a car and car platform, of a post detachably arranged on the car platform in front of the door opening in the car body, a curved tube arranged on the post, and a curved rail arranged to slide through said curved tube.

5. The combination with a car and car platform, of a post detachably arranged on the car platform in front of the door opening in the car body, a curved tube arranged on the post, a curved rail arranged to slide through said curved tube, and the ends of which curved rail are adapted to engage against the end of the car body adjacent the door opening.

6. The combination with a car and car platform, of a post detachably arranged on the car platform in front of the door opening, in the car body, a curved tube arranged on the post, a curved rail arranged to slide through said curved tube, and means whereby the rail is locked after movement.

7. The combination with a car and car platform, of a post detachably arranged on the car platform in front of the door opening, in the car body, a curved tube arranged on the post, a curved rail arranged to slide through said curved tube, and sockets fixed on the end of the car body adjacent the door opening and adapted to receive the ends of the curved rail.

8. The combination with a car and car platform, of a socket fixed in the car platform in front of the center of the door opening, a post having its lower end detachably positioned in the socket, a horizontally disposed curved tube carried by the post, and a curved rail arranged to slide through said tube.

9. The combination, in a passenger car, of a body portion, a platform, a partition separating the body from the platform, and a guard rail separating the space on the platform occupied by the conductor from the rest thereof, made in two sections, one stationary and the other movable, and one section arranged to slide within the other, the movable section being arranged when projected beyond the stationary section to close a passageway into the car, and when moved into its other position, with one of the sections of the guard slid within the other, to open the said passageway.

In testimony whereof, I have signed my name to this specification, in presence of two subscribing witnesses.

CHARLES O. BIRNEY.

Witnesses:
M. P. SMITH,
E. M. HARRINGTON.