

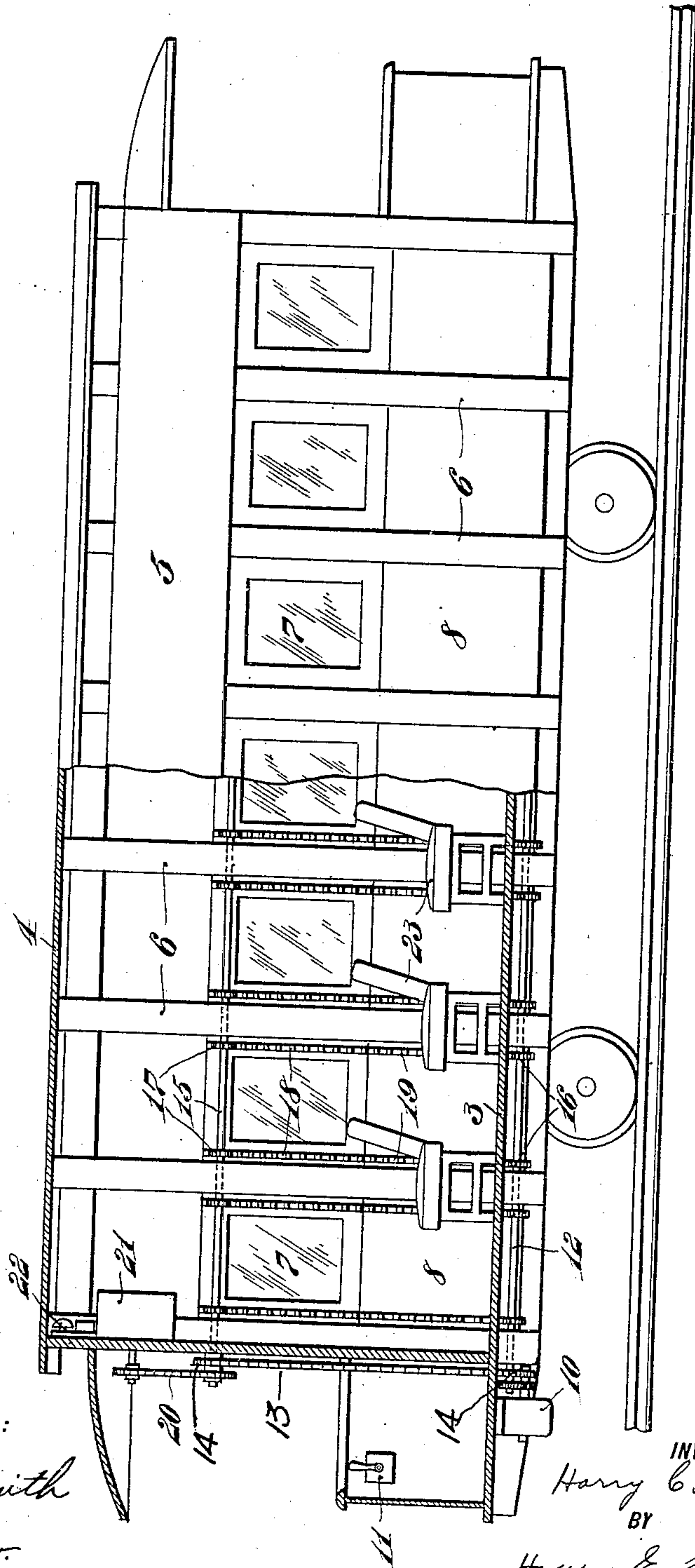
No. 863,904.

PATENTED AUG. 20, 1907.

H. COHEN.  
RAILWAY CAR.  
APPLICATION FILED MAY 13, 1907.

2 SHEETS—SHEET 1.

*Fig. 1.*



WITNESSES:

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*W. L. Drew.*

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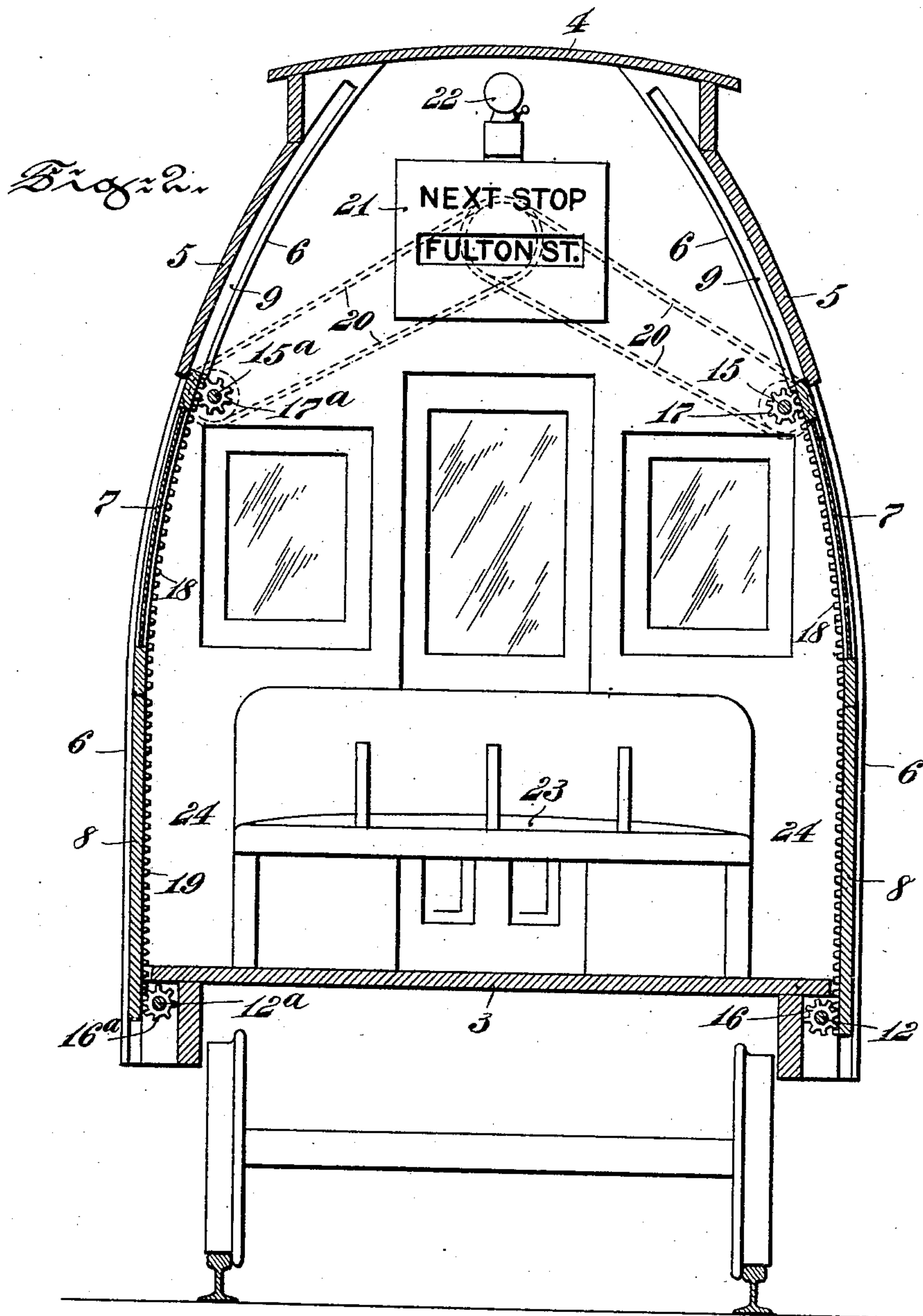
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*Geo. C. Woburnsmith*  
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# UNITED STATES PATENT OFFICE.

HARRY COHEN, OF PHILADELPHIA, PENNSYLVANIA.

## RAILWAY-CAR.

No. 863,904.

Specification of Letters Patent.

Patented Aug. 20, 1907.

Application filed May 13, 1907. Serial No. 373,290.

*To all whom it may concern:*

Be it known that I, HARRY COHEN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Railway-Cars, of which the following is a specification.

My invention has relation to that class of cars known as street railway or elevated railway cars and has for its object to provide means for the speedy entrance to or exit from the car as well as means for announcing the station or street at which the car stops to discharge or take on passengers.

As heretofore constructed a street railway car or a car used on elevated railway structures has usually had but two main entrances and exits one at either end. In some instances the car has been provided with a sliding door at the side of the car. In loading and unloading such cars at principal stops or stations the outgoing and incoming passengers have mingled in hopeless confusion and much loss of time is incurred at each of said stops. Again outgoing passengers frequently block the aisle to ask of the conductor the name of the street or station.

To avoid all these disadvantages and to minimize the confusion and trouble above enumerated my present invention has been devised.

To carry out my invention I prefer to construct the car as illustrated in the accompanying drawings, in which,—

Figure 1, is a side elevational view partly broken away and in section of a car embodying main features of my invention, and, Fig. 2, is a cross-sectional view of the same.

Referring to the drawings 3 represents the floor and 4 the roof of the car. The roof 4 has the side pieces 5 supported above the floor 3 by the frames 6. Between the frames 6 the windows 7 and base boards 8 are arranged said windows 7 and boards 8 being so arranged as to slide respectively upwards and downwards in the frames 6. When slid upwards in the frames 6 the windows 7 slide in slots 9 of the side pieces 5 as clearly illustrated in Fig. 2. To slide the windows up and the base boards down there is used the following preferred mechanism. A motor 10 controlled by the motorman from the controller 11 operates a driving shaft 12 arranged beneath the floor 3 of the car. The shaft 12 is connected by a chain 13 and sprockets 14 to a counter shaft 15 extending along the side of the car below the roof and adjacent to the top of the windows 7. The shaft 12 is also connected by chain and sprockets with a

corresponding shaft 12<sup>a</sup> on the opposite side of the car beneath the floor and the shaft 12<sup>a</sup> is also connected with a counter shaft 15<sup>a</sup> which extends along that side of the car opposite to the side along which the shaft 15 extends. Each pair of shafts 12 and 15 or 12<sup>a</sup> and 15<sup>a</sup> has at suitable intervals the pinions 16 and 16<sup>a</sup> and 17 and 17<sup>a</sup> which mesh respectively 16 and 16<sup>a</sup> or 17 and 17<sup>a</sup> with racks 18 and 19 on the sides of the windows 7 and boards 8. When the shafts 12 and 15 or 12<sup>a</sup> and 15<sup>a</sup> are turned in one direction their pinions serve to raise the windows 7 and lower the boards 8 to permit of exit from and access to the interior of the car and when turned in an opposite direction the windows 7 are lowered and the boards 8 to close the sides of the car and prevent exit therefrom or ingress thereto. Each shaft 15 and 15<sup>a</sup> is connected by a belt 20 with an indicator 21 and an annunciator or alarm 22. The indicator shows on its face the street or station at which the car has stopped and the alarm 22 calls the attention of the passenger to the indicator. When ready to start the station master or the conductor of the car gives the proper signal to the motorman who in turn closes the sides of the car. When ready to stop, the motorman open the sides of the car and the annunciator and alarm are thereby set in motion. To facilitate the exit from and ingress to the car through the sides, the seats 23 are arranged across the center of the car with a space or aisle 24 between the ends of the seat and the sides of the car as illustrated in Fig. 2.

Having thus described the nature and object of my invention what I claim as new and desire to secure by Letters Patent, is:—

1. A street railway car having at its sides a series of windows and a series of base boards combined with means for moving the windows and base boards in opposite directions to open or close the sides of the car.

2. In a street railway car, a driving shaft and a counter shaft, a series of pinions on each shaft, a series of windows arranged to slide upwards in the roof of the car, a series of base boards arranged to slide downwards in the frame of the car, racks connecting the windows with the pinions of the counter shaft and racks connecting the base boards with the pinions of the driving shaft.

3. A street railway car having at its sides a series of windows and a series of base boards combined with means for moving the windows and base boards in opposite directions to open or close the sides of the car and means for announcing the stop of the car when said sides are opened.

HARRY COHEN.

Witnesses:

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