

H. M. SLOAN.

STREET CAR.

APPLICATION FILED JAN. 16, 1908.

951,661.

Patented Mar. 8, 1910.

Fig. 1.

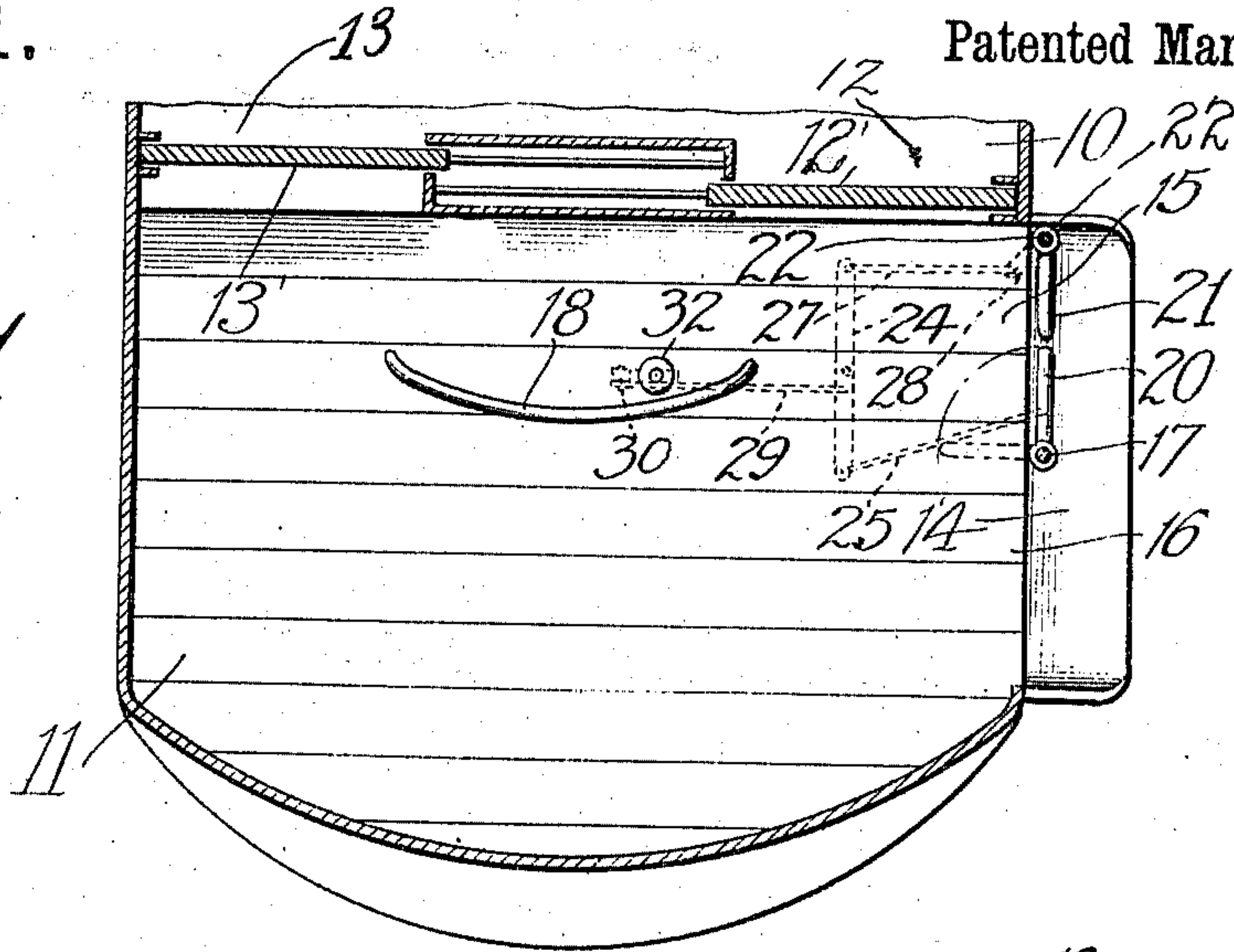


Fig. 2.

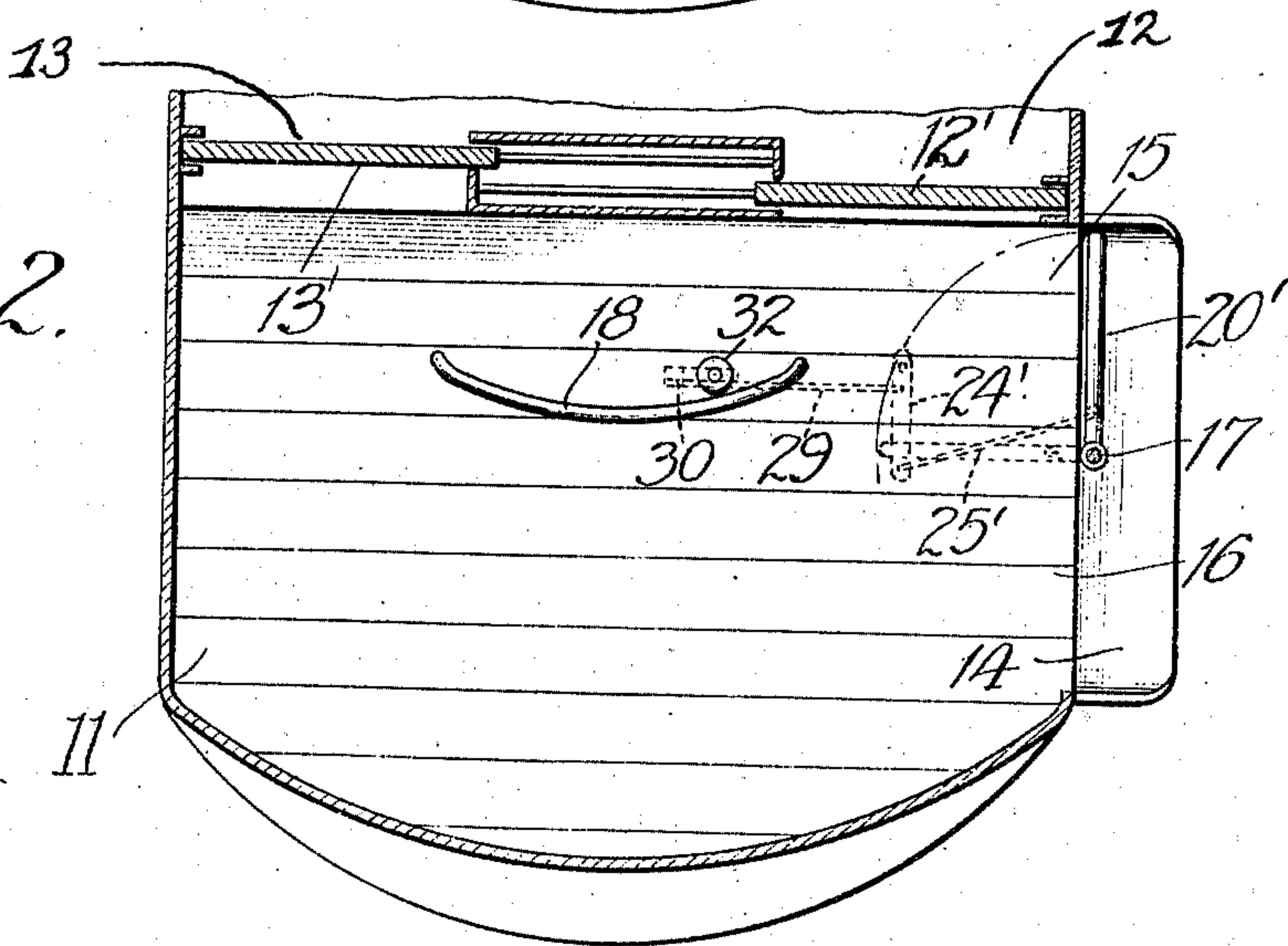


Fig. 3.

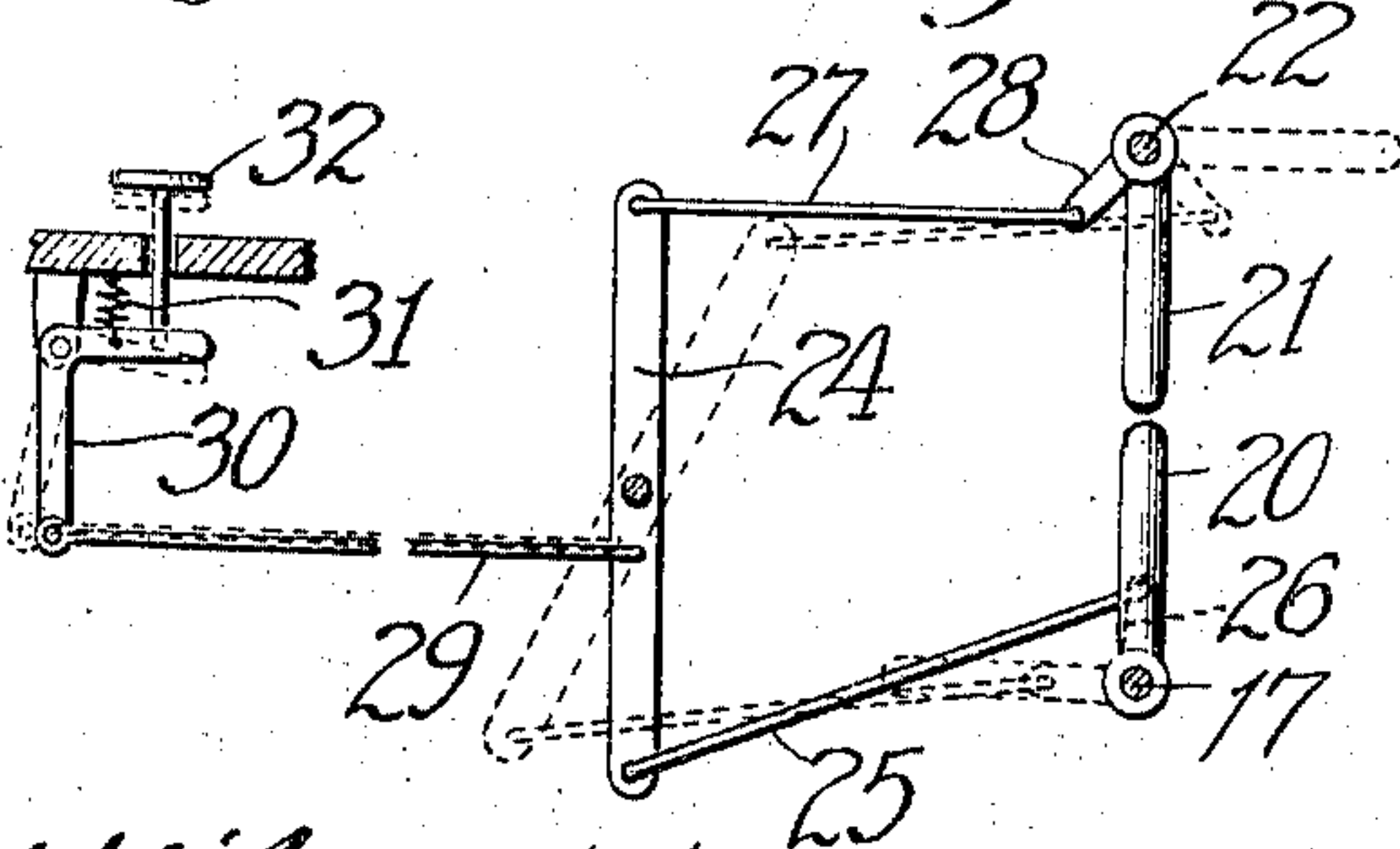


Fig. 4.

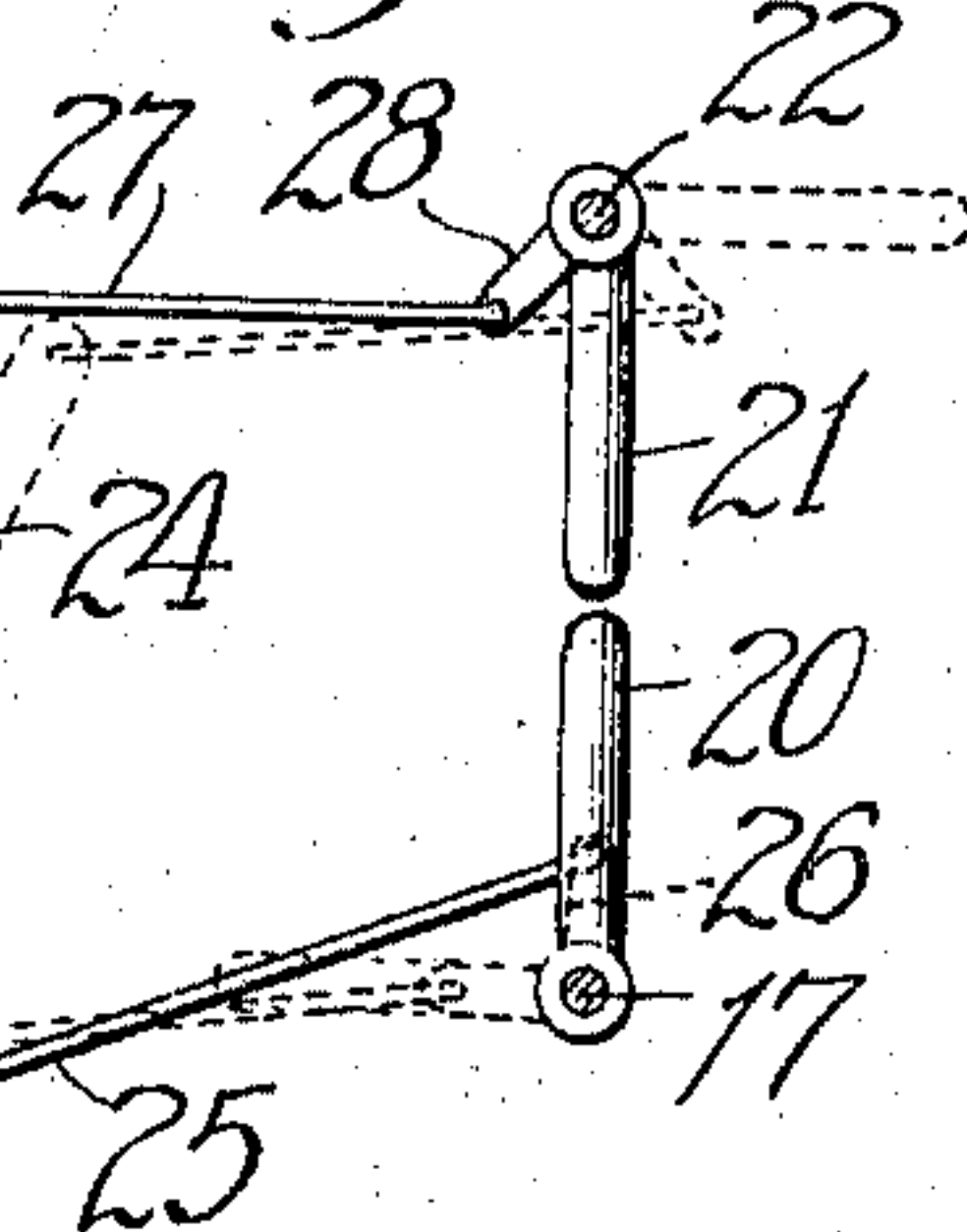
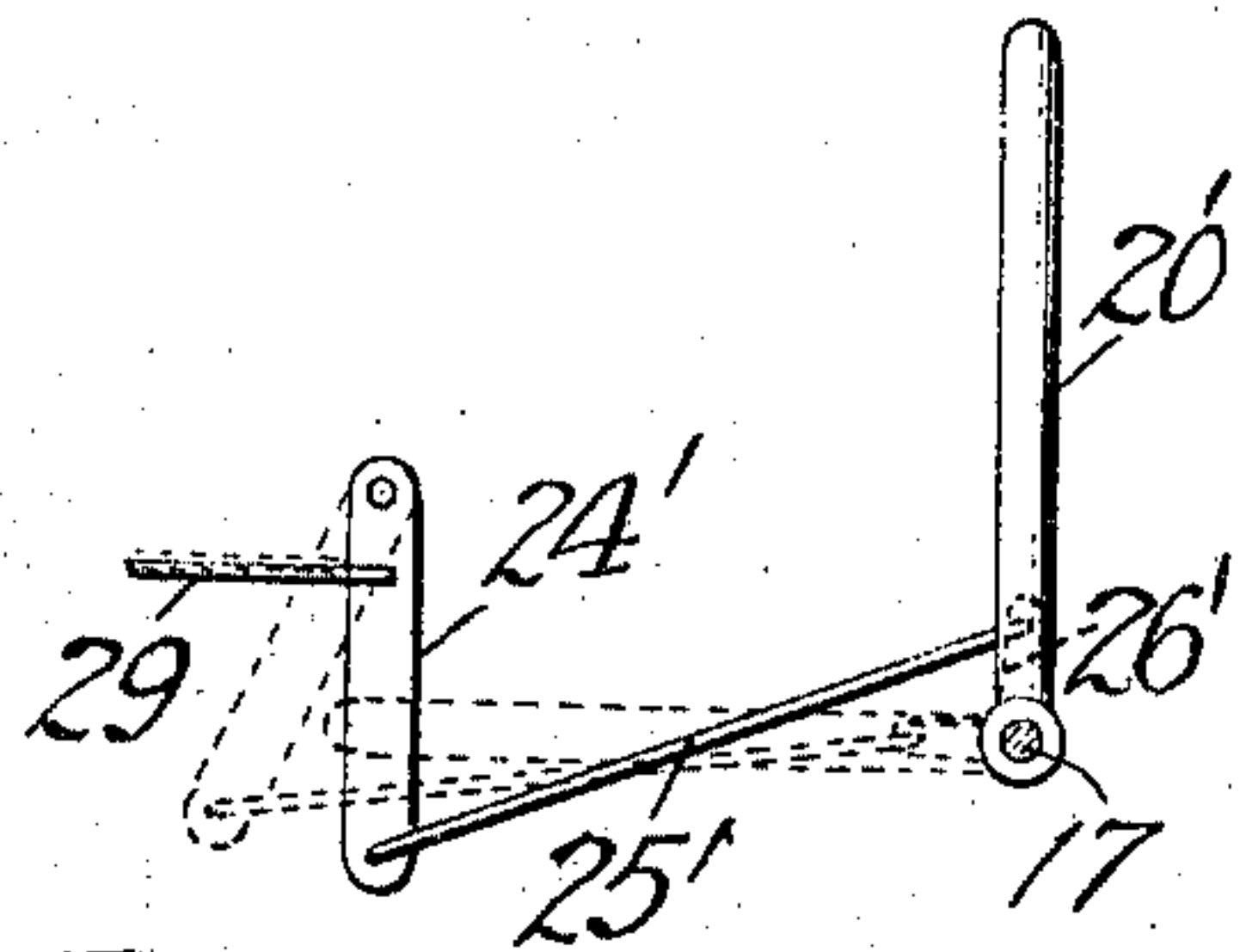


Fig. 5.



Witnesses  
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# UNITED STATES PATENT OFFICE.

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## STREET-CAR.

951,661.

Specification of Letters Patent.

Patented Mar. 8, 1910.

Application filed January 16, 1908. Serial No. 411,089.

*To all whom it may concern:*

Be it known that I, HARRY M. SLOAN, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Street-Cars, of which the following is a specification.

My invention relates to improvements in street cars, and has for its general object to provide a construction to facilitate the handling of passengers and the conductor's work of collecting fares.

One of the objects of my invention is to provide a car so constructed that the exit passage from the car intended only for the use of persons leaving the car may be effectively guarded and controlled by the conductor from a station at a suitable point upon the platform, and which will suitably guard the exit passage against use by entering passengers and yet will permit of such movements of the passengers under the direction of the conductor as will avoid confusion and delay.

In the drawing, Figure 1 is a horizontal section through the rear end of the car, showing an embodiment of my invention; Fig. 2 is a similar view showing my invention embodied in a modified form; Fig. 3 is a vertical section showing the foot lever for controlling the exit closure; Fig. 4 is a plan view of mechanism for connection with the parts shown in Fig. 3 to control the gates, as shown in Fig. 1, and; Fig. 5 is a similar view showing mechanism for moving a gate, as illustrated in Fig. 2.

Throughout said figures like numerals of reference refer always to like parts.

In general the car is structurally divided into two communicating compartments, preferably with means for cutting off the communication at will.

In the drawing 10 indicates in general a car body constituting one compartment, and 11 the rear platform of the car constituting another compartment, which may be and preferably is of somewhat larger size than has customarily been provided in street cars heretofore.

12' and 13' indicate respectively individually shiftable doors or barriers for separate exit and entrance openings or doorways, 12 and 13, in the end wall, between the car and platform compartments. Said openings or doorways 12 and 13 are preferably at opposite sides of the car, with the exit door-way

on the side of the platform nearest the car step, which is indicated at 14. The space opening from the step to the car platform is divided into separate immediately contiguous exit and entrance openings 15 and 16 respectively adjacent to and remote from the end of the car body, such separation being effected by an upright post 17, preferably located on the step or the edge of the platform.

Upon the platform preferably in the space immediately in rear of the body of the car between the exit and entrance door-ways 12 and 13 I provide a conductor's station, or space, segregated to a suitable extent from the balance of the space of the platform, as for instance by a transverse railing or barrier 18, substantially laterally coextensive with the space between the passageways so that passengers entering through the opening 16 and passing to the door-way 13 of the car body must pass by the conductor's station where their fares may be collected.

For controlling the exit opening 16 to the ground, I provide means for closing such opening operable from the conductor's station, and arrange such closing means in such manner that when opened the closure or a portion thereof constitutes part of the arrangement for directing the passengers in proper paths of exit and entrance, but yet preferably in such manner as to not interfere with such movements of the passengers under the conductor's direction, from the entrance path to the exit path or vice versa, as will best facilitate the handling of the passengers and prevent unnecessary delay.

In Fig. 1 the exit opening 15 to the ground is provided with two gates 20 and 21, the former pivoted upon post 17 to swing inward, and the latter upon a post 22 set adjacent the corner of the car body to swing outward. The conductor's station railing 18 is preferably located near the transverse line of the post 17, and the closure or barrier 20 when swung inward to position at substantially right angles with the edge of the car, forms a barrier partially spanning the space between the rail 18 and post 17, so that it serves as an aid to directing the passengers either entering or leaving the car in the proper path intended for their use, but without entirely closing the space between the rail 18 and post 17 so that any passenger desiring to get from the entrance path into the exit path, or vice versa, may do so by passing close to



the conductor's station, where his movements may easily be directed by the conductor in a way which will best subserve the rapid handling of the other passengers.

5 Thus the gate 20 constitutes a barrier-means for temporarily establishing paths on the platform leading from the respective side ingress and egress passageways to the corresponding passageways to the body, as  
10 well as a means for obstructing the side egress passageway.

For effecting the desired movements of gates 20 and 21, I show simple mechanism, comprising a centrally pivoted lever 24, hav-  
15 ing one end connected by link 25 with an arm 26 movable with the closure 20, and its other extremity connected by a link 27 to the arm 28, movable with the other closure 21, one side of the lever 24 being con-  
20 nected by a link 29 with a bell crank lever 30 mounted below the conductor's station, normally held by spring 31 and depressible by a treadle 32, arranged within the confines of the conductor's station. Depression of  
25 treadle 32 rocks the bell crank lever 30 exerting a pull on the rod 29 which turns the lever 24 to position shown in dotted lines in Fig. 4, throwing the gate 21 outward and the gate 20 inward, as indicated in dotted  
30 lines in Fig. 1.

For some purpose it is desirable to employ only a single gate, as shown at 20' in Fig. 2 and under such conditions the means for moving the gate inward may be em-  
35 bodied as shown in Fig. 5, the lever 24' being pivoted at one end and at the other end connected by link 25 with the moving arm 26' of the gate 20', said lever 24' being connected to link 29' for control by the treadle  
40 32 and its bell crank connections as heretofore described.

While I have herein described in some detail a specific embodiment of my invention it will be apparent that changes in the spe-  
45 cific construction may be made without departure from the spirit and scope of my invention.

Having thus described my invention what I claim and desire to secure by Letters Pat-  
50 ent, is;

1. In a car, a platform having independent entrance and exit openings to the ground, a railing dividing a conductor's platform near the transverse center of the  
55 platform from the balance thereof, and a closure for the opening to the ground nearest the car body, arranged when opened to stand with its free edge inward toward the railing of the conductor's station.

60 2. In a car, a platform having separate entrance and exit openings to the ground, means for obstructing that one of said openings adjacent the body of the car, comprising a gate arranged to swing inwardly  
65 when open, and means dividing a conduc-

tor's station from the balance of the platform, arranged approximately in a transverse line of the open door.

3. In a car, a platform having separate entrance and exit openings to the ground, 70 a closure for the exit opening to the ground arranged to swing inward, a railing separating from the balance of the platform a conductor's station near the body of the car, said railing being sufficiently remote from 75 the path of travel of said closure to leave a space between said rail and closure when the closure is open.

4. In a car; a platform having separate entrance and exit openings to the ground, 80 a closure for the exit opening to the ground arranged to swing inward, a railing separating from the balance of the platform a conductor's station near the body of the car, said railing being sufficiently remote from the 85 path of travel of said closure to leave a space between said rail and closure when the closure is open, and means for opening the door arranged for operation from the conductor's station.

5. In a car, a platform having separate entrance and exit openings to the ground, the exit opening being adjacent the body of the car, two gates for closing said exit opening pivoted at opposite sides thereof, and ar- 90 ranged one to swing inward and the other to swing outward, the inwardly swinging gate being the farthest from the car body, and means accessible from the platform for opening the gates. 95

6. In a car, a platform having separate entrance and exit openings to the ground, the exit opening being adjacent the body of the car, two gates closing said exit opening pivoted at opposite sides thereof, and ar- 100 ranged one to swing inward and the other to swing outward, the inwardly swinging gate being that farthest from the car body, and means accessible from the platform for operating said gate, and a transverse rail- 105 ing adjacent the transverse line of separation of the openings to the ground, partially separating from the balance of the platform a conductor's station. 110

7. A car having two compartments, indi- 115 vidually shiftable barriers between said compartments, means above the floor of one of said compartments to provide two independent passage-ways leading to one side of one of said compartments and also adapted 120 to provide an obstruction for one of said passageways, substantially as set forth.

8. A car structurally divided above its floor into two compartments, means provid- 125 ing two independent passageways between said two compartments, means providing two independent side openings from one of said compartments, and a movable obstruction for one of said openings, arranged to swing inward to temporarily establish two 130



independent passages on the platform leading respectively from the two side openings toward the corresponding passageways between the compartments.

5 9. A car providing a body and a platform having communication through two separated ingress and egress passageways, said platform having two independent ingress and egress passageways therefrom to the street, and means for obstructing one said passageway to the street, movable, in opening said passageway, into position to constitute a temporary means for separating in part two paths on the platform between the respective inlet passageways and outlet passageways.

10. A car having two compartments, means above the floors of said compartments providing two independent passageways between the compartments, means at one side of the car providing independent passageways from the street to one compartment, and movable barrier-means controlling one of said passageways to the street, arranged to swing inward, and arranged when open to be spaced apart from the first said means.

11. In a car, the combination with the body and the end platform, of a rail extending upon the platform, contiguous to the body, there being laterally separate ingress and egress passageways between the body and platform on opposite sides of the rail, and separated ingress and egress passageways from the platform to the street; and a barrier for one of said passageways, to the street, movable inwardly in opening to coact with the rail on the platform to temporarily separate in part paths connecting the ingress passageways and egress passageways respectively.

12. In a car, the combination with the body and the end platform, of a rail extending upon the platform, contiguous to the body, there being laterally separate ingress and egress passageways between the body and platform on opposite sides of the rail, and separated ingress and egress passageways from the platform to the street; and a barrier for one of said passageways, to the street, movable inwardly in closing to coact with the rail on the platform to temporarily separate in part paths connecting the ingress passageways and egress passageways respectively, said barrier, when open, being spaced apart from the rail sufficient to permit passage of persons from the one path to the other.

13. In a car, a platform, a body, and means for defining separate ingress and egress paths from an edge of the platform to the body of the car comprising a transverse barrier permanently located upon the platform, and a

swinging barrier at the edge of the platform, arranged when moved to one position to obstruct one of the paths and when moved to another position to coact with the permanent barrier to form in effect a continuation thereof to separate said paths.

14. In a car, a body, a platform, and means for defining separate ingress and egress paths from a side edge of the platform to the body of the car comprising a barrier at an edge of the car movable from position to obstruct one of the paths to position separating said paths in part; and another barrier for coaction with the first having a part transverse to the car to form in effect a continuation of said first barrier, further to separate said paths in another part.

15. In a car providing a body and a platform, the latter having a side opening, means dividing the side opening into two immediately contiguous passageways between the platform and street, a barrier on the platform relatively remote from the said dividing means, partially segregating from the balance of the platform a conductor's station, an inwardly swinging barrier for one of the passageways between the platform and the street; and means for operating said barrier accessible from the conductor's station.

16. In a car providing a body and a platform, the latter having a side opening, means dividing the side opening into two immediately contiguous passageways between the platform and street, a barrier on the platform relatively remote from the said dividing means, partially segregating from the balance of the platform a conductor's station, an inwardly swinging barrier for one of the passageways between the platform and the street; and means for operating said barrier accessible from the conductor's station, comprising a prime mover at the conductor's station, and operative connections between said prime mover and the said movable barrier vertically removed from the passage space of the platform.

17. In a car, a platform, a plurality of barrier-means positioned combinatively to define separate areas on the platform for incoming and outgoing passengers, and defining a conductor's station out of both said areas, and means accessible from the conductor's station for moving one of said barriers to and from its position of coaction with the remaining barrier-means.

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

HARRY M. SLOAN.

In the presence of—

GEO. T. MAY, Jr.,

MARY F. ALLEN.