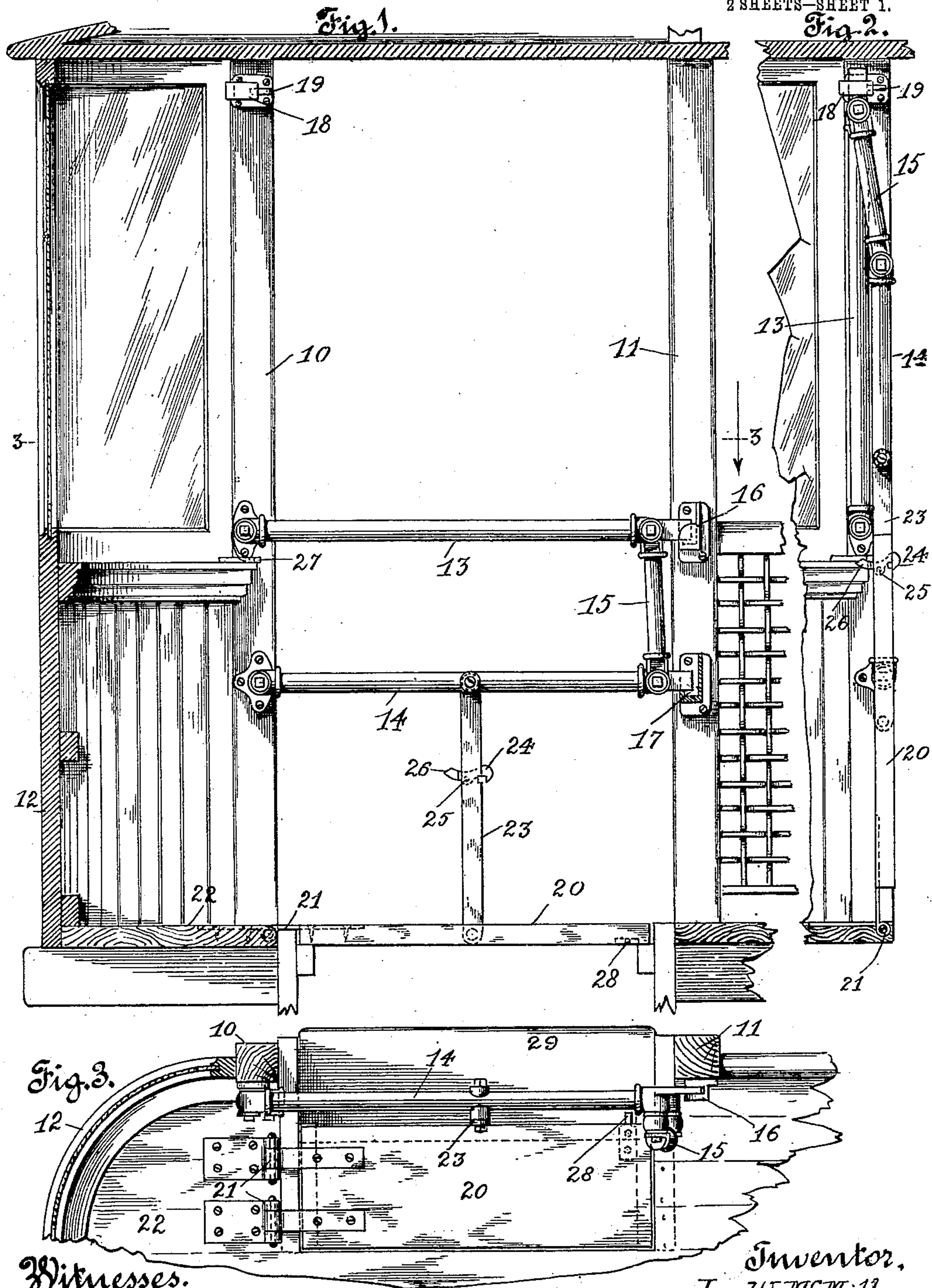


J. W. McMILLAN.
 MEANS FOR CLOSING THE ENTRANCES TO AND EXITS FROM PASSENGER CARS.
 APPLICATION FILED AUG. 17, 1908.

915,207.

Patented Mar. 16, 1909.

2 SHEETS—SHEET 1.



Witnesses.

H. Hartenbergs.
S. B. Quetin

Inventor,
 Jos. W. McMillan,
 By *E. D. Orphan*
 Attorney

J. W. McMILLAN.

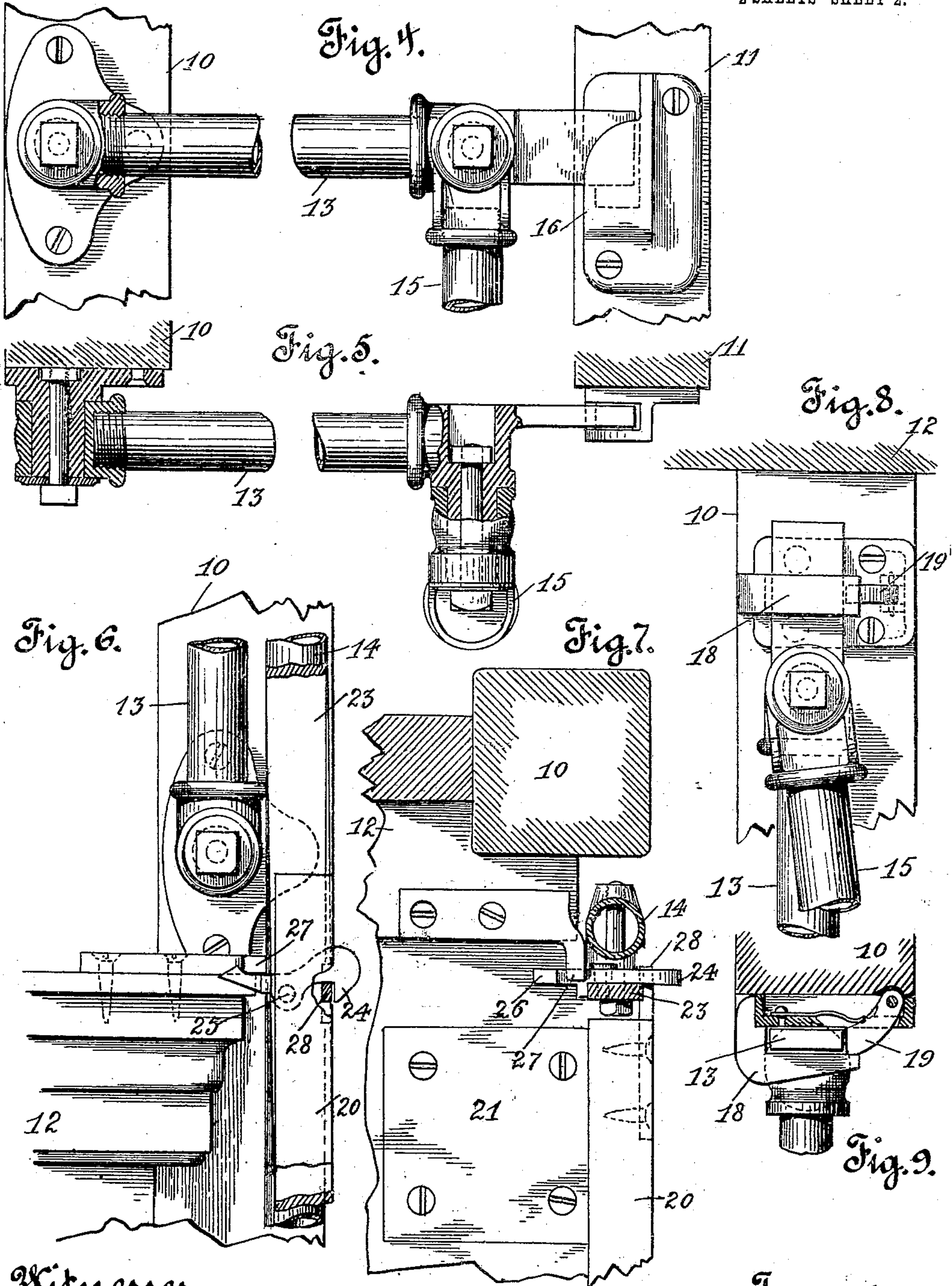
MEANS FOR CLOSING THE ENTRANCES TO AND EXITS FROM PASSENGER CARS.

APPLICATION FILED AUG. 17, 1908.

915,207.

Patented Mar. 16, 1909.

2 SHEETS—SHEET 2.



Witnesses.

H. Marteverde

S. B. Austin

Inventor,

Jos. W. McMillan

By *E. D. Darpham*
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH W. McMILLAN, OF LOS ANGELES, CALIFORNIA.

MEANS FOR CLOSING THE ENTRANCES TO AND EXITS FROM PASSENGER-CARS.

No. 915,207.

Specification of Letters Patent.

Patented March 16, 1909.

Application filed August 17, 1908. Serial No. 448,794.

To all whom it may concern:

Be it known that I, JOSEPH W. McMILLAN, a citizen of the United States, residing at Los Angeles, county of Los Angeles, and State of California, have invented new and useful Improvements in Means for Closing the Entrances to and Exits from Passenger-Cars, of which the following is a specification.

In passenger service, particularly on inter-urban electric lines, it is desirable that convenient and easily operated means shall be provided for closing the entrance to and exit from one or both sides of the passenger car, and for closing or flooring over that portion of the steps which lies within the car body. It is particularly desirable when double tracks are used that the entrance to and exit from that side of the car next to the other track be closed, and the portion of the steps within the car body be temporarily floored over.

It is the object of this invention to provide simple and efficient means, which shall be as nearly automatic in operation as is possible for that purpose. I accomplish this object by the mechanism described herein and illustrated in the accompanying drawings, in which;

Figure 1 is a side elevation of my improved closing, and temporary step flooring mechanism, with a fragment of an interurban car shown in connection therewith to illustrate my invention, the view being taken from the inside of the car looking out at the front entrance on the right hand side of the car, the closing device being in operative position, closing the entrance. Fig. 2 is a side elevation of a part of the left hand portion of the parts shown in Fig. 1 with the closing device in inoperative position, that is with the entrance open. Fig. 3 is a section and plan taken from the line 3—3 of Fig. 1. Figs. 4 to 9 are detail views of different parts of the mechanism shown in the other figures.

In the drawings 10 and 11 are the usual stanchions which flank the entrance to the car 12. To stanchion 10 is pivotally connected bars 13 and 14. These bars are pivotally connected at their free ends by a cross bar 15. Bars 13, 14 and 15 form what may be termed a closing gate, and when in their lowered or operative position prevent ingress to or egress from the car. The free end of bar 13 is received in a holding pocket 16 and the free end of bar 14 is received in a holding pocket 17 when the gate is in its

closed position. These holding pockets are secured to stanchion 11. Near the top of stanchion 10 is a locking pocket 18 which is provided with a spring latch 19 shown in enlarged detail in Figs. 8 and 9. When the gate is opened and swung to the vertical position as shown in Figs. 2, 6, 8 and 9 the free end of bar 13 depresses the spring latch as it passes into the locking pocket and after passing the latch, the latch springs outwardly behind the end of the bar and holds the gate locked in its open position. By pressing down on latch 19 the gate can be released and lowered to its operative or closing position as shown in Fig. 1.

When the gate is used with cars having a plurality of steps one or more of which starts within the body of the car as best shown in Fig. 3, it is desirable that when the gate is down that portion of the steps which is within the body of the car should be closed or covered with a temporary platform and that this temporary platform should be operated at the same time as the gate. To accomplish this object I secure a temporary platform 20 by hinges 21 to the floor 22 at that end of the step opening which is adjacent to the stanchion to which the gate is pivotally connected. I pivotally secure to this platform a link bar 23 so that when the gate is raised the temporary platform is likewise raised and when the gate is lowered the platform is likewise lowered. This link bar carries a dog 24 which is pivotally attached to the bar at 25 and is provided with a rearwardly projecting shank 26, the upper surface of which slopes upwardly from the rear end and then curves downwardly to above the pivotal point so that as the gate is raised the rear end of the shank will engage releasing pin 27 and raise the front end of the dog and then allow the front end of the dog to again drop as the curved portion of the shank comes beneath the releasing pin as best shown in Fig. 6. The front end of the temporary platform carries a locking pin 28 which when the gate is raised and the temporary platform pushed to a vertical position passes underneath dog 24 and is caught thereby, which holds the temporary platform locked in a vertical position. When raising the gate and after bar 13 is locked in pocket 18 the temporary platform will be a little out of the vertical and it will be necessary for the operator to push the same to the vertical line as shown in Fig. 6 when the dog

will catch pin 28 and hold the platform in a vertical position. When the gate is lowered the shank of dog 24 engages pin 27 and releases the dog from engagement with pin 28 as the gate is being lowered thereby permitting the platform to descend and reach its operative position as shown in Figs. 1 and 3 when the gate is lowered to its closed position. In Fig. 3 a portion of the outer step 29 is shown while the other step is shown in dotted lines beneath the temporary platform 20.

By this construction convenient and easily operated means are provided for closing the entrance to and exit from passenger cars and for flooring over that portion of the steps which are within the car body so as to give a level and even floor surface, whenever it is desired to prevent egress from the car at that point.

Having described my invention what I claim is:

1. Means for closing the entrance to and exit from passenger cars comprising a gate pivotally connected at one side of the opening to the frame of the car; means for supporting and holding the other end of the gate; locking means for securing the gate in a vertical position; a temporary platform adapted to cover the step opening within the body of the car, hinged at one end to the floor of the car; and means connecting said platform and gate, whereby when the gate is opened, the platform will be opened and the closing of the gate will also close the platform.

2. Means for closing the entrance to and exit from passenger cars comprising a gate pivotally connected, at one side of the opening, to the frame of the car; means for supporting and holding the other end of the gate; automatically operating locking means for securing the gate in a vertical position; a temporary platform adapted to cover the step

opening within the body of the car hinged at one end to the floor of the car; and means connecting said platform and gate whereby when the gate is opened the platform will be opened and the closing of the gate will also close the platform.

3. Means for closing the entrance to and exit from passenger cars comprising a gate pivotally connected, at one side of the opening, to the frame of the car, said gate comprising two parallel bars connected at their free ends by a pivotally connected bar; means for supporting and holding the free end of the gate when in its closed position; locking means for securing the gate in its open position, said locking means comprising a pocket having a spring latch controlling the entrance thereto; a temporary platform adapted to cover the step opening within the body of the car hinged at one end to the floor of the car; a link bar extending from said platform to the lower side of the gate and pivotally connected at its ends to said gate and platform; a dog pivotally connected to said bar, said dog having a shank the upper portion of which curves upwardly and rearwardly from a point above its pivotal connection and then slopes downwardly and rearwardly; a releasing pin secured to the frame of the car and adapted to be engaged by the shank of the dog to raise the front end of the dog upwardly and then to permit it to drop as the gate is opened; and a locking pin secured to said platform adapted to pass under the dog and be caught thereby when the gate is locked open.

In witness that I claim the foregoing I have hereunto subscribed my name this 10th day of August, 1908.

JOS. W. McMILLAN.

Witnesses:

G. E. HARPHAM,
S. B. AUSTIN.