H. HOWSON.

PASSENGER CAR.

APPLICATION FILED MAY 18, 1908.

920,062.

Patented Apr. 27, 1909.

2 SHEETS—SHEET 1.

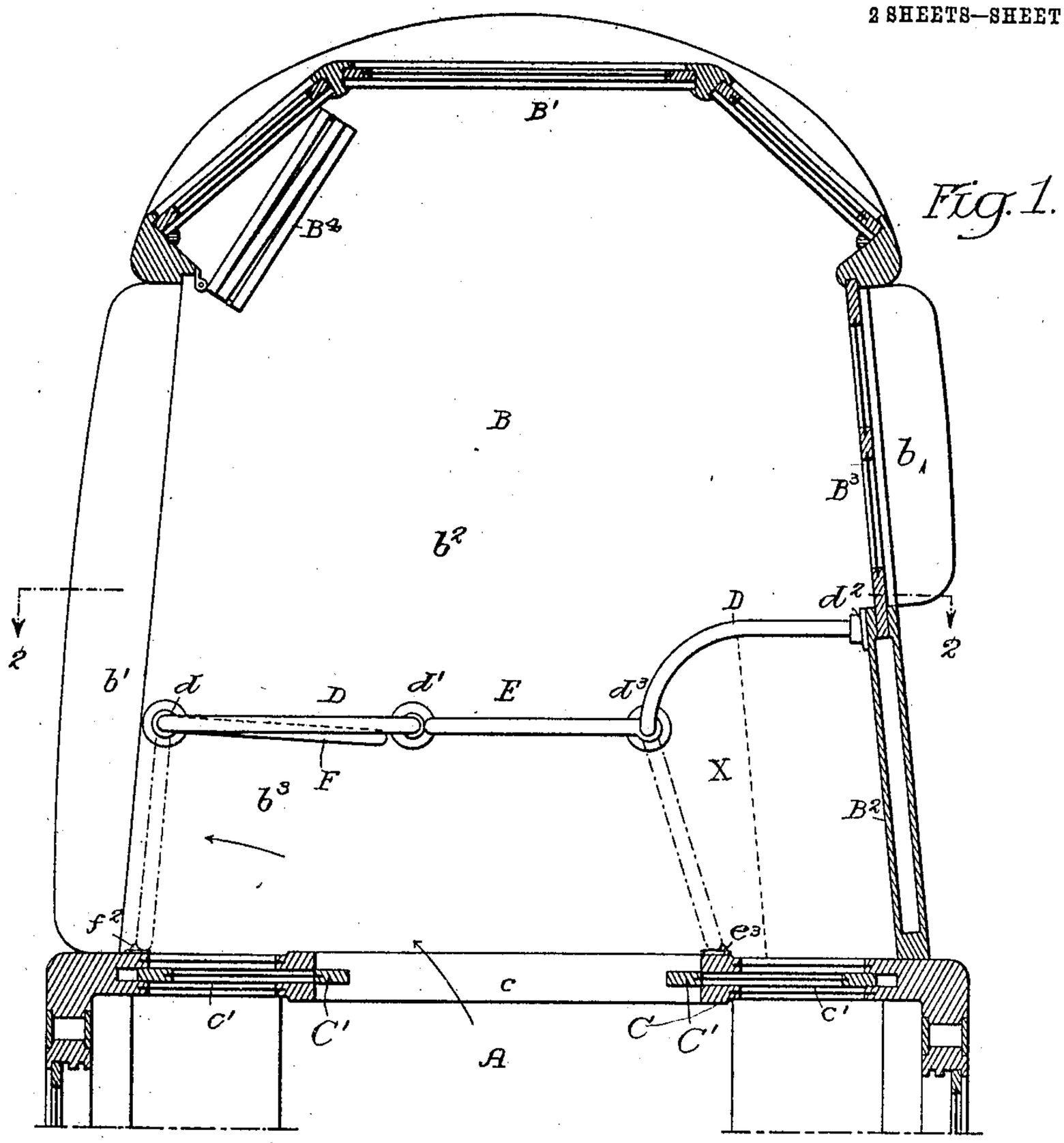


Fig. 1.

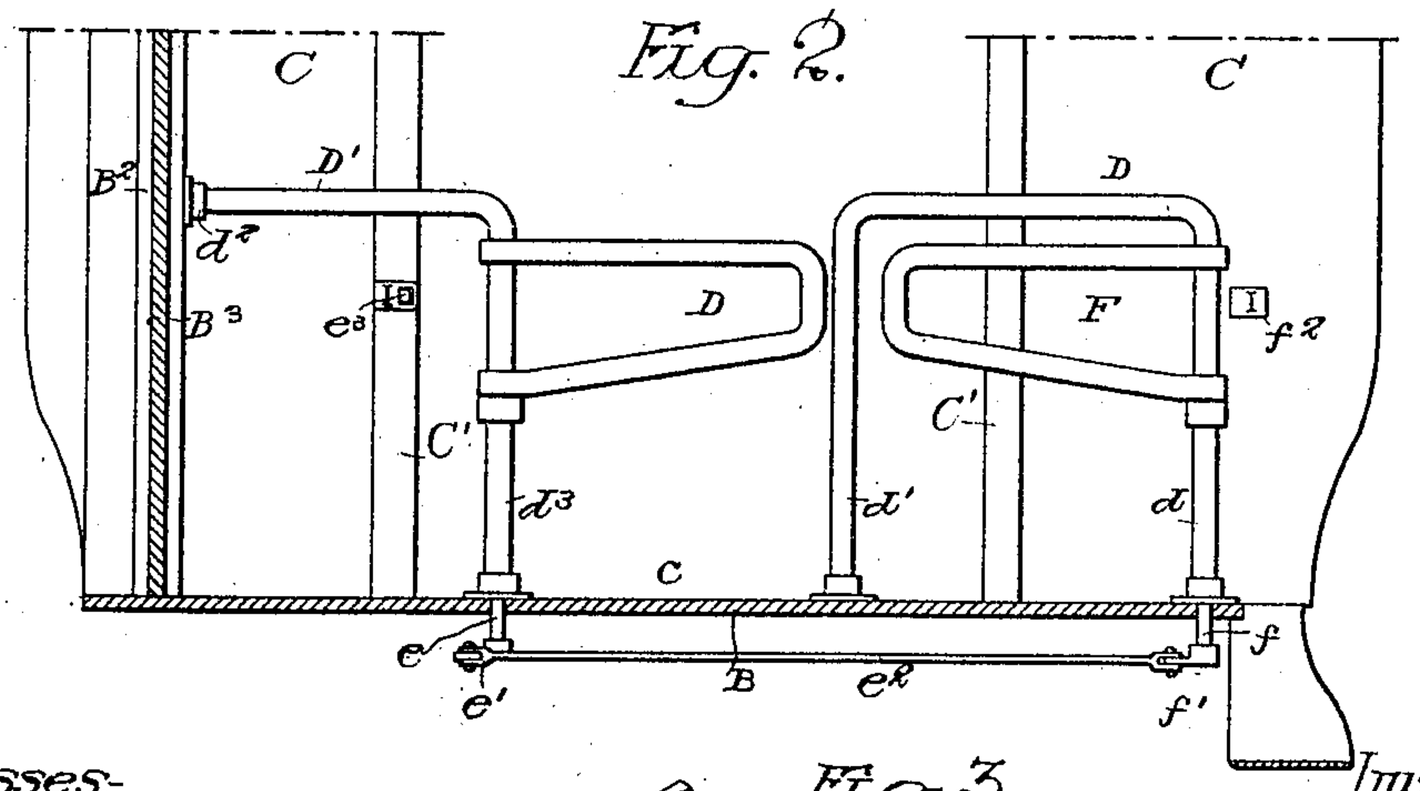


Fig. 2.

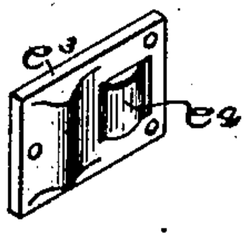


Fig. 3.

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2 SHEETS—SHEET 2.

Fig. 4.

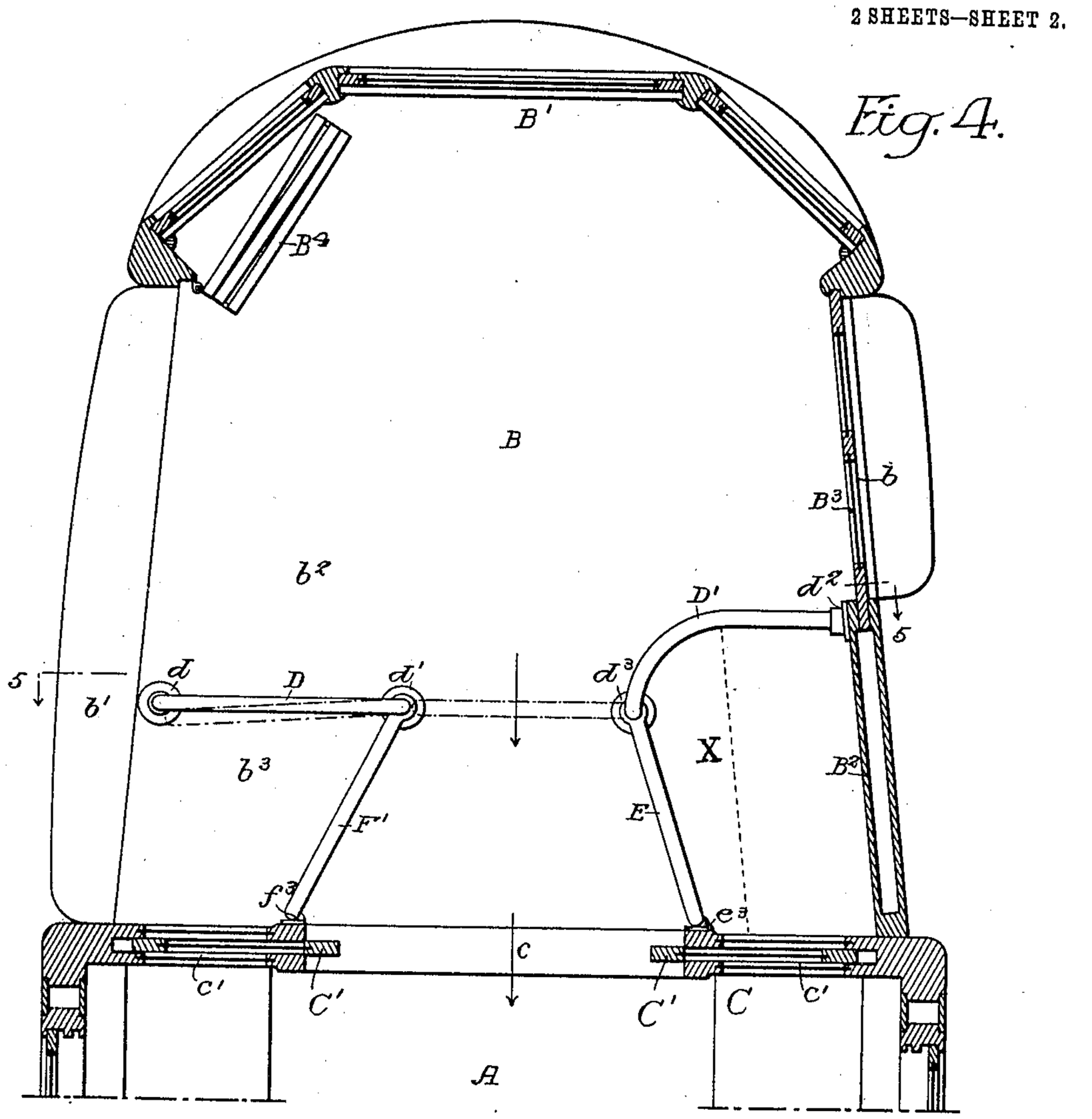
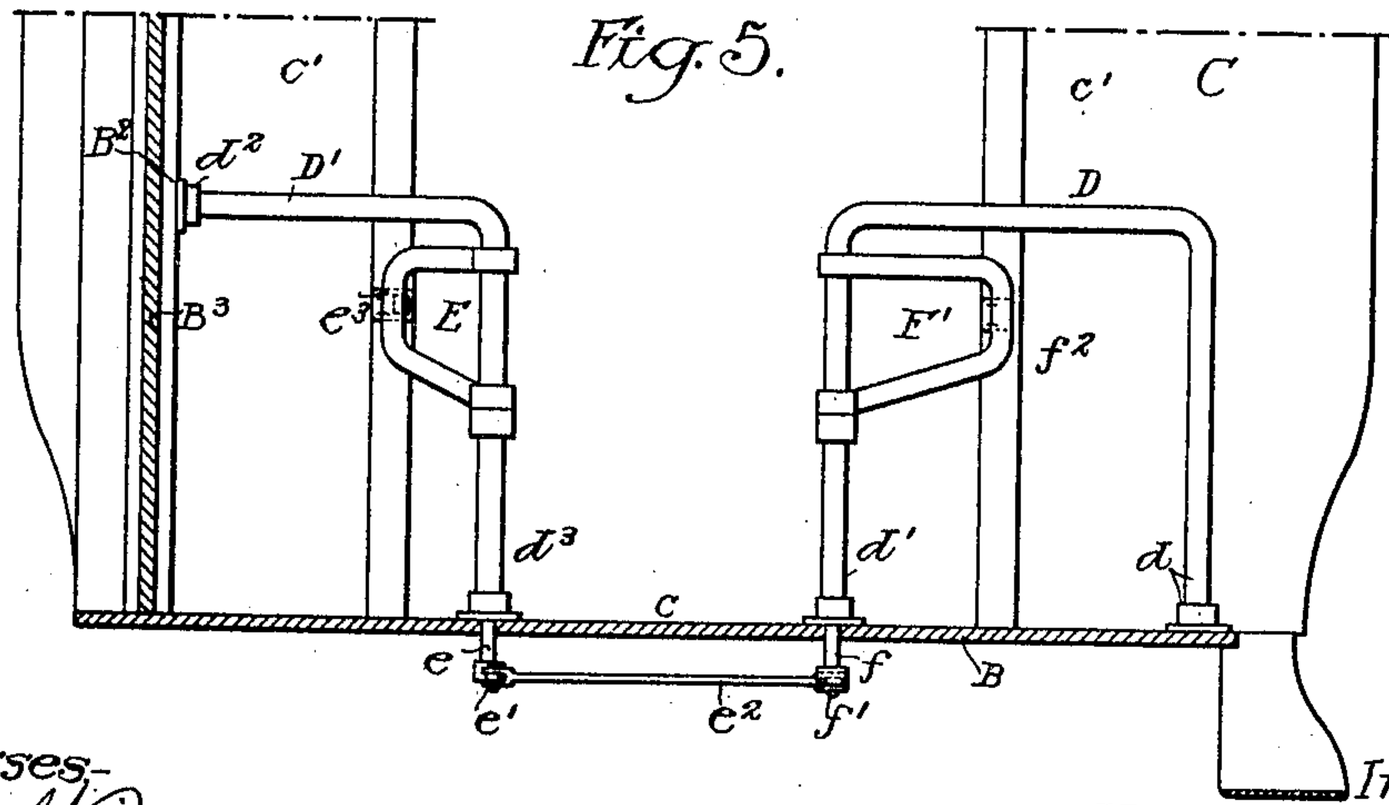



Fig. 5.

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# UNITED STATES PATENT OFFICE.

HENRY HOWSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO THE J. G. BRILL COMPANY, OF PHILADELPHIA, PENNSYLVANIA, A CORPORATION OF PENNSYLVANIA.

## PASSENGER-CAR.

No. 920,062. Specification of Letters Patent. Patented April 27, 1909.

Application filed May 18, 1908. Serial No. 433,366.

*To all whom it may concern:*

Be it known that I, HENRY HOWSON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Passenger-Cars, of which the following is a specification.

My invention relates to certain improvements in passenger cars of the type in which passengers pay their fares on entering the car.

The object of my invention is to provide means to prevent the entrance of passengers into the body of the car while other passengers are leaving the car at the same end and to close the exit passageway when the ingress passageway is open. This object I attain in the following manner, reference being had to the accompanying drawing, in which:—

Figure 1, is a sectional plan view of a passenger car illustrating my invention; Fig. 2, is a transverse sectional view on the line 2—2, Fig. 1; Fig. 3, is a perspective view of one of the stops; Fig. 4, is a view illustrating a modification of my invention; and Fig. 5 is a transverse sectional view on the line 5—5 Fig. 4.

A is the body of the car.

B is the platform and C the transverse partition separating the body portion from the platform. In the partition is a doorway *c* of the ordinary width and preferably arranged central in respect to the body of the car, leaving panels on each side in which are channels *c'* for the reception of the sliding doors C'; these doors can be made in the ordinary manner and so connected as to close and open simultaneously.

The platform B is closed at the outer end by the ordinary vestibule framing B' and at one side of the platform by a panel $B^2$ having a channel therein and a door $B^3$ adapted to close the doorway *b* and arranged to slide into the channel in the panel $B^2$. The opposite side of the car is open, when the platform is at the rear end of the car, for the free ingress and egress of passengers, but when the platform is at the forward end of the car, this side is preferably closed, either by doors $B^4$ or any form of guards.

The platform B is divided into ingress and egress sections $b^2$ and $b^3$ by a guard in the form of rails. D is a guard rail mounted on posts *d* and *d'*, in the present instance, the post *d* being at the edge *b'* of the platform B; and D' is another fixed guard rail secured at $d^2$ to the panel $B^2$, in the present instance, and mounted on a post $d^3$ preferably the same distance from the center of the platform as the post *d'* so as to form an ingress passageway from the ingress section $b^2$ of the platform into the body of the car. Pivoted to the post $d^3$, in the present instance, is a movable guard E adapted to swing from the position shown in full lines, Fig. 1, to the position shown in dotted lines in said figure, and F is another movable guard pivoted to the post *d* and adapted to swing from the position shown in full lines, Fig. 1, to the position shown in dotted lines. These two guards are preferably connected together so as to move in unison so that when they are in the position shown in Fig. 1 the ingress passageway between the two posts *d'* and $d^3$ is closed and the egress passageway $b^4$ is open to allow passengers to leave the body of the car.

When the parts are in the position shown by dotted lines the exit passageway $b^3$ is closed by the guard F at the edge of the platform and the ingress passageway is open so as to allow passengers to freely enter the body of the car from the platform. The space X between the rail D' and the partition C is reserved for the conductor when the movable guard is in the position shown by dotted lines so that he can collect the fares as the passengers enter the car. When the movable guard is in the position shown in full lines the conductor is free to move from one side of the platform to the other and have unobstructed view of the interior of the car. In the present instance I connect the two guards E and F to vertical shafts *e* and *f* respectively; these shafts pass through the posts $d^3$ and *d* respectively and through the floor of the platform and on the shaft *e* is an arm *e'* and on the shaft *f* is an arm *f'* and these two arms are connected by a rod $e^2$ so that when the guard E is moved by the conductor the guard F will move with it. Sockets or stops $e^3$ and $f^2$ can be arranged and so formed as to receive the ends of the guards when they are in either position and these sockets can be made with spring retaining members as shown at $e^4$, Fig. 3, should it be desirable to retain the guard in either position. Other means for connecting

the guards so that they will work together may be resorted to without departing from my invention.

In Fig. 4, I have shown a modification of the arrangement of the guards. In this figure the guard F′ for the exit passage is mounted on the post $d'$ and rests against a socket $f^3$ at one side of the doorway; the other guard E is made similar to the guard illustrated in Fig. 1 and rests against the socket $e^3$ on the opposite side of the doorway when the ingress passage is open as in Fig. 4. These two guards are connected so that when the guard E is moved to the position shown in dotted lines, Fig. 4, the guard F′ is moved to such a position as to leave the egress opening free for the exit of passengers.

While I have shown in the drawing guards made in the form of rails, it will be understood that the guards may be made in any form to separate the ingress section of the platform from the egress section and to allow the conductor to collect the fares as the passengers enter the car.

Thus it will be seen that by either of the constructions above set forth, the ingress of passengers to the body of the car can be prevented while passengers are leaving the car by the egress passageway and as soon as the ingress passageway is open the egress passageway is closed so as to prevent any one passing into the car from the latter passageway

I claim:

1. The combination in a passenger car, of a body portion, a platform, a transverse guard extending across the platform, and separating the ingress and egress portions thereof, a section of the guard being movable so as to open or close the passage leading from the ingress section of the platform to the body of the car.

2. The combination in a passenger car, of a body portion, a platform, a transverse partition separating the body portion from the platform, a doorway in the partition, a guard extending across the platform and having an opening therein for passengers to enter the car from the ingress section, with a movable guard adapted to close said opening.

3. The combination in a passenger car, of a body portion, a platform, a transverse partition separating the body portion from the platform, a door in said partition, a transverse guard extending across the platform and separating said platform into ingress and egress sections, one section of said guard being movable and adapted to swing toward the doorway, with a guard pivoted to said transverse guard and adapted to swing toward the partition and block the egress passageway.

4. The combination in a passenger car, of a body portion, a platform, a transverse partition separating the platform from the body portion and having a doorway therein, a guard rail extending across the platform some distance from the said partition, a central opening in the guard rail through which passengers enter the car from the ingress section of the platform, a pivoted guard mounted to close said opening and to swing toward the partition so as to close the egress section of the platform, and means connecting the two movable guards so that they will work in unison.

5. The combination in a passenger car, of a body portion, a platform, a partition separating the platform from the body portion of the car, a doorway in the partition, a guard rail extending across the platform and some distance from the partition, posts supporting the guard rail, two guards, one hung to one post and the other hung to the other post, said guards being arranged to swing toward the partition, one guard being arranged to close the passageway between the ingress portion of the platform and the body of the car and the other arranged to close the egress portion of the platform, means connecting the two so that they will work in unison, and stops to limit the movement of the guards in either position.

6. The combination in a passenger car, of a body portion, a platform, a transverse partition dividing the platform from the body portion, a central doorway in the partition, a transverse guard rail made in two sections, posts supporting the guard rail sections, said sections being spaced apart to form a passageway in line with the door, a movable guard pivoted to one of the posts and adapted to swing toward the partition, said pivoted guard closing the passageway from the ingress portion of the platform to the body of the car, a guard pivoted to the post at the side of the car and arranged to swing toward the platform and close the exit passage at one side of the car, the space between the guard rail and the partition at the opposite side of the car being of such a size as to accommodate the conductor.

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

HENRY HOWSON.

Witnesses:
Jos. H. Klein,
Wm. A. Barr.