(No Model.) 2 Sheets—Sheet 1.

D. Y. WILSON.

RAILROAD CAR.

No. 395,412. Patented Jan. 1, 1889.

Fig. 1.

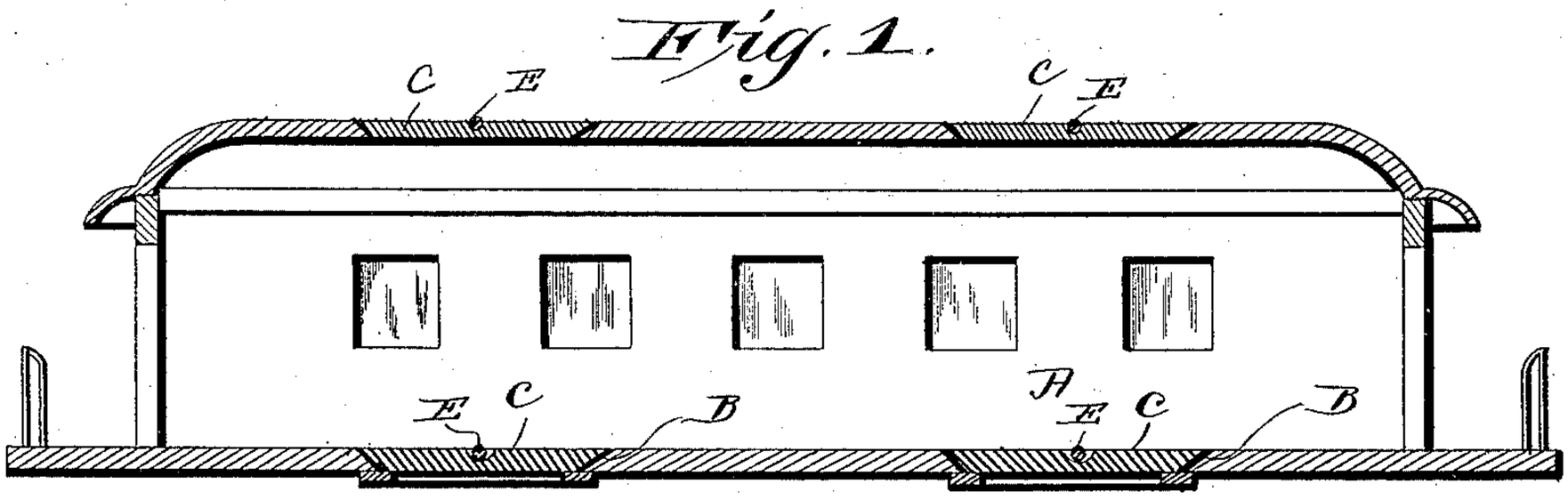
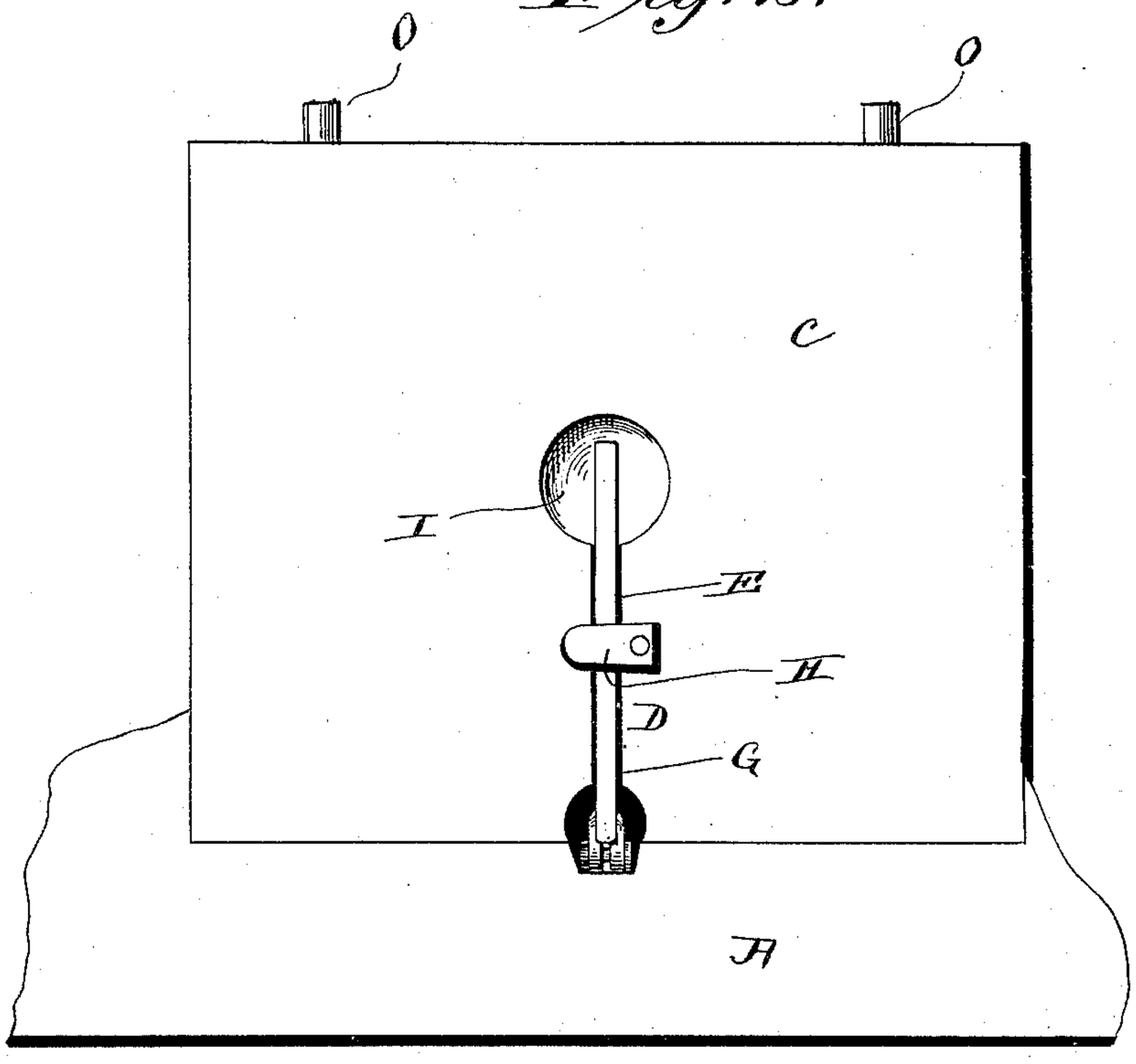


Fig. 2.



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R. W. Bishop.

Inventor,
David Y. Wilson.
By his Attorneys
C. A. Snow & Co.

(No Model.) 2 Sheets—Sheet 2.

D. Y. WILSON.

RAILROAD CAR.

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Fig. 3.

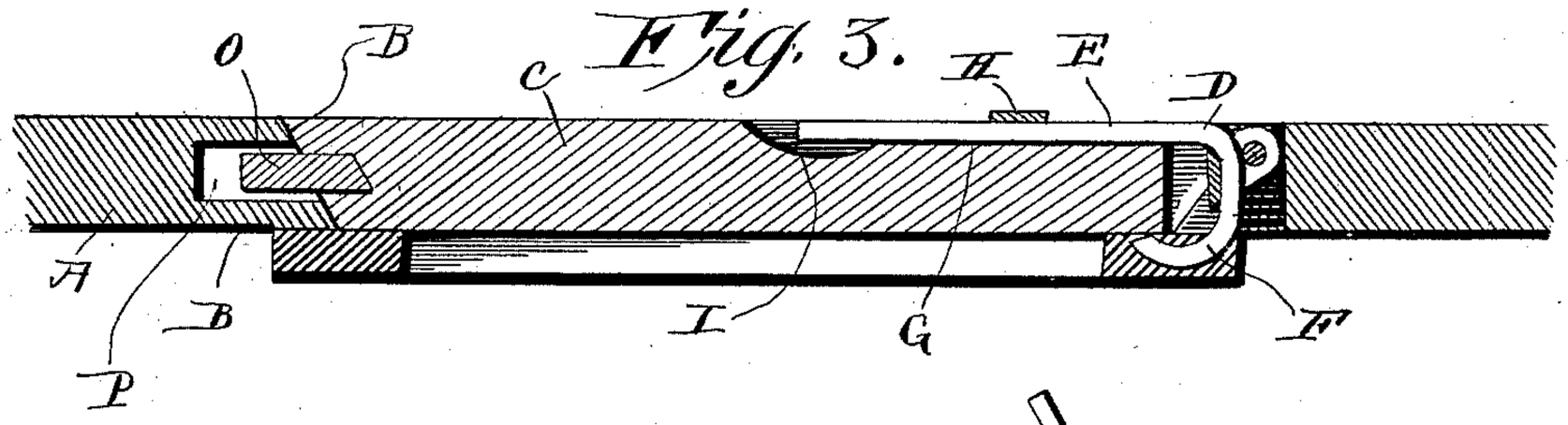


Fig. 4.

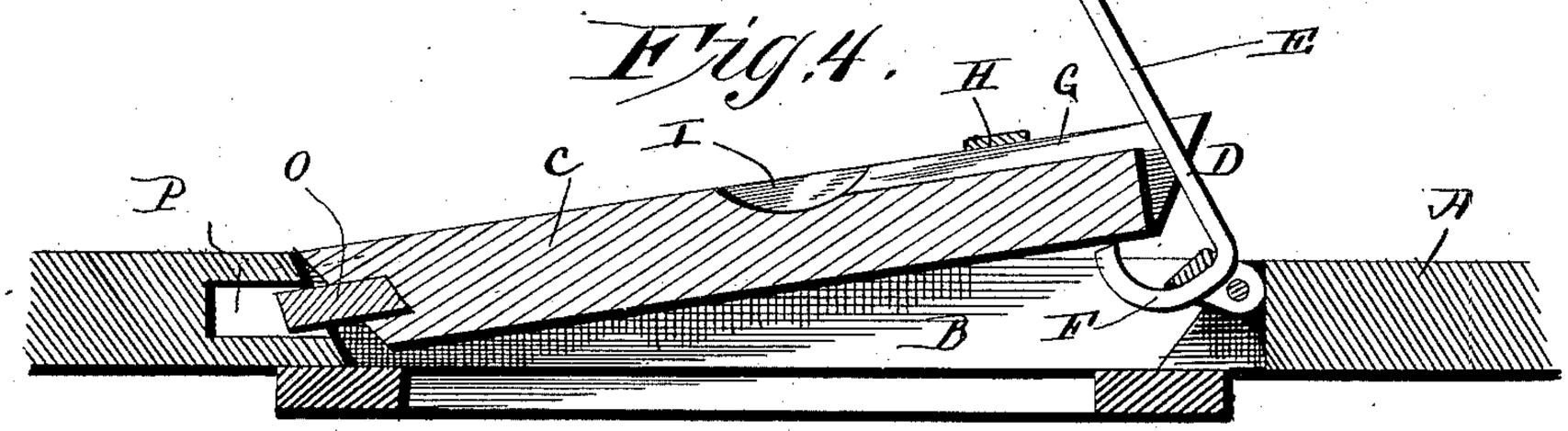


Fig. 5.

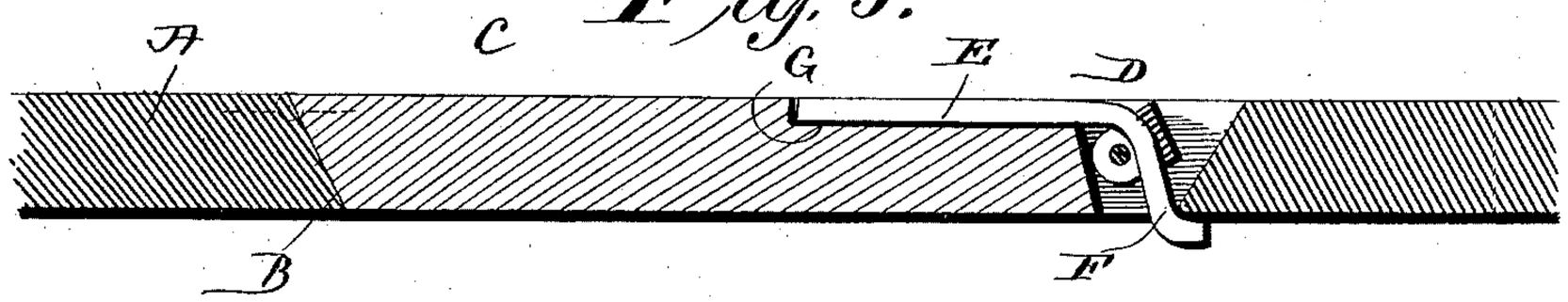
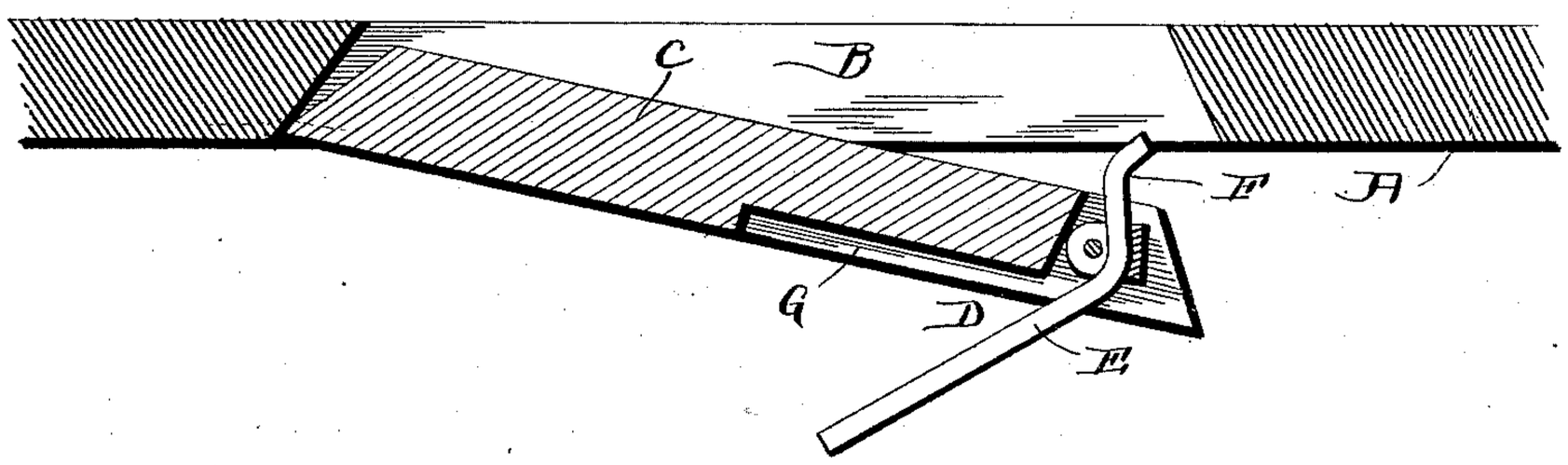


Fig. 6.



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UNITED STATES PATENT OFFICE.

DAVID Y. WILSON, OF GUM TREE, ASSIGNOR OF ONE-HALF TO WILLIAM B. HASLETT, OF PARKESBURG, PENNSYLVANIA.

RAILROAD-CAR.

SPECIFICATION forming part of Letters Patent No. 395,412, dated January 1, 1889.

Application filed October 9, 1888. Serial No. 287,640. (No model.)

To all whom it may concern:

Be it known that I, DAVID Y. WILSON, a citizen of the United States, residing at Gum Tree, in the county of Chester and State of Pennsylvania, have invented new and useful Improvements in Railroad-Cars, of which the following is a specification.

My invention relates to improvements in railroad-cars; and it consists in certain novel features hereinafter described and claimed.

The object of my invention is to provide a railway-car with a door in its top, bottom, or sides, so that in case of an accident and wrecking of the car the passengers will have a ready means of egress.

In the accompanying drawings, Figure 1 is a longitudinal section of a car provided with my improvements. Fig. 2 is a plan view of the door in the floor of the car. Fig. 3 is a central transverse section of the same, and Fig. 4 is a similar view showing the same partly opened. Fig. 5 is a central transverse section of the door in the roof the car. Fig. 6 is a similar view showing the same open.

Referring to the drawings by letter, A designates a railroad passenger-car of the usual or any preferred construction. In the floor of the car I form one or more openings, B, which are arranged in the aisle between the rows of seats.

C designates a door, which rests in said opening B, flush with the upper surface of the floor, so as to present no obstructions to passengers walking in the aisles. The door is provided with the lateral pins O in one edge, which are made to engage sockets or recesses P in the side of the opening B, so as to hold the door in place.

At the side of the opening B, opposite the pins, I pivotally secure the latch D, which has a longer arm, E, and a shorter arm, F, as clearly shown in Figs. 3 and 4. The longer arm, E, rests in a transverse groove, G, in the upper side of the door and is held normally in said groove by a keeper, H, pivoted to the upper side of the door and projected over said groove. At the end of the groove I form, in the upper side of the door, the recess I, to provide for access to the arm of the latch when it is desired to operate said latch to open the door. The shorter arm of the latch projects downward from the pivot thereof and is turned toward the longer arm, so as to lie substantially parallel therewith, as clearly shown.

In case of a wreck should the car be overturned the keeper-plate H is turned from over the longer arm of the latch, and the said arm of the latch is then drawn inward, thereby causing the shorter arm thereof to strike against the opposite side of the door and raise the side of the same so that it can be removed from the opening B to allow the passenger to escape, as will be readily understood on reference to Figs. 3 and 4.

The door shown in Figs. 5 and 6 is especially adapted to be placed in the roof of the car, and is constructed in substantially the same manner as the door shown in the other figures and hereinbefore described. In this last-mentioned door, however, the latch is pivoted in the edge of the door, and the shorter arm is turned outward from the door, so as to engage under the edge of the opening, as shown in the drawings. Should the car be overturned, the passenger by releasing the shorter arm of the latch from engagement with the edge of the opening in the roof will permit the said door to swing open of its own weight.

From the foregoing description, taken in connection with the accompanying drawings, it will be seen that I have provided a very simple and efficient device, by means of which the loss of life occasioned by accident on railroads will be greatly diminished, and its advantages are thought to be obvious.

If so desired, either one of the forms shown and described may be placed in the side of the car, thereby providing an additional means of escape for the imprisoned passengers.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with a railroad-car having door-openings, of the doors arranged in said openings, and pivoted latches arranged between the edges of the doors and the sides of the openings, and having arms of unequal length extending in opposite directions from their pivots and adapted to hold the doors normally closed, as set forth.

2. The combination, with the car having the

door-opening, of the door arranged in said opening and having the groove G and recess I, and the latch pivoted in the side of the opening, and having its arm resting in the groove G, and a keeper-plate pivoted to the door and normally extending across the latch, as set forth.

3. The combination, with the car having the door-opening B, of the door arranged in said opening, and the latch pivoted in one side of the door-opening and having a longer arm normally resting in a groove in one side of the door, and a shorter arm adapted to contact with the other side of the door when the longer arm is raised, as set forth.

4. The combination, with the car having the opening B, provided in one side with the sockets or recesses, of the door having pins to engage said sockets, and a latch at the opposite side of the opening, as set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

DAVID Y. WILSON.

Witnesses:
HARRY WILSON,
WM. A. RUSSELL.