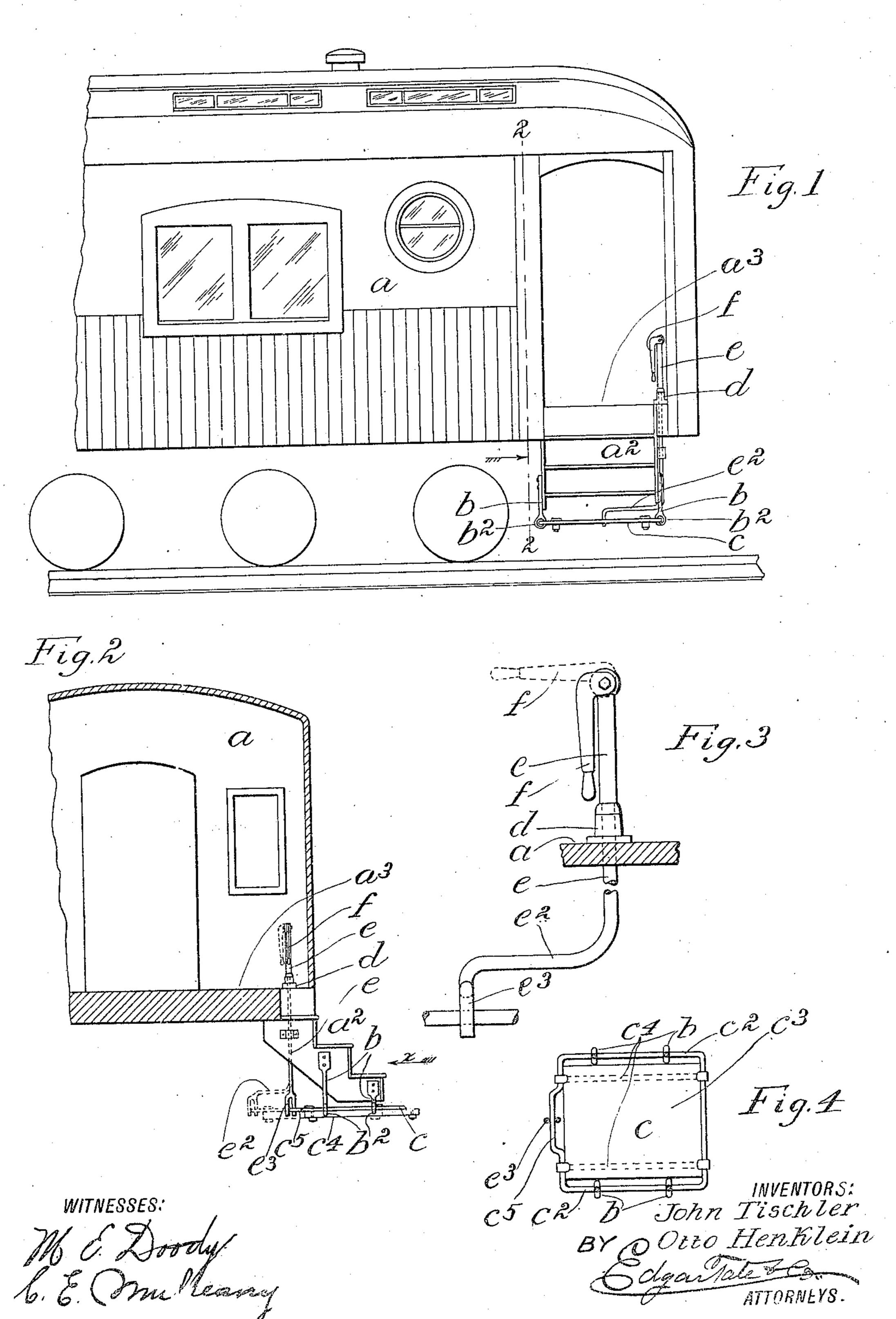
## J. TISCHLER & O. HENKLEIN.

CAR STEP.

APPLICATION FILED DEC. 5, 1908.

935,008.

Patented Sept. 28, 1909.



## UNITED STATES PATENT OFFICE.

JOHN TISCHLER AND OTTO HENKLEIN, OF EAST PORTCHESTER, CONNECTICUT.

## CAR-STEP.

935,068.

specification of Letters Patent. Patented Sept. 28, 1909.

Application filed December 5, 1908. Serial No. 466,044.

To all whom it may concern:

Otto Henklein, citizens of the United States, and residing at East Portchester, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Car-Steps, of which the following is a specification, such as will enable those skilled in the art to which it appertains to make and use the same.

This invention relates to car steps, and it consists in the addition to the ordinary steps of a car of a supplemental bottom step which is mounted in such manner that it may be projected for use when desired or withdrawn beneath the other steps when its use is not

necessary.

The steps of railway cars as ordinarily constructed are so high that it is difficult to get into a car unless there is a raised platform at the station or stations, but with my improvement this difficulty is avoided by the use of a supplemental bottom step which may be projected for use when there is no raised platform and withdrawn when there is, or when the supplemental step is not required.

The invention is fully disclosed in the following specification, of which the accompanying drawing form a part, in which the separate parts of our improvement are designated by suitable reference characters in

each of the views, and in which;-

Figure 1 is a side view of one end portion of a railway car provided with our improvement, Fig. 2 a section on the line 2—2 of Fig. 1, Fig. 3 a detail view at right angles to that of Fig. 2 and looking in the direction of the arrow x, and;—Fig. 4 a plan view of

40 the supplemental step.

In the drawing forming part of this specification we have represented at a the end of a car provided with the usual steps  $a^2$  and platform  $a^3$ , and in the practice of our invention we connect with the opposite sides of the frame work of the steps  $a^2$  hangers b in which our supplemental step c is mounted. The supplemental step, in the form of construction shown, consists of a frame  $c^2$ , the side portions of which are passed through keepers  $b^2$  at the bottom of the hangers b and the frame  $c^2$  is provided with a body, board or similar device  $c^3$  which constitutes

the step proper, and which is, in the form of construction shown, placed on transverse 55 members  $c^2$  connected with the front and back members of the frame  $c^2$ . The frame  $c^2$  is also provided, in the form of construction shown, with an off-set member  $c^5$ , and secured on the platform  $a^3$  is a keeper  $a^4$  through which is passed a vertical rod  $a^4$  provided at its lower end with an arm  $a^4$  having a downwardly directed yoke-shaped member  $a^4$  between the side portions of which the off-set part  $a^4$  of the frame  $a^4$  of the supplemental step  $a^4$  passes.

Pivoted to the top portion of the rod e is a handle member f by which said rod may be manipulated, and in practice the supplemental step e may be projected for use by 70 raising the arm f into the position shown in dotted lines in Fig. 3 and turning the rod e in one direction, and withdrawn beneath the main steps of the car when not desired for use by turning the rod e in the opposite 75

direction.

Our improvement is not limited to the means herein shown and described for projecting and withdrawing the supplemental step c, and any suitable device or devices 80 may be employed for this purpose.

Having fully described our invention, what we claim as new and desire to secure by Let-

ters Patent, is;-

The combination with the main steps of a car of hangers connected with the side portions thereof, a forwardly and backwardly movable step mounted between said hangers and beneath the main steps and provided at its rear edge with a transverse member, and a rod passing vertically through the platform of the car and provided at its lower end with an angular arm movable on said transverse member, whereby the turning of said rod will move said step outwardly or 95 inwardly according to the direction in which said rod is turned.

In testimony that we claim the foregoing as our invention we have signed our names in presence of the subscribing witnesses this 100

4th day of December 1908.

JOHN TISCHLER. OTTO HENKLEIN.

Witnesses:

A. R. APPLEMAN. C. E. MULREANY.