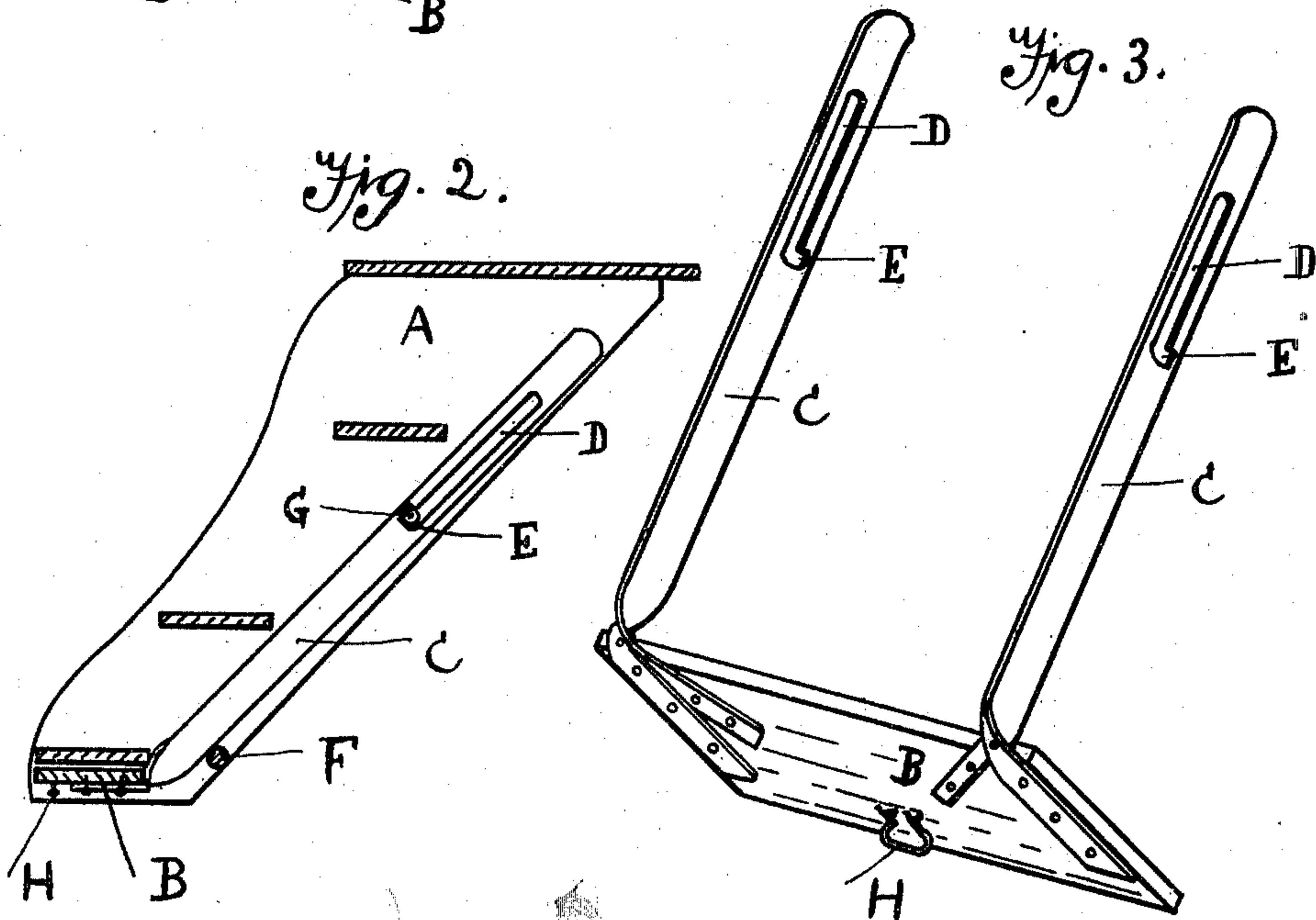
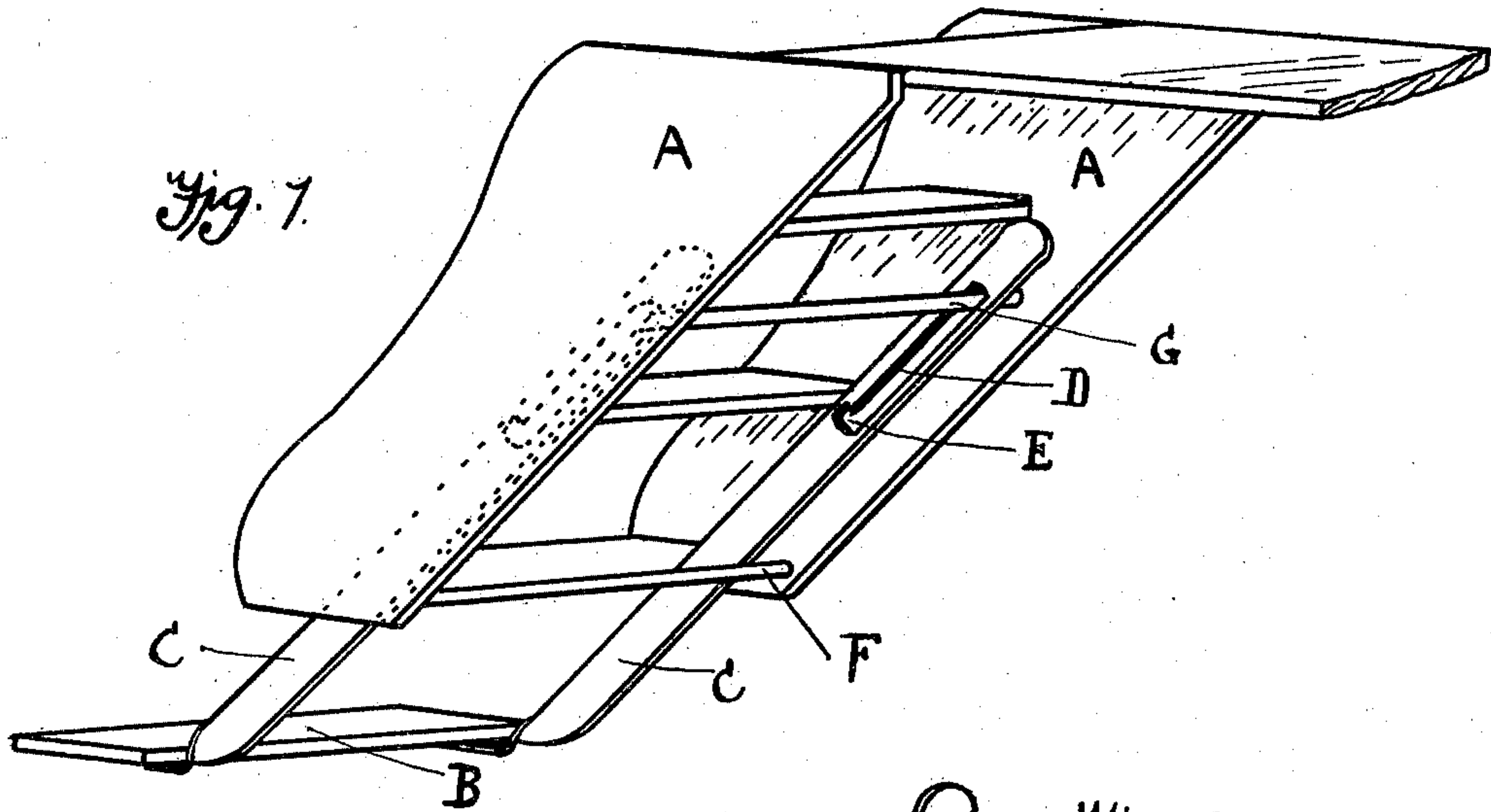


(No Model.)

I. N. DAVIS.
EXTENSION CAR STEP.

No. 584,676.

Patented June 15, 1897.



Witnesses

George E. Glendorf.
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UNITED STATES PATENT OFFICE.

ISAAC N. DAVIS, OF BINGHAMTON, NEW YORK, ASSIGNOR OF ONE-HALF
TO CLINTON J. LEWIS, OF SAME PLACE.

EXTENSION CAR-STEP.

SPECIFICATION forming part of Letters Patent No. 584,676, dated June 15, 1897.

Application filed February 18, 1897. Serial No. 623,944. (No model.)

To all whom it may concern:

Be it known that I, ISAAC N. DAVIS, a citizen of the United States, residing at Binghamton, in the county of Broome and State of New York, have invented certain new and useful Improvements in Extension Car-Steps; and I do hereby declare that the following specification is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, forming part thereof.

My invention relates to improvements in extension car-steps; and the object of my improvements is to provide an automatic adjustable lower step for a car readily extended and replaced. I attain this object by means of the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my extension-step attached to car-steps with step extended. Fig. 2 is a vertical sectional view of my extension-step drawn up. Fig. 3 is a perspective view of my step detached from the car-steps.

In Fig. 1, A represents the ordinary car-steps; B, my extension-step; C, the sliding bars; D, the slot; E, the lock-slot; F, the supporting-fulcrum; G, the guiding and locking rod, and H the pull.

In Figs. 2 and 3 the same letters indicate the same parts.

My invention consists of a sliding extension-step so arranged that it may be quickly dropped to assist the passengers to ascend and descend the step without the box usually used and be quickly pushed up under the bottom step when not needed.

To the extension-step B are attached the flat iron bars C, so that their flat sides will pass freely along the inner face of the sides of the car-steps. In these bars are cut the straight longitudinal slot D, with the lock-slot E at right angles at the lower end of the slot D. Through these slots D run the rod G, the ends of which are secured in the sides of the steps and about half-way up them.

Back of the lower step runs the rod F from side to side as the upper rod. This rod F runs back of the bars C, which rest upon it as upon a fulcrum.

When the extension-step is pushed up under the lower step of the car, the upper ends of the bars C drop backward enough to allow the rod G to engage the slot E, thus locking the extension-step out of the way.

When it is desired to use the extension-step, the handle H is given a pull downward, thus tilting the upper ends of the bars C forward and releasing the rod G from the slot E and the step slides down, making an extra and lower step. The lower ends of the bars C, pressing against the rod F and the upper ends against the rod G, support the step firmly in place. I may use the bars F and G or I may use bolts secured in the sides of the step; but

What I claim as my invention, and desire Letters Patent for, is—

1. In a car-step, in combination with permanent steps of a car, the extension-step B provided with the handle H and the sliding bars C fulcrumed loosely upon the rod F and sliding up and down upon the rod G by means of the slot D; the step being locked by the weight of the bar C automatically tilting and causing the rod G to engage the lock-slot E; as described and specified.

2. In a car-step, an extension or auxiliary step, suspended from arms loosely fulcrumed upon suitable pins or rods at or near the back of the step, and locked in place automatically under the lower permanent step, when pushed to that position, by longitudinal slots in the upper end of the arms having right-angled notches which lock to the rod or pin which is engaged by said slots, by reason of the tilting of the levers, said extension-step being released by tilting said levers forward to release the said notch from its retaining-pin; as described and specified.

ISAAC N. DAVIS.

Witnesses:

GEORGE E. OLENDORF,
J. E. BOOKSTANER.