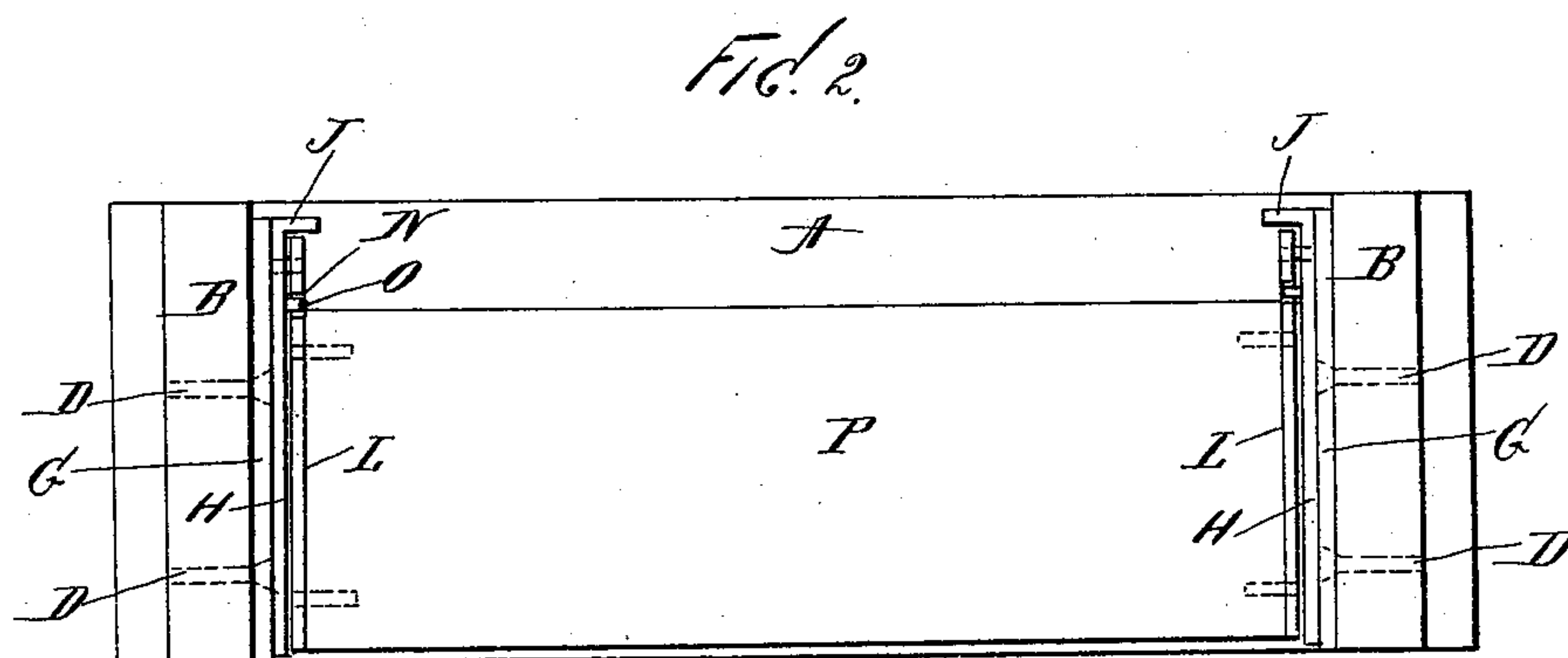
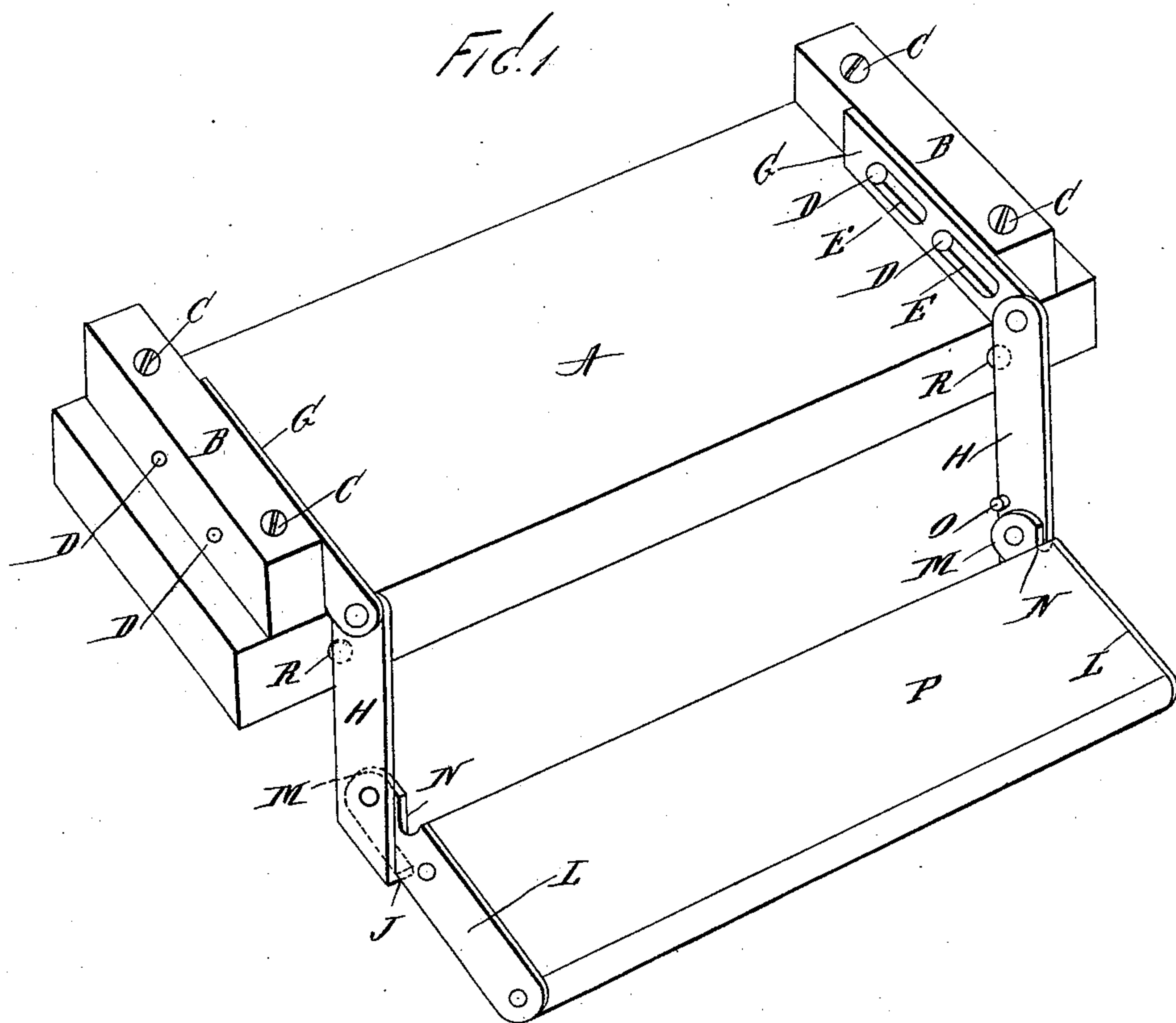


(No Model.)

L. G. HEYWARD.  
STEP FOR CARS.

No. 587,095.

Patented July 27, 1897.



WITNESS

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# UNITED STATES PATENT OFFICE.

LOUISA GUERARD HEYWARD, OF HARDEEVILLE, SOUTH CAROLINA.

## STEP FOR CARS.

SPECIFICATION forming part of Letters Patent No. 587,095, dated July 27, 1897.

Application filed February 11, 1897. Serial No. 622,934. (No model.)

*To all whom it may concern:*

Be it known that I, LOUISA GUERARD HEYWARD, a citizen of the United States, residing at Hardeeville, in the county of Beaufort and State of South Carolina, have invented certain new and useful Improvements in Steps for Cars, of which the following is a full and complete 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 the object thereof is to provide a supplemental step which is adapted to be secured to the lower stationary step in such manner as to be lowered for use below said stationary step when desired and to be folded above said stationary step when not in use; and with these and other objects in view the invention consists in the construction, combination, and arrangement of parts hereinafter described and claimed.

The invention is fully disclosed in the following specification, of which the accompanying drawings form a part, in which—

Figure 1 is a perspective view of the lower step of a car provided with my improved supplemental step and showing the latter lowered in position for use, and Fig. 2 a plan view showing the supplemental step folded as when not in use.

In the drawings forming part of this specification the separate parts of my improvement are designated by the same letters of reference in each of the views, and in said drawings, A represents the lower stationary step of a car, which may be composed of any desired material and which in practice is secured in a frame which is connected with the platform of a car in the usual manner.

Secured to the upper portion of the step A and transversely of the ends thereof are bars B, which may also consist of any preferred material, and in practice I secure these bars to the step A by bolts or screws C or by any other suitable means, and passed through said bars B are bolts D, which pass through longitudinal slots E, formed in sliding plates G, which are mounted adjacent to the inner faces of the bars B, and pivotally connected with the outer ends of the plates G are arms H, the lower ends of which are inwardly curved or provided with inwardly-directed angular

extensions J, and pivotally connected with the lower ends of the arms H are plates L, which are adapted to rest upon said inwardly-directed angular extensions J when said plates L are lowered into the position shown in Fig. 1, and secured to and between said plates L is a supplemental step P.

The plates L are provided rearwardly of the step P with transverse notches or recesses N, and the arms H are provided with inwardly-directed pins O, which enter said notches or recesses when the step P is folded backwardly, and secured to the front of the step A are plates or buffers R, against which the arms H are adapted to strike, and said plates or buffers are intended to prevent injury to the step A.

The slots E in the plates G or the side walls thereof are preferably beveled, and the inner ends of the bolts D are provided with heads which act as guides for the slotted plates G and also to hold said plates in contact with the bars B, and the beveled ends of the plates L are rounded, as shown at M.

If preferred, the bars B may be omitted and the plates G may be connected with the inner sides of the side frames of ordinary car-steps, as will be readily understood, and the operation will be apparent from the foregoing description when taken in connection with the accompanying drawings and the following statement thereof.

In the normal position of the supplemental step P the plates G are moved backwardly and the step P is folded between the arms H, and said arms are folded backwardly into the position shown in Fig. 2, and the supplemental step P rests upon the step A, and whenever it is desired to open the supplemental step it is folded outwardly, and the plates G are also pulled outwardly into the position shown in Fig. 1, and said supplemental step drops into the position which is also shown in said figure, and when said supplemental step is not required for use it is again folded into the position shown in Fig. 2, the plates G being moved backwardly, so that the supplemental step rests squarely upon the step A.

Having fully described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination with a car-step, of trans-



versely-movable plates, arms pivotally connected with the outer ends of said plates, other plates being pivotally connected with the lower ends of said arms, and a supplemental step secured between said last-named plates, substantially as shown and described.

2. In a car-step, the combination with a main stationary step, transversely-movable plates which are mounted at the ends thereof, arms pivotally connected with the outer ends of said plates, other plates pivotally secured to the lower ends of said arms, and adapted to be held in a horizontal position, said last-named plates being provided with notches or recesses which are adapted to receive pins secured to said arms, and a supplemental step secured between said last-named plates, substantially as shown and described.

3. The combination with a car-step, of transverse bars secured to the ends thereof, transversely-movable plates mounted adjacent to said bars, and adapted to be projected beyond the edge of said step, arms pivotally connected with the ends of said plates and provided at their free ends with inwardly-directed projections, other plates pivotally connected with said arms, and adapted to rest on said pro-

jections, and a supplemental step secured between said last-named plates, substantially as shown and described.

4. The combination with a car-step, of transverse bars secured to the ends thereof, transversely-movable plates mounted adjacent to said bars, and adapted to be projected beyond the edge of said step, arms pivotally connected with the ends of said plates and provided at their free ends with inwardly-directed projections, other plates pivotally connected with said arms, and adapted to rest on said projections, and a supplemental step secured between said last-named plates, and said last-named plates being also provided adjacent to their pivotal connection with said arms, with notches or recesses which are adapted to receive pins secured to said arms, substantially as shown and described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of the subscribing witnesses, this 3d day of February, 1897.

LOUISA GUERARD HEYWARD.

Witnesses:

WILLIAM NATHANIEL HEYWARD,

WILLIAM NATHANIEL HEYWARD, Jr.