

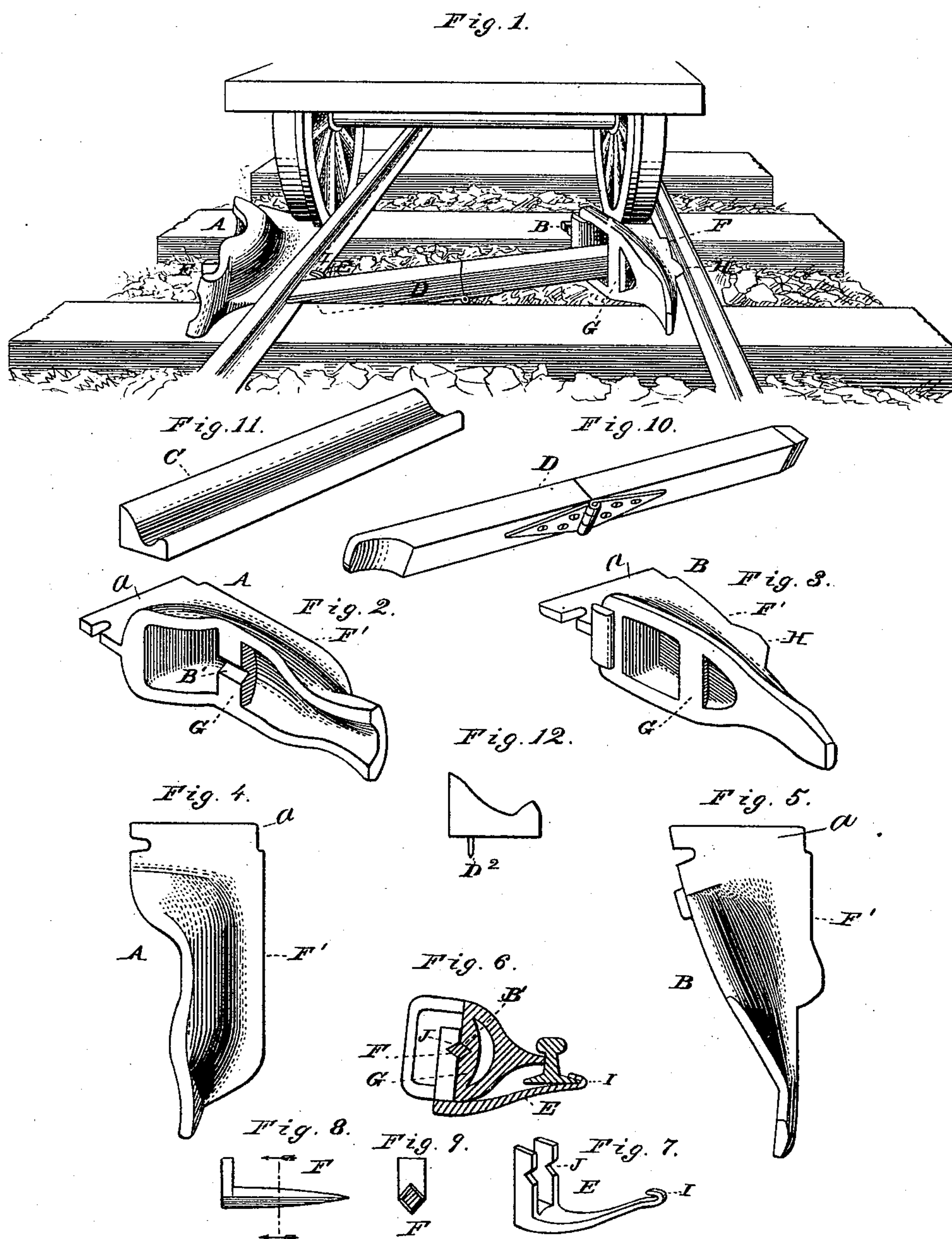
(No Model.)

J. E. NORWOOD.

CAR REPLACER.

No. 329,939.

Patented Nov. 10, 1885.



WITNESSES

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INVENTOR

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# UNITED STATES PATENT OFFICE.

JOHN E. NORWOOD, OF SYKESVILLE, MARYLAND.

## CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 329,939, dated November 10, 1885.

Application filed September 18, 1885. Serial No. 177,476. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN E. NORWOOD, a citizen of the United States, residing at Sykesville, in the county of Carroll and State of Maryland, have invented certain new and useful Improvements in Car-Replacers; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-  
10 pertains to make and use the same, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation  
15 of this invention, and is a perspective view. Fig. 2 is a perspective view of the outside piece, and Fig. 3 is a perspective view of the inside piece. Fig. 4 is a top view of the outside piece, and Fig. 5 is a top view of the inside piece. Fig. 6 is a vertical section taken through the outside piece and the clamp with the rail. Figs. 7, 8, 9, 10, and 11 are details  
20 showing clamp, pin, brace, and extension.

This invention relates to car-replacers; and  
25 it consists in the construction and novel arrangement of parts, as will be hereinafter fully described, and pointed out in the claims.

The objects of the invention are, first, to reduce the size of the car-replacers, so that they  
30 can be conveniently carried with every train or engine; second, to reduce the weight of replacers, so that they can be easily transported and handled; and, third, to make the replacers reversible, so that they can be used either  
35 as right or left replacers.

Referring by letter to the accompanying drawings, A designates the outside piece; B, the inside piece; C, the extension; D, the brace; E, the clamp, and F the clamping-key for  
40 locking the clamp in place. The outside piece, A, and inside piece, B, are made in the form of partly-hollow castings, forming shells, and are each provided in their hollow sides with a transverse bridge or bar, G, which traverse  
45 the hollow sides of the castings and form supports for the shells. The bridge G in the outside piece, A, has a longitudinal middle groove, B', in its outer face to receive the point of the clamp-key F. The sides of the castings, which,  
50 when the castings are in place, abut against the side faces of the rails, are in the form of

integral flanges F', which extend horizontally from the shell or body of the replacers along one side, and also along one end, as at *a*. The rail-edge of the outside piece, A, runs high at  
55 one end, to carry or direct the flange of the car-wheel over the top of the rail, while the inside piece, B, is formed with a projected point, H, to fit in the hollow between the base-flange and tread of the rail to allow the flange of the  
60 car-wheel to pass on between the replacer and the rail.

The clamp E is to be used in conjunction with the outside piece or shell, A, and is formed in elbow shape, having at one end a hook, I,  
65 to catch over the base-flange on the inside of the rail. Near the opposite end of the clamp E a rectangular groove, J, is formed, which corresponds with a groove, B', in the bridge of the outside plate. Now, when the replacer  
70 is in position the grooves J and B will receive the tapering shouldered key F. Drive the key in the two slots or grooves J and B, and the clamp and key will clamp and hold tight to the rail in proper position. A brace, D, is  
75 formed of two bars of wood hinged together at their ends, so that they may be folded together for transportation. The larger or square end of the brace D should fit, when in place, in the inside shell near the bridge, running ob-  
80 liquely across to and fitting in the hollow of the opposite rail of the track. The brace is tapered off at the end that fits the hollow of the rail to allow the flange of the wheel (when on the track) to pass. As the wheels move  
85 forward over the replacers, the inclined slope of the two pieces will raise and guide the wheels on the track-rails. Should the wheels be so far from the track-rail that the replacers will not receive them, the extension C  
90 should be adjusted to the inside piece, one end resting on the tie in front of the wheel, and as the wheel is drawn forward the extension will guide it to the replacers. The extension C is  
95 of cast-iron, formed with a broad base, and is higher along one side on its surface than along the other side, so that it is inclined from the higher edge to the lower edge, and has a longitudinal face-groove to guide the car-wheels to the replacers. The extension is reversible,  
100 so that it may be used at either side of the track.

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

- 5 1. The cast shell having the back flange and the end flange and the transverse bridge across its open face, substantially as specified.
2. The combination, with the track-rail, of the shell having the end flange and the bridge, and of the clamping-hook, substantially as  
10 specified.
3. The combination, with the outside replacer having the notched bridge, of the track-rail, the notched clamp, and the key, substantially as specified.
- 15 4. The combination, with the track-rails and the inside flanged shell provided with the

transverse bridge, of the hinged brace with one rectangular end and one pointed or tapering end, substantially as specified.

5. The combination, with the ties and track-rails, of the outside shell, clamp and clamp-key, the inside shell and hinged brace, and the grooved extension C, with its longitudinal groove having edges of unequal heights, substantially as specified. 20

In testimony whereof I affix my signature in presence of two witnesses. 25

J. E. NORWOOD.

Witnesses:

FRANK BROWN,  
CHAS. R. FAVOUR.