

(No Model.)

3 Sheets—Sheet 1.

J. V. SLUSSER.
RAILWAY CAR REPLACER.

No. 421,873.

Patented Feb. 18, 1890.

FIG. I.

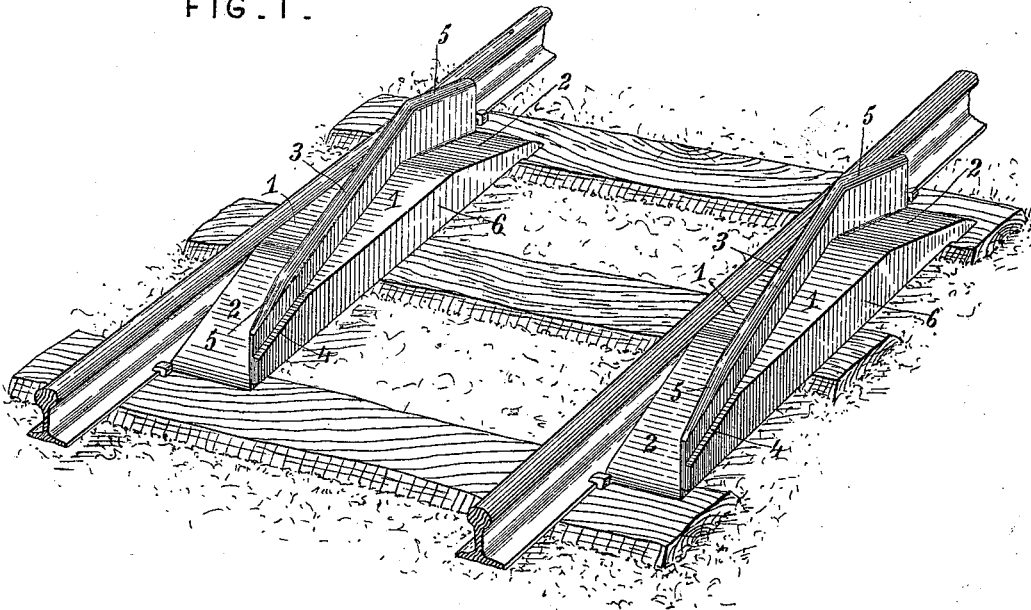
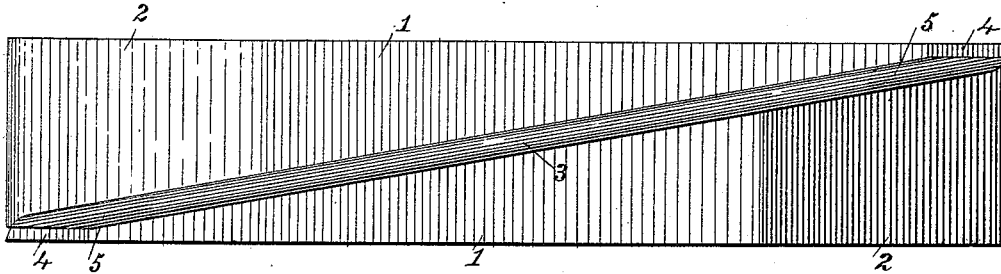


FIG. II.



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FIG. III.

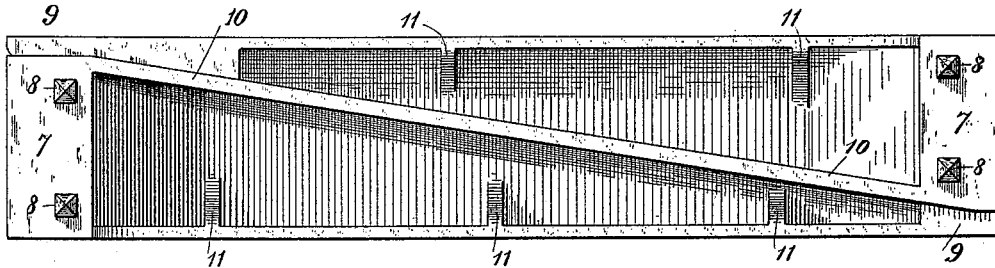


FIG. IV.

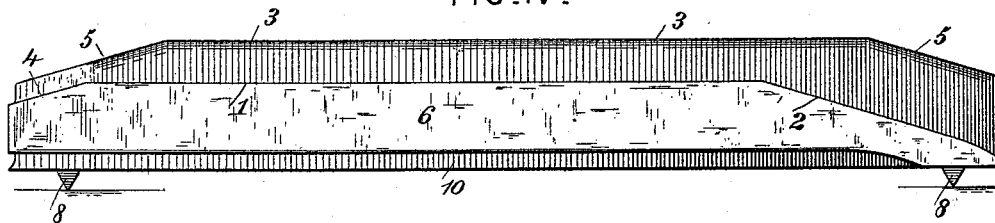
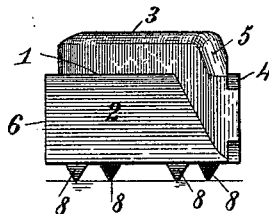


FIG. V.



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FIG. VI.

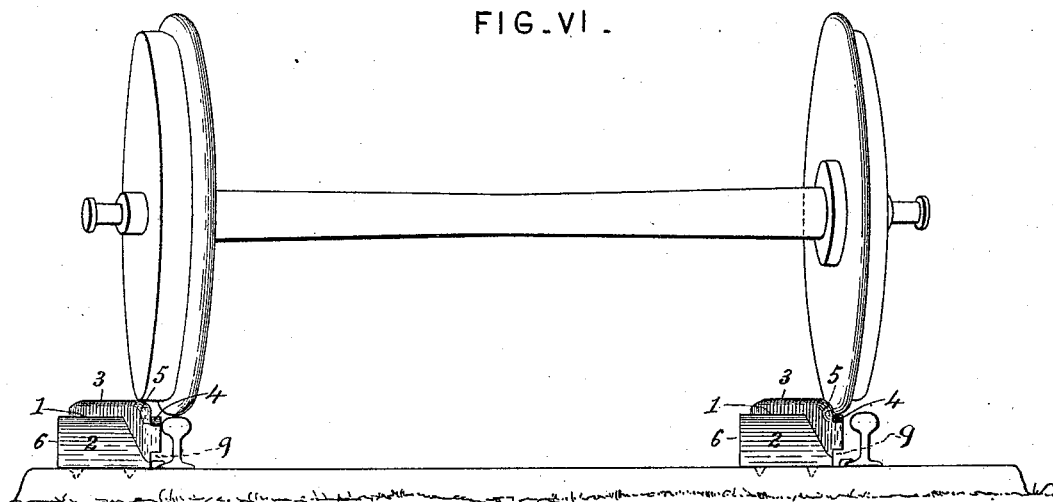
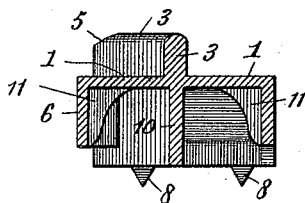


FIG. VII.



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UNITED STATES PATENT OFFICE.

JOHN V. SLUSSER, OF MEMPHIS, TENNESSEE, ASSIGNOR OF ONE-HALF TO O.
M. DUNN, OF SAME PLACE.

RAILWAY-CAR REPLACER.

SPECIFICATION forming part of Letters Patent No. 421,873, dated February 18, 1890.

Application filed November 4, 1889. Serial No. 329,172. (No model.)

To all whom it may concern:

Be it known that I, JOHN V. SLUSSER, a citizen of the United States, residing at Memphis, in the county of Shelby and State of Tennessee, have invented certain new and useful Improvements in Railway-Car Replacers, of which the following is a full, clear, and exact specification.

This invention relates to a device to be used for replacing derailed cars, by locating one or more of them in such position that the wheels of the car will mount upon them when the train is moved and be guided onto the rails. Heretofore devices having this object in view have been made bulky and cumbersome, as well as complicated in mechanism, depending largely upon attachment to the rail, for which reason they must necessarily be removed before the train can pass after the replacing of the derailed car, owing to the obstruction they offer, thus much time is lost after the derailed car has been replaced.

In my present invention the object is to provide a device of a single integral casting or structure, simple in form, easily applied, adapted to retain itself in place wherever located, and while always insuring the proper placing of the wheel upon the rail yet not offering any obstruction to the wheels of the remaining cars of the train.

To these ends my invention consists, broadly, in a beveled plate having spikes or projections which enter the ties to hold it in the position placed, and a flange or rib along the top adapted to guide the wheel which mounts upon the plate onto the proper rail of the track. The rib is preferably made to traverse the plate diagonally, thus dividing it into two triangular oppositely-lying parts, which are in every respect symmetrical. The broad ends of the triangular parts are beveled off in such a manner as to meet the tie or ground and permit the wheel to mount upon the plate, while the narrow part is equal in thickness to the height of the rail, and this narrow part of the plate is also beveled slightly and the side of the rib cut away in a plane parallel to the rail of the track. The fall in this beveled end may be equal to the width of the wheel-flange, so that the wheel which is between the rails and which therefore trav-

els along the plate upon its flange is gently lowered in the proper position upon the rail, the tread of the wheel meeting the rail just as the flange leaves the beveled end. The ends of the diagonal flange or rib are also beveled off, so that the wheel which is outside of the track and which therefore has its smaller periphery next the rib will have its broad tread engaged by the inclined end, and the flange of the wheel thus prevented from slipping or wedging down between the replacer and the rail. To insure the proper union of the side of the plate with the rail, and to avoid the obstruction otherwise offered by the spikes or other media for securing the rail to the ties, a recess is formed just beneath the narrow portion of the plate, which will allow this portion of the plate to come directly against the side of the rail. If desired, the plate may be made hollow for convenience in handling, and in this case I prefer to form a transverse web or rib on the under side whose lower edge is in the same horizontal plane with the supporting ends of the plate, said web or rib corresponding in position to the top flange or rib, so as to assist in bearing the weight of the car.

In order that my invention may be more fully understood, I will proceed to describe it with reference to the accompanying drawings, in which—

Figure I is a perspective view showing the use of my improved device. Fig. II is a top plan view of the device. Fig. III is a bottom plan view. Fig. IV is a side elevation. Fig. V is an end elevation. Fig. VI is a front view showing the mode of operation, and Fig. VII is a transverse section through the plate.

For convenience in description attention is directed to the fact that the upper and lower flanges divide the device into two precisely similar parts.

1 represents the plate divided, as set forth, each part having the broad inclined end 2, the diagonal flange or rib 3, and the narrow inclined end 4.

5 indicates the beveled ends of the upper rib; 6, the sides of the plate, which in the preferred form constitute walls which come against the rails; and 7, the supporting ends of the plate, which are provided with lugs or

barbs 8 for insertion into the ties to hold the plate in position.

9 represents the recess, of such form and shape as to permit the narrow end of each
5 portion to come square against the track-rail, bridging over spikes, chairs, or other means of attachment of the rail to the tie.

10 represents the diagonal lower rib, which corresponds in position to the upper rib 3.

10 11 may represent braces formed in casting, for the purpose of strengthening the sides of the hollow plate.

The ordinary width of the tread of a car-wheel is such that the wheel, which is without
15 the track and which therefore presents its tread to the rib, will be supported by its tread upon the rib until the flange is safely on the inside of the rail, when the wheel will be gently lowered on the rail by the tread passing
20 over the inclined end 5.

From the foregoing description and illustrations it will be observed that my device is readily adapted for the use specified, is reversible and therefore applicable to either
25 side of the track, and the use is such that it will engage and replace a wheel at any distance from the rail, within a certain limit, without moving or particularly adjusting the device. The wheel mounts upon the plate
30 and goes a longer or shorter distance when it comes in contact with the rib, and is gradually guided over and lowered gently upon the rail.

While I have shown and described my device as being divided into two precisely similar parts by the diagonal rib, yet I desire it understood that I do not limit my invention to this particular form, for it is obvious that
35 the essential features of the invention could be embodied in various forms of devices having the rib at different angles.

The device may be made of any suitable material and in any suitable way, either of cast or wrought iron or steel.

45 Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent—

1. A car-replacer for use between the rails
50 or without the track, consisting of the bevel base-plate approximately of the height of the

rail, and the rib adapted to receive the tread of the wheel, the forward end of the rib being higher than the rail by at least the width of the wheel-flange, and adapted to be placed a distance from the rail less than the width of
55 the wheel-tread, whereby the wheel-flange when outside the track is conveyed over the rail, or the wheel between the tracks is guided into place by means wholly to one side of the rail and the remaining wheels therefore not
60 obstructed, as fully explained.

2. A car-replacer consisting of the base-plate 1, having the diagonal rib 3 and end 4 approximately of the height of the rail, said
65 end 4 and rib 3 being of such width and adapted to be placed at such proximity to the rail that the tread of the wheel when running on the rib will not leave said rib until the flange of the wheel is safely across the rail, as
70 fully explained.

3. In a car-replacer, a plate divided diagonally into two similar oppositely-lying parts, each provided with a broad inclined end and a narrow end adapted to be placed against
75 the rail and approximately of the height of the rail, substantially as and for the purposes explained.

4. In a car-replacer, the combination of the plate 1, the rib 3, dividing said plate diagonally into two oppositely-lying similar parts, each provided with a broad inclined end 2,
80 the narrow beveled end 4, adapted to be placed against the rail, said plate being provided on its under side with barbs or projections for insertion into the ties for holding
85 the device in place, all substantially as set forth.

5. In a car-replacer, the plate provided with the upper and lower ribs or flanges dividing the same diagonally into two oppositely-lying
90 similar parts having inclined and beveled ends, for the purposes explained, said lower rib or flange being adapted to support the weight of the wheel which passes alongside the upper flange, substantially as set forth.

JOHN V. SLUSSER.

In presence of—
O. M. DUNN,
T. L. LEE.