(No Model.)

D. E. SHERMAN.

CAR REPLACER.

No. 456,780. Patented July 28, 1891.

Fig. 1.

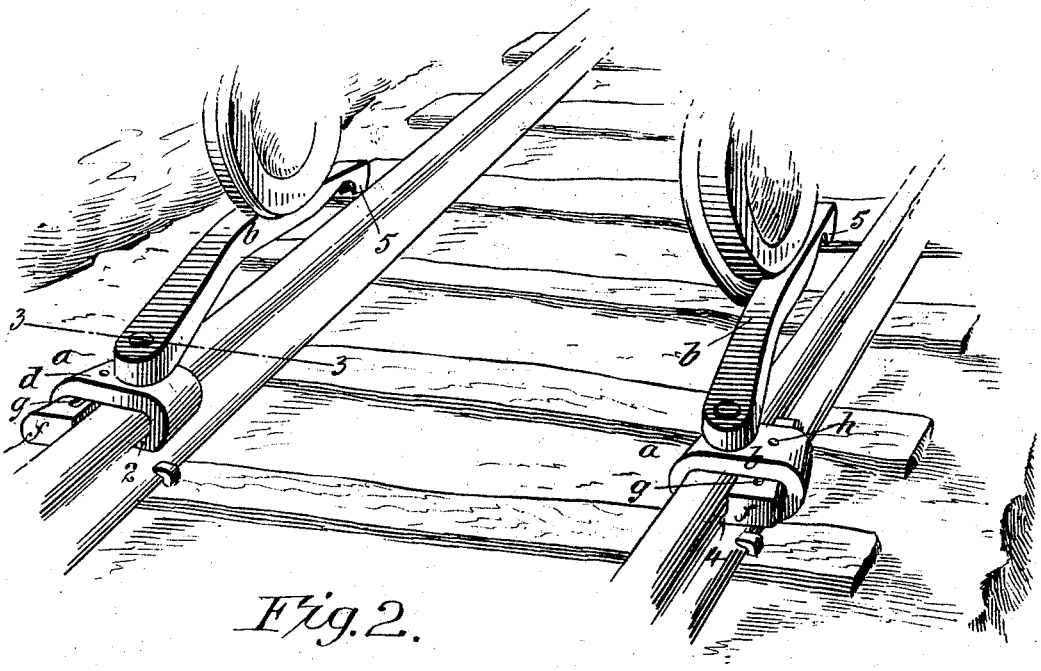

Fig. 2.

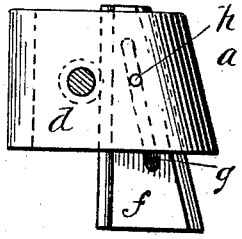

Fig. 4.

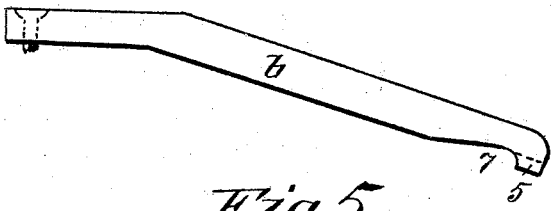

Fig. 3.

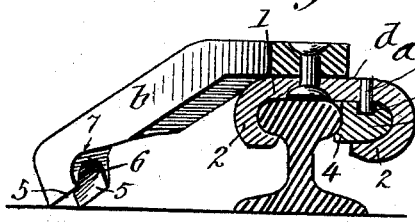

Fig. 5.

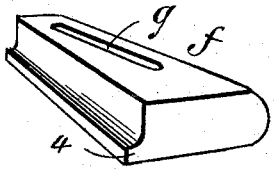

Fig. 6.

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CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 456,780, dated July 28, 1891.

Application filed December 29, 1890. Serial No. 376,018. (No model.)

To all whom it may concern:

Be it known that I, DWIGHT E. SHERMAN, a citizen of the United States, residing at Springfield, in the county of Hampden and State of Massachusetts, have invented new and useful Improvements in Car-Replacers, of which the following is a specification.

This invention relates to improvements in car-replacers, the object being the provision of an appliance for the purpose indicated, which is most simple in construction and effective in application, and one wherein the various parts thereof are confined together and against detachment in a novel manner.

The invention consists in the construction and combination and arrangement of parts, all substantially as will hereinafter more fully appear, and be set forth in the claims.

In the drawings, Figure 1 is a perspective view of a section of railroad-track, showing a pair of car-replacers as in use. Fig. 2 is a plan view of the rail-engaging clip or strap and key. Fig. 3 is a vertical section taken on the line 3 3, Fig. 1. Fig. 4 is a side view of the replacer-bar for one of the appliances. Fig. 5 is a perspective view of the key. Fig. 6 is a sectional view to indicate the manner of disconnecting the clip from the rail.

The replacers are to be employed in duplicate in the manner substantially as indicated in Fig. 1, and each consists of the rail-engaging part *a* and the replacer-bar *b*, which is connected thereto and has an inclination as to its length, so that one end is higher than the other, the higher end being connected to the rail-engaging part, and the bar is adapted for a disposition angularly with relation to the length of the rail. The rail-engaging part consists of the clip *d* and the key *f*. The clip is constructed in the form of an intermediate upper member 1 and the opposing downwardly and inwardly turned angularly-arranged lips 2 2. The distance between the lips is greater than the width of the rail, and permits the entrance between the outer side of the rail and one of the lips of the said key *f*. The key has its inner side formed to lie against the side of the rail, and by the flange 4 lies and fits upon the portion of the rail under its tread. The flange 4 on the inner side of the wedge or key to lie under the tread of the rail will be appreciated as serving a useful purpose in the use of the implement under certain conditions. For instance, assuming that the replacer-bar at one side of the track rests, as indicated, at the right of Fig. 1 and in Fig. 3 with its part 5 on a tie, which latter may be rotten or unstable, then as the weight of the truck or car is brought upon the replacer-bar, and the tie supporting the end of the said bar should give way the replacer-bar would not be permitted to exert any such leverage on the clip as to cause the latter to roll around on and transversely of the rail and to become disengaged therefrom, for the said flanged part of the key serves as a check against such movement. The key has a vertical groove *g* therein, which is parallel with the outer edge of the key, and a pin *h* is passed through the top of the clip and by its extremity into said groove. It will be noticed that the key, being held against vertical movement between the top of the clip and one of the underlying lips thereof, and constrained against any movement except a sliding one, with its outer edge against the inner side of the adjacent lip 2 cannot become detached from the clip, and the bar *b*, being pivoted or riveted to the top of the clip, all the elements of the appliance are therefore held against detachment the one from the other. The lower end of the bar *b* is provided with what are in substance spurs 5 5, and, as shown, are formed by channeling the under side of the bar longitudinally, as at 6, and recessing the bar in its under side a little in advance of its end, as at 7. The bar is therefore capable of having an engagement with a tie or the road-bed preventing any endwise movement of the replacer as the wheel of the car or truck is run up thereon, although the peculiar construction and arrangement of the clip and key are very effective for holding the replacer absolutely immovable.

The replacers are capable of being readily utilized in accordance with various requirements, serving to support and guide up the truck-wheels to and upon the rails at any angle necessary. It will be noticed, of course, from an inspection of the drawings, that when the car-wheels have been run up onto the replacer-bars they are raised somewhat above

the rails, but having secured such elevation of the wheels and the alignment thereof with the rails the wheels may be easily let down upon the rails without concussion by the proper interposition of wooden bars or other appliances.

What I claim as my invention is—

1. In a car-replacer, the combination, with the clip having the downwardly and inwardly turned and angularly-disposed lips 2 2, the wedge-shaped key having the groove *g* parallel with its outer edge, the pin *h*, passing through the clip and entering the groove, and the replacer-bar pivotally engaged with the clip, substantially as described.

2. In a car-replacer, the combination, with the clip having the downwardly-turned and angularly-disposed lips 2 2, of the wedge-shaped key having the flange 4, and the replacer-bar pivotally engaged with the clip, all arranged substantially as and for the purpose set forth.

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