(No Model.) 2 Sheets—Sheet 1.

# J. W. YOTHERS.

## CAR REPLACER.

No. 306,373. Patented Oct. 7, 1884.

*Fig. 1.*

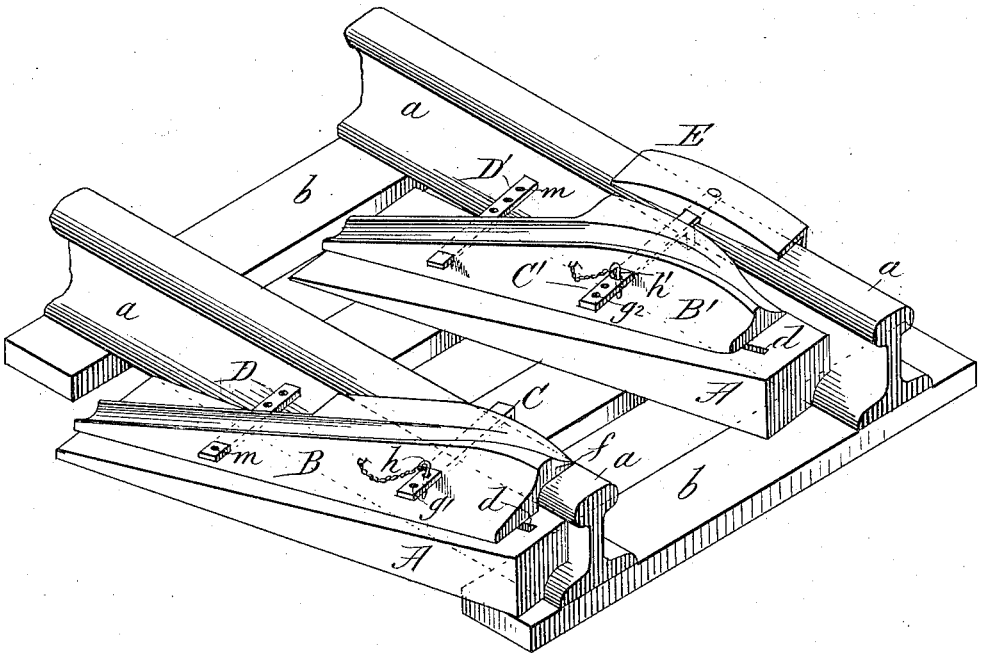
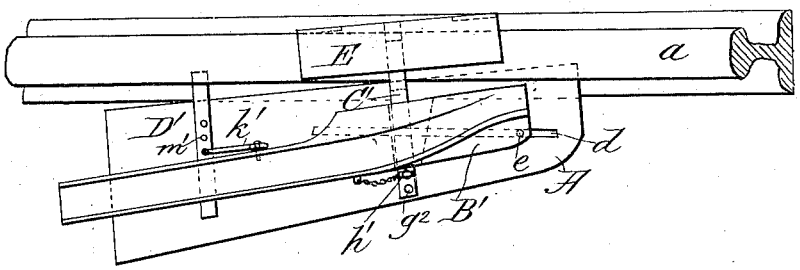



*Fig. 2.*

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(No Model.) 2 Sheets—Sheet 2.

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## CAR REPLACER.

No. 306,373. Patented Oct. 7, 1884.

Fig. 3.

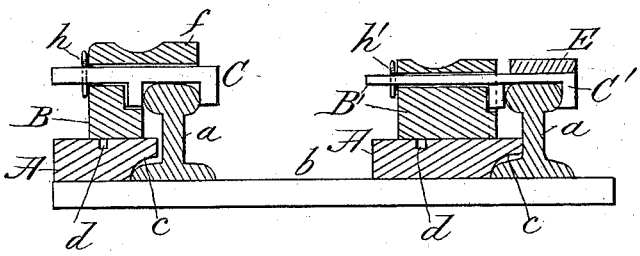



Fig. 4.

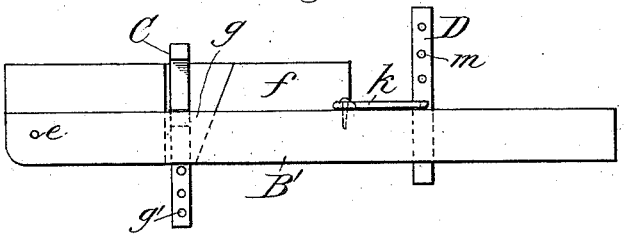



Fig. 5.

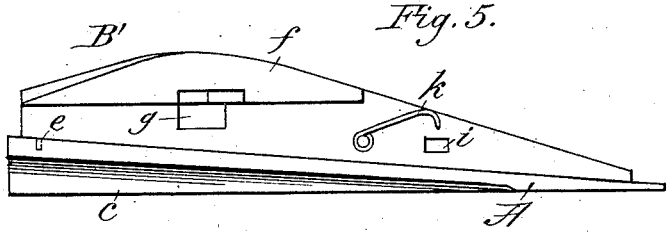



Fig. 6.

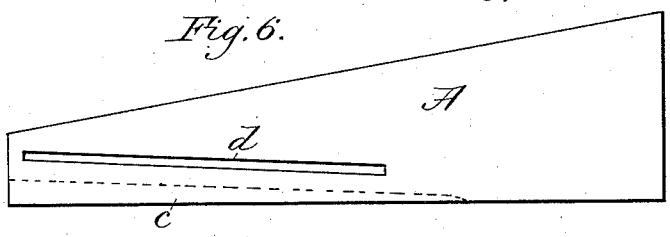
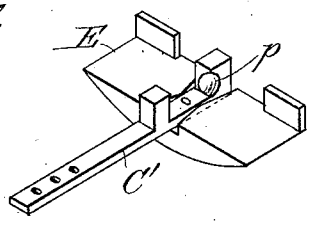



Fig. 7.

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# UNITED STATES PATENT OFFICE.

JOHN W. YOTHERS, OF CRESCO, PENNSYLVANIA.

## CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 306,373, dated October 7, 1884.

Application filed March 28, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. YOTHERS, a citizen of the United States, residing at Cresco, in the county of Monroe and State of Pennsylvania, have invented certain new and useful Improvements in Railroad-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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

This invention relates to improvements in car-replacers; and it consists in the construction and arrangement of parts, as hereinafter more fully described and claimed.

In the annexed drawings, illustrating the invention, Figure 1 is a perspective view of my improved car-replacers in position. Fig. 2 is a plan view of one replacer. Fig. 3 is a vertical cross-section. Fig. 4 is a bottom plan view of one of the replacers. Fig. 5 is an elevation of the same, showing the side next to the rail. Fig. 6 is a plan of the bed-piece, and Fig. 7 is a perspective view of one of the clamps or fastenings, showing its under side.

Like letters of reference designate like parts in the several views.

A A are wedge-shaped bed-pieces, the forward ends of which are contracted laterally, but thickened vertically to a height nearly equal to the track-rails *a a*, while their rear ends are extended laterally and reduced in vertical thickness. These bed-pieces are intended to lie upon the ties *b b* in contact with the rails *a a*, and at their forward ends on the side next the rails they are beveled or rabbeted to fit the base of the rails against which they rest, as shown in Figs. 1, 2, and 3. This beveled or rabbeted portion *c* of the bed-piece is widest at the forward end, and tapers gradually backward, as shown in Figs. 5 and 6.

In the upper face of the bed-piece A is a diagonal groove, *d*, for engagement with a pin or bolt in the under side of the supplementary rails B B′, as hereinafter explained.

The supplementary rails B B′, that form the upper part of the car-replacer, are each provided on the under side in front with a pin, stud, or bolt, *e*, that enters the groove *d* in its respective bed-plate, as shown in Fig. 2. It will be seen that the groove *d* and pin *e* serve to connect the bed-piece and supplementary rail while the latter is being moved or turned to any desired position or angle with relation to the track-rails, and also enables the supplementary rail to be moved longitudinally along the bed-piece without being disconnected therefrom, which would not be possible if the pin or bolt *e* was made to enter a circular hole instead of being engaged in a groove or slot, as shown. The supplementary rails B B′ have a general wedge-shaped form, being enlarged at the forward end and tapered gradually back to a thin point, as shown in Figs. 1 and 5, so that the wheels of a displaced car can be readily moved onto said supplementary rails by means of a car-starter or suitable lever. The forward end of the supplementary rail that forms part of the car-replacer that is arranged on the outer side of the track, as shown in Fig. 1, is provided on the side next the track with a flange, *f*, Fig. 5, that fits over the flange of the track-rail *a*, as shown in Figs. 1 and 3, so that the flange of the displaced car-wheel will be guided over the track-rail to its inner side. This supplementary rail B is detachably secured to the track-rail by means of a clamp, C, Fig. 3, the shank of which passes through a recessed mortise, *g*, in the side of the rail B, and is provided with a series of perforations, *g′*, for engaging a pin, *h*, that is connected to the side of the supplementary rail. By withdrawing the pin *h* the rail B can be readily detached. This connection is such that by shifting the pin *h* from one perforation *g′* to another the rail B can be turned to any desired angle with the track-rail, according to the position of the displaced car. The clamp C is also connected to the track-rail *a* in such a manner that, should the car-replacer be pushed slightly forward, the clamp, by turning at a slight angle, will grip the track-rail and hold the replacer firmly. The rear end of the supplementary rail B is held away from the track-rail at any desired angle therewith by means of a detachable bar, D, that passes through a slot or mortise, *i*. One end of this bar D bears against the track-rail, as shown in Fig. 1. The other end is passed through the mortise *i*, and a hook, *k*,

that is pivoted to the side of the rail B, being then engaged with one of a series of perforations, *m*, in the bar D, it will be seen that the rear end of the rail B will be firmly held in the position to which it may have been adjusted. The supplementary rail B′ on the other side is connected to its track-rail in a similar manner, by means of a clamp, C′, having a shank provided with perforations *g*′ for engagement with a pin, *h*′, and a detachable bar, D′, having perforations *m*′ for engaging a hook, *k*′, so that, like the rail B, it can be adjusted laterally to any required angle with the track. As the supplementary rail B′ is arranged, however, between the tracks, it does not need to have a flange, *f*, like its fellow, to guide the car-wheel flange over the track. The forward end of the rail B′, therefore, instead of being flanged, is simply curved laterally to abut against the adjacent track-rail without lapping over the same. The clamp C′ is provided with a pivoted plate, E, that rests on the track-rail and allows the car-wheels to pass over without injury to the clamp. This plate E is beveled or rounded at each end on its surface, to enable the car-wheel to pass readily without jar or liability of displacement, and, if desired, it may be flanged on its outer side, as shown in Fig. 7, so as to have a firm bearing against the track-rail. The outer part of each clamp C and C′ is slightly beveled on one corner, next to the track-rail, as shown at *p*, Fig. 7, so as to form a hook or projection that will catch under the flange of the track-rail when the clamp is moved at an angle therewith, and thus prevents the clamp from being lifted or displaced.

It will be observed that the mortises in the supplementary rails B B′, through which the shanks of the clamps C C′ pass, are tapered from end to end, so as to allow for the necessary range of movement in adjusting said supplementary rails.

It will be observed that the upper surfaces of the supplementary rails B B′ are grooved throughout their length in the usual manner, to facilitate the passage of the car-wheels in replacing the cars upon the track. On the rail B the grooved surface gradually merges with the flange of the adjacent track-rail, while the grooved surface of the rail B′ dips abruptly down on one side of the enlarged end of said rail B′, so as to guide the flange of the car-wheel to the inner side of the track.

Owing to the wedge-shaped construction of the bed-pieces A A and supplementary rails B B′, it will be seen that the supplementary rails can be readily adjusted to any height of track-rail by simply sliding the rails B B′ forward or back on the bed-pieces, the pins *e e* and grooves *d d* remaining in engagement and serving as guides.

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

1. In a car-replacer, the combination, with the wedge-shaped bed-pieces A A, having grooves *d d*, of the supplementary rails B B′, provided with pins *e e* and means for adjustably connecting the rails B B′ to the track-rails, substantially as described.

2. In a car-replacer, the combination of the wedge-shaped bed-pieces A A, the supplementary rails B B′, the clamps C C′, bars D D′, and connections, substantially as described.

3. In a car-replacer, the combination, with the track-rail *a* and supplementary rail B′, of the clamp C′, having a pivoted plate, E, substantially as described.

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

JOHN W. YOTHERS.

Witnesses:
MILLIN HELLER,
JOHN H. WARNER.