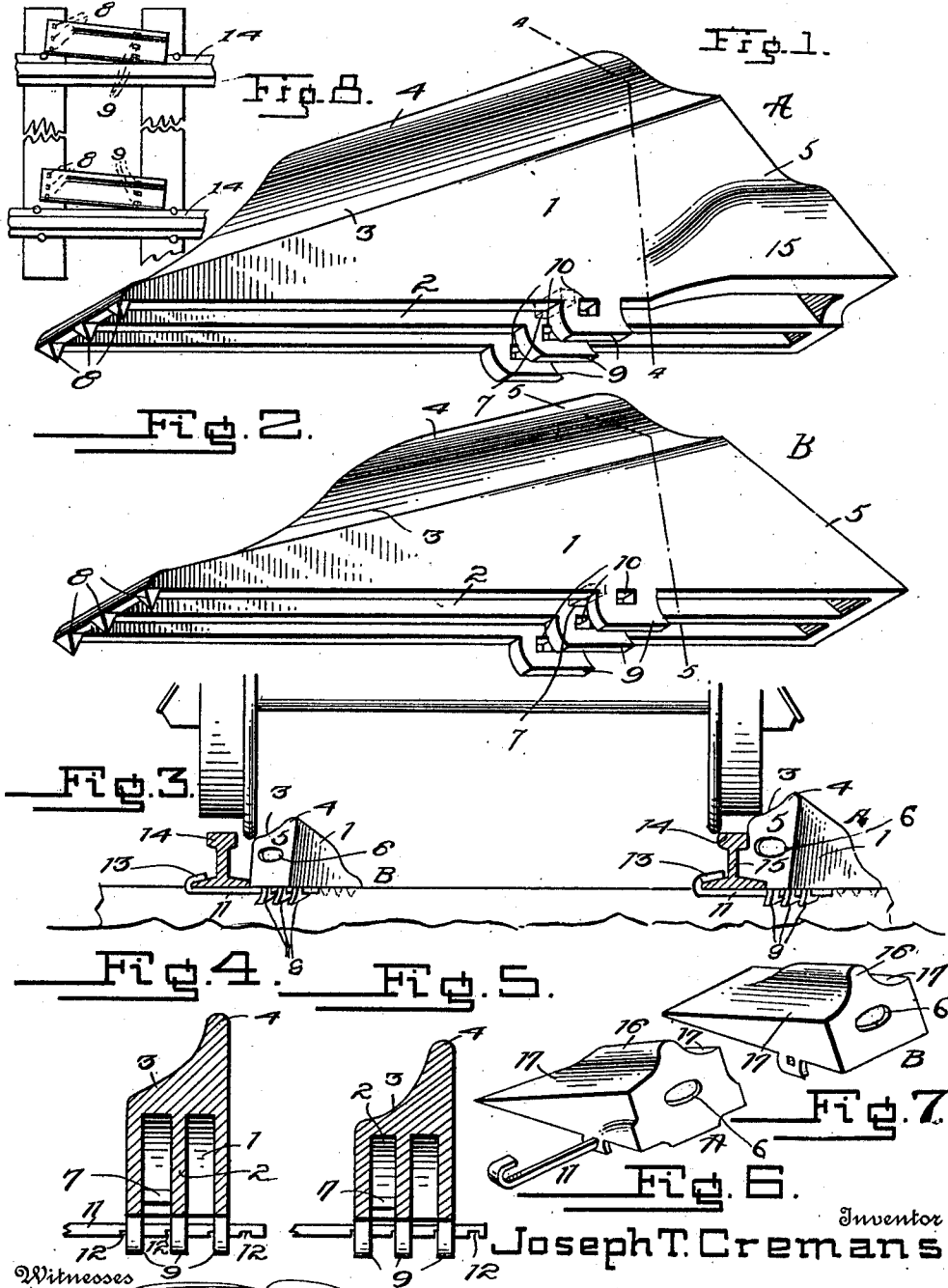


J. T. CREMANS:
CAR REPLACER.
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991,958.

Patented May 9, 1911.



Witnesses

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CAR-REPLACER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOSEPH T. CREMANS, a citizen of the United States of America, residing at Whitefish, in the county of Flat-head and State of Montana, have invented certain new and useful Improvements in Car-Replacers, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to car replacers and the principal object of the same is to provide simple means which can be adjustably attached to the rails so that the wheels will readily be guided to the rails.

The invention contemplates the employment of replacing frogs which are arranged in pairs, one for the inside of a rail and the other for the outside of a rail, the frogs being provided with flange-engaging bars which are adjustably attached to the base of the frogs to hold the same in proper position relative to the rails to facilitate the replacing of a car. In addition to the foregoing prominent features of the invention the frogs are provided with novel surfaces and guards which facilitate the transfer of the wheels from the frogs to the rails.

In carrying out the objects of the invention generally stated above it will be understood, of course, that the essential features thereof are necessarily susceptible of changes in details and structural arrangements, certain preferred and practical embodiments of which are shown in the accompanying drawings, wherein:—

Figure 1 is a detail perspective view of a replacing frog constructed in accordance with this invention, and especially adapted for use in connection with the outer side of the rails. Fig. 2 is a similar view of a frog adapted for use in connection with the inner side of the rails. Fig. 3 is a detail view in rear elevation showing the use of the frogs as they appear in use. Fig. 4 is a transverse vertical sectional view taken on the line 4—4, Fig. 1. Fig. 5 is a similar view taken on the line 5—5, Fig. 2. Fig. 6 is a detail view of a modified form of the replacer adapted for the outer side of rails. Fig. 7 is a detail view of a modified form of the replacer adapted for the inner side of rails. Fig. 8 is a top plan view showing the frogs in operative position.

Referring to the accompanying drawings by numerals, and particularly to Figs. 1, 2, 3, 4 and 5 thereof, it will be seen that the

improved frogs comprise a hollow body 1 that is provided with a central longitudinal reinforcing web 2, said body being open at the bottom and of a substantially triangular shape. The elongated inclined tread surface 3 of said body at a point beyond the lower end merges on an easy curve into an upstanding guard flange 4 which extends to a point adjacent the upper end of said tread surface, and said tread surface and guard flange form a cam which guides a wheel therefrom to the rails. The rear ends 5 of the frogs are beveled and provided with an opening 6 which is in alinement with a cross rod 7 within the body, the purpose of which will be presently explained. At the forward ends the bottom edges of the sides and the central web 2 are provided with pendent spurs 8 which grip a tie to prevent the frogs slipping, and adjacent the middle, said bottom edges are provided with pendent lugs 9 which are in transverse alinement and provided with transverse openings 10. A locking bar 11 is slidable through the openings 10 of said lugs 9 and is provided with notches 12 for selective engagement with the edges of said openings to adjustably hold said bar in engagement with the frogs. The outer end of said bar 11 is provided with a hook 13 for engaging the base flange of a rail 14, as is shown in Fig. 3 of the accompanying drawings.

As has been stated, the frogs are used in pairs, one for the outer side of a rail and the other for the inner side of a rail, and for convenience in description the outer frog has been designated generally by the reference character A and the inner frog by the reference character B. The frog A differs from the frog B in that it is higher at the rear end and is provided with a laterally projecting lug 15 that engages the web of a rail. One of said frogs is made higher than the other so that when a truck is being replaced it will assume an inclined position which causes the same to readily slide from the tread surface of the frogs to the rails, as is clearly illustrated in Fig. 3. The bars 11 in addition to providing simple means for adjustably fastening the frogs to the rails, also serve as handles for transporting the frogs by being passed through the end openings 6 and having the notches thereof selectively engaged with the cross bars 7.

In Figs. 6 and 7 a pair of double and reversible frogs are shown which embody the

same principle and use the same means for engaging the rails as the frogs previously described. These frogs differ however in providing the guard flange 16 in the longitudinal center of the frogs and thereby provide two tread surfaces 17. In use the frogs span the space between the ties with the spurs 8 engaging one tie and the rear ends of the lugs 9 engaging or abutting one longitudinal edge of a contiguous tie, said lugs 9 having their rear vertical edges concaved for abutting engagement with the edge of said tie. This arrangement prevents the frogs slipping longitudinally, and by fastening the bars 11 to the rails and to the lugs 9, lateral movement of the frogs is prevented.

The frogs may be formed of any suitable material, and in practice it has been found that cheap and serviceable structures embodying this structure may be cast.

What I claim as my invention is:—

1. A car replacer comprising a body provided with means for guiding a wheel therefrom to a rail, said body being also provided with pendent lugs, said lugs being provided with alined transverse openings, and a bar provided with a rail-engaging hook and with notches for selectively engaging the edges of said openings.

2. A car replacer comprising a body provided with means for guiding a wheel therefrom to a rail, said body being provided

with an end opening, a cross bar in said body, and a rail-engaging bar provided with notches and adapted to be passed through said end opening and engaged with said bar.

3. A car replacer comprising a body provided with wheel guiding means, said body being provided with a transverse row of tie-engaging lugs, said lugs being provided with alined openings, and a rail-engaging bar provided with means for selective interlocking engagement with the edges of said openings.

4. A car replacer comprising a hollow body provided with an end opening, a rod transversely arranged within said body, and a rail engaging bar provided with an end hook adapted to be passed through said opening and engaged with said rod.

5. A car replacer comprising a body provided with wheel guiding means, said body being provided with depending lugs, said lugs being provided with concaved rear edges for abutting engagement with the longitudinal edges of the ties, and means for securing said body to the rail.

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

JOSEPH T. CREMANS.

Witnesses:

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E. L. GEDDES.