

W. MARTLEY.
 RERAILING FROG.
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957,230.

Patented May 10, 1910.

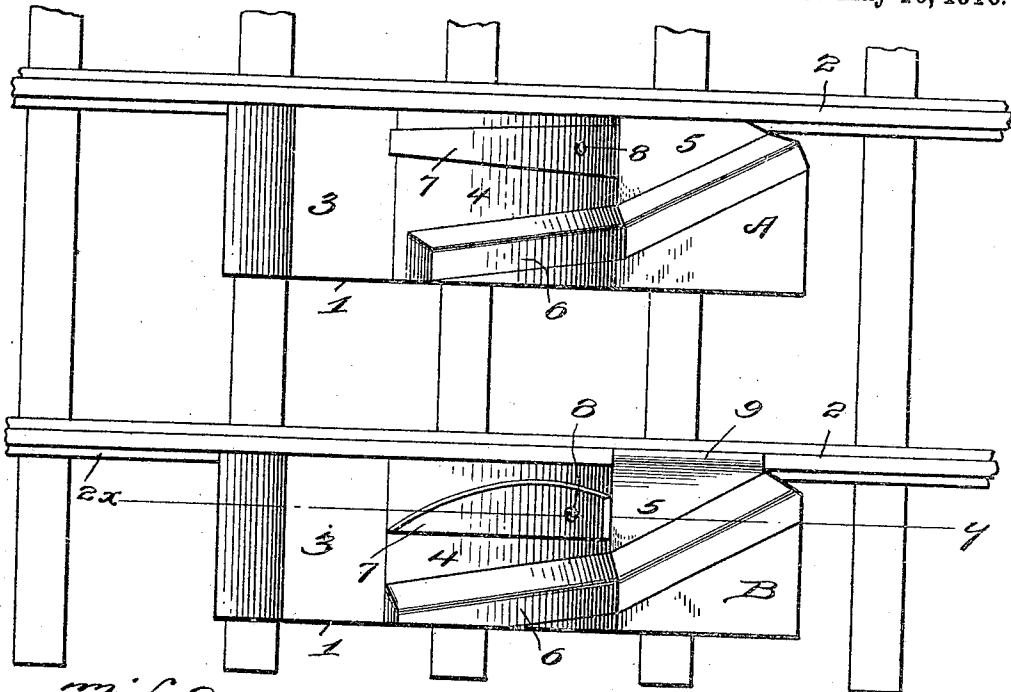


Fig. 2.

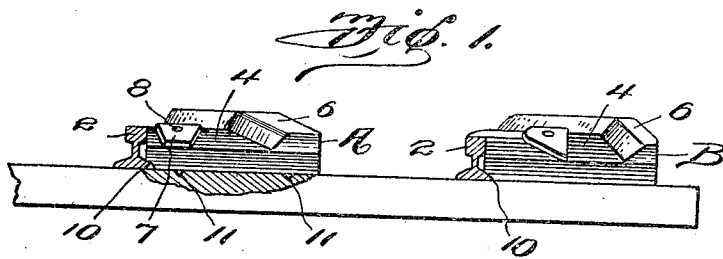


Fig. 1.

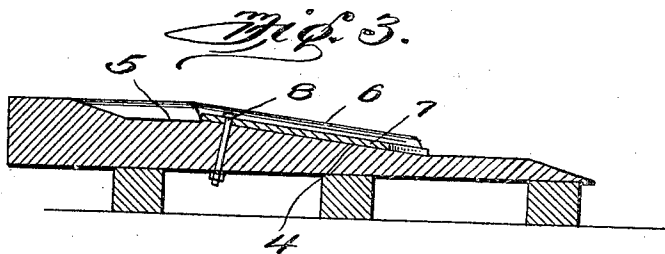


Fig. 3.

Witnesses
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UNITED STATES PATENT OFFICE.

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RERAILING-FROG.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WALTER MARTLEY, a citizen of the United States of America, and resident of Lebanon, in the county of Laclede and State of Missouri, have invented certain new and useful Improvements in Rerailing-Frogs, of which the following is a specification.

This invention relates to rerailing frogs and more especially to that class of frogs in which two similar devices are provided, each of which is adapted to be used in conjunction with the other and to be applied to railroad ties in such manner as to guide the wheels of a car truck back on to the tracks.

When a car or locomotive is derailed some of the wheels are forced outside of the tracks while the other wheels rest upon the ties between the tracks. For this reason the frogs provided for guiding the wheels back to the tracks must be of two different types, one adapted to receive the tread of the wheels which remain between the tracks and guide the same to position and the other adapted to receive such wheel and lift the same over the tread of the rail in order that the flange may rest in its proper position within such rail.

It is well known that similar devices have been constructed but it is notorious that the large majority of them have faults which heretofore have not been overcome. Most of them are heavy and take up considerable room and are not easily transportable while others cost a great deal to manufacture and are objectionable from that standpoint. None of them are absolutely efficient nor are they simple.

It is the object of applicant's invention to overcome these disadvantages and to provide a rerailing device which will be simply and easily constructed at a low cost and which will be as efficient as the more expensive devices now in use.

With the foregoing and other objects in view, the invention consists in the details of construction and in the arrangement and combination of parts to be hereinafter more fully set forth and claimed.

In describing the invention in detail, reference will be had to the accompanying drawings forming part of this specification, wherein like characters denote corresponding parts in the several views, in which—

Figure 1 illustrates a view in elevation

from the front or operative end showing the two frogs comprising my invention in position; Fig. 2 illustrates a plan view of the same; and Fig. 3 illustrates a longitudinal section on the line X—Y of Fig. 1.

In carrying my invention into practice, it is necessary, as pointed out before, to provide two frogs of slightly different construction, these frogs being shown at A and B in the figures. The frog A is adapted to be attached to the ties upon the inner side of the rail or in other words, between the two rails. In this way it is adapted to guide back to the rails the wheel which is positioned between the said rails. This frog is provided with a substantially level surface 3, also a sloping surface 4, which terminates near its upper end in a substantially level surface 5 which is adapted to throw the tread of the wheel on to the tread surface of the track 2 and to guide the wheel flange into position. Disposed along the inner edge of the base 1 and extending along the inclined surface 4 is a guide rail 6 which approaches the rail 2 at an angle. This guide rail may be of angular formation as shown or it may be curved, the object being to prevent the wheel from sliding off of the inclined surface 4 back on to the ties. It will be observed that the guide rail 6 terminates slightly short of the rail 2 in order to permit the wheel flange to roll off of the substantially level surface 5 into position against the inner surface of the rail 2.

Pivoted at 8 near the junction of the inclined surface 4 and the surface 5 is a shiftable track member 7 pointing downwardly and having its lower end tapered. When the wheel approaches the surface 4, the shiftable track member 7 is adapted so that its tapered end will receive the tread surface of the wheel and guide it upward to the plane surface or plate. In this way, I am able to adjust my device so as to allow for slight variations in the direction of approach of the wheels, and the level surface is adapted to retain the wheel at rest while this shiftable member is being adjusted in position to receive the wheels.

The frog B is adapted to be placed along the outside of the rail; that is between the rail and the ends of the ties. This frog is of similar construction to frog A, a difference being that the plate 5 of the latter is on a somewhat higher plane than the track surface of the rail and has an extension 9, over-

lying the track surface and flush with the inner vertical surface of the rail head, said extension having a convex taper toward its edge and constituting a slideway for the flange of the wheel in being replaced on the track. The car wheel is guided to this slideway by the shiftable track member 7, upon which it rides to the convex member overlying the rail, from the convex surface of which the flange slides, thus seating the tread of the wheel upon the overlying plate. The wheel now being alined with the track, it is only necessary to roll it until it descends from the end of the overlying plate to the track and the operation is completed.

It will be understood that the frogs described above may be connected to the rails or to the ties in any suitable manner but I have shown in the drawings a series of spikes or feet 11, projecting from the under sides of said frogs, which spikes are forced into the ties 1 by the weight of the car upon the bases 3. Recesses 10 may be formed along the lower inner edges of the bases 3, said recesses being adapted to receive the base flanges of the rail 2 in order that the frogs may set closely against the rails. It will be understood, however, that these are simply details of construction which may be varied at will and I desire it to be understood that the construction above set forth may be varied within the scope of the appended claims.

I claim—

1. In a re-railing frog, a base comprising

a sloping surface and a substantially level surface, said sloping surface being intermediate the ends of said base and having pivoted thereon a shiftable track member, and a guide rail crossing the base diagonally.

2. In a re-railing frog, a base comprising substantially level surfaces and a sloping surface intermediate the level surfaces, a shiftable track member on the sloping surface adapted to receive the tread of a car wheel and bear it to the upper level surface, a guide rail diagonally crossing the base and a slide-way comprising an extension of last said level surface, said slide-way overlying the top surface of the rail and its edge being flush with the inner vertical surface of the rail head.

3. In a re-railing frog, a base comprising substantially level surfaces, a sloping surface connecting said level surfaces, a shiftable track member pivoted on said sloping surface, a bent guide rail diagonally spanning the base, and adapted to direct the flange of the wheel to the slide-way, said slide-way comprising an extension of the upper level surface and adapted to overlie the rail tread and direct the wheel flange thereto.

In testimony whereof, I have hereunto affixed my signature in the presence of two witnesses.

WALTER MARTLEY.

Witnesses:

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