

(No Model.)

2 Sheets—Sheet, 1.

C. K. MARSHALL.
WRECKING FROG.

No. 564,093.

Patented July 14, 1896.

Fig. 1.

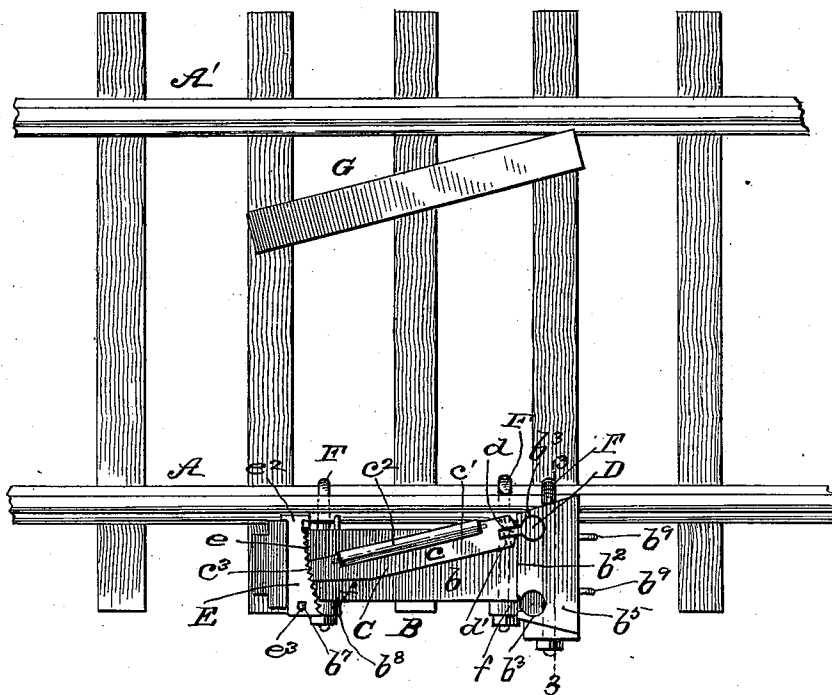


Fig. 2.

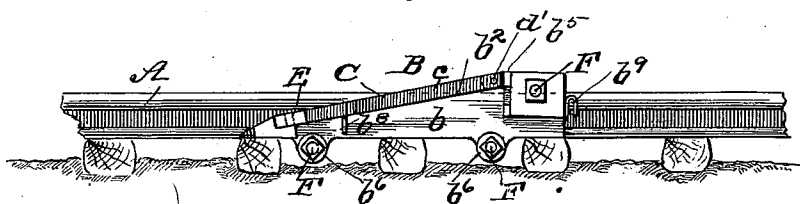
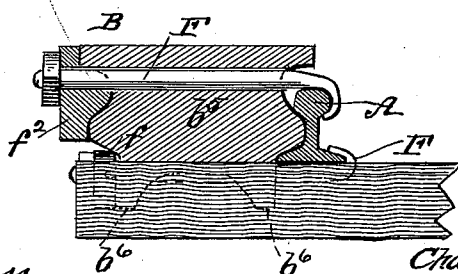


Fig. 3.



WITNESSES:

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Chas. R. Wright

INVENTOR:

Charles H. Marshall.

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ATTORNEYS

(No Model.)

2 Sheets—Sheet 2.

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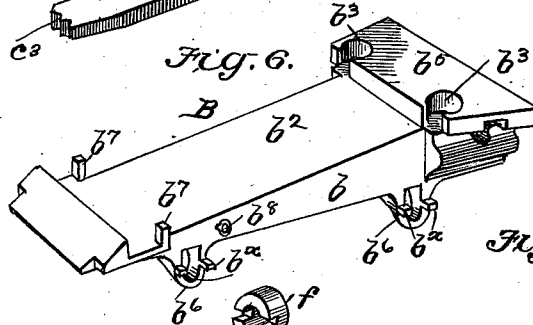
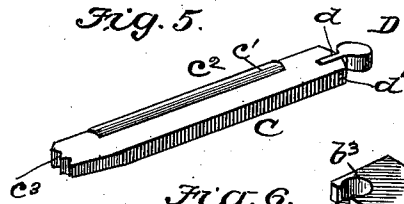
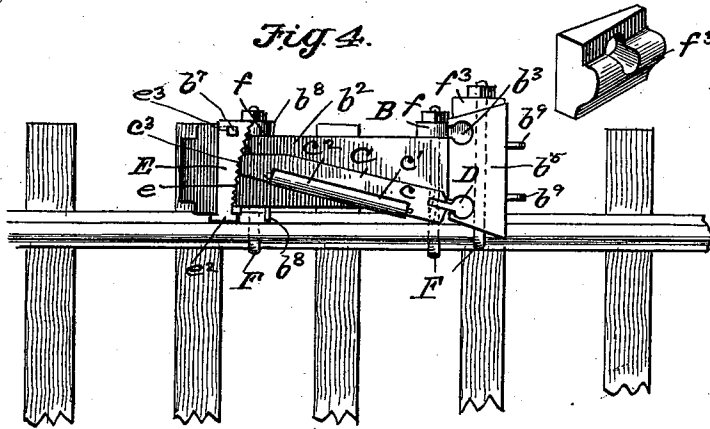


Fig. 7.

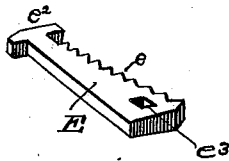
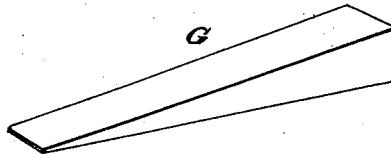


Fig. 9.



WITNESSES:

Joe. A. Ryan

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UNITED STATES PATENT OFFICE.

CHARLES K. MARSHALL, OF TACOMA, WASHINGTON.

WRECKING-FROG.

SPECIFICATION forming part of Letters Patent No. 564,093, dated July 14, 1896.

Application filed August 3, 1895. Serial No. 558,152. (No model.)

To all whom it may concern:

Be it known that I, CHARLES K. MARSHALL, of Tacoma, in the county of Pierce and State of Washington, have invented a new and useful Improvement in Wrecking-Frogs, of which the following is a specification.

My invention relates to improvements in that class of devices employed for placing cars which have jumped the track or otherwise gotten off, back on the track; and the invention has for its object to provide a device of the character indicated which is very simple, cheap, and effective.

The invention consists of an inclined support having its sides similarly constructed to adapt it to fit upon either rail and to extend in either direction, and provided with a reversible switch-rail having a removable and adjustable connection therewith.

The invention also consists in the particular construction and arrangement of parts, as hereinafter fully described, and pointed out in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference refer to corresponding parts in all the views.

Figure 1 is a plan view of the improvement and a portion of a railroad-track. Fig. 2 is a side elevation of the same. Fig. 3 is a section on line 3 3 of Fig. 1. Fig. 4 is a plan view of the improvement, showing it applied to the rail of a track opposite to that which is shown in Fig. 1, and also a perspective view of one of the washers; and Figs. 5, 6, 7, 8, and 9 are detailed perspective views.

A A' are the rails of a track, and B my improvement, which I term "wrecking-frog," secured to the rail A. The body of the frog is tapering or wedge-shaped, the lower surface being straight, and the said body is preferably of a length to extend over three ties of track, as shown in the drawings. The upper surface of the body *b* is recessed at *b*², and in this recess is arranged the adjustable and reversible switch-rail C. The switch-rail C consists of the bar *c*, provided with the recess *c*¹ in one side, and the roller *c*², mounted in the said recess. To the upper end of the rail C is pivoted, by a horizontal pivot *d*¹, the shank *d* of the head D, which is circular and fits in one of the sockets *b*³ in the body *b* ad-

jacent to the recess thereof and having an opening leading therefrom to the said recess. By this construction the switch-rail can swing both vertically and horizontally.

In order to lock the switch-rail in the desired position, the lower end of the said rail is notched or provided with teeth *e*³, which engage the teeth *e* of the locking-bar E. The locking-bar E is tapering and is provided with the head *e*² at its small end and with the opening *e*³ in its large end, to be engaged by the studs *b*⁷ on the body. When the locking-bar E is in position, its head *e*² rests against one of the studs *b*⁷ and the edge of the body, and the other stud projects through the openings thereof. By this means the locking-bar will be firmly and securely held and can be readily reversed when desired.

The head *b*⁵ of the body *b* is shaped on each side to fit up against the rail with its upper part overlapping the same, and the lower end is shaped to fit upon the base of the rail. To secure the frog, I preferably employ three hook-bolts F, two of which engage the base of the rail, and one the tread thereof. The bolt F that engages the tread of the rail passes through an aperture in the head *b*⁵, while the bolts that engage the base of the rail pass through ears *b*⁶, projecting from the lower surface of the body. The ears *b*⁶ are preferably provided with lugs *b*^x to enter corresponding notches *f*¹ in washers *f* to prevent the said washers from turning. A washer is also employed for the bolt that engages the tread of the rail, and since either side of the body *b* is adapted to fit upon the rail, two washers *f*² and *f*³, one for each side, are necessary.

Secured to the sides of the body *b* are eyes *b*⁸ to receive handholds, and to the front end of the body are secured hooks *b*⁹ to receive a bar. By these means the device can be easily carried from place to place.

In connection with the improvement I preferably use an incline G to receive the wheel opposite that which is to travel upon the frog.

In practice the frog is secured to the outside of the rail, as shown, and the rail C thereof having been adjusted to or from the rail according to the distance the wheel of the car to be replaced is from the rail the incline G is placed between the rails opposite

the other wheel of the car, when the car can be readily pulled upon the frog and incline and the wheels thereof guided upon the rails of the track.

- 5 It will be seen that the frog can be applied to either rail, so as to extend in either direction, thereby permitting cars on either side of the track to be readily replaced. It will be understood that if the frog is to be shifted
10 to the side of the track opposite from that shown in the drawings, the switch-rail C will be reversed or turned over and its head D placed in the recess of the body adjacent to the track, and the locking-lever will also be
15 reversed.

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

1. A device of the character described, comprising an inclined support having its opposite sides similarly constructed, whereby it is adapted to fit upon either rail and extend in either direction, and a reversible switch-rail having a removable and adjustable connection with the support, substantially as described.
25

2. A device of the character described, comprising an inclined support having its opposite sides similarly constructed whereby it is adapted to fit upon either rail and to extend in either direction, a reversible switch-rail having a removable connection at one end with the support, and means for locking the other end of the switch-rail, substantially as described.
30 35

3. A device of the character described, comprising an inclined support adapted to be secured to a rail, and a switch-rail carrying a roller, substantially as described.

- 40 4. A device of the character described, comprising an inclined support, a reversible switch-rail, pivoted upon the support and means for locking the free end of the said rail, substantially as described.

- 45 5. A device of the character described, comprising an inclined support, a reversible switch-rail pivoted to swing vertically and

horizontally on said support, and means for locking the free end of the rail, substantially as described. 50

6. A device of the character described, comprising an inclined support adapted to be secured to a rail, a pivoted switch-rail having teeth at its free end and a locking-bar secured to the support and provided with teeth with which the teeth of the switch-rail engage, substantially as described. 55

7. A device of the character described, comprising an inclined and recessed support, a switch-rail pivoted in the said recess and provided with teeth at its free end, and a tapering transverse locking-bar secured in the recess of the support and provided with teeth, with which the teeth of the switch-rail engage, substantially as described. 60 65

8. A device of the character described, comprising an inclined and recessed support, a switch-rail carrying a roller and reversibly pivoted in the recess of the support, the free end of the rail being provided with teeth, and a tapering and reversible locking-bar provided with teeth engaging the teeth of the switch-rail, substantially as described. 70

9. A device of the character described, comprising an inclined and recessed support constructed to fit up against a rail, a switch-rail, consisting of a bar having teeth at one end and pivoted to swing vertically and horizontally, and a roller mounted in one side of the bar, and a tapering locking-bar secured to the support and provided with teeth with which the teeth of the switch-rail engage, substantially as described. 75 80

10. In a device of the character described, the combination with an inclined support provided with a socket, of a switch-rail comprising a bar a roller mounted therein, and a circular head pivoted to the bar and fitting in the socket of the support, substantially as described. 85

CHARLES K. MARSHALL.

Witnesses:

ED. BRADLEY,
J. M. ARNTSON.