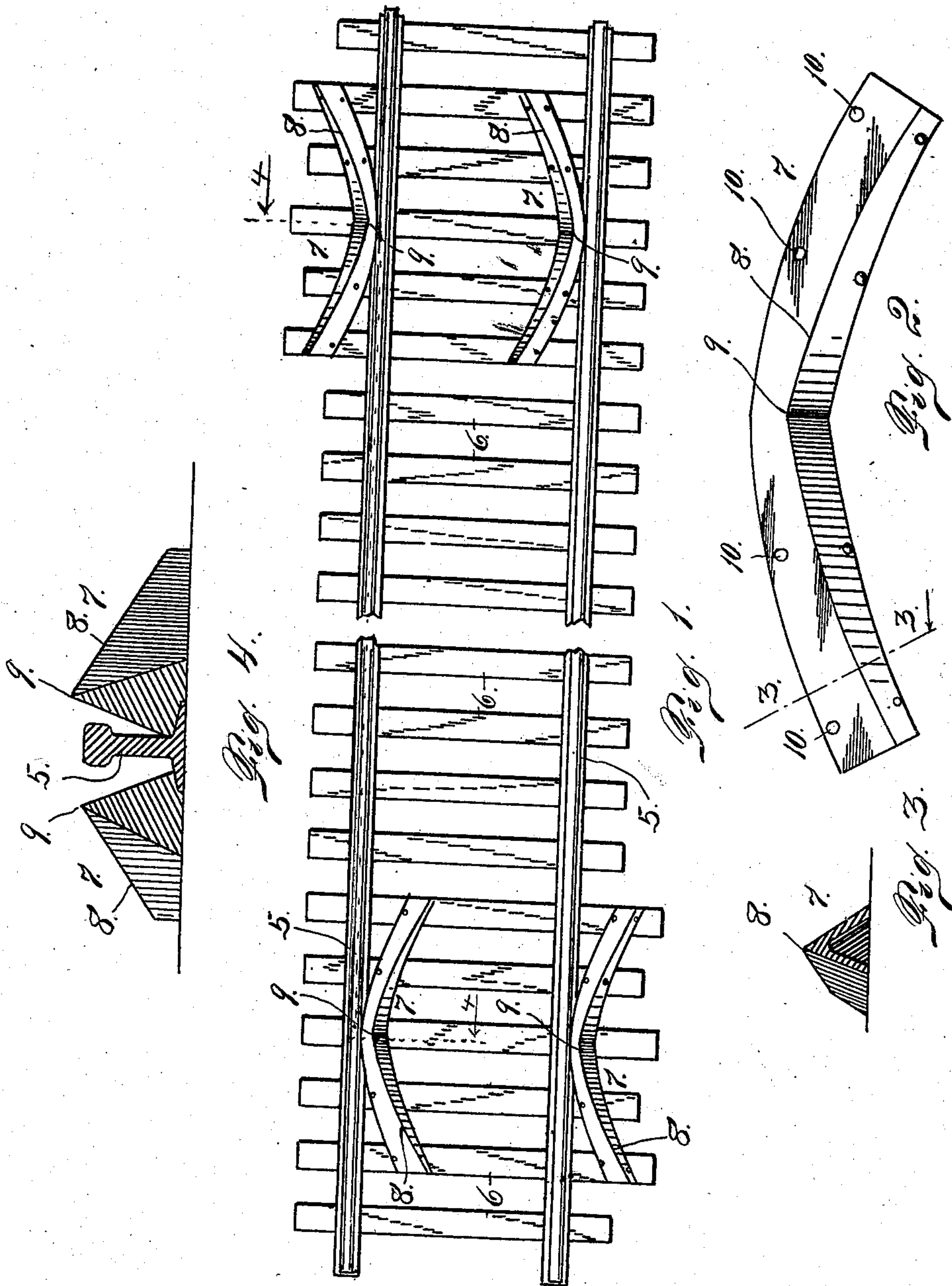


No. 867,857.

PATENTED OCT. 8, 1907.

J. W. WALLS.
AUTOMATIC CAR REPLACER.
APPLICATION FILED APR. 8, 1907.



Witnesses:
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UNITED STATES PATENT OFFICE.

JAMES W. WALLS, OF MORLEY, COLORADO.

AUTOMATIC CAR-REPLACER.

No. 867,857.

Specification of Letters Patent.

Patented Oct. 8, 1907.

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To all whom it may concern:

Be it known that I, JAMES W. WALLS, a citizen of the United States, residing at Morley, in the county of Las Animas and State of Colorado, have invented certain new and useful Improvements in Automatic 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.

My invention relates to improvements in means for automatically remounting or returning to the track the wheels of cars which have run off the rails, my object being to locate my remounting frogs, at such intervals that when the wheels of a car run off the rails, they will be automatically returned or replaced, thus preventing accidents which might result in the derailing of an entire train after a single car has run off the track.

My improved remounting frog, consists of a simple, inexpensive device adapted to efficiently perform the aforesaid function, and the same will now be described in detail reference being made to the accompanying drawing in which is illustrated an embodiment thereof.

In this drawing, Figure 1 is a top view of a section of track, showing a number of my remounting frogs in place. Fig. 2 is a plan view of my remounting frog shown in detail. Fig. 3 is a cross section of the same. Fig. 4 is a section taken on the line 4—4 Fig. 1.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate the track rails and 6 the ties upon which the rails are placed. These ties and rails may be of any ordinary construction, except that the ties are elongated on one side of the track where my improved remounting device is placed in order to make room for the same. These remounting devices as shown in the drawing are preferably of such length as to extend across five ties.

The device which in its entirety is designated by the numeral 7, is provided with an apex 8 and is considerably flared from this apex toward the adjacent rail. The apex is highest at a central point 9 and tapers downwardly as the ends of the device are approached in both directions. From the point 9 the frog also diverges or recedes from the rail in both directions, its outer extremities being a sufficient distance away from the rail, to cause the frog to guide the wheel to the rail, sufficient space being allowed to insure such action regardless of the direction in which a train is traveling. Each frog is preferably secured to five ties by means of spikes passing through holes 10 formed in the frogs. The frog placed on the outside of a rail is preferably six inches

high in the center and tapers three feet each way. The frog for the outside rail must be two inches from the top or outside of the ball or tread of the rail. The frog for the inside of rail must be five inches high in the center and stand three inches inside of the ball or tread of the rail, to prevent the flange of the wheel from striking the top of this frog. A pair of these frogs is preferably located about every half mile along the track and by this arrangement it is believed that any car whose wheels have left the track may be remounted or replaced before serious accident has occurred or the entire train derailed. In arranging each pair of replacing frogs, one of the frogs is placed on the inside of one rail and the other frog on the outside of the other rail, with the inner and outer frogs of each rail alternating so that the car may be replaced whether it runs off from the track on one side or the other. If desired two pairs of frogs may be located on the same set of ties, that is to say one frog on the inside and another on the outside of each rail or they may be placed as shown in Fig. 1 of the drawing.

Having thus described my invention, what I claim is:

1. In a car replacing device, the combination with a track rail, of a bar mounted along-side the rail, the said bar being highest at its center and tapering longitudinally in both directions, the said bar provided with smooth faces transversely inclined in opposite directions, the center of the bar being nearest the rail while its parts on opposite sides of the center recede from the rail in both directions.

2. As an improved article of manufacture, a car replacing frog comprising a bar-highest in the center and tapering longitudinally in both directions, the portions of the bar on opposite sides of the center receding transversely in one direction, the said frog provided with smooth faces transversely inclined downwardly in opposite directions.

3. In an automatic car replacing or remounting device, the combination with the track, of a bar made fast to the device adjacent each rail, the said bar being on the inside of one rail and on the outside of the other rail, each bar being highest in the center and tapering downwardly longitudinally in both directions, the said bar also receding from the rail in both directions from the center and provided with smooth faces transversely inclined from a ridge or apex, downwardly in the direction of the rail, substantially as described.

4. In a device of the class described, the combination with a track rail, of a bar, said bar having a high central portion located a short distance from the adjacent edge of the tread of the rail, said bar tapering downwardly longitudinally from the center in both directions, and also provided with smooth faces tapering transversely downwardly from an apex toward the rail, the bar being secured to the ties or supporting means for the rails, substantially as described.

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

JAMES W. WALLS.

Witnesses:

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