

W. M. ROBBINS.
CAR REPLACER.
APPLICATION FILED AUG. 17, 1911.

1,060,213.

Patented Apr. 29, 1913.

Fig. 1.

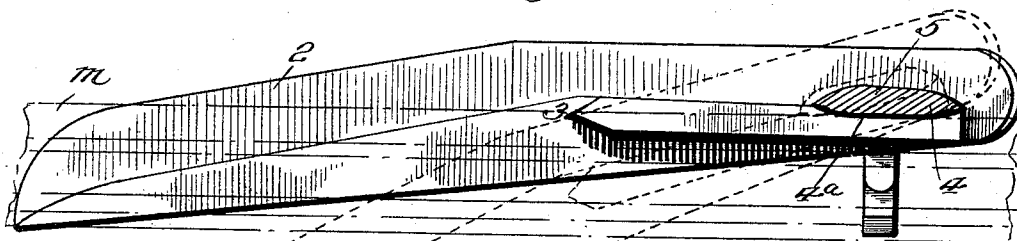


Fig. 2.

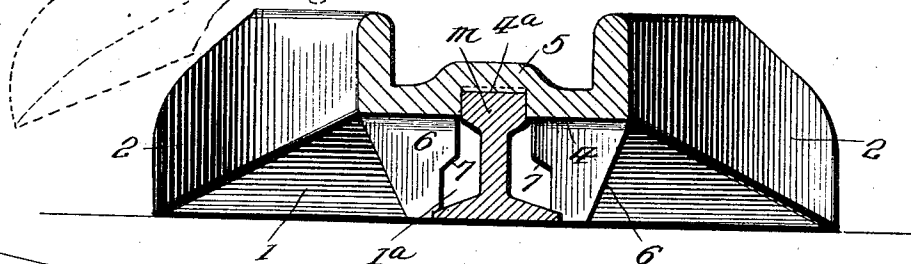


Fig. 3.

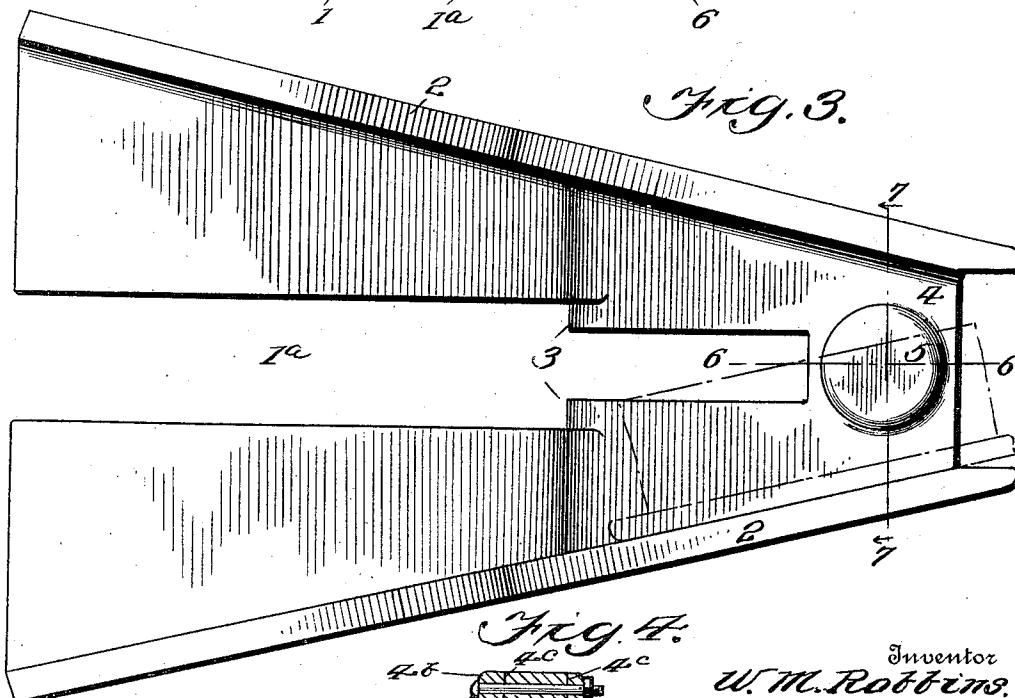
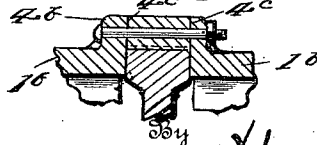


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

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CAR-REPLACER.

1,060,213.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM M. ROBBINS, citizen of the United States, residing at Bluefield, in the county of Mercer and State of West Virginia, have invented certain new and useful Improvements in Car-Replacers, of which the following is a specification.

My invention relates to certain new and useful improvements in car replacers.

There is great need for a quick means of replacing derailed cars on the tracks, and especially is this true in coal mines, where poorly constructed track joints, frogs, switches and curves as well as rough handling cause numerous derailments. Many times the tracks here are not filled in so that the wheels of a derailed car drop far below the rail level. Present methods of replacing are uncertain and tedious and more or less destructive to track, rolling stock and motive force.

My improved replacer aims to overcome the difficulties of car replacement as my device embraces the rail and one end rests firmly thereon, while the other drops down to the ground level, thus forming a firm inclined plane necessitating no blocking and up which the car can be drawn without excessive strain on the motive force or injury to the track or rolling stock. The time occupied is minimum since means of replacement may always be at hand.

With this and other objects in view the invention consists in certain constructions, arrangements and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention reference is to be had to the following description and accompanying drawing, in which:

Figure 1 is a longitudinal section on the line 6—6 of Fig. 3; Fig. 2 is a transverse section on the line 7—7 of Fig. 3; Fig. 3 is a plan view; and Fig. 4 shows a possible construction on the line 7—7 of Fig. 3.

Corresponding and like parts are referred to in the following description and indicated in all the views of the accompanying drawing by the same reference characters.

Referring to the drawing, the numeral 1 designates a substantially V shaped inclined plane formed with vertical flanges 2 on either side thereof and provided with a longitudinally extending slot 1^a. The part of said slot which lies in the narrow end of

the plane is slightly wider than the tread of the rail M and the part in the wide portion of the plane is slightly wider than the base of said rail, thus forming the shoulders 3. At its narrow end, the plane is formed with a bridge 4 joining the walls that define the slot 1^a, the under side of said bridge being longitudinally curved as at 4^a and the upper side being provided with a boss 5 intermediate the flanges 2 which acts as a wheel bumper. The wide end of the plane may rest on the ground or be supported on the rail base by the shoulders 3. The various degrees of incline of the plane affect in no way its secure support as the curved rail bearing at 4^a provides for the change of position. To further insure the secure setting of the plane, the supports 6 underneath the smaller end of the plane are formed with stepped notches 7 on their adjacent edges to permit the device to be supported on the bases of various sized rails.

It is to be understood that while I have described this device as composed of a solid plane, I do not wish to be limited to this construction, as the bridge 4 could be pivoted to allow vertical independent movement of each half of the plane, thereby allowing one side of the broad end thereof to rest on a lower or higher level of ground. This construction is illustrated in Fig. 4, wherein the plane is designated 1^b, the bridge 4^b and the pivot connection is indicated at 4^c.

From the preceding description in connection with the accompanying drawing, the operation of my device will be apparent. My improved replacer is placed astride of the rail so that the curved under surface 4^a rests on the tread surface thereof. The broad end of the plane drops down until it strikes the ground or any interposed supports or is held by the shoulders 3 striking the rail base. Being thus firmly supported a wheel of the derailed car may be drawn up the incline, when as it nears the upper and narrow portion of the plane the flange 2 will crowd the wheel over until it rests on the track, since at this point the distance from the flange to the track is less than the width of the car wheel. The boss 5 serves as a bumper to stop the car wheel when said wheel is being returned to the track. At this time the boss acts as a stop to the wheel flange and prevents undue lateral movement of the wheel so that the latter cannot shift from above the rail. It will be noted that

the boss 5 also reinforces the bridge 4 at its weakest point and does not interfere with the forward movement of the wheel since the latter is raised above the boss by the
5 wheel flange. It is of course understood that a similar device is placed on the other rail of the track and operates upon the other car wheel simultaneously and in a like manner.

An understanding of the preceding description will show that I have provided a
10 device which will easily and positively replace wheels that have been dropped quite far below the base of the rail. This it does quickly and with the minimum of effort, the
15 device requiring no blocking or assistance other than propelling force for the derailed car. The replacer is readily applicable to different sized rails and may be used on the

standard steam and electric roads as well as in mines.

Having thus described the invention what I claim as new is:

A car replacer comprising a body portion having a longitudinal slot forming side portions, and a bridge portion connecting said
25 side portions at one end of the slot, the upper face of the bridge portion being above the adjacent side portions and the under face of the bridge portion being recessed and
30 convex from end to end.

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

WILLIAM M. ROBBINS. [L. s.]

Witnesses:

J. T. LEWIS,

LEE LONG.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents
Washington, D. C."
