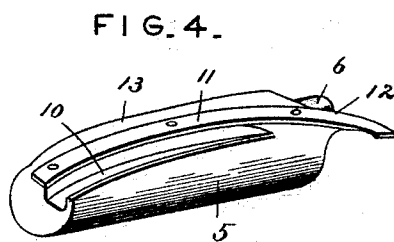
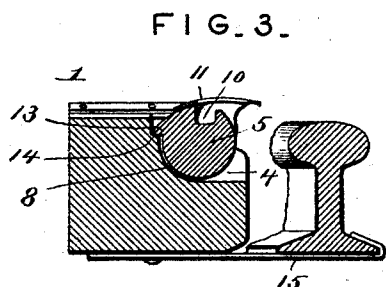
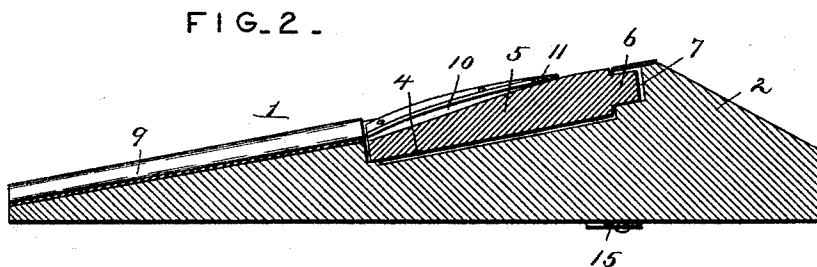
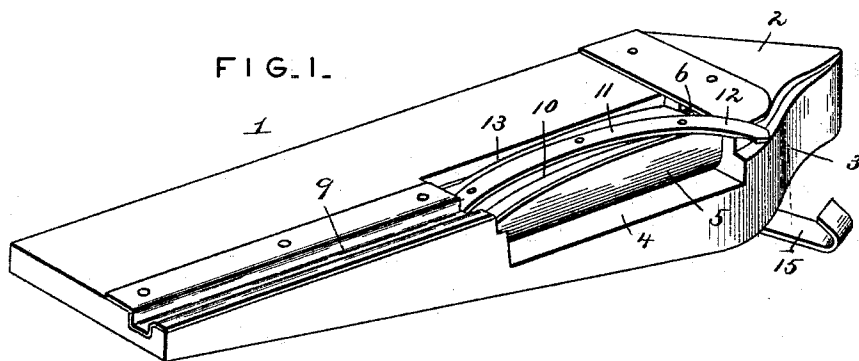


(No Model.)

H. SAUNDERS.
CAR REPLACER.

No. 497,927.

Patented May 23, 1893.



Witnesses

Harry L. Amer.
W. H. Riley

Inventor

By his Attorneys, Henry Saunders.
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UNITED STATES PATENT OFFICE.

HENRY SAUNDERS, OF PERRY, MISSOURI.

CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 497,927, dated May 23, 1893.

Application filed February 24, 1893. Serial No. 463,655. (No model.)

To all whom it may concern:

Be it known that I, HENRY SAUNDERS, a citizen of the United States, residing at Perry, in the county of Ralls and State of Missouri, have invented a new and useful Car-Replacer, of which the following is a specification.

The invention relates to improvements in car replacers.

The object of the present invention is to provide a simple, inexpensive and effective car replacer, capable of being conveniently and securely attached to a rail and of readily carrying a wheel across the latter.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings and pointed out in the claims hereto appended.

In the drawings—Figure 1 is a perspective view of a car replacer constructed in accordance with this invention. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a transverse sectional view. Fig. 4 is a detail perspective view of the eccentric roll.

Like numerals of reference indicate corresponding parts in all the figures of the drawings.

1 designates a body having an inclined upper face and having its end 2, tapered and curved at the inner side at 3 and adapted to fit against the side of a rail. The body may be constructed entirely of metal or of heavy wood sheathed with metal to insure the proper strength and stability and at the same time to enable the car replacer to be constructed sufficiently light to be readily carried; and the said body is provided on its upper face at its inner side with a recess 4 receiving an eccentric roll 5. The eccentric roll 5 is provided at its upper end with a journal 6, which is arranged in a bearing 7, and its lower end is rounded and fits in a bearing 8 of the body at the lower end of the recess 4. The body is provided at its inner side with a longitudinal wheel-flange receiving grooves 9, and the roll is provided with a groove 10 adapted to form a continuation of the groove 9 to receive the flange of the wheel, and having its upper portion located beyond the center of axis of the roller, whereby when the wheel reaches the top of the groove 10 the weight will turn the eccentric roll and throw the wheel on the top

of a rail. The wheel is guided across the top of the rail by a curved plate 11, secured to the roll and extending therefrom at the inner side of the car replacer and having its lower face slightly concaved at 12 to fit against the rounded portion of a top of a rail; and the wheel in moving forward across the rail will by pushing against the curved plate return the roll to its initial position to receive the next wheel. The turning of the roll to assume its initial position is limited to stop the groove at the proper point by a shoulder 13, formed integral with the roll, disposed longitudinally of the same and adapted to engage and be supported by a longitudinal shoulder or seat 14 of the recess 4. The lower end of the roll is substantially semi-cylindrical, and is centrally journaled; the roll tapers therefrom forming an inclined upper surface; and the eccentric journal is at the head of the roller, which is bulged outwardly. The turning takes place when the wheel is about two-thirds the way up the roll, and the lateral throw of the roll is sufficient to carry the flange of a wheel over a rail.

The car replacer is secured to the rail, against which it is placed, by a clip 15 adapted to extend under the rail and engage the bottom flange of the same at the farther side. The clip consists of a shank, which is pivoted to the car replacer at the bottom of the body near the front end thereof, and a hook formed integral with the shank to engage the bottom flange of the rail.

It will be seen that the car replacer is simple and inexpensive in construction, that it is adapted to readily cause car wheels to pass across a rail, and that after being secured in position the cam roll is automatic in its operation.

Changes in the form, proportion and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

What I claim is—

1. A car replacer comprising a body, and a roll journaled on the body and adapted to receive the flange of a wheel and to turn in its bearings, substantially as and for the purpose described.

2. A car replacer comprising a body, and a

roll journaled on the body and provided with an eccentric wheel-groove, whereby the weight of a wheel will turn the roll, substantially as and for the purpose described.

5 3. A car replacer comprising a body having an inclined upper face and provided with a longitudinal groove, a roll journaled on the body and provided with an eccentric groove, and a curved plate secured to the roll, sub-
10 stantially as described.

4. A car replacer comprising a body having a recess provided at the ends with bearings and at one side with a shoulder forming a seat, a roll journaled in the bearings and provided
15 at one side with an eccentrically arranged wheel receiving groove and provided at the other side with a shoulder, and a curved plate extending from the upper end of the roll, substantially as described.

20 5. A car replacer comprising a body having its upper end tapered and curved to fit against a rail, a clip secured to the bottom of the body

and adapted to extend beneath the rail and provided with a hook to engage the bottom flange thereof, and a roll having an eccentric
25 wheel-receiving groove, substantially as described.

6. A car replacer comprising a body having a recess provided at the ends with bearings and at one side with a shoulder forming a seat, 30 a roll having its lower end substantially semi-cylindrical and tapering toward its upper end and bulged laterally forming a curved inclined upper surface having a groove, said roll having its upper end eccentrically journaled, and
35 a curved plate extending from the upper end of the roll, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

HENRY SAUNDERS.

Witnesses:

JOHN W. TAYLOR,
M. P. LAFRANCE.