

A. J. CHAPEL.
CAR REPLACING DEVICE.

Patented Jan. 5, 1897.

Fig. 2. A perspective view of the machine in operation. It shows the material being processed by the rollers. The mechanism for adjusting the pressure is visible, including the screw and the lever. The material is shown being fed into the machine and emerging from the rollers.

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UNITED STATES PATENT OFFICE.

ADONIRAM JUDSON CHAPEL, OF ARKANSAS CITY, KANSAS.

CAR-REPLACING DEVICE.

SPECIFICATION forming part of Letters Patent No. 574,662, dated January 5, 1897.

Application filed July 6, 1896. Serial No. 598,264. (Model.)

To all whom it may concern:

Be it known that I, ADONIRAM JUDSON CHAPEL, a citizen of the United States, residing at Arkansas City, in the county of Cowley and State of Kansas, have invented certain new and useful Improvements in Car-Replacers; and I do hereby declare that the following is a specification.

This invention relates to certain new and useful improvements in car-replacers of that class designed to be placed by the rail and upon which the wheels are to be run to guide the same onto the rail.

It has for its objects, among others, to provide a simple and cheap construction in which abrupt inclines are avoided as well as sluicing cars over toward the rail, and to make the inclines so that the engine can be run over the same by its own steam. The device is in two parts, light yet of sufficient strength, the male portion being of sufficient height to carry the flange of the wheel over the rail, and a diagonal ridge is provided to engage the flange of the wheel to send it down the incline in case the beveled descent of the two parts does not throw the wheel over to its place.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claim.

The invention in this instance resides in the peculiarities of construction, as will be hereinafter more particularly described, and then pointed out in the claim.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of the male portion of the device. Fig. 2 is a vertical cross-section on the line 2 2 of Fig. 1, showing the device in position with relation to the rail. Fig. 3 is a plan on a smaller scale, showing the male and female portions in their operative positions. Fig. 4 is a vertical cross-section on the line 4 4 of Fig. 1, looking in the direction of the arrow.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates a block of wood

of the required dimensions, having the upper face of its main portion inclined toward the edge designed to be arranged next to the rail, as seen at *a* in Fig. 2, while the inclined portion A' also has its upper face beveled toward the same edge, as seen at *a'*. This is an essential feature of the construction, as it tends to throw the car-wheel toward the rail in its upward ascent. B is the covering or housing for this block. It is preferably of steel and comprises the top portion *b*, which is beveled toward the edge of the device that is arranged next to the rail, as shown, while the sides *b'* may extend for any desired distance, so as to embrace the opposite sides of the block, and when they extend below the bottom edge of the block they are serrated or toothed, as seen at *b''*, so as to afford a better hold in the cross-ties, as will be readily understood. This housing extends the full length of the block, and its upper face is beveled to correspond with the bevel of the upper face of the block, both upon the main and inclined portions thereof. The housing is formed upon one edge with the downwardly-extending flange C to engage over the upper edge of the rail, as indicated in Fig. 2.

D is a single integral ridge upon the upper face of the body portion of the housing and extends entirely across the same, as seen best in Fig. 1. It has its opposite ends oppositely beveled, as seen in said Fig. 1, and serves to start the wheel to sliding when the upper face of the replacer is covered with snow or frozen mud.

E is the female portion of the device. It has an inclined end portion D', similar to the inclined end portion of the male portion, as indicated in Fig. 3. It is applied inside the rail, as shown in said Fig. 3.

The operation will be readily understood. The bevel of the inclined end portion toward the rail aids materially in throwing the car-wheel inward toward the rail as the wheel moves upward on the replacer.

What is claimed as new is—

As an improved article of manufacture, the car-replacer herein described, consisting of the block having integral inclined portion at one end with the upper face of the body portion and inclined portion beveled toward one edge, and the metallic housing in a single

piece having inclined end portion, a flange
beyond one edge of the block to engage over
a rail and a single integral ridge on its upper
face extending diagonally entirely across the
5 body portion of the housing and having its
opposite ends oppositely beveled, the upper
face of the housing over the body portion
and inclined end of the block being corre-
spondingly beveled toward the flanged edge

of the housing, all substantially as shown 10
and described.

In testimony whereof I have hereunto set
my hand in the presence of two witnesses.

A. JUDSON CHAPEL.

Witnesses:

J. S. CREE,

E. P. REYNOLDS.