## G. I. KRIEGER. CAR REPLACER.

(Application filed Sept. 20, 1901.)

(No Model.) Wilnesses George Z. Kriegers Inventor

## United States Patent Office.

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## CAR-REPLACER.

SPECIFICATION forming part of Letters Patent No. 713,456, dated November 11, 1902.

Application filed September 20, 1901. Serial No. 75,869. (No model.)

To all whom it may concern:

Beitknown that I, GEORGE IRVIN KRIEGER, a citizen of the United States, residing at Harrisburg, in the county of Dauphin and State 5 of Pennsylvania, have invented a new and useful Car-Replacer, of which the following is a

specification.

This invention relates to car-replacers; and the object of the present construction is to 10 provide a simple and effective device of this class for application to either the inside or outside of ordinary track-rails or between one of said rails and a switch-rail, so that derailed wheels adjacent main-track rails, as well as 15 those located between a main-track rail and a switch-track rail, may be readily replaced on either of said rails, as may be desired, and also to provide a replacer wherein the wheel, moving thereover in the act of replacement, 20 is caused to slip or slide downwardly toward the rail on which it is desired to effect the replacement.

The invention consists in the construction and arrangement of the several parts, which 25 will be more fully hereinafter described and

claimed.

In the drawings, Figure 1 is a plan view of a portion of a main-track rail and a switchrail, showing the improved replacer applied 30 in operative relation thereto. Fig. 2 is a similar view of a portion of a main-track rail, showing the improved replacer applied in operative position to one side thereof. Fig. 3 is a detail perspective view of the improved re-35 placer. Fig. 4 is a bottom plan view of the same. Fig. 5 is an end elevation thereof. Fig. 6 is a transverse vertical section taken through the center of the replacer.

Similar numerals of reference are employed 40 to indicate corresponding parts in the several

views.

The numeral 1 designates the replacer, which is constructed of suitable metal and having dimensions of such proportions as to 45 adapt the replacer for its intended use. In some instances the dimensions of the replacer may be varied; but in resorting to such change the structural features will not be in the least varied. The outer side 2 of the replacer, or 50 the side opposite that over which the wheel moves in the operation of replacement, is inclined downwardly from the apex or highest | part of the replacer will be located between

| central point of the improved device and from opposite ribs 3, which extend diagonally inward from the outer corners and merge into 55 each other at the said highest central point, the said ribs gradually decreasing in vertical extent from the opposite terminals at the ends of the replacer toward the said central point to thereby have the greatest vertical extent 60 of the ribs at the ends of the said device. At a suitable distance inwardly from the ribs 3 short auxiliary ribs 4 are located and extend longitudinally of the replacer, the said ribs 4 being heavier or of greater width than the 65 ribs 3 to offer a greater resistance to the carwheels, which bear thereagainst and pass upwardly through the guide-channels 5, formed between the ribs 3 and 4, said channels being gradually inclined upwardly to the highest 70 central point 6 of the replacer. Between the inner sides of the ribs 4 and the inner edge 7 of the improved device inclined guide-tables 8 are formed, which also gradually incline toward the highest point 6 of the replacer, and 75 from the said highest point downwardly toward the intermediate portion of the inner sides 7 a downwardly-inclined surface 9 is provided for the purpose of causing the wheels when arriving at said point to slip downwardly 80 toward the rail on which it is desired that replacement be made and which will be governed by the particular application of the replacer in relation to the track-rails. Extending longitudinally of the end portion of the 85 replacer, directly under the ribs 4, are railslots 10, which will be of such depth and width as to easily fit over a track-rail and permit the lower side of the replacer to rest against the ties or other rail-supporting means below. 90 The replacer is partially hollow, as shown by Fig. 4, and in order to assist in holding it in applied position and prevent slipping thereof during the replacing operation pairs of spur or spike ribs 11 are formed on the under side, 95 adjacent to the opposite ends, and are preferably extended transversely of the replacer to be pushed or driven downwardly into or catch upon ties or other rail-supporting means.

As before indicated, the improved replacer 100 is adapted to be applied to the inner or outer sides of main-track rails or over one of the latter and adjacent to a switch-rail, so that

the main-track rail and switch-rail, as shown by Fig. 1, or the improved device can be disposed over a switch-rail and have a portion thereof located between the latter and an adjacent track-rail. The provision of the guide-channels 5 and the tables 8 makes it possible to move a derailed wheel upwardly over the improved device from either end and at different points, so that a derailed wheel occupying a position close to or at a considerable

opying a position close to or at a considerable distance from the rail on which it is desired to be placed may be readily positioned in normal condition on the rail. The improved device may be similarly used at either side of a main track and some consulty well in the

of a main track and serve equally well in the operation of replacement. It is preferred that the improved device be constructed of pressed steel; but it can be made of cast or malleable iron, if desired, the degree of hard-

ness of the material from which it is formed being governed by the work it is to perform. The essential feature of this improved device is the sidewise replacing movement of the derailed wheel, and as soon as the wheel arrives at the highest point 6 or adjacent to

the latter a sidewise slipping action of the wheel will immediately ensue.

The improved replacer will be found very useful in view of its capability as to general application and use between a main-track rail and a switch-rail, and, furthermore, it can be cheaply produced and formed as set

forth at one operation.

Having thus described the invention, what

35 is claimed as new is—

1. A car-replacer consisting of a body adapted to fit over a rail and arranged to extend from opposite sides thereof and having outer and intermediate ribs which define upwardly-inclined guide-channels 5 and tables 8, both

the tables 8 and the channels 5 running toward the highest central point from which transversely extends an inclined surface toward one side of the replacer to cause a wheel moving over the replacer when arriving at said 45 highest point to slip sidewise toward the rail on which it is desired to place the wheel, sub-

stantially as described.

2. A car-replacer consisting of a body having slots in the under side at the ends to fit 50 over a rail, and upper outer and intermediate ribs which define upwardly-inclined guidechannels and tables, both the tables and the channels running toward the highest central point from which transversely extends an inclined surface toward one side of the replacer to cause a wheel moving over the replacer when arriving at said highest point to slip sidewise toward the rail on which it is desired to place the wheel.

3. A car-replacer consisting of a body having under slots to fit over a rail and dispose a portion of the replacer between two adjacent rails, the central part of the body interposed between the rails having a downwardly- 65 inclined upper sliding surface toward the one side edge adjacent to one of the rails, the opposite ends of the body having distinctly-defined upwardly-inclined guide-channels and tables, and the lower part of the body near 70 the ends having means for preventing the replacer from being moved after it is applied.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in

the presence of two witnesses.

GEORGE IRVIN KRIEGER.

Witnesses:

R. E. FITZGERALD, R. H. NELSON.