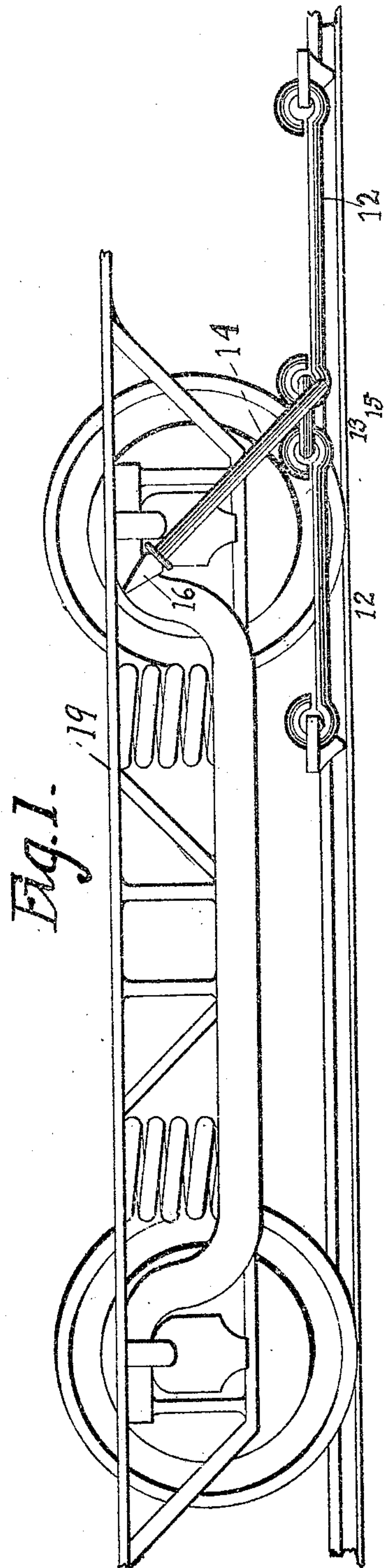
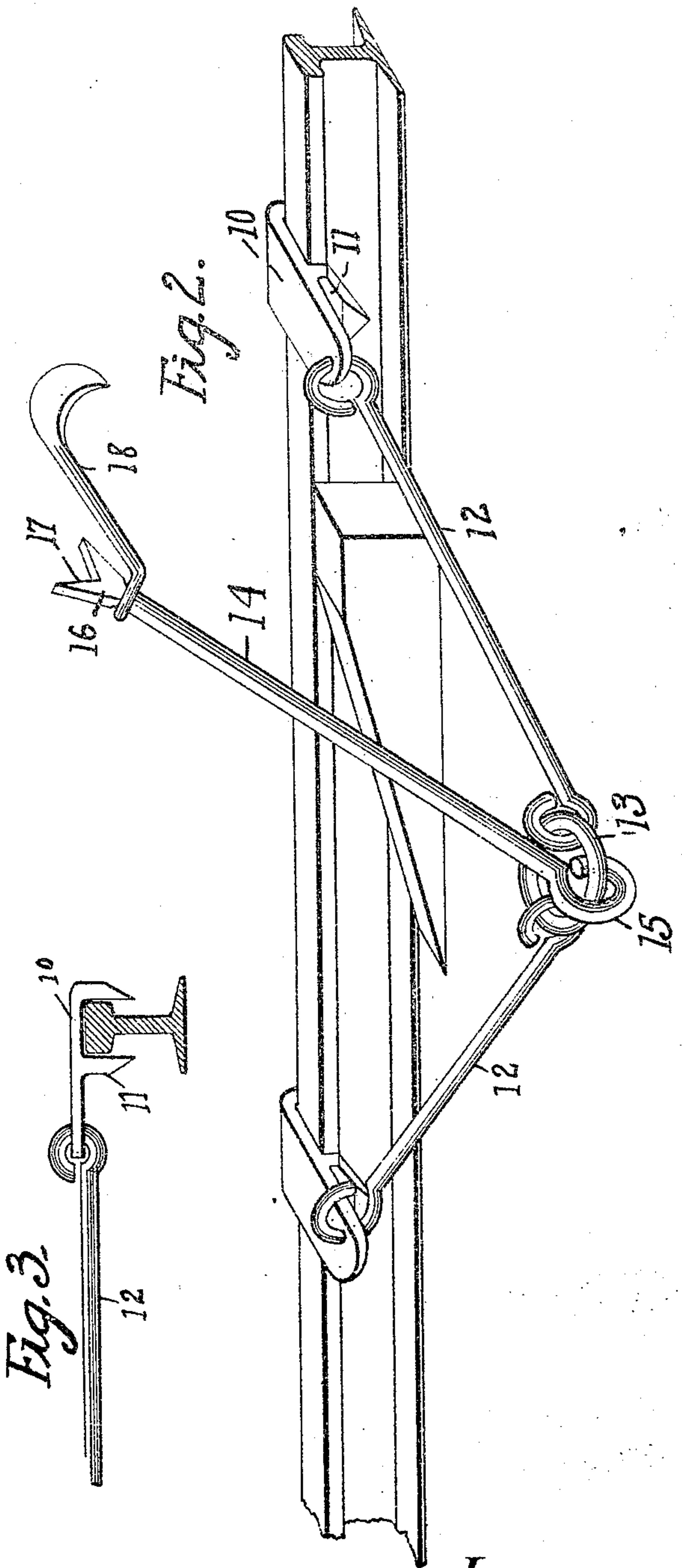


955,375.

Patented Apr. 19, 1910.



Witnesses  
 W. A. Loftus  
 A. S. Hague



Inventor  
 F. J. Wood.  
 by Dring & Landis



# UNITED STATES PATENT OFFICE.

FRANZ J. WOOD, OF DES MOINES, IOWA.

CAR-REPLACER.

955,375.

Specification of Letters Patent.

Patented Apr. 19, 1910.

Application filed April 26, 1909. Serial No. 492,310.

*To all whom it may concern:*

Be it known that I, FRANZ J. WOOD, a citizen of the United States, residing at Des Moines, in the county of Polk and State of Iowa, have invented a certain new and useful Car-Replacer, of which the following is a specification.

The object of my invention is to provide a car replacing lever and a fulcrum device for the lever so arranged that it may be securely fixed to a railway rail in such a manner that the fulcrum point may be adjusted quickly and easily to any desired position relative to either side of the rail and also to provide a device of this kind that will form an electrical connection between a car truck and a rail when the wheels of the truck are out of contact with the rail.

My invention consists in the construction, arrangement, and combination of the various parts of the device whereby the objects contemplated are attained as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which—

Figure 1 shows a side elevation of a car truck and a railway rail and my improved replacing device applied to the rail and in engagement with a truck as required in practical use. Fig. 2 shows a perspective view of a portion of a rail and my improved car replacing device applied thereto, and Fig. 3 shows a sectional view of a rail and a portion of one of the gripping devices applied thereto.

Referring to the accompanying drawings, the device is composed of two gripping members, each of which is preferably formed complete of a single piece of material and comprises a top plate 10 with two downwardly extended lugs 11, said lugs being preferably tapered toward their lower ends so that they can be readily and easily driven into a pavement which is laid close to the top of a rail with the said lugs on opposite sides of the rail. Pivoted to each of said gripping devices is a brace bar 12 and said brace bars are both connected to a metal ring 13.

The car replacing lever comprises a body portion 14 having a loop 15 at one end engaging the ring 13 and also having at its other end a head 16 with a V-shaped notch 17 therein, and slidingly mounted upon the lever is a hook 18.

The reference numeral 19 is used to indi-

cate a car truck which is illustrated only for the purpose of showing the manner in which the replacing device is applied to a truck.

In most instances it is necessary to use an inclined wheel guide in connection with the device embodying my invention for the purpose of guiding the wheel over the rail when the truck is forced upwardly and toward the rail by means of my improvement. The wheel guide device forms no part of my present invention and similar ones are now in general use.

In practical use, the operator places the two gripping devices upon a rail spaced apart from each other. In some instances, paving is laid close to the tops of the rails and, for this reason, I preferably point the lower ends of the downwardly projecting lugs of the rail gripping devices so that they can readily and easily be driven into the paving adjacent to the rail. By moving the two rail gripping devices close together, the fulcrum of the replacing lever is moved outwardly away from the rail, and by separating the gripping devices a considerable distance, the fulcrum of the lever is moved closer to the rail; then the replacing lever is placed in position against a part of the car truck to be placed on the track, as clearly shown in Fig. 1. Then, when the car is moved forwardly, the car replacing lever will move through an arc inwardly toward the rail and upwardly, which will have the effect of both raising the part of the truck to which it is attached and moving it laterally toward the rail. In some instances, where a car has moved to a considerable distance away from the nearest rail, the replacing lever is extended outwardly in a direction away from the rail, that is to say, opposite from the direction shown in Fig. 2, and the hook 18 thereon is attached to the truck so that as the car is moved forwardly, the device will tend to draw the car toward the rail, as the hook 18 will move in a segment centered at the ring 13.

One of the desirable features of my invention is that when the device is used in connection with a car operated by electricity, the replacing device will form a good electrical conductor between the truck and the rail so that the car may be operated by its own power.

The rail gripping devices are held against longitudinal movement on the rail on account of the fact that the lugs 11 bind on the



rail when the rods 12 are pulled toward each other.

I claim as my invention:

- 5 1. An improved car replacer, comprising two rail gripping devices, a rod pivoted to each and a car replacing lever pivotally connected to said rods.
- 10 2. An improved car replacer, comprising two rail gripping devices, each formed of a top member, and two downwardly projecting lugs, a rod pivoted to one end of each of said top members, a ring connecting said rods together and a car replacing lever pivoted to said ring.
- 15 3. An improved car replacer, comprising two rail gripping devices, a rod pivoted to each and a car replacing lever pivotally connected to said rods, said car replacing lever having a head on one end provided with a V-shaped notch.
- 20 4. An improved car replacer, comprising

two rail gripping devices, a rod pivoted to each and a car replacing lever pivotally connected to said rods, and a hook pivoted to the car replacing lever.

5. A car replacer, comprising two rail gripping devices, each consisting of a top portion and two downwardly projecting lugs to engage opposite sides of a rail, said lugs being pointed at their lower ends, a rod pivoted to one end of each of said top portions, a ring connected to the other ends of said rods, a car replacing lever pivoted to said ring and having a head formed with a V-shaped notch, and a hook pivotally and slid- 35 ingly mounted on the lever, for the purposes stated.

Des Moines, Iowa, March 26, 1909.

FRANZ J. WOOD.

Witnesses:

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