

(No Model.)

J. RIPBERGER.  
CAR STARTER.

No. 493,736.

Patented Mar. 21, 1893.

FIG. 1.

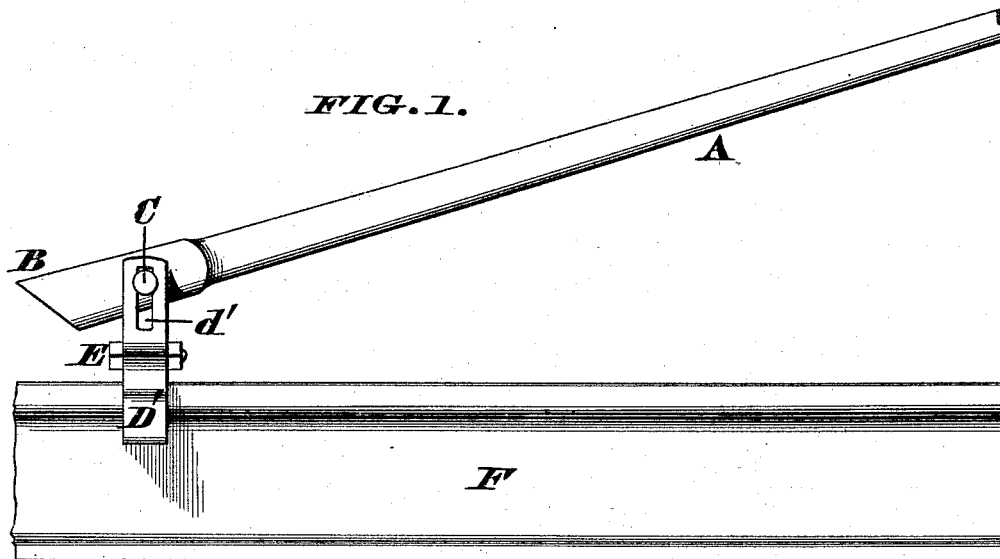


FIG. 2.

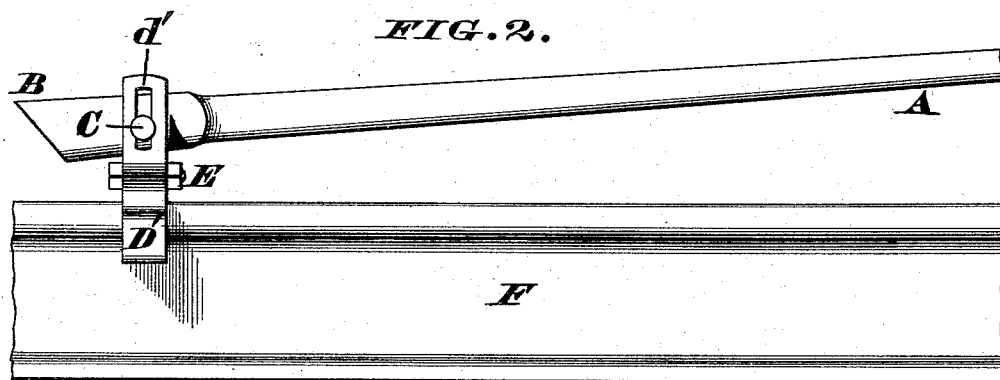


FIG. 3.

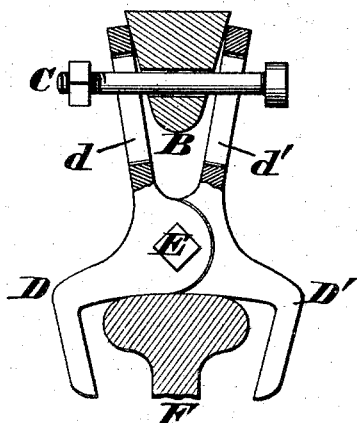
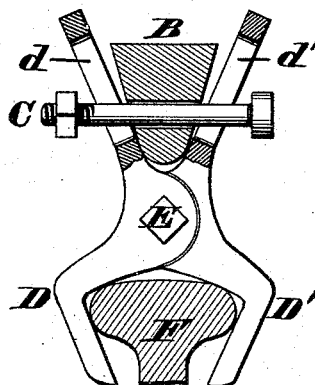


FIG. 4.



Attest.  
Arthur Schmidt  
Harry Byrne

Inventor.  
J. Ripberger.  
By James R. Lohman.  
Att'y.

# UNITED STATES PATENT OFFICE.

JACOB RIPBERGER, OF NEWPORT, KENTUCKY, ASSIGNOR OF ONE-HALF  
TO CHARLES MANNE, OF CINCINNATI, OHIO.

## CAR-STARTER.

SPECIFICATION forming part of Letters Patent No. 493,736, dated March 21, 1893.

Application filed November 30, 1892. Serial No. 453,648. (No model.)

*To all whom it may concern:*

Be it known that I, JACOB RIPBERGER, a citizen of the United States, residing at Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Car-Starters; and I do hereby declare the following to be a full, clear, and exact description of the invention, reference being had to the annexed drawings, which form part of this specification.

This invention relates to those lever-implements which are employed for shifting railway-cars a limited distance along the tracks, and my improvement comprises a special combination of lever-toe and jaw-bearings for the same, the arrangement of these parts being such as to cause said bearings to grip a rail-head very firmly the instant said toe is brought into action against the periphery of a car-wheel, as hereinafter more fully described.

In the annexed drawings, Figure 1 is a side elevation showing the position the various parts of my car-starter assume when first applied to a rail-head. Fig. 2 is a similar elevation, but showing the position these parts assume when the lever is brought into action. Fig. 3 is an enlarged vertical section through the jaw bearing when in the position seen in Fig. 1. Fig. 4 is a similar section through said bearing when in the position seen in Fig. 2.

A represents a lever of sufficient length to afford the desired power, and B is the toe of the same, which toe must be properly tempered to enable it to act against the periphery of a car-wheel. The exact length of this toe portion is immaterial, but its transverse shape is important, it being considerably wider at top than at bottom to enable said toe to have a wedging action, and its lower edge being, usually, rounded, as more clearly seen in Figs. 3 and 4. Furthermore, this toe is pierced transversely to admit a bolt or pin C, which serves as a pivot for the lever, the opposite extremities of pin being adapted to play freely within vertical slots *d, d'*, of a pair of jaws D, D', which latter are jointed together at E,

and their lower ends are of any shape that will enable them to grasp the head of a rail F.

To use my car-starter, the jaws D, D', are first applied to the head of rail F, in the manner seen in Fig. 3, and lever A B is raised until its pivot C approaches the upper ends of slots *d, d'*, this portion of the jaws being now in contact with the opposite sides of the toe B. Consequently, the lower, or unslotted portions of the jaws are distended. The toe is then brought to bear against the tread or periphery of a car-wheel, and power is applied to the lever proper, A, and as said lever is forced down, the inclined sides of said toe gradually wedge against the upper portions of jaws D, D', the result being the closing of their lower portions against the rail head, as seen in Fig. 4. This closure is readily effected because the pivot C descends the slots *d, d'*, as the toe B is forced down. Therefore, the jaws are immovably clamped to the rail-head, and, the cars can be started without danger of forcing said jaws back on the rail. It will thus be seen that the jaw bearing D D', is held in place by the application of power to the lever, and it will also be apparent that this bearing becomes more secure in exact proportion to the weight thrown on said lever. Finally, any suitable spring or springs may be added to keep the jaws normally closed against the inclined sides of toe B.

I claim as my invention—

The combination, in a car-starter, of the lever A, having a wedge-shaped toe B, a pair of jaws D, D', slotted vertically at *d, d'*, and pivoted to each other by a single bolt E, and a pin C that traverses said toe B and slots *d, d'* and descends within said slots when said lever is depressed, all as herein described, and for the purpose stated.

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

JACOB RIPBERGER.

Witnesses:

JAMES H. LAYMAN,  
ARTHUR MOORE.