

C. X. JOHNSON.
CAR STARTER.
APPLICATION FILED JAN. 19, 1912.

1,022,089.

Patented Apr. 2, 1912.

Fig. 1.

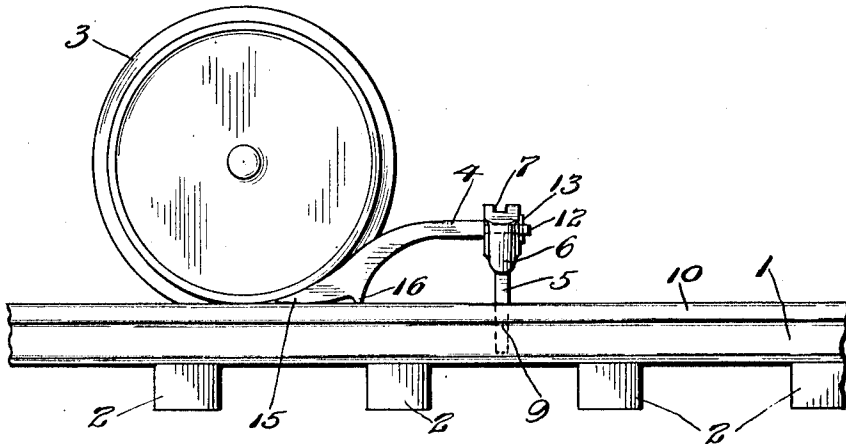


Fig. 2.

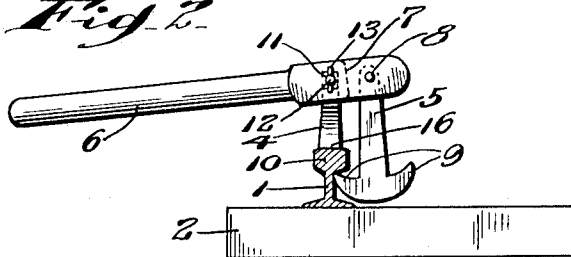
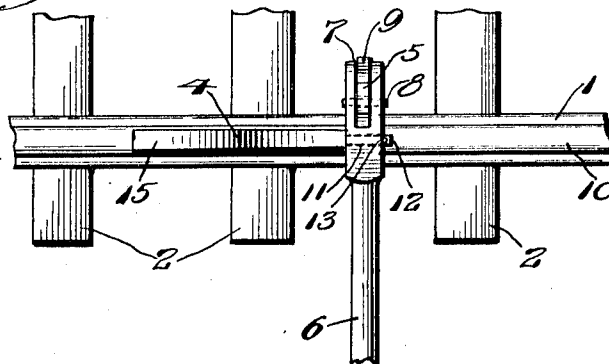


Fig. 3.



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Witnesses

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UNITED STATES PATENT OFFICE.

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CAR-STARTER.

1,022,089.

Specification of Letters Patent.

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Application filed January 19, 1912. Serial No. 672,134.

To all whom it may concern:

Be it known that I, CHARLES X. JOHNSON, a citizen of the United States, residing at Morris Run, in the county of Tioga and State of Pennsylvania, have invented certain new and useful Improvements in Car-Starters, of which the following is a specification.

My invention relates to improvements in car starters, the object of the invention being to provide a manually operated device of this character which will be of extremely simple, inexpensive construction, and which may be easily operated and exert a great leverage under a car wheel to start the car.

A further object is to provide a device of this character which may be used from either side of the track by shifting the several parts of the device, and which may be quickly placed in position and operated to start the car.

With these and other objects in view, the invention consists in certain novel features of construction and combinations and arrangements of parts, as will be more fully hereinafter described and pointed out in the claims.

In the accompanying drawings: Figure 1, is a view in side elevation illustrating my improvements. Fig. 2, is a view in cross section through the rail, and Fig. 3, is a plan view.

1, represents a rail of an ordinary track supported upon ties 2, and 3 is an ordinary car wheel mounted on rail 1.

My improved device comprises three separable members, namely, a fulcrum bar 4, an anchor piece 5, and a lever 6. The lever 6 is bifurcated at one end as shown at 7, and in this bifurcated end of the lever 6, the upper end of the anchor piece 5 is pivotally secured by means of a pin 8. The lower end of the anchor piece 5 is made with laterally and upwardly projecting curved lugs 9, which are adapted to engage under the head 10 of the rail 1.

Lever 6 is provided near the fulcrum point of the anchor piece with a transverse opening 11, through which the restricted end 12 of the fulcrum bar 4 projects, and this restricted end of the fulcrum bar is secured in the lever by means of a cross pin 13. By reducing the end of the bar, shoulders are formed which bear against the lever, and when the pin 13 is in place, the bar is held against longitudinal movement in the

lever. The fulcrum bar 4 curves midway between its ends, so that while the upper portion is approximately horizontal, the free end extends downwardly, and is shaped somewhat as a foot with the extended toe portion 15 projecting under the wheel tread, and the heel portion 16 constituting a fulcrum, both toe and heel portion resting upon the rail 1, and extending under the wheel as far as possible.

When the parts are in the position shown, a downward pressure on the free end of lever 6 will cause the bar 14 to be moved, and move the wheel sufficiently to start it. By reason of the structure above described, a great leverage is had upon the bar 4, as the anchor piece 5 prevents any upward movement of the inner end of the lever, and the downward pressure on the lever causes the bar to rock, and insures the starting of the car. By reversing the bar 14 in the lever, so that it projects to the other side, this lever may be used on the opposite side of the track, and hence the parts are reversible, so that they may be used at the most convenient point.

Various slight changes might be made in the general form and arrangement of parts described without departing from my invention, and hence I do not limit myself to the precise details set forth, but consider myself at liberty to make such changes and alterations as fairly fall within the spirit and scope of the appended claims.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent is:

1. A device of the character described, comprising a lever, an anchor piece pivotally connected to the lever, a lug on the anchor piece adapted to engage a fixed point, and a fulcrum bar positioned at right angles to the lever and connected thereto, substantially as described.

2. A device of the character described, comprising a lever, an anchor piece pivotally connected to the lever, a lug on the anchor piece adapted to engage a fixed point, a fulcrum bar positioned at right angles to the lever and connected thereto, said fulcrum bar at its free end of general foot shape having an extended toe portion adapted to be positioned under a wheel, and a heel portion to fulcrum on the rail, substantially as described.

3. A device of the character described,

comprising a lever having a bifurcated end and a transverse opening, an anchor piece pivotally secured in the bifurcated end of the lever, curved lugs on the lower end of
5 said anchor piece adapted to engage under the head of a rail, a curved fulcrum bar having a reduced end projecting through the opening in the lever, and a pin positioned through the bar and securing it in the lever,
10 substantially as described.

4. A device of the character described, comprising a lever having a bifurcated end and a transverse opening, an anchor piece pivotally secured in the bifurcated end of
15 the lever, curved lugs on the lower end of said anchor piece adapted to engage under

the head of a rail, a curved fulcrum bar having a reduced end projecting through the opening in the lever, a pin positioned through the bar and securing it in the lever, 20 and the free end of said lever of general foot shape with an extended toe portion to be projected under a wheel, and a heel portion to fulcrum on the rail, substantially as described. 25

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CHAS. X. JOHNSON.

Witnesses:

CHAS. SWENSON,

JOSEPH A. JOHNSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."