

No. 768,469.

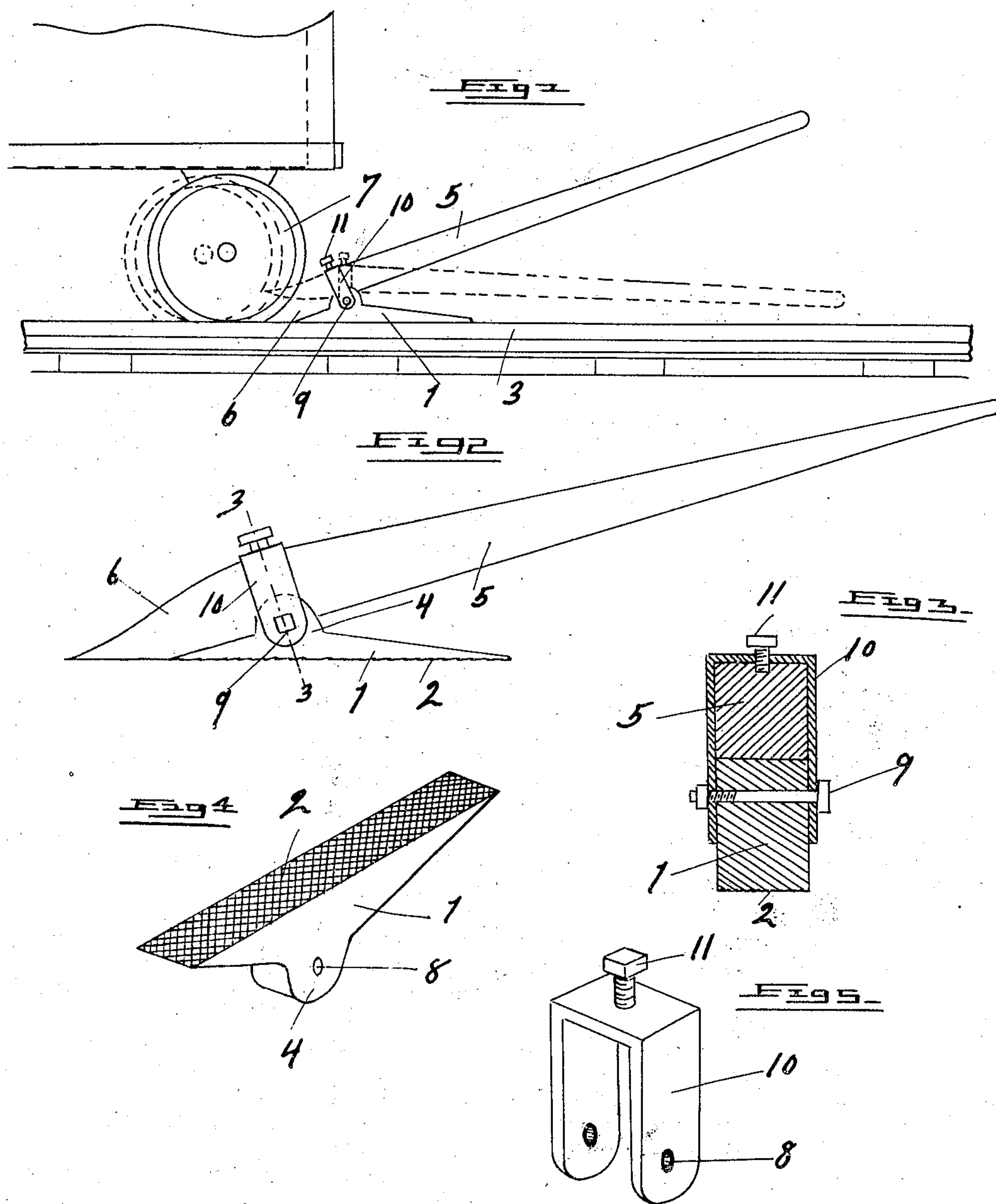
PATENTED AUG. 23, 1904.

J. S. LINDERMAN.

CAR STARTER.

APPLICATION FILED APR. 9, 1904.

NO MODEL.



Witnesses:

J. S. Fawcett.

E. B. Wright

By his Attorneys

E. S. Wheeler & Co.

Inventor

Jay S. Linderman.

UNITED STATES PATENT OFFICE.

JAY S. LINDERMAN, OF DETROIT, MICHIGAN, ASSIGNOR OF TWO-THIRDS TO ALEXANDER W. BEAL AND STANLEY B. SMITH, OF DETROIT, MICHIGAN.

CAR-STARTER.

SPECIFICATION forming part of Letters Patent No. 768,469, dated August 23, 1904.

Application filed April 9, 1904. Serial No. 202,331. (No model.)

To all whom it may concern:

Be it known that I, JAY S. LINDERMAN, a citizen of the United States, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Car-Starters; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it ap-
 10 pertains to make and use the same, reference being had to the accompanying drawings, and to the figures of reference marked thereon, which form a part of this specification.

This invention relates to a car-starter; and
 15 it consists in the construction and arrangement of parts hereinafter fully set forth, and pointed out particularly in the claims.

The object of the invention is to provide simple and efficient means for starting a car
 20 by the application of a lever to the wheel thereof wherein the arrangement is such as to prevent the bearing-block from slipping on the rail, so that the operative lever or starting-bar may be held to its work, at the same
 25 time providing a fulcrum for said lever which affords at all times a direct downward bearing upon the fulcrum-block.

The above object is attained by the structure illustrated in the accompanying drawings, in which—

Figure 1 is a view showing the application of my invention. Fig. 2 is an elevation of the device. Fig. 3 is a transverse section as
 35 on line 3 3 of Fig. 2. Fig. 4 is a perspective view of the fulcrum-block looking at the under face thereof. Fig. 5 is a perspective view of the yoke by means of which the lever is connected to said block.

Referring to the characters of reference, 1
 40 designates the fulcrum-block, having a serrated under face 2, which rests upon the rail 3 of the track. Formed upon the upper face of said block is a rounded fulcrum 4, adapted to fit a corresponding recess in the under edge
 45 of the lever 5, which is thereby fulcrumed upon said block and is provided with a curved forward end 6, adapted to engage under the tread of the wheel 7 of a car.

Passing centrally through the rounded fulcrum 4 of the block 1 is an aperture 8, which
 50 is concentric with the arc of said fulcrum and is adapted to receive a transverse bolt 9, which passes therethrough and through the lower ends of the yoke 10, which sits astride of the
 55 lever 5 and embraces between its lower ends the fulcrum 4. Passing through the top of the yoke is a set-screw 11, which is threaded therein and which enters the upper edge of
 60 the lever 5, whereby the yoke is held in position with respect to said lever and provision is made for taking up any play or lost motion
 between the lever and fulcrum-block through the operation of said set-screw.

It will be noted that because of the rounded fulcrum 4, which fits in a corresponding socket
 65 in the under side of the lever, the actual bearing-point of the lever upon said fulcrum is always in line with its vertical axis. Thereby a direct downward pressure is applied to the
 70 fulcrum-block, which obviates its slipping upon the rail. As the lever swings the point of bearing of the fulcrum shifts to accommodate any change in the position of the lever.

In the operation of this device the forward end of the lever is placed under the tread of
 75 the car-wheel with the fulcrum-block 1 resting upon the track and power applied to the outer end of said lever to turn the wheel and start the car.

Having thus fully set forth my invention, 80
 what I claim as new, and desire to secure by Letters Patent, is—

1. In a car-starter, the combination of the fulcrum-block adapted to rest upon the rail and having a rounded fulcrum projecting from
 85 its upper face, of a lever provided with a rounded socket coinciding with said fulcrum and in which said fulcrum is received, and a strap attached to the lever and pivoted to the
 90 fulcrum concentric with the arc thereof for connecting the lever and fulcrum-plate.

2. In a car-starter, the combination of the fulcrum-plate adapted to rest upon the rail and having a rounded upwardly-extending
 95 fulcrum, a lever recessed to receive said fulcrum and adapted to move thereon, said lever

having a curved forward end adapted to engage a car-wheel, and a strap embracing the lever for movably connecting said lever and fulcrum-plate.

- 5 3. In a car-starter, the combination of the fulcrum-plate having a serrated under face adapted to rest upon the rail and having a rounded upwardly-projecting fulcrum, a lever having a rounded socket to receive said ful-
10 crum and a curved forward end to engage the car-wheel, a yoke astride of said lever and

embracing said fulcrum, the ends of said yoke being pivoted to the fulcrum concentric with the arc thereof, and a set-screw passing through the yoke and engaging the lever. 15

In testimony whereof I sign this specification in the presence of two witnesses.

JAY S. LINDERMAN.

Witnesses:

E. S. WHEELER,
I. G. HOWLETT.