

E. P. PHELPS.
Car-Pusher.

No. 214,187.

Patented April 8, 1879.

Fig. 1.

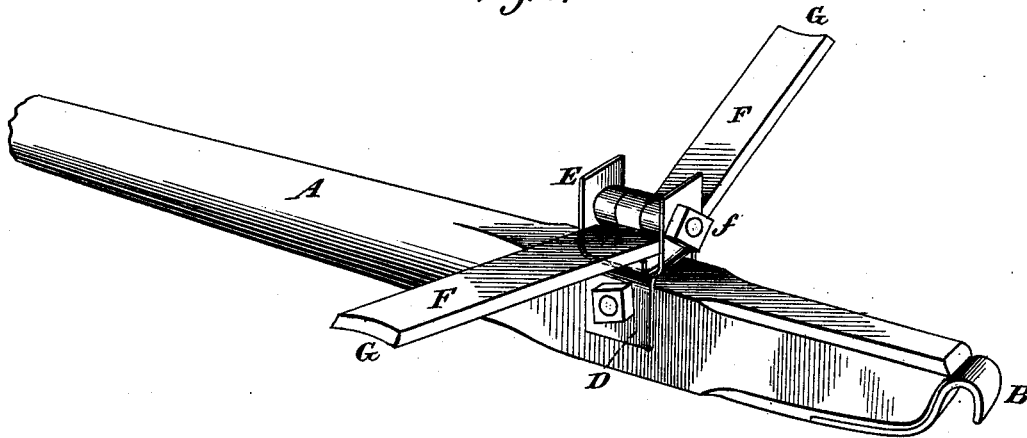
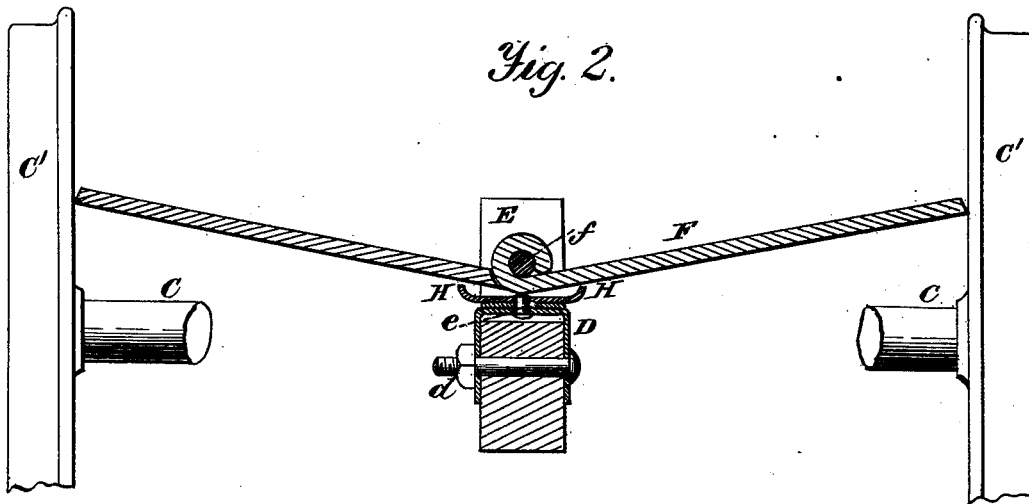


Fig. 2.



Witnesses.
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IMPROVEMENT IN CAR-PUSHERS.

Specification forming part of Letters Patent No. **214,187**, dated April 8, 1879; application filed January 20, 1879.

To all whom it may concern:

Be it known that I, EDWARD P. PHELPS, of Scranton, in the county of Greene and State of Iowa, have invented certain new and useful Improvements in Car-Pushers; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is a perspective view of my invention. Fig. 2 is a section of the same.

The same letters are used to refer to identical parts of the drawings.

My invention relates to that class of devices used for starting railroad-cars by hand; and it consists in a lever provided with a hook for engaging the car-axle, and arms for engaging the flanges or peripheries of the car-wheels *C'* in such a manner as to cause them to revolve as the lever is raised, and return for another engagement as the lever is lowered, as will hereinafter more fully appear.

A is the hand-lever, to the operative end of which is securely attached the metal hook *B*, which is sufficiently large to freely clasp the car-axle *C*. There is also a fulcrum, *D*, attached to the lever by the bolt *d*; the hook *B*, as attached to the lever, is curved downward so as to embrace the upper surface of the axle, this fulcrum is also located upon the top of the lever, and consists of a clasp or clevis-formed yoke, held in free position by the bolt *d*.

There is also a piece of flanged metal attached to the upper part of this fulcrum *D* by means of a bolt, *e*. The flanges or ears *E*, extending upward, are perforated to receive the bolt *f*. Upon this bolt are hinged the two arms *F*, which are of equal length, in aggregate a little more than the width between the flanges of the car-wheels *C'*. Their outer ends are formed concave, as shown at *G*, and beveled so as to present a chisel-like edge,

which will, in the operation, rigidly engage with the flanges of the car-wheels.

To prevent the arms *F* from falling down below their proper position for operation while the instrument is being applied for use, I have interposed the flanged piece *H* beneath the arms *F* at the joint, which is also held in position by the bolt *e*.

The operation of my invention is as follows: Engage the hook *B* upon the car-axle; lower the handle, and the arms *F* will slide down the flanges—the distance from the center of the hook to the center of the fulcrum being, as near as may be, one-half of the diameter of the car-wheels. Then, by raising the handle end of the lever, the arms *F*, which are thus brought to nearly a horizontal position, rigidly engage the flanges of the wheels, and cause them to revolve at each repetition of the motion a distance determined by the motion given to the arms *F*.

I am aware that heretofore levers provided with hooks for engaging the axle, and cams and similar devices for engaging with the flange of a car-wheel, have been devised; also various pushing-jacks and car-starting devices; but

What I claim as new, and for which I desire Letters Patent, is—

1. The arms *F*, formed with the concave beveled ends *G*, mounted upon a lever, for starting cars, substantially as described.

2. In an instrument for starting railroad-cars, the lever *A*, provided with the hook *B*, in combination with the compound fulcrum *D* and *E* and the arms *F*, constructed and operating together as and for the purposes substantially as set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

E. P. PHELPS.

Witnesses:

M. O. ROBERTSON,
H. O. BEATTY.