

(No Model.)

J. P. ROBERTSON.
CAR PROPELLER.

No. 509,491.

Patented Nov. 28, 1893.

Fig. 2

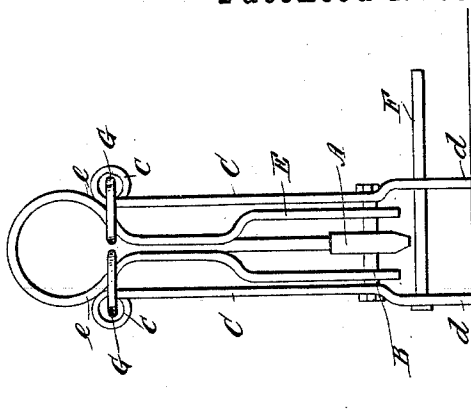
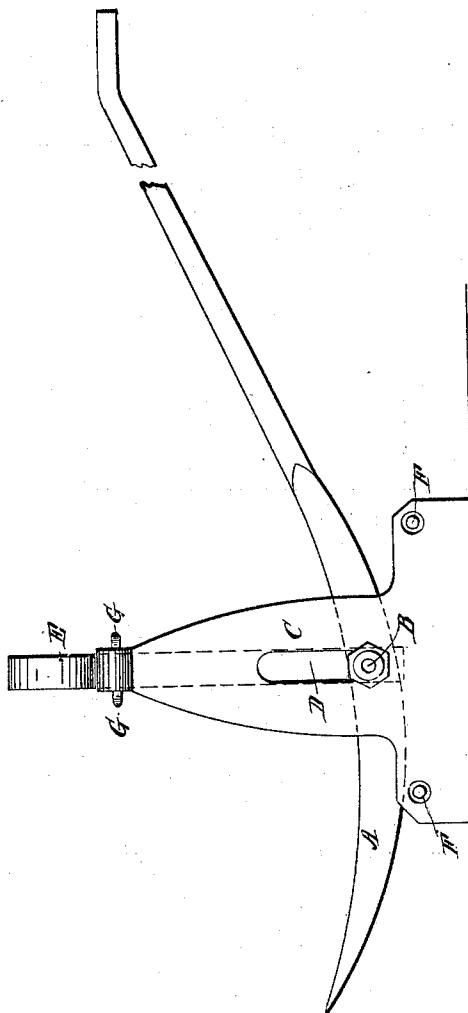


Fig. 3



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES PALMER ROBERTSON, OF LONDON, ENGLAND.

CAR-PROPELLER.

SPECIFICATION forming part of Letters Patent No. 509,491, dated November 28, 1893.

Application filed June 13, 1892. Serial No. 436,633. (No model.)

To all whom it may concern:

Be it known that I, JAMES PALMER ROBERTSON, a subject of the Queen of Great Britain, residing at 19 Garlick Hill, London, England, have invented a certain new and useful Improvement in Car-Propellers, of which the following is a specification.

The object of this invention is to provide a cheaply constructed instrument for use in starting railroad trucks and other vehicles upon railways and thus facilitate the handling of such vehicles in shunting operations.

To this end the instrument consists of a lever, the fulcrum of which is supported by or from a doubled plate the upper part of which is bent outwardly to act as a wedge lying between two jaws or clamp plates, the upper ends of which are connected by links to the outwardly bent parts of the aforesaid wedge plate, and the lower ends of which are adapted to grasp the rail on which rests the respective car which is to be moved, so that when the instrument is inserted with the point of the lever between the tire of the wheel of the car, and the rail, downward pressure on the opposite end of the lever will draw down the wedge between the jaws, separating their upper ends and causing their lower ends to grasp the rail and thus provide a stationary fulcrum for the lever in the action of propelling the car. By shifting the lever along the rail after the receding car, the lifting of the lever disengages the clamp so that the engagement and disengagement of the latter automatically follow the movement of the lever.

The annexed drawings illustrate a shunting lever or "pinch bar" constructed according to this invention, Figure 1 being a side elevation, Fig. 2 a front or end elevation.

A is the lever of which the handle is shown broken away. It is fulcrumed on the bolt B which connects the side jaws C C moving in slots D D therein. The bolt B carries also the curved plate or wedge piece E the upper part of which is shaped or made in any suitable way to possess the divergement faces *ee* which by the drawing down of the bolt B due to the pressure of the lever slide against and press apart the upper ends *ee* of the plates or jaws C C and thus rocking them under the head and nut respectively of the bolt B bring their lower edges *dd* together to grip the head of the rail lying between them.

F F are pins fastened in the one jaw C and projecting through holes in the other jaw C. These pins form a rest for the instrument on the upper face of the rail. G G are rings or links connecting the ends of the jaws C C with the wedge piece or plate E.

I claim—

A car propeller or pinch bar having a lever A, a pivotal cross bolt B therefor, side plates C C with slots D D therein, for reception of said cross bolt, a bent plate E having its ends connected to said cross bolt and having its upper part bent laterally outward to form diverging wedge faces *ee* bearing on the upper ends of said plates C C, and links G G connecting said plates C C, respectively, to plate E, the whole substantially as set forth.

In witness whereof I have signed this specification in presence of two witnesses.

JAMES PALMER ROBERTSON.

Witnesses:

R. HADDAN,

A. E. MELHUISH.