T. MURGATROYD.

Car-Starter.

No. 168,172. Patented Sept. 28, 1875.

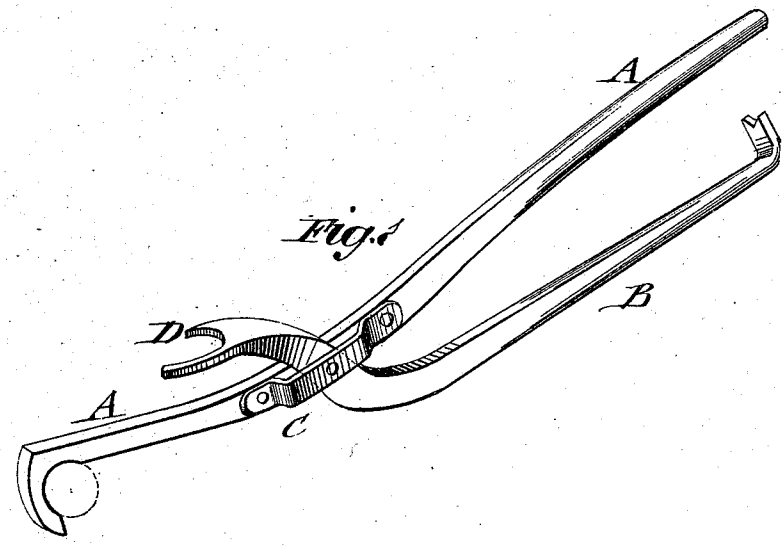

Fig. 1.

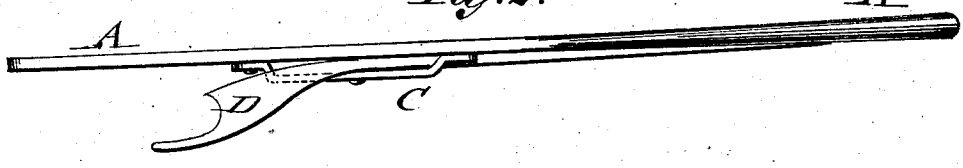

Fig. 2.

WITNESSES:

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UNITED STATES PATENT OFFICE.

THOMAS MURGATROYD, OF ST. JOSEPH, MISSOURI, ASSIGNOR TO HIMSELF AND FERDINAND SCHOEN, OF SAME PLACE.

IMPROVEMENT IN CAR-STARTERS.

Specification forming part of Letters Patent No. **168,172**, dated September 28, 1875; application filed August 21, 1875.

To all whom it may concern:

Be it known that I, THOMAS MURGATROYD, of St. Joseph, Buchanan county, Missouri, have invented a new and Improved Car-Starter, of which the following is a specification:

Figure 1 represents a perspective view of my improved car-starter, and Fig. 2 a top view of the same.

Similar letters of reference indicate corresponding parts.

My invention relates to an improved car-starter that is quickly applied to axle and wheel, and moves the car by being lifted.

The invention consists of a main lever with front hook fitting on the axle, in connection with a pivoted lever with forked end or claw that bears tightly on the flange of the car-wheel to move the same.

In the drawing, A represents the main lever, that fits, by its curved or hook-shaped front end, on the axle of the car-wheels. A second lever, B, is pivoted to the main lever at suitable distance from the end of the same, and guided by a strong guide-band, C, along the same. The pivoted lever B is curved with its front end slightly to the side, and made in the shape of a forked claw, D, with sharp biting-edge as shown in the drawing. The claw D is placed on the flange of the car-wheel when its lever is lifted, so that the edge of the claw bites into the flange of the car-wheel and forces the same upward. The greater the pressure exerted by the lifting of the levers on the axle and car-wheel the tighter will the claw take hold of the flange and move thereby the car, whether the edge of the claw is sharp or dulled by use. Thus a car may be readily started by the use of a simple, durable, and strong instrument, which accomplishes its work in a quick and reliable manner.

I am aware of the existence of a car jack or mover which comprises a hooked lever engaging with the car-axle and an adjustable or sliding clamp-block adapted to engage with the flange and rim of the wheel.

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

The combination of the pair of pivoted levers A B, provided, respectively, with a hooked end and a claw, D, as and for the purpose set forth.

THOMAS MURGATROYD.

Witnesses:

F. H. STUPPY,

A. SALTZMAN.