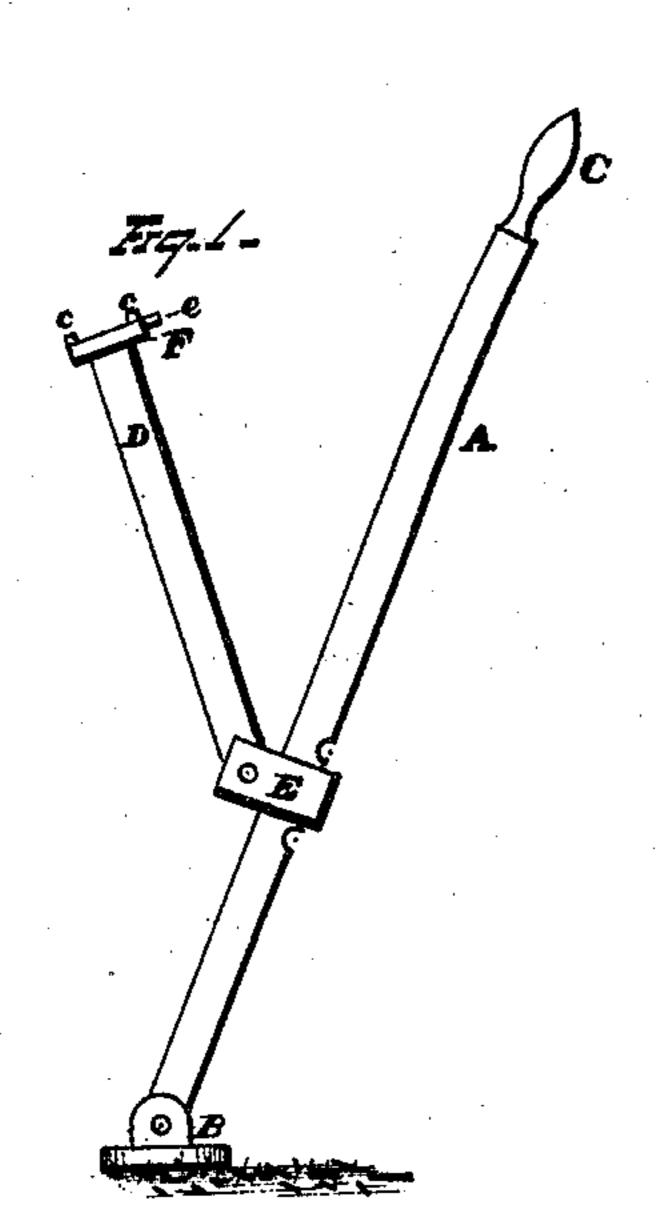
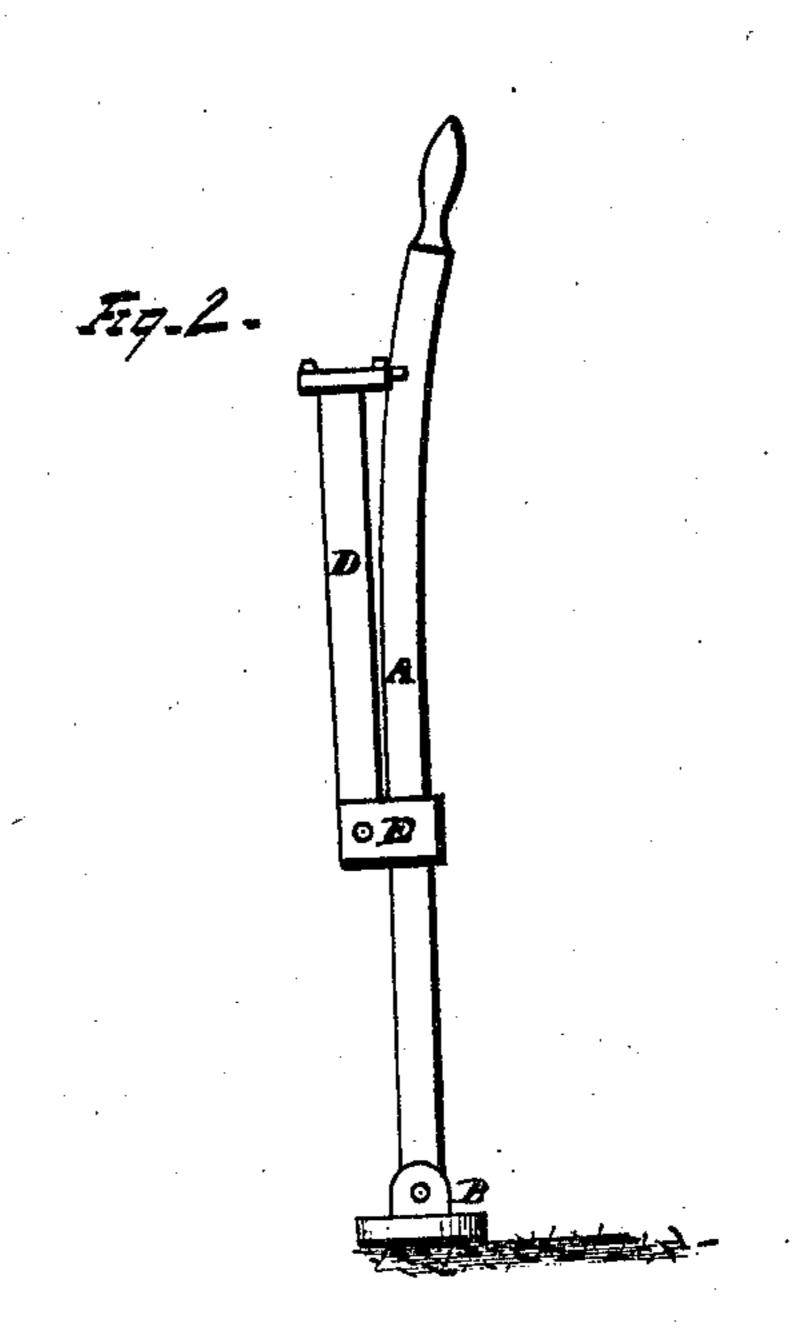
E. S. HOLLISTER.

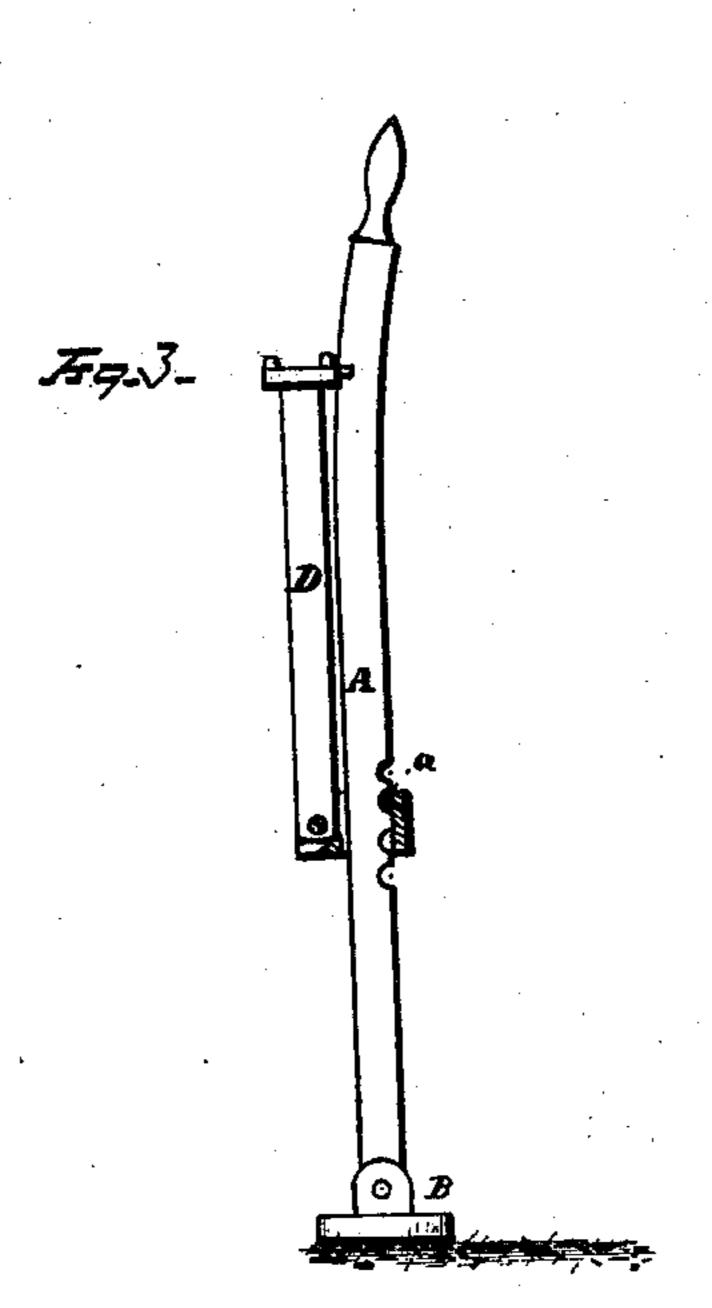
WAGON-JACK.

No. 177,514.

Patented May 16, 1876.







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UNITED STATES PATENT OFFICE.

ELISHA S. HOLLISTER, OF BRISTOL, CONNECTICUT.

IMPROVEMENT IN WAGON-JACKS.

Specification forming part of Letters Patent No. 177,514, dated May 16, 1876; application filed May 1, 1876.

To all whom it may concern:

Be it known that I, E. S. Hollister, of Bristol, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Wagon-Jacks; and I do hereby 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 pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates an improved wagon-

jack.

Figure 1 is a side elevation of my improved jack in position to raise the axle of a vehicle. Fig. 2 shows the jack in position for supporting the axle. Fig. 3 is a vertical section of the adjustable fulcrum-block and that portion of

the standard constituting a rack-bar.

My invention consists, first, in a wagon-jack, the combination, with a long lever or standard, of a short lever pivoted to an adjustable fulcrum-block; second, in a wagon-jack, the combination with a long lever, a portion of which is formed as a rack-bar, of a short lever, pivoted to a fulcrum-block, adjustable on the rack of the long lever; third, in a wagon-jack, the short lever connected with the long lever by means of a slide formed with a rib or tooth in its upper portion, and its upper and lower openings of such size, relative to the rack-bar, that the slide is adjustable on the rack-bar only when turned angularly thereto; fourth, in a wagon-jack, the combination, with the long lever, of an axle-supporting plate, secured to the free end of the short lever, said a plate being provided with lugs to fit the long lever, and thereby prevent strain on the pivotal bearing of the short lever; fifth, a wagonjack, consisting of a long lever formed with a rack, and provided with a pivotal standard, a short lever having an axle-supporting plate, the two levers being adjustably connected by means of a slide.

In the drawings, A represents the long lever of the jack, the lower end of said lever being pivoted to a foot-block, B. The upper end of lever A is formed into a handle, C, which is curved slightly, so that it may be kept clear of the axle, and be readily grasped by the

hand in any position. D is the short lever, and is pivoted to a slide, E, which is formed with an open-ended slot in its upper portion, while its lower is provided with an opening of sufficient size to allow the lever A to slide freely therein. A rib or tooth, a, of the slide E engages with notches b of the lever A. By turning the slide E the tooth a is disengaged from the notch b, and the slide may be freely moved on the lever A. When the slide is returned to its original position the tooth a engages with the notch opposite the same, thereby serving to securely lock the slide to the lever at any desired height. The upper end of the short lever D is provided with an axlesupporting plate, F, having lugs c, by means of which the axle is prevented from slipping off the same. Lugs e e project from the inner end of the supporting-plate F. When the axle is raised and supported by the jack, the lugs fit the sides of the lever A, locking the levers together, thereby taking all lateral strain from the pivotal bearing of the short lever.

The operation of the jack is as follows: The pivoted foot is placed in a vertical line beneath the axle, and the long lever is then in the position shown in Fig. 1. The short lever D is then secured to the axle by its upper supporting plate, the long lever is then forced toward the axle, and the two levers form a toggle-joint, which serves to raise the axle. The long lever is locked to the lugs of the supporting-plate of the short lever, and is there retained in a secure and fixed position.

I do not limit myself to the exact construction herein shown and described, as it is obvious that other means may be devised for connecting the long and short levers in an

adjustable manner.

A wagon-jack, constructed substantially as described, is of economical construction of great durability, as it is of corresponding simplicity, and it is easy of attachment in operation.

Having fully described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. In a wagon-jack, the combination, with the long lever, of an adjustable fulcrum-block

and a short lever pivoted thereto, substantially

as and for the purpose set forth.

2. In a wagon-jack, a long lever notched a portion of its length to form a rack-bar, in combination with an adjustable fulcrum, and a short lever pivoted thereto, substantially as and for the purpose set forth.

3. In a wagon-jack, an adjustable fulcrumblock, provided with a rib or tooth, and formed with an opening through the same decreasing in size from top to bottom, in combination with a short lever and the rack of a long lever, substantially as and for the purpose set forth.

4. In a wagon-jack, the short lever provided with an axle-supporting plate, having lugs

projecting therefrom to engage with the long lever, substantially as and for the purpose set forth.

5. A wagon jack, consisting of a long lever pivoted to a standard, and a short lever pivoted to a fulcrum-block adjustable on the long lever, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 28th day of

April, 1876.

ELISHA S. HOLLISTER.

In presence of— DAN. A. MILLER, A. F. ATKINS.