J. G. WINTERS.

LIFTING-JACK.

No. 192,554. Patented June 26 1877.

Fig. 1.

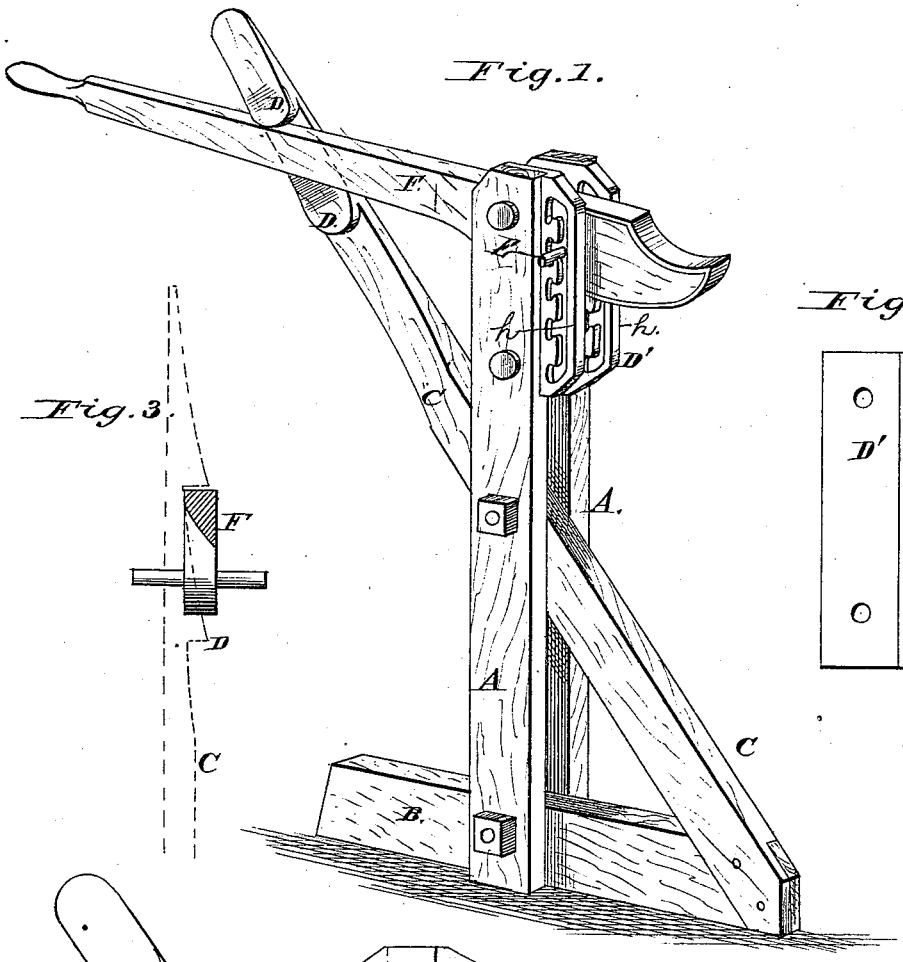
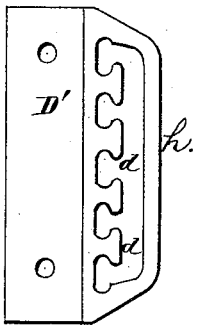


Fig. 3.

Fig. 4.



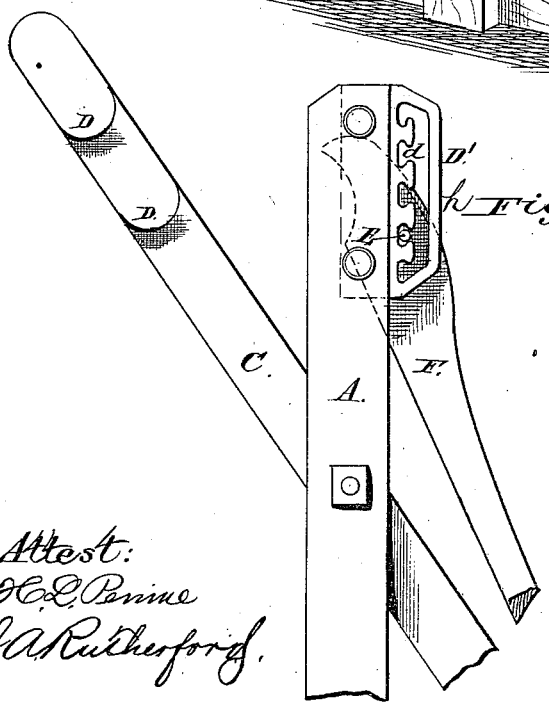


Fig. 2.

Attest:
H. L. Pennie
J. A. Rutherford.

John G. Winters.
Inventor.
By James L. Norris.
Attorney.

UNITED STATES PATENT OFFICE.

JOHN G. WINTERS, OF WARREN, OHIO.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **192,554**, dated June 26, 1877; application filed June 13, 1877.

To all whom it may concern:

Be it known that I, JOHN G. WINTERS, of Warren, in the county of Trumbull and State of Ohio, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a specification:

This invention relates to certain improvements in lifting-jacks; and has for its object to produce a cheap and efficient implement especially adapted to elevate the axles of various vehicles for removing the wheels thereof, although it may be applied to various other purposes where a lifting-jack is required.

My invention consists in two racks having a series of open bearings, and a vertical bar in front of the open bearings, which form a guide and a means of retaining the fulcrum-pin of an elastic lever within said racks, the latter being attached at or near the upper end of two separated standards, and the elastic lever operating in connection with an inclined beam having a series of catches, with which the elastic lever is adapted to engage for supporting the axle or other object in an elevated position, all of which will be more fully hereinafter set forth.

In the drawing, Figure 1 is a perspective view of my improved lifting-jack. Fig. 2 is a side elevation of a portion of the jack; Figs. 3 and 4, detached views of the jack.

In the drawing, the letter A represents two upright parallel standards, which may be constructed of wood, or other suitable material, and bolted or otherwise securely fastened to a horizontal sill or base, B, one on each side of the same.

To the front end of said sill or base is secured the lower end of an inclined beam, C, which is made of wood, metal, or other material of sufficient elasticity to allow the beam to be sprung slightly, for the purpose to be hereinafter described.

The said beam extends backward toward the rear of the apparatus, and passes between the two upright beams about midway between their two ends, and is secured firmly between said standard by means of a bolt, or otherwise.

The upper end of said inclined beam C is provided with a series of any convenient number of catches, D, for the purpose to be hereinafter explained.

To the edges of the upper ends of the vertical stands A A are secured the racks D′ D′, with a series of bearings, *d d*, for the pin E, which forms the fulcrum of the jack-lever F, allowing the position of said jack-lever to be changed for work of different heights, and these racks D′ are each constructed or provided with a vertical arm or bar, *h*, arranged in front of the open bearings, and forming vertical slots, in which the pin of the lever moves to effect its adjustment, and which arm or bar not only serves as a guide to the pin E of the lever F in its vertical movement, but also retains the pin in place and prevents the possibility of its displacement from the racks when the lever is being adjusted to one of the bearings *d*, and such is an important feature.

The operation of my improvement will be readily understood in connection with the foregoing description.

The forward end of the jack-lever is placed under the axle or other object to be elevated, the fulcrum being adjusted in the proper bearing to suit the height of the object. The axle or other object is then elevated by depressing the rear end of the jack-lever until said rear end falls below the proper catch on the beam C, which confines it in position. The beam C is made slightly elastic, so as to be sprung aside for purpose of allowing the lever to pass the catches, and the under side of the rear end is beveled off, as shown at *e* in the drawings.

The lifting-jack, as described, is simple of construction, compact, and exceedingly durable, and can be made at very little expense, and is adapted, by reason of the adjustability of its jack-lever, to a variety of purposes.

What I claim, and desire to secure by Letters Patent, is—

The racks D′, having a series of bearings, *d*, and vertical guiding and retaining arms *h*, in combination with the two separated standards A, the sill B, the inclined beam C, having notches D, and the elastic lever F, having a pin, E, arranged within the racks, and retained therein by the arm or bar *h*, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand in the presence of the subscribing witnesses.

JOHN G. WINTERS.

Witnesses:

FRANK D. MCLAIN,

D. R. GILBERT.