

No. 628,803.

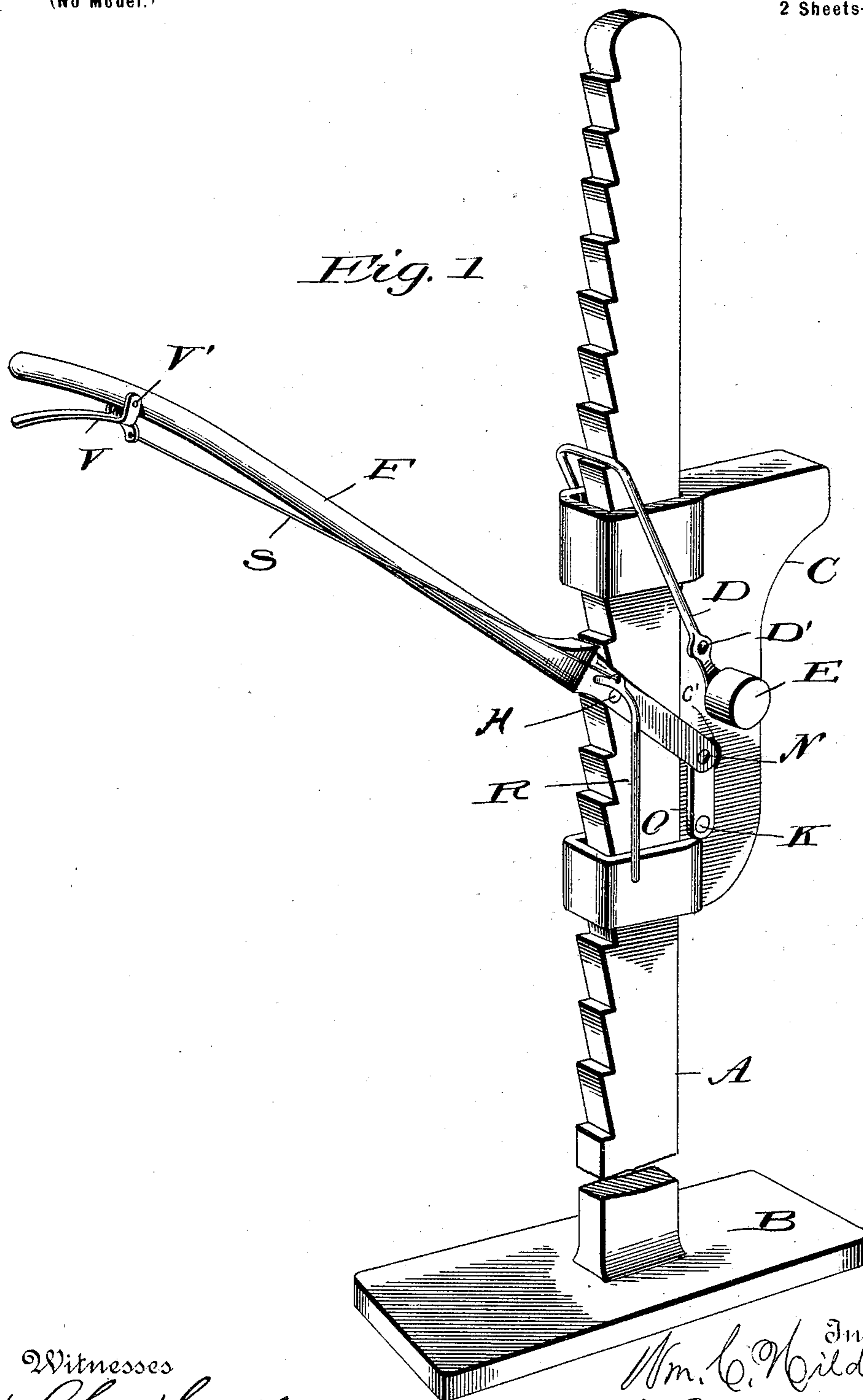
W. C. HILDEBRAND.  
LIFTING JACK.

Patented July 11, 1899.

(Application filed May 9, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses  
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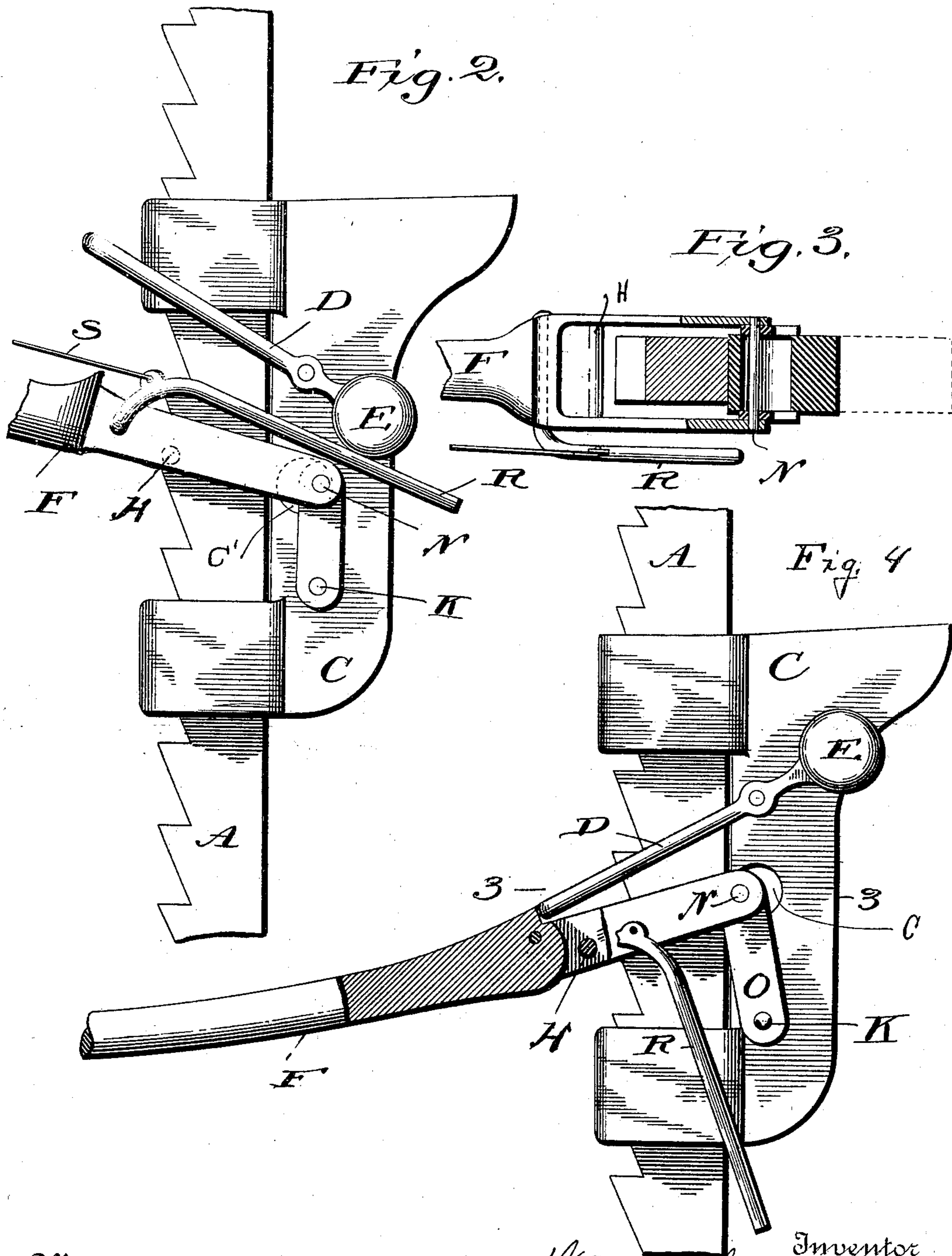
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# UNITED STATES PATENT OFFICE.

WILLIAM C. HILDEBRAND, OF GLEN ROCK, PENNSYLVANIA.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 628,803, dated July 11, 1899.

Application filed May 9, 1899. Serial No. 716,113. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM C. HILDEBRAND, a citizen of the United States, residing at Glen Rock, in the county of York and State of Pennsylvania, have invented certain new and useful Improvements in Lifting-Jacks; and I do 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 appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in lifting-jacks; and it has for its objects, among others, the provision of a simple, cheap, efficient, and durable device of this character which, though especially intended for use as a wagon or vehicle jack, may, as will be at once evident, by slight modification in detail be equally well adapted for use in any situation in which the use of a lifting-jack may be required.

A further and more immediate object of the present invention resides in the novel features of construction and in the peculiar combination, arrangement, and adaptation of parts, whereby the lifting-block may be quickly and easily released from its engagement with the standard and the said block when thus released may be permitted to fall by gravity to the base of the standard, or may, if preferred, be caused to move downward any desired distance, the downward movement of the block being at all times under the immediate control of the operator.

To these ends and to such others as the invention may pertain the same consists in the novel features of construction and combination of parts, all as more fully hereinafter described, shown in the accompanying drawings, and then specifically defined in the appended claims.

The invention is clearly illustrated in the accompanying drawings, which with the letters of reference marked thereon form a part of this specification, and in which—

Figure 1 is a perspective view of a lifting-jack embodying my invention, the parts being shown in the positions which they assume when the lifting-block has been raised and is

locked to the standard. Fig. 2 is a side elevation showing the positions assumed by the parts at the moment of releasing the loop carried by the lifting-block from its engagement with the notches upon the rack-bar of the standard. Fig. 3 is a transverse section upon the line 3 3 of Fig. 4, and Fig. 4 is a side view showing the position of the parts after the lifting-block has been released from its engagement with the standard and the block is in readiness to drop.

Reference now being had to the details of the drawings by letter, A designates the ratchet-standard, mounted on the block B, and C is the lifting-block, having two apertures which work over said ratchet-standard and serve to hold the two members together. Pivoted to said block on its opposite sides is a bail D, said bail being mounted on the pin D'. One arm of the bail is extended a short distance beyond its pivotal point and has secured thereto a weight E, the office of which weight is to normally hold the bail in engagement with the ratchet-teeth of the standard.

The operating-lever F has one end forked, between the arms of which forked end the fulcrum-pin H is mounted, and said pin is adapted to rest on the teeth of the standard while the block is being raised. The extreme ends of said arms have mounted therein the pin N, on which are pivoted the links O. These links, one on each side of the block C, are pivoted at their lower ends to the pin K, which is mounted in the raising-block C. In order to allow the ends of the arms of the forked part of the lever to have the requisite forward play while the jack is being operated, the inner face of the block C adjacent to the standard is apertured, as at C', and through this aperture is passed the pin N, to which the upper ends of said links O are pivoted.

For tripping the bail so that it will disengage with the ratchet-standard I provide the arm R, one end of which is bent at right angles and passed through the forked arms of the lever. This arm R is connected to the rod S, the other end of which rod is fastened to the handle V, which is pivoted to the lever at V'. By the provision of this arm R and connections with the handle when the latter is drawn against the handle or lever the free end of arm is thrown up against the weight

E and the bail is thrown from engagement with the teeth of the ratchet-standard, and when the bail is held from engagement with said standard and the lever slightly pulled outward a sufficient distance to allow the pin to become disengaged from the ratchet-teeth the raising-block is allowed to fall to the bottom of the standard.

In operation the lever is raised and lowered, and at each downward throw of the lever the block is raised, through its connection with the lever, by means of the links O, the lever being fulcrumed on the pin M, which rests on one of the teeth of the standard. The weighted end of the bail will cause the latter to engage in a notch and hold the purchase, and by successive actuations of the operating-lever the block may be raised to its highest limit. When it is desired to lower the block, the operator causes the weighted end of the bail to be thrown up, which will disengage the bail from the teeth of the standard, and when thus disengaged by simply pulling on the lever its fulcrum-pin will be unseated from the standard and the block will drop, as will be readily understood.

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

1. A lifting-jack, consisting of the standard, block working thereon, the operating-lever with forked end, the pin mounted between the arms of the forked end, the weighted bail pivoted to said block, the links pivoted also to said block, the pin N to which the upper ends of the links are pivoted, said pin being mounted in the arms of the forked end of the lever, said pin N having a slight play in an aperture in the block, and means for operating the bail whereby it may be disengaged from the ratchet-standard, as set forth.

2. A lifting-jack, consisting of the standard, the block working thereon, the weighted bail, the operating-lever, the fulcrum-pin carried thereby, connections between said lever and block, and the arm pivoted to the forked end of said lever, and rod and lever connections between said arm and the handle end of the lever, whereby as the arm is thrown up, the weighted end of the bail is raised, as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. HILDEBRAND.

Witnesses:

J. M. PFERFFER,  
FRANKLIN H. HOUGH.