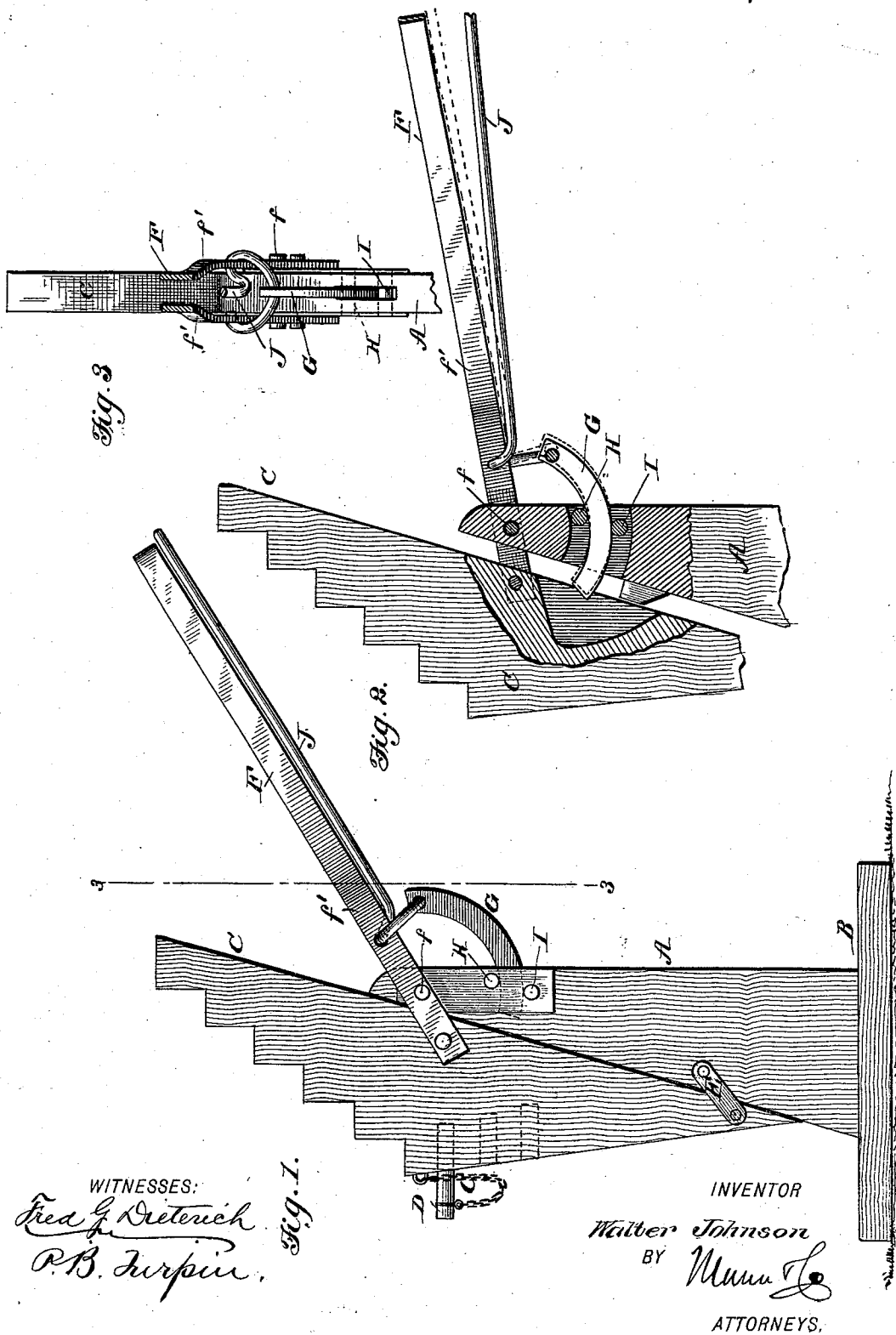


(No Model.)

W. JOHNSON.
LIFTING JACK.

No. 514,755.

Patented Feb. 13, 1894.



WITNESSES:
Fred G. Dietrich
R. B. Turpin

Fig. 1.

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UNITED STATES PATENT OFFICE.

WALTER JOHNSON, OF MIDDLETOWN, CONNECTICUT.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 514,755, dated February 13, 1894.

Application filed October 6, 1893. Serial No. 487,340. (No model.)

To all whom it may concern:

Be it known that I, WALTER JOHNSON, residing at Middletown, in the county of Middlesex and State of Connecticut, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a specification.

My invention is an improvement in lifting jacks, and consists in the special construction whereby the jack may be locked at any height to which it may be adjusted all as will hereinafter be more fully described and pointed out in the claims.

In the drawings, Figure 1 is a side view of my lifting jack; Fig. 2 is a detail side view partly in section showing the parts locked in full view and unlocked in dotted lines, and Fig. 3 is a detail sectional view on about line 3—3 of Fig. 1.

The jack comprises a standard A, mounted on a suitable base B, and the lifting piece C which may be stepped as shown and provided with the pin D and the series of holes to receive it; or may be otherwise adapted to engage under the vehicle axle. This lifting piece is connected with the standard by the link E and the hand lever F pivoted both to the standard and lifting piece as shown. By the handle lever the lifting piece may be easily raised to any desired height. To lock it at such point I provide a detent which consists of a curved bar G sliding between two binding or contact surfaces H I, in the standard and having an adjustable connection with the handle lever so that it may be set to slide between or bind such surfaces H and I as desired.

The binding surfaces are shown as arranged out of alignment with the pivot *f* of the hand lever, the lower surface I being nearer to the sliding or lifting piece than the upper surface H and these surfaces H and I are preferably afforded by pins between which the detent bar slides as shown.

In the construction shown, and, as preferred, the adjustable connection between the curved bar and the handle lever is effected by means of a lever J pivoted to the lever F and having its long arm extended adjacent to said handle lever and its short arm linked to the curved bar as shown. This lever J is pref-

erably a rod bent to form the long and short arms and also the portions which fulcrum in the arms *f' f'* of the handle lever.

In operation if the lever J be left free the handle lever F may be depressed to elevate the lifting piece but cannot be raised because the detent bar will bind between the surfaces H and I on its return movement and thus lock the detent bar against the return movement and so hold up the lifting piece and the load it supports. To release the detent it is only necessary to lift the long arm of the lever up against the handle lever which by reason of the proximity of such parts may be easily accomplished. This operation moves the detent out of binding contact with the surfaces H and I and permits it to move freely in either direction so that the lifting piece may be moved up or down as desired.

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

1. A lifting jack provided with a lifting piece, or portion, means for raising the same, a detent bar and contact surfaces between which said bar plays and binds, substantially as set forth.

2. A lifting jack comprising the standard having contact surfaces, the lifting piece, the handle lever for operating and binding in certain adjustments such lifting piece, the detent operating between said contact surfaces and an adjustable connection between said detent and the handle lever substantially as set forth.

3. The combination in a lifting jack of the standard, the lifting piece, the handle lever, a curved detent adjustably connected with said lever and binding or contact surfaces between which such detent plays and binds, substantially as and for the purposes set forth.

4. The improved lifting jack herein described comprising the standard having upper and lower contact surfaces, the handle lever, and the detent bar connected with said handle lever and arranged to play between said contact surfaces and to bind between said surfaces substantially as set forth.

5. The combination in a lifting jack with the standard having contact surfaces, the handle lever and the detent playing and bind-

ing between said contact surfaces of a lever pivoted to the handle lever and connected with the detent whereby to secure the detent adjustably to the handle lever all substantially as set forth.

5 6. In a lifting jack the combination of the standard having the opposing contact surfaces, the handle lever, the detent bar playing and engaging between the said surfaces, 10 and the lever pivoted to the handle lever and having its short arm connected with the detent bar and its long arm extended adjacent to the handle lever substantially as set forth.

15 7. The improved lifting jack herein described, consisting of the standard having

the opposing contact or binding surfaces; the lifting piece the handle lever pivoted to the standard and connected with the lifting piece, the curved detent bar playing and engaging between the contact surfaces, and the lever 20 bent from a rod of metal forming the short arm linked to the detent bar, the portions pivoted to the handle lever and the long arm extended adjacent to said handle lever all substantially as and for the purposes set forth. 25

WALTER JOHNSON.

Witnesses:

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HARRY J. ROBINSON.