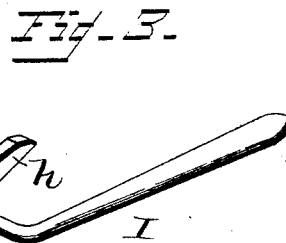
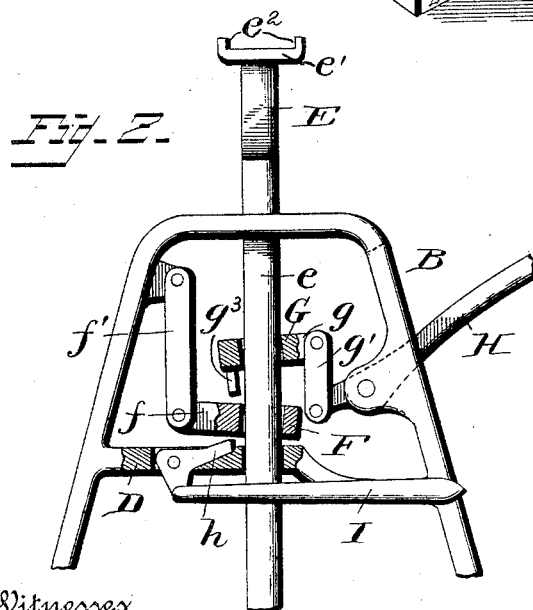
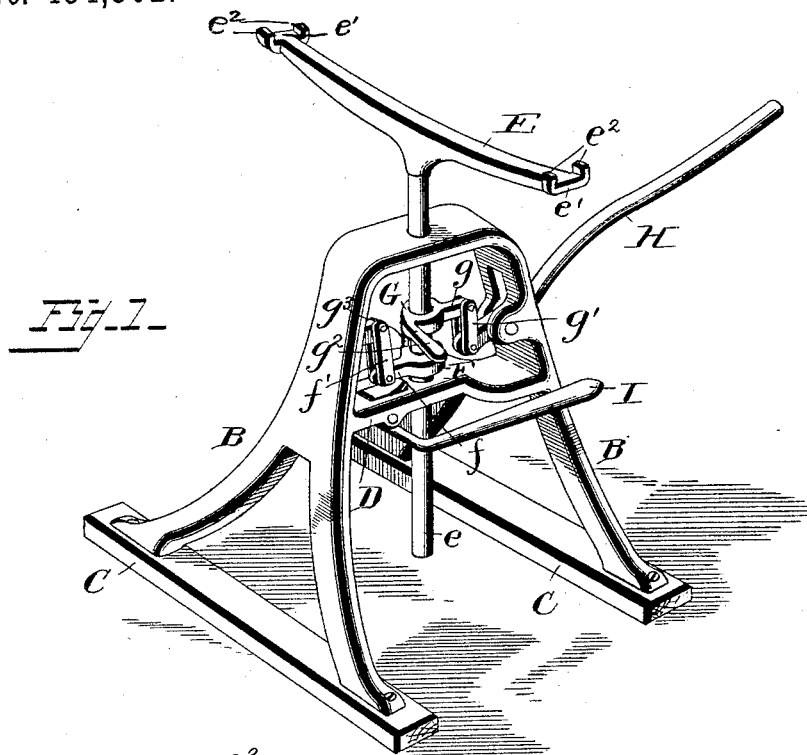


(No Model.)

J. W. SUTPHEN & D. D. BRAY.
LIFTING JACK.

No. 454,302.

Patented June 16, 1891.



Witnesses
Albert Speiden.
Van Buren Hillyard.

Inventors
John W. Sutphen.
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By their Attorney
R. A. Lacey

UNITED STATES PATENT OFFICE.

JOHN W. SUTPHEN AND DANIEL D. BRAY, OF ASBURY PARK, NEW JERSEY.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 454,302, dated June 16, 1891.

Application filed April 18, 1891. Serial No. 389,455. (No model.)

To all whom it may concern:

Be it known that we, JOHN W. SUTPHEN and DANIEL D. BRAY, citizens of the United States, residing at Asbury Park, in the county of Monmouth and State of New Jersey, have invented certain new and useful Improvements in Lifting-Jacks; and we 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 appertains to make and use the same.

This invention relates to hoisting-jacks, and aims to provide a lifting-machine which will be simple and efficient, and which can be quickly adjusted to the elevation of the axle or other object to be raised, and which can be tripped to permit the rapid descent of the said body when it is required to lower the same quickly.

The improvement consists of the novel features and the peculiar construction and combination of the parts, which will be hereinafter more fully described and claimed, and which are shown in the annexed drawings, in which—

Figure 1 is a perspective view of a hoisting-jack embodying my invention. Fig. 2 is a side view of the upper portion of the jack, on a larger scale, the grapple and the returning rings being broken away. Fig. 3 is a detail view of the releasing-lever.

The frame, which may be of any suitable design, is A-shaped, the lower ends of the diverging standards separating and being secured to wooden sills C. The horizontal portion and the cross-bar D of the frame B have coincident openings, through which passes the lifting-bar *e*, the latter having a head or cross-bar E, which is depressed between its ends, and which is provided at each end with short cross-bars *e'* and vertical extension *e²* at the ends of the said cross-bars. The grapple-rings F and G are similarly constructed, having stems *f* and *g*, by means of which and the links *f'* and *g'* they are connected at their respective supports. The link *f'* is pivoted at the end opposite that which is connected with the grapple F to a lug or arm which is projected from the frame

B. The link *g'* is pivoted at its lower end to the operating-lever H, which latter is thrust through a slot in the side of the frame and pivoted therein near its inner end. The arm *g²* projects laterally from the grapple-ring G, is adapted to be grasped by the hand to release the said grapple-ring from or cause it to bind on the lifting-bar, as required. The dependent projection *g³* on the under side of the grapple-ring G is adapted to be struck by the grapple-ring F when the latter is elevated by the releasing-lever I, which is pivoted to the cross-bar D, to release it from the elevating-bar. The releasing-lever is pivoted on the far side of the cross-bar and its outer end is bent to extend in the direction of the operating-lever H. The inner end *h* of the lever I is adapted to engage with the grapple-ring F and lift the same sufficiently to release it from the elevating-bar.

As a wagon-jack the device is placed directly under the center of the axle, and on operating the lever H the end of the vehicle will be elevated thereby, permitting the washing or greasing of two wheels without shifting the jack. The grapple-ring F holds the lifting-bar at the adjusted position while the grapple-ring G is returning to obtain a new grip on the said bar. By proper manipulation of the releasing and the operating levers the lifting-bar can be gradually lowered or by operating the lever I solely the lifting-bar can be released from both grapple-rings simultaneously and will drop at once.

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

1. In a lifting-jack, the combination, with the lifting-bar, the grapple-rings F and G, the grapple-ring G having arm *g²* and the dependent projection *g³*, of the operating-lever H and the releasing-lever I, substantially as described.

2. The hereinbefore-specified lifting-jack, comprising the A-frame B, the lifting-bar *e*, passing through coincident openings in the upper end in the cross-bar of the frame, the

grappling-rings F and G, the grappling-ring G having arm g^2 and the dependent projection g^3 , the operating-lever connected by link with the grappling-ring G, a link connecting the grappling-ring F with the frame, and the releasing-lever, substantially as and for the purpose described.

In testimony whereof we affix our signatures in presence of two witnesses.

JOHN W. SUTPHEN.
DANIEL D. BRAY.

Witnesses:

ROBERT E. DRUMMOND,
DAVID H. WYCKOFF.