

(No Model.)

E. COVERT.
LIFTING JACK.

No. 558,581.

Patented Apr. 21, 1896.

Fig. 1.

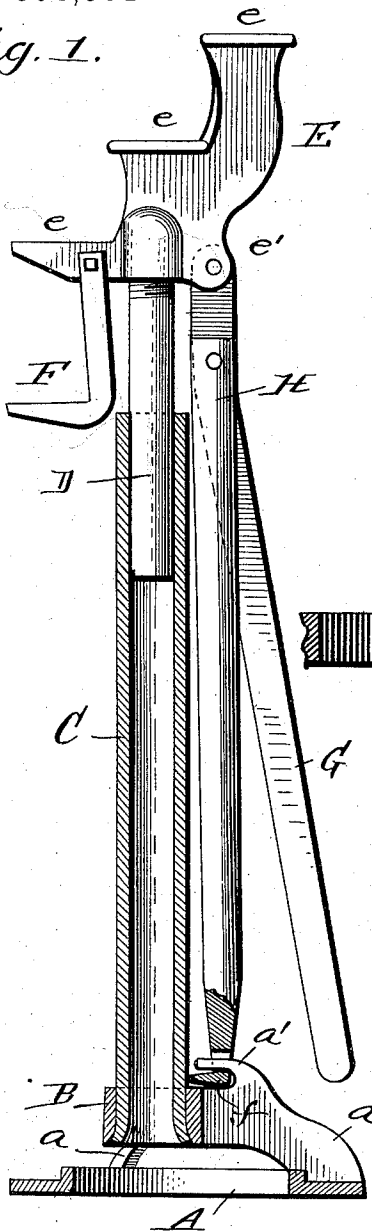


Fig. 2.

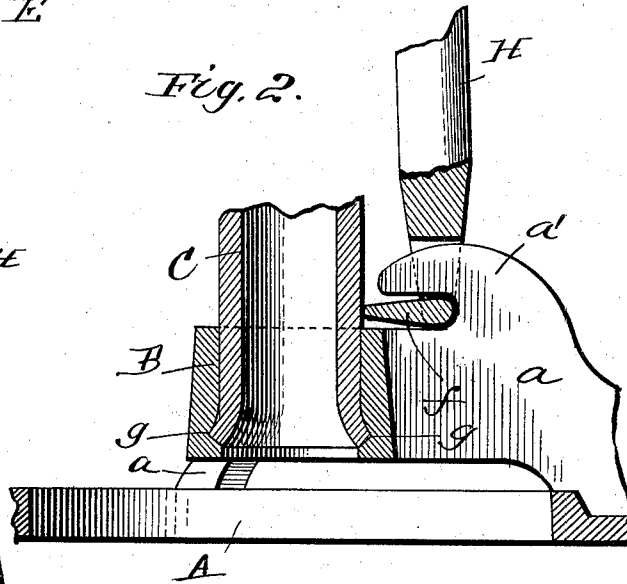
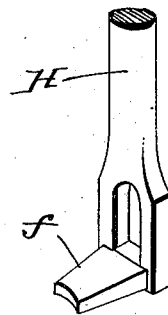


Fig. 3.



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LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 558,581, dated April 21, 1896.

Application filed November 9, 1895. Serial No. 568,466. (No model.)

To all whom it may concern:

Be it known that I, ENOCH COVERT, a citizen of the United States, residing at Farmer, in the county of Seneca and State of New York, have invented certain new and useful Improvements in Lifting-Jacks, of which the following is a specification, reference being had therein to the accompanying drawings.

The object of my invention is to provide a light, strong, cheaply-constructed, and easily-operated lifting-jack of few parts; and to this end my invention consists in the lifting-jack having the construction hereinafter specified.

In the drawings, Figure 1 is a vertical sectional view; Fig. 2, a similar view of the base portion, somewhat enlarged; and Fig. 3, a detail perspective of the lower end of the fulcrum-rod.

Referring to the drawings by letters, A designates the base of the jack, which for the sake of lightness is in the form of a ring cast with a suitable number of upwardly and inwardly curved arms *a*, that are integral with and support a short tubular socket B in a position eccentric to the ring A. Secured at its lower end within the socket B, by being made to fit the same so tightly as to require to be forced therein, is a tubular standard or upright C, preferably round in cross-section, into the upper portion of which projects the shank or bar D of the axle engaging and supporting block E, said shank and standard serving to guide the latter in its vertical movements. The block E is shown as provided with several integral rigid steps or shoulders or points of support *e* and with a separately-made one in the form of an L-shaped bar F, that is suspended from the lowest of the steps *e*.

Pivotally connected at *e'* to the block E is the end of an operating-lever G, whose fulcrum is formed by a bar H, to the upper end of which it is pivoted, and which in turn is pivoted at its lower end to one of the arms *a* of the base A, said arm *a* being provided with an integral hook-like lug *a'*, that engages an eye in the lower end of the bar.

The pivot *e'* is substantially in a line vertically with the pivot-hook *a'*, and the length of the fulcrum-bar H is such that when the block E is at its lowest position the point of pivotal connection between the lever G and

said bar will be a little above a line passing horizontally through the pivot *e'*. By depressing the outer or free end of the lever G the block E will be raised, and as soon as the pivot *e'* reaches and passes a point horizontally in line with the connection between the lever and the fulcrum-bar H the latter will be swung inward until it occupies a vertical position with the three pivotal points in a straight line and, in consequence, the block E locked in its raised position.

It will be observed that the block E is sustained from the base A entirely by the lever G and the fulcrum-bar H, no weight whatever being borne by the standard C. The described connection between the latter and the socket B is accordingly adequate for all strains that may come upon it.

That the weight upon the block E may not fall upon the pivot-hook *a'* the eye of the bar H is made sufficiently large to permit the lower end of the bar to rest upon and be supported by the arm *a* directly beneath the lug. The hook *a'*, it will be apparent, is a cheaper and otherwise more advantageous form of pivotal connection than a pin or rivet, as all drilling and riveting are avoided.

It will be seen that the hook *a'* is formed on the base outside of the bearing-point of the rod H and extends inward through the eye therein to near the standard, whereby it will be impossible to remove the fulcrum-rod H without first removing the standard. The fulcrum-rod is confined under the hook by simply securing the standard in its socket.

Formed on the lower end of the fulcrum-rod H, under the hook *a'*, is a lug *f*, which extends inwardly and touches the standard, this lug serving to keep the pivotal point of the fulcrum-rod pressed outward under the hook and away from the standard.

To lock the tubular standard in the ring-socket B, the said socket is provided with an annular groove *g* on its interior near its lower end, and the extreme lower end of the tubular standard is forced outward into said groove by reaming or otherwise, whereby the standard will be permanently and cheaply fastened in place and will not be liable to detachment by rough handling.

Having thus fully described my invention, what I claim is—

1. In a lifting-jack, the combination of a base and a standard rising therefrom, a hook carried by said base at one side of the standard and extending upward and inward to near
5 the standard, an axle-engaging part working on the standard, a lever, and a fulcrum-rod, the lower end of the fulcrum-rod having an opening formed in it at its lower end, through
10 which the hook extends, said fulcrum-rod being confined in the hook by the standard and having its pivotal bearing on the base under
the hook, substantially as described.

2. In a lifting-jack, the combination of a base, a standard rising therefrom, said base
15 having formed on it at one side of the standard a hook-like part *a'* extending inward toward the standard, a fulcrum-rod having an

eye formed in its lower end, through which the hook portion *a'* extends, and which has its pivotal point on the base under the hook, 20
said fulcrum-rod having formed on it under the hook an inwardly-extending lug terminating at or near the standard and serving to keep the fulcrum-rod away from the stand- 25
ard and out under the hook, and an axle-engaging part and a lever, substantially as described.

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

ENOCH COVERT.

Witnesses:

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