

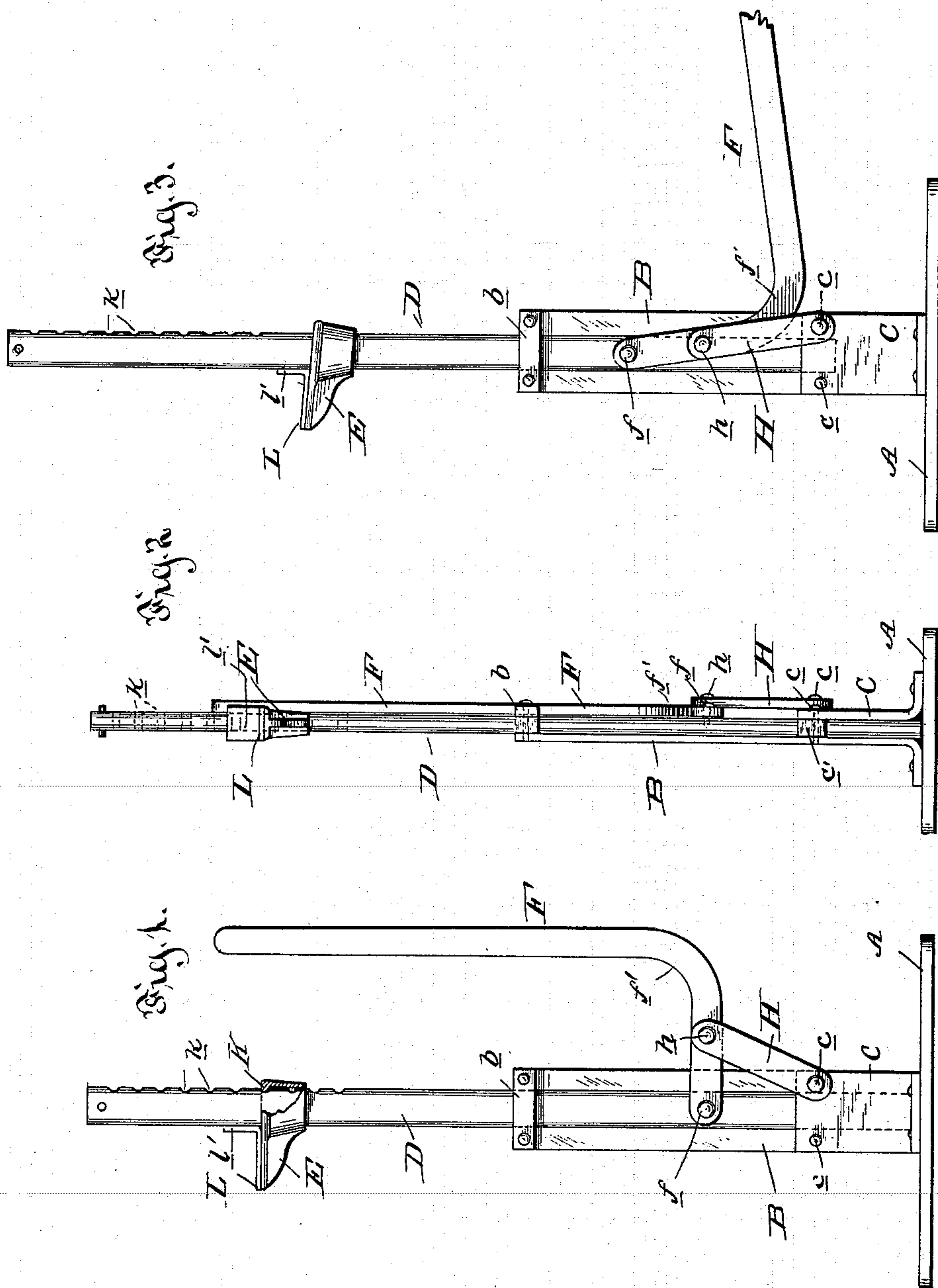
No. 615,433.

Patented Dec. 6, 1898.

J. C. COVERT.
LIFTING JACK.

(Application filed June 18, 1898.)

(No Model.)



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UNITED STATES PATENT OFFICE.

JAMES C. COVERT, OF WATERVLIET, NEW YORK.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 615,433, dated December 6, 1898.

Application filed June 18, 1898. Serial No. 683,822. (No model.)

To all whom it may concern:

Be it known that I, JAMES C. COVERT, a citizen of the United States, residing at Watervliet, in the county of Albany and State of New York, have invented certain new and useful Improvements in Lifting-Jacks; and I 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 an improvement in lifting-jacks, and it is embodied in the construction and arrangement of parts hereinafter described and claimed.

The invention relates more particularly to that type known as the "lever-lifting bar-jack," wherein a vertically-moving lifting-bar is moved by a lever, the bar carrying an adjustable rest or bracket. Of this type of jack there are many faults, and the present aim and desire of the manufacturers are to reduce the weight of the jack as much as possible, while retaining the strength and durability. With this in view the iron and steel jack is largely made and preferred. It is also desirable that the jack should be constructed of the fewest possible number of parts and to avoid the use of a multiplicity of movable members.

My invention comprehends a jack which will meet the present requirements.

In the drawings I have shown a jack embodying the invention; but I desire it understood that variations in the form and construction can be made without departing from the nature and principle of the invention.

Figure 1 is a side elevation showing the lever in raised position and parts in section. Fig. 2 is an edge elevation, and Fig. 3 is a side elevation showing the lever lowered.

In the drawings, A designates a flat plate, on the upper face of which is the standard B, having a guide clip or bracket *b* at its upper end. The base of the standard is bent outward and secured to the plate in any desirable manner. At the base of the standard B, parallel therewith and in close proximity, is a relatively short upright C, properly secured to the base-plate and rigidly secured at its upper end to the standard conveniently by rivets *c*, passing through spacing-blocks *c'*.

D designates the lifting-bar, which is fash-

ioned to closely fit and slide at its lower end between the standard and upright and which also passes through the guide-clip at the upper end of the standard. On the upper end of the lifting-bar is a bracket or block E, presently to be referred to.

Heretofore metal jacks have been made with two standards of equal length united at their tops, and the lever mechanism has been located between the standards. This necessitated wide plates for the standards, the links and levers being usually pivoted between the plates at one side, while the lifting-bar has been located between the plates at the opposite side. Such a construction necessitated a number of links and usually a double lifting-bar, increasing largely the weight of the jack, while not adding to its efficiency. To overcome these objections and to make a jack which will have the requisite strength, I pivot the lever F directly to the exposed side of the lifting-bar at *f* between the guide *b* and the end of the upright. This lever has conveniently an angle or curved short arm *f'* and is fulcrumed at *h* to the upper end of a fulcrum-link H, pivotally secured on the upper outer end of the upright conveniently by one of the rivets *c*. The link H is of such length and is so arranged that as the lever is forced down and the lifting-bar up the latter will be held in that position in a well-known manner. By so mounting the fulcrum-link and by the construction of the upright and standard as described all elongated slots are avoided, as will be readily appreciated.

The bracket or block E has a flat upper face and has the usual inclined opening in its heel through which the upper end of the lifting-bar passes, thereby forming the well-known clutch. I have found, however, that by making the rounded rib K on the upper inner and rear wall of the heel and forming corresponding depressions *k* in the edge of the lifting-bar a very effective non-slipping clutch is formed and one which can be easily adjusted up or down, differing in this respect from the angle-toothed type of lifting-bar and block.

On the upper face of the block is placed a pad L, of leather or other suitable relative soft material, its inner end *l'* being extended freely upward and rests against the edge of the lifting-bar, so that the paint or enameled

finish of the axle will not come in contact with the bar either during the adjustment of the block or after adjustment.

From the foregoing it is thought that the operation of the jack will be readily understood.

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

10 The combination with a base-plate, of a vertical standard thereon having a retaining guide-clip at its upper end, a vertically-moving lifting-bar passing through the guide and extending downward along the side of the
15 standard, a relatively short upright connected

to the base and at its upper end to the standard below the top thereof and between which and the standard the lower end of the lifting-bar is guided, a lever pivotally connected to the exposed side of the lifting-bar above the upright, and a fulcrum-link pivoted at its lower end to the outer face of the upright and at its upper end to the lever, substantially as described.

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

JAMES C. COVERT.

Witnesses:

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