

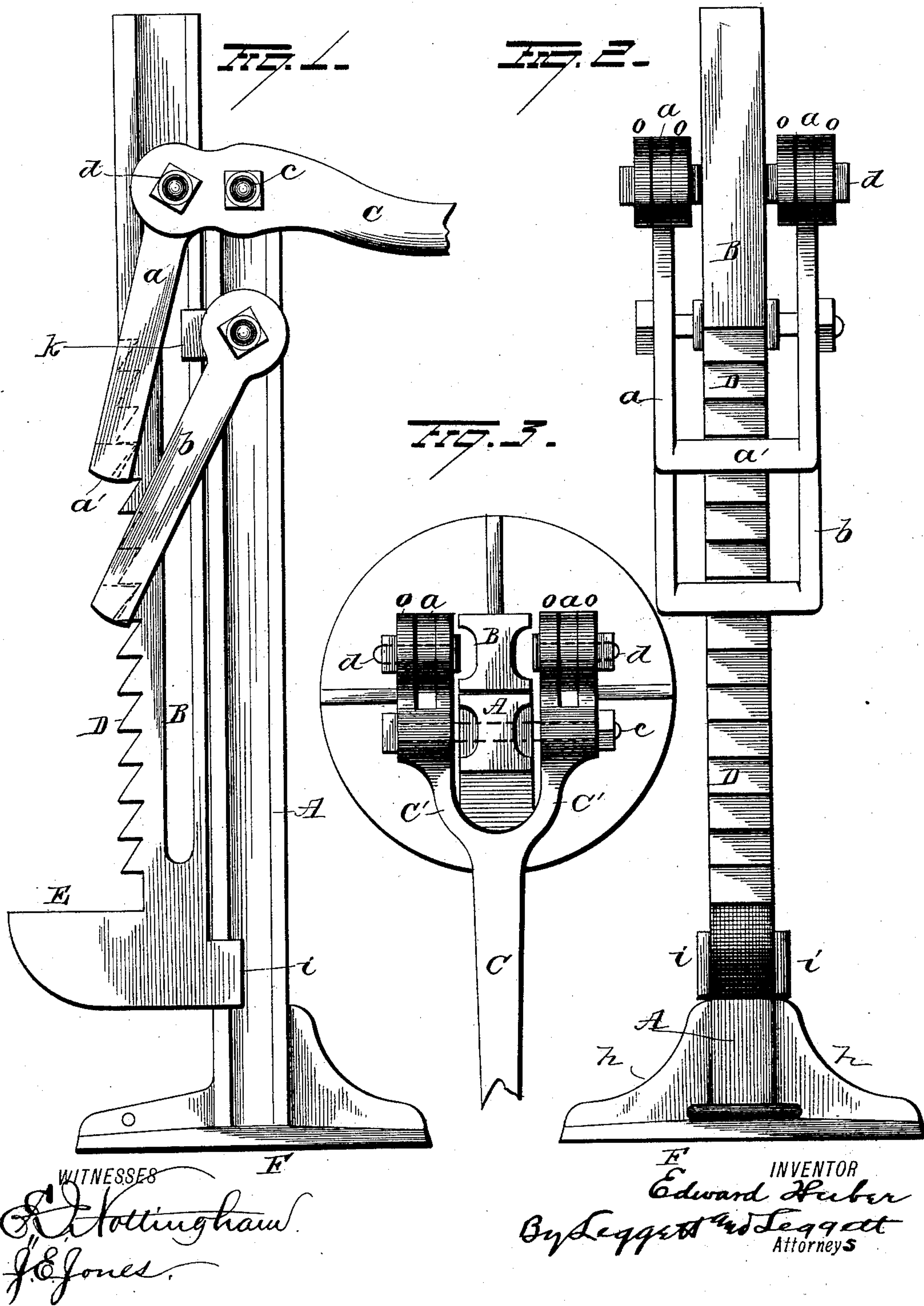
(No Model.)

E. HUBER.

LIFTING JACK.

No. 362,085.

Patented May 3, 1887.



UNITED STATES PATENT OFFICE.

EDWARD HUBER, OF MARION, OHIO.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 362,085, dated May 3, 1887.

Application filed January 29, 1887. Serial No. 225,874. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HUBER, of Marion, in the county of Marion and State of Ohio, 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.

10 My invention relates to lifting-jacks.

The object of my present invention is to produce a lever lifting-jack of simple construction which will utilize a large proportion of the power applied to the lever and automatically lock the jack at any desired point of elevated adjustment within its range.

With these objects in view my invention consists in certain features of construction and combination of parts, that will be hereinafter described, and pointed out in the claim.

Referring to the drawings making a part of this specification, Figure 1 is a side elevation of the lifting-jack. Fig. 2 is a front elevation of the device. Fig. 3 is a top plan view of the jack.

25 In Fig. 1, A represents a vertical standard, which is made of proper height for the purpose, and to reduce weight is given an I form in cross-section. The base F is preferably extended to form a disk or plate, and its connection with the lower end of the standard A is stiffened by the bracket-flanges h.

30 The sliding standard or lifting-bar B is made of a form similar to the standard A in its cross-section. The bar B has a lifting-toe, E, made to project at its lower end, and is provided with lugs or ears i, adapted to slidingly engage the side edges of the upright standard A, similar projections, k, being formed upon the upper front edges of the standard A to hold the lifting-bar B in proper sliding adjustment with the stationary upright standard A.

45 The front face of the lifting-bar B has ratchet-teeth D cut therein. Upon the upper end of the standard A the lever C is pivoted, the handle being extended a proper distance to provide sufficient leverage. The bolt c, upon which the lever C oscillates, is located in the side walls of the bifurcated end of the lever C

in a transverse perforation made in these walls for its reception.

The limbs formed by bifurcating one end of the lever C are made to loosely fit upon the sides of the standard A, and these limbs C' are extended a suitable distance forward, and each limb is forked to receive the free ends of the loop a between the jaws o o. (See Fig. 2.) The loop a is pivotally secured between these jaws o o at d, and from its assigned position will hang nearly perpendicular to engage the teeth D of the lifting-bar B. A short distance below the pivot-bolt c the detent-loop b is pivotally secured to the standard A, a sufficient space being allowed between the points of connection of the loops a and b and the standard A to permit a proper engagement of the transverse bar a' of the loop a with the ratchet-teeth D.

70 The operation of this jack is evident, and when it is to be put in use the toe E is inserted beneath the object to be elevated and the lever C elevated to permit the loop a to engage a tooth in the rack D. A depression of the lever C will raise the bar B a limited distance, and the relative position of the loops a and b will permit the engagement of the loop b with the rack D, and thus retain the bar B in place. A continuation of this operation will give the desired degree of elevation.

80 Heretofore jacks have been constructed with a lever that is pivoted upon a bracket at the rear of the vertical standard; but this method of construction fails to utilize the power applied, as much of the applied power is absorbed by frictional resistance between the sliding surface of the lifting-bar. I have by the construction of the forked or double lever C and its combination with the pendent loop a overcome this friction to a great extent, and by shortening the distance between the pivot-bolts c d great power can be derived and consequent ease of operation be secured.

95 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination, with a standard secured to a base, and a forked lever pivoted to said standard and carrying a bail, of a slide-bar provided with an outwardly-projecting toe, said bar 100

being loosely secured to the standard and passing between the fork of the lever, and provided with ratchet-teeth on its outer edge adapted to be engaged by the bail suspended from the
5 lever, and with grooved sides, guides, or projections secured to the standard and engaging the grooved sides of the slide-bars, and a bail pivoted to said standard below the lever and adapted to engage the teeth on the slide-bar,
10 substantially as set forth.

In testimony whereof I have signed this specification in the presence of two subscribing witnesses.

EDWARD HUBER.

Witnesses:

M. V. PAYNE,
J. E. DAVIDS.