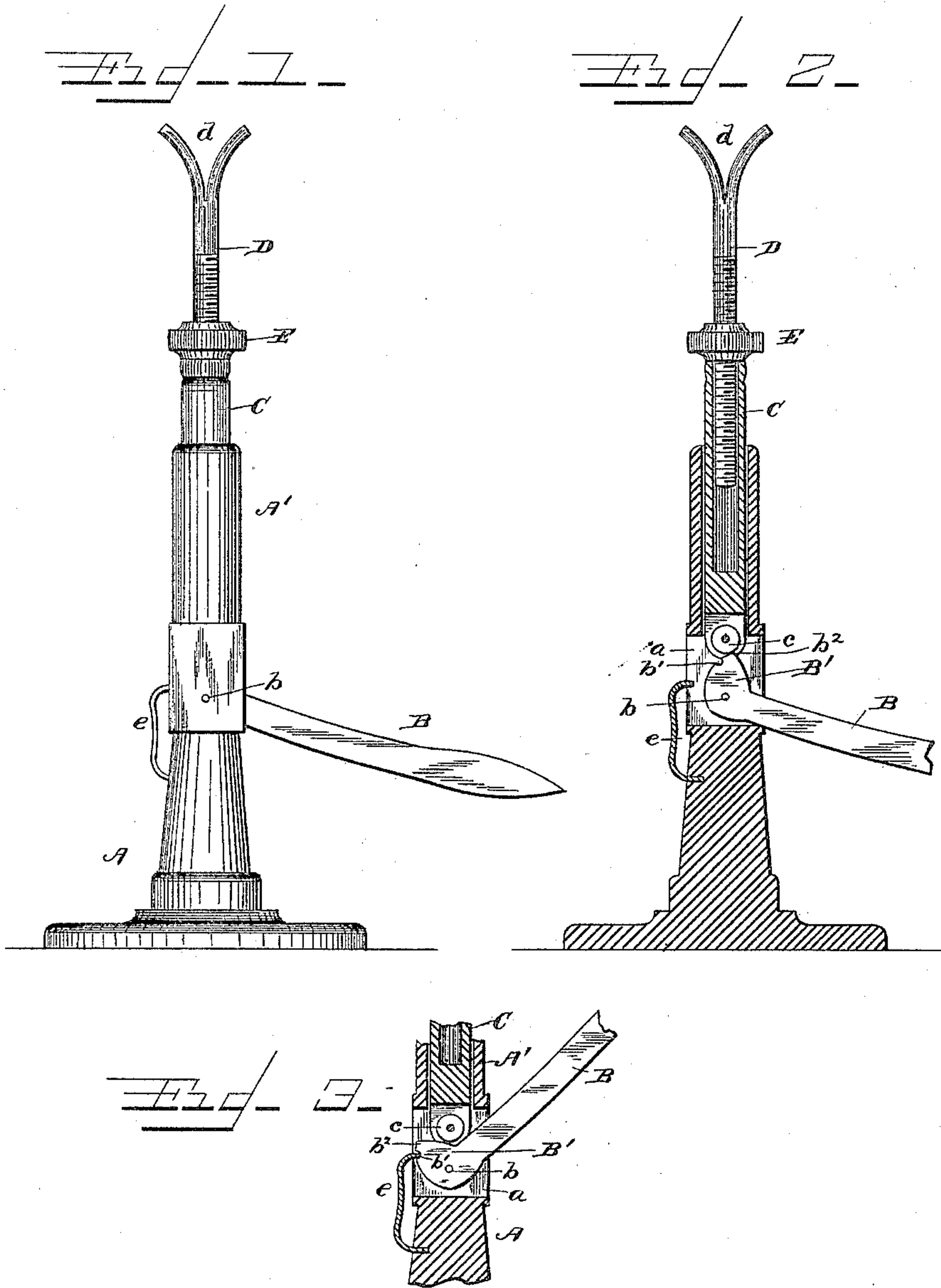


(No Model.)

C. R. PIGGINS.
LIFTING JACK.

No. 446,537.

Patented Feb. 17, 1891.



Witnesses

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CHARLES R. PIGGINS, OF RACINE, WISCONSIN.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 446,537, dated February 17, 1891.

Application filed November 3, 1890. Serial No. 370,192. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. PIGGINS, a citizen of the United States, and a resident of Racine, county of Racine, and State of Wisconsin, have invented a new and useful Improvement in Lifting-Jacks, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

My invention relates to a novel combination and arrangement of the parts of a lifting-jack, whereby its construction is simplified and it is made more certain in its action than the jacks in common use as ordinarily constructed.

It will be understood from the following description and claims.

In the accompanying drawings, Figure 1 is a side elevation of my improved jack. Fig. 2 is a vertical section through the same, showing the stem or fork elevated; and Fig. 3, a similar section through the part embracing the cam-lever, showing the latter in position for acting on the fork or stem to raise it.

A indicates the base, and A' an upright cylindrical standard thereon, the upper part of which is made hollow or tubular, and below said tubular portion has a transverse perpendicular slot formed in it at *a* for the reception of the cam-shaped end B' of a cam-lever B, pivoted therein by means of a through-pin *b*. Within the tubular upper end of the tubular standard A' is located a second cylinder C, the upper end of which is also made tubular, while near its lower end it is made solid, its extreme lower end being bifurcated to receive an anti-friction roller *c*, journaled in said end and resting on the cam-shaped end of the lever B, as shown. The sleeve or cylinder C forms the lower part of the stem lifting-bar or fork sliding within the standard A', the upper part of the stem or fork (indicated at D) resting and being made adjustable up and down within the upper end of the part C, as follows: The part D is cylindrical in form and screw-threaded, and passes into the tubular end of the part C through a milled nut E, which rests on the open upper end of the part C, and by the rotation of which the upper part D of the stem can be adjusted up and down in the part C until its fork or upper end *d* is brought to bear snugly against the axle or other weight to be lifted.

The normal position of rest of the cam-lever is shown in Fig. 3, in which a spring-latch *e*, fastened at one end to the standard A' at its opposite or free end, engages a notch at *b'* in the cam B', and the roller *c* rests on the upper cam-face of the lever. With the fork *d* properly adjusted to bear on the weight or object to be lifted, the lever B is depressed, throwing the spring-latch *e* out of engagement with the cam, and the latter, acting on the roller *c*, raises the stem until the point or most eccentric portion *b''* of the cam, which is made substantially heart-shaped, as shown, passes the roller, and the latter falling slightly below and outside of said point relative to the lever, as shown in Fig. 2, serves to lock the lever in position with the weight raised, as required. By reversing the movement of the lever the point of the cam passes under and outside of the roller, and the lever being restored to its normal position is again caught and held by the latch *e*, as shown in Fig. 2. Thus a very simple and effective construction of lifting-jack is attained, and one not liable to get out of order.

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

1. In a lifting-jack, the combination, with the base having the cylindrical or tubular standard and the cam-lever pivoted therein, of the divided lifting stem or fork, consisting of the tubular lower part C, provided in its lower end with a friction-roller, the screw-threaded upper part D, and the nut E thereon for adjusting it, all substantially as described.

2. The combination, in a lifting-jack, of the tubular standard A', the notched cam on the lever pivoted in said standard, the divided stem, the tubular lower portion thereof having its lower end provided with a friction-roller resting on said cam, and the spring-latch for engaging said notched cam and locking it in its normal position, substantially as described.

In testimony whereof I have hereunto set my hand this 31st day of October, A. D. 1890.

CHARLES R. PIGGINS.

Witnesses:

ERASTUS C. PECK,
CHARLES H. COLLINS.