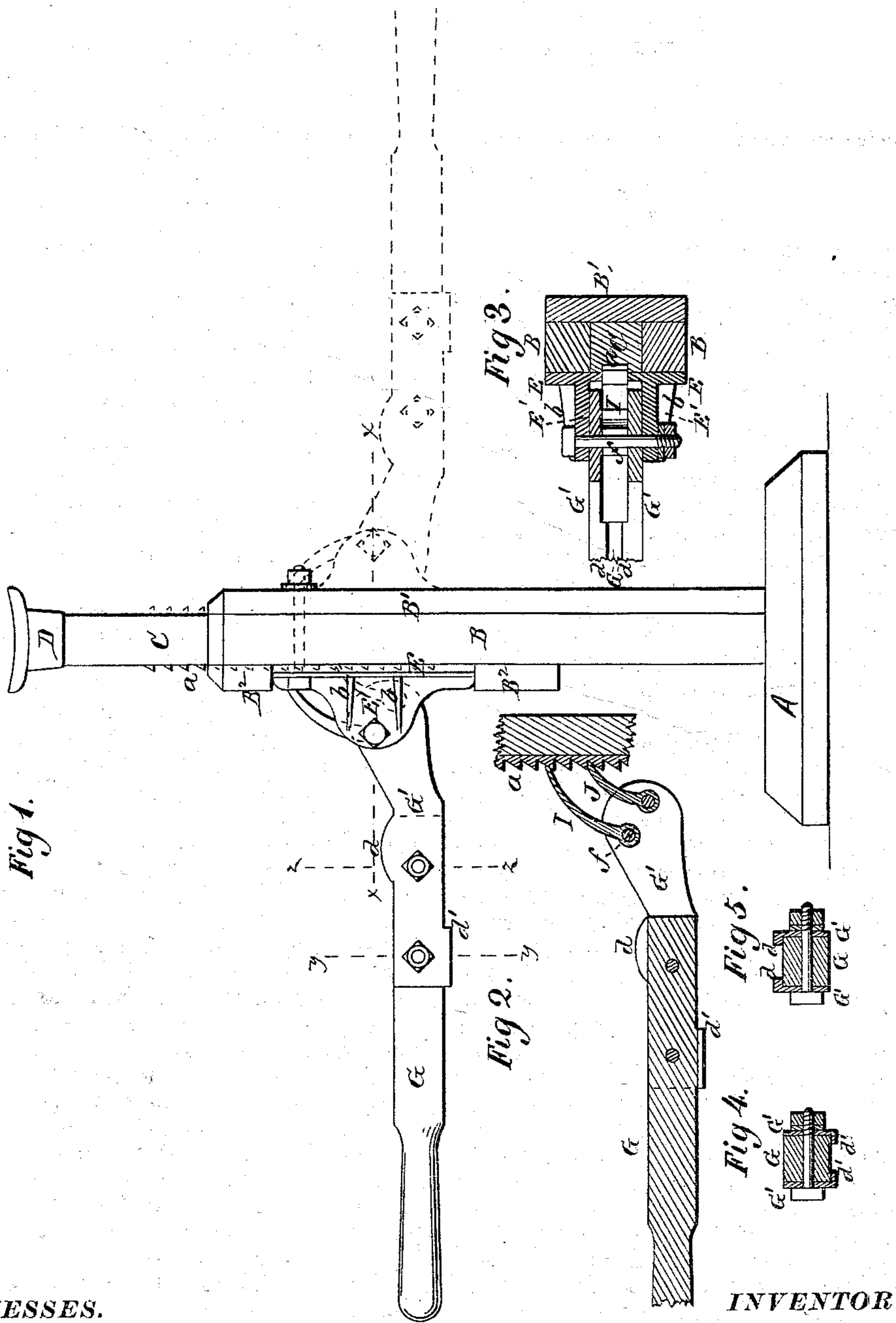


H. W. CORNELL.
Lifting-Jacks.

No. 152,608.

Patented June 30, 1874.



WITNESSES.

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HARMON W. CORNELL, OF OWEGO, NEW YORK.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **152,608**, dated June 30, 1874; application filed May 21, 1874.

To all whom it may concern:

Be it known that I, HARMON W. CORNELL, of Owego, in the county of Tioga and in the State of New York, have invented certain new and useful Improvements in Lifting-Jack; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification.

The nature of my invention consists in the construction and arrangement of a lifting-jack, as will be hereinafter more fully set forth.

In order to enable others skilled in the art to which my invention appertains to make and use the same, I will now proceed to describe its construction and operation, referring to the annexed drawing, in which—

Figure 1 is a side elevation of my lifting-jack. Fig. 2 is a longitudinal section of the operating lever and pawls, with a part of the movable upright. Fig. 3 is a horizontal section through the line *xx*, Fig. 1. Figs. 4 and 5 are cross-sections of the handle through the lines *yy* and *xx*, respectively.

A represents the base or bed piece of my lifting-jack, upon which is firmly secured an upright standard. In a single-lever jack this standard is constructed, as shown in Fig. 3, of two uprights, B B, with a back, B¹, and two front cross-bars, B² B², firmly bolted thereto. In a double-lever jack the back B¹ is omitted, and two cross-bars used on this side also. In this upright standard is placed the movable upright C, provided on its upper end with a flanged collar, D, which forms the rest for the article to be elevated. On the front side of the movable upright is secured a vertical rack-bar, *a*, as shown, the said bar being let into the upright. On the front of the side standards B B, between the cross-bars B² B², are secured plates E E, which extend inward in front of the movable upright C close to the rack-bar *a*. On each of the plates E is a forward-projecting flange, E', said plate and flange, with braces *b b*, being all cast in one piece, as shown. G represents the operating-lever, on each side of which, at the inner end, is secured a cast plate, G'. These plates are

each provided with a flange, *d*, on the upper edge, and a flange, *d'*, on the lower edge, which flanges extend inward and fit over the top and bottom of the lever G. The plates G' G' are pivoted between the flanges E' E' by means of a single bolt, *f*, passing through them, and on this bolt, between the plates G', is pivoted a pawl, I, to engage in the rack-bar *a* of the movable upright C. J represents another pawl, pivoted between the plates G' G' at a point a suitable distance inward from and below the pivot of the pawl I when the lever is in a horizontal position, as shown in Fig. 2.

When the lever G is worked up and down the pawl I retains the same relative position to the movable upright C and its rack-bar *a*, while the pawl J moves downward when the lever is raised, and upward when the lever is depressed; hence, when the lever is elevated, the pawl I will hold the movable upright steady in place, while the pawl J will move downward to take a new hold on the rack-bar, and when the lever is pressed down said pawl J will raise the movable upright and lift the article under which the jack is placed.

For very heavy work two levers are used—one on each side—as shown by dotted lines in Fig. 1, in which case the back B¹ of the stationary standard is omitted, as above mentioned, and the movable upright provided with another rack-bar.

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

In combination with the slotted or grooved standard having movable rack-bar C *a*, the flanged plates E E' and the lever G, with cam-plates G' pivoted to the flanges E', and having upper and lower pawls I J pivoted loosely between said plates, all constructed as and for the purposes set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 21st day of May, 1874.

H. W. CORNELL.

Witnesses:

A. N. MARR,
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