

(No Model.)

F. S. HARTZELL.
Lifting Jack.

No. 229,406.

Patented June 29, 1880.

Fig. 2.

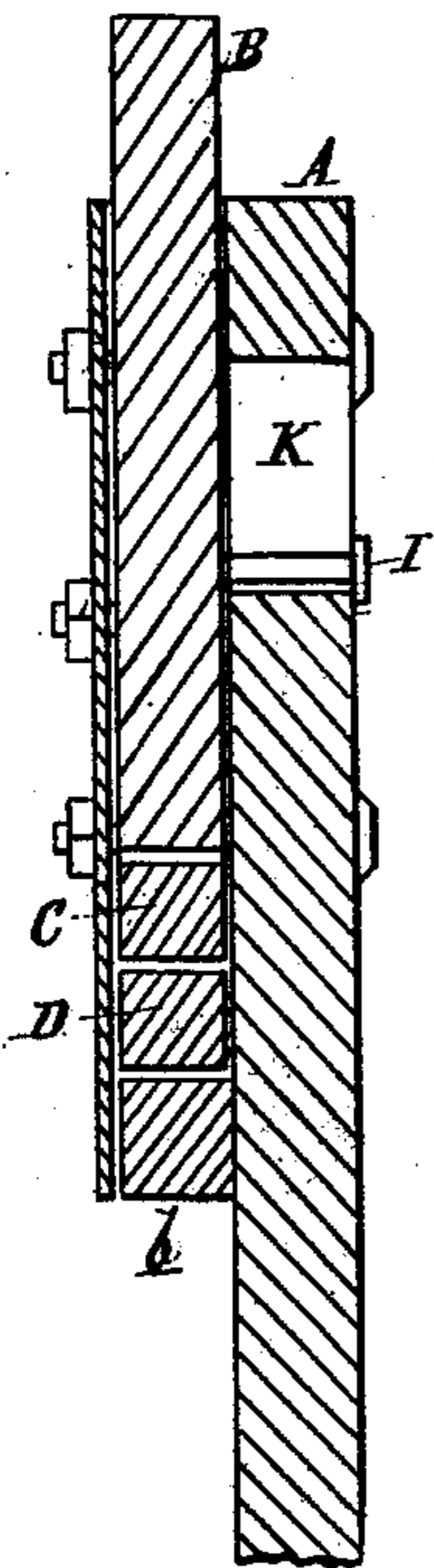
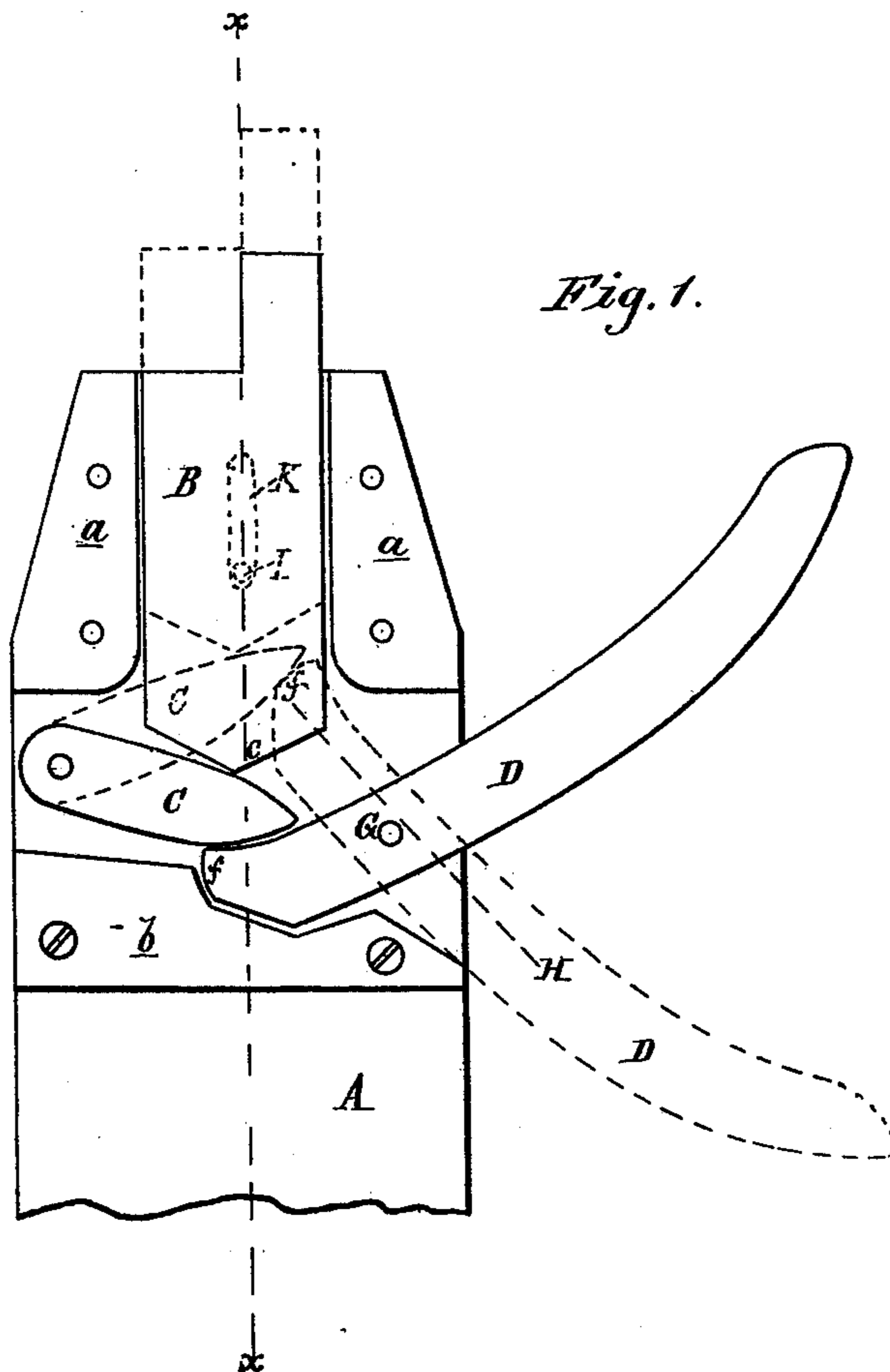


Fig. 1.



WITNESSES:

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FRANCIS S. HARTZELL, OF BEAN, PENNSYLVANIA.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 229,406, dated June 29, 1880.

Application filed May 15, 1880. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS S. HARTZELL, of Bean, in the county of Bucks and State of Pennsylvania, have invented a new and Improved Lifting-Jack, of which the following is a specification.

The object of this invention is to provide a simple and convenient lifting-jack that operates without pawl, ratchet, or rack, or other of the usual attachments.

The invention consists of an adjustable head-block provided with a rounded or V-shaped lower extremity, and vertically adjustable between guides in a hollow case or standard; and it consists, further, of a wedge-shaped key pivoted in said case with its thin end extending between the lower extremity of the head-block and the rounded head of the operating-lever, so that when the said block is raised by the action of the said lever the said key operates to lock the parts in position.

Figure 1 is a front elevation of the device with the front plate removed. Fig. 2 is a sectional side elevation of the same on line *x x*, Fig. 1.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a box or hollow standard, within the upper part of which are the vertical guides *a a*, and within which, at about the center of its height, is a transverse block, *b*.

B is the adjustable head-block fixed between the guides *a a*, the lower end of said block being rounded, or, in this instance, sloping from the sides downward to the center, as shown at *c*.

Within the case A, and at one side of it, is pivoted the wedge-shaped key C, the beveled end of said key C being extended beneath the lower extremity of the head-block B, and in contact therewith. In the other side of the case A, and at a point a little below the fulcrum of the key C, the lever D is pivoted on the pivot or fulcrum G, the handle of said lever D projecting outward and upward at the side of the device, while the rounded or curved head of the said lever D is adjusted below and in contact with the free end of the key C, so that the curved or beveled lower face of the key C rests on the curved or sloping face of the

head of the said lever D, while the block *b* is cut away on its upper edge to admit and support the head of the lever D from below.

In operating this device the handle of the lever D is pressed downward, thereby raising the head-block B until the point of contact between the head of the said lever D and the key C is shifted from its primary position, as shown in full lines, Fig. 1, to the curved end *f* of the said lever D, as shown in dotted lines, Fig. 1, whereby the direction of the line of resistance or pressure of the block B is changed from its primary vertical plane to an inclined plane that falls outside of the fulcrum G of the lever D, as shown in dotted lines at H, whereby the said block B is firmly held or locked in position.

This device has the advantage over other lifting-jacks in durability and simplicity of parts and in cheapness of construction.

When the said head-block B is elevated to any desired position below the lock made by the lever D and key C it may be secured there by means of the screw-stud I, which is attached to the said block B, and moves up and down in the slot K.

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

1. A lifting-jack constructed substantially as herein shown and described, consisting of the case A, adjustable head-block B, provided with rounded or V-shaped lower extremity, pivoted wedge-shaped key C, and lever D, provided with rounded head, as set forth.

2. In a lifting-jack, as a means for adjusting and locking the head-block B, the wedge-shaped key C, and lever D, in combination, substantially as herein shown and described, whereby the line of pressure upon the head-block is changed from the vertical to an inclined plane, as set forth.

3. In a lifting-jack, the pivoted wedge-shaped key C, substantially as herein shown and described, whereby the pressure of the operating-lever is transmitted from below to the head-block and the direction of the pressure changed, as set forth.

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Witnesses:

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