(Model.)

J. SEWELL, Jr.

LIFTING JACK.

No. 271,137. Patented Jan. 23, 1883.

Fig. 1.

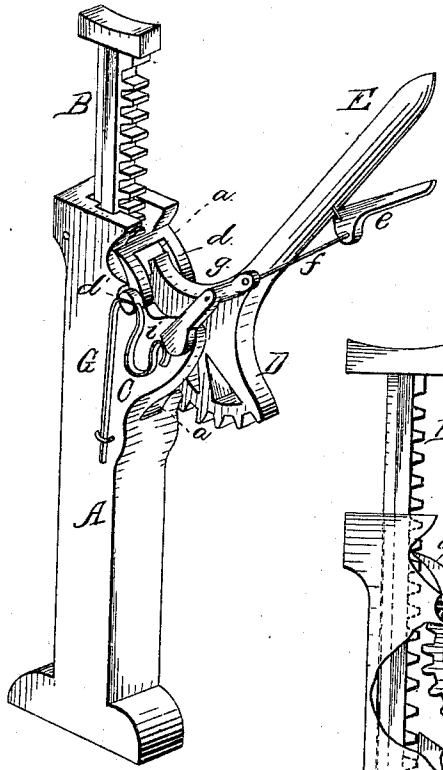
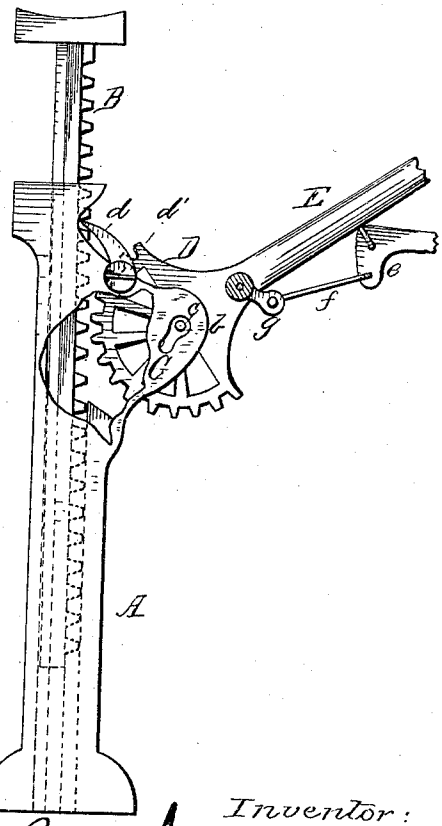


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

JOSEPH SEWELL, JR., OF HAMILTON, INDIANA.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 271,137, dated January 23, 1883.

Application filed July 19, 1882. (Model.)

To all whom it may concern:

Be it known that I, JOSEPH SEWELL, Jr., a citizen of the United States of America, residing at Hamilton, in the county of Steuben and State of Indiana, 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to certain improvements in lifting-jacks for raising heavy bodies; and it belongs more especially to that class of lifting-jacks which have a rack-bar recessed in a standard and operated by means of a lever with a cogged segment.

The novelty of my invention consists in the construction of the jack and the combination of the parts, as will be hereinafter set forth and specifically claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved jack, and Fig. 2 is a side elevation of the same.

A represents the standard, which is made hollow, with grooves to receive the rack-bar B; and it is provided with a suitable base and a longitudinal slot, *a*, on one side, near the top.

On each side, near the top of the standard, projecting from the slot *a*, are formed brackets C C, which are provided with slots *b b*.

Between the slotted brackets C C, which extend from the upper end of the standard and are formed integrally therewith, is placed a cogged segment, D, which is formed upon the inner end of the operating-lever E and engages with the rack-bar B.

The lever E, with its cogged segment, is supported by the pin *c*, which passes through the segment D and slot *b* in the brackets C C.

In the upper ends of the brackets C is pivoted a curved pawl, *d*, one side having its bearing *d'* extending beyond the frame of the standard A, which side projection is grooved for the reception of a spring, as will be hereinafter described.

Attached near the end of the lever E is a bell-crank lever or handle, *e*, having a connecting-rod, *f*, which is attached to the crank-arm of the dog *g*.

The spring G consists of a single piece of metal, which is bent substantially in the shape or form shown in Fig. 2. This spring is connected at its lower end to the standard A in any suitable manner. The flat or upper portion of the spring passes through the groove in the bearing *d'* of the pawl *d*, and has a tendency to throw the pawl *d* in contact with the teeth of the rack-bar. The end of the spring G opposite the one which is secured to the standard is bent downwardly, forming a semicircular curve, the end being either bent round, as shown, or provided with a suitable knob. This spring presses the pawl *d* against the rack-bar. When one movement of the lever is not sufficient to raise the article to the desired height, the lever E is moved outward in a slot in the brackets C C, causing the cogged segment to become disengaged from the rack-bar, when the lever can be raised and pushed inward, so as to engage again with the rack-bar. To lower the rack-bar or article supported by the jack, the lever E is brought to a horizontal position, and the handle *e* is pressed against the lever E, which movement is communicated to the dog *g*, which is forced against the end *i* of the spring G, which throws the cogged lever E out of mesh and forces the pawl *d* away from the rack-bar. In case one movement of the lever is not sufficient to raise the article to the desired height, it is unnecessary to move the crank *e*, the lever E being simply drawn outward, which places the segment out of gear and allows the lever to be raised for another lift.

In a jack constructed as hereinbefore described a single spring is employed to operate the pawl and throw the lever out of gear. The pawl and lever, by means of a bell-crank and connecting-rod, are both operated from the handle or lever.

What I claim as new, and desire to secure by Letters Patent, is—

1. A lifting-jack, herein described, consisting of the standard A, having brackets C C, with slots *c c*, and pawl *d*, with extended trun-

nion d' and springs G, in combination with the lever E, having cogged segment and crank e, rod f, and dog g, attached to said lever, substantially as shown and specifically set forth.

2. In combination with the standard A, having pawl d and spring G, the rack-bar B, operated by the lever E with cogged segment, which lever is provided with a bell-crank e, connecting-rods f, and dog g, substantially as shown and described.

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

JOSEPH SEWELL, JR.

Witnesses:
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