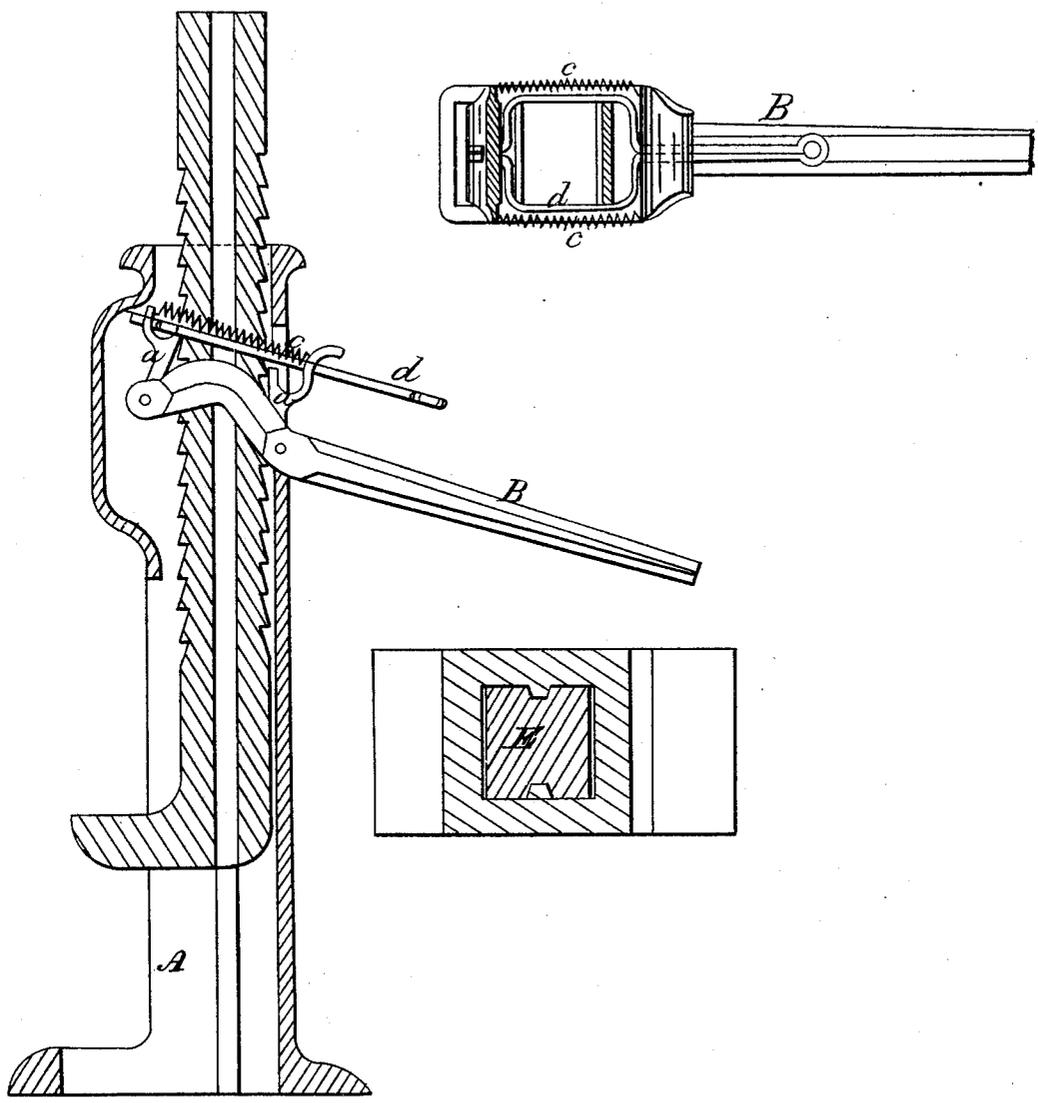


J. D. Otstot,
Lifting Jack,
N^o 37,051, Patented Dec. 2, 1862.



Witnesses.
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UNITED STATES PATENT OFFICE

J. D. OTSTOT, OF SPRINGFIELD, OHIO.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **37,051**, dated December 2, 1862.

To all whom it may concern:

Be it known that I, J. D. OTSTOT, of Springfield, in the county of Clark and State of Ohio, have invented certain new and useful Improvements in Lifting-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

In the annexed drawings, making part of this specification, A represents the stock of the jack, which is made of cast-iron, being cast hollow, so that the lifting-bar will pass up through its center. Near the top of the stock an opening is made in one side of it, so that one end of a lever, B, can pass into the opening for the lifting bar. This lever B (seen in Figure 2) has a square slot cut in it at one end, large enough to receive the lifting-bar and allow said bar to pass up and down through it easily.

a a represent two pawls, which are pivoted one on each side and within the slot in the lever, which pawls are intended to catch into the racks on each side of the lifting-bar. The upper ends of the pawls are connected by means of two coiled-wire springs, *c c*, as shown in Fig. 2. A bent rod, *d*, also connects the two pawls, as shown, said rod being in the form represented in the figure, and passing through both of the pawls. By pressing the finger upon one of the pawls and at the same time shoving the rod *d* in an opposite direction the two pawls are made to separate, so that neither one will catch into the racks on each side of the bar. In this way the lifting-bar can be suddenly dropped after it has been raised to its full height; but by removing only one pawl at a time, by pressing upon it and at the same time lowering the lever, then pressing upon the other pawl, the lifting-bar may readily be lowered gradually with a heavy weight upon it. The lever is constructed on its under side as seen in Fig. 1, and rests upon two A-shaped projections or shoulders

made in the opening in the stock through which the lifting-rod passes. The sides of the lever rest and work upon these projections. On two sides of the lifting-bar are grooves which run from one end to the other of said bar, and said grooves are filled with tongues on the inside of the stock when the bar is in place in the stock.

In operating this jack it is placed under the weight to be raised, and the outer end of the lever B is alternately raised and lowered. One of the pawls is always caught in the teeth of the bar, and the pawl on one side is raising the bar while the other is descending to take fresh hold. Thus the bar is raised by every stroke of the lever, both ascending and descending. The lever B, not being pivoted to the stock, can be easily removed after the bar E is removed, and can thus be readily and conveniently packed away for transportation.

The leverage in this jack is very short, and the fulcrum being between the two pawls equal weight or force is exerted by each, and great power may be derived from the jack.

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

1. So connecting and combining the lever B with the stock and lifting-bar that it may be attached or detached for use or transportation at a moment's notice, in the manner herein set forth.

2. The employment of the rod *d* in connection with the pawls *a a*, for the purpose of detaching them from the teeth of the rack-bar when necessary, substantially as specified.

3. The arrangement of the lever B, the pawls *a a*, the springs *c c*, the rod *d*, and the lifting-bar E, in the manner and for the purpose specified.

J. D. OTSTOT.

Witnesses:

J. S. CHRISTIE,
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