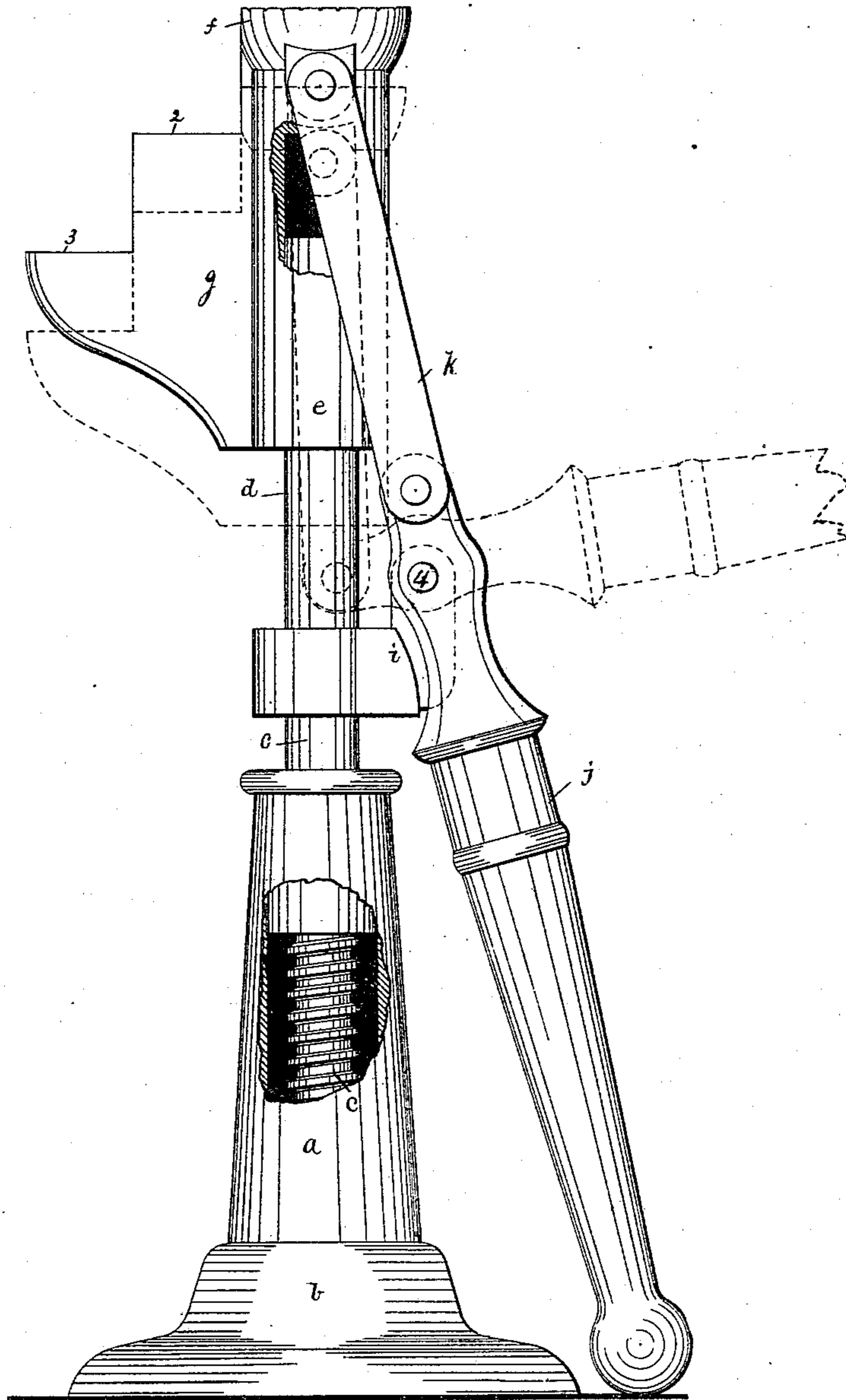


A. S. DINSMORE.

Lifting-Jack.

No. 211,891.

Patented Feb. 4, 1879.



Witnesses.

*N. E. Whitney.*  
*L. F. Connor.*

Inventor.

*Alfred S. Dinsmore*  
*by Crosby & Gregory Attys.*

# UNITED STATES PATENT OFFICE.

ALFRED S. DINSMORE, OF BOSTON, ASSIGNOR OF ONE-HALF HIS RIGHT TO  
CHAS. F. CURWEN, OF SALEM, MASSACHUSETTS.

## IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. **211,891**, dated February 4, 1879; application filed  
October 25, 1878.

*To all whom it may concern:*

Be it known that I, ALFRED S. DINSMORE, of Boston, county of Suffolk, State of Massachusetts, have invented an Improvement in Lifting-Jacks, of which the following description, in connection with the accompanying drawing, is a specification.

This invention relates to lifting-jacks, and has for its object the production of a cheap and easily-operated jack.

The invention consists in an improved jack composed of an internally screw-threaded bottom standard, an externally-threaded rod, a fulcrum fixed upon the rod, a lifting-lever pivoted thereon, and a head and a guide connected therewith to co-operate with the upper end of the said rod, the sleeve being connected with the lever by means of links, substantially as hereinafter shown and described.

The drawing represents, in side elevation, a jack constructed in accordance with my invention, the head being shown in full lines as elevated, and in dotted lines as lowered.

The standard *a*, having a base portion, *b*, is internally screw-threaded to receive within it the externally-threaded rod *c*, the upper end of which, as at *d*, is left smooth to receive the guide or sleeve *e*, provided at its upper end with the head *f*. This guide *e* will preferably be cast with the head and with a side rest, *g*, having one or more notches or shoulders, 2 3.

A sleeve arranged outside the rod *c* may be easily provided at its outer side with side rests close to the line of movement of the guide or sleeve, rather than at a considerable distance therefrom, as in United States Patent No. 202,197; and the said rests consequently in no way interfere with the vertical movement of the sleeve.

The fulcrum *i* for the lever *j* is shown as a

collar fixed upon the rod *c*, the collar being provided with an ear to receive the pin 4, upon which the lever *j* turns.

To raise and lower the head *f* the proper distance, according to the height of the article to be lifted, the rod may be rotated in the standard by means of the handle.

The links *k* connect the forked ends of the lever *j* with the portion *e f*.

By making the fulcrum *i* a fixture with relation to the externally-threaded rod *c*, it is obvious that the guide, fitted to rise and fall with relation to the upper end of the said rod under the action of the lever, is always made to occupy the same position with reference to the end of the rod *c*, no matter what may be the change of position of the rod with relation to the standard *a*, whereby the strain upon the guide is always the same under all adjustments of the jack, which is not the case when the lever for lifting the guide is mounted upon a nut which is movable vertically along the standard, as in the patent referred to.

I claim—

As an improved article of manufacture, a lifting-jack composed of an internally-threaded standard, an externally-threaded rod fitted thereto, a fulcrum device, *i*, fixed upon the said rod, a lifting-lever, *j*, sustained by the fulcrum device, a headed guide fitted loosely to the upper end of the said rod, and links connecting the guide with the lever, all substantially as and for the purpose set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

ALFRED S. DINSMORE.

Witnesses:

G. M. GREGORY,  
L. F. CONNOR.