

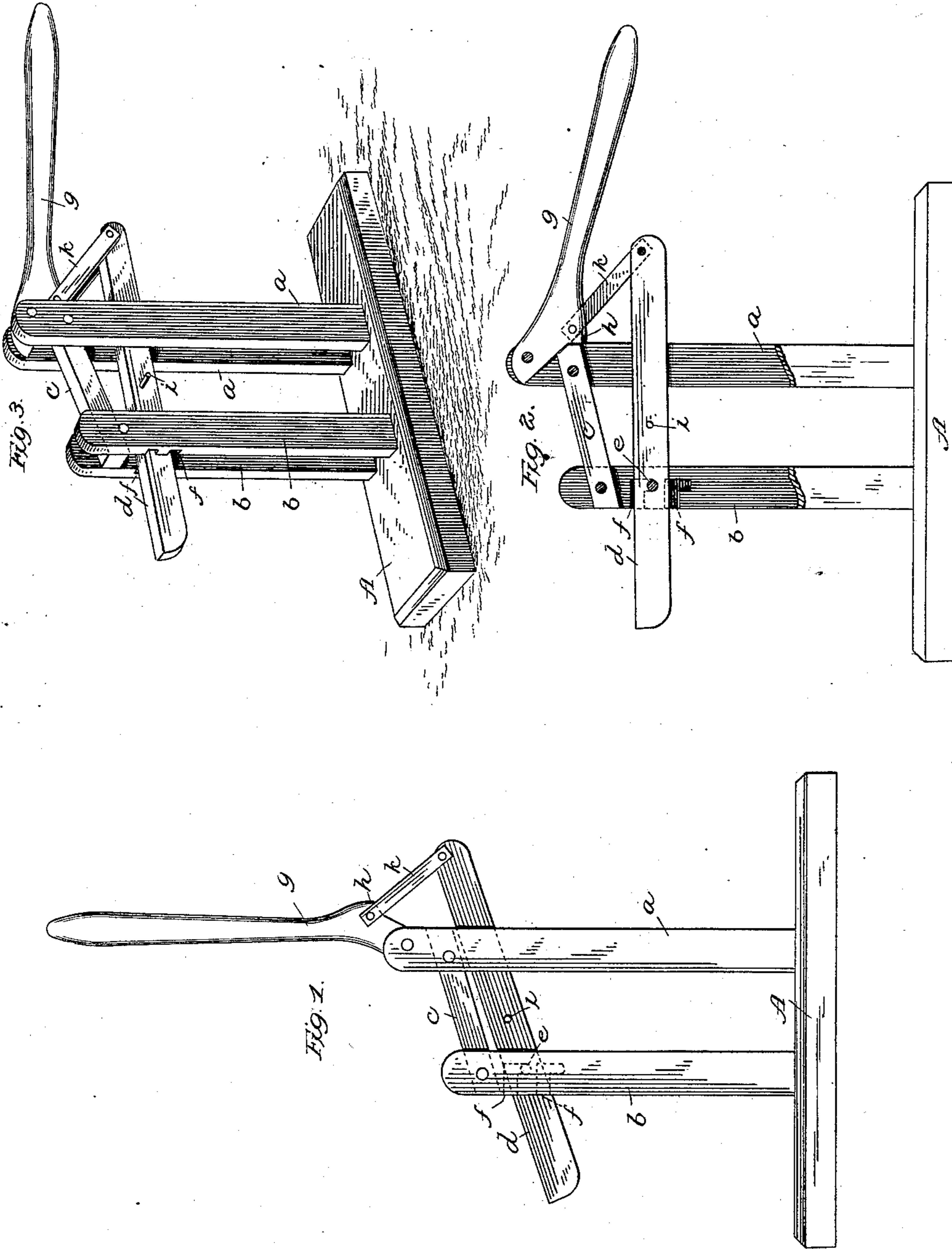
(No Model.)

A. C. SPAULDING.

LIFTING JACK.

No. 299,867.

Patented June 3, 1884.



Attest:  
Walter Donaldson  
J. L. Middleton

Inventor:  
Abner C Spaulding  
by J. C. V. Spear  
Attys.

# UNITED STATES PATENT OFFICE.

ABNER C. SPAULDING, OF RICHMOND, MAINE.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 299,867, dated June 3, 1884.

Application filed April 16, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, ABNER C. SPAULDING, of Richmond, in the county of Sagadahoc and State of Maine, have invented a new and useful Improvement in Lifting-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to improvements in lifting-jacks of the class which are operated by means of a lever to raise and lower the lifting end.

The object of the invention is to simplify the construction by reducing the number of parts, and so arrange the operating parts as to obviate the necessity of a separate holding or locking device for the jack when supporting a load.

In the drawings, Figure 1 is a side elevation of the jack, showing it in position to elevate the load. Fig. 2 is a side view, two of the posts being broken away to better illustrate the invention. Fig. 3 is a perspective view, the parts being in the position when the load is lifted.

In these drawings, the jack is supported on a suitable base, A. From this base, in which they are preferably secured by mortises, extend two pairs of posts, *a a b b*, the posts of each pair being separated by a space of suitable width. Instead, however, of the posts being arranged in pairs, they may be constructed of one piece of suitable thickness and slotted to receive the operating-levers. The posts *a a* are set some distance back of the posts *b b*, and are made of greater height, to allow for the pivoting of the handle-lever between them, and also for the connection between the said hand-lever and the lifting-lever. A brace-rod, *c*, is provided to connect the upper portions of the posts together, this, however, being the only brace required.

The parts described constitute the frame of the jack, and the operating parts—three in number—are adapted thereto. The lifting-lever *d*, the end of which is adapted to come in direct contact with the load, works beneath the two sets of posts in the space referred to. It is provided with a pin, *e*, passing entirely through the same and projecting on either side, and upon this pin is fulcrumed in slots *f* in

the bars *b b*. It is not essential that a pin be used for this purpose, as projections or lugs may be cast therewith and perform the same function. The bars or posts *b b* may also be provided with more than one set of notches or slots, and as they are made open at their front ends the fulcrum of the lever may be readily changed and the lift of the lever increased or diminished as occasion requires. This lifting-lever has no other support in the posts; but a guiding or stop pin, *i*, may be provided to limit the forward movement of the lever, the pin coming in contact with the rear surface of the posts *b b*. The end of the lever projects to the rear, and is connected by means of a link, *k*, with the forward end of a pivoted lever, *g*, situated above and out of line of the lever end *d*. The lever *g* is pivoted between the upper end of the posts *a a*, preferably above the line of the posts *b b*. The brace-rod *c* enters between the posts *a a* below the point where the lever *g* is pivoted, and is flush with the rear of said posts. The lever *g* is provided with an offset, *h*, on its under side, so made as to bear snugly against the end of the brace-rod *c* when the handle of the lever is depressed to elevate the lifting-lever. The link *k*, connecting the lifting-lever *d* and hand-lever *g*, is preferably composed of two metallic rods, pivoted at one end on a pin passing through the offset *h*, and at the other on a pin passing through the end of the lever *d*, this point being to the rear of the line of the offset. Instead of the link being made as described, a single short bar may be used to connect the two levers. It will thus be seen that by elevating the hand-lever the end of lever *d* is depressed until it reaches a position beneath the load. (This end may be grooved or corrugated in any suitable way, to better take hold of the load.) Power is then applied to the hand-lever, which, through the link, presses down the rear end of *d* and elevates the front end and the load which it carries. This motion continues until the offset *h*, carrying the pivoted ends of the link, passes through the arc of a circle and bears against the end of the brace-rod. This brings the pivoted end of the link upon the lower side of the pivot of the hand-lever and in such rela-

tion to the end of lever *d* that the pressure of the load is exerted through the link to the offset, and being, as before said, upon the lower side of the pivot of the lever *h* beyond the center, the offset is forced against the frame and the handle of lever *g* prevented from rising. This construction renders the use of a separate supporting device or lock totally unnecessary, as the jack is, when in the position described, practically locked with the load supported.

I do not limit myself to the details of construction shown herein, as they may be greatly varied without departing from the spirit of my invention.

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

1. A lifting-jack consisting of a base, front and rear standards supported thereon, a lifting-lever pivoted loosely in the front standards, a handle-lever, and a link connecting the same with the free end of the lifting-lever, substantially as described.

2. A lifting-jack consisting of a base and front and rear standards supported thereon, the open slots in the front standards, the lifting-lever adjustable in said slots, a handle-lever and a link connecting said lifting and handle levers, substantially as described.

3. In a lifting-jack, the frame mounted in a suitable base, a lifting-lever, *d*, fulcrumed in the front posts of said frame and extending to the rear, and a handle-lever provided with an offset, *h*, and connected to lever *d* by a suitable link, the parts being arranged in relation to each other substantially as described.

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

ABNER C. SPAULDING.

Witnesses:

GEO. B. RANDLETTE,  
C. H. HODGES.