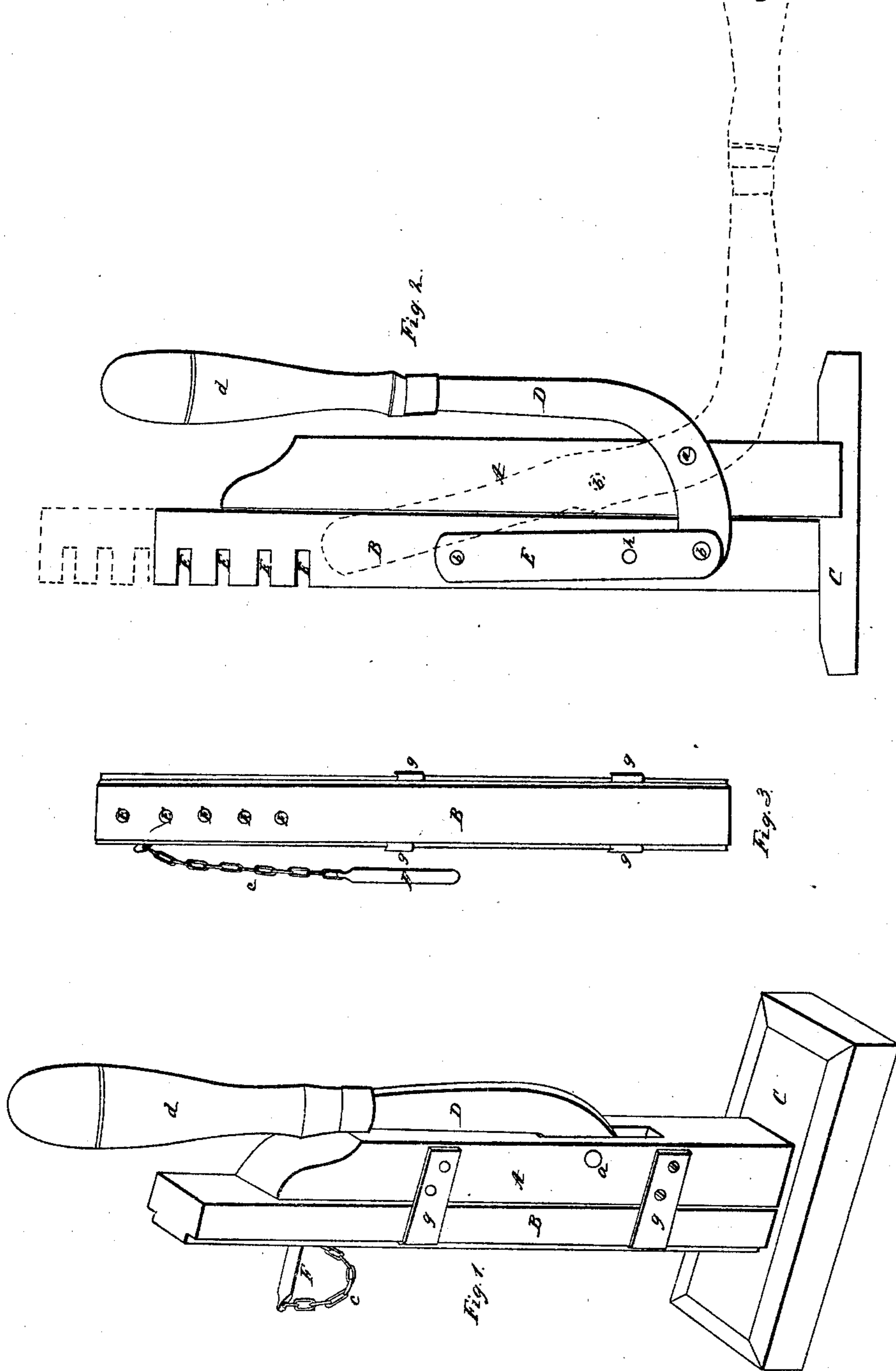


J. F. Hammond,
Lifting Jack.

N^o 57,439.

Patented Aug. 21, 1866.



Witnesses:
Daniel C. Galtby
J. H. Littlefield

Inventor:
Joshua F. Hammond

UNITED STATES PATENT OFFICE.

JOSHUA F. HAMMOND, OF PROVIDENCE, ASSIGNOR TO HENRY STAPLES,
OF BARRINGTON, RHODE ISLAND.

IMPROVEMENT IN LIFTING-JACKS.

Specification forming part of Letters Patent No. 57,439, dated August 21, 1866.

To all whom it may concern:

Be it known that I, JOSHUA F. HAMMOND, of Providence, in the county of Providence and State of Rhode Island, have invented new and useful Improvements in Carriage-Jacks; and I do hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view; Fig. 2, a sectional view; Fig. 3 a front elevation of the post B.

Letter A represents a post set firmly in the base C; letter B, a sliding post to move up and down; letter D, the lever with which the machine is worked; letter E, a stirrup connecting the lower end of the lever D with the sliding post B; letter F, a pin to be used in connection with the holes *e e e*, &c., to adapt the machine to the different height of wheels; letters *g g*, straps of iron, two upon each of the two opposite sides of the post A, and, being continued across the post B, have their ends turned inward to hold the post B in its place, and whenever it is raised the axle-tree, resting on the iron pin F, is raised as the post B is raised.

Letter *a* is an iron pin, on which the lever D turns; letters *b b'*, pins connecting the stirrup E with the post A and the post B; letter *c*, a chain connecting the pin F and the post B; letter *d*, wooden handle, forming the upper part of the lever D; letters *e e e*, &c., holes to sustain the pin F; *g g*, iron straps; *h*, rivet.

The object of my invention is to secure a carriage-jack very compact as well as very effectual and durable.

To enable others skilled in the art to construct and use my machine, I will describe its construction and mode of operation.

I make the post A, the post B, and the base C of good hard wood, such as oak or ash, the lower part of the lever D of iron, the stirrup E of iron, flat, in two pieces, and riveted together by the rivet *h*, and only of sufficient thickness to be of the required strength, with one hole punched through near each end, as seen in Fig. 2, for the insertion of the pins *b b'*.

The pin *a* should be at least one-half inch in diameter, as the whole pressure rests upon this.

A sufficient slot is cut in the post A for the free working of the lever D, and a slot also in the post B for the movement of the lower end of the lever D and the stirrup E. The extent of these slots may be readily discerned by examining Fig. 2 of the drawings.

When the machine is not in use it stands as seen, Fig. 1. In using it, take hold of the upper part of the lever D, set it under the carriage, letting the axle-tree rest on either the pin F or the top of the post B.

To raise the carriage, depress the lever D to a horizontal position, as indicated by the dotted lines in Fig. 2. This carries up the curved end of the lever, which, by means of the stirrup E, raises the post B.

Care should be taken to have the curve of the lever D at its lower end such that, when in the position indicated by the dotted lines in Fig. 2, the pin *b* will fall inside of a straight line drawn from *b'* to *a*.

It is this last feature that makes the jack self-holding or self-sustaining. If this last feature is not fully comprehended at once, the study of Fig. 2 of the drawing will make it plain.

By lengthening the upper part, *d*, of the lever any desired power may be obtained.

I am aware that carriage-jacks have been before constructed with a combination of three or more upright parts operated by a bent lever with a ball and socket or knuckle joint, as is the case with the patented jack of Nathan Badgely, patent dated June 23, 1863.

I do not therefore claim the general combination and arrangement where three or more upright parts are combined and used; but

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

The combination of the two upright posts A and B, the one fixed and the other movable vertically, the lever D, stirrup E, and the pin F, the whole arranged, combined, and operating as above described.

JOSHUA F. HAMMOND.

Witnesses:

DANIEL C. COLBY,
J. H. LITTLEFIELD.