

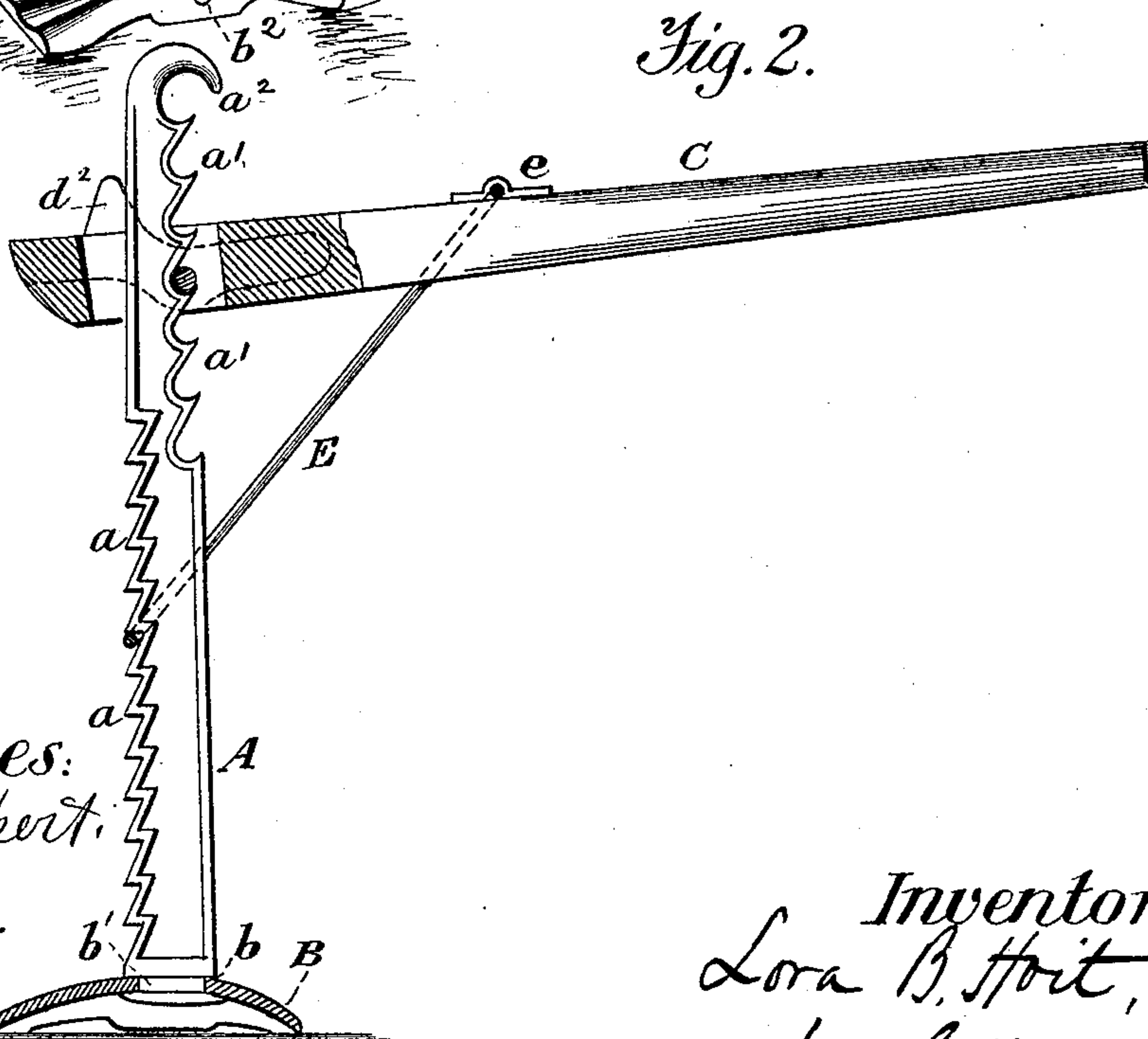
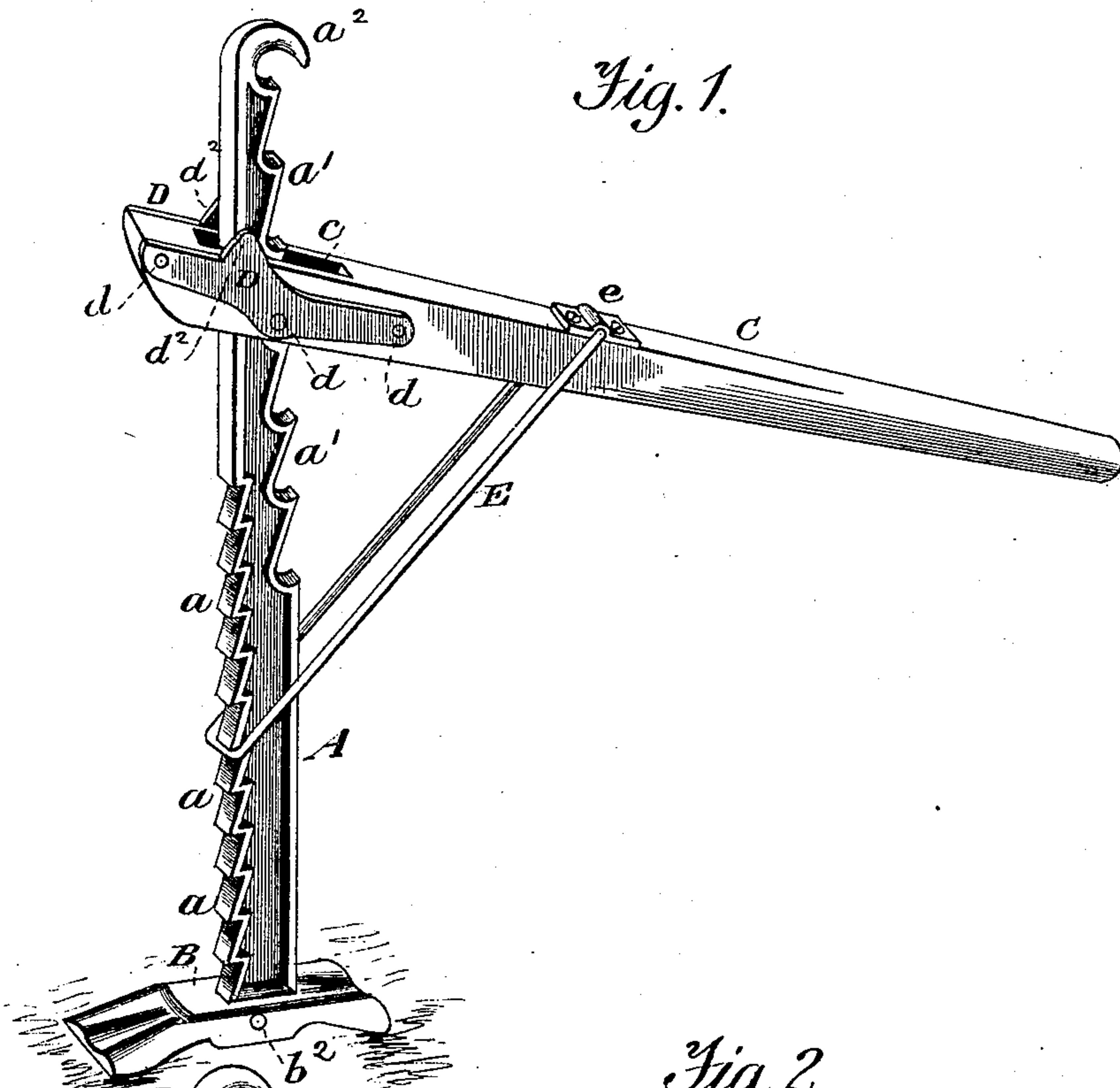
(No Model.)

L. B. HOIT.

LIFTING JACK.

No. 390,671.

Patented Oct. 9, 1888.



Witnesses:
A. Ruppert,
E. Cruise.

Inventor:
Lora B. Hoyt,
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att.

UNITED STATES PATENT OFFICE.

LORA B. HOIT, OF WORCESTER, MASSACHUSETTS.

LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 390,671, dated October 9, 1888.

Application filed December 14, 1887. Serial No. 257,847. (No model.)

To all whom it may concern:

Be it known that I, LORA B. HOIT, of Worcester, in the county of Worcester and State of Massachusetts, have invented certain new and
5 useful Improvements in Lifting-Jacks, of which the following is a specification, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The object of my invention is to provide a
10 lifting-jack that can be thrown under an axle without the lever becoming separated from the standard; also, to provide means whereby the axle shall be prevented from slipping
15 down the lever or binding against the standard when lifting on a high pitch; and also to increase the leverage without lengthening the lever.

My invention consists in the several details of construction and arrangement, as fully set
20 forth in the following specification and claim.

In the drawings, Figure 1 is a perspective view of my improved lifting-jack, and Fig. 2 is a vertical section.

Similar letters of reference indicate similar
25 parts in the respective figures.

A is the standard, which is made of malleable metal, and provided on the lower portion of its front edge with a series of notches, *a*, and on the upper portion of its rear edge with a
30 series of notches, *a'*. The upper end of the standard is formed into a hook, *a''*, for a purpose hereinafter described.

B is a metal concave shell, which serves as a base to support the standard A. The base B
35 is provided with a slot or mortise, *b*, and the lower end of the standard A with a tenon, *b'*, which fits into the mortise, and is secured therein by means of a rivet *b''*, Fig. 1; or the base and standard may be secured together
40 by hammering out the end of the tenon on the standard to form a rivet-head, as shown in Fig. 2.

C is a lever longitudinally slotted at *c*, so as to adapt it to fit over the standard in the manner shown. Each side of the forward end of the said lever is provided with a metallic plate,
45 D, the plates being riveted to the lever and to each other by rivets *d*. The central rivet, *d*, constitutes the fulcrum of the lever, and is
50 adapted to rest in any of the notches *a'*. The central rivet, *d*, is so located as to make the

space between it and the front edge of the slot *c* somewhat less than the width of the hook-shaped top of the standard, for the purpose of preventing the lever from slipping off the
55 standard unless the long end of the lever is lowered, when it can be taken off.

The plates D are provided with lugs or ears *d''*, which extend upward above the upper face of the lever C, and are for the purpose of preventing the axle from binding against the standard or slipping down on the lever when lifting on a high pitch. The plates D also serve as a protection to the end of the lever C and keep it
60 from being cut away by constantly coming in contact with the axles of carriages.

E is a shackle or link loosely hung to the top of the lever C, and held thereto by a plate or cap, *e*, riveted to the lever. The forward
70 end of the shackle or link is fitted to enter any of the notches *a* at the front edge of the standard.

By making the standard and base-support of metal and riveting them together a very durable article is produced, as they are not likely
75 to get loose, and will not rot, as is the case where wood or wood and iron are used. The peculiar construction of the base gives it strength without great weight. By making the standard of this class of jacks of malleable metal instead of wood, or wood strengthened with iron
80 plates, the width of the standard can be reduced one-half and still retain strength sufficient for all ordinary purposes; and by having the standard narrower the fulcrum-point of
85 the lever can be brought nearer to its lifting end than heretofore, and thereby increase the leverage without lengthening the long arm or shortening the short arm.

In using jacks of this class it is a common occurrence for the operator to swing the jack under the body of the carriage to be lifted, simply holding it by the lever; but in doing this the lever often slips off the standard and so causes
90 annoyance and delay. To obviate this difficulty is the object of the hook on the upper end of the standard, which will engage with the fulcrum-rivet *d* and allow the standard to swing freely without danger of being detached from
95 the lever.

Having described my invention, I claim—
The herein-described lifting-jack, which

consists of the following elements, viz: a hollow base, a standard riveted thereto, said standard being provided with a series of notches at its front and rear edges and having a hook at
5 its upper end, a lever having a fulcrum adapted to rest in either of the notches at the rear edge of the standard, metal plates riveted to the sides of the lever at its lifting end, said plates having lugs extending upwardly above the upper face
10 of the lever, and a shackle or link loosely hung

to the lever and fitted to enter either of the notches at the front edge of the standard, all arranged and co-operating substantially as specified.

In testimony whereof I have hereunto set my hand and seal.

LORA B. HOIT. [L. S.]

Witnesses:

HENRY M. BOYD,
WM. CARL.