

No. 731,704.

PATENTED JUNE 23, 1903.

E. T. OGLE.  
LIFTING JACK.

APPLICATION FILED FEB. 25, 1903.

NO MODEL.

Fig. 1.

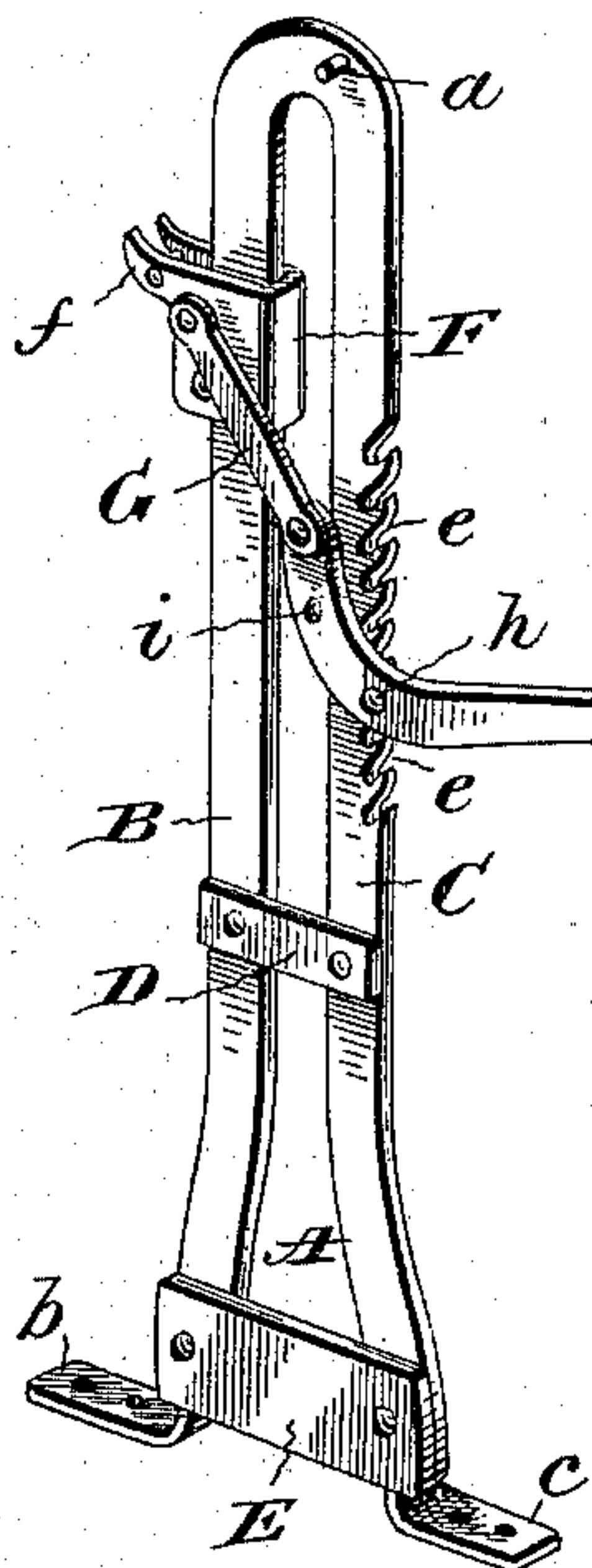


Fig. 2.

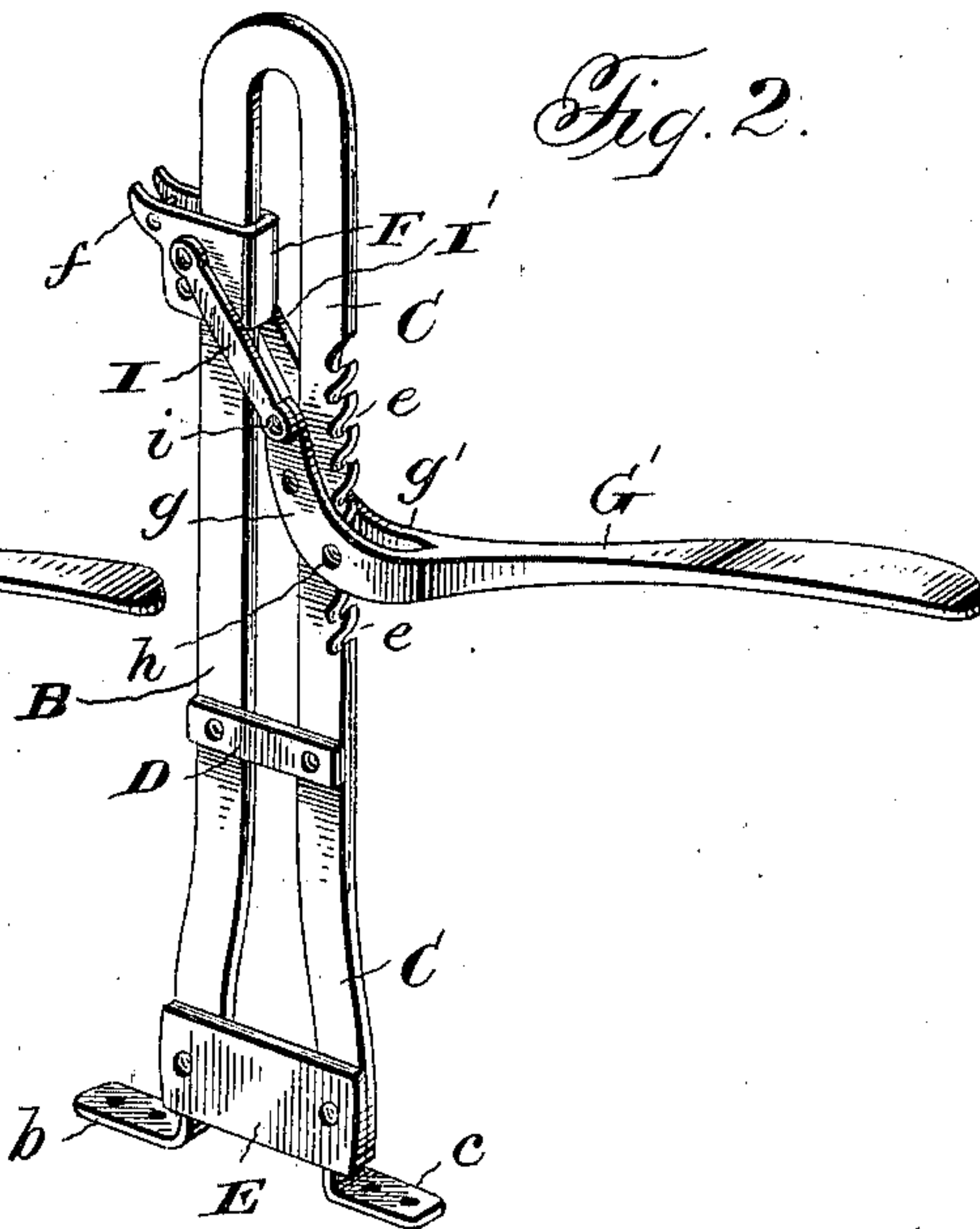


Fig. 3.

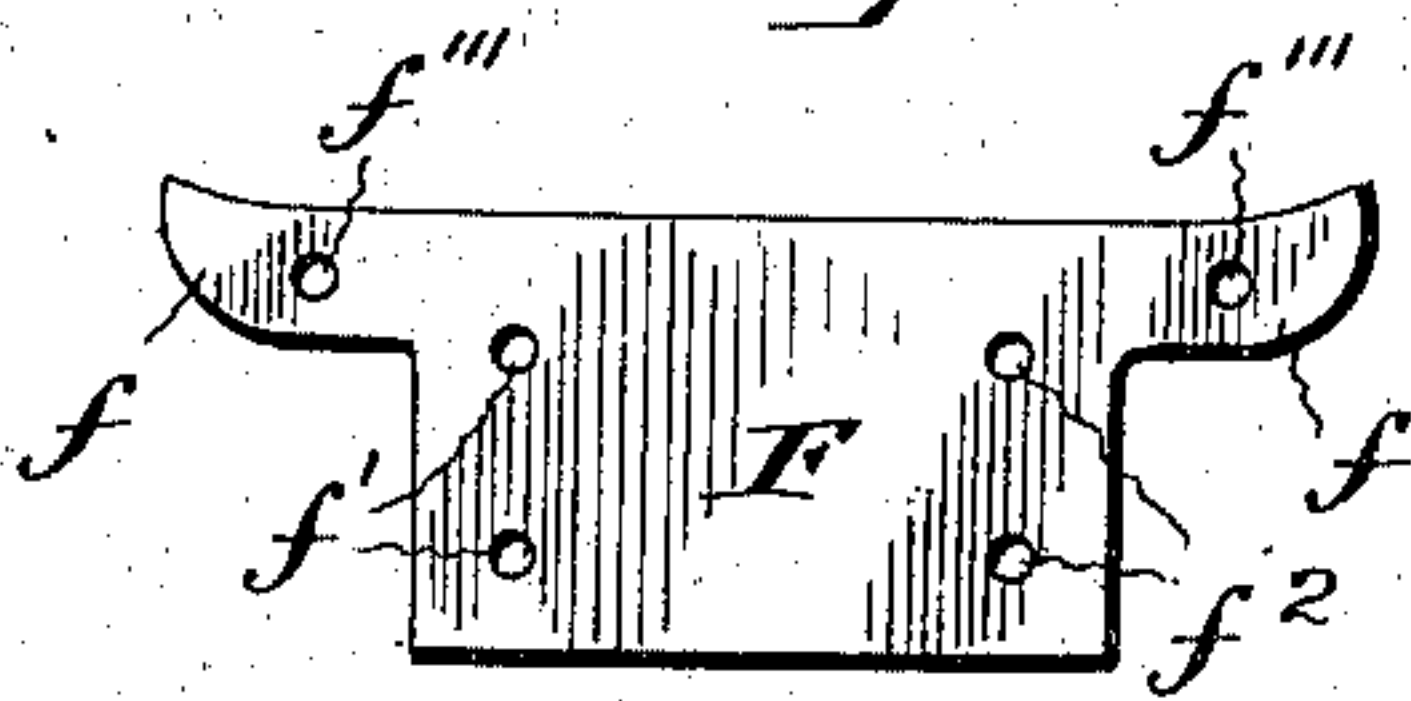


Fig. 4.



Witnesses:  
Jas. Hutchinson.  
Jas. R. Steath.

Inventor:  
E. T. Ogle  
by Jas. R. Steath  
Att'y.



# UNITED STATES PATENT OFFICE.

EVENS T. OGLE, OF MARIETTA, OHIO.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 731,704, dated June 23, 1903.

Application filed February 25, 1903. Serial No. 144,995. (No model.)

*To all whom it may concern:*

Be it known that I, EVENS T. OGLE, a citizen of the United States, residing at Marietta, in the county of Washington and State of Ohio, have invented certain new and useful Improvements in Lifting-Jacks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in lifting-jacks; and its object is to provide a lifting-jack which can be cheaply and easily constructed and be withal strong and durable.

In the drawings, in which a preferable embodiment of my invention is shown, and wherein like letters of reference refer to similar parts in the several views, Figure 1 is a perspective view of my invention. Fig. 2 is a perspective view of a modified form of my invention. Fig. 3 is a detail view of the blank used to form the head-block, and Fig. 4 is a detail view of the operating-lever of the jack.

In the drawings, A is a standard having the arms B and C. The standard A and the arms B and C are formed of a single piece of strap metal bent in the form of an inverted U. The arms B and C of the inverted-U-shaped standard are substantially parallel for the greater part of their length; but at a point near their end they are bent outwardly to form a broad base for the jack to rest on. The arms B and C are formed at their ends with the feet *b* and *c*, on which the jack is adapted to rest. These feet *b* and *c* are formed by twisting the ends of the arms B and C to lie in a plane substantially at right angles to the rest of the arms and then bending the parts so twisted outwardly to rest flat on the floor or support. The feet *b* and *c* may be provided with holes, through which screws or other fastening means may be passed when it is desired to fasten the jack to the floor or support. The arms B and C are prevented from spreading by the braces D and E, the opposite ends of which are secured by bolts or other fastening means to the arms B and C. I have shown the brace D as connecting the arms B and C just above the point where they start to diverge to form the wide base and the brace E as connecting the arms just

above the point where the ends of the arms are twisted to form the feet *b* and *c*. These braces may, however, be located at any other suitable points on the arms B and C out of the path of movement of the head-block. The arm C has formed in its outer edge a number of downwardly and inwardly extending notches *e* for a purpose to be hereinafter more particularly pointed out.

F is a head-block which is adapted to loosely slide on the arm B of the standard. The head-block F is formed from a metal blank of the shape shown in Fig. 3. The blank is formed at each of its outer corners with the outwardly-projecting portion *f* and along each of its sides with the holes *f'* and *f''*. The blank is adapted to be folded around the standard A and rivets passed through the holes *f'* *f'* and *f''* *f''* to clamp the same loosely thereon. The projecting portions *f* of the blank form, when the same is clamped around the standard B, the supporting-face of the head-block F. To prevent any possibility of the blank from spreading, I may also provide the projecting portions *f* with holes *f'''* for the reception of an additional clamping-rivet.

G is a link pivotally connected at one end to the head-block F and at the other end to the curved operating-lever H. The operating-lever H is provided on the side adjacent the standard and at a point near its inner end with a laterally-projecting lug or pin *h*, which is adapted to rest in one of the before-mentioned inclined slots or notches *e* to constitute a fulcrum for the lever. The lug or pin *h* is preferably formed with a head *h'* on its outer end to prevent the lever from becoming accidentally dislodged from the notches *e*. The lever H is also provided on the face adjacent the standard and at a point beyond the pin or lug *h* with a similarly-disposed stop or lug *i*. Excessive upward movement of the lever is prevented by means of a stop *a*, which projects laterally from the top of the standard A and stands in the path of movement of the lever.

Instead of the form of lever above described I may employ the form shown in Fig. 2. In this case I split the lever G at its inner end or construct the same of two pieces to form the arms *g* and *g'*, which are adapted to straddle the arm C of the standard. The



lugs *h* and *i* are the same as in the other form, except that they are fastened to both of the arms *g* and *g'*. In this form I employ two links *I* and *I'*, the ends of which are pivotally connected to each side of the head-block *F* and to the ends of the arms *g* and *g'*.

Having now described the construction of my device, I will now proceed to describe the operation of the same.

10 The pin or lug *h* is first adjusted in the desired notch with the end of the lever in its raised position, and consequently the head-block in its lowest position. If now the end of the lever is forced down, the head *F* will be raised by reason of its linked connection with the lever. As soon as the lever has been depressed sufficiently to cause the point of connection between the link and the end of the lever to pass the dead-center the head-block will be locked in its raised position by reason of the fact that the weight of the load on said head-block will cause the lug *i* to abut against the inner edge of the arm *C*.

I do not desire to limit myself to the precise form of lifting-jack shown in the drawings, as it is obvious that many minor changes of construction might be made without departing from the spirit of the invention.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. A lifting-jack of the character described, comprising an inverted-U-shaped standard, one of the arms of the standard being provided with a plurality of notches, a head-block sliding on the other arm of the standard, a lever adapted to engage with one of said notches and means for connecting the head-block and the end of the lever.

40 2. A lifting-jack of the character described, comprising a standard formed from a single piece of metal bent in the form of an inverted U, the upper portions of the arms of the standard being approximately parallel and the lower portions of said arms being slightly divergent, feet at the ends of arms to support the jack, a lever fulcrumed on one arm of the standard, a head-block sliding on the other arm of the standard, and a link pivotally connecting said lever and head-block.

3. A lifting-jack of the character described, comprising a standard formed from a single piece of metal bent in the form of an inverted U, feet at the end of the arm of said standard to support the jack, said feet being formed by twisting at the ends of the arms a portion of the metal to lie in a plane substantially at right angles to the rest of the arms, and a lever fulcrumed on one arm of said standard, a head-block sliding on the other arm of the standard and a link pivotally connecting said lever and head-block.

4. A lifting-jack of the character described comprising a standard formed from a single piece of metal bent in the form of an inverted U, feet at the ends of the arms of said standard to support the jack, said feet being formed

by bending at the ends of the arms a portion of the metal to lie flat, a lever fulcrumed on one end of the standard, a head-block sliding on the other arm and means for connecting said lever and head-block.

5. A lifting-jack of the character described comprising a standard formed from a single piece of strap metal bent in the form of an inverted U, a lever fulcrumed on one arm of said standard, a head-block sliding on the other arm of said standard, and means for connecting the head-block and the end of the lever.

6. A lifting-jack of the character described, comprising a standard formed from a single piece of strap metal bent in the form of an inverted U, feet at the ends of the arms of the standard to support the jack, braces connecting the arms of the standard, a lever fulcrumed on one arm of the standard, a head-block sliding on the other arm and means for connecting said lever and head-block.

7. In a lifting-jack of the character described, a standard comprising two substantially parallel arms, one of said arms provided with a plurality of notches, a head-block sliding on the other of said arms, a lever adapted to engage said notches, a stop projecting from the lever into the space between the arms of the standard, and means for connecting the end of the lever and the head-block.

8. In a lifting-jack of the character described, a standard comprising two substantially parallel arms, a lever fulcrumed on one of said arms, a head-block formed of a single piece of metal bent around and bolted so as to slide loosely on the other arm of the standard, and means for connecting the lever and the head-block.

9. A lifting-jack of the character described comprising a standard formed from a single piece of strap metal bent in the form of an inverted U, feet at the end of the arms of the standard to support the jack, one of the arms of said standard having a plurality of notches in its outer edge, a head-block sliding loosely on the other arm of the standard, a lever provided on its side with a lug adapted to engage with one of said notches and on the same side with a stop adapted to project into the space between the arm of the standard, and a link pivotally connecting the end of the lever and the head-block.

10. In a lifting-jack of the character described, a standard comprising two substantially parallel arms, a lever fulcrumed on one of said arms, a head-block sliding on the other of said arms, a stop projecting from the lever into the space between the arms of the standard, and means for connecting the end of the lever and head-block.

11. In a lifting-jack of the character described, a standard comprising two substantially parallel arms, a lever fulcrumed on one of said arms, a head-block sliding on the other of said arms, a stop for limiting the movement of the lever in one direction, an auxil-



iary stop for limiting the movement of the lever in the opposite direction, and means for connecting the end of the lever and the head-block.

- 5 12. In a lifting-jack of the character described, a standard comprising two substantially parallel arms, a lever fulcrumed on one of said arms, a head-block sliding on the other of said arms, a stop projecting laterally from

the frame in the path of the lever, and means 10 for connecting the end of the lever and the head-block.

In testimony whereof I affix my signature in presence of two witnesses.

EVENS T. OGLE.

Witnesses:

ADA G. BEYNON,  
N. E. KIDD.