

(No Model.)

L. J. CRECELIUS.  
LIFTING JACK.

No. 407,174.

Patented July 16, 1889.

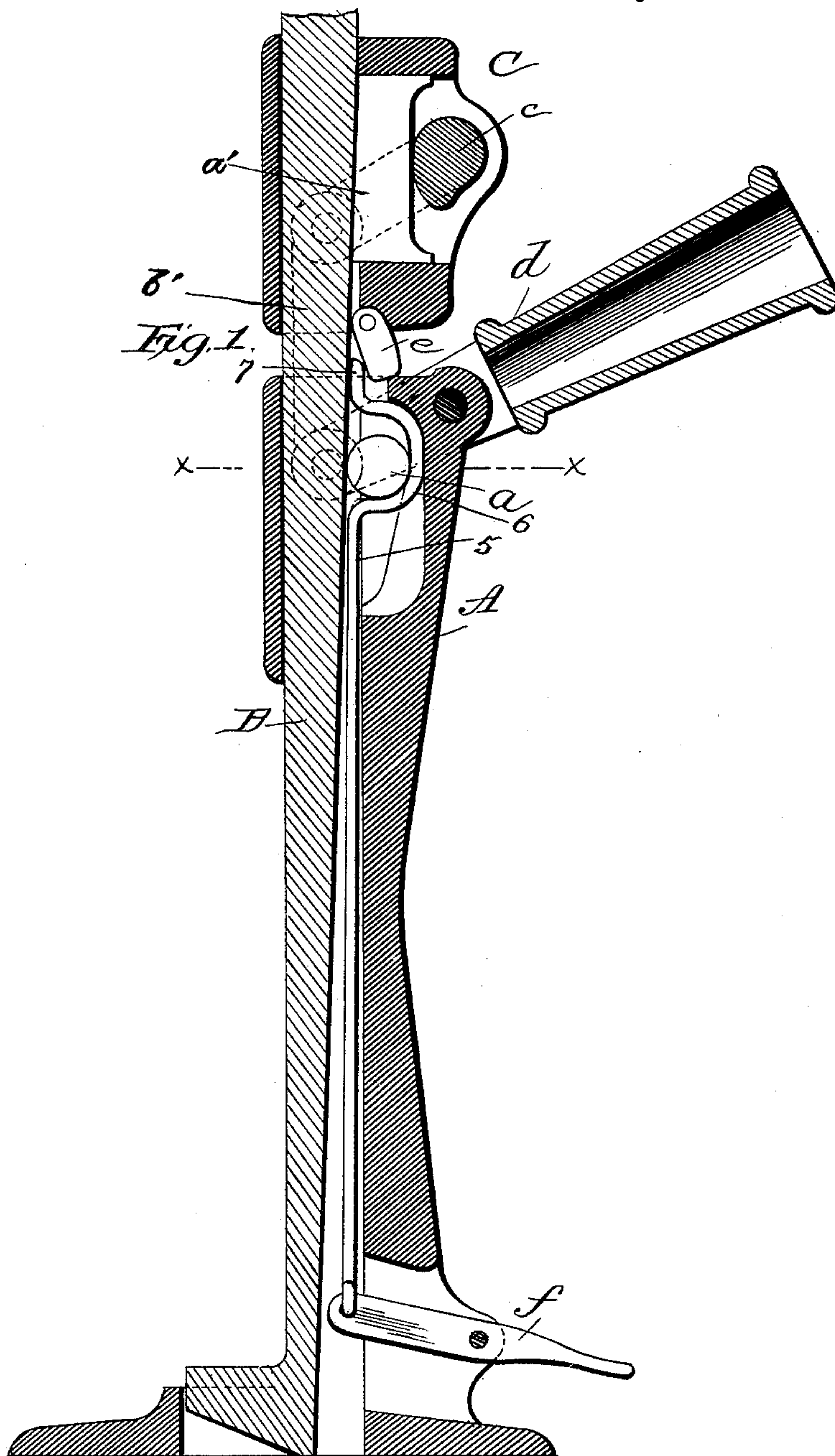
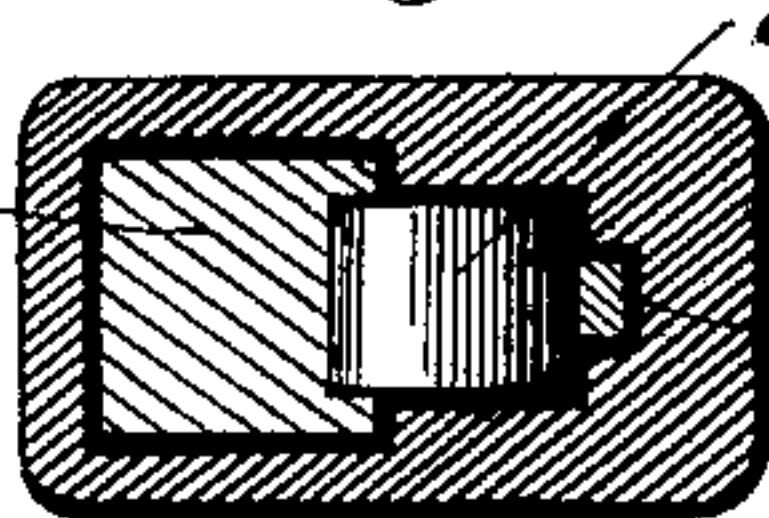


Fig. 2.



Attest  
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# UNITED STATES PATENT OFFICE.

LOUIS J. CRECELIUS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO ANDREW WARREN, OF SAME PLACE.

## LIFTING-JACK.

SPECIFICATION forming part of Letters Patent No. 407,174, dated July 16, 1889.

Application filed May 16, 1889. Serial No. 311,005. (No model.)

*To all whom it may concern:*

Be it known that I, LOUIS J. CRECELIUS, of St. Louis, in the State of Missouri, have invented a new and useful Improvement in  
5 Lifting-Jacks; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates to lifting-jacks of that class in which there is a standard and head  
10 combined with a lifting-bar and with gripping devices in the standard and head; and it consists in a special connection of the releasing-rod with the grip in the standard, whereby it acts on the grip to move it both  
15 upward and downward, and in the particular construction of the releasing-rod in relation to the grip in the standard and the movable releasing-lug on the head.

The invention is shown in the accompanying  
20 drawings, in which—

Figure 1 shows a vertical section of the jack, taken from front to rear. Fig. 2 is a horizontal section of the standard on line  $xx$  of Fig. 1.

25 In the drawings, B represents the lifting-bar, and A the standard in which the lifting-bar has vertical movement. The head C has a gripping device  $c$ , connected by rigid arms  $a' a'$  to the links  $b' b'$ , (shown in dotted lines  
30 in Fig. 1,) and through these links to the pivoted lever-socket  $d$ . This form of grip in the head is not herein claimed, but is simply used to represent any convenient form of head and grip. In the upper end of the  
35 standard is a cylinder or roller  $a$ , which forms the grip, located in a downwardly-tapering chamber and adapted to press directly against the rear face of the lifting-bar, so that it binds and grips against the bar in its down-  
40 ward movement. On the lower end of the head C is a pivoted lug  $e$ , which in its normal position strikes against the upper end of the standard when the head is lowered and allows the head-grip to operate. In order to  
45 lower the lifting-bar, it is necessary to swing its lug outwardly, as well as to raise the gripping-roller  $a$ . For this purpose a rod 5 has been heretofore used in connection with a lever-treadle  $f$ , said rod passing up directly  
50 between the roller and the lifting-bar through a groove in said roller.

In my present invention the rod 5 is formed with a bend 6, which partially encircles the roller, passing through a groove in the rear wall of the gripping-cavity in the head of  
55 the standard. The rod is bent back around the roller and inward again, and is then turned upward, as shown at 7. The bend 6, which partially encircles the roller, serves a  
60 twofold purpose. When the rod is raised, the lower part of the bend bears against the under side of the roller and lifts it up, freeing the standard-grip, while the upper end 7 throws out the pivoted lug  $e$  and throws the  
65 head-grip out of action. When the rod is drawn down or falls by its own weight, the upper part of the bend bears against the upper side of the roller and positively moves the roller down, rendering it unnecessary to  
70 groove the roller itself, and leaves its full bearing-face for contact with the lifting-bar, and the only change necessary in the standard itself is the groove in the rear face of the chamber.

The cylinder is shown as representative.  
75 The same construction is applicable to spherical or other forms of grips.

I claim as my invention—

1. In combination with the standard of a lifting-jack and with its head having a piv-  
80 oted lug, a grip located in a chamber in the standard and adapted to bear against the lifting-bar and a releasing-rod arranged to bear against the upper and under sides of said grip and extending to the pivoted lug,  
85 substantially as described.

2. In combination with the standard of a lifting-jack and a grip arranged in a chamber in said standard, a releasing-rod bent to  
90 bear against the upper and lower sides of said grip and working in a groove in rear of the grip, substantially as described.

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

LOUIS J. CRECELIUS.

Witnesses:

CHAS. A. THOMPSES,  
C. D. GREENE, Jr.