

(Model.)

M. JACKSON.  
PADLOCK.

No. 451,156.

Patented Apr. 28, 1891.

FIG. 1.

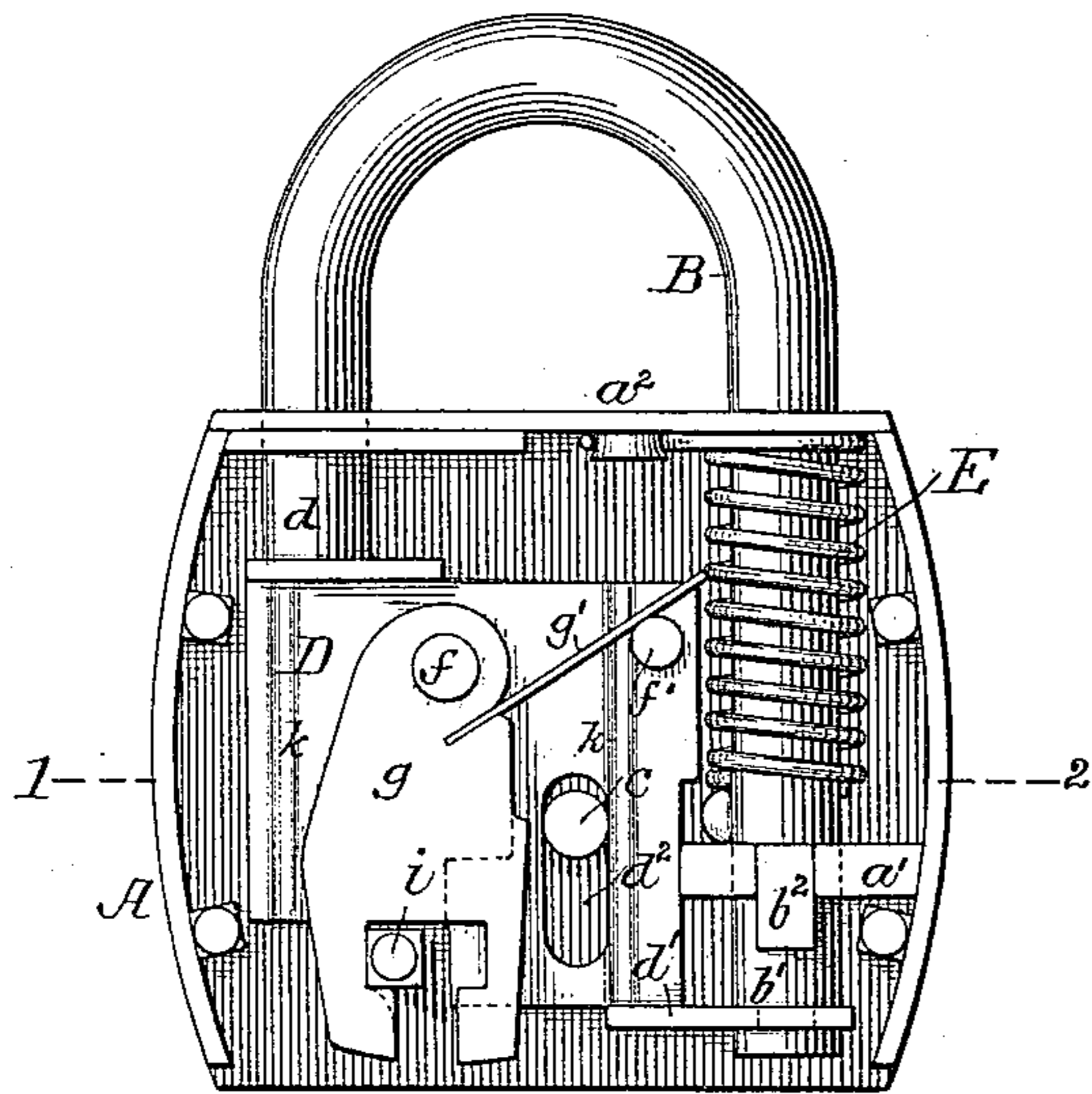


FIG. 2.

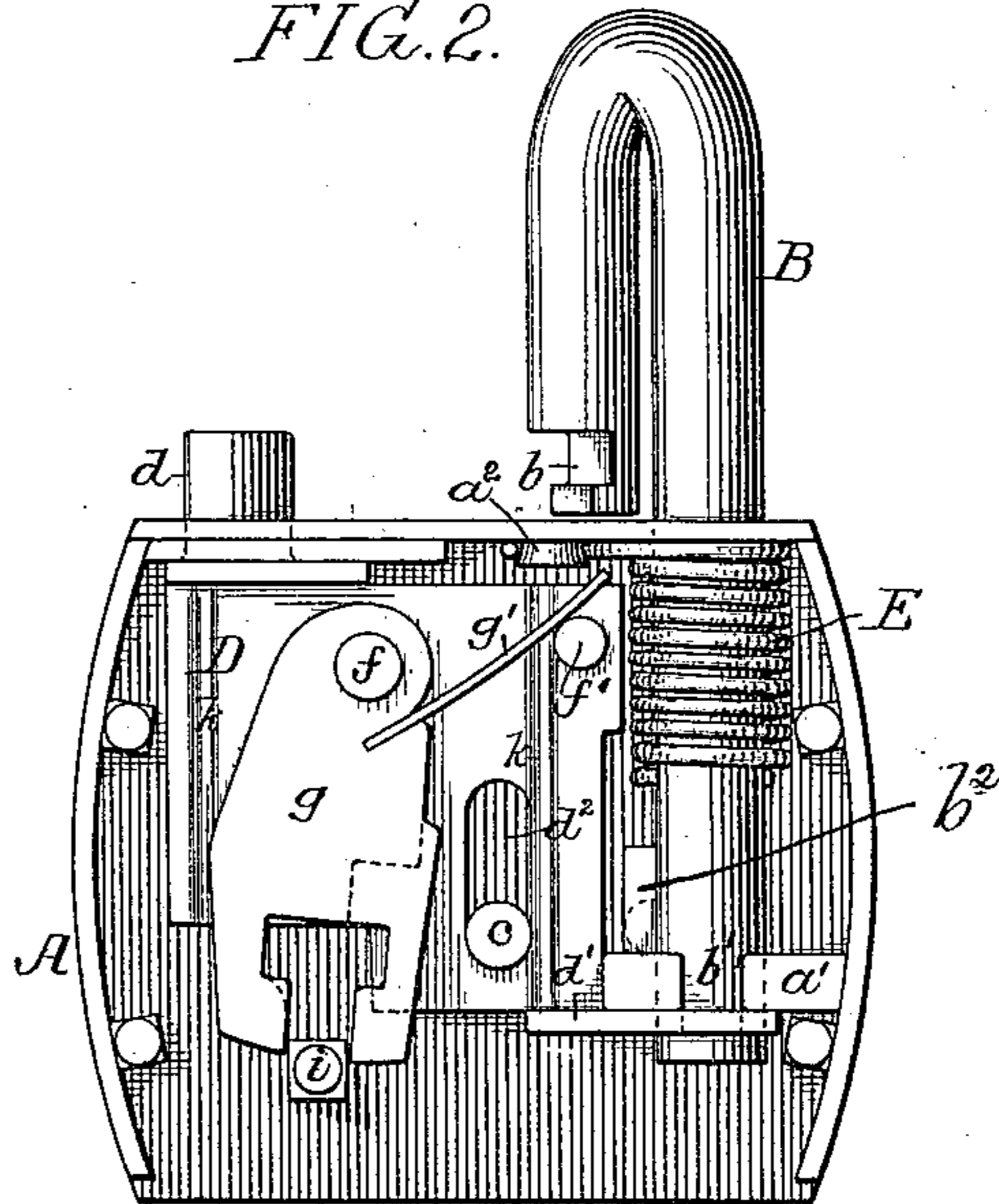


FIG. 5.

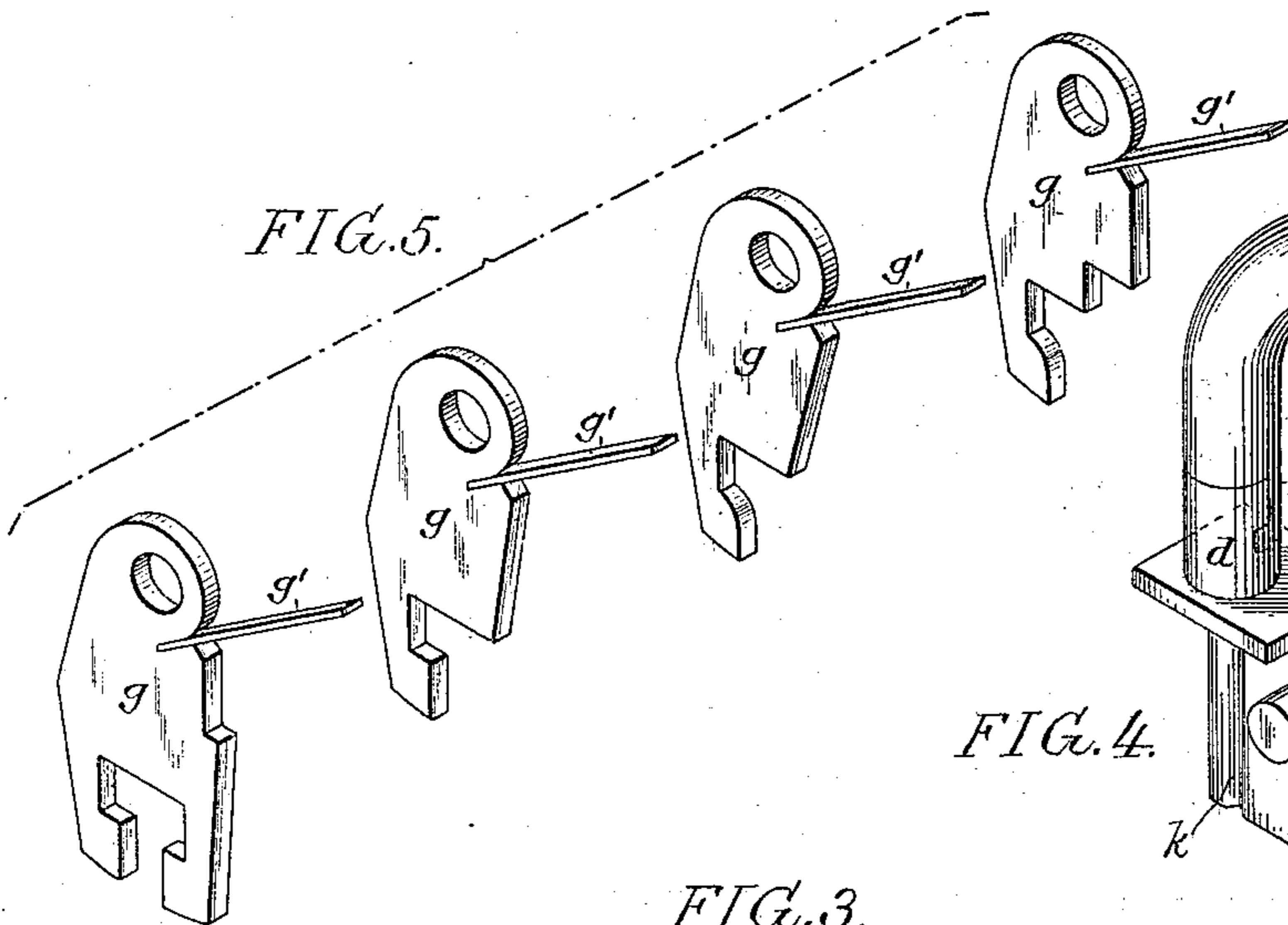


FIG. 4.

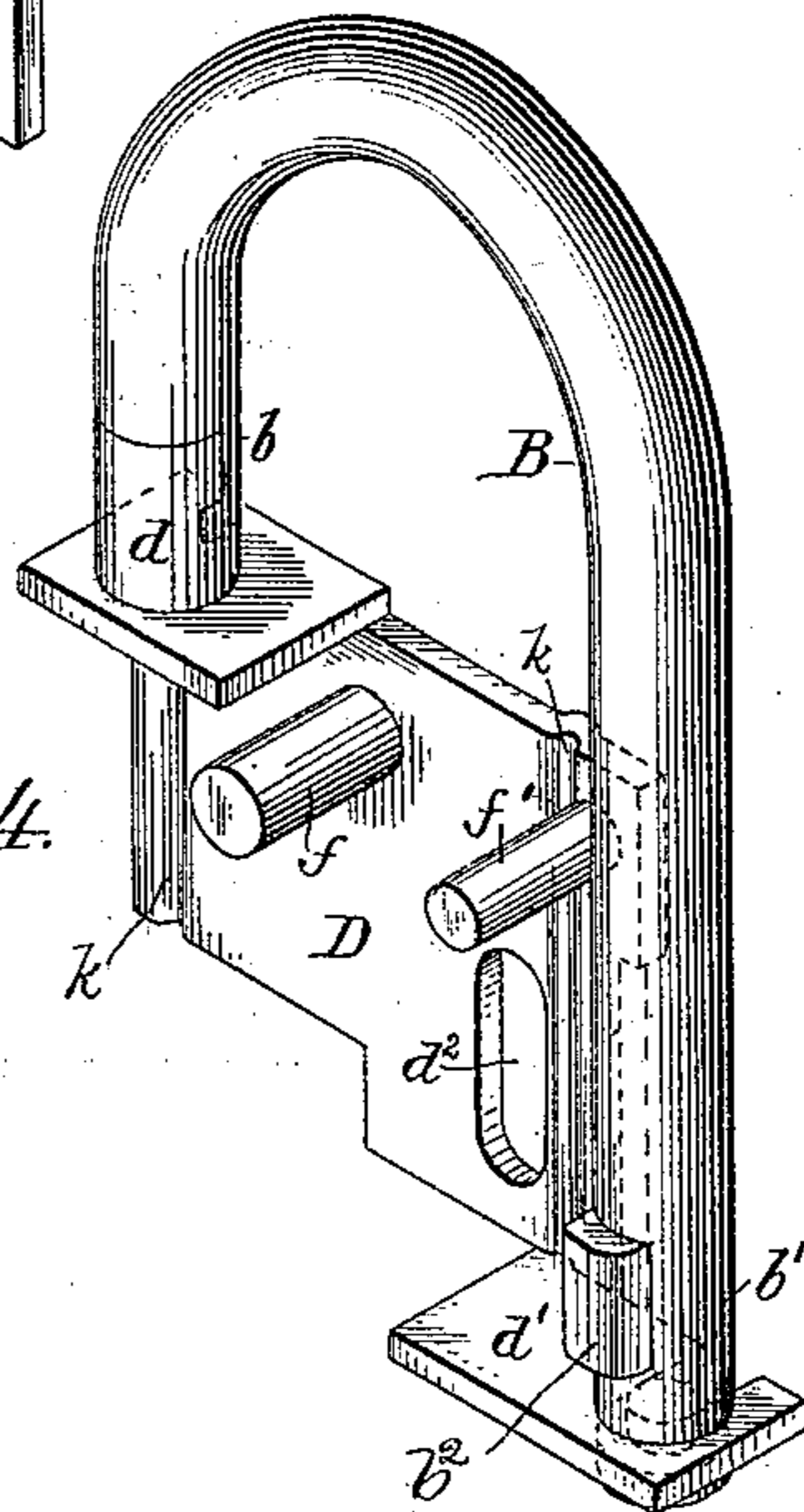
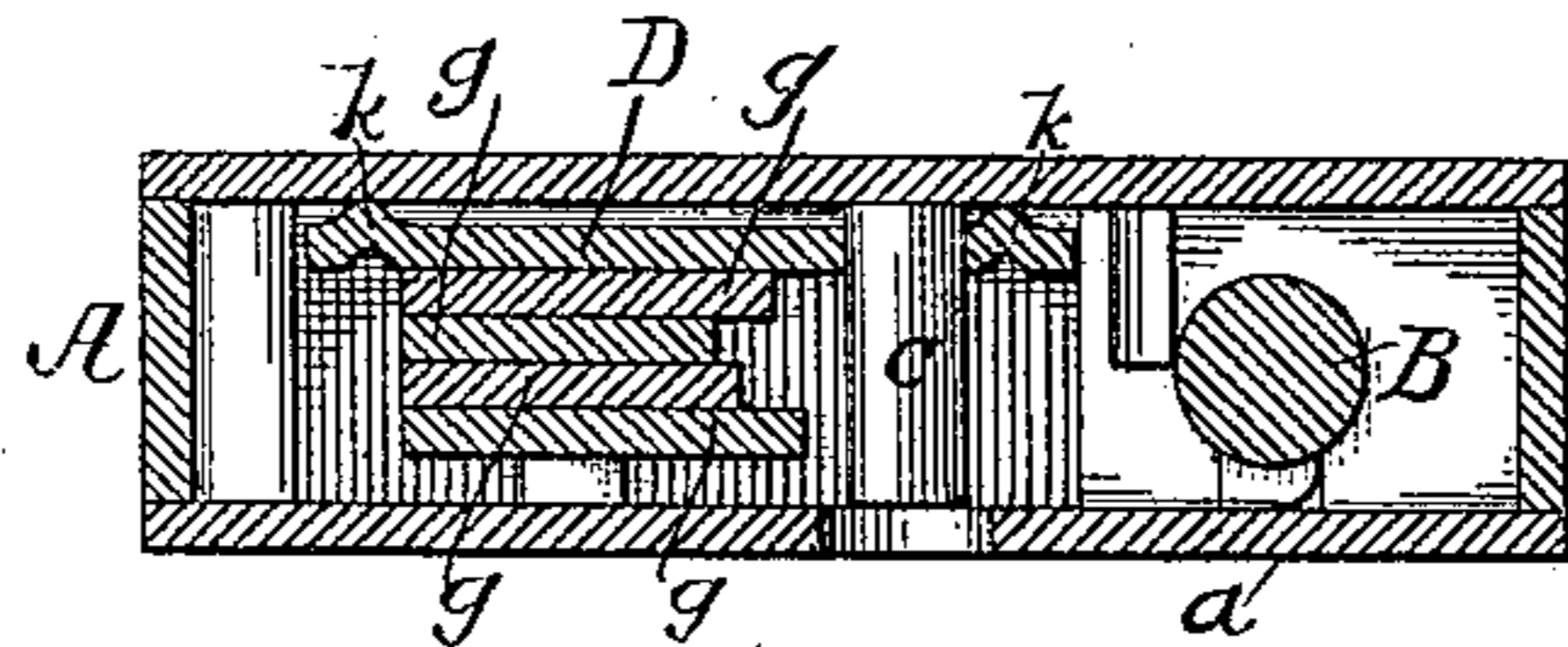


FIG. 3.



Witnesses:  
Hamilton D. Turner  
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by his Attorneys  
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# UNITED STATES PATENT OFFICE.

MILTON JACKSON, OF PHILADELPHIA, PENNSYLVANIA.

## PADLOCK.

SPECIFICATION forming part of Letters Patent No. 451,156, dated April 28, 1891.

Application filed June 18, 1890. Serial No. 355,839. (Model.)

*To all whom it may concern:*

Be it known that I, MILTON JACKSON, a citizen of the United States, and a resident of Philadelphia, Pennsylvania, have invented certain Improvements in Padlocks, of which the following is a specification.

The object of my invention is to construct an improved padlock which can be readily made from wrought metal struck up to the proper form. This object I attain in the following manner, reference being had to the accompanying drawings, in which—

Figure 1 is a side view of my improved padlock with the front plate removed, showing the shackle locked. Fig. 2 is a similar view to Fig. 1, showing the shackle unlocked. Fig. 3 is a section on the line 1 2, Fig. 1. Fig. 4 is a perspective view of the shackle and the carrying-plate, and Fig. 5 is a perspective view showing the series of dogs.

A is the casing of the lock.

$a$  is the face-plate, which is secured to the body of the lock by riveting in the usual manner.

B is the shackle of the swinging type and having a notched end  $b$  adapted to a notched projection  $d$ , secured to or forming part of the carrying-plate D. The lower end of this carrying-plate has an extension  $d'$ , which is adapted to the grooved portion  $b'$  of the long arm of the shackle, and consequently the carrying-plate moves up and down with the shackle. The long arm of the shackle is adapted to bearings in the upper section of the casing and to a lug  $a'$ , secured to the casing, and the projection or lug  $d$  is adapted to an orifice in the upper portion of the casing.

Surrounding the long arm of the shackle B is a coiled spring E, which not only turns the shackle at right angles to the face of the lock, but also tends to force the shackle and plate down, as shown in Fig. 1. The lower end of the spring passes through the long arm of the shackle, and its upper end is secured back of a lug  $a^2$  on the casing. A squared projection  $b^2$  on the lower end of the long arm of the shackle B passes through a slot in the lug  $a'$  when the shackle and plate are raised, as will be readily understood by referring to Fig. 1. This lug prevents the shackle from turning until its short arm is clear of the case. The

projection is then free of the lug  $a'$ , and will allow the shackle to turn on its pivot to the position shown in Fig. 2. The carrying-plate D is slotted at  $d^2$ , and adapted to this slot is the key-post  $c$  on the case A. On a pin  $f$  on the carrier D are a series of dogs  $g$ . (Shown clearly in Fig. 5.) Each of these dogs has a spring  $g'$ , bearing against a pin  $f'$  on the carrying-plate. The lower portions of the dogs engage with a pin  $i$  on the casing, and when the key is inserted in the key-hole the dogs are so moved that they clear the pin, thus allowing the key to lift the shackle, and when the shackle reaches the limit of its upward movement it is turned by the spring to the position shown in Fig. 2, the projection  $b^2$  on the long arm passing over the lug  $a'$ , which retains the shackle in its raised position. To relock the shackle, it is simply turned, and is drawn down into the orifice of the lug  $d$  by the spring and locked automatically.

On the carrying-plate are two or more ribs  $k$ , pressed from the plate, which rest against the back plate of the case and reduce the friction between the carrier and the case. The ribs, however, may be on the case instead of the carrier without departing from my invention. In some instances the lug  $d$  on the carrying-plate may be dispensed with, the end of the short arm in this instance merely extending into or onto the casing.

I claim as my invention—

1. The combination, in a padlock, of the casing, the shackle adapted to slide and swing in the casing, a carrying-plate attached to the shackle, but in which it is free to swing, a spring acting both to swing the shackle and to withdraw the same, and dogs pivoted to a pin on the carrying-plate, with a pin on the casing, with which the dogs engage, substantially as set forth.

2. The combination, in a padlock, of the casing, a projection  $a'$  thereon, a shackle round in cross-section, having its bearings in the top plate of the casing and in the projection and adapted to move vertically in said bearings and also to vibrate therein, a lug  $b^2$  on the long arm of the shackle, adapted to a slot in the projection  $a'$ , a carrying-plate having an extension attached to the long arm of the shackle and having a notched projection

*d*, adapted to engage with the notched short arm of the shackle, said carrying-plate moving vertically with the shackle, a coiled spring on the long arm of the shackle, a pin *f* on the  
5 carrying-plate, and dogs pivoted thereto, with a pin *i* on the casing, with which the dogs engage, substantially as described.

3. The combination, in a padlock, of the struck-up back casing, a shackle adapted to  
10 move vertically in said casing, a struck-up sheet-metal carrying-frame attached to and moving vertically with the shackle, and ribs on

the carrying frame or casing, said ribs being forced up from the sheet metal, with locking-dogs and a pin with which they engage, all 15 substantially as set forth.

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

MILTON JACKSON.

Witnesses:

EUGENE ELTERICH,  
HARRY SMITH.