

F. SOLEY.

PADLOCK.

APPLICATION FILED MAY 6, 1909.

945,628.

Patented Jan. 4, 1910.

Fig. 1.

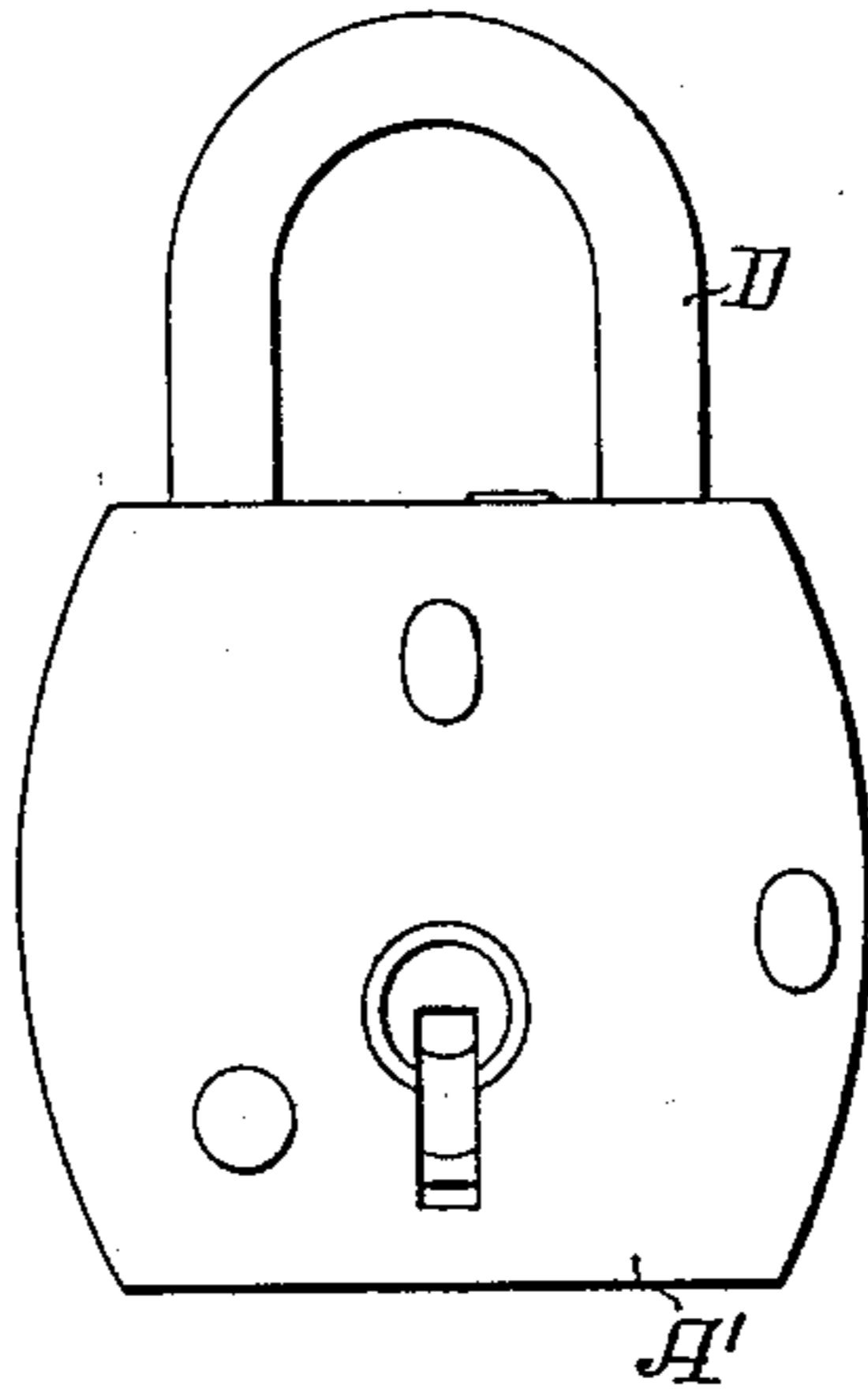


Fig. 2.

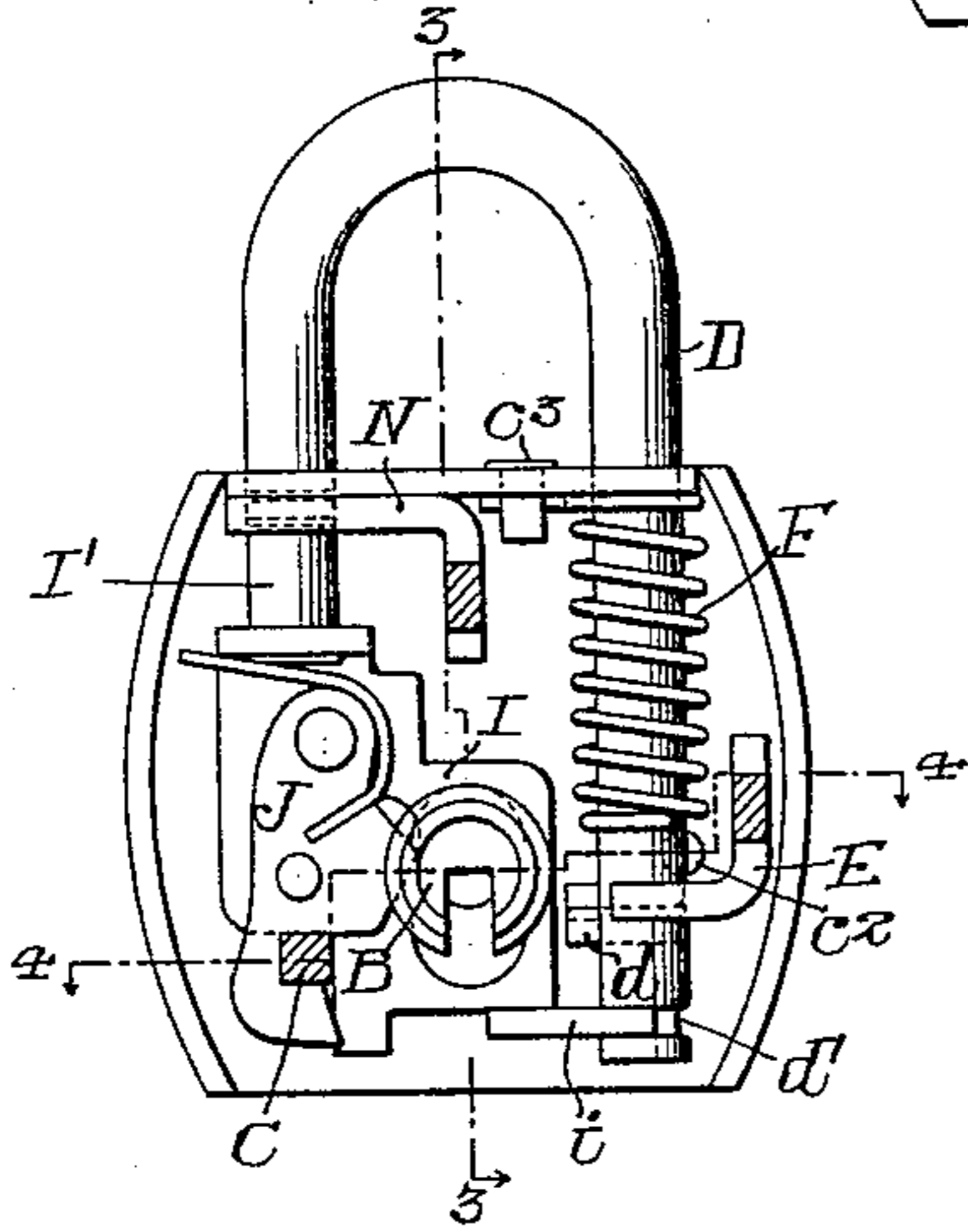


Fig. 3.

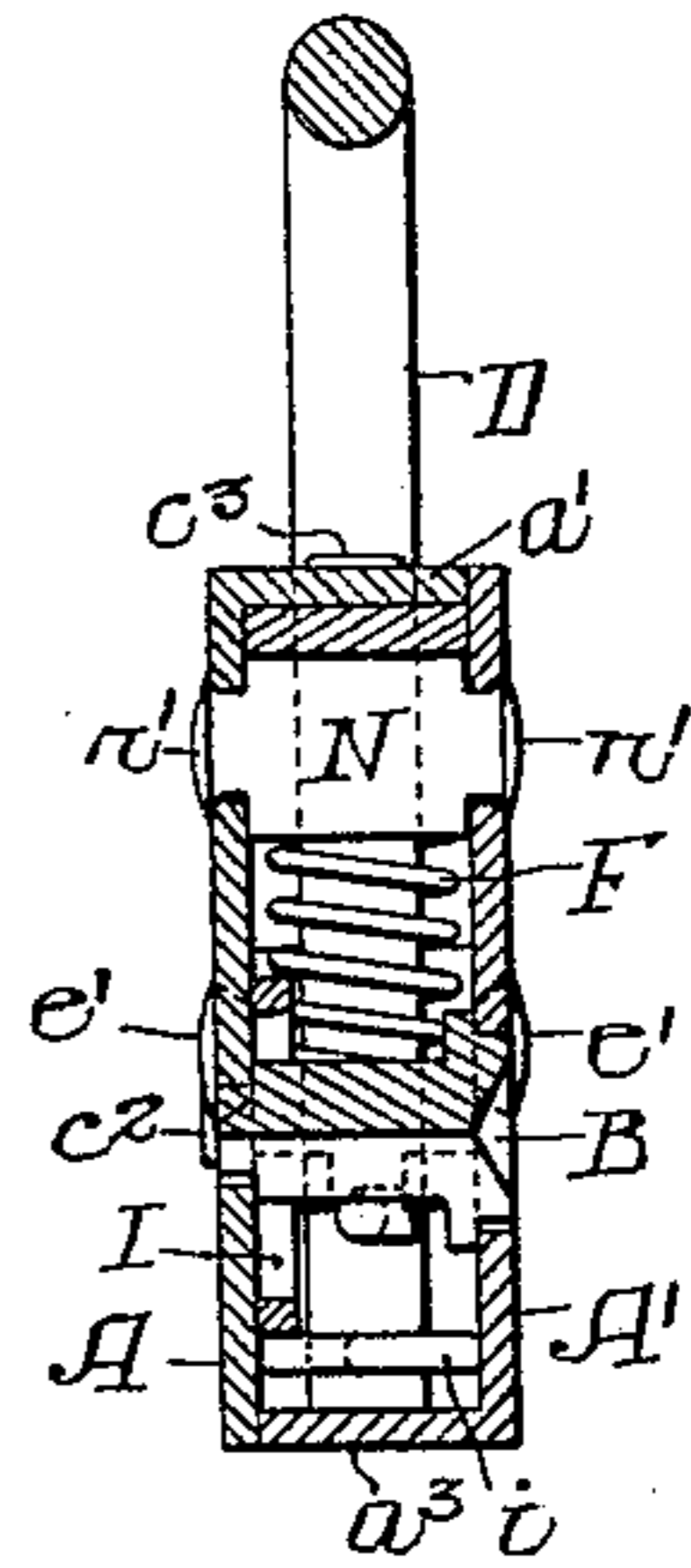


Fig. 4.

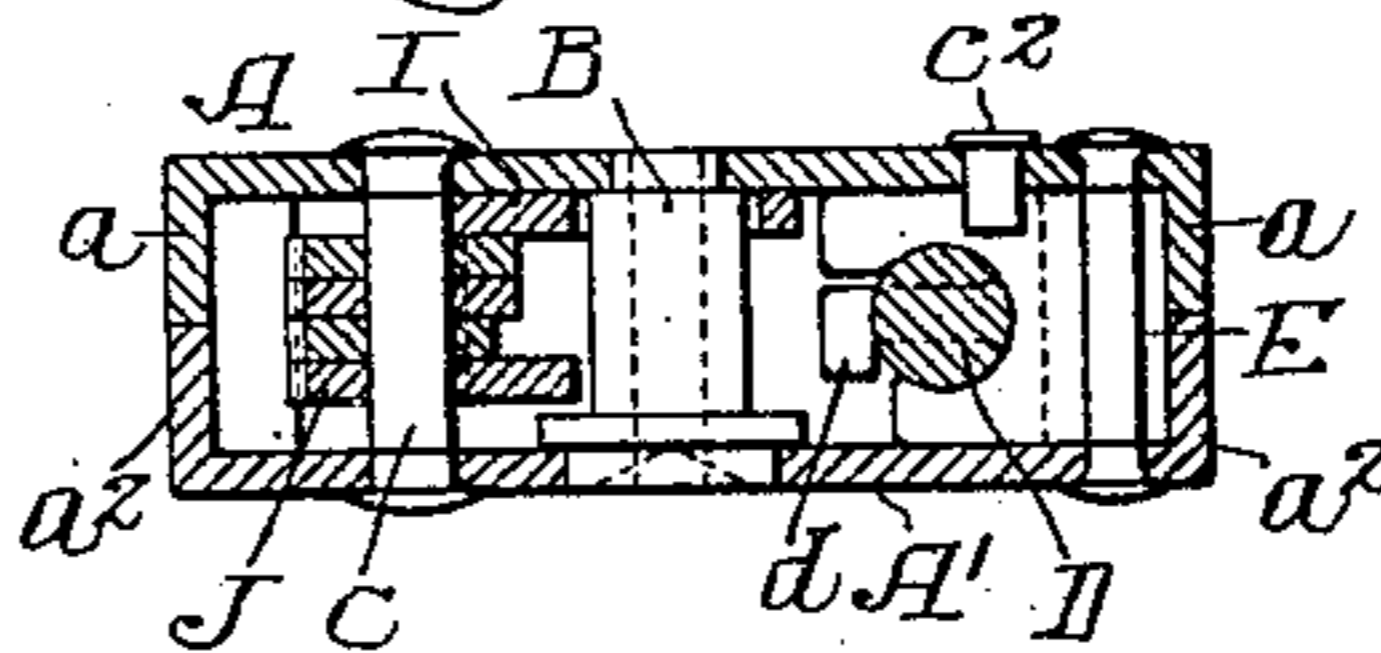


Fig. 7.

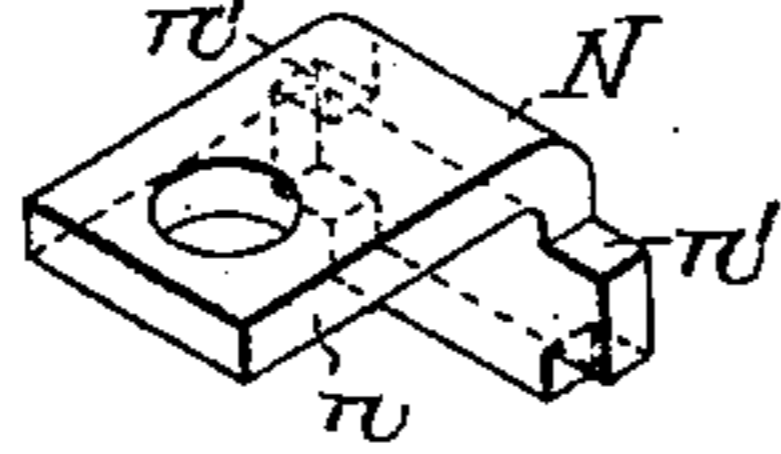


Fig. 8.

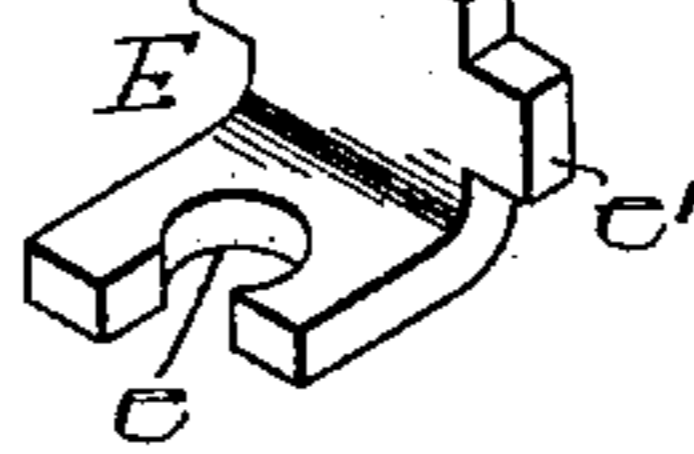


Fig. 9.

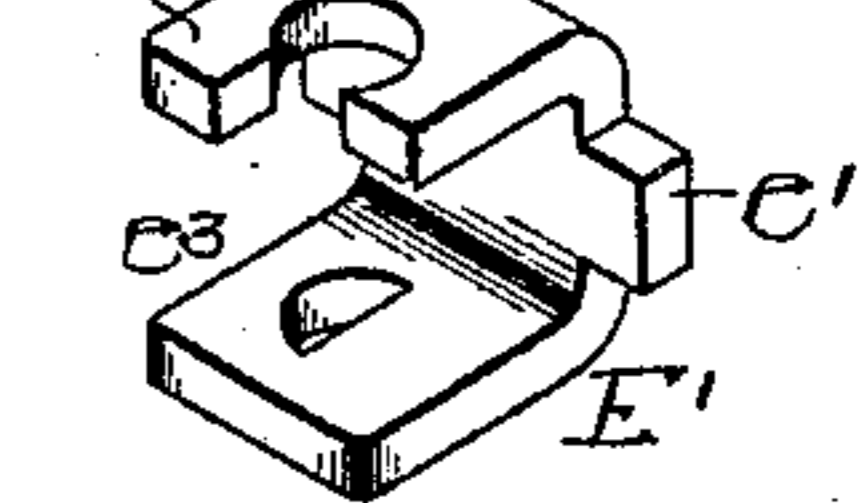


Fig. 5.

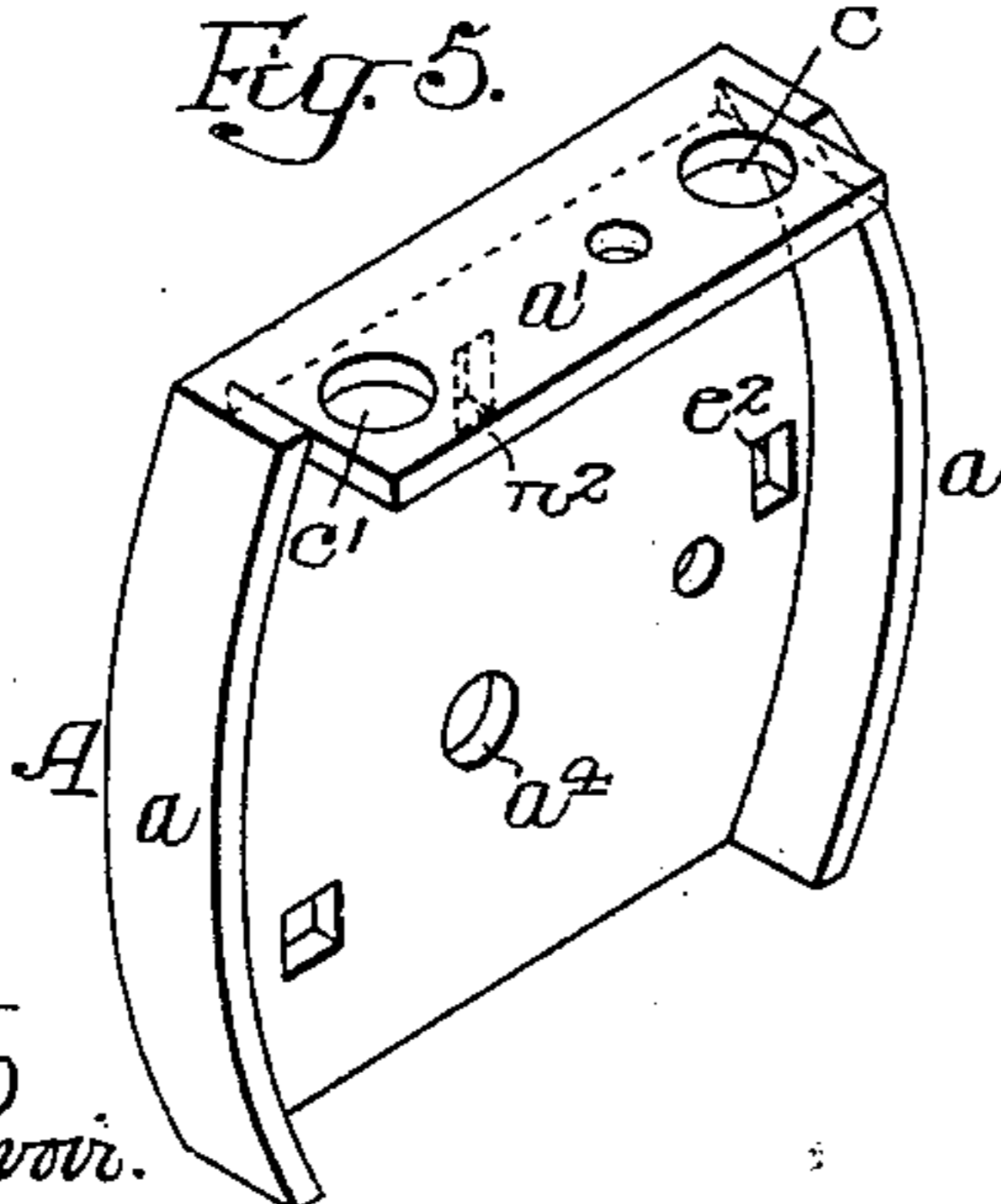
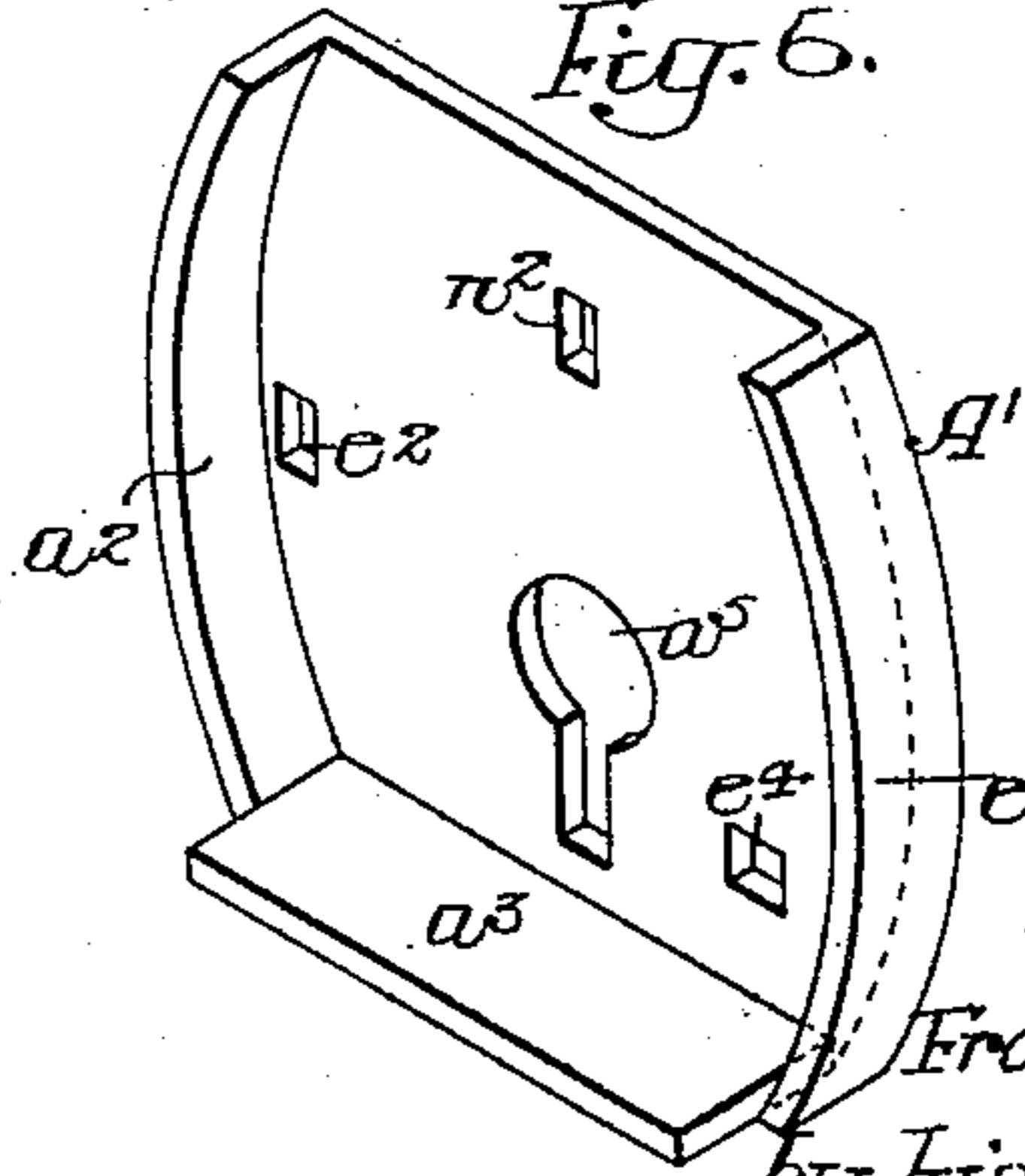


Fig. 6.



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UNITED STATES PATENT OFFICE.

FRANK SOLEY, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO MILLER LOCK CO.,
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PADLOCK.

945,628.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, FRANK SOLEY, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain
5 Improvements in Padlocks, of which the following is a specification.

The object of my invention is to improve the construction of padlocks of the type having a front and back case secured together
10 by rivets.

The object of my invention is to so design the bearing or guide sections of the lock as to utilize these sections to secure the two parts of the case together. This object I attain in the following manner, reference being had to the accompanying drawings, in which,—

Figure 1, is a view of a padlock to which my invention is applied. Fig. 2, is a view with the front cover plate removed and the rivets shown in section. Fig. 3, is a sectional view on the line 3—3 Fig. 2. Fig. 4, is a sectional view on the line 4—4 Fig. 2. Fig. 5, is a detached perspective view of the back
20 section of the case. Fig. 6, is a detached perspective view of the front section of the case. Fig. 7, is a perspective view of the short shackle guide. Fig. 8, is a perspective view of the yoke which acts as a guide for the lower end of the main shackle; and Fig. 9, is a view of a modification.

This invention relates particularly to the type of lock which must be made in large quantities and at comparatively low cost, so that every part that can be omitted without reducing the strength of the lock is an advantage.

The ordinary rivets extending from one section of the case to the other are objectionable in that they are not as substantial as they should be for this type of lock. By my invention I utilize parts of the lock which guide the shackles to secure the two sections of the case together, at the same
40 time giving these parts the rigid support of the case.

Referring now to the drawings A is the back section of the case having side flanges a and an extended top flange a' perforated
50 at $c-c'$ for the main shackle and the short shackle.

A' is the front section of the case having side flanges a^2 and a bottom flange a^3 . When the parts are assembled the two side
55 flanges abut and the upper flange of the back

casing fits within the side flanges of the front casing and the lower flange of the front casing extends between the side flanges of the back casing. The back casing has an opening a^4 for the key cylinder B and the front casing has an opening a^5 forming the front support for the key cylinder.

D is the main shackle adapted to the openings c and c' in the top plate a' of the casing and the long arm of the shackle is
65 guided at its lower end by the yoke E which is in fact the shackle guide. This yoke is slotted for the reception of the lower portion of the shackle and on the long arm is a pin d which passes through the slot so that
70 when the shackle is turned it will come in contact with a stop c^2 on the case. I form projections $e' e'$ on the yoke E which extend through openings e^2 in the front and back sections A A' of the case, and when riveted
75 hold the two parts of the case together and also hold the yoke firmly in position.

F is the shackle spring secured at its upper end to a stud c^3 projecting from the upper portion of the case. The long arm of
80 the shackle is grooved at d' and adapted to this groove is an extension i of the bolt I, on which are pivoted the tumblers J, these tumblers engaging a locking post C which is riveted to both the front and back sections
85 of the case, as illustrated in Fig. 4. Carried by the bolt I is the short shackle I' which has an undercut projection adapted to engage the undercut end of the main shackle D in the ordinary manner. The short
90 shackle is adapted to an opening n in the shackle guide N, shown in Fig. 7. This shackle guide has projections n' at each side adapted to openings n^2 in the sections A—A' of the case and when riveted firmly secure
95 the shackle guide to the case.

The locking post C is adapted to openings e^4 in the two plates, as mentioned above, so that after the parts are in position the post C and the projections on the yoke E
100 and guide N are securely riveted to the sections A—A' of the case, as shown in Figs. 3 and 4, thus making a very substantial construction.

The yoke E and the guide N are each
105 made in one piece, the metal being struck-up and bent to the proper shape as shown.

In some instances I may make the main shackle guide as shown in Fig. 9, in which the guide E' has two flanges e^2, e^3 through
110

which the shackle extends; the hole in the lower flange being an odd shape and the shackle having a shape corresponding with it, so that it will slip through when in line
5 with the short shackle.

It is to be understood that the shape of both guides may be modified without departing from my invention.

I claim:—

10 1. The combination in a padlock, of a case having front and back sections, and a shackle guide having projections at each side extending through openings in the case sections and riveted.

15 2. The combination in a padlock, of a case made in two sections, a shackle guide made by bending a piece of metal so as to form two arms one at an angle to the other, one arm being perforated for the passage of
20 the shackle and the other arm having projections which extend through openings in the sections of the case, the said projections being riveted, thus securing the guide to the case.

25 3. The combination in a padlock, of the

front and back sections of the case, a yoke made of a single piece of metal bent so as to form two arms, one arm being slotted and forming the guide for the long arm of the main shackle, the other arm of the yoke
30 having projections forming rivets extending through openings in the front and back sections of the case and riveted thereto, the guide for the short shackle being also bent at an angle to form two arms and having
35 an opening through which the short shackle extends, the other arm of the guide having projections extending through openings in the sections of the case and riveted, a bolt carrying the short shackle, tumblers piv-
40 oted to the bolt, and a locking post also riveted to the front and back sections of the case and with which the tumblers engage.

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

FRANK SOLEY.

Witnesses:

WM. E. SHUPE,

WM. A. BARR.