

(Model.)

T. B. PRIDDY.

PADLOCK.

No. 280,327.

Patented June 26, 1883.

fig 1

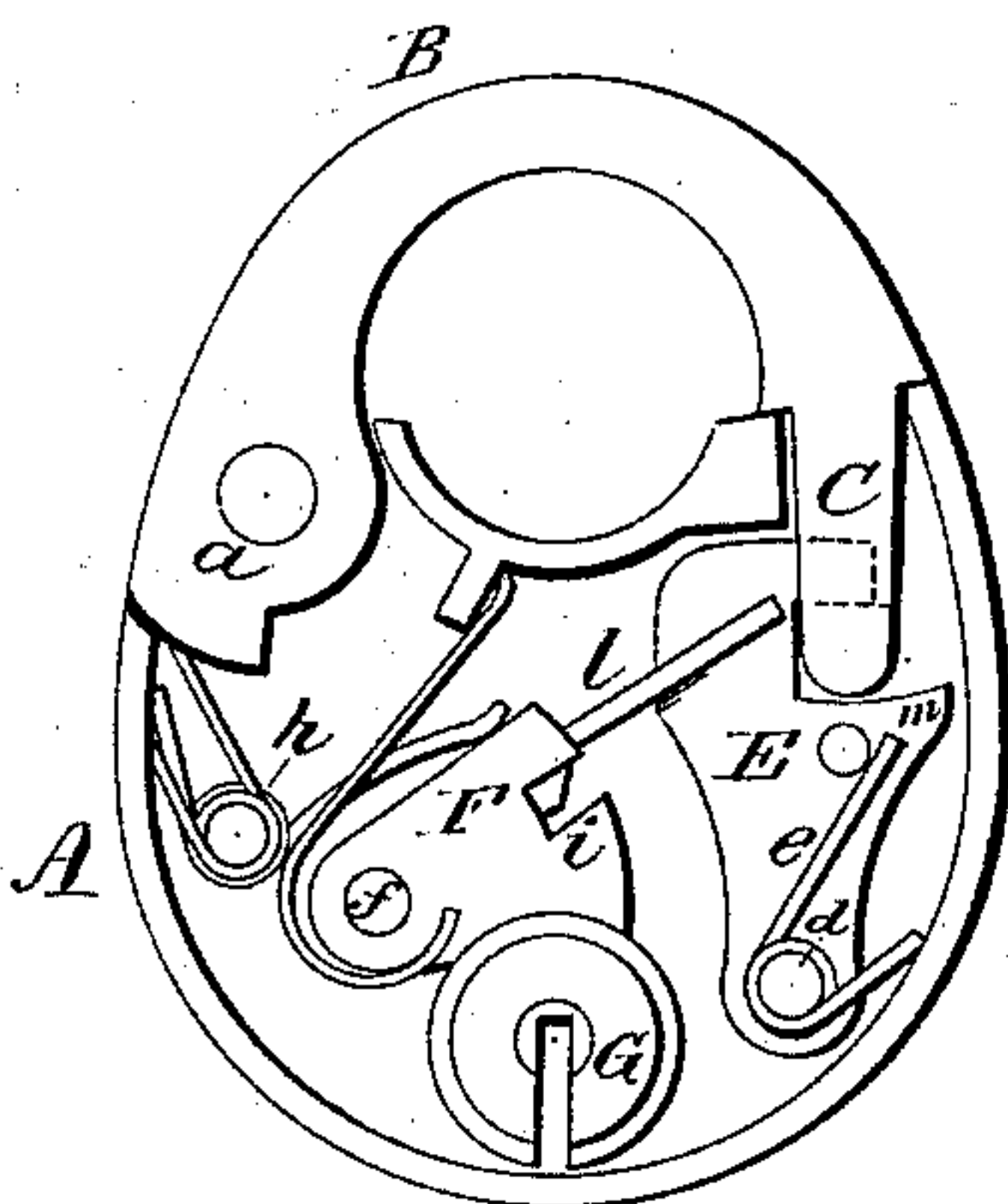


fig 2

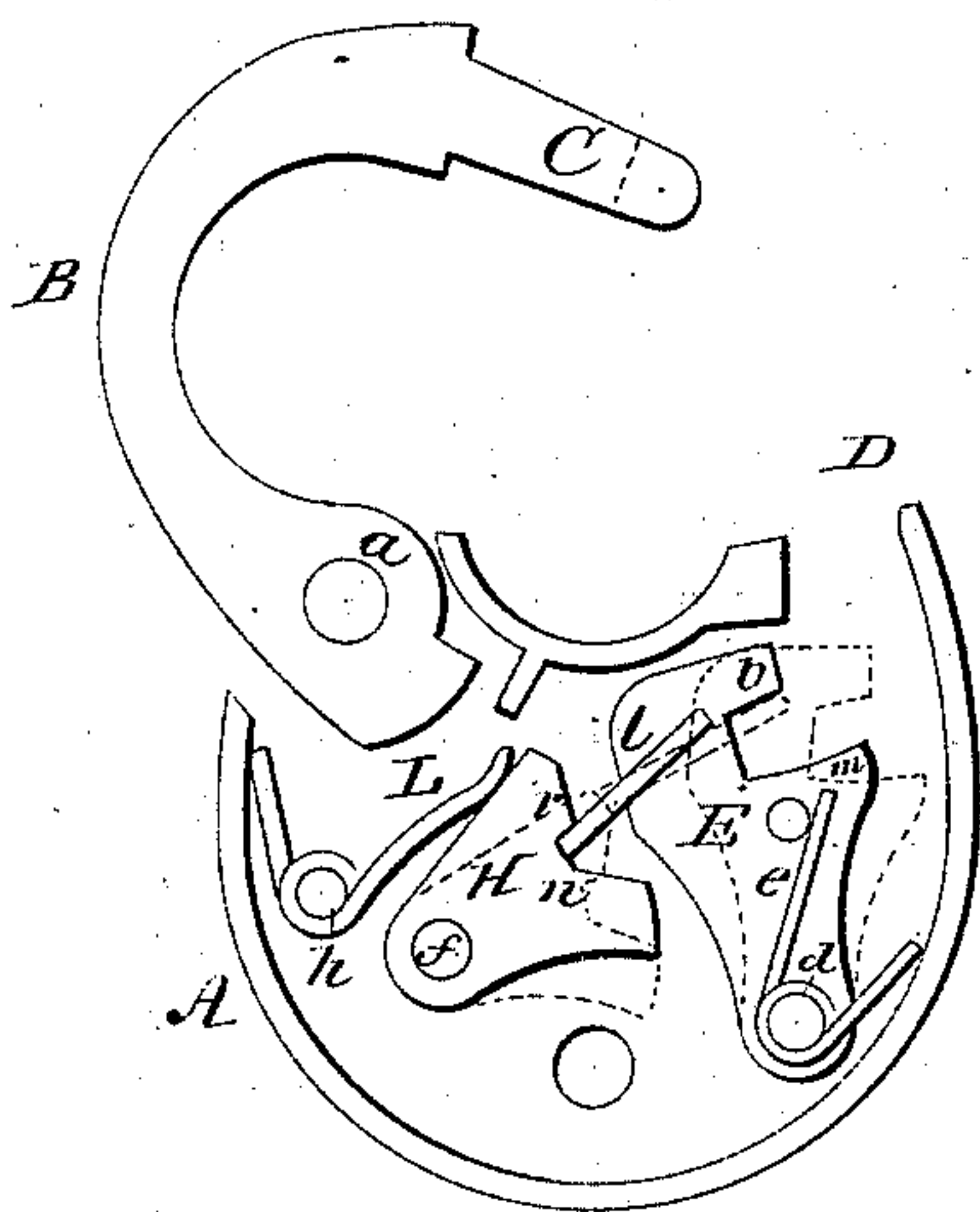


fig 3

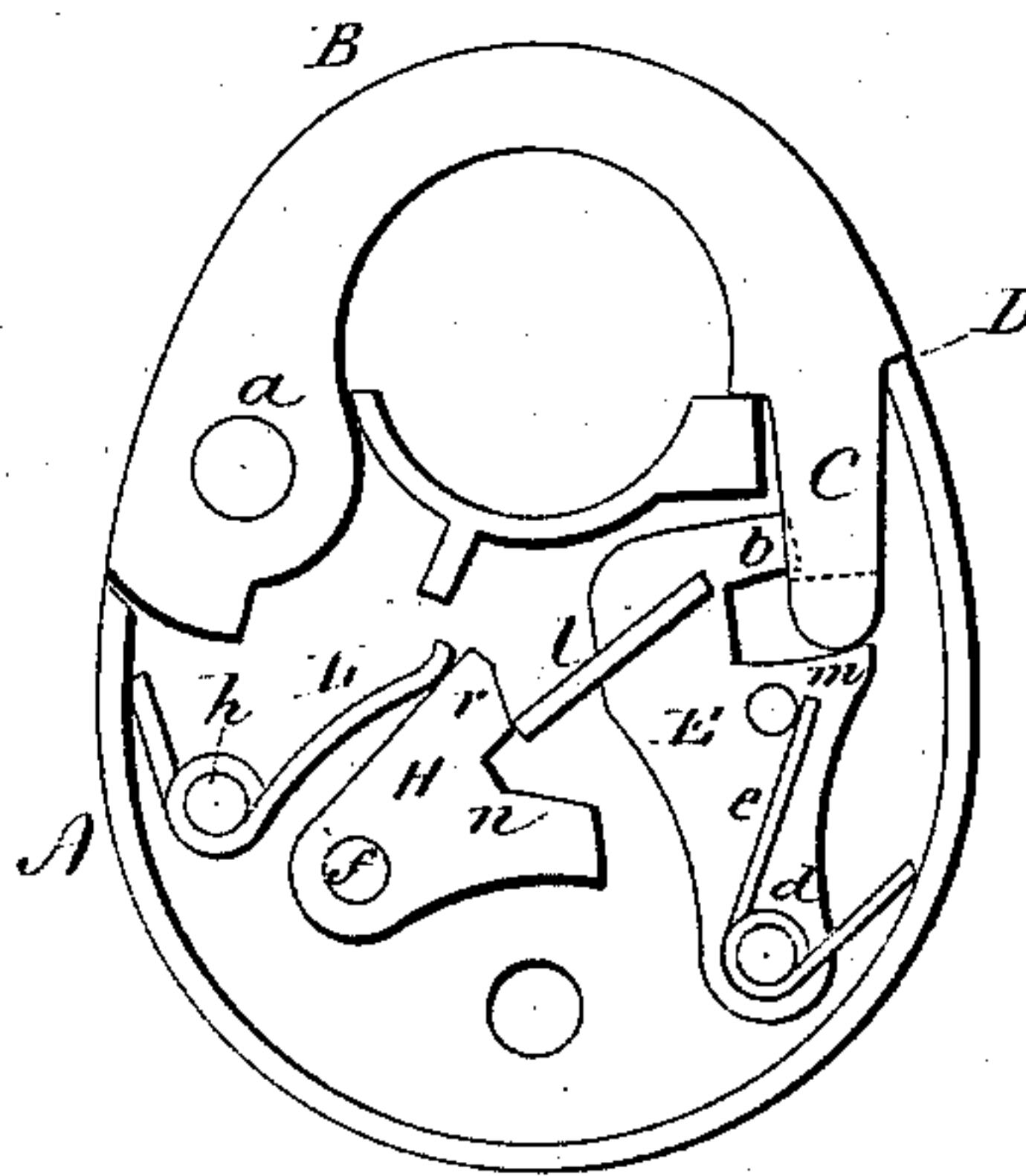
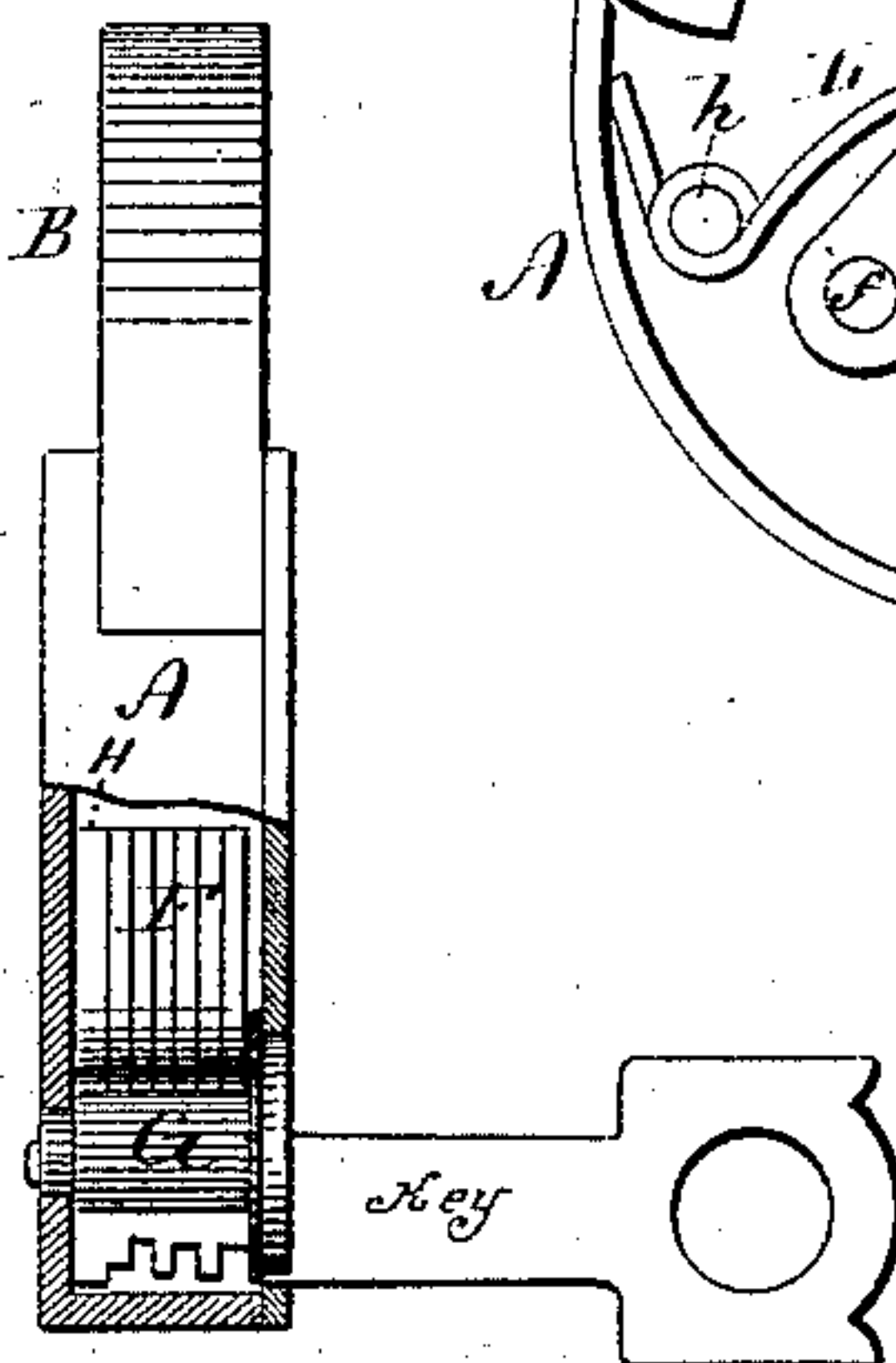


fig 4



Witnesses.  
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# UNITED STATES PATENT OFFICE.

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## PADLOCK.

SPECIFICATION forming part of Letters Patent No. 280,327, dated June 26, 1883.

Application filed April 2, 1883. (Model.)

*To all whom it may concern:*

Be it known that I, THOMAS B. PRIDDY, of New Haven, in the county of New Haven and State of Connecticut, have invented new Improvements in Padlocks; and I do hereby declare the following, when taken in connection with accompanying drawings and the letters of reference marked thereon, to be a full, clear, and exact description of the same, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a face view, the covering-plate removed; Fig. 2, a face view with the tumblers, except the tumbler H, removed, and showing the invention in the unlocked position; Fig. 3, the same as Fig. 2, as in the act of locking; Fig. 4, a sectional side view.

This invention relates to an improvement in that class of padlocks in which a hinged or vibrating bolt is employed to engage the end of the bow, and in which the tumblers are arranged and actuated by the bit of the key, and so that when the tumblers are turned to a certain position a stump on the bolt is permitted to enter notches in the tumblers, and so that a spring on the bolt serves to throw it out of engagement with the bow and permit the bow to open.

The object of the invention is to construct a lock in which a tumbler is arranged so that at the proper time it will be actuated by a spring of greater power than the spring which throws the bolt backward, and by the action of such stronger spring serve to throw the bolt into complete engagement with the bow, and in such a construction of lock my invention consists.

The general outline of the lock is immaterial to my invention.

As shown in the illustration, A represents the case within which the mechanism is placed. At one side the bow B is hinged, as at *a*, the nose C of the bow fitted to enter an opening, D, in the opposite side of the case, and pass down into the case, where it is engaged by the end *b* of a vibrating bolt, E. This bolt is hinged below, as at *d*, and is provided with a spring, *e*, arranged to press the bolt backward, or away from engagement with the bow—say, as from the position seen in Fig. 1 to that seen in Fig. 2. Within the case, and on the side

toward which the spring *e* tends to throw the bolt, the tumblers F are arranged upon a pivot, *f*, as seen in Fig. 1. These tumblers may be more or less in number. Below the tumblers a key-socket, G, is arranged, in which a flat key will enter, as seen in Fig. 4, and when so entered the turning of the key turns the socket G. The bit of the key projects through the cylindrical surface of the socket, as seen in Fig. 4. The tumblers F rest upon the cylindrical surface of the socket, forced thereon by the action of springs, as seen in Fig. 1, and so as to bear upon the tumblers in the usual manner for such tumblers. The tumblers are fitted with notches *i*, which, when the tumblers are raised by the key, come into line with the stump *l* on the bolt, and when the notches in the tumblers are so presented the bolt is thrown backward by the action of the spring *e* away from its engagement with the bow, the stump entering the notches in the tumblers. When the nose C of the bow enters the case it strikes a shoulder, *m*, on the bolt below the nose, and, being pressed downward, will turn the bolt, as seen in Fig. 3, but not sufficiently far to take the stump from the tumblers; hence the action of the spring *e*, not being prevented, will throw the bolt E backward and disengage the bow.

In order to throw the bolt into complete engagement with the nose of the bow, and so as to take the stump *l* entirely out from the notches in the tumblers, and so that the tumblers may fall to block the bolt, I arrange a tumbler, H, preferably on the same pivot, *f*, as the other tumblers, and so as to be turned by the key in the same manner, and provide this tumbler H with a spring, L, stronger or of greater power than the spring *e*. The said spring turns the tumbler H toward the key-socket G, tending to force it onto the socket, as seen in broken lines, Fig. 2, in which condition it may serve as one of the tumblers to block the bolt, as seen in broken lines, Fig. 2. This tumbler is constructed with a notch, *n*, similar to the notches of the other tumblers; but above the notch the end of the tumbler is inclined, as at *r*, and the relative position of this incline to the stump *l* of the bolt is such that when the nose of the bow has turned the bolt as far as possible, as seen in Fig. 3, the



stump has just reached the incline *r* on the tumbler, as seen in Fig. 3. Now the spring *L* comes into action upon the tumbler *H*, and forces that downward. The incline *r*, bearing against the end of the stump, forces the bolt into its locked position, as seen in broken lines, Fig. 2. One shoulder on the bit of the key acts upon this tumbler *H* in the same manner as do the shoulders upon the other tumblers, so that as the key is turned to raise the other tumblers it raises the tumbler *H* to the proper position for the stump *l* on the bolt to enter. Then the bolt is thrown back, as before described.

While I prefer the key-socket described, with its flat key, I do not wish to limit my invention to its employment, as there may be a simple key-hole, the spindle of the key forming bearings upon which the key will turn to bring the bit into action upon the tumblers in the usual manner; neither do I wish to be understood as limiting my invention to the employment of tumblers other than the tumbler *H*, for the reason that that single tumbler may serve the purpose described, and also serve to lock the bolt; but, as in other locks of this

class, the additional tumblers afford greater protection.

I claim—

1. In a padlock, the combination of the vibrating bolt *E*, its spring *e*, the bow *B*, the tumbler *H*, constructed with the incline *r* and a notch or shoulder, beneath which the stump of the bolt will engage when thrown back, and a spring, *L*, arranged to bear upon the said tumbler *H*, said spring of greater power than the spring *e* of the bolt, substantially as and for the purpose described.

2. In a padlock, the combination of the vibrating bolt *E*, its spring *e*, the bow *B*, the tumbler *H*, constructed with the incline *r* and a notch or shoulder, beneath which the stump of the bolt will engage when thrown back, and a spring, *L*, arranged to bear upon the said tumbler *H*, said spring of greater power than the spring *e* of the bolt, and notched tumblers *F*, substantially as described.

THOMAS B. PRIDDY.

Witnesses:

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JOHN E. EARLE.