

(No Model.)

F. WHEATON.
PADLOCK.

No. 432,587.

Patented July 22, 1890.

Fig. 1.

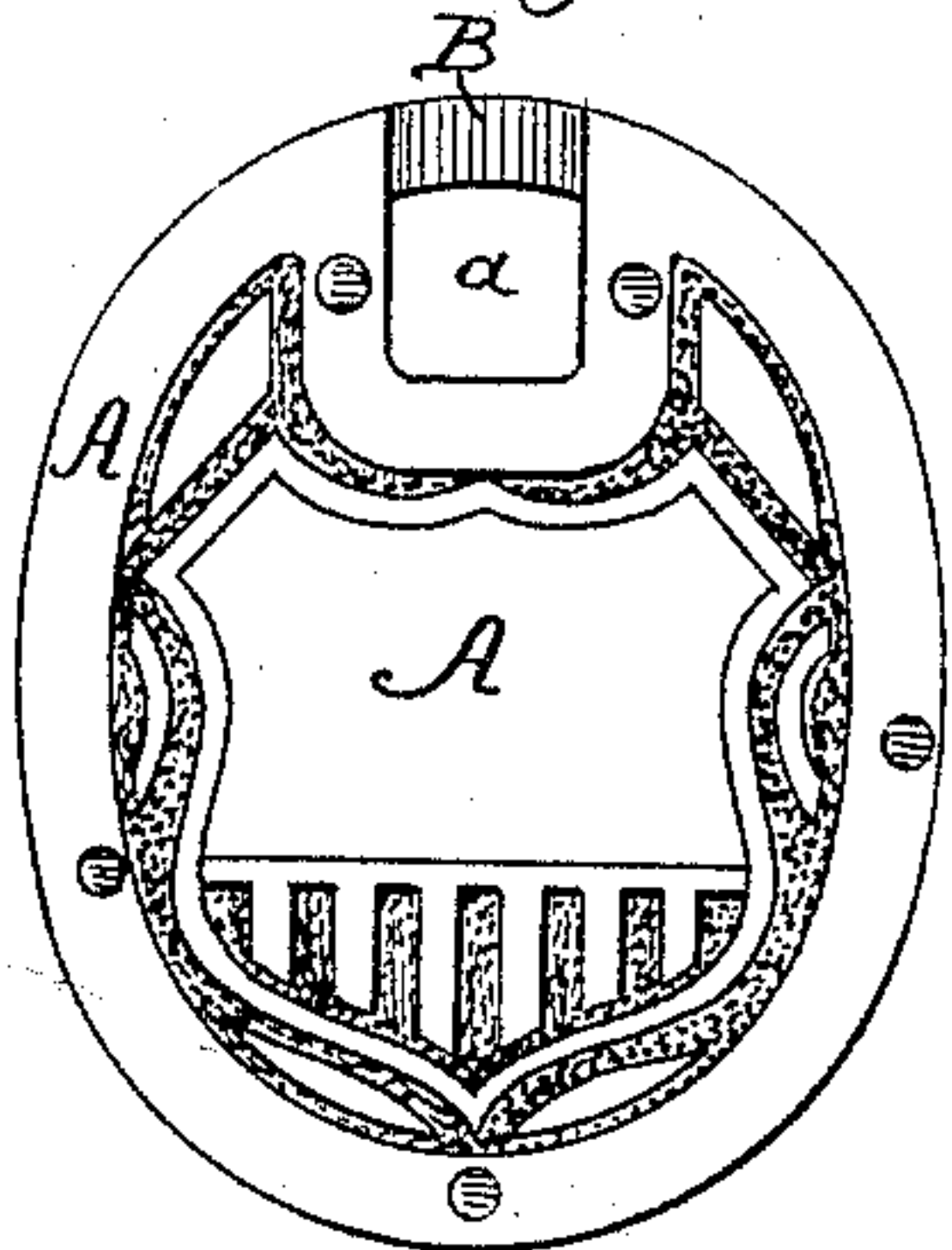


Fig. 2.

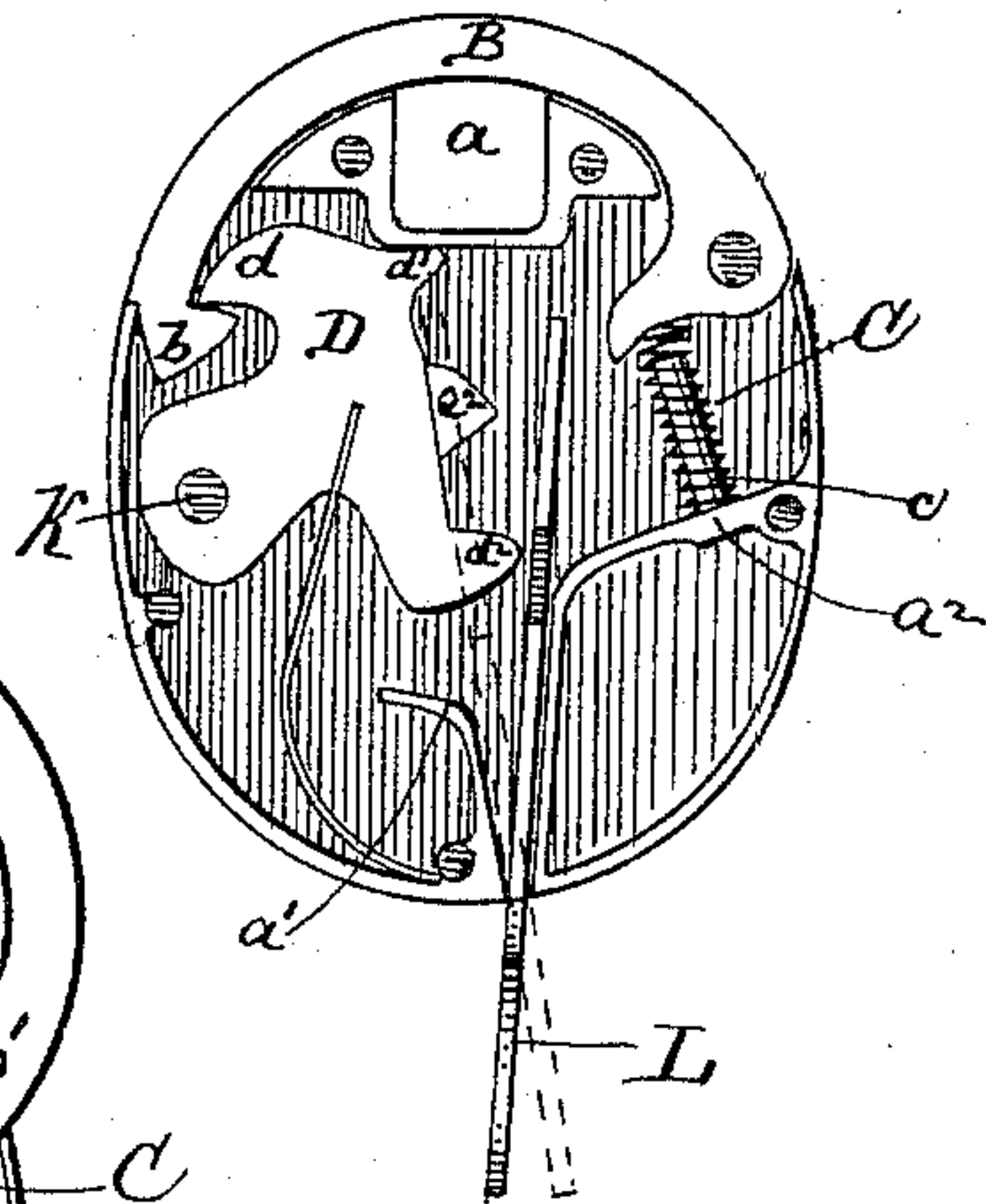


Fig. 3.

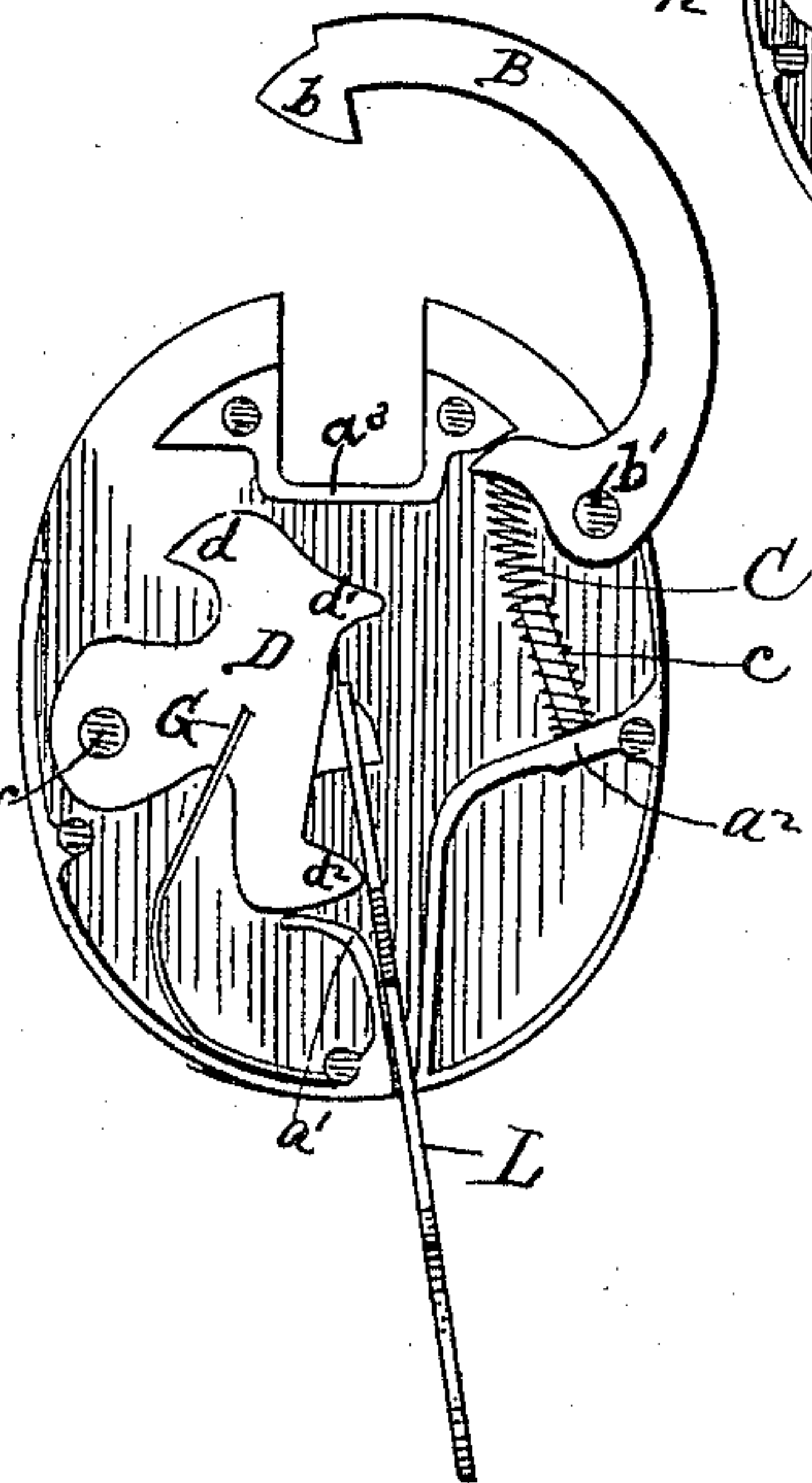


Fig. 4.

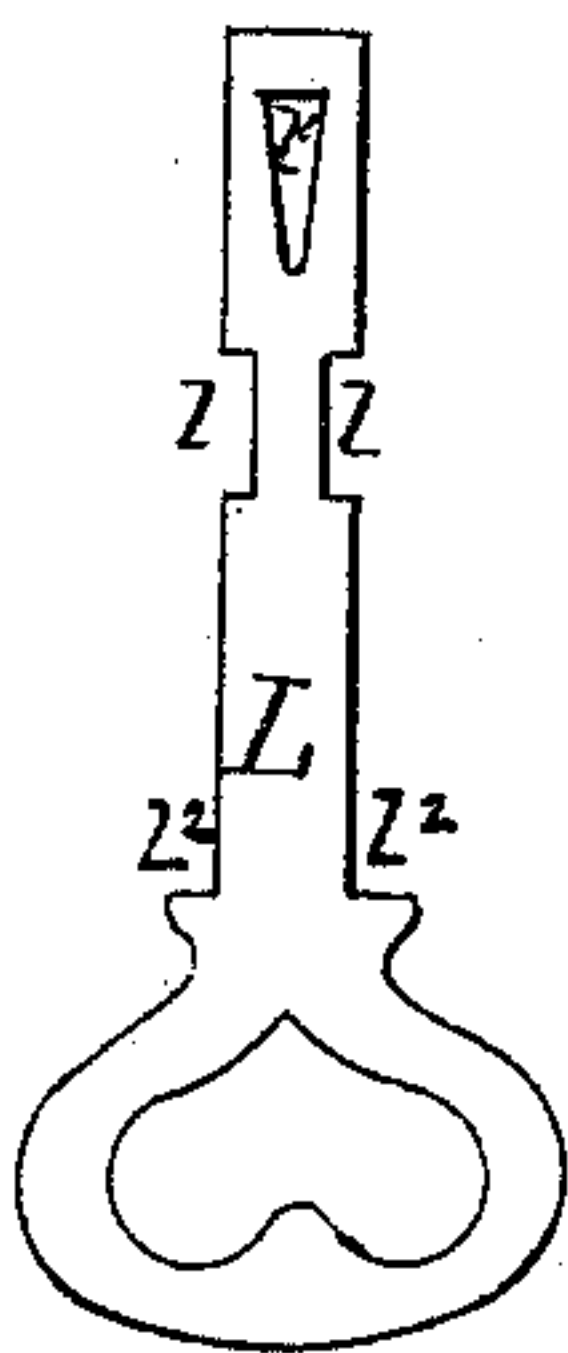


Fig. 5.

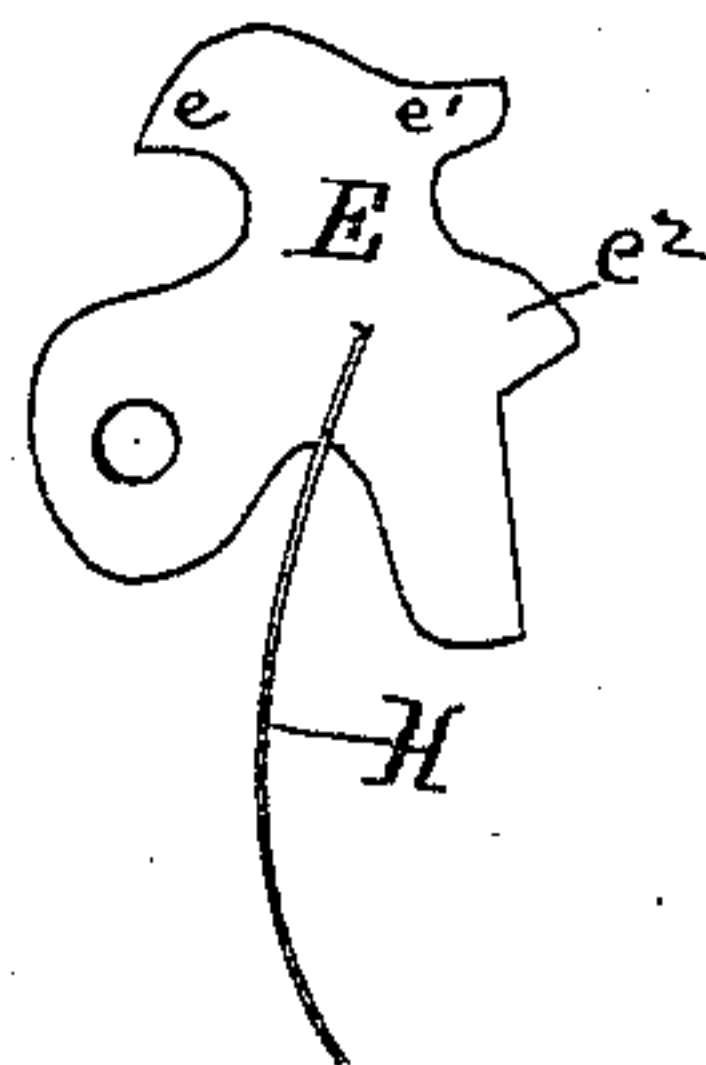
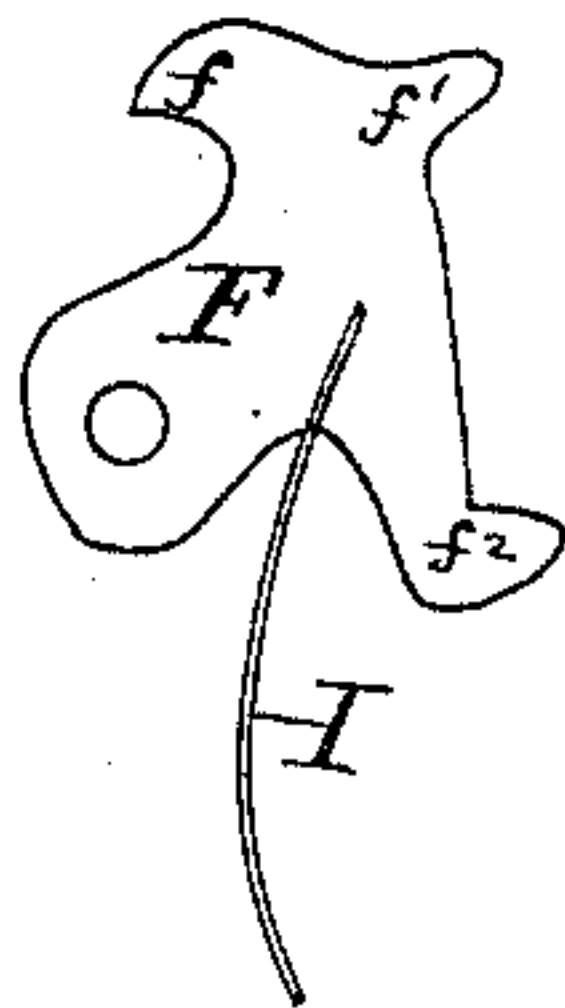


Fig. 6.



Witnesses:
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UNITED STATES PATENT OFFICE.

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PADLOCK.

SPECIFICATION forming part of Letters Patent No. 432,587, dated July 22, 1890.

Application filed January 14, 1888. Renewed January 25, 1890. Serial No. 338,069. (No model.)

To all whom it may concern:

Be it known that I, FRANK WHEATON, a citizen of the United States, residing at New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Padlocks; and I do 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, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to padlocks employing a pivoted self-locking shackle; and its objects are to guard against the picking of the lock and to facilitate unlocking.

In the accompanying drawings, (like letters representing like parts,) Figure 1 is an exterior front elevation of the padlock; Fig. 2, an interior front elevation, the face of the lock being removed; Fig. 3, a similar view, but with the shackle open and the key ready for withdrawal; Fig. 4, an outline of the key; Fig. 5, an outline of the middle tumbler, (the series consisting of three tumblers;) and Fig. 6, an outline of the bottom tumbler, which may likewise stand for the upper tumbler, as the two are identical and interchangeable.

A is the lock-case, so outlined as to form a recess a for the staple or other object to be shackled. Within the case are flanges a' a^2 , serving as guides for the key, the flange a' acting also as a stop for the tumblers and a guard for their springs, and the flange a^2 supporting the shackle-spring. A third flange a^3 serves as an upper stop for the tumblers.

B is the shackle, having a toe b and pivoted on a wrist-pin b' . When unlocked, it is thrown open by a spring C bearing against the projecting shoulder of the shackle, said spring being coiled around a short spindle c . The three tumblers are pivoted on a common wrist-pin K. The middle tumbler E has a different contour from the duplicate upper and bottom tumblers D and F. Flat springs G, H, and I respectively return the several tumblers to position after being moved and released by the key. Shoulders d e f , formed, respectively, upon the tumblers D E F engage with the toe b , formed upon the shackle B. Other shoulders d' e' f' , formed, respectively,

upon the tumblers just indicated, bear against the flange a^3 in the upper part of the padlock. Others still d^2 f^2 , formed likewise, respectively, upon said tumblers D F, bear against the flange a' in the lower part of the padlock and engage with the key in unlocking the shackle. A shoulder e^2 on the middle tumbler engages with the slot l' in the key. The key L has also recesses l l' to enable it to engage with the upper and bottom tumblers D F. The shackle being locked and the parts disposed as in Fig. 2, the key is inserted through the rim of the case between the flanges a' a^2 until stopped by the shoulders l^2 , whereupon it is moved from its oblique to a vertical direction, so as to engage it with the shoulders d^2 e^2 f^2 , formed, respectively, upon the tumblers D E F, and then pulled out vertically.

Having thus sufficiently described my invention, I claim as follows:

1. The combination, in a padlock, of a shackle B, pivoted in the case and having a toe b , a series of spring locking-tumblers D E F, pivoted in the case, arranged to engage said shackle, and having shoulders d d^2 , e e^2 , f f^2 , respectively, and a key L, arranged to engage said tumblers, and having a slot l' and shoulders l l' , the whole constructed and arranged substantially as hereinbefore set forth, for the purpose of unlocking the padlock by a pull upon the key.

2. The combination, in a padlock, of an ordinary lock-case, a shackle moving upon a pivot within said case, having a projecting toe, a series of tumblers moving upon a common pivot within said case, having shoulders to engage said shackle and other shoulders to engage the key, a series of springs severally bearing against said tumblers and the inner rim of the case, a spiral spring moving upon a spindle within said case and bearing against said shackle, and a key having a slot and recesses engaging with said tumblers and adapted to unlock the shackle by a pull upon the key, the whole constructed and arranged as hereinbefore described, and for the purposes set forth.

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