I. D. BOYER.

PADLOCK.

No. 176,459. Patented April 25, 1876.

Fig. 1.

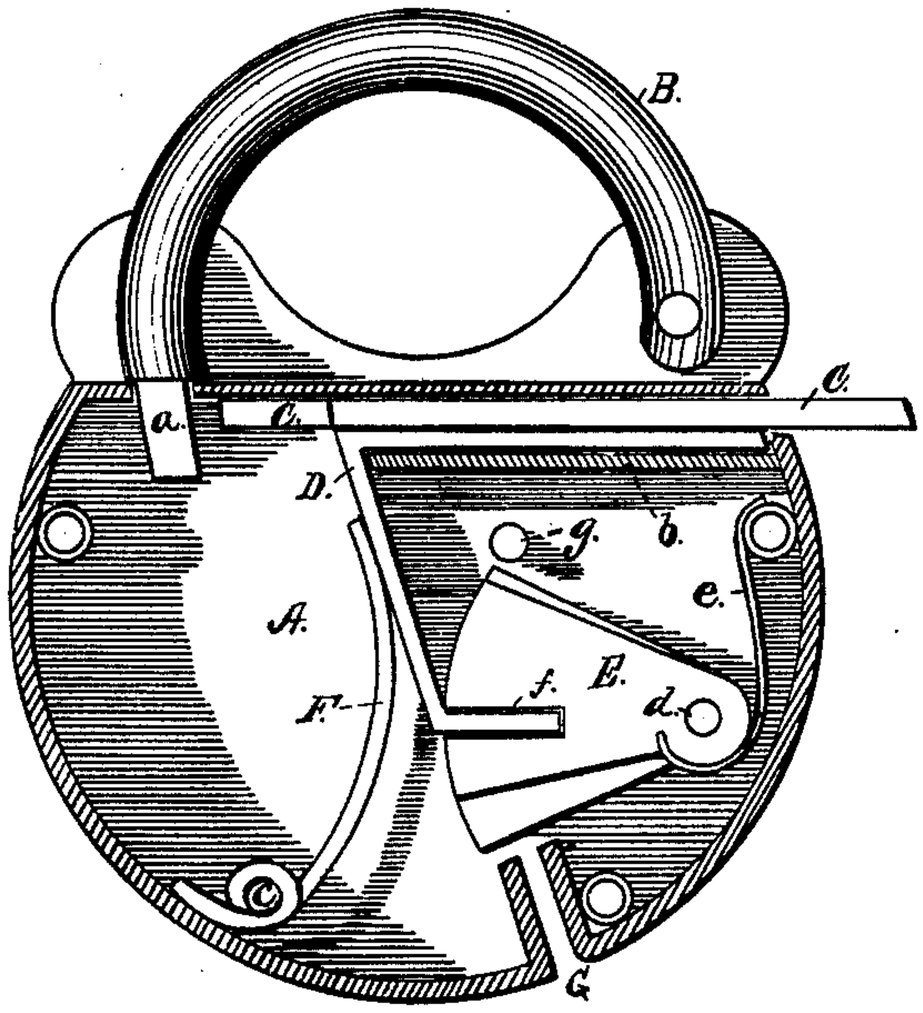


Fig. 3.

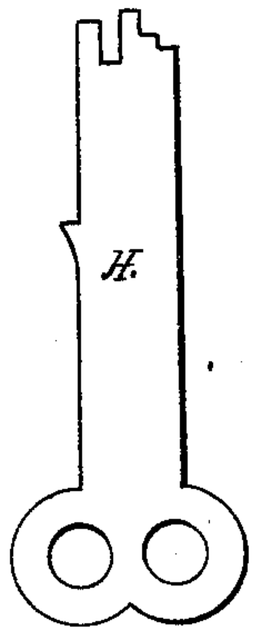
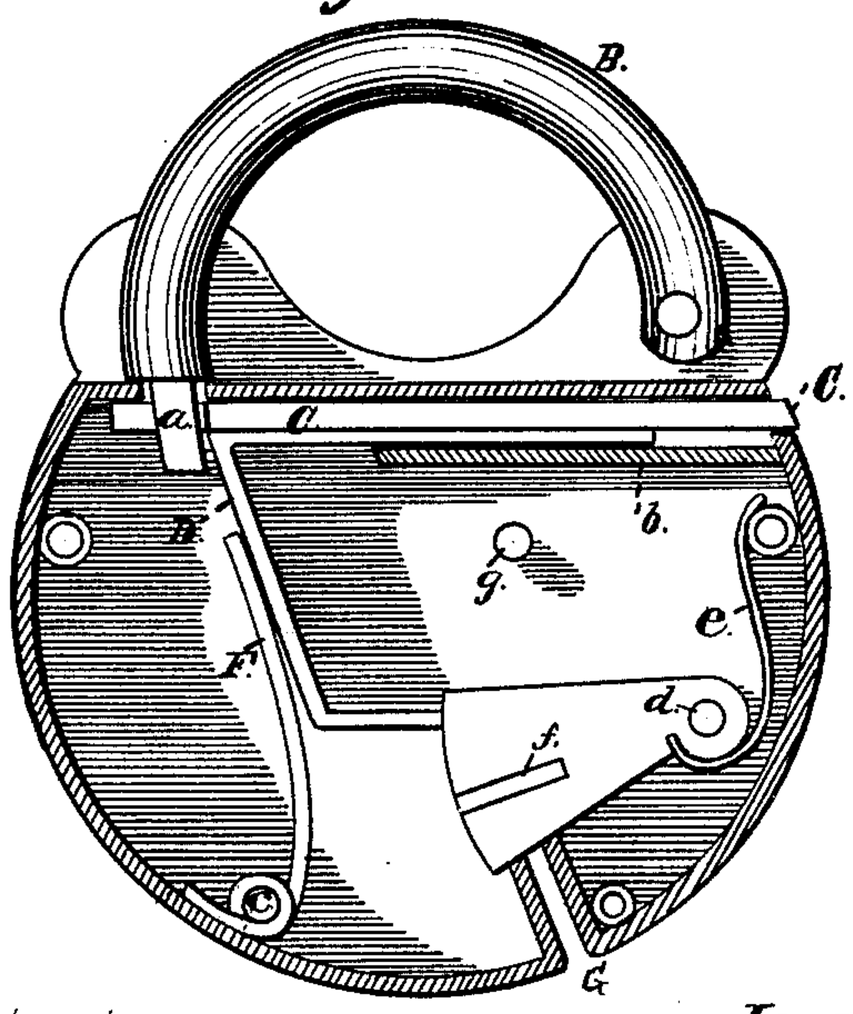


Fig. 2.



Witnesses;
Chas. M. Peck
Wm. Ritchie

Inventor:
Israel Donald Boyer
by his Atty's.
Peck & Co.

UNITED STATES PATENT OFFICE.

ISRAEL DONALD BOYER, OF DAYTON, OHIO.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. **176,459**, dated April 25, 1876; application filed March 2, 1876.

To all whom it may concern:

Be it known that I, ISRAEL D. BOYER, of Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Padlocks; and I do hereby declare the following to be a full, clear, and exact description of the same.

This invention relates to that class of padlocks in which Chubb's tumblers are used with a straight thrust key; and my improvements consist of the peculiar arrangement of the respective parts, whereby simplicity, cheapness, and efficiency are obtained, as will be herewith described, and the invention distinctly pointed out in the claim.

To enable others skilled in the art to which my invention appertains to make and use the same, I would thus proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 represents a plan view of my improved lock with the bolt withdrawn and the face-plate removed. Fig. 2 represents the same with the bolt thrust in, locking the bow; and Fig. 3 is a plan view of the key.

Corresponding letters of reference indicate like parts in the different figures.

Externally my lock conforms to the general appearance of padlocks, consisting of a shell, A, and pivoted bow B. The free end of the bow has the usual square socket-piece *a*, that enters the top of the shell, and into the socket of which the bolt slips. C represents the bolt, that works in a guide formed by the strip *b*, held in place between the faces of the shell, parallel to its top, and by the top of the shell. A rigid strip of metal, D, is secured to the under side of the bolt. It is bent downward, as represented, and has its end again bent parallel to the top of the shell to form a stud, which enters the slots in the tumblers E when adjusted. A wire or other spring, F, coiled around a pin, *c*, presses against the strip D and shoots back the bolt when the tumblers are raised into position to bring the slots into line with the stud of the strip D.

The tumblers E, known as Chubb's, are too well known to require description. They are pivoted at *d*, and are kept in line by springs, one of which is represented by *e*.

G represents the aperture or key-hole for the key H, Fig. 3, whose irregularly-shaped end raises the tumblers till their slots *f* are in line to admit the stud, which is forced in by the spring F, as seen in Fig. 1. At the same time the bolt is thrust back, releasing the bow. A pin, *g*, prevents the tumblers from being raised too high.

To lock the bow, it is only necessary to press the end of the bolt, which projects through an aperture in the side of the shell, until the stud, moving with it, leaves the slots of the tumblers. The springs *e*, then acting upon the tumblers, throw them down in the position indicated in Fig. 2. Their ends form a rigid bearing for the end of the stud, and thus effectively hold the bolt locked until the introduction of the key opens it.

I am aware that all of the devices herein used are old, and I therefore claim none of them separately; but

What I do claim as new, and desire to secure by Letters Patent, is—

The herein-described padlock, consisting of the shell A, bow B, bolt C, arranged to slide through an aperture in the side of the shell and to be shot by the thumb, stud-strip D, spring F, tumblers E, and springs *e*, when the respective parts are constructed and combined in the manner and for the purpose specified.

Witness my hand this 26th day of February, A. D. 1876.

I. DONALD BOYER.

Witnesses:

CHAS. M. PECK,

WM. RITCHIE.