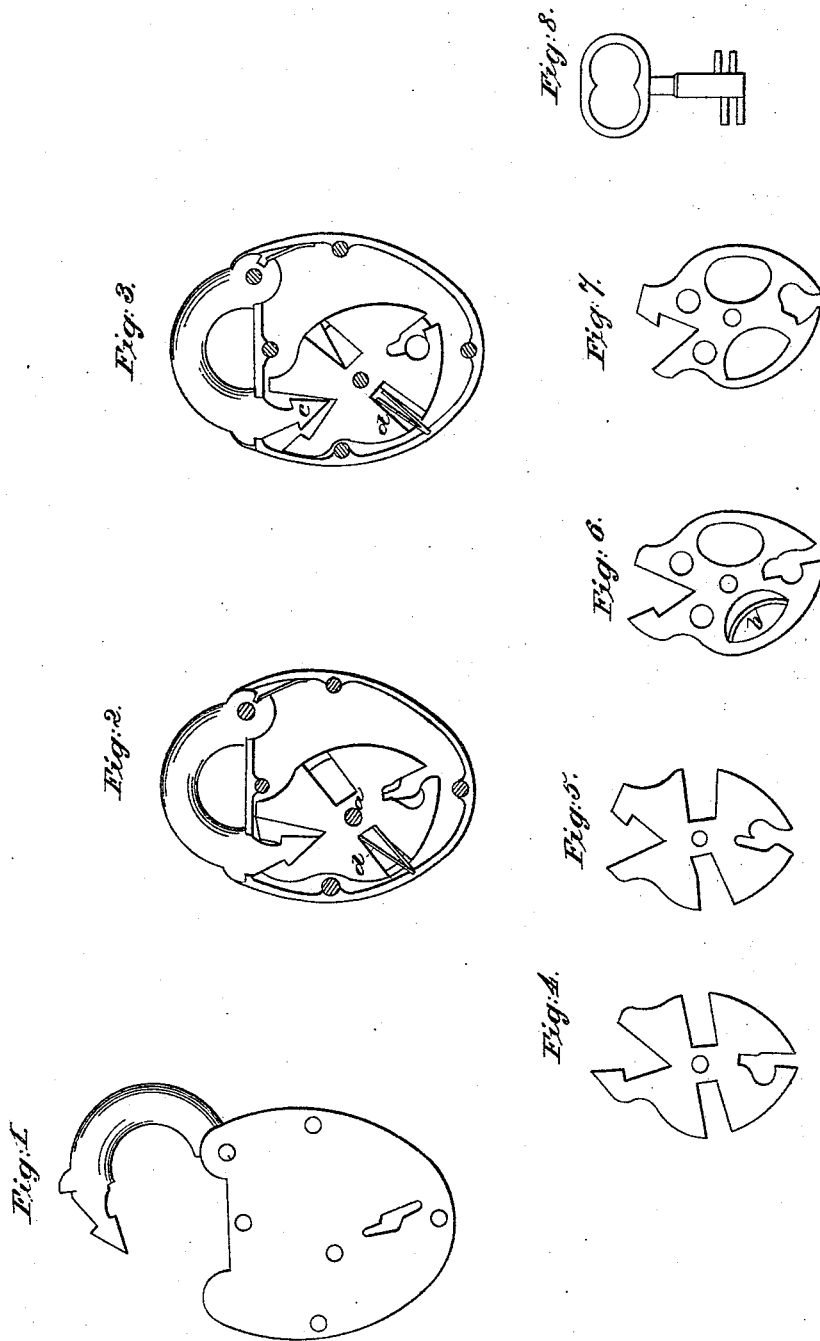


Royer & Ball, Padlock.

N^o 2,848.

Patented Nov. 9, 1842.



UNITED STATES PATENT OFFICE.

E. H. ROPER AND W. BALL, OF WASHINGTON, DISTRICT OF COLUMBIA.

PADLOCK.

Specification of Letters Patent No. 2,848, dated November 9, 1842.

To all whom it may concern:

Be it known that we, E. H. ROPER and WILLIAM BALL, of Washington city, District of Columbia, have invented a new and
5 Improved Mode of Constructing Padlocks, and we do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, in
10 which—

Figure 1 is a view of the outer part of the lock when open or unlocked, that is of the top plate. Fig. 2 is a view of the lock,
15 without the top plate, and is locked. Fig. 3 is a view of the same, with the catches open or unlocked. Fig. 4 is the upper catch or tumbler; Fig. 5, the second tumbler; Fig. 6, the third tumbler, and Fig. 7, the bottom or fourth tumbler. Fig. 8 is the key.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

25 We make our case of cast or wrought iron, or brass or any metal, and the tumblers all turn on the pin *a* in Fig. 2, having a spring *b* as shown in a bowed form in Fig. 6. The opening for the spring *b* is cut in such

a form as not to allow the spring to touch 30 but one of the tumblers at each end; consequently when the tumblers are turned so as to open the catches and free the head of the shackle, Fig. 3, the ends of the spring presses the tumblers in contrary directions 35 around the pin *a*, Fig. 2.

Another form of spring is shown, in letter *d*, Fig. 3, which acts the same as the first, but is placed with the ends near the center of the tumblers and consequently re- 40 quires less motion.

What we claim as our invention and desire to secure by Letters Patent, is—

The construction of our tumblers in such a form as to be on a balance on all sides of 45 the pin, letter, *a* in Fig. 2, and in their having rotary motions in different directions, which prevents them from being affected by a blow to open the lock and further in their being so constructed as to pass each 50 other where the key enters and thereby cut off all possibility of picks being used to open the lock.

E. H. ROPER.
WM. BALL.

Witnesses:

B. R. MORSELL,
WM. WALLIS.