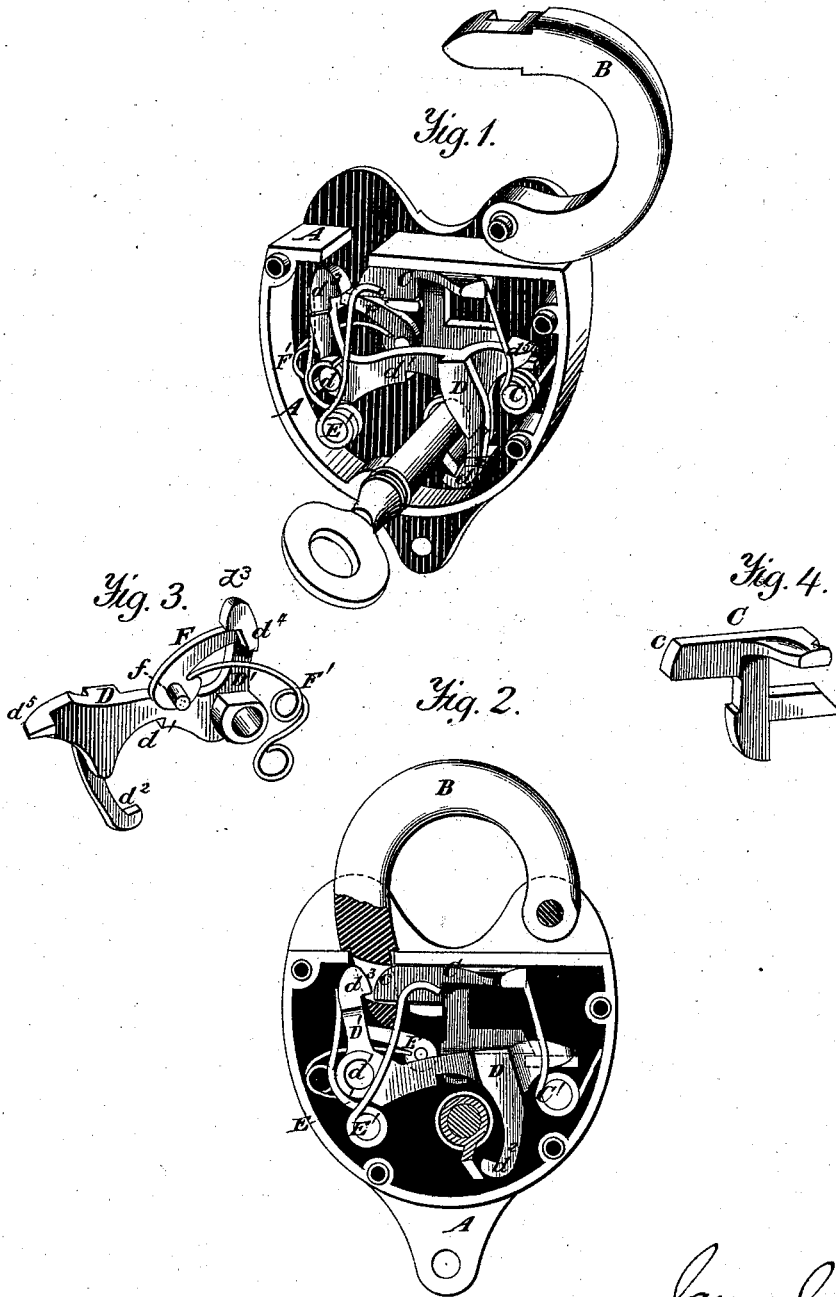


J. J. TURNER.
Padlock.

No. 197,911.

Patented Dec. 4, 1877



Witnesses:
A. Ruppert,
Attorney at Law

James J. Turner
Inventor.
by his attorney
J. J. Coils.

UNITED STATES PATENT OFFICE.

JAMES J. TURNER, OF RICHMOND, INDIANA, ASSIGNOR OF ONE-HALF HIS
RIGHT TO JOHN F. MILLER, OF SAME PLACE.

IMPROVEMENT IN PADLOCKS.

Specification forming part of Letters Patent No. 197,911, dated December 4, 1877; application filed
October 13, 1877.

To all whom it may concern:

Be it known that I, JAMES J. TURNER, of Richmond, in the county of Wayne and State of Indiana, have invented a certain new and useful Improvement in Padlocks, of which the following is a full, clear, and exact description.

This invention relates to a padlock such as described in an application for Letters Patent filed by me in the United States Patent Office of even date with this application, the lock being so constructed that, in the act of unlocking the shackle, the key is caught in the lock, and cannot be extracted therefrom until the shackle has been again locked by the bolt or bolts.

In the lock now under consideration, I provide the key-confining tumbler with an additional hooked arm, adapted to engage the shackle from one side while the bolt engages it from the other side. I also dispense with the dogging-heel on the shackle, and substitute therefor a separate dog, which engages or releases the key-confining tumbler according as the free end of the shackle is in or out of the lock-case.

In the annexed drawings, Figure 1 is a perspective view of the lock minus the face-plate, showing the shackle unlocked and the key caught. Fig. 2 is a front elevation, showing the position of the parts when the shackle is locked. Fig. 3 is a perspective view of the tumbler and the dogging-pawl seen from the rear side. Fig. 4 is a perspective view of the bolt seen from the front side.

The same letters of reference indicate identical parts in all the figures.

The shackle B is pivoted at one end between ears of the case A above the plate thereof. Its free end, having a recess on one side, in which the bolts engage, is wedge-shaped at the point, and is somewhat reduced to form shoulders, which seat against the top plate when the shackle is locked. The top plate of the case has an opening in the proper position for the entrance of the wedge-shaped end of the shackle.

The tongue *c* of the sliding bolt C is beveled so that the shackle can force the bolt back against the stress of its spring C', which throws it forward again as soon as the recess in the shackle registers with the tongue *c* of the bolt,

by which the shackle is locked from one side. This sliding bolt, the form of which is clearly shown in Fig. 4, moves between suitable guides on the case.

The tumbler D is pivoted on a fixed stud-pin, *d*, from which it extends beyond the key-hole, its extreme end resting against any suitable fixed abutment of the case. Its lower edge is provided with a locking-tooth or hook, *d'*, in front of the shoulder of the bolt on which the key acts in retracting it, and with an elongated hook, *d''*, which extends along one side of the key-hole. Between these hooks the key is caught and confined in unlocking the shackle. An upwardly-projecting arm, D', of the tumbler terminates in a hook-head, *d'''*, adapted to enter the recess in the shackle, to aid the bolt C in securely holding it locked.

The hook-head of this arm is suitably beveled, so that the wedge-shaped end of the shackle can force it back on entering the case.

One end of the spring E acts on this arm D' to throw the tumbler down on its abutment, while the other curved end of said spring is held in position to bear against the end of the shackle, to throw it up the moment it is released from the hold of the bolt and hook-headed arm D' of the tumbler.

Adjacent to the hook-head *d'''* a boss, *d''''*, is formed on the rear side of the tumbler, on which the end of the dogging-pawl F bears when the shackle is unlocked. This dogging-pawl is pivoted at *f* to the case, and is acted upon by a spring, F', which tends to throw its end upward. The pawl extends across the shackle-opening in the top-plate of the case, and its free end is pressed down by the shackle, on pushing it into the case, so as to release the boss *d''''* on arm D', which is then at once thrown forward by spring E, to engage the shackle with its hook-head.

In unlocking, the bit of the key is first caught behind the hook *d'* of the tumbler. As soon as the tumbler has been lifted the shackle is liberated from the hook-head of the arm D' of the tumbler, but is still retained by the sliding bolt. On retracting this bolt the shackle is expelled by spring E, and at the same moment spring F' throws the pawl F up against the hook-head, and in front of the boss *d''''* on arm

D', thereby dogging the tumbler, so that it cannot be thrown down by spring E.

The lifting of the tumbler throws the hook d^2 also across the path of the bit of the key, so that it cannot return under the key-hole—whose position registers about with the position of the key, as shown in Fig. 2—no matter whether it is turned to the right or to the left.

The projection d^5 , on the rear side of the extreme end of the tumbler, is adapted to dog the tail end of the bolt.

Should the recess of the shackle become clogged, so that neither the sliding bolt nor the hook-head of the tumbler can enter it, the tumbler will be maintained in the lifted position by the shackle itself, though released from the dogging-pawl; and, if the clogging is of such a nature as to leave room for the entrance of the hook-head of the tumbler, but so as to exclude the tongue of the sliding bolt, the tail of the latter, being then under the projection d^5 of the tumbler, will still hold the latter in the lifted position. Thus the key will not be released until both the sliding bolt and hook-head of the tumbler have engaged the shackle.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a padlock, the combination, substantially as specified, of the key-confining tumbler, the shackle and the dogging-pawl, arranged in the path of and operated upon by the free end of the shackle of said tumbler.

2. In a padlock, the combination, substantially as specified, of the key-confining tumbler, provided with a hook-head for engaging the shackle, the dogging-pawl, and the shackle.

3. In a padlock, the combination, substantially as specified, of the key-confining tumbler, provided with a hook-head for engaging the shackle, the dogging-pawl, the sliding bolt, and the shackle.

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

JAMES J. TURNER.

Witnesses:

J. B. MORRITZ,
DAVID H. HILL.