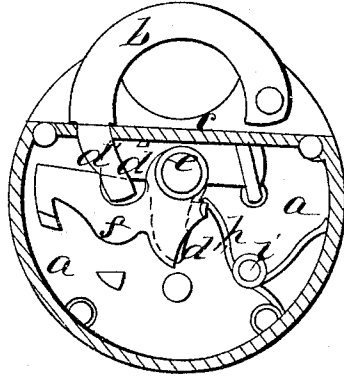


T. Staight,

Padlock.

N^o 8,431.

Patented Oct. 14, 1851.



UNITED STATES PATENT OFFICE.

THOS. SLAIGHT, OF NEWARK, NEW JERSEY.

PADLOCK.

Specification of Letters Patent No. 8,431, dated October 14, 1851.

To all whom it may concern:

Be it known that I, T. SLAIGHT, of Newark, in the State of New Jersey, have invented certain new and useful Improvements in Padlocks, and that the following is a full, clear, and exact description of the principle or character which distinguishes them from all other things before known and of the usual manner of making, modifying, and using the same, reference being had to the accompanying drawing, making a part thereof.

The nature of my improved lock, is the combination of the tumblers, bolt and springs, in such a way as to cause the springs to perform their offices to sustain both the tumblers and bolt in place, and carry them forward when drawn back by the key in unlocking, and to throw the shackle out when unlocked, and permit it to lock again without a key, the tumblers acting as counter bolts to prevent the catch from being thrown open by a blow, or picked, moving with the bolt to which they are attached.

The shell (*a*) of this lock, and the shackle (*b*) are like those of ordinary padlocks, and may be constructed in the most approved manner. Under the straight portion (*c*) of the rim of the lock, through which the end of the shackle passes to lock it, there is a straight sliding bolt (*d*), moving in proper guides, and entering the recess forward in the end of the shackle, to receive it at right angles to the end of the shackle, as already shown by the dotted lines, (*d'*). At or near the center of the length of this bolt (*d*), there is a stud (*e*) upon which the tumblers (*f*) are pivoted, and projecting down from the underside of the bolt, at this point there is a "talon" *d''* against which the key strikes to throw back the bolt. The tumblers are curved pieces of metal, clearly represented in the drawing, with a recess in their upper side, into which the end of the shackle enters when locked, the ends of the tumblers coming up in front of the end of the bolt against the side of the shackle.

There is, on the under side of these tumblers a projecting piece, that the key strikes, to throw the tumblers down before they are carried back by the bolt; on their forward ends there is a hook; below that, should they be thrown down too far, in attempting to pick the lock, they will catch on the U stud below, and prevent the bolt from being thrown back to unlock; at the rear end of each of the tumblers, and just below the pivot, there is a rest for the end of a spring (*h*) which spring is composed of a piece of wire, descending down and coiling around a stud (*i*) below. These rest with their opposite ends against the rim of the lock, at any convenient point. To unlock the bolt the key is turned, the bit strikes the tumblers, throwing their front ends down, and compressing the springs to some extent, the bit then strikes the "talon" on the bolt, and carries it back out of the catch of the shackle, still further compressing the springs; at this point the key leaves the tumblers, which fly upward, striking the end of the shackle and throwing it out beyond the reach of the bolt. To lock the shackle it is pressed downward upon the tumblers, and carrying them down forces back the bolt by striking its inclined front end till it can pass down by it into place, when the bolt enters its proper recess, and the tumblers being thereby released, assume the position shown in the drawing.

Having thus fully described my improved padlock, and its mode of operation; what I claim therein as new, and desire to secure by Letters Patent, is—

The arrangement of the bolt, tumblers, and springs, as herein set forth, the tumblers and bolt being operated by the same springs, which also serves the purpose of throwing out the shackle; the tumblers projecting beyond the end of the bolt for that purpose— all substantially as herein subscribed.

THOS. SLAIGHT.

Witnesses:

WM. GREENOUGH,
J. B. WEST.