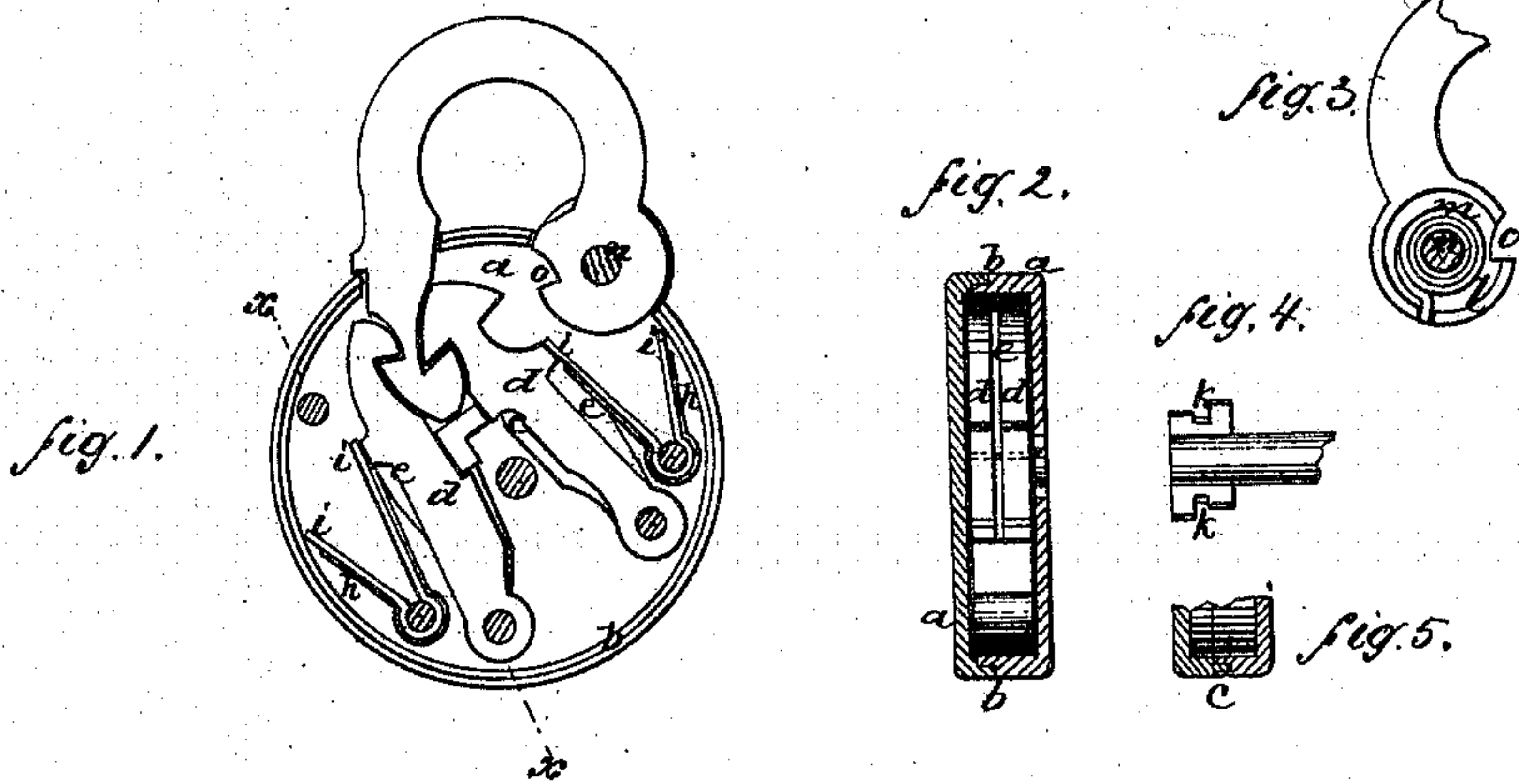


*E. L. Gaylord,*

*Padlock.*

*No. 104,572.*

*Patented June 21. 1870.*



Witnesses:

*Victor Hagmann*  
*J. A. Pettis*

Inventor:

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*per* *Wm H*  
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# United States Patent Office.

EDWARD L. GAYLORD, OF TERRYVILLE, CONNECTICUT.

Letters Patent No. 104,572, dated June 21, 1870.

## IMPROVEMENT IN PADLOCKS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, EDWARD L. GAYLORD, of Terryville, in the county of Litchfield and State of Connecticut, have invented a new and Improved Padlock; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a plan view when the upper plate of the case is removed;

Figure 2 is a transverse section, showing the lap-joint of the inclosing plates;

Figure 3 is a detached view of the recessed shackle and the spring which operates it;

Figure 4 is a plan of the key; and

Figure 5, a part of a section similar to fig. 2, showing the tongue-and-groove joint of the inclosing plates.

This invention consists in the combination of a flat spring coiled around a stump projecting upward from the inside of the case, with a shackle recessed at its butt so as to inclose the spring, an arm of the latter projecting through a slot in the wall of the recessed butt, and operating so as to throw the shackle open when the tumblers are withdrawn from it, and hold it open until it is shut by direct pressure, the dimensions of the recess being such as to leave sufficient thickness in the butt to form a firm bearing on its pivot.

The invention also consists in the combination with the tumblers of each set, of an interposed tumbler of thin metal, and of a spring of a width equal to the combined thickness of all the tumblers bearing against such interposed tumbler, and of separate springs, each of a width equal to the thickness of one tumbler, and each placed opposite a tumbler and bearing upon the wider spring aforesaid, all the tumblers and springs operating together in such manner as to render it extremely difficult to pick the lock.

In the drawing—

*a a* are the two plates of which the inclosing case of the padlock is composed.

*b b*, fig. 2, the lap-joints at the edges of the plates.

*c*, fig. 5, the tongue-and-groove joint, which may be used as a substitute for the lap.

*d d*, the tumblers, of which there are two sets, and two in each set.

*e*, the tumbler-catch of thin metal, interposed between the two tumblers of each set.

Thin spring plates *h*, as wide as the united thickness of both tumblers and the interposed catch, bear against the rear edges of the catches, and separate spring plates *i* bear against the tumblers severally.

In fig. 4—

*k k* are recesses between the wards of the key, into which the tumbler-catch projects.

For picking this lock the artist would be obliged to use a stem having a bit sufficiently thin to pass between the tumblers *d*, and yet sufficiently strong to press back the three springs *h i i*, requirements which it is hardly possible to unite in one bit.

In fig. 3—

*l* is a recess in the butt of the shackle, in which is coiled a spring, *m*, around the pin *n* on which the shackle turns.

The spring throws the shackle out of the lock as soon as the key turns back the tumblers, and holds the shackle open and out of the way until it is locked again on being pressed between the tumblers.

In figs. 1 and 3—

*o* is the notch in the butt of the shackle, which receives the heads of the adjacent tumblers if the latter be thrown too far back by one tampering with the lock, and thus prevents the shackle from flying open when the tumblers are withdrawn from its head.

Having thus described my invention,

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

1. The combination of the flat spring *m*, coiled around the pin *n*, with the shackle provided with the recess *l* and notch *o*, and with the tumblers *d*, in the manner and for the purpose specified.

2. The combination of the tumblers *d e* with the springs *h i i*, in the manner and for the objects specified.

E. L. GAYLORD.

Witnesses:

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