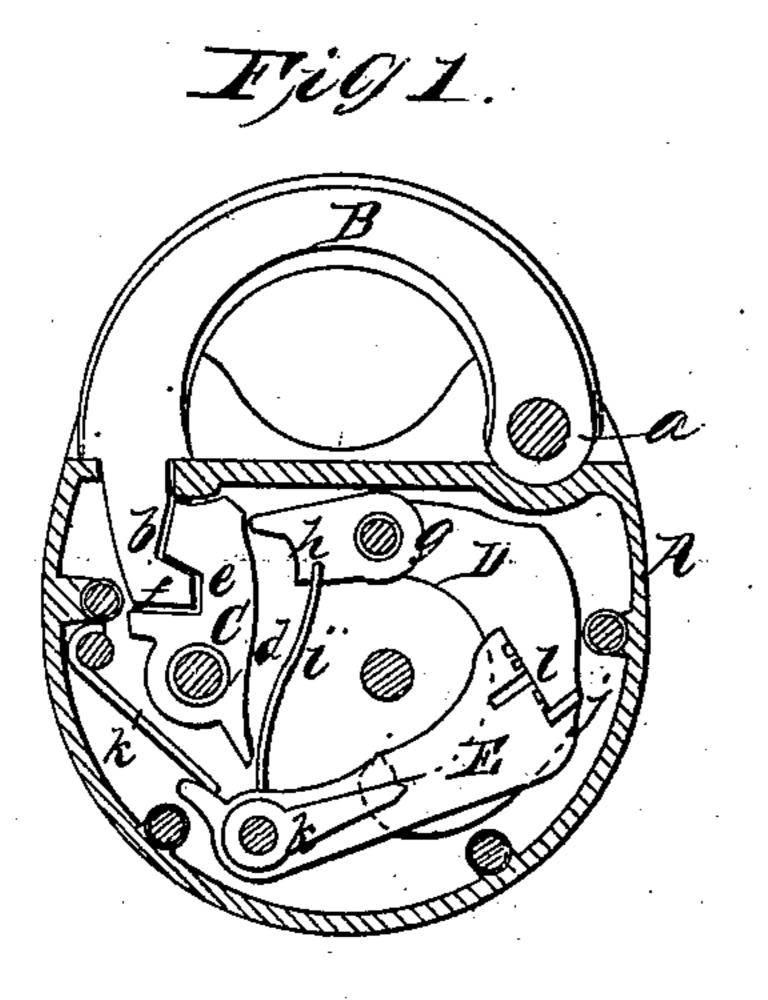
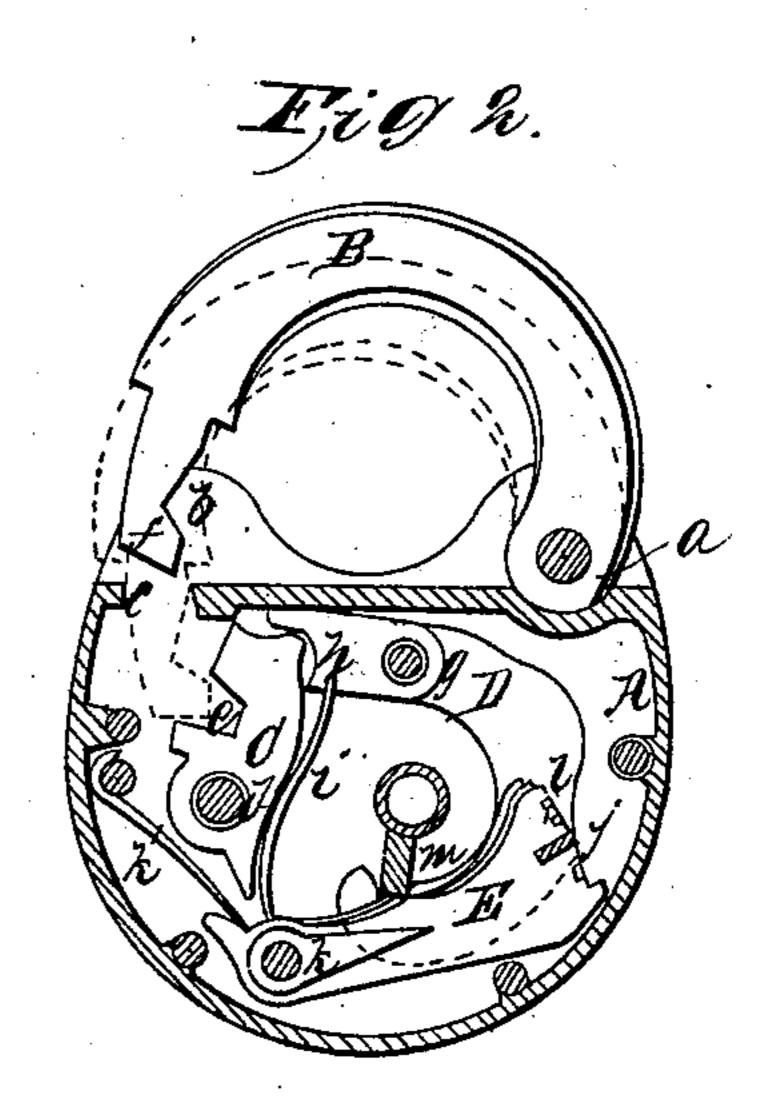
T. Slaight,

Padlock.

Patented Jan. 2, 1855.

Nº 12, 186.





## UNITED STATES PATENT OFFICE.

THOMAS SLAIGHT, OF NEWARK, NEW JERSEY.

## PADLOCK.

Specification of Letters Patent No. 12,186, dated January 2, 1855.

To all whom it may concern:

Be it known that I, Thomas Slaight, of Newark, in the county of Essex and State of New Jersey, have invented a new and Im-5 proved Spring-Padlock; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figure 1, is a front view of my improved padlock, the casing nearest the eye being removed in order to show the interior. In this view the end of the shackle is within the casing, and the lock is in a locked state. 15 Fig. 2, is the same view as Fig. 1, with the exception that the end of the shackle is out of the casing, and the lock in an unlocked state.

Similar letters of reference indicate cor-

20 responding parts in the two figures.

This invention relates to a new and improved spring padlock, and consists 1st, in the employment or use of a dog so constructed and arranged that the end of the shackle 25 when pressed or forced into the casing will act upon the dog and throw it into a recess or notch in the shackle without the intervention or aid of a spring; 2nd, my invention consists in the combination of the dog above 30 mentioned, guard bar, and tumblers, arranged as will be hereafter fully shown and described, for the purpose of preventing the lock from being picked.

To enable others skilled in the art to fully 35 understand and construct my invention I

will proceed to describe it.

A represents the casing of the lock constructed in the usual manner, and B is the shackle of the well known form one end of 40 which is secured by a bolt (a) to the upper end of the casing, the shackle turning loosely thereon as usual. The opposite end of the shackle has a recess or notch (b) cut in it which passes in and out of the casing through

45 a slot (c) in its upper end.

C is a dog placed within the casing A and working upon a pivot (d). This dog has a recess (e) cut in it a short distance above the pivot (d) the lower edge or side of the 50 recess projecting outward beyond the upper edge or side, the lower edge or side of said

recess being directly underneath the slot (c) in the upper end of the casing.

The recess (e) in the dog C corresponds inversely in form to a projection (f) at the 55

lower end of the shackle B.

D represents a curved guard bar within the casing A. This guard bar works upon a pivot (g) and its upper end has a curved recess -(h) cut in it directly below which 60 there is attached a spring (i) the lower end of which bears against the lower end of the dog C. To the guard bar D at a point about equidistant between its lower end and the pivot (g) there is attached a stud (j). 65

E, represents a series of tumblers, one end of which work upon a pivot (k), the edges of these tumblers at their opposite ends have slots (1) cut in them, one in each, at varying distances from the sides of the tumblers. 70 The tumblers are provided with springs

(k') as usual.

When the lock is in a locked state, as shown in Fig. 1, and it is designed to unlock it, the key (m) see Fig. 2, or rather 75 the bits of the key first act upon the tumblers E and bring the slots (1) in line, and in range with the stud (i) on the guard bar D. A bit on the key then acts against the lower end of the guard bar D which is there- 80 by turned and the stud (j) passes into the slots (1) in the tumblers and the upper end of the guard bar is thrown above the upper end of the dog C and the upper end of the dog is thrown back by the action of the 85 spring (i) into the curved recess (h) at the upper end of the guard bar the projection (f) on the shackle being freed from the recess (e) in the dog, see Fig. 2.

To lock the lock all that is required is to 90 press the shackle into the case, and the lower end of the shackle will bear upon the lower edge or side of the recess (e) and throw the upper end of the dog in the recess or notch (b) the projection (f) on the shackle 95 passing into the recess (e) and the upper edge of the guard bar D passing down behind the upper end of the dog, see Fig. 1.

By the above invention it will be seen that no spring is required to throw the dog into 100 the shackle, even the spring (i) of the guard bar is not essential, or it may be dispensed

with without affecting the general working of the parts. The great objection to spring padlocks hitherto has been the failing of the spring which has always been employed to throw the dog in the shackle.

I do not claim, the tumblers E separately, nor the guard bar, for they have been pre-

viously used, but

What I do claim as new, and desire to

10 secure by Letters Patent, is—

1. The employment or use of a dog C constructed as herein shown or in an equivalent way so that the pressure of the shackle upon it, when the end of said shackle is forced

into the case, will throw the dog into the 15 recess or notch in the shackle without the intervention or aid of a spring or any other device.

2. I claim the combination of the dog C, guard bar D, with the stud (j) upon it and 20 slotted tumblers E, arranged as herein shown and operating in the manner as set forth.

## THOMAS SLAIGHT.

Witnesses:

W. WHITNEY, HERVEY PARK.