B. Chambers,

Padlock.

No. 5,057. Patented Apr. 10, 1847.

Fig. 2

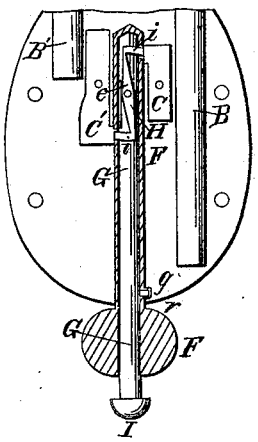

Fig. 1

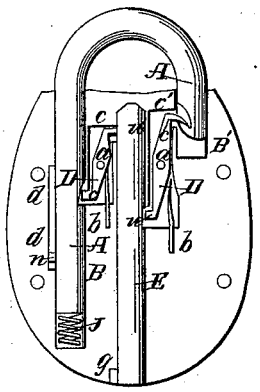

Fig. 3

UNITED STATES PATENT OFFICE.

BENJ. CHAMBERS, OF WASHINGTON, DISTRICT OF COLUMBIA, ASSIGNOR TO JOANNA CHAMBERS.

PADLOCK.

Specification of Letters Patent No. 5,057, dated April 10, 1847.

To all whom it may concern:

Be it known that I, BENJAMIN CHAMBERS, of the city of Washington, in the District of Columbia, have invented a new and useful Improvement in the Manner of Constructing Padlocks; and I do hereby declare that the following is a full and exact description thereof.

The body or box of my lock consists usually of two plates or pieces of brass or other metal, say of one fourth of an inch, more or less, in thickness according to the size of the lock. In finishing the lock the flat faces of these plates are placed together and are firmly united by riveting. The hasp or bow does not work upon a joint, but slides in and out of the body of the lock; it consists of a rod or wire of iron or steel, usually cylindrical, which is bent into the form of the letter U but has one of its sides two or three times the length of the other. This hasp is received within the body of the lock, which has two holes parallel to each other, drilled into it from the upper end of the lock for that purpose, the two halves being placed together during the time of drilling, so that one half of said holes is formed in each of the plates. The key which is a cylindrical tube is also received within a hole drilled, in like manner, between the two plates but from the lower end of the lock; and by means of the mechanism contained within it, and to be presently described is made to liberate the hasp.

In the accompanying drawing Figure 1, is a view of the inner face of one of the plates with the hasp in place. Fig. 2, is a view of the inner face of the other plate with the key in place which latter is shown in section. These faces are to be laid on each other and riveted together and when this has been done the lock when looked at edgewise has the appearance shown in Fig. 3.

A A′ is the hasp, which is received within the openings, or cavities B B′. Two excavations or cavities C, C′, are also made within the plates to receive two levers D, D′, that turn on joint pins *a a* at their centers and are borne upon by springs *b b* that press upon their sides and cause their ends *c c* to catch in suitable notches made in the hasp, so as to hold it in place until released by the action of the key.

E is the cylindrical opening into which the key F Fig. 2, is to be passed when the lock is to be opened. This key is tubular for its whole length and receives within it a slide G, G′, that is beveled off at its inner end G′, as represented. The key contains a lever H, at its inner end which is similar in its form and operation to the levers D, D′, that are contained within the body of the lock having a fulcrum pin at *e*, and lateral projecting pins at *i*, *i*, that stand flush with the outside of the cylindrical tube F of the key, when not acted on by the slide G of the key; *o*, is a spring that keeps the lever H in its ordinary position and restores it thereto after it has been acted on by the key. The hasp has a pin *n*, Fig. 1 on it that slides in a recess *d d* so as to prevent it from turning when its end A′ is free from the body of the lock and which serves also to arrest it when sufficiently drawn out.

The following is the manner in which this lock is operated on by the key F. The key is to be passed into the opening E, until it is arrested by coming into contact with the bottom of said opening. In passing it in it is made to stand in the proper direction by means of a pin *r*, that passes into a recess or notch *g* in the body of the lock; when so passed in the projecting pins *i*, *i*, of the lever H, will stand exactly opposite to those *u u* on the lever D, D′. The slide G, G′, is then to be forced in by placing the thumb on its head I, which will cause the beveled end of said slide to act upon the lever H, will force out its pins or lateral offsets *i*, *i*, and these coming into contact with those *u*, *u* of the levers D, D′, will liberate the catches from the notches in the hasp, which will then be raised by the action of the spring J. When the thumb is removed from the head I, the spring *o* will cause the slide to return back, and will restore the lever H to its ordinary position.

When it is desired to make the lock with less work I sometimes employ but one of the levers D, and the hasp is then held by a single catch only, but the security of the lock is much increased by the use of the two, as described. I have spoken of the openings or cavities for receiving the hasp and the key as being cylindrical but they may be square or in any other preferred form as the key is

not to be turned around; but the cylindrical form is given with the greatest facility, and is therefore to be preferred.

Having thus fully described the manner in which I construct my pad-lock what I claim as new therein and desire to secure by Letters Patent is—

1. The manner in which I have arranged and combined the levers D, D′, or either of them, and the lever H; the former within the body of the lock, and the latter within the barrel of the key, so as to be operated on by the slide G, G′, of the key, the manner described which slide liberates the catches from the hasp of the lock as set forth; the whole combination and arrangement being the same with that herein fully made known.

2. And this I claim whether the respective parts be made precisely in the forms represented and described, or in any other that constitutes a lock and key that are substantially the same in their principle of action, effecting the same end by means essentially the same.

B. CHAMBERS.

Witnesses:
PRESTON FARRITT,
LAFAYETTE CALDWELL.