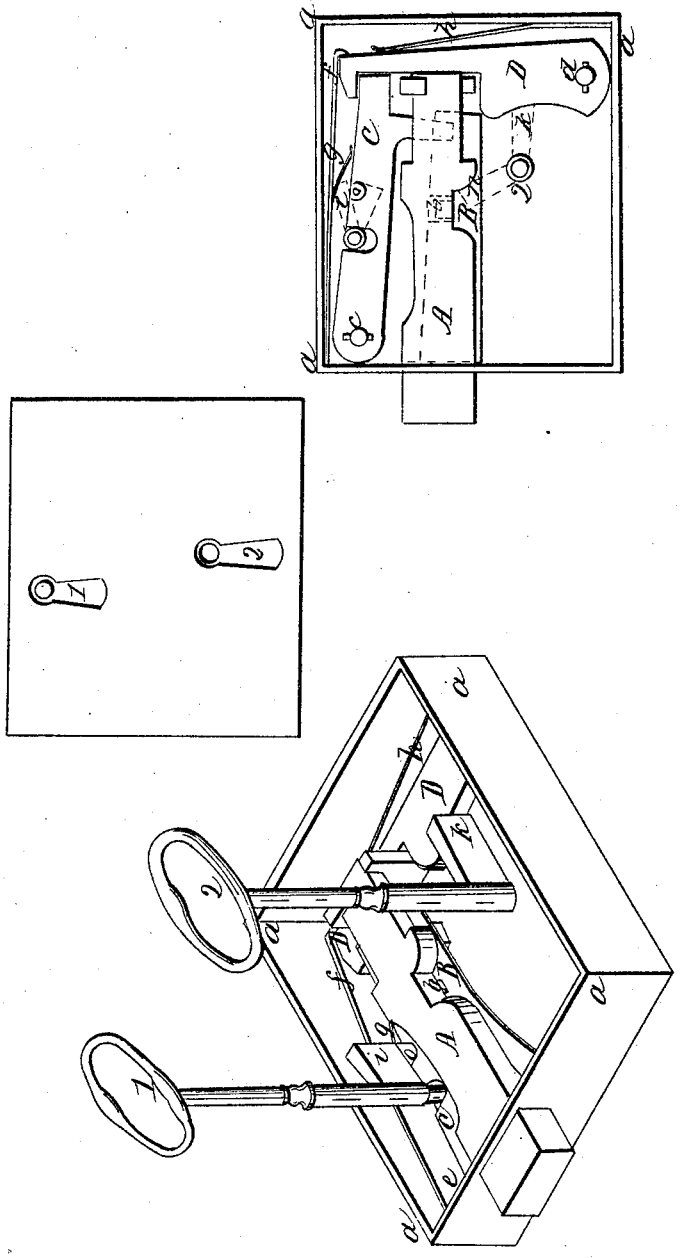
W. Stillman,

Lock.

No. 1,323. Patented Sep. 14, 1839.



UNITED STATES PATENT OFFICE.

WILLIAM STILLMAN, OF WESTERLY, RHODE ISLAND.

SAFETY-DOOR LOCK.

Specification of Letters Patent No. 1,323, dated September 14, 1839; Antedated March 14, 1839.

To all whom it may concern:

Be it known that I, WILLIAM STILLMAN, of Westerly, in the county of Washington and State of Rhode Island, have invented a new and useful Improvement in Making Locks for Banks or Any Other Important Establishments.

The use of this improvement is to prevent the operation of lockpicks and false keys; and I do hereby declare the following to be an exact description of the said improvement, reference being had to the drawings hereunto annexed and making a part of this specification.

The general principle of this invention consists in such a combination of parts or pieces called stoppers as require the continued alternate use of two keys to unlock them. These keys are of ordinary construction as shown at Nos. 1 and 2 in the annexed drawings, to turn on the pivots fastened to the lower plate of the lock, they should be somewhat less in depth than the inside of the lock so that there may be room between the plates to push and pull them in and out as circumstances require. The key holes should be made to suit the keys, and may be placed in any part of the lock where it is found most convenient, and will best agree with the situation of the stoppers, as it will not be likely that these stoppers will be arranged exactly alike in every lock.

To enable others skilled in the art to make and use this invention, I now proceed to describe its construction and operation.

I make a box or stock in any of the known forms of locks now in use, or as represented by the figure marked *a*, *a*, *a*, *a*, in the annexed drawings. This box may be made of wood or of any kind of metal suitable to that purpose, or of any size or shape best agreeing with the door on which it is to be applied. In this box I place the bolt A of any suitable size according to the size of the lock, constructed and placed in the box in the ordinary style of common stock locks or otherwise. This bolt has a notch in one edge suitable for the key No. 2 to work in by which to drive the bolt in and out to lock and unlock as in ordinary cases. My first stopper is a strong spring of a suitable length and bigness to hold the bolt from sliding back when the little knob *b* on the under side of the bolt is in the notch in this spring. This spring is fastened to the lower plate of the lock at one end and inclined upward toward the other end, so as to bear up against the bolt where there is a notch in it, to receive the knob *b* on the under side of the bolt when locked, as shown at B; by this the bolt is held and cannot be driven back until it is bent down so as to clear it from the knob *b*. To prevent this spring from being bent down by lockpicks I use the second stopper C which is a piece of metal nearly the length of the spring just described, say two inches long, and half an inch wide, and one-eighth of an inch thick and turns on a center *c* at one end. At the other end or near it, it has an arm projecting under the spring B and prevents it from bending down. This stopper C is driven under the spring B by the little spring S bearing against it. This is the second stopper. Its dimensions, however, might be more or less, and hung in some different way answering the same purpose, its only use being to prevent the spring B from bending down. In this stopper is fixed a little pin *o* a small distance from the center of the key No. 1. The use of this pin is to enable us to draw the arm out from under the spring B by turning key No. 1 against it. This, however, cannot be done until the stopper shown at D is removed, which is a long piece of metal say two inches long and half an inch wide though it may be more or less, and turns on the center *d* at one end, and grows smaller toward the other end, and terminates in a hook at the end, which hooks over the end of the stopper C and is driven up against the stopper C by the little spring *h* bearing against it. This stopper has a bulge near the middle of it, projecting toward the center of key No. 2 so that by turning key No. 2 against this bulge we throw off the hook from stopper C. This however cannot be done until the fourth stopper *e f* is thrown off. This fourth stopper is a long spring of a suitable length and bigness to hold the stopper D, say 2 inches long though it may be more or less, and is fastened to the inside of the lock at *e*. At the other end is a hook catching over the end of the stopper D holding it fast in its place. Other stoppers might be added, but they being sufficient to show the nature of the invention I add no more.

The operation of unlocking is as follows: First turn key No. 1 against the sun pulling it outward so as to pass over the pin *o* in the stopper C and press it against the stop-

per *e f* and thus throw off the hook *f* from the stopper D, then turn key No. 2 against the sun and press it against the bulge in the stopper D and thus throw off the hook from the stopper C; then turn key No. 1 with the sun until it will drop down behind the pin *o* in the stopper C; then turn it against the sun and it will draw out the arm from under the spring B; then turn key No. 2 with the sun pulling outward as you turn until it goes over the spring B at the point *n* in the notch of the bolt; then push it hard in bending down the spring B until it is clear from the knob *b;* then turn it around with the sun and it will be unlocked.

It however is easy to see that these stoppers might be somewhat differently formed and differently arranged, and yet the principle and operation remain exactly the same. This combination of stoppers may also be applied to locks of two or three bolts in the same manner as they are applied to a lock of only one bolt.

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

The combination of the bolt A with the catches B C D and *f* constructed and operating in the manner and for the purpose described.

WILLIAM STILLMAN.

Witnesses:
GEORGE SHEFFIELD,
HORATIO S. BERRY.