

*A. Call,
Latch.*

N^o 6,109.

Patented Feb. 13, 1849.

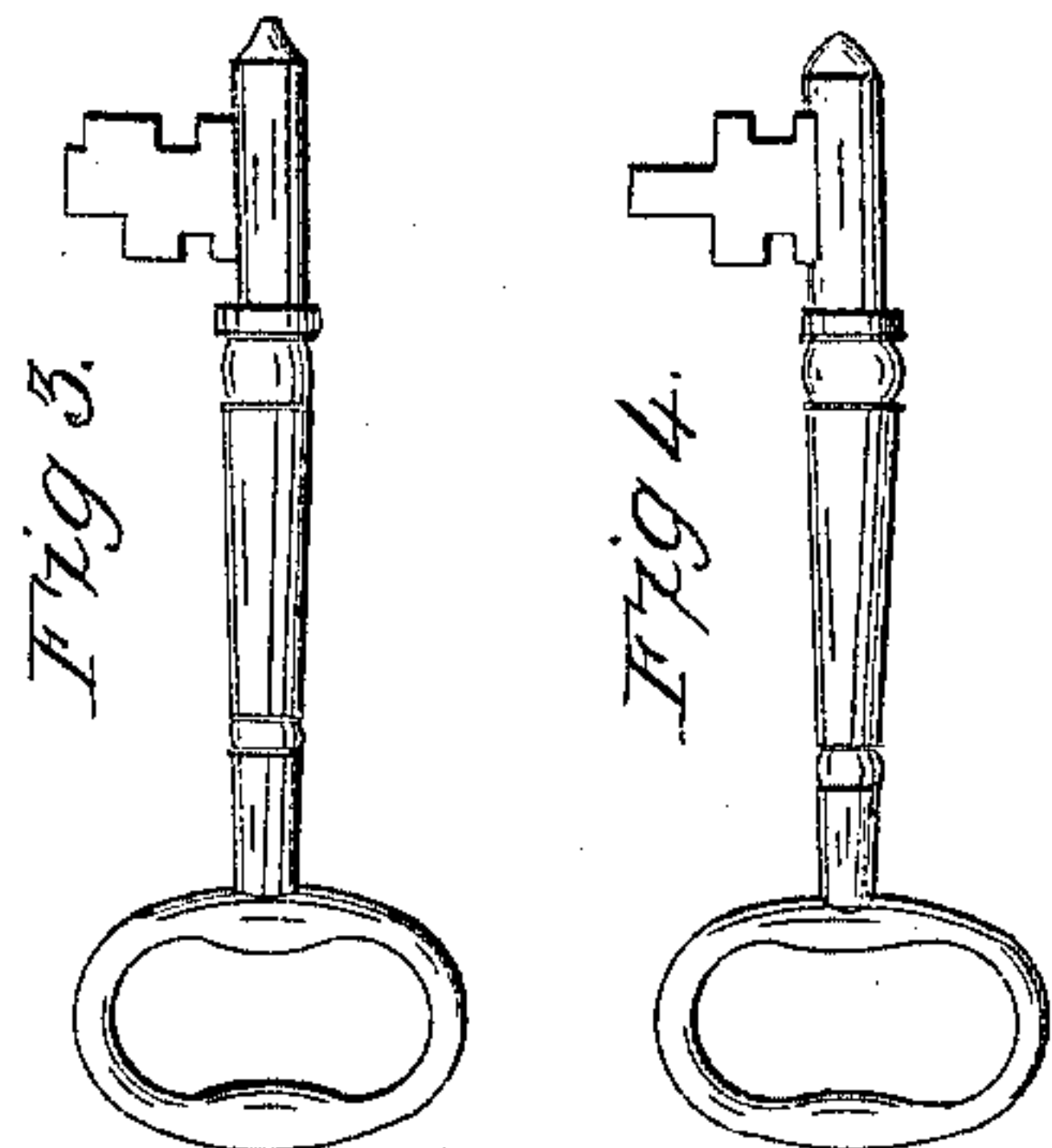


Fig 2.

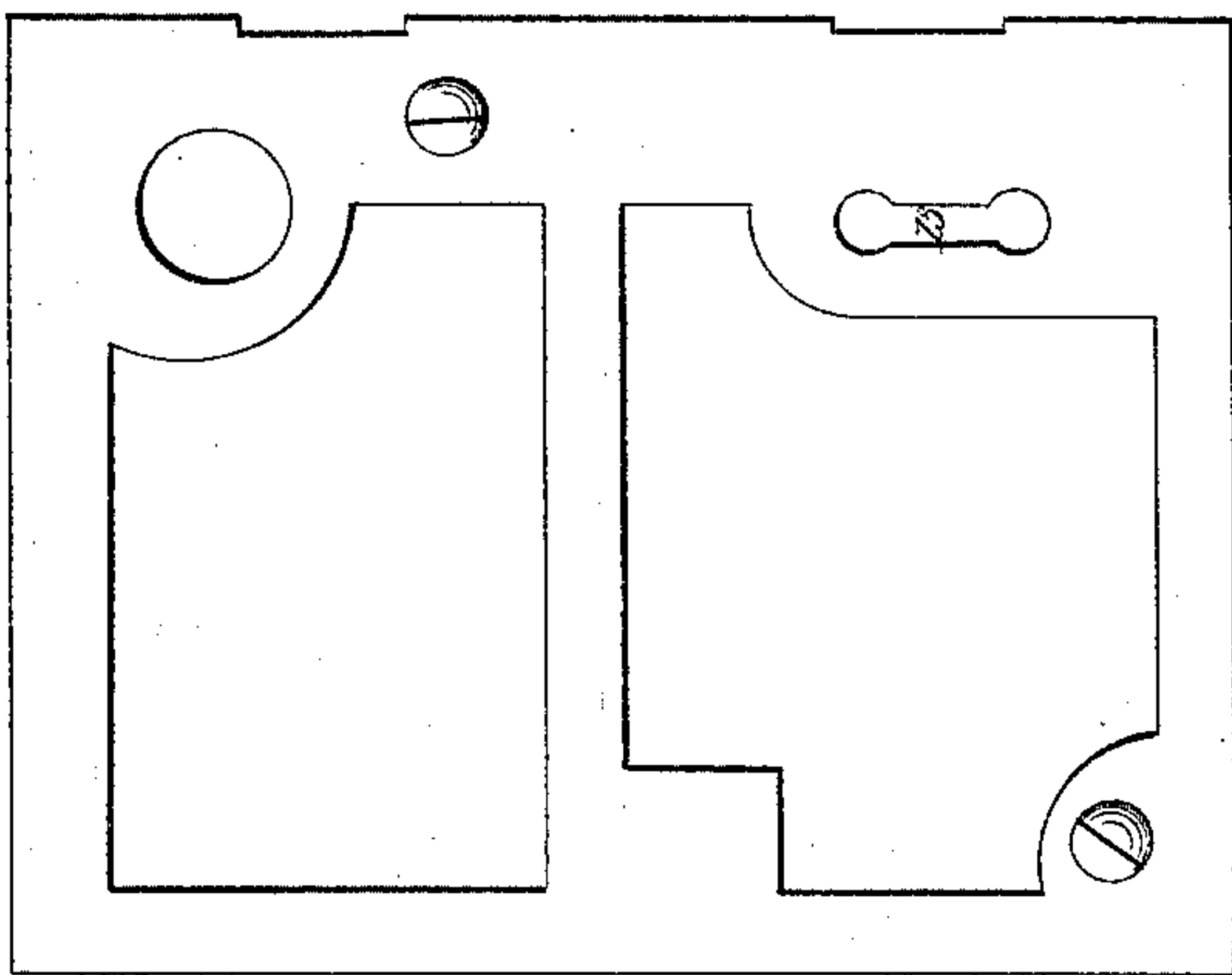
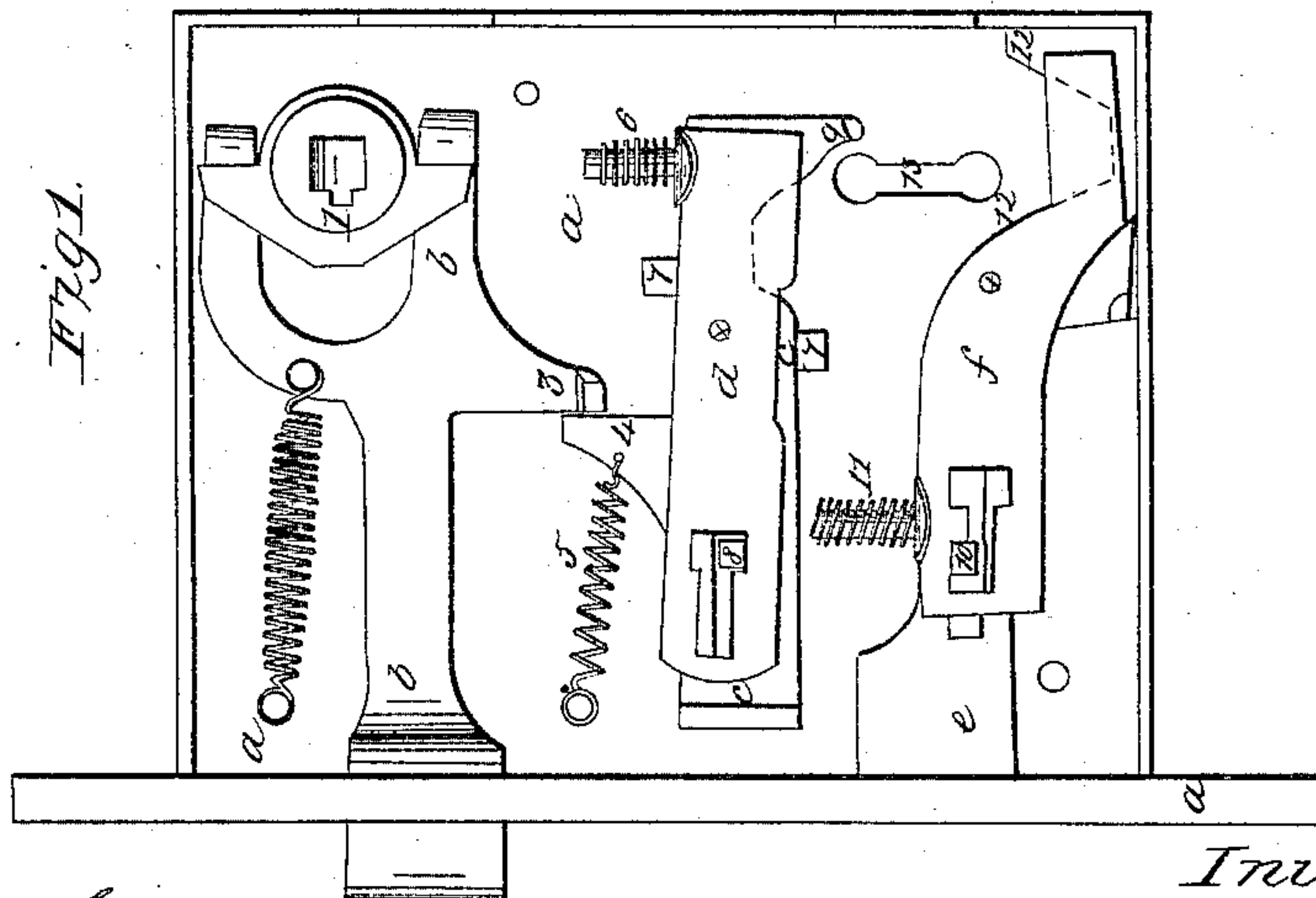


Fig 1.



Witnesses:

*Jonas Hooker
Wm Chapman*

Inventor:

Amos Call

UNITED STATES PATENT OFFICE.

AMOS CALL, OF SPRINGFIELD, MASSACHUSETTS.

DOOR-LOCK BY WHICH ONE KEYHOLE SERVES FOR TWO DISTINCT KEYS.

Specification of Letters Patent No. 6,109, dated February 13, 1849.

To all whom it may concern:

Be it known that I, AMOS CALL, of Springfield, Hampden county, State of Massachusetts, lock manufacturer, have invented and made and applied to use certain new and useful Improvements in the Construction of Night-Locks, such improvements consisting in applying a detached slide to move the common latch-bolt, the slide operated on by a key put through one end of a double-ended keyhole, the other end of which receives another key to move and work a standing bolt that permanently secures the door to which the lock is attached, for which improvement I seek Letters Patent of the United States, and that the said improvements are fully and substantially set forth and shown in the following description and in the drawing annexed to and making part of this specification, wherein—

Figure 1, is an elevation of a mortise lock, with my improvements added, and the side cover plate removed to show the parts; Fig. 2, is a detached elevation of the cover plate; Fig. 3, is a side view of the key for moving the latch bolt, and Fig. 4, is a side view of the key for unlocking the door, by the standing bolt; the letters and numbers used, as marks of reference, designate the several parts referred to.

a, is the common box of a mortise lock, with a cover plate formed as shown in Fig. 2. The box carries a latch bolt, *b*, with one end passing through the edge of the lock, the other forming a fork, to take the cams of the spindle barrel 1, and a contractile helical spring 2, retains the latch extended, when not otherwise acted on; an arm 3, projects from the lower side of the latch, with a stud on the end, taking an arm 4, on the upper side of a slide *c*, supported by guide studs, 7, having a contractile helical spring 5, to operate on the slide *c*, to draw it toward the outer edge of the lock; on each side of the slide is a tumbler, *d*, set on a fulcrum *e*; on one end of the bolt, a stud takes around it an expansive helical spring 6, operating on a small circular follower, set around the lower end of the stud, which follower overlies the ends of the two tumblers *d*, and near the other end of each tumbler, a T formed mortise receives a detent stud 8, which goes through a mortise or slot in the slide *c*, and is secured into the box of the lock. A keyhole 13, in both the box and cover plate, is

formed to receive the barrel of a key, at both ends, the upper end taking a key, shown in Fig. 3, which, when turned raises the tumblers *d*, and taking against the talon 9, of the slide *c*, moves that and by the arms 3, and 4, draws back the latch, releasing the door, and on the withdrawal of the key, the springs 2, and 5, draw the parts to their former position; and the position and action of the arms 3, and 4, is such, as to allow the latch to move by the handle and spindle, operating through the barrel and cams 1, on the latch, independent of any motion of the slide *c*. Beneath the keyhole 13, is the standing bolt *e*, fitted with tumblers *f*, one on each side, working on a fulcrum *g*, having a mortise taking the detent stud 10, which goes through a mortise in the shank of the bolt. When thus constructed, the key shown in Fig. 4, is to be entered through the lower end of the keyhole 13, and turned downward, depressing the tumblers, and operating on the inverted talons 12, of the bolt *e*, either to project, or withdraw it, from the side of the lock; and a spring and follower 11, on the upper edge of the bolt, operating on the upper side of the tumblers *f*, retains them in place, when not acted on.

It will be seen, by this arrangement, that one keyhole serves a double purpose, for both the night and standing bolt, and by the arrangement of the other parts, a tumbler slide is applied to the latch, thereby rendering that more secure, against any improper attempts to obtain entrance. The key shown in Fig. 3, from its construction, is only useful on the outside, as the handle, on the inside, will withdraw the latch, the handle on the outside being either entirely loose, or fitted with my improved connection, patented 7 March 1846.

It will be seen that these arrangements may be varied, as to the handling of the lock, and the positions of the latch bolt and night bolt may be inverted, yet be substantially the same, in effect and operation; and by changing the shapes of the talons and tumblers, an infinite variety of forms will be required, in the bits of the keys, so that no one key shall open any second lock; thereby obviating the existing dangers of the common night latch, and preventing the easy access these now give to the dwelling, whether properly or improperly used.

All the parts described are well known except the keyhole, made to receive the bar-

rel of a key at both ends, which is believed to be entirely new, as admitting the use of two distinct keys, by one opening in the lock and door.

5 I therefore claim as new, and of my own invention, and desire to secure by Letters Patent of the United States,

The application of such a keyhole, to receive a different key at each end, such keys
10 acting singly, or successively, to withdraw or project the night or standing bolt, or act

upon the latch bolt by the intermediate slide, as these are all applied and conjoined for these purposes, substantially as described and shown.

15

In witness whereof I have hereunto set my signature this fifteenth day of September one thousand eight hundred and forty-eight.

AMOS CALL.

Witnesses:

JOSIAH HOOKER,

C. W. CHAPIN.