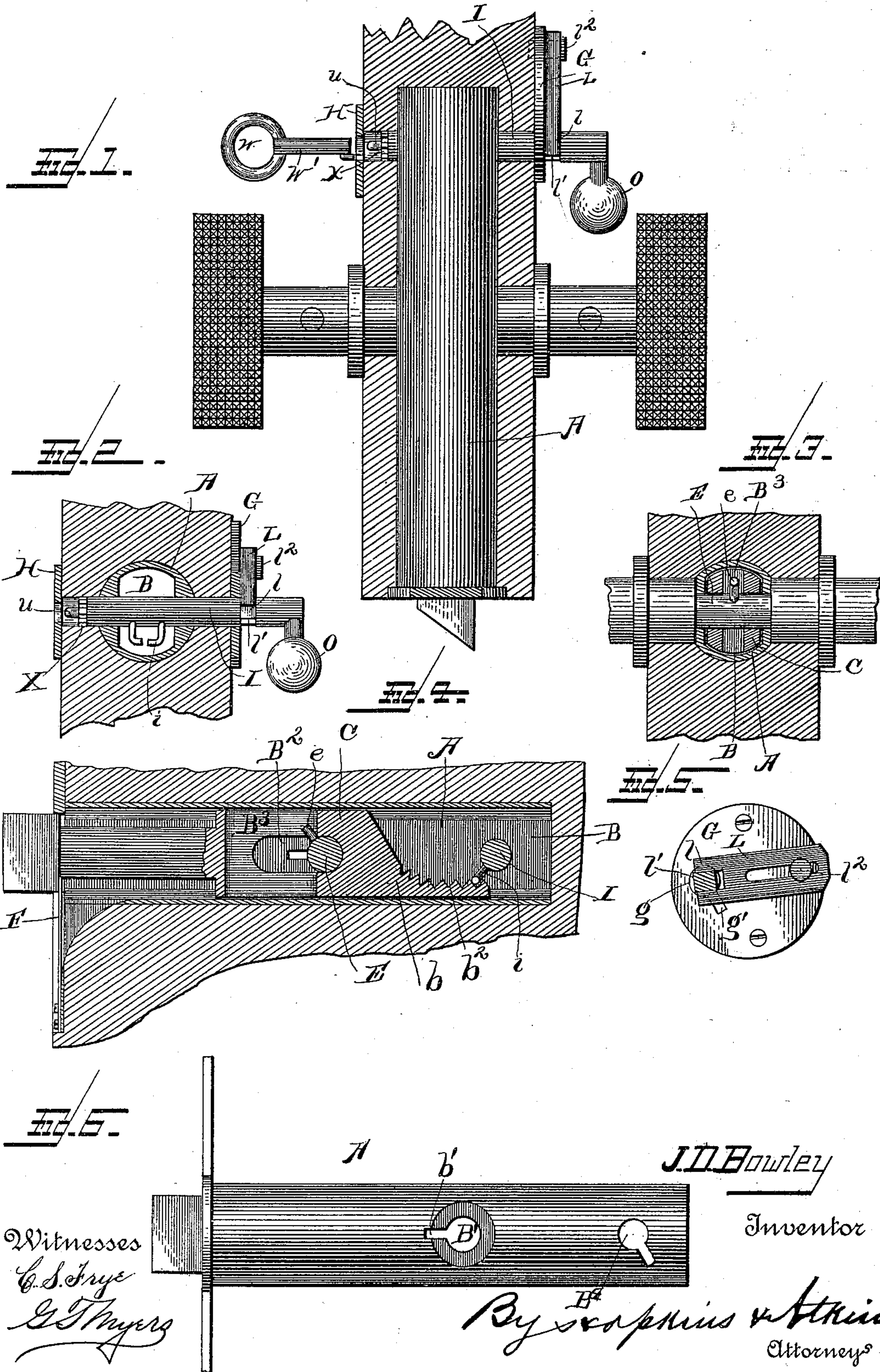


(No Model.)

J. D. BOWLEY.  
LOCK.

No. 491,868.

Patented Feb. 14, 1893.



Witnesses  
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# UNITED STATES PATENT OFFICE.

JAMES DEARNESS BOWLEY, OF WOODLAWN, ALABAMA.

## LOCK.

SPECIFICATION forming part of Letters Patent No. 491,868, dated February 14, 1893.

Application filed March 14, 1892. Serial No. 424,877. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES DEARNESS BOWLEY, a subject of the Queen of Great Britain, now a resident of Woodlawn, in the county of Jefferson, in the State of Alabama, have invented a new and useful Door-Lock, of which the following is a specification.

My invention relates to improvements in door locks, and it is designed more especially for mortise locks. It consists in the construction and novel arrangement of parts as will be hereinafter particularly described and pointed out in detail in the claims.

In the accompanying drawings:—Figure 1 is a top view of my lock set in position, and showing the door cut away at the center line of the lock; Fig. 2 is a vertical cross section through the rear of the lock, some of the parts being shown in elevation. Fig. 3 is a similar view through the front end of the lock; Fig. 4 is a central vertical longitudinal section of my lock, with the forward part of the latch-bolt shown in elevation; Fig. 5 is a detail view of the locking plate; and Fig. 6 a side elevation of the lock with some of the parts removed.

Referring to the letters on the drawings: A, designates a lock case having a longitudinal opening B, extending through it, from end to end.

B', indicates a circular opening passing through the side of the case, and b', a recess in one side thereof.

C, represents a latch bolt seated in the opening B, and provided with a horizontal oblong opening B<sup>2</sup>, extending through its sides, also a similar vertical opening B<sup>3</sup>, communicating with the opening B<sup>2</sup>. The latch bolt is also provided with a semi-circular tail piece b and notches b<sup>2</sup>, therein.

E, indicates a spindle with a lug or pin e, secured thereon. The spindle with its lug is, in putting the parts together, inserted through the opening B', and recess b', and when in place the lug e, enters the opening B<sup>3</sup>, engaging with the latch bolt C, to operate it.

F, denotes the spring of the latch bolt. It may be secured to the front face of the case with its upper end in engagement with the head of the latch bolt as illustrated in Fig. 4, or it may be a spiral spring surrounding the latch bolt, and bearing at one end against it

and at the other end against the face of the case, as usual.

G, indicates a face plate secured to the inside of the case in rear of the latch bolt, it is provided with an opening g, having a recessed portion g'.

B<sup>4</sup>, indicates an opening which passes through the side of the case, as shown in the drawings.

H, designates the escutcheon secured on the opposite side of the casing and over the opening B<sup>4</sup>.

I, represents the key spindle having mounted thereon a projection, as for example, lugs or pins i, i, which with the spindle are passed through the openings and recess of the plate G, and the opening B<sup>4</sup>, of the case. The spindle connects with the opening of the escutcheon plate by means of a terminal pin u. The lugs i, i, of the spindle come in contact with the tail piece b and notched portion b<sup>2</sup>, of the latch bolt. In this position they are adapted to operate the latch bolt from without by means of a key entering the key-hole of the escutcheon. The locking spindle is further provided with a cut away or notched portion l'.

L, designates a locking plate having bifurcated arms l, which are adapted to straddle the notched portion l', to dead lock the key spindle. The locking plate is preferably connected to the plate G, by means of a headed pin l<sup>2</sup>, working in a slot l<sup>3</sup>, in the locking plate.

On the inside end of the locking or key spindle, is secured a weight O, whereby said spindle is counter-balanced, and held in the locking position. The operation of the key from the outside is to lift the counter-weight and relieve the locking action of the key spindle.

W, indicates a key, which is adapted for operation with my lock, it is preferably provided with a sweep W', and is adapted to be inserted upon the end of the pin u, on the end of the key spindle. The lock may be guarded in any suitable manner, as for example, by circular plates X, secured opposite the opening in the escutcheon plate, and adapted to receive and register corresponding members on the end of the key sweep. These notches may be varied an indefinite number of ways and the lock guarded from operation on the outside by that means.

I do not desire to be understood as limiting



myself to the precise details of construction shown in my drawings, and heretofore described, but reserve for myself the right to make such alterations therein as come within  
5 the scope of my invention without departing from the substance thereof.

What I claim is:—

1. In a lock, the combination with a case and latch bolt, of a key spindle located in the  
10 rear of the latch bolt, a notched tail piece upon the latch bolt, and a counter-weight upon the key spindle, substantially as and for the purpose specified.

2. In a lock, the combination with a latch  
15 bolt provided with a notched tail piece, of a key spindle provided with projections in operative relations with the notched tail piece of the latch bolt, the counter, weight upon the key spindle, and a key pin upon the out-  
20 side end of the spindle, substantially as and for the purposes specified.

3. In a lock, the combination with a case and latch bolt provided with a notched tail piece, of a key-spindle in operative relations with the notched tail piece and provided with a lug  
25 thereon, a cut away portion on the inside of the spindle and a sliding locking plate for engagement with the cut away portion of the spindle for holding it against rotation, substantially as and for the purposes specified. 30

4. In a lock, the combination with a casing having a through opening therein, a revoluble key spindle in said opening of a notched circular plate on the head of the spindle, and a  
35 weighted key spindle having a correspondingly membered key wing to register with the notches in the plate and rotate the key spindle, substantially as specified.

JAMES DEARNESS BOWLEY.

Witnesses:

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