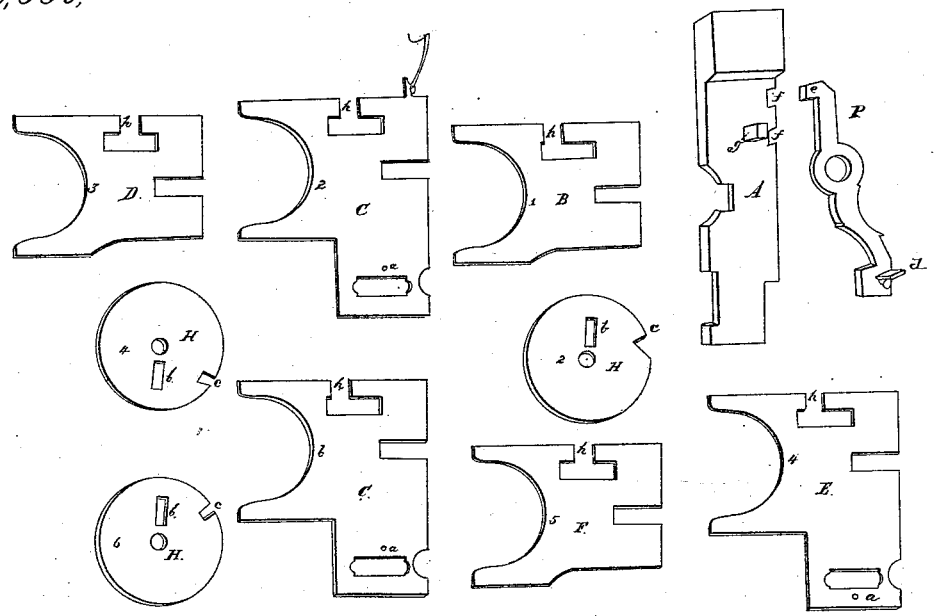
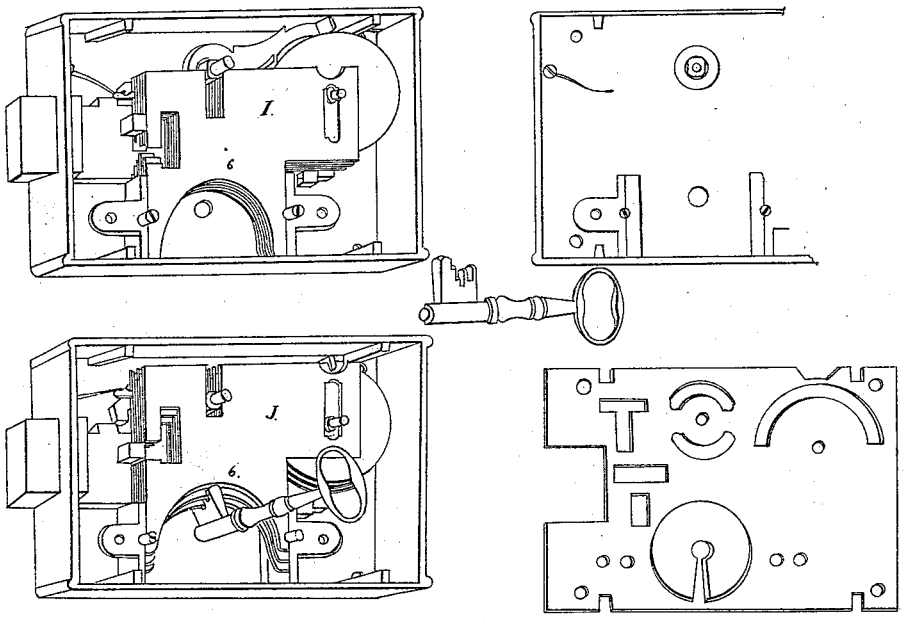
R. M. Tuttle,

Lock,

No. 2,869. Patented Dec. 5, 1842.





UNITED STATES PATENT OFFICE.

ROBERT M. TUTTLE, OF NEWARK, NEW JERSEY.

COMBINATION TUMBLER DOOR-LOCK.

Specification of Letters Patent No. 2,869, dated December 5, 1842.

To all whom it may concern:

Be it known that I, ROBERT M. TUTTLE, of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in Locks, of which the following is a specification. See the drawings thereof.

P, is the protector, a lever working on an axis and having at each end a quad or hold intended for securing the bolt in its place.

A, is the bolt with notches for the reception of the guard on the protector.

B, C D E F and G, are tumblers on the external one of which C, there is a spring designed to depress it with a greater certainty than can be done by its own weight.

H, Nos. 2, 4, and 6 are wheels.

I, shows the lock with the bolt protruded as when the door is locked.

J is the lock showing the position of the key as it turns and elevates the tumblers.

a, is a pin on the tumblers.

b, is a slot, in the wheels in which the pin *a* works.

c, is a notch on edge of the wheels.

d, is an arm or guard on the end of the protector which rests on the periphery of the wheels and which falls into notches cut into them when they are made to coincide by the action of the tumblers on the wheels.

e, is a bolt guard on the protector.

f, *f*, are notches in the bolt, into which the bolt guard falls.

g, is a stump fast to the bolt and passes through the slot, *h*, in the tumblers when the bolt moves.

h, is the slot in the tumblers.

The key to this lock is formed of bits of unequal lengths.

When the lock is in its natural state with the bolt drawn in or sheathed, the guard *d* on the right end of the protector is sustained by the edge of the wheels on which it rests, while the guard, *e*, on the other end being depressed, falls into the notches *f* No. 1 in the bolt and secures the bolt, by inserting the key and elevating the tumblers in its revolution the wheels H, Nos. 2, 4 and 6 are set in motion by means of the pin, *a*, on the tumblers working in the slots, *b*, in the wheels. These slots should on the alternate wheels be placed to the right and to the left of the center thereof respectively with the pin to correspond, whereby a motion in the one wheel will be caused to the right, and in the other to the left. This motion of the wheels will bring the notches, *c*, on the periphery of each together so as to form a regular groove across the edge of the wheels and as this groove passes under the guard, *d*, on the protector the guard falls by its own weight into it and thereby elevates the other end of the protector at *f*, and liberates the bolt which then on the further turning of the key passes out as the wheels again move on the falling of the tumblers a beveled notch on the external wheel throws up the guard, *d*, on the protecting lever, and at the same time depresses the guard, *e*, at the other end of the lever, which then falls into the notch *f* No. 2 in the bolt, and this holds it finely in its place. This completes the revolution of the key and shows the operation of the lock.

What I claim in this lock is—

The combination of the protector or protecting lever with the wheels to produce a security unattained as I think by other locks now in use that is to say I claim to have invented that combined action of the wheels upon the protector which by a nice adjustment of the tumblers allows the bolt to pass out and in only when the tumblers are elevated by the unequal bits of the key, so as to relieve the bolt from resistance at the slot *h*, and at the same time from the hold of the protecting guard at *f*, as herein described.

In testimony whereof I the said ROBERT M. TUTTLE hereto subscribe my name in the presence of witnesses this 21st day of November, 1842.

ROBT. M. TUTTLE.

Witnesses:
D. A. HALL,
A. E. HALL.