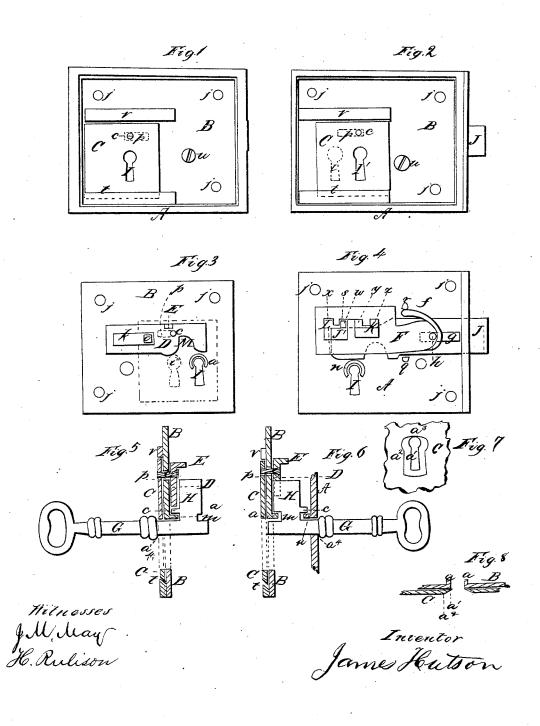
## J. Hutson, Key-Hole Guard. IV945,611. Patented Dec.21,1864.



## UNITED STATES PATENT OFFICE.

JAMES HUTSON, OF JANESVILLE, WISCONSIN.

## IMPROVEMENT IN LOCKS.

Specification forming part of Letters Patent No. 45,611, dated December 27, 1864.

To all whom it may concern:

Be it known that I, James Hutson, of the city of Janesville, Rock county, and State of Wisconsin, having invented a new and useful Improvement in Door-Locks, for the purpose of making door-locks burglar and powder proof; and I do declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention relates to the closing of the key hole on the side of the lock next to the door by means of a sliding plate attached to the lock, and is moved longitudinally or lengthwise of the lock when the key is turned to lock the door from the inside of the room, and covers the key-hole as the lot is thrown forward in locking the door; and as the door is unlocked the same movement in turning the key in unlocking the door also removes the plate from the key-hole, the plate being held as firmly over the key-hole when the door is locked as the bolt is held, but when locked and unlocked from the outside the plate remains unmoved.

In the accompanying drawings the same letters of reference in each figure represent

the same part of the lock.

Figure 1 is a view of the side of the lock having the sliding plate attached, with the key-hole through the plate and lock. Fig. 2 represents the same side of the lock, with the plate moved to cover the key-hole in the lock. Fig. 3 is the main plate of the lock, showing the opposite side thereof from that shown in Figs. 1 and 2, also showing a supplemental bolt connected with and used in moving the sliding plate to cover the key-hole. Fig. 4 shows the inside of the lock, with the peculiarly shaped ward, spring, and bolt. Fig. 5 is a magnified section showing the key as it is used on the outside in locking the door, allowing the sliding plate to remain stationary, and also the relative position of different parts of the lock. Fig. 6 is a section showing the key as applied in locking the door on the inside of a room, and Figs. 7 and 8 are sections representing the beveled edge of the plate around the key-hole.

A is the shell or casing that contains the principal machinery or movement of the lock. B is the plate that covers the principal working part of the lock, thus inclosing its

chief mechanism within the casing A, and all kept together by the screw u, the holes for fastening the lock to the door being represented by j. B has also a slot, p, (indicated in Figs. 1, 2, and 3 by dotted lines,) and in Figs. 5 and 6 the rivet e passes through the plate B in a slot connecting together the sliding plate C and the supplemental bolt D on opposite sides of plate B, so that when the supplemental bolt D is moved by the key G the plate C is also moved in the same direction, and by it the key-hole is covered and uncovered as the key is turned back and forth from the inside of the room; also, the supplemental bolt is kept in line by means of slot k therein, through which the projections o from plate B extend, while the slidingplate C is kept in place by means of the groove t and guide v.

It will be observed that Fig. 3 represents plate B, not only reversed, showing its opposite side from that shown in Figs. 1 and 2,

but also its ends are reversed.

F in Fig. 4 is the ward pivoted to the casing A by the pivot h, which passes through the slot g in the bolt J. The projection rfrom plate A holds the spring f with proper tension, and also serves, in connection with the similar projection, g, to guide the bolt in line as it is moved back and forth by the key. The notch in the bolt for the key to touch in moving it is indicated by dotted lines where it is covered by ward F, while J' indicates the rear part of the bolt, as seen through the space L in the ward, and has the projection s fitting notch w and holding the bolt forward when the door is locked either from the outside or inside of the room, and as the door is unlocked the key lifts the ward F, the bolt passes back underneath the ward, and the projection s fits the notch x in the ward, and is held by means of the spring f. The notches y and z in space K of the ward receive pro-The notches jection E of the supplemental bolt D when the key is used in operating the lock from the inside of the room; but owing to the peculiar construction of the key, the supplemental bolt is left untouched by the key when used on the outside, as will appear by reference to Fig. 5, which is a sectional drawing magnified to about double size. Fig. 5 shows the key as used in locking the door from the outside, wherein the projection c serves to keep

the bit H of the key from coming in contact with supplemental bolt D, and thus the supplemental bolt and sliding plate C remain stationary while the bolt J is thrown back and forth in locking the door in the usual manner, the projection E remaining in space K and notch y, the ward F rising and falling and not affecting supplemental bolt D or sliding plate C, while by means of the projection s from the part of the bolt J' and notches w and x in space L of the ward the bolt J is held firmly when the door is locked or unlocked.

In Fig. 6 the key is placed in the lock from inside the room. The embossment a on plate B partly around the key-hole steadies the end of the key, while notch m in the bit of the key allows the bit H to fit closely to the plate B, and as the key is turned it takes into notch M of the supplemental bolt D, and thus the ward is raised, and the bolt J, the supplemental bolt D, and sliding plate C are moved back and forth and held firmly by the ward, as before described, and the key-hole on the outside is covered and uncovered by turning the key, while groove t and guide v hold the plate from being moved up or down.

When the door is locked on the inside of the room, the plate C covers the key-hole in the lock on the outside, and the lock is safe from being picked and the key safe from being turned by burglars' nips or forceps; or the key may be withdrawn and the plate C is held as firmly over the key-hole as the bolt J is held in its place. Powder cannot be introduced into the lock, nor can chloroform or noxious gases be introduced into the room through the key-hole.

I will also observe that when the door is locked from the outside it cannot be unlocked from the inside. A separate ward may be used to hold the supplemental bolt D and plate C firmly in place when the door is either locked or unlocked, instead of the twofold service required of ward F; but a ward to hold the plate C firmly I deem indispensable.

In Fig. 7 the plate C from a' to  $a^2$  is bev-

eled and brought to an edge at the key-hole; but at the top of the key-hole the plate is not beveled, but left with a square edge, to meet the shoulder  $a^4$  of the key, to prevent the key from going too far into the lock, as at  $a^3$ .

In Fig. 8, which is a horizontal cross section at the round part of the key-hole, the beveled edge from a' to  $a^2$  of plate C is also represented. This beveled edge is to prevent the end of a burglar's instrument or tool that might be used as a lever from being placed against a square edge of the plate in the key-hole and pushing the plate back to uncover the key-hole in the lock, the beveled edge causing the end of the lever to slip and fail to take hold of the plate.

My improvement is applicable to mortiselocks, knob-locks, and other descriptions of

I am aware that several devices to secure locks from being picked have been made, as the swinging plate to cover the key-hole, the plate being held to its place by a bolt fitting a notch in the edge of the plate, patented by Charles Claude, October 15, 1861; also the device of Peter Paul Stephan, for stopping the key-hole by filling it so as to prevent the insertion of a pick, and also a class of inventions that are analogous to those devices, which I do not claim.

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

1. The use of plate C, in combination with supplemental bolt D, ward F, and key G, when constructed and used substantially as and for the purposes described.

2. Ward F, having the double capacity of holding the main bolt J and supplemental bolt D firmly in place, substantially as described.

3. Plate C, when made with a beveled edge around the key-hole, substantially as and for the purposes described.

JAMES HUTSON.

Witnesses:

J. M. MAY, H. RULISON.