S. Hiatt,

Latch.

No. 22,425. Patented Dec. 28, 1858.

Fig. 3

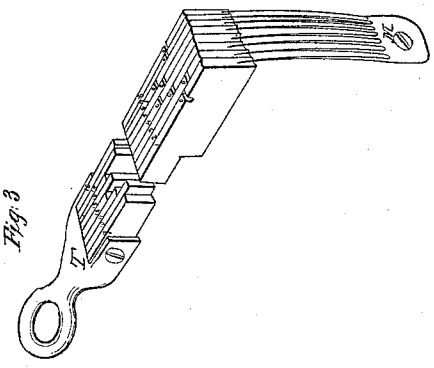


Fig. 2.

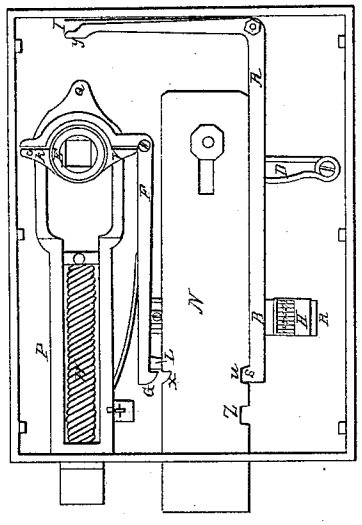


Fig. 5.

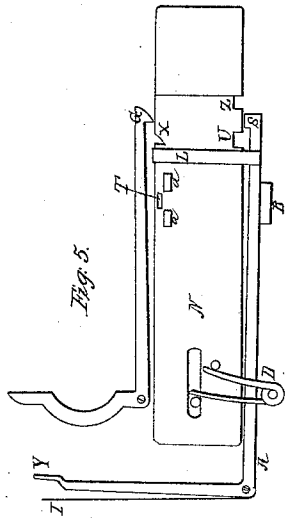


Fig. 4.

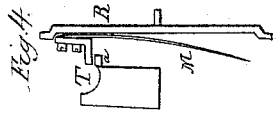
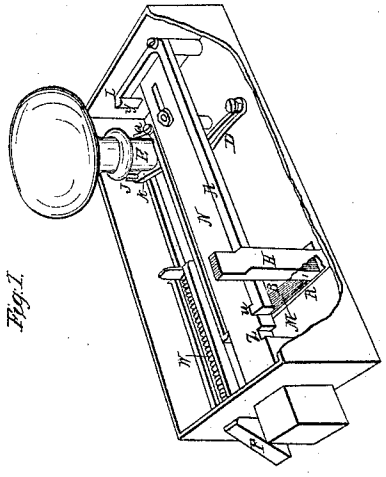


Fig. 1.



Witnesses:

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AM. PHOTO-LITHO. CO. N.Y. (OSBORNE'S PROCESS)

UNITED STATES PATENT OFFICE.

S. HIATT, OF INDIANAPOLIS, INDIANA.

LOCK.

Specification of Letters Patent No. 22,425, dated December 28, 1858.

To all whom it may concern:

Be it known that I, SPENCER HIATT, of Indianapolis, in the county of Marion and State of Indiana, have invented a new and useful Improvement in Burglar-Proof Locks, of which the following is a full and exact description, reference being had to the accompanying drawings and the letters of reference marked thereon.

Figures 1, 2, 3, 4 and 5 are sectional views showing the construction and general arrangement of the lock.

The following is the construction of the same: In a common case or lock frame I place the bolt N which is provided with notches U and Z in which the catch S (which is attached to the lever A) is designed to operate for the purpose of holding the bolt N in place. Upon the bolt N are also the projections *a*, *a*, which serve as a rest or stop for the projection T upon the slide R, as shown in Fig. 5. Upon the lever A is the catch plate B, designed to operate in the notches of the tumblers 1, 2, 3, 4, 5, 6, 7, and 8. M is a comb spring designed to operate upon each tumbler separately. The tumblers 1, 2, 3, 4, 5, 6, 7, and 8 are designed to hold the lever A up to the bolt N, and the stop or catch S into the notch U or Z when the catch plate B is withdrawn from the notches in the tumblers 1, 2, 3, 4, 5, 6, 7 and 8, and rests upon the top of the same. E is a follower upon which are the levers or arms V and K, designed to force back the catch bolt P and lock bolt N, by operating the yoke Q and lever F. L is a rest firmly attached to the lever A, and extending to the lever F, holding it up and preventing the catch G from falling into the notch X while the bolt N is held by the catch S. The spring D is designed to throw out the lock bolt N; the catch bolt P is also operated by a spring similar to catch bolts in other locks. Q is a projection upon the end of the bolt P which when the bolt P is thrown back strikes the lever A at Y, operating the same as will be shown. The lever F is attached to the bolt P and fulcrumed at *b*. The arm K has a pin J, designed to operate the lever F, thereby raising the catch G out of the notch X. The comb spring M is attached to the slide as shown in Fig. 4 and may be taken out when the bolt is partly withdrawn so that the projection T may pass down between the rests or projections *a*, *a*, thereby allowing the arrangement of the tumblers 1, 2, 3, 4, 5, 6, 7, and 8.

The following is the operation of the lock: To unlock the same the key is placed against the end of the tumblers 1, 2, 3, 4, 5, 6, 7 and 8 in such a manner that when pressed they are forced to back against the comb spring M, (the bits 9, 10, 11, 12, 13, 14, 15 and 16 being properly adjusted) which brings the notches *o*, *o*, *o*, *o*, *o*, *o*, *o*, *o* in line and the catch B upon the lever A falls into them, freeing the catch S from the notch U. By turning the follower E and throwing back the arm V against the yoke Q, the catch G resting in the notch X draws back the bolt N. When the projection upon the yoke Q is pressed against the lever A at Y the catch S is thrown into the notch Z holding the bolt back, while the catch bar B being withdrawn from the notches in the tumblers 1, 2, 3, 4, 5, 6, 7 and 8 rests upon the top of the same, the notches having been thrown out of line by the action of the comb spring M. In locking the key is placed against the tumblers in the same manner as in unlocking. As the notches in the tumblers are brought in line, the catch B falls into them, allowing the lever A to descend, freeing the catch S from the notch Z. The spring D then throws the bolt N forward. As the arm or lever K forces back the yoke Q it strikes the lever A at Y and forces the catch S into the notch U, freeing the catch plate B from the notches *o*, *o*, *o*, *o*, *o*, *o*, *o*, *o* when the comb spring M throws them out of line thereby holding the catch S into the notch U and preventing the bolt N from being moved. The rest bar L is attached to the lever A and supports the lever F preventing the catch G from falling into the notch X while the bolt N is locked. The slide R, which holds the comb spring M, is held in place by the projection T, which rests upon the projections *a*, *a*, upon the bolt N and the spring is taken out for the purpose of adjusting the tumblers 1, 2, 3, 4, 5, 6, 7 and 8, which may be taken out and changed or arranged to correspond with any change made in the arrangement of the bits in the key.

What I claim and desire to secure by Letters Patent is—

1. The combination and arrangement of the tumblers 1, 2, 3, 4, 5, 6, 7 and 8 and key

bits 9, 10, 11, 12, 13, 14, 15, and 16 with the lever A, sliding yoke Q and lever arms V and K, when constructed and arranged substantially as set forth.

2. The combination of the comb spring M and slide R with the tumblers 1, 2, 3, 4, 5, 6, 7 and 8 when constructed arranged and operated substantially as and for the purposes set forth.

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Witnesses:
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