J. Adt,

Lock.

No. 37,209. Patented Dec. 23, 1862.

Fig. 1.

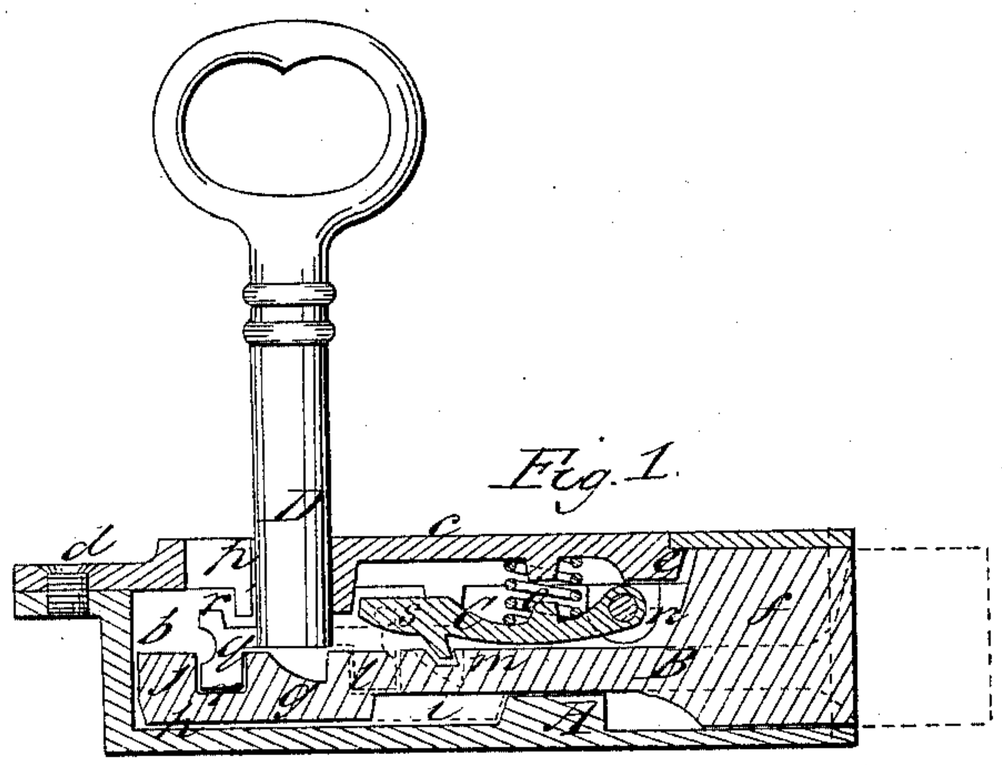
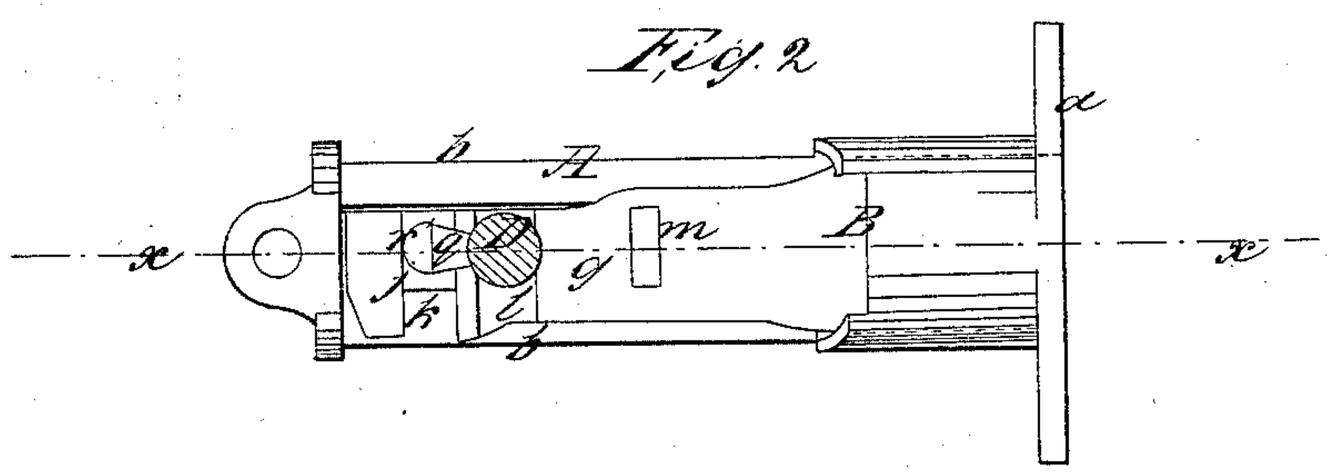


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

JOHN ADT, OF WATERBURY, CONNECTICUT.

IMPROVEMENT IN LOCKS.

Specification forming part of Letters Patent No. **37,269**, dated December 23, 1862.

To all whom it may concern:

Be it known that I, JOHN ADT, of Waterbury, in the county of New Haven and State of Connecticut, have invented a new and Improved Lock; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a longitudinal section of my invention, taken in the line *x x*, Fig. 2. Fig. 2 is a side view of the same, a portion of the case nearest the eye being removed in order to show the interior.

Similar letters of reference indicate corresponding parts in the two figures.

This invention relates to an improvement in that class of locks which are constructed and arranged in such a manner as to admit of being readily inserted in a door, in an auger-hole therein, without the trouble of mortising.

The object of the invention is to render this class of locks more compact and simple than any hitherto devised; and to this end I construct the bolt with a groove or recess to receive the bit of the key and serve as a "gating" as it is technically termed, for the bit to act upon and shove the bolt out from and into the lock-case, thereby avoiding all the bolt appendages—such as gatings, projections, arms, or levers—hitherto used for the bit of the key to act against, and which necessarily monopolize considerable room.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the lock-case, which is of cylindrical form and provided at its outer end with a plate, *a*, through which screws pass into the edge of the door to secure the case in the auger-hole made to receive it. The case A has an oblong slot or opening, *b*, in its upper and lower sides, and a portion, *c*, of the front side of the case is removable, it being secured to the other portion by a screw, *d*, at one end, and a lip, *e*, at the opposite end, as shown in Fig. 1.

B is the bolt, the outer part, *f*, of which is of cylindrical form, the cylindrical portion corresponding in length to the length of the movement or throw of the bolt. The inner part, *g*, of the bolt is of flat form, and it has a projection, *h*, on its back side, which fits in a longitudinal recess, *i*, in the case. (See Fig. 1.) This projection *h* serves as a guide for the back part of the bolt B.

In the front side of the inner part, *g*, of the bolt there is a transverse slot or recess, *j*, the lower part of which extends entirely through the bolt, as shown at *k*; and *l m* are two recesses which are also made in the front side of the bolt to receive a catch, C, which is secured by a pivot or joint, *n*, within the case, and has a spring, *o*, bearing against it, said spring keeping the free or disengaged end of the catch in contact with the front side of the inner part of the bolt, as shown in Fig. 1. In the front removable portion, *c*, of the case, there is a key-hole, *p*, and D is the key, which is provided with a bit, *q*, having two prongs, *r r'*, as shown in Fig. 1. One prong, *r*, fits in the recess *j* of the inner part, *g*, of the bolt, while the other prong, *r'*, acts upon the catch C, and forces the free or disengaged end of the same out from the recess *l*, so that the bolt may be operated by the prong *r* in the recess *j*. The catch C, it will be seen, prevents the bolt from casually moving, retaining it within the case when engaged with the recess *m*, as shown in black, Fig. 1, and holding the cylindrical part *f* out from the case when engaged with the recess *l*, as shown in red in Fig. 1. The free or disengaged end of the catch C is provided with a lip, *s*, for the prong *r'* of the bit *q* to act against. The catch C only requires to be forced out from the recess *l* in order to admit of the throwing back of the bolt, the recess *m* being beveled at one side to admit of the bolt being shoved forward without actuating the catch by means of the key. In the latter case friction alone is depended upon, and that is sufficient, to keep the bolt within the case. By this arrangement the lock is rendered very compact, the bit of the key fitting directly in the bolt, and thereby admitting of the latter being fitted in a case of small diameter, just large enough to admit the bolt, the bit of the key not requiring any more

room to operate upon the bolt than is afforded by a case the internal diameter of which is equal to the diameter of the cylindrical part *f* of the bolt.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The catch C, when used in combination with the bolt B and the double-pronged bit *q*, all arranged as herein set forth.

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Witnesses:
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