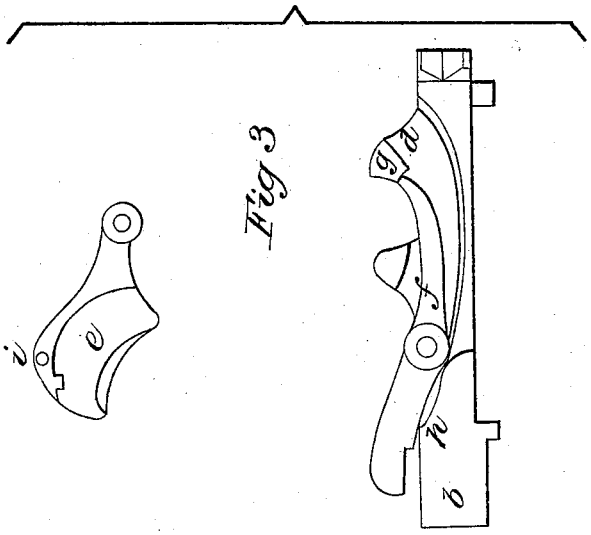
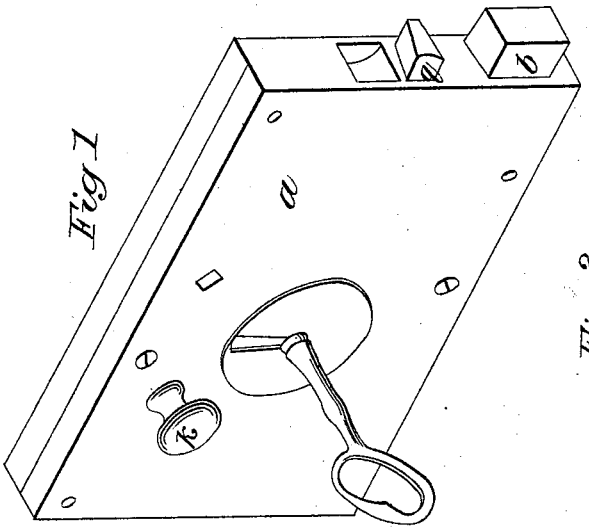
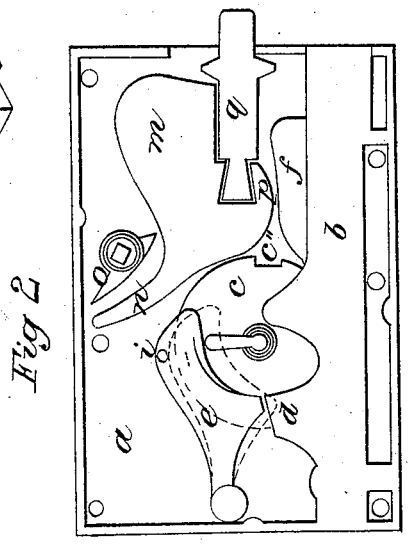
J. H. Davis,

Door Lock.

No. 4,403. Patented Mar. 7, 1846.







UNITED STATES PATENT OFFICE.

JOHN H. DAVIS, OF LUMBERVILLE, PENNSYLVANIA.

DOOR-LOCK.

Specification of Letters Patent No. 4,403, dated March 7, 1846.

To all whom it may concern:

Be it known that I, JOHN H. DAVIS, of Lumberville, in the county of Bucks and State of Pennsylvania, have invented a new and useful Improvement in Door-Locks, and that the following is a full, clear, and exact description of the principle or character thereof, which distinguishes it from all other things before known, and of the manner of making, constructing, and using the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a view of the exterior of the lock; Fig. 2, an elevation of the lock, with the front plate removed, showing the interior construction; Fig. 3, detached parts.

The same letters indicate like parts in all the figures.

The nature of my invention consists in fitting up the lock with revolving escutcheons, connected with a wheel inside the lock, in which there is a hole only large enough to admit the key, so that when the key is turned in the lock, the key hole will be closed on both sides; and by means of a notch in said wheel, into which a pawl falls, the escutcheons are fastened in a position covering the key hole when the door is locked; the catch of the latch is so constructed that it can be reversed, making the lock a right or left hand one at pleasure.

In the accompanying drawings (*a*) is the case of the lock, which is divided into two equal parts, the division running through the rim vertically, and leaving the outside of both sides alike. The bolt (*b*) of the lock (seen most distinctly in Figs. 2 and 3) is shaped like those in ordinary locks, except that it is stayed farther into the shank than the wrought iron ones. The rear end of the shank projects back on one side of the lower part of the wheel (*c*) opposite which on the upper side of the bolt are two projections properly disposed to be struck by the key, to throw the bolt out or in; the rear projection (*d*) is also made with an inclined plane on its upper side, to support a pawl (*e*) when the bolt is thrown back, as shown in the drawings, Fig. 2, which would otherwise fall into the notch (*c''*) on the wheel (*c*) and prevent its turning; at this position of the bolt, the rear end of the tumbler (*f*) that is behind the bolt rises up between it and the wheel and strikes a projection (*g*) (see Fig. 3), on the side of the projection (*d*), and prevents the bolt from being pushed forward till said tumbler is depressed, and when the bolt is thrown forward, the other end of the tumbler falls into a notch (*h*) in the thick part of the bolt forward, as shown in the same figure. In this position of the bolt, the projection (*d*) is removed from the pawl (*e*), so that when the wheel is again turned into the position in which it is represented in Fig. 2, a catch on the pawl falls into the notch on the wheel, (as indicated by the red lines) when the key hole is partly covered by the lower edge of the pawl falling below it. This edge of the pawl is chamfered off, so as to be raised by the insertion of the key; if however, it is desired to cover the key hole on the outside, so that there can be no ingress from that side the key is moved back a quarter turn, till the notch (*c''*) is brought up to the catch on the pawl, where it is stopped; this effectually prevents the insertion of any thing into the lock to pick it. To raise the pawl when the key is in this position it has a small projection (*i*) on it, that extends through an oblong mortise in the side of the plate, and has a knob (*k*) attached to it as shown in Fig. 1.

By the above arrangement it will be seen that a perfect protection is obtained from the attempts of burglars on the outside of doors; while by a simple construction, a cheap lock can be manufactured, all the parts being made of cast iron and fitted together from the sand. The latch is formed of one heavy weight (*m*) suspended on a pivot near one side and having a horn (*n*) curving back and upward for the tumbler (*o*) of the knobs (of common construction) to act on; in the lower part of this weight there is a dovetailed recess (*p*), in which the latch (*q*) is inserted the upper and lower sides of which are made alike to permit the latch to be reversed; the part of this latch outside the case is chamfered off, above and below, as more clearly represented in Fig. 1; this part of the apparatus is contained in the upper front part of the case, as clearly represented in Fig. 2. The lower part of weight (*m*) may be made, to rest on the tumblers (*f*) so that it cannot be raised without raising the latch, if desired.

Having thus fully described my improvements, I wish it to be understood that I do

not claim as my invention a revolving wheel or cover for a key hole in a lock, as that has before been applied, but

What I do claim as my improvement and desire to secure by Letters Patent is—

The combination of the revolving escutcheons and wheel with the bolt and pawl in the manner described, so that when the bolt is locked and the keyhole closed, the lock is perfectly secure from attempts outside, and when drawn back, it can be locked equally well from either side.

JOHN H. DAVIS.

Witnesses:
A. P. BROWNE,
J. J. GREENOUGH.