

UNITED STATES PATENT OFFICE.

HENRY LOCKWOOD, OF NEW YORK, N. Y.

DOOR-LOCK.

Specification of Letters Patent No. 28,092, dated May 1, 1860.

To all whom it may concern:

Be it known that I, HENRY LOCKWOOD, of New York, in the county and State of New York, have invented a new and Improved Lock; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure I represents an internal view of the lock with the back plate removed. Fig. II represents the lock covered ready for attachment to the door. Fig. III is a section at line (1, 2).

A is the bolt, acted upon by a spiral spring, S, and provided with a pin (*p*) passing through the front side of the casing to which a knob (K) is attached to operate said bolt by hand.

B is a frame attached to the lock casing, on one end of which a cylinder, C, is fixed, capable of turning. This cylinder (C) is provided with a center pin (D) passing through the frame B and front plate of the lock case, and acting as a center for the cylinder, C, to turn upon. A projection, N, is made on this cylinder acting against a projection (*m*) on the bolt A, in such a manner, that the turning of said cylinder, C, will push the bolt A back. Through the frame B and this cylinder, C, two holes are cut, corresponding exactly with each other, and into which plugs or pins, *v*, *v'*, are fitted, capable of moving easily up or down and acted upon by springs, *n*, situated on the underside of the frame B, so as to press those plugs or pins against the top, J, of the cylinder, C. This top piece, J, is provided with a longitudinal slot, *w*, directly above the pins *v*, *v'*, for the key to pass through. The key, (which is represented in Fig. IV) is made with two projections *x*, *x'* of unequal length. The plugs or pins *v* and *v'* are each made in two parts, of such a length that when the key is inserted, and the same pressed down, the division of said pins *v*, *v'* will be exactly in a line with the bottom surface of the cylinder, C, in which case said cylinder, can easily be turned around, and act then by means of the projection, N, upon the bolt A, so as to draw the same back as

above described. If a false key is inserted having the least variation in the length of its projections *x* or *x'* the division of these plugs, *v*, *v'*, will be brought either above or below the bottom surface of the cylinder, C, and consequently prevent the turning of said cylinder and the opening of bolt.

Instead of springs bearing against the bottom of the plugs which are attached to the underside of the frame B as above described, spiral springs may be placed in the bottom of the holes directly underneath the plugs, and the number of the plugs or pins may be increased to any number desired.

The back plate E is provided with a cap piece F which covers the cylinder, C, and passes through the wood of the door. The endplate has an opening corresponding with the opening in the piece, J, and enlarged in the center for the shank of the key to turn in. By this arrangement the key, after having pushed back the plugs, so as to turn the cylinder and pull thereby the bolt back, is covered over and cannot be withdrawn from the keyhole, preventing thereby any possibility of measuring the length of the projections *x* and *x'* of the key, and as soon as the key is again in a position to be withdrawn the holes in the frame B and cylinder C correspond with each other, so that the lower parts of the plugs *v*, *v'*, are through the action of their springs pushed upward, and move thereby the upper parts of said plugs against the top piece, J, of the cylinder C.

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

1. The arrangement of a number of plugs or pins in combination with a revolving cylinder and a fixed frame, when said cylinder acts directly on the bolt, while turning in the manner and for the purpose as described.

2. I further claim the arrangement of the cap plate F so constructed as to cover the key, as soon as the same shall begin to turn the cylinder substantially as set forth.

H. LOCKWOOD.

Witnesses:

HENRY E. ROEDER,
JAS. H. DAVIDSON.