

J. WALTON.
Alarm-Lock.

No. 159,129.

Patented Jan. 26, 1875.

Fig. 1

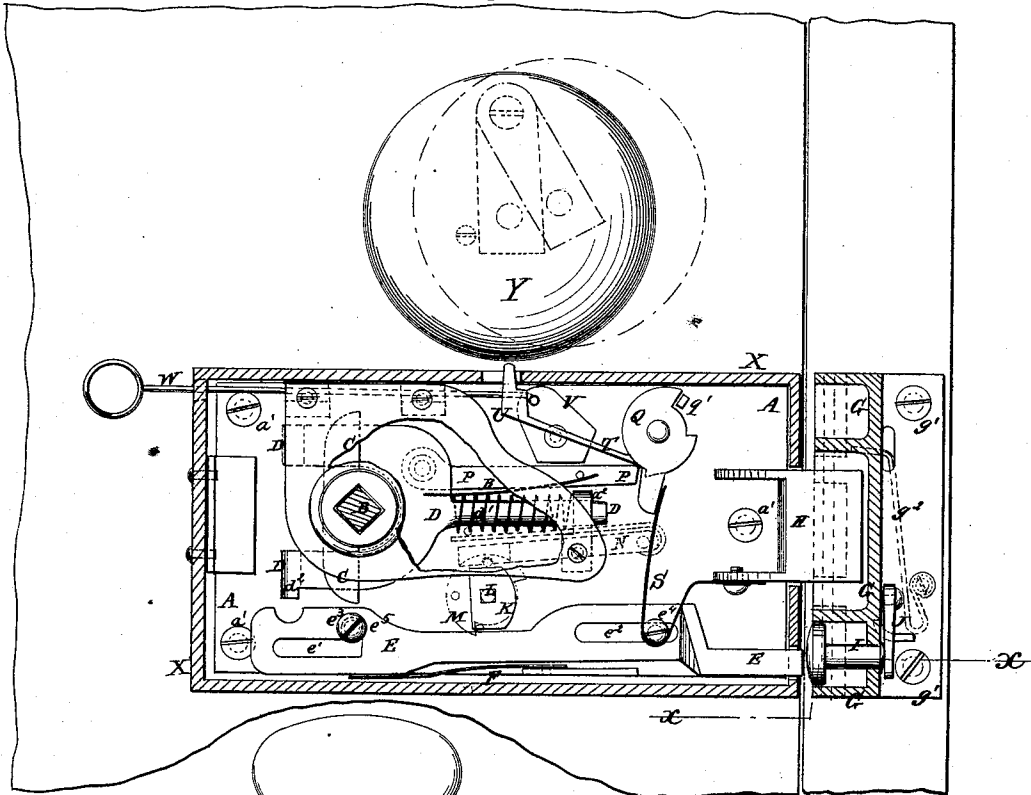


Fig. 2

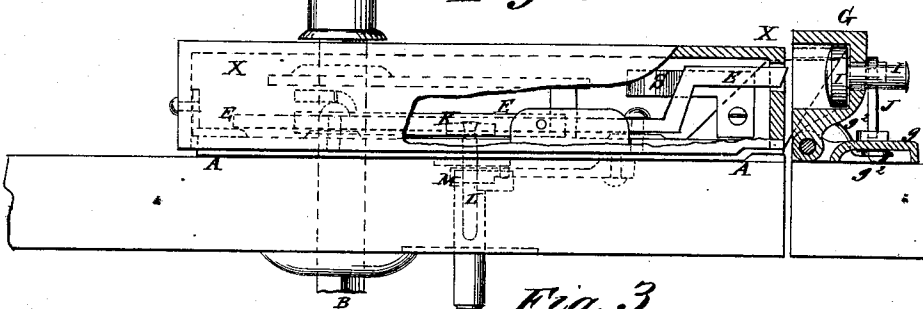
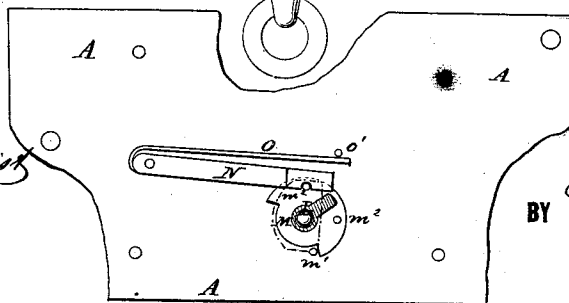


Fig. 3



WITNESSES:

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UNITED STATES PATENT OFFICE.

JONATHAN WALTON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN ALARM-LOCKS.

Specification forming part of Letters Patent No. 159,129, dated January 26, 1875; application filed July 3, 1874.

To all whom it may concern:

Be it known that I, JONATHAN WALTON, of Brooklyn, in the county of Kings and State of New York, have invented a new and useful Improvement in Combined Lock, Latch, Bolt, and Alarm, of which the following is a specification:

Figure 1 is a face view of my improved lock, the face-plate being removed, and part being broken away, to show the construction. Fig. 2 is an edge view of the same, part being broken away to show the construction, and partly in section through the line *xx*, Fig. 1. Fig. 3 is a detail view of the under side of the inner plate.

Similar letters of reference indicate corresponding parts.

My invention has for its object to furnish an improved device which may be used as a lock, a latch, a bolt, and an alarm, as may be required, and which shall be simple in construction and reliable in use in either capacity.

The invention will first be fully described, and then pointed out in the claims.

A is the base-plate of the lock, which is secured to the door by screws *a*¹, as shown in Fig. 1. B is the knob-spindle, which passes through the plate A and through the door, and to which the knobs are attached in the ordinary way. The spindle B passes through and operates the armed hub C, against the end parts of which rest the shoulders of the forked end of the sliding rod D, which is held against the hub C by a spring, *d*¹, coiled around it, and the forward end of which rests against a guide-projection, *a*², for said rod, formed upon the plate A. The lower arm or prong of the slide D has a toe, *d*², formed upon it, which enters a notch in the upper edge of the rear end of the sliding bolt E, which has longitudinal slots *e*¹ *e*² formed in it to receive the screws or pins *e*³ *e*⁴, upon which it works. In the bolt E, at the upper side of the forward end of the slot *e*¹, is formed a notch, *e*⁵, to enable the said rear end to be pushed down out of gear with the toe *d*² of the slide D, so that the bolt E cannot be operated by the knob-spindle B. The rear end of the bolt E is held up against the slide D by the spring F attached to the plate A, and which presses against the

lower edge of said bolt E. G is the catch, which is hinged to the forward edge of a base-plate, *g*¹, by means of which it is secured to the door-casing. The catch G is held in an erect position by a spring, *g*², secured beneath the base-plate *g*¹, and the end of which passes up through a slot in the said plate *g*¹, and rests against the outer side of the said catch G. H is the latch, which is formed solid upon the forward end of the base-plate A, and the inner side of which is beveled off in the usual way, so as when the door is swung shut to push back the catch G, and fasten the door. In the lower part of the catch G is formed a small chamber, in which is placed a large-headed pin, I, the body of which passes through a hole in the outer side of the catch G, and which is kept from dropping out of said chamber by a small head formed upon its outer end, as shown in Fig. 2. By this construction when the pin I is held forward, and the bolt E is pushed outward, the end of the bolt E strikes against the head of the pin I, and pushes the catch G outward, allowing the door to be opened. When the pin I is left free the outward movement of the bolt E simply pushes the pin I outward, and does not move the catch G. J is a button, pivoted to the outer side of the catch G, so that it may be turned down over the outer end of the pin I to hold it, so that the outward movement of the bolt E may push back the catch G, and allow the door to open. When the button J is turned back to release the pin I, its free end strikes or rests upon a projection formed upon or in a recess formed in the plate *g*¹, so that the catch G cannot be pushed back, thus forming a double lock. The outer part of the bolt E is made with an offset, so that it may strike the head of the pin I squarely. The rear part of the bolt E is pushed down from the toe *d*² of the slide D by a block, K, which, when in one position, allows the said bolt to rest against the said slide, and when turned one-quarter around pushes and holds the bolt away from said slide, locking the door. The block K is attached to the forward end of the post L, which passes through and is pivoted in a hole in the plate A, and the rear end of which projects to serve as a pivot to the key. To the post L, at the other or outer side of the plate A, is attached

the stop-plate M, the movement of which is limited by a pin, m^1 , attached to the plate A, and which is held in position to hold the block K steady in either position by two pins, m^2 , attached to the plate M, and which enter alternately a notch formed in the bar N, which is pivoted to the plate A, and held forward against the pins m^2 by a spring, O, attached to it, and the free end of which rests against a pin, o' , attached to the plate A. The lock-bar N is raised from the pin m^2 to allow the blocks K M to be turned by the key striking against it. To the forked end of the slide D is pivoted the end of a push-bar, P, the forward end of which rests against a shoulder of the block Q, and which is held up against said block by a spring, R, also attached to the slide D. The shoulder of the block Q is held forward by the spring S attached to the plate A, and which rests against a toe formed upon said block. The block Q is pivoted to the plate A, and its movement is limited by a pin, q' , attached to said plate A, and which enters a notch in said block Q. To the block Q is attached or upon it is formed an arm, T, upon the outer end of which is formed, or to it is attached, a hammer-head, U. By this construction when the knob-spindle B is turned the bar P pushes against the shoulder of the block Q, pushing back the spring S. As the end of the bar P slips from the shoulder of the block Q, the said block is thrown back to its place by the spring S, which projects the hammer-head against a gong, and sounds an alarm. V is a block, pivoted to the plate A, and upon the edge of the lower part of which are formed two faces, at different distances from its center, so that when the said block is

turned into one position it will allow the bar P to rest against the block Q, and when turned into another position it will hold the said bar P away from the said block Q, thus enabling the alarm to be connected with, and disconnected from, the knob-spindle, when desired. The block V is operated by a rod, W, passing out at the end of the lock-case. The lock-case X may be made of bell-metal, to adapt it to serve as a gong, in which case it is supported by being attached at one end to a flange attached to or formed upon one end of the plate A; or an ordinary gong, Y, may be attached to the door in such a position as to be struck by the hammer-head U, as may be desired.

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

1. The combination of the pin I and button J with the hinged catch G g^1 g^2 and a sliding bolt, E, operated by the knob-spindle B, substantially as herein shown and described.

2. The combination of the spring F, the block K, the post L, the plate M, the stop-pins m^1 m^2 , the pivoted bar N, and the spring O, and stop o' , with the sliding bolt E, to enable the said bolt E to be thrown into and out of gear with the knob-spindle by a key, substantially as herein shown and described.

3. The gong X, constructed, substantially as herein shown and described, to adapt it to serve also as a cap to the lock mechanism, as set forth.

JONATHAN WALTON.

Witnesses:

JAMES T. GRAHAM,
T. B. MOSHER.