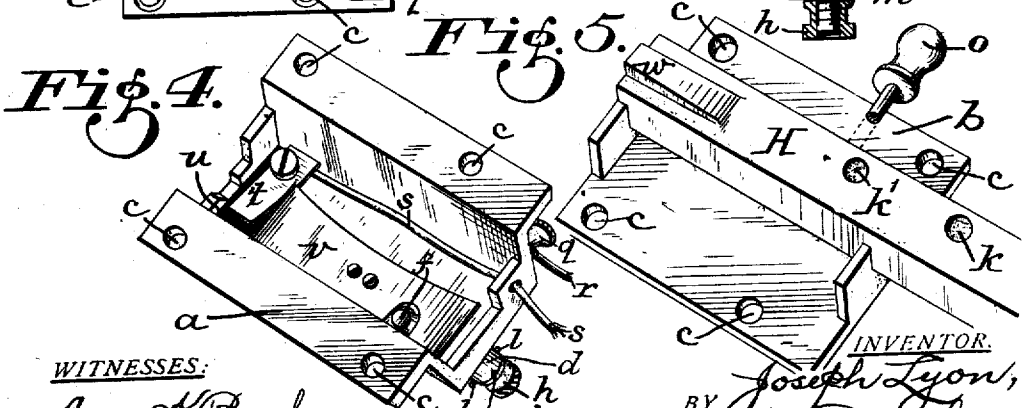
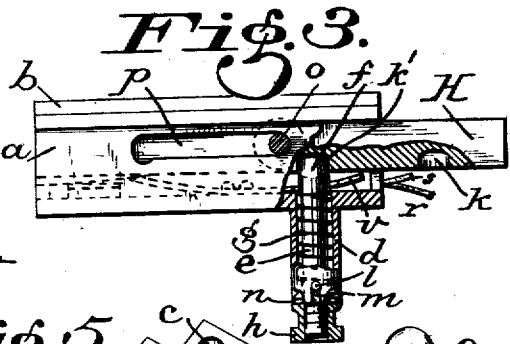
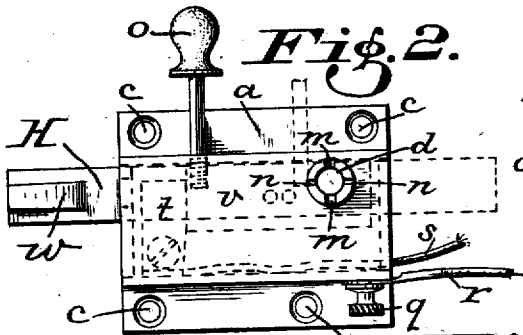
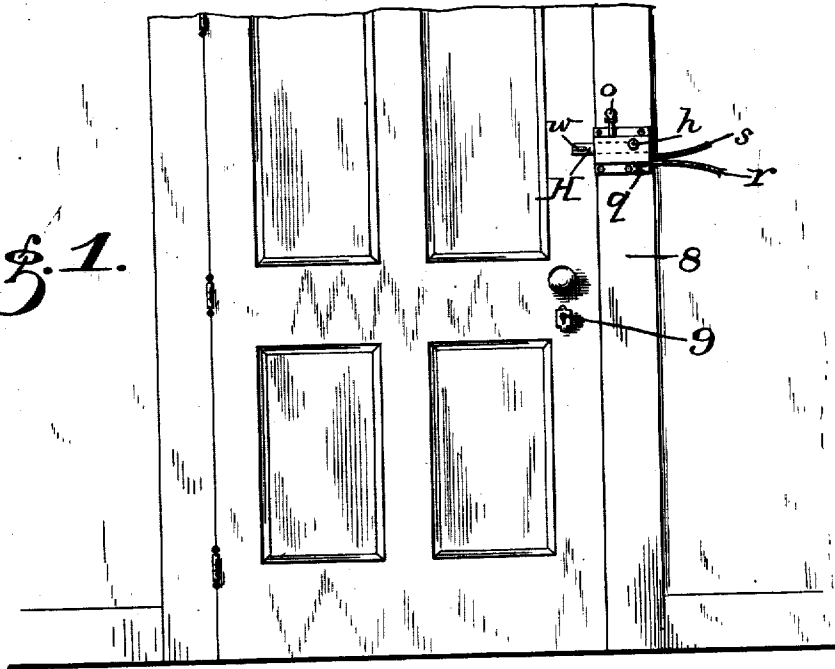


J. LYON.  
BURGLAR PROOF KEYLESS ALARM LOCK.  
APPLICATION FILED DEC. 9, 1909.

1,012,384.

Patented Dec. 19, 1911.

Fig. 1.



WITNESSES:

Anna H. Burnham  
Chester C. Mohler

INVENTOR.

Joseph Lyon,  
BY Frank M. Burnham  
ATTORNEY.

# UNITED STATES PATENT OFFICE.

JOSEPH LYON, OF DAYTON, OHIO, ASSIGNOR OF ONE-THIRD TO FRANK J. McCORMICK, ONE-THIRD TO FRANK J. McCORMICK, JR., AND ONE-THIRD TO FRANK J. McCORMICK, TRUSTEE OF SAID JOSEPH LYON.

## BURGLAR-PROOF KEYLESS ALARM-LOCK.

1,012,384.

Specification of Letters Patent.

Patented Dec. 19, 1911.

Application filed December 9, 1909. Serial No. 532,259.

*To all whom it may concern:*

Be it known that I, JOSEPH LYON, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Burglar-Proof Keyless Alarm-Locks, of which the following is a specification.

My invention relates to a "burglar proof keyless alarm lock",—and is a separate, distinct and different invention over any of the many patents granted to me;—containing as it does an entirely and vastly different construction and combination of parts therefrom.

Some of the principal objects and advantages of this invention consists:—1st in providing a lock that is keyless and entirely hidden, and therefore can not be communicated with from the outside, thus making it burglar proof. 2nd also, to provide a lock that when placed at a door, and an entrance is attempted, or by forcing the door, will instantly give a signal or alarm as a notification to the occupants. 3rd also, to provide a lock that when the door is secured by the regular or ordinary key-lock in fastening said door, and it is neglected to throw the securing or retaining bolt of my burglar proof lock into operative position—although the switch has been turned on,—there will be a continuous ringing of the alarm bell as a signal or notification that said bolt should be thrown forward into operative position. 4th also, to provide a lock as heretofore referred to which will give an alarm or signal to the occupants when the regular or ordinary lock is unlocked, for example when unlocking the door to pass out a notification will be given that the electrical or other signal-alarm means is in operation and has not been turned off as intended. Still further objects being, to provide a lock of this class that is very effective in its results; is quite simple in construction; composed of few parts; and one which can be manufactured at a minimum cost, and is therefore quite inexpensive.

My invention consists essentially, referring briefly and in general terms to the device, of the very peculiar construction, arrangement and combination of the various mechanical parts or elements, and the minor

details thereof, as will be hereinafter fully described and set forth in the subjoined claims all in accordance with the statutes in such cases made and provided therefor.

Referring to the accompanying drawing constituting a formal part of this specification, and illustrating one form of construction for carrying out the objects and principles of my invention, and wherein the same reference letters and numerals are utilized to indicate or point out the same parts wherever occurring throughout the several views—Figure 1 is a general view, of a broken away portion of a door and its frame in elevation, with my burglar proof keyless alarm lock in operative position thereon;—illustrating the practical application of the invention. Fig. 2 is a front elevation of the lock in operative position as shown in Fig. 1,—but with plunger removed. Fig. 3 is a plan view partially broken away and in section looking at the top edge of the lock, with the bolt thrown back out of engagement with the door,—when not in operative position. Fig. 4 is a perspective view looking at the reverse side of the upper-portion of the body or casing of said lock—showing the interior construction of same; and Fig. 5 is a perspective view of the lower portion of the body or casing of said lock showing the interior thereof, with the securing or locking bolt back out of operative position.

In describing my said invention specifically, and referring in detail to the various mechanical parts or elements of construction which in combination make up my burglar-proof keyless alarm lock,—by means of the characters of reference as aforesaid; *a* refers to the upper-portion, and *b* the lower-portion of the body or inclosing casing of said lock, which for the purpose of holding and retaining the parts therein, is preferably formed as shown. Said body portions having screw-eyes or openings *c*, by which—when said portions are assembled,—said lock can be securely attached or fastened—by means of screws or otherwise—in a convenient location for the purpose intended, to the door frame 8:—see Fig. 1. Upper portion *a* is provided with a sleeve *d*, in which rests and moves plunger *e*, one end of which is formed with a small head *f*—between the shoulder of which and the end of said sleeve rests the actuating spring *g*;—the opposite

end of said plunger being screw-threaded, thus adapting it to receive the screw-threaded knob or operating head *h*,—which allows of said plunger and spring being removed from said sleeve when desired, simply by the removal of said knob,—when the parts are detached from the door frame 8 as in the position shown in Fig. 4.

Locking or securing-bolt H, is provided with recesses or depressions *k* and *k'* adapted to receive plunger-head *f*; said head is so formed as to drop in or enter one of said recesses by reason of the pressure of actuating spring *g* on said plunger, thus retaining said bolt from moving until said plunger-head is released therefrom, by reason of said plunger being pulled forward or outward by means of its knob *h*; and when it is desired to hold or retain said plunger in this position so that its head will be clear and free of said bolt-recesses, all that is necessary is to turn said plunger until its lugs or stops *l*—(which when the plunger is in its normal position and holding the bolt as shown in Fig. 3, rest in slots *m* of said sleeve),—will now engage and rest in the small notches *n* located in top of sleeve *d* at right angles to said slots, thus releasing and permitting of bolt H by means of its handle *o*,—which is removably connected thereto by means of its screw-threaded end,—and moves in slotted opening *p* of upper portion *a*, being moved or thrown forward—into—its operative position and engaging the door as shown in Figs. 1 and 2; when plunger *e* may be operated by means of its knob *h* and actuating spring *g*, until its head *f* being in alinement with recess *k*, and said knob being released will also release said spring which suddenly expanding will throw the plunger-head into said recess, thus retaining and holding said bolt, until said plunger and bolt are again operated as just described, and the bolt now being moved backward said plunger-head will now rest in recess *k'*, thus holding said bolt out of engagement with the door and in its opposite and normal position as shown in Fig. 3.

Projecting from upper body portion *a* is a binding-post, the screw-threaded thumb-knob *q* of which retains the end of an electrical-conductor *r* on said post, while the opposite end of said conductor (not necessary to be here shown)—is in practice connected with a conveniently located electric-switch and an alarm-bell not shown as they are no part of this invention. Another conductor *s* which connects with contact spring *t*; said spring being suitably insulated at *u* so as not to charge the body of the lock, the same as the insulations on said conductors; extends to a suitably located battery not necessary to be here shown; and which connects with said switch and alarm-bell.

When the switch has been turned on and

the circuit is complete, and the lock is in operative position with the bolt thrown forward engaging the door as shown in Fig. 1, pressure-spring *v* will hold bolt H clear of and free from contact with contact spring *t*, but should the ordinary or regular lock 9 of the door, be tampered with, or picked or turned, and an entrance through said door attempted in any manner, the least pressure on said door will force said bolt against pressure-spring *v*, which will yield and being compressed until said bolt comes in contact with contact-spring *t* and the electric current transmitted through the bolt to the upper portion *a*, thence through the binding post to conductor *r*, and the circuit now being completed the alarm-bell will sound the alarm and continue ringing as long as pressure is on the door to hold it inward, or until the occupants have been aroused, and the switch thrown, thus breaking the circuit and cutting off the current from the alarm bell. Now when it is desired to put said lock out of operation, either because it is not desired to fasten the door, or for any reason whatsoever; all that is necessary is to move said bolt backward to its normal position—see Fig. 3,—as heretofore fully described,—and should it be neglected to throw the switch and cut or turn off the current from the alarm bell as intended, swell *w* on bolt H will bear and impinge tightly against contact spring *t* and charge said bolt, thus making up the electric circuit and ringing the alarm bell,—the same as when pressure has been placed on the bolt as heretofore described,—as a notification means that the switch has not been thrown and the current is still on. It will here be observed, that as heretofore described when the switch is on and has not been thrown, and the current from the battery is on, a slight pressure of the bolt when in a forward and operative position will cause it to complete the circuit and ring the alarm bell, and also in like manner when the switch is on, swell *w* contacting with spring *t* will complete the circuit and ring the bell.

It will be obvious, that my lock may also be used with equal advantage in locking and protecting transoms and windows, or in fact any covered openings or entrances similar to a door.

Having now described my invention and the construction of my lock I claim:—

1. In a burglar alarm lock, the combination with a lock casing, a manually operated bolt therein, and a spring-controlled plunger adapted to hold said bolt in either of its positions, of electrical conductors, a yielding contact member within said lock casing and insulated therefrom and forming the terminal of one of said conductors, the other conductor being connected to the

lock casing, and means within said lock casing for holding the bolt free from said contact member when said bolt is thrown, and to permit of an engagement between said bolt and said contact member when pressure is exerted upon the door, whereby an electrical circuit is completed through said conductors.

2. In a burglar alarm lock, the combination with a door and frame thereof, of a lock casing mounted on said frame, a securing bolt slidably mounted in said casing, and a plunger cooperating with said bolt, of electrical conductors, a yielding contact member in said lock casing with which the terminal of one of said conductors is connected, the other conductor being connected to the lock casing, means for exerting a yielding pressure upon said bolt to maintain it free from contact with the yielding contact member when said bolt is thrown to its operative position, and means on said bolt for engaging said contact member when said bolt is in its retracted position.

3. In a burglar alarm lock, the combination with a door and the frame thereof, a lock casing mounted on said door frame, a slidable bolt, a spring-controlled plunger engaging said bolt to maintain it in either an operative or inoperative position, of electrical conductors, a yielding contact member *t* in said casing connected with the

terminal of one of said conductors and lying in the path of said bolt, the other conductor being connected to the lock casing, and an elastic member *v* secured within said casing and normally maintaining the bolt free from engagement with said contact member.

4. In a burglar alarm lock, the combination with a door and the frame thereof, a lock casing mounted on said frame, a sliding bolt *H* having a swell *w* thereon in said casing, adapted to extend over the door, and a spring-controlled plunger adapted to hold said bolt in either of its positions, of electrical conductors *r* and *s* leading to opposite ends of the lock casing, a yielding contact member *t* connected with the terminal of one of said conductors, the other conductor being connected to the lock casing, and an elastic plate *v* secured to said lock casing and adapted to hold the bolt from engagement with the contact member *t* while said bolt is in operative position, and to yield when the door is being opened, and to permit of said bolt completing the circuit through the lock casing.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH LYON.

Witnesses:

ALLEN C. McDONALD,  
W. S. RHOTEHAMEL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."