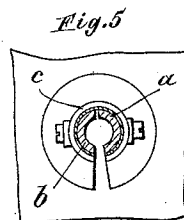
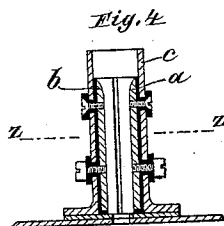
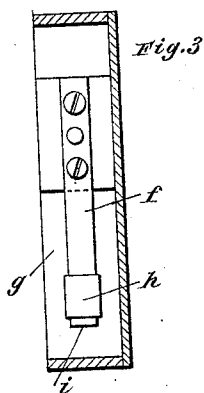
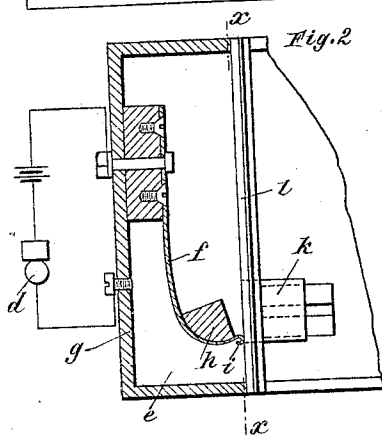
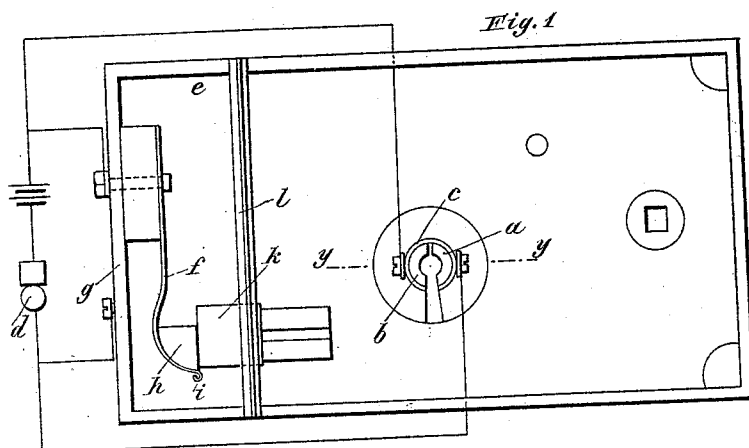


(No Model.)

A. J. MOULART.
LOCK WITH ELECTRIC SAFETY ATTACHMENT.

No. 569,882.

Patented Oct. 20, 1896.



Witnesses
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James R. Mansfield

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UNITED STATES PATENT OFFICE.

ADRIEN J. MOULART, OF PARIS, FRANCE.

LOCK WITH ELECTRIC SAFETY ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 569,882, dated October 20, 1896.

Application filed June 6, 1895. Serial No. 551,920. (No model.)

To all whom it may concern:

Be it known that I, ADRIEN JOSEPH MOULART, a citizen of the French Republic, and a resident of Paris, France, have invented a new and Improved Lock with Electric Safety Arrangement, of which the following is a full, clear, and exact description.

My invention relates to a safety attachment for locks of any description, and has for its object to provide means whereby a signal will be given every time the lock is opened.

The invention comprises an arrangement of parts whereby when a key or other tool is inserted in the keyhole an electric circuit will be closed and a signaling apparatus included in such circuit will be operated. The invention also comprises an arrangement of parts whereby an electrical signaling device will be actuated whenever the bolt of the lock is moved inward.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a front elevation of a lock constructed according to my improvement. Fig. 2 is a broken front elevation thereof with parts in section. Fig. 3 is a cross-section on line *xx* of Fig. 2. Fig. 4 is a horizontal section on line *yy* of Fig. 1, and Fig. 5 is a vertical section on line *zz* of Fig. 4.

The safety attachment located within the keyhole is so constructed as to be operated by the insertion of a key or other metallic or conducting article. A second safety attachment is arranged to be operated by the locking-bolt in such a manner as to close the circuit when the bolt is drawn into the casing of the lock.

The attachment within the keyhole consists of two half-sleeves *a b*, which are secured to the keyhole-sleeve *c*, but insulated therefrom and from each other, the said half-sleeves being spaced at their ends, as will be seen best in Figs. 1 and 5. Each of the sleeves is connected to one of the wires of the circuit, (see Fig. 1,) and in the said circuit is arranged a signaling apparatus of any suitable kind, an electric bell being indicated at *d*.

It will be obvious that whenever a metallic or conducting article, such as a key or a pick-lock, is inserted in the keyhole the circuit

will be completed by the said article bridging the gap between the half-sleeves *a* and *b*, and thus the signaling apparatus *d* will be actuated. An audible signal will therefore be given whenever the lock is opened, and this may be availed of as a protection against burglars.

The second safety attachment, as illustrated in Figs. 1, 2, and 3, consists of a spring *f*, which is secured to the rear wall *g* of the casing *e* of the lock, the spring being insulated from the casing. At the front end of the spring is secured a block *h* of insulating material, the end of the spring projecting in advance of the said block, as illustrated at *i*. When the lock is closed, as illustrated by Fig. 1, the bolt *k* is in contact with the insulating-block *h*. When, however, the lock is opened, or the bolt *k* is moved inward in any other manner, the spring *f* will assume the position illustrated by Fig. 2, in which the end *i* of the spring comes in contact with the bolt *k*. The spring *f* is connected to one pole of the battery, and the casing *e*, with which the bolt *k* is permanently in contact, connects with the other pole of the battery, the bell *d* or other signaling device being included in such circuit. Thus it will be seen that in the position illustrated by Fig. 2 the circuit will be closed and the signaling device actuated. The free end *i* of the spring *f* is preferably turned upon itself, as shown, whereby a good engagement of the spring with the bolt *k* is obtained without undue friction between said parts.

It will be seen that the improved safety arrangement is very simple in construction and affords ample protection against burglars, as even in case the lock should be broken open it will be next to impossible to do that without moving the bolt *k* inward and thereby actuating the signal.

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

1. In a lock, two conducting half-sleeves arranged out of contact with each other, a split keyhole-sleeve surrounding them, an insulating-sleeve between the keyhole-sleeve and the half-sleeves, and an electrically-operated signaling device in circuit with the half-sleeves, substantially as described.

2. The combination of the sliding bolt, the insulated spring having its end curved upon itself and adapted to engage the bolt, the insulating-block secured on the spring and adapted to engage the bolt when the same is out of contact with the spring, and an electrically-controlled signaling device in circuit with the bolt, and spring, substantially as described.
3. In a lock, a circuit-closer consisting of two insulated parts located in the keyhole and adapted to be electrically connected upon the insertion of a key or other conducting article, a sliding bolt, a yielding contact in conducting contact with the bolt in one position thereof, and insulated therefrom in the other position of the bolt, an electric circuit having two branches or shunts in one of which are included the two insulated parts of the keyhole while in the other parallel branch or shunt are included the bolt and its yielding contact, and an electrically-operated signaling device in said circuit, substantially as described.
- In witness whereof I have hereunto set my hand in presence of two witnesses.

ADRIEN J. MOULART.

Witnesses:

G. SOUZAY,
ANDRILLOS.