

B. UHLMANN.
SELF SWITCHING ALARM.
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1,008,756.

Patented Nov. 14, 1911.

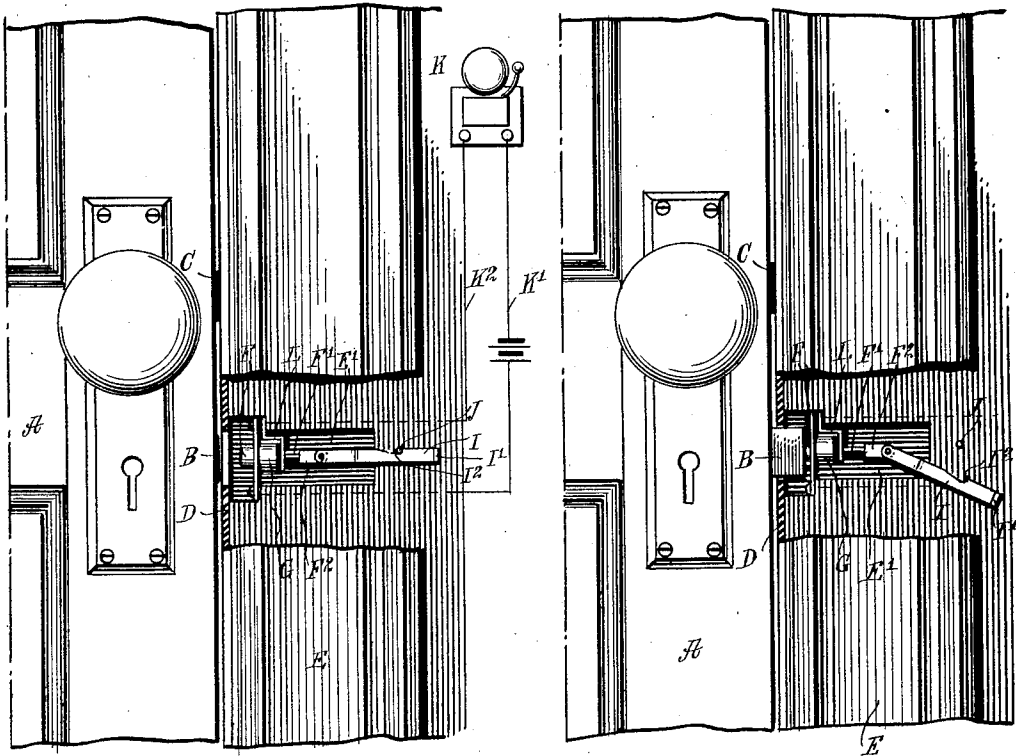


Fig. 1

Fig. 2

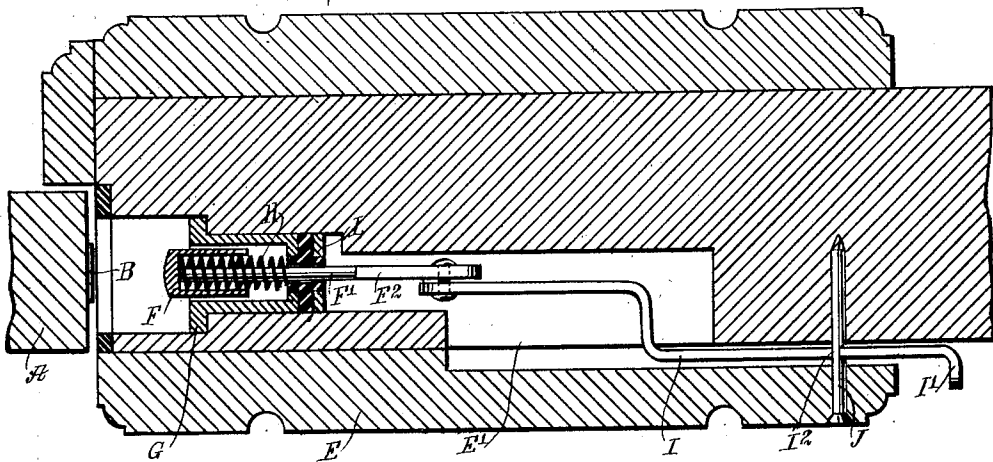


Fig. 3

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BERNHARD UHLMANN, OF GARFIELD, NEW JERSEY.

SELF-SWITCHING ALARM.

1,008,756.

Specification of Letters Patent. Patented Nov. 14, 1911.

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To all whom it may concern:

Be it known that I, BERNHARD UHLMANN, a citizen of the United States, and a resident of Garfield, in the county of Bergen and State of New Jersey, have invented a new and Improved Self-Switching Alarm, of which the following is a full, clear, and exact description.

The invention relates to burglar alarms for doors and the like, and its object is to provide a new and improved self-switching alarm, arranged to sound an alarm on retracting the key-controlled locking bolt of the door lock, and adapted to be normally held in a set position to permit of opening and closing the door, say during the day, without ringing of the alarm. For the purpose mentioned use is made of a spring-pressed push button arranged in the door casing and adapted to be actuated by the key-controlled bolt of the door, and on the said push button is pivoted a drop arm adapted to be held in set position by a retainer on the door casing, and which drop arm is released from the retainer on moving the push button inward when shooting out the bolt.

A practical embodiment of the invention is represented in 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 side elevation of the self-switching alarm as applied to a door, the casing of which is partly shown in section, and the alarm being in set position; Fig. 2 is a like view of the same and showing the alarm in active position; and Fig. 3 is an enlarged sectional plan view of the same.

The door A is provided with a suitable lock having the usual key-controlled bolt B, and the knob-controlled bolt C, of which the key-controlled bolt B is adapted to engage a keeper D, held on the door casing E. A spring-pressed plunger or push button F is arranged in the path of the bolt B, and is mounted to slide in a casing G, held in a recess E' formed in the door casing E, as plainly indicated in the drawings, and the said push button F is pressed in an outward direction by a spring H, held in the casing G and coiled around the reduced shank F' of the push button F (see Fig. 3). The rear terminal of the shank F' has an enlarged portion F², pivotally connected with one end of a drop arm I, provided with

a handle I', extending to the outside of the casing E at the inside of the door, so as to permit the proper person to take hold of the handle I' and to swing the same upward into a horizontal position, that is, in alinement with the push button F, the upper edge of the said arm I being provided with a notch I², adapted to engage a transverse pin J, secured to the door casing E. When the arm I is swung upward and the notch I² is engaged with the pin J, as indicated in Figs. 1 and 3, then the push button F is slightly retracted so as to be under the tension of the spring H, and consequently the arm I is held in engagement with the pin J by the force of the spring H. An electric alarm K, of any approved construction, has one circuit wire K' connected with the push button casing G, and the other circuit wire K² of the alarm K is connected with a contact plate L, insulated from the casing G and from the stem F' passing through the contact plate.

When the arm I is held in the set position indicated in Figs. 1 and 3, then the enlarged portion F² of the stem F' of the push button F is a distance from the contact plate L, and hence the circuit for the alarm K is open. Now when the door is locked by the proper person using a key and shooting out the bolt B to engage the latter with the keeper D, then the said bolt B engages the push button F and pushes the same inward against the tension of the spring H, whereby the drop arm I is likewise moved inward and its notch I² is disengaged from the pin J, so that the arm I drops downward into a released position, as indicated in Fig. 2. Now in case a burglar or other unauthorized person retracts the bolt B then the push button F moves outward by the action of its spring H, and in doing so the enlarged portion F² of the push button stem F' comes in contact with the contact plate L, thus closing the circuit and sounding the alarm. In case the proper person retracts the bolt B from the inside, then it will be necessary for this person to also take hold of the handle I' during the retraction of the bolt B, and to swing the arm I upward, so as to reengage the notch I² with the pin J, thus preventing sounding of the alarm K, at the same time resetting the device. It will also be noticed that during the day when the bolt B is retracted the door A can be opened and closed by manipulating

the knob-controlled bolt C in the usual manner.

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

5 1. A self-switching alarm for doors, comprising a push button arranged in a door casing and mounted to slide, a key controlled bolt arranged opposite the push button to actuate the latter, the said push button having a shank, a drop arm pivotally connected at one end with the end of the shank of the push button, a retainer on the door casing, means on the drop arm coöperating with the retainer for holding the drop arm raised in set position, the drop arm being released from the retainer on moving the push button inward on the shooting out of the bolt, a spring for pressing the push button in an outward direction when the drop arm is released and the door bolt is retracted, a contact plate, the push button having a contact member for engaging the contact plate, and an electric alarm having a circuit including the said contact member and the contact plate, the said circuit being closed on the outward movement of the push button.

2. A self-switching alarm for doors, comprising a spring-pressed push button arranged in a door casing opposite a key-controlled bolt to be actuated by the latter, a drop arm pivotally connected with the said push button and having a notch in its top

edge, a pin held on the door casing and adapted to be engaged by the notch of the said drop arm to hold the device normally in a set position, a contact plate insulated from the said button, the push button having a contact member for engaging the contact plate, and an electric alarm having one of its circuit wires connected with the casing of the push button and the other with the said contact plate.

3. A self-switching alarm for doors, comprising a spring-pressed push button arranged in a door casing, and adapted to be actuated by the key-controlled bolt of the door, the said push button having a reduced stem provided at its rear end with an enlarged portion, a drop arm pivotally connected with said enlarged portion of the stem, a retainer on the door casing for holding the drop arm in set position, a contact plate insulated from the stem of the push button and through which said reduced portion of the stem passes, the said contact plate being adapted to be engaged by the enlarged portion of said stem, and an electric alarm having a circuit including the push button and the contact plate.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

BERNHARD UHLMANN.

Witnesses:

HUGO HOFFMAN,
ANDREW CHIZACKY.

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