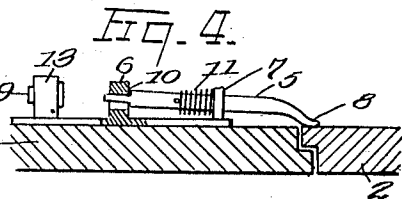
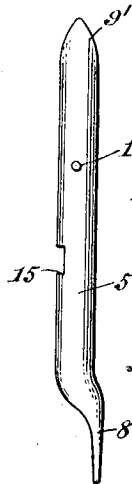
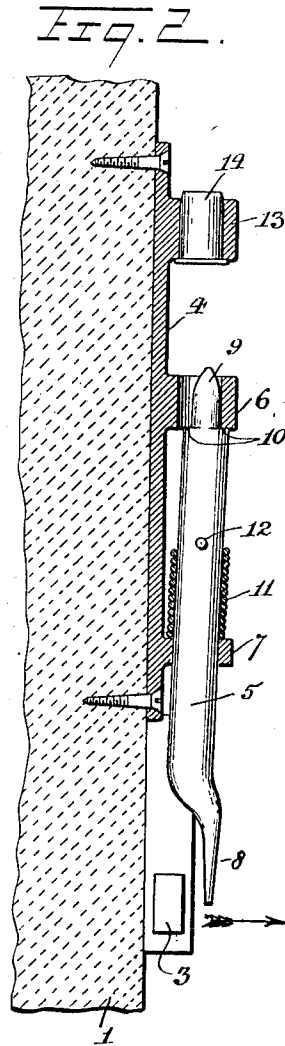
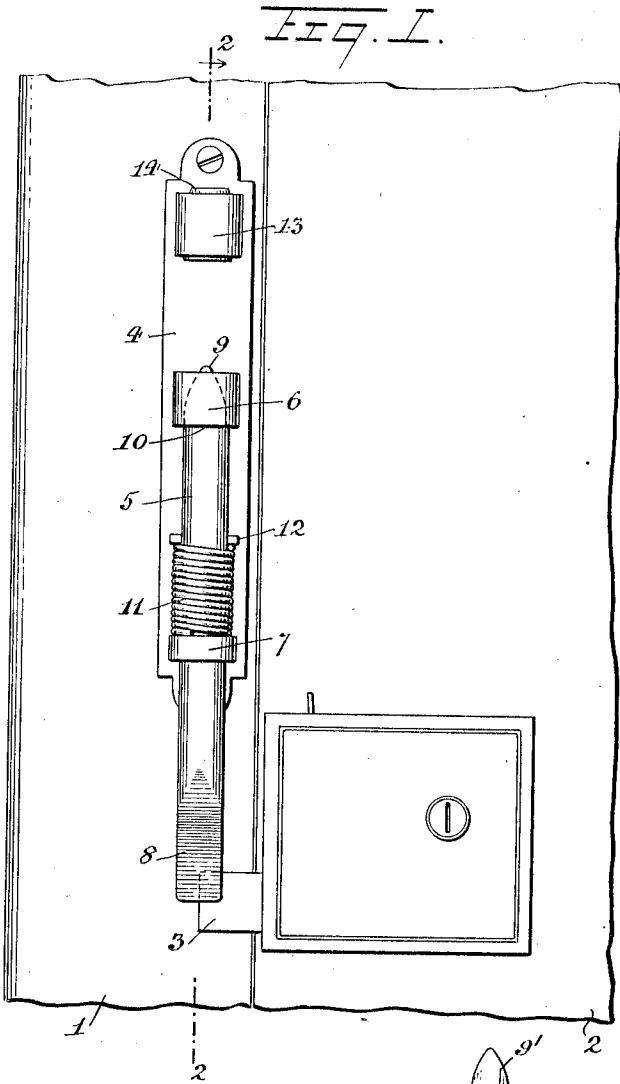


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ALARM,
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1,054,448.

Patented Feb. 25, 1913.



WITNESSES
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UNITED STATES PATENT OFFICE.

EUGENE CALVIN RICKER, OF SCRANTON, PENNSYLVANIA.

ALARM.

1,054,448.

Specification of Letters Patent.

Patented Feb. 25, 1913.

Application filed October 21, 1911. Serial No. 655,836.

To all whom it may concern:

Be it known that I, EUGENE C. RICKER, a citizen of the United States, and a resident of Scranton, in the county of Lackawanna and State of Pennsylvania, have invented a new and Improved Alarm, of which the following is a full, clear, and exact description.

My invention relates generally to alarms and more particularly to a device adapted to be positioned on a door casing and actuated by opening of the door.

The object of my invention is to provide an alarm device of simple construction which is adapted to be used on either side of a door casing with doors opening in either direction, the construction and arrangement being such that an efficient device of low cost of manufacture is produced.

A further object of the invention is to provide in a certain structure an alarm device which will give warning whenever an attempt is made to open a particular door, thereby either frightening away an intruder or making his capture easy.

A further object of my invention is to provide a thief or burglar alarm which gives warning through the explosion of a cartridge or other explosive constructed and arranged to be set or engaged from either side of a door or opening and particularly adapted to engage with the bolt of a rim lock and released by a push or pull from either side of the said lock or other suitable connection.

A further object of my invention is to provide a thief or burglar alarm made up of a firing pin which, through its movement, explodes a suitable cartridge or other explosive, the pin being held in operative position and released therefrom by movement of a door in either direction, there being a spring in engagement with the pin whereby it is brought into engagement with the cartridge.

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

Figure 1 is a partial side view of a door and a casing showing my device in operative position; Fig. 2 is a vertical sectional view thereof on the line 2—2 of Fig. 1; Fig. 3 is a side view of a modified form of bolt; Fig.

4 is a transverse sectional view showing the firing pin in the position it occupies when the device is applied to the door casing at right-angles to the door casing.

The device is adapted to be positioned on a casing 1 adjacent a door 2, the door being provided with any suitable bolt 3. The device itself is made up of a base 4 having a firing pin 5 positioned thereon by any suitable means, such as guides 6, 7.

Referring particularly to Fig. 2 it is to be noted that one end 8 of the pin is offset while the other end 9 is tapered, there being shoulders 10 on opposite sides of the pin and adjacent the said tapered end. Surrounding the pin between the guides 6, 7, is a helical spring 11, one end of which preferably rests against the guide 7 while the other end bears against the stop 12 carried by the firing pin. The base 4 is also provided with a suitable guide or holding device 13 adapted to receive and hold a cartridge 14, the cap of the cartridge being in line with the tapered end of the pin 5 when it is released from the position shown in Fig. 2.

As shown in Figs. 1 and 2 the device is positioned on the inside of the casing 1, the door 2 swinging toward the observer, the bolt 3, when the door is swung, engaging the offset end 8 of the firing pin, thereby carrying the shoulder 10 out of engagement with the guide 6 and permitting the spring 11 to bring the tapered end 9 of the firing pin into engagement with the cap on the cartridge, thereby exploding the same. By making the firing pin freely rotatable within the guides 6, 7, and by providing the shoulders 10 at opposite sides thereof I have produced a device which may be used in the position shown in Figs. 1 and 2 as in the position shown in Fig. 4. When the device is used as shown in Fig. 4, it is attached to the door casing at right angles thereto and the firing pin 5 is turned 180° from that shown in Fig. 2, so that the shoulder 10 at the opposite side of the pin engages the guide 6 and the offset end 8 there- of extends in front of the door. Now when the door is opened, it engages the offset portion 8, moving it and bringing the shoulder 10 out of engagement with the guide 6 and permitting the tapered end of the pin to come into engagement with the cartridge,

thereby exploding it; it is clear that the firing pin may be rotated and in any position in its bearings will be held in position in the guides 6.

5 In Fig. 3 I have shown a modified form of firing pin which may be desirable in some cases. In this construction the upper end 9' of the pin 5' is tapered and the stop 12 is used, the shoulders 10, however, being omitted, a similar structure being provided in the notch or recess 15 in one side of the bolt. This notch or recess is adapted to hold this form of pin in the position shown in Fig. 2 by engagement of the notch with the lower guide 7, release of the engagement actuating the device as previously described. In either case the bolt 3 releases the firing pin, the tapered end thereof coming into engagement with the cartridge by means of the spring, and exploding it. Such an alarm is particularly adapted for use in poultry houses where any attempt to enter gives warning to the neighborhood; the parts of the device are few and when once set in operative position require no further attention so that it is not necessary each time the house or room is closed to try the alarm. Of course any form of bolt 3 can be used, the bolt being movable out of the path of the offset end of the firing pin by any suitable means, such as a wire or cord, or by a locking means, as shown in Fig. 1; in the absence of a lock a connection may be made with a bolt, which connection extends through the door, thereby enabling it to be set from outside the door.

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

40 1. An alarm of the character described, comprising a base plate provided with guides and a cartridge holder in alinement with the guides, a spring pressed firing pin mounted to slide and turn in the guides of the base plate, said firing pin having one end offset and its other end reduced and provided with shoulders, either of which is adapted to engage a guide of the base plate to hold the pin against the action of its spring with the offset end projecting beyond the base plate, said base plate being adapted to be secured to a door casing adjacent to the free edge of the door, whereby the firing pin will be released upon the opening of the door and the cartridge exploded.

2. A device of the class described comprising a base, a plurality of guides on the base, a longitudinally movable firing pin in the guides, means engaging one of the guides and also the pin for maintaining the pin in one position, one end of the pin being provided with shoulders at opposite points thereof, either of which is adapted for engagement with one of the guides,

whereby the pin may be held in another position, and a holder adapted to receive a cartridge, the cap of the cartridge being in a line with and adapted to be engaged by the end of the said pin.

3. A device of the class described, comprising a base, a plurality of guides on the base, a firing pin in the guides, a spring surrounding the pin and engaging one of the guides, a stop carried by the pin also in engagement with the spring, one end of the pin being provided with shoulders, either of which is adapted for engagement with one of the guides whereby the pin may be held in another position, the base being provided with a holding device adapted to receive a cartridge, the cap of which is in line with and adapted to be engaged by the end of the pin when the shoulder thereon is disengaged from the said guide.

4. A device of the class described, comprising a base, a plurality of guides on the base, a longitudinally movable firing pin carried by the guides, means engaging the pin and one of the guides for holding the pin in one position, shoulders adjacent one end of the pin and at opposite points thereof, either one of the shoulders being adapted for engagement with different portions of one of the guides whereby the pin may be held in another position, the base being also provided with means for holding a cartridge in line with and adapted to be engaged by the end of the said pin when the shoulder is disengaged from the guide.

5. In a device of the class described, a base member, a plurality of guides thereon, a longitudinally movable firing pin carried by the guides, one end of the pin being offset, the other end of the pin being provided with shoulders, means engaging one of the guides and the pin whereby the pin is held in one position, either of the said shoulders on the pin being adapted for engagement with one of the guides in order to hold the pin in another position, together with means, also carried by the base, for holding a cartridge in line with and adapted to be engaged by one end of the pin when the offset end thereof is moved in a given direction.

6. A device of the class described, comprising a base member, a plurality of guides thereon, a longitudinally movable firing pin carried by the base member, one end of the pin being offset, the other end of the pin being tapered, the pin being provided with shoulders at opposite points thereof adjacent the tapered end, a spring in engagement with one of the guides and the said pin for moving it in a given direction, either of the said shoulders being adapted for engagement with one of the guides for holding the pin in a given posi-

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tion, together with means for holding a
cartridge in line with and adapted to be
engaged by the tapered end of the pin
when the offset end is moved in a given
5 direction.

In testimony whereof I have signed my

name to this specification in the presence of
two subscribing witnesses.

EUGENE CALVIN RICKER.

Witnesses:

E. M. SEARS,

ETHEL M. PERRY.

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