No. 816,005.

PATENTED MAR. 27, 1906.

J. A. DILLEN.

BURGLAR ALARM.

APPLICATION FILED APR. 3, 1905.

Fig. 1

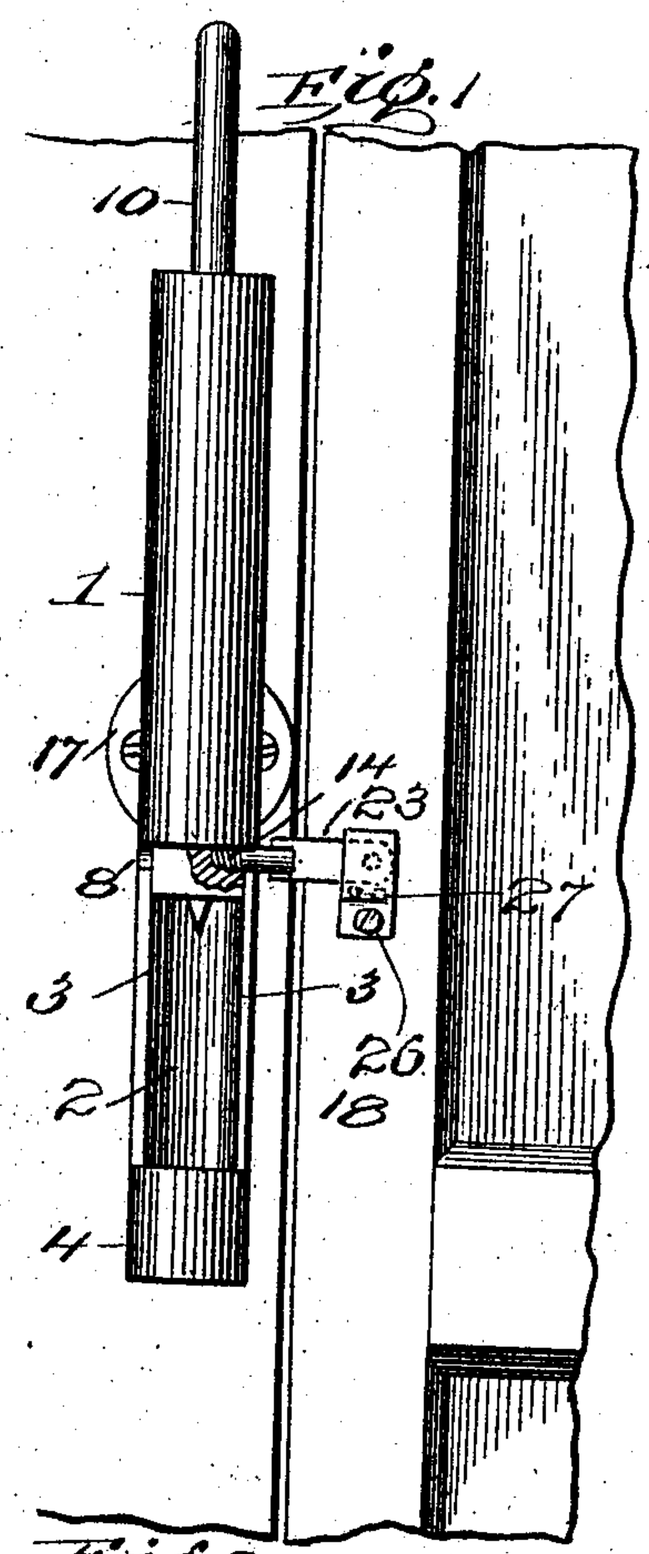


Fig. 2

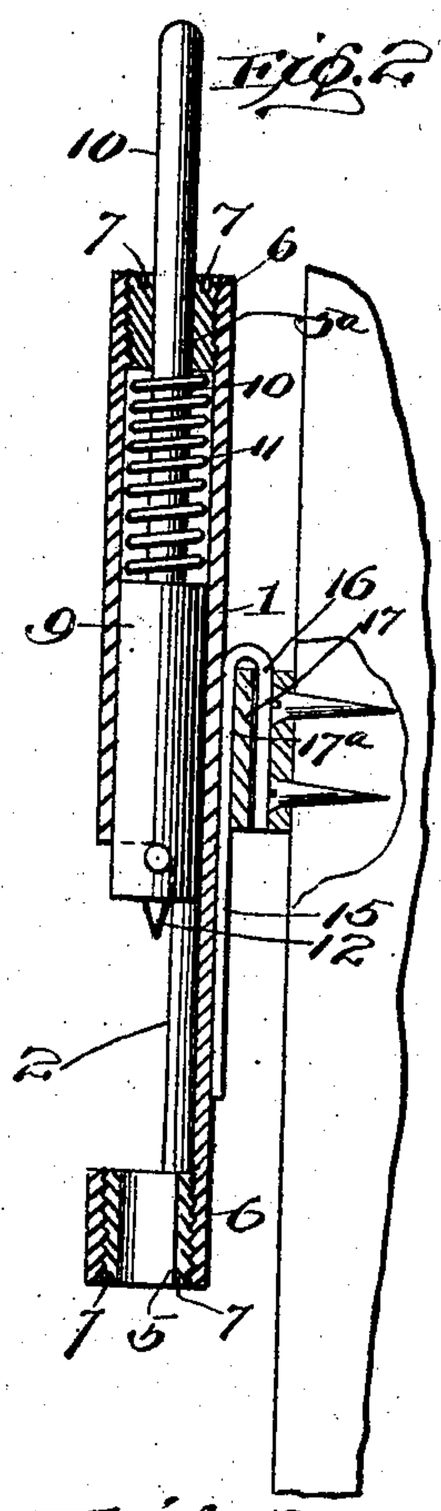


Fig. 3

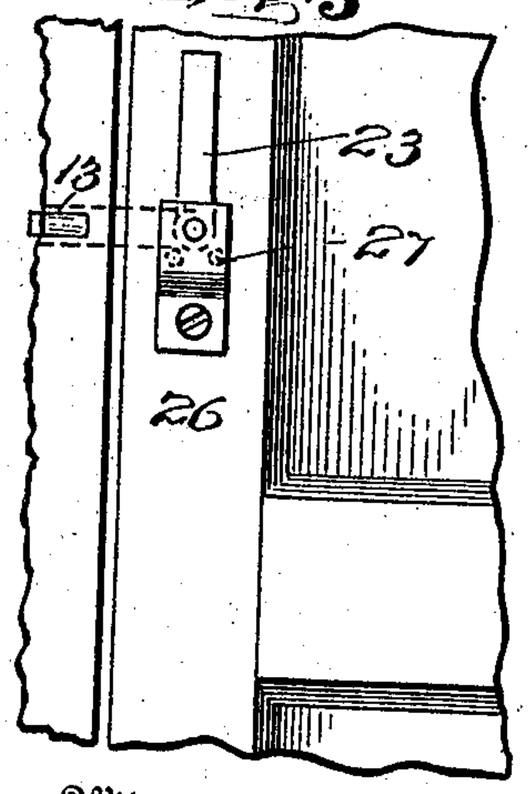
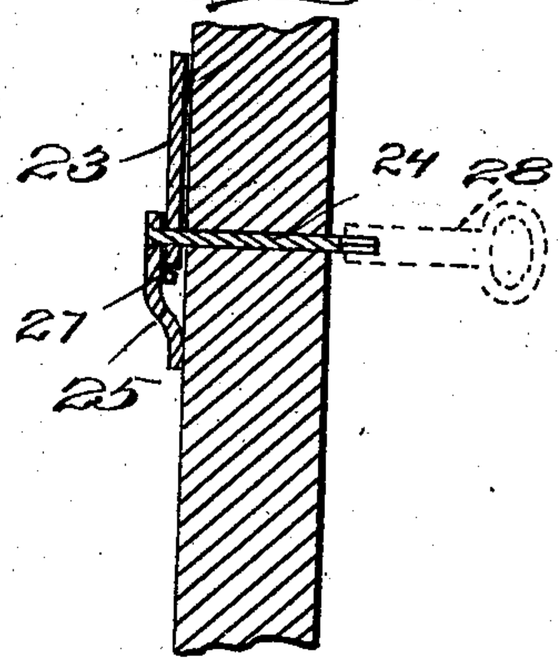


Fig. 4



Witnesses

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BURGLAR-ALARM.

No. 816,005. Specification of Letters Patent. Patented March 27, 1906.

Application filed April 3, 1905. Serial No. 253,518.

To all whom it may concern:

Be it known that I, JOHN A. DILLEN, a citizen of the United States, residing at Clearfield, in the county of Clearfield and State of Pennsylvania, have invented new and useful Improvements in Burglar-Alarms, of which the following is a specification.

This invention relates to improvements in burglar-alarms.

One of the objects in view is the improvement of the construction of devices employing a barrel, a cushioned firing-pin, and a trigger extending laterally from said firing-pin.

Another object of the invention is the construction of a simple and efficient device which comprises a minimum number of parts, said device being comparatively inexpensive in construction.

With these and other objects in view the invention consists of certain other novel constructions, combinations, and arrangements of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and more particularly pointed out in the claims hereto appended.

In the drawings, Figure 1 is a view in elevation of a device constructed in accordance with the present invention, showing the same secured to a door-frame, the trigger being cocked and in the path of the door, so that when the door is opened the same will be sprung and the device fired. Fig. 2 is a vertical sectional view of the barrel and the supporting means therefor, the firing-pin being shown in side elevation. Fig. 3 is a fragmentary view of an outside door, showing a tripping device in front elevation. Fig. 4 is a vertical central section of the tripping device and door shown in Fig. 5.

Referring to the drawings by numerals, 1 designates a cylindrical barrel which is provided with a notch 2. The notch 2 provides parallel edges 3 3 upon the barrel. The lower cylindrical end 4 of the barrel is adapted to receive a cartridge. (Shown in dotted lines, Fig. 2.) For supporting the cartridge within the lower end of the barrel a removable sleeve 5 is positioned therein. The removable sleeve is provided with a threaded surface 6, which engages an inner threaded surface formed upon the lower portion of the barrel. The lower end of the sleeve 5 is provided with recesses 7 7 for receiving pointed members of a tool which is employed to either insert the sleeve within the lower end of the barrel or remove the same therefrom. A removable sleeve 5^a is positioned within the upper end of the barrel 1. The sleeve is provided with a threaded surface 6, similar to sleeve 5. Recesses 7 are formed in sleeve 5^a for the same purpose as the recesses which are formed in the sleeve 5. The sleeve 5^a is of greater thickness than the sleeve 5.

Detent or locking notches 8 are formed upon the barrel 1. The notch 2 and notches 8 8 constitute a bayonet-notch. Within the barrel 1 there is slidably mounted a cylindrical firing-pin 9. The firing-pin 9 comprises a body portion which is provided with a reduced integral extension 10. The extension 10 extends through the sleeve 5^a. Interposed between the sleeve 5^a and the body of the firing-pin is a helical spring 11, constituting cushioning means for said pin, whereby downward movement is imparted to the same when the same is sprung after it has been moved to a cocked position. Upon the lower end of the firing-pin 9 there is formed a primer or pointed extension 12, which indents a portion of the cartridge when the device is fired for exploding said cartridge. A removable trigger 13 is secured to the lower end of the firing-pin 9. The trigger 13 is threaded into the lower end of the firing-pin, as will be seen at 14, Fig. 1. It will be obvious that the body of the firing-pin is of sufficient thickness to fit snugly within the barrel 1, while its reduced integral extension 10 is likewise of sufficient dimension to fit snugly within the sleeve 5^a, although the body portion and the extension of the firing-pin do not bind against the barrel 1 or the sleeve 5^a. Owing to the removability of the trigger 13 and the sleeve 5^a, the firing-pin 9, as well as spring 11, may be quickly removed, if it is desired.

For supporting the barrel I secure by any suitable means a member 15 to the back portion of the same. The member 15 is provided with a hook 16. Said hook 16 is positioned in a bracket 17, which may be secured to a door or window frame. If the bracket is secured to a door-frame, it will be necessary to position the trigger 13 in one of the notches 8 nearest to the door when it is desired to employ the device as an alarm. This positioning of the trigger will be clearly understood upon referring to Fig. 1, as in this figure the trigger is shown positioned so as to be sprung when the door 18 is open. As soon as the trigger 13 is moved from its seated position within one of the notches 8

the spring will force the firing-pin downwardly, and if a cartridge is positioned within the lower end of the barrel the same will be exploded.

The comparatively long body portion 15 of the supporting member, together with the bracket 17, which is substantially circular in shape, furnishes means for easily securing the firing device to a support, or, if it is desired, the same may be removed from the support without difficulty. The bracket 17 is bulged centrally, as at 17ª, for receiving the hook 16.

When the firing device or alarm is secured to the frame of a door, it will be necessary to employ means whereby the trigger may be moved from its cocked position after the door has been closed from the outside. The firing device or alarm is positioned in from the edge of the door, so that the trigger 13, as illustrated in Fig. 3, will not project to the edge of the frame, permitting of the trigger to be cocked and the person to pass out of the building and afterward to move the latch 23 from its normal vertical position to a horizontal position, as shown in broken lines, Fig. 3, to place the same behind the firing-pin 13. The latch 23 is fixedly secured to a revoluble member 24. The revoluble shaft 24 is journaled in a door-frame and at its inner end is swiveled to an angular bracket 25. The bracket 25 is removably secured by any suitable means, as screw 26, to the door. The bracket 25 is provided with parallel projections 27, constituting stops for preventing the latch from being moved below a horizontal plane. The outer end of the shaft 24 is squared, so that said shaft may be rotated by means of an ordinary squared recessed key 28. (Shown in broken lines, Fig. 4.)

The door shown in Figs. 1 and 3 may be opened and closed without firing the alarm, and for this reason I employ the tripping device, which is provided with the movable latch 23, which is to be positioned behind the cocked trigger 13 for moving said trigger from its seated position when the door is opened, as shown in Figs. 1 and 3.

What I claim is—

1. In a device of the character described, the combination of a barrel, a removable sleeve threaded entirely into each end of said barrel, one of said sleeves constituting a cartridge-support, a firing-pin positioned within said barrel, an integral extension carried by said firing-pin and extending through one of the sleeves, yielding means carried by the extension of said firing-pin, a trigger carried by said firing-pin, means formed upon said barrel and capable of holding said trigger in a cocked position, a tripping device for said trigger, said tripping device comprising a revoluble shaft provided with a squared end, a latch fixedly secured near the opposite end of said shaft, a stop for limiting movement of said shaft and latch, and means for causing movement of said shaft.

2. In a device of the character described, the combination of a barrel, a firing-pin mounted in said barrel, a trigger carried by said firing-pin, means for securing said pin in a cocked position, a tripping device for said trigger, said tripping device comprising a curved or angular bracket, a revoluble shaft journaled at one end in said bracket, the opposite end of said shaft provided with a squared portion, a latch fixedly secured to said shaft, contiguous to said bracket, integral parallel lugs projecting inwardly from said bracket and constituting stops for limiting movement of said latch and shaft, and means for causing movement of said shaft.

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

JOHN A. DILLEN.

Witnesses:
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