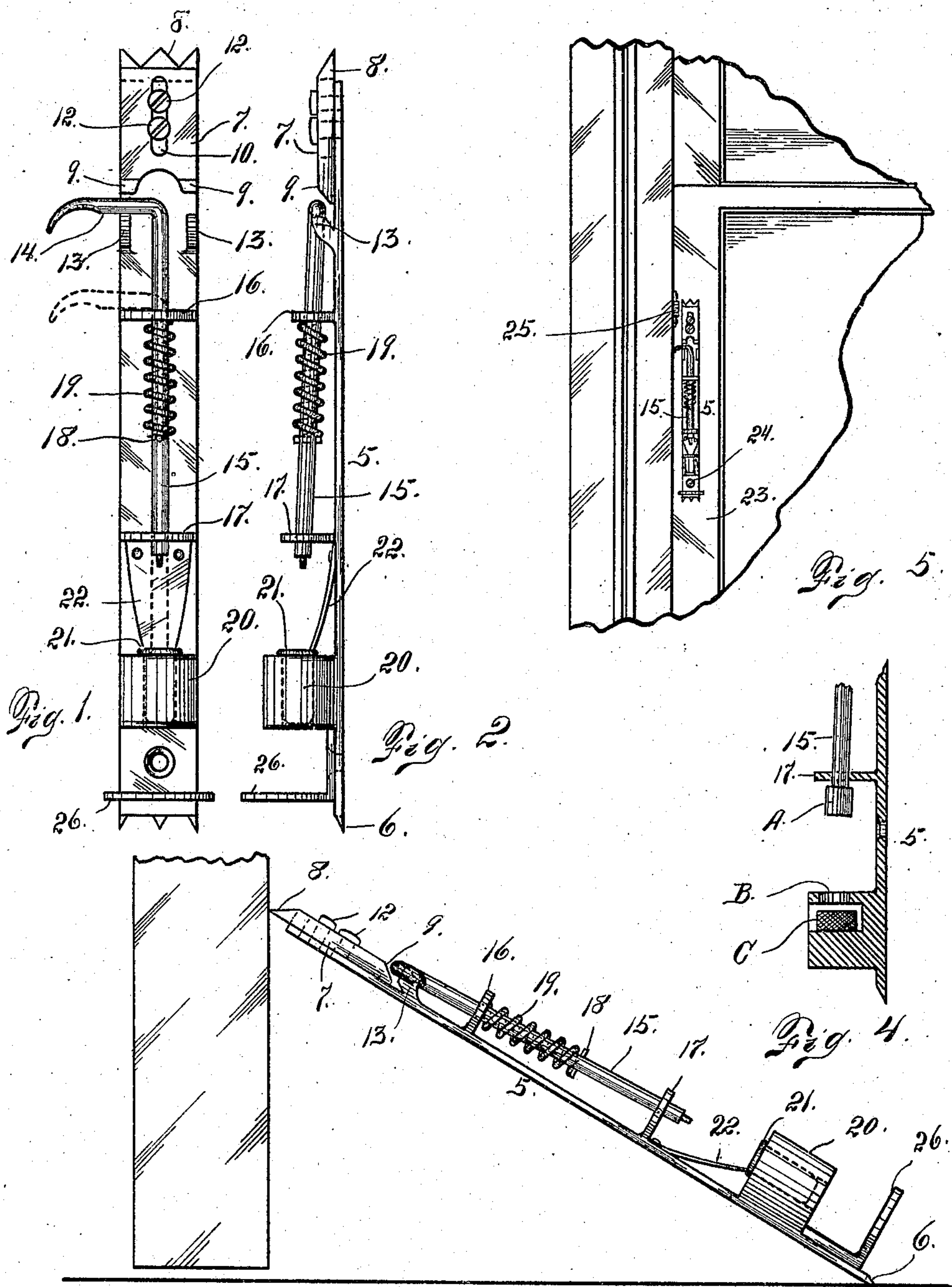


No. 847,975.

PATENTED MAR. 19, 1907.

A. V. TODD.  
DETONATING BURGLAR ALARM.

APPLICATION FILED MAY 17, 1905.



Witnesses  
Otto E. Hoodnick.  
Dena Nelson.

Fig. 3.

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# UNITED STATES PATENT OFFICE.

ALBERT V. TODD, OF DENVER, COLORADO.

## DETONATING BURGLAR-ALARM.

No. 847,975.

Specification of Letters Patent.

Patented March 19, 1907.

Application filed May 17, 1905. Serial No. 260,755.

*To all whom it may concern:*

Be it known that I, ALBERT V. TODD, a citizen of the United States, residing at the city and county of Denver and State of Colorado, have invented certain new and useful Improvements in Detonating Burglar-Alarms; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to improvements in alarms of the class adapted more especially for use in connection with doors and windows, whereby the opening of the door or window will release a spring-actuated plunger whose movement explodes a cap or cartridge as the case may be, whereby notice is given of an unauthorized attempt to enter a building or room.

The object of my invention is to provide a device of this class which shall be simple in construction, economical in cost, reliable, durable, and efficient in use; and to this end the invention consists of the features, arrangements, and combinations hereinafter described and claimed, all of which will be fully understood by reference to the accompanying drawing, in which is illustrated an embodiment thereof.

In this drawing, Figure 1 is a front view of my improved detonating alarm. Fig. 2 is a side elevation of the same. Fig. 3 is a view of the device in use. Fig. 4 is a fragmentary view showing a modified form of construction. Fig. 5 is a fragmentary view of a window illustrating my improvement applied.

The same reference characters indicate the same parts in all the views.

Let the numeral 5 designate a bar whose lower extremity is provided with teeth 6, adapted to enter the floor of a room. The opposite extremity is provided with a device 7, having teeth 8 at one extremity, its opposite extremity being beveled, as shown at 9. This sliding part 7 is provided with a slot 10, through which two screws 12 are passed, whereby the sliding device is movably connected with the upper extremity of the bar 5. Just below the device 7 are located two lugs 13, one on each side, their upper edges occupying a position at right angles to the bar 5,

whereby either of the said lugs forms a support or stop for the hook-shaped extremity 14 of a plunger, slidably mounted on the bar 5. This plunger passes through openings 60 formed in projections 16 and 17, suitably separated, and, as shown in the drawing, formed integral with the said bar. The lower extremity of a coil-spring 19 is connected with the plunger, as shown at 18, the upper extremity of this spring engaging the stop 16. The lower part of the bar is provided with a cartridge-holder 20, in line with the plunger 15. In the drawing a cartridge 21 is shown in position and is held in place by a leaf-spring 22, secured to the bar 5, its lower extremity pressing against the rim of the cartridge, whereby the latter is held securely in place.

When the device is applied to a door, it occupies the position shown in Fig. 3. The plunger is drawn up against the spring 19, whereby the latter is placed under tension. The hooked extremity 14 of the plunger is then thrown to engagement with one of the lugs 13, as shown in the drawing. One extremity of the plunger-releasing device 7 engages the door, while the opposite extremity of the bar engages the floor of the room. The releasing device while engaging the door is resisted sufficiently by the hooked extremity of the plunger to cause the device to remain in position, the teeth 8 being reasonably sharp. Now if an effort is made to open the door the inward thrust will be sufficient to force the releasing device downwardly, whereby its beveled lower extremity will crowd the hooked extremity 14 of the plunger off from the lug 13, in which event the recoil of the spring 19 will throw the plunger forcibly downward against the cartridge and explode the same. When the device is used in connection with a window, it is secured to the sash 23 by means of one or more fastening devices 24. In this event a device 25 is applied to the window-frame and adapted to engage the hooked extremity of the plunger to disengage the same from the lug 13, if an attempt is made to raise the window.

In the form of construction shown in Fig. 4 the plunger 15 is provided with an enlarged head A, adapted to pass through an opening B and explode a cap or cartridge C of special construction or different from that shown in the other views. The bar is provided at its lower extremity with a guard-plate 26, located below the cartridge-holder and is



adapted to prevent the possible sparks or fire resulting from the explosion of a cartridge from passing downwardly against the surface engaged by the lower extremity of the bar. In case it is a carpeted floor the spark or fire resulting from the explosion of the cartridge might possibly ignite the carpet. In any event the plate 26 is desirably employed as a safeguard against the possibility mentioned.

Having thus described my invention, what I claim is—

In a detonating burglar-alarm for doors, the combination of a bar toothed at its lower extremity to engage the floor and provided with a cap or cartridge holder at its opposite extremity, a spring-actuated plunger mounted on the bar intermediate its extremities, the upper extremity of the plunger being hook-shaped, an exposed lug mounted on the bar on each side of the axis of the plunger,

the said lug forming a stop for the hooked end of the plunger and adapted to hold the latter against the tension of its spring, and a device slidably mounted on the bar, one extremity of the slidable device being adapted to engage the door, while the other end is beveled and located adjacent the hooked extremity of the plunger whereby as force is applied to the slidable device its beveled end acts to disengage the hooked extremity of the plunger from the said lug, the cartridge-holder being located in line with the plunger whereby the movement of the latter under the influence of its spring acts to explode the cartridge or cap.

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

ALBERT V. TODD.

Witnesses:

DENA NELSON,  
BURT L. RHOADS.