No. 875,197. PATENTED DEC. 31, 1907.

U. MAGNI.

BURGLAR ALARM.

APPLICATION FILED JUNE 25, 1907.

Fig. 1.

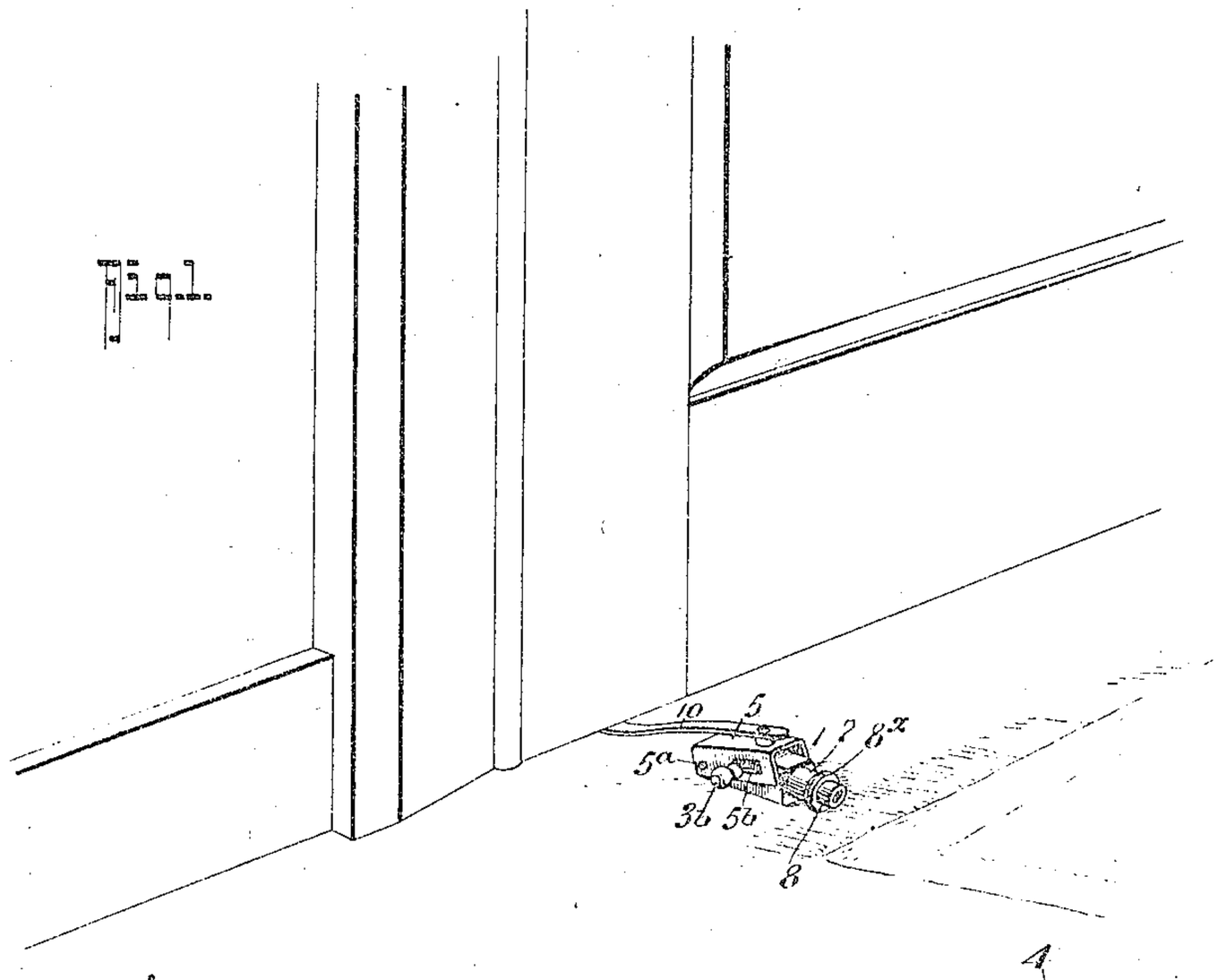


Fig. 2.

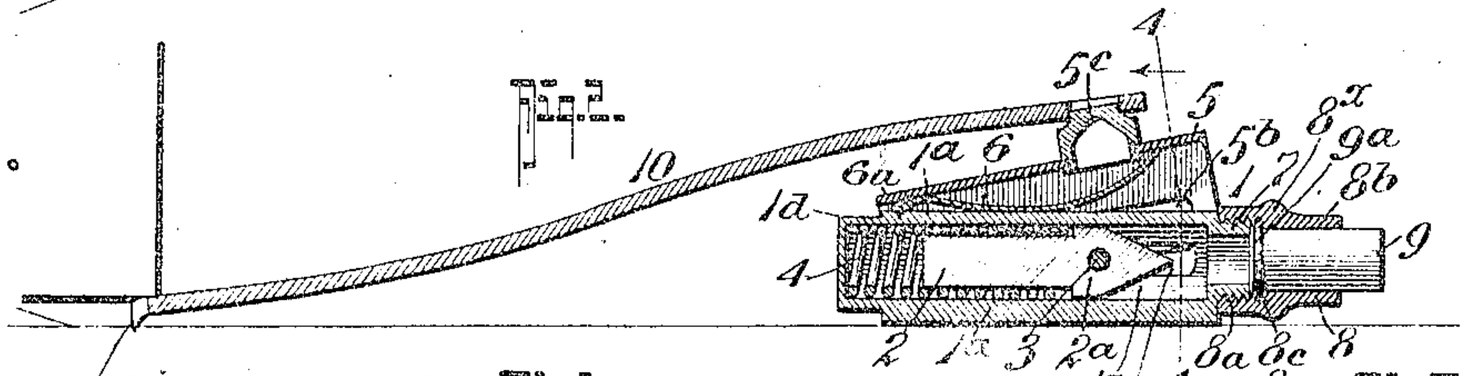


Fig. 3.

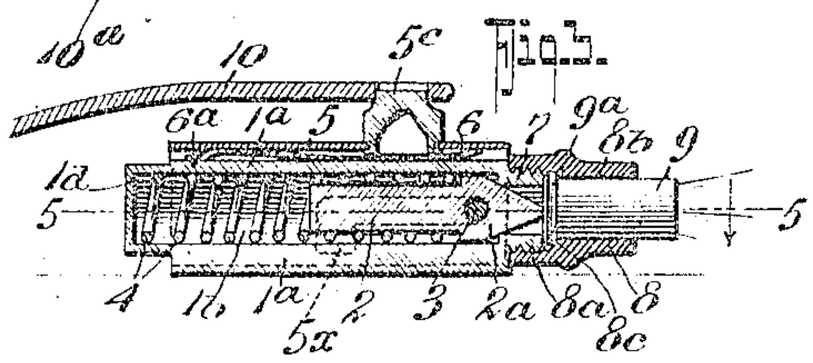


Fig. 5.

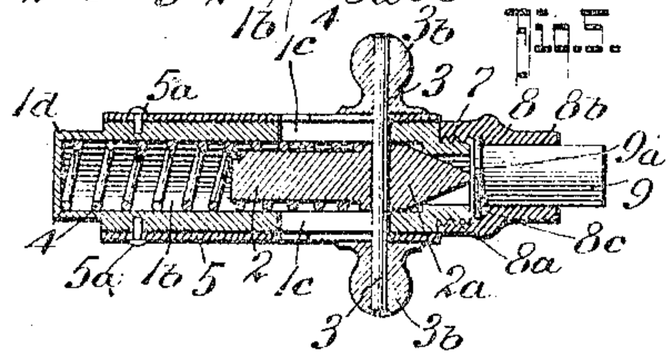


Fig. 4.

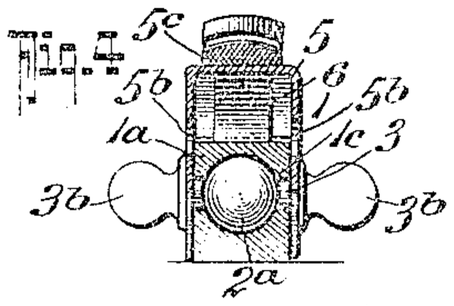


Fig. 7.

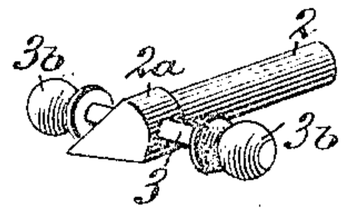
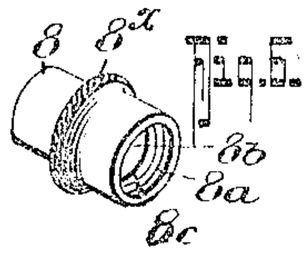


Fig. 6.



WITNESSES:

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UNITED STATES PATENT OFFICE.

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BURGLAR-ALARM.

No. 875,197. Specification of Letters Patent. Patented Dec. 31, 1907.

Application filed June 25, 1907. Serial No. 380,732.

To all whom it may concern:

Be it known that I, UMBERTO MAGNI, residing at San Francisco, in the county of San Francisco and State of California, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is a specification.

My invention relates to certain new and useful improvements in burglar alarms of the detonating type, and it particularly has for its object to provide an alarm of this character of a simple and effective construction, which can easily and cheaply be manufactured and which will readily serve its intended purposes.

In its generic nature, the invention embodies a cartridge holder and firing mechanism, such mechanism including a firing pin, and means for normally holding the firing pin in its cocked position, together with a door operated device for releasing the firing pin to explode a cartridge, with a cartridge holder detachably secured to the firing mechanism and forming a coöperative part thereof.

In its more subordinate features my invention embodies certain novel construction, combination and detailed arrangement of parts, all of which will be first described, then be specifically pointed out in the appended claims, reference being made to the accompanying drawings, in which,—

Figure 1, is a perspective view of my invention applied for use. Fig. 2, is a central, vertical longitudinal section thereof, the parts being in their cocked position. Fig. 3, is a similar view showing the position of the parts after the cartridge has been fired. Fig. 4, is a cross section on the line 4—4 of Fig. 2. Fig. 5, is a horizontal section on the line 5—5 of Fig. 3. Fig. 6, is a detail view of the cartridge holder removed. Fig. 7, is a detail perspective view of the firing pin removed.

Referring now to the accompanying drawings in which like numbers and letters of reference indicate like parts in all of the figures, 1 designates the firing mechanism which comprises the casing 1^a in which the firing pin 2 is held, the casing 1^a being provided with an internal chamber 1^b to receive the firing pin and longitudinal slots 1^c in its side walls through which the rod 3 projects, the rod 3 passing through the enlarged head 2^a of the firing pin 2 and carrying finger engaging handle members 3^b at its ends, as clearly shown in Fig. 1, of the drawings.

Within the chamber 1^b of the casing 1^a and surrounding the firing pin 2, is a coil spring 4, which is adapted to project the firing pin into its cartridge firing position, the casing 1^a having a knob portion 1^d at its rear end apertured to receive the firing pin 2 and to form an abutment for the spring 4.

Hingedly secured at 5^a, to the rear of the casing 1^a is a U-shaped trigger member 5 having bayonet slots 5^b in its side walls to coöperate with the slots 1^c of the casing 1 and through which slots 5^b the handle carrying rod, projects. The trigger 5 has a knob 5^c on its upper face to coöperate with the door engaging lever member 10 hereinafter referred to, which is apertured to receive the knob 5^c and which is adapted to project under the door and have its prongs 10^a under the sill of the door.

Within the trigger 5, and between the upper wall and the corresponding wall of the casing 1^a is a leaf spring 6 secured at 6^a to the casing 1^a and adapted to normally press the free end of the trigger 5 upwardly so that when the parts are in the position shown in Figs. 1 and 2 of the drawings, the firing pin will be held back by resting in the short portion $5^\times$ of the bayonet slots.

At the front the casing 1 is provided with an apertured threaded projection 7 which is adapted to receive the cartridge holder 8 that is internally threaded at 8^a and adapted to be screwed upon the threaded projection 7, as shown, the cartridge holder 8 having a receiving bore 8^b terminating in the cartridge flange engaging member 8^c to engage the head 9^a of the cartridge 9 which may be an ordinary blank cartridge.

The cartridge holder 8 is milled at $8^\times$ to enable it to be unscrewed and screwed on as conditions may require, for purposes of reloading the device.

In the practical application of my invention a cartridge is placed in the holder 8, as shown in Fig. 2 of the drawings, and the firing pin 2 is drawn back until the trigger member 5 holds the same in its cocked position, as indicated in Figs. 1 and 2 of the drawings. The member 10 is then projected beneath the door and the parts arranged in the position shown in Fig. 1. As soon as the door is opened the pressure upon the member 10 will cause the trigger 5 to be depressed and will thereby release the firing pin which engages the priming of the cartridge and explodes the same in a manner well understood

by reference to the drawings. This causes a loud noise and awakens the occupants of the house.

From the foregoing description taken in connection with the accompanying drawings it is thought the complete construction, operation and numerous advantages of my invention will be readily understood by those skilled in the art to which the invention appertains and it will be furthermore noticed that the threaded projection 7 has its bore of less diameter than the external diameter of the head of the firing pin and thus forms an automatic stop for the firing pin when in its firing position.

What I claim is,

1. An apparatus of the class described, comprising a casing, having an internal bore, a firing pin held therein, trigger devices within the casing for coöperating with the firing pin, a cartridge holder detachably screwed to one end of said casing, means for holding said firing pin cocked, means for releasing said holding means, said holding means comprising a U-shaped trigger pivotally secured to said casing at one end, a laterally projecting rod carried by said firing pin and projecting through slots in said casing, said trigger having means for coöperatively engaging said rod for holding the trigger cocked, means interposed between the trigger and the casing for normally holding the trigger in its cocking position, substantially as shown and described.

2. An apparatus of the class described, comprising a casing having an internal bore terminating at its front end in a reduced threaded portion, a cartridge holder having threads for coöperating with said reduced threaded portion, a firing pin held within said casing and having a head of greater diameter than the diameter of the reduced portion of the casing and having an elongated shank portion, a coil spring held within said casing and around said shank portion and in engagement with the head portion of the firing pin, said casing having slots in its sides, a rod projecting through said firing pin and slots, and having finger engaging ends, a substantially U-shaped trigger pivoted at one end to said casing and having bayonet slots through which said rod projects, means interposed between the trigger and the casing for normally holding the trigger in one position and separate means coöperatively connecting the trigger with the door for moving the same to another position as the door is opened, substantially as shown and described.

3. A device of the class described comprising a casing, a cartridge holder removably fastened at one end of the casing, a firing pin held within the casing, a substantially U-shaped trigger member pivoted on the outside of the casing and embracing the same, means carried by the firing-pin for coöperatively engaging the trigger member, separate means adapted to be engaged by the door or other movable article and in engagement with said trigger for depressing the trigger to release the firing pin and means for normally tending to elevate the trigger substantially as shown and described.

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Witnesses:
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