

E. B. WALDRON.
DETONATING ALARM DEVICE.
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1,014,792.

Patented Jan. 16, 1912.

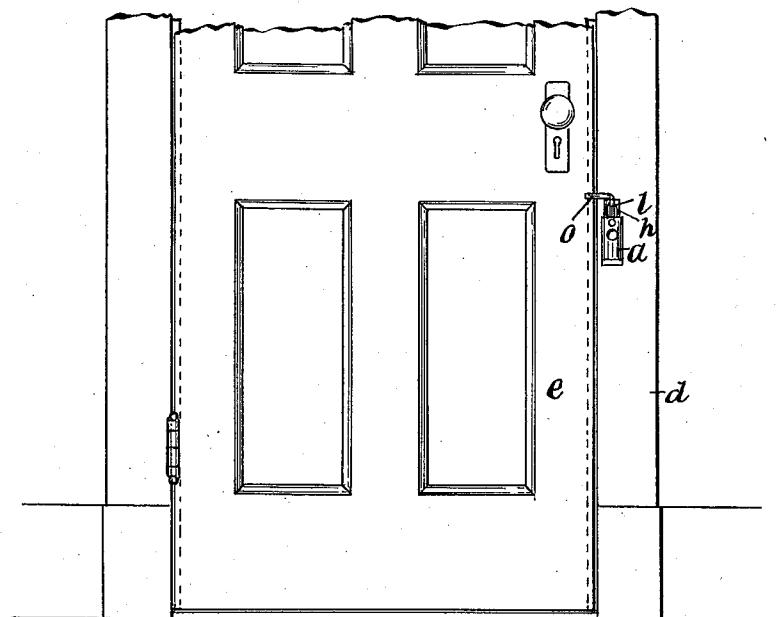
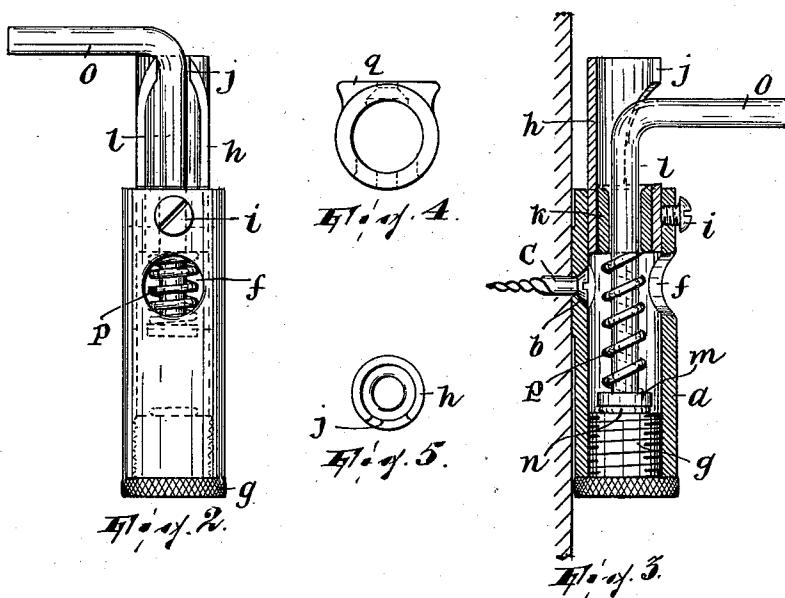


Fig. 1



WITNESSES

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DETONATING-ALARM DEVICE.

1,014,792.

Specification of Letters Patent.

Patented Jan. 16, 1912.

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To all whom it may concern:

Be it known that I, EDWARD B. WALDRON, a citizen of the United States, residing at Paterson, in the county of Passaic and 5 State of New Jersey, have invented certain new and useful Improvements in Detonating-Alarm Devices, of which the following is a specification.

The object of this invention is to provide 10 a detonating alarm device for protecting buildings and the like against entry by burglars or other unauthorized persons, which device shall be simple and durable in construction and reliable and effective in operation.

In carrying out this object I have produced an alarm device of the kind indicated which consists, generally stated, in a supporting member having an anvil for a 20 cushion cap, a hammer movable rectilineally in the supporting member against the anvil, a detent arranged in the supporting member and adjustable therein around the path of movement of the hammer, said hammer 25 being normally restrained from movement toward the anvil by the detent and revolvable in the supporting member out of engagement with the detent, and a spring normally acting to move the hammer against the 30 anvil, said hammer having a laterally projecting arm or the like whereby to rotate it. Thus constructed, when the supporting member is secured, say, to the jamb of a door so that the arm, held by the detent 35 against movement, overlaps the door, if the door is opened, the hammer will thereby be turned until it is released, whereupon it will be forced by the spring against the anvil and explode the cap reposing on the latter; 40 and by rotatively adjusting the detent the device may be adapted to conditions otherwise requiring more or less rotary movement of the hammer to effect its release.

In the accompanying drawing, Figure 1 45 shows my device in operative position on the casing of a door; Fig. 2 shows the device substantially full-size and in front elevation, the hammer being in its cocked position; Fig. 3 is a vertical sectional view of 50 the device, showing the hammer and anvil in elevation and the former in its released position; and, Figs. 4 and 5 are plan views of two parts of the supporting member.

Describing, first, the supporting member, 55 *a* is a cylindrical casing having a hole *b* in

one side thereof to receive a screw *c* whereby to secure said casing to the jamb *d* of a door *e*, the casing having opposite the hole *b* a larger hole *f* for admitting the screw to the hole *c* and receive a screw-driver. Into the 60 lower end of this case *a* is tapped a milled plug *g* affording an anvil. Into the upper end of the casing *a* is fitted a cylindrical sleeve *h* which is held in the casing *a* so as to be rotatably adjustable therein by a set 65 screw *i*. At one side, and extending down to about the level of the upper end of the casing *a* the sleeve *h* has a slot *j* formed in it. Suitably fixed in the lower end of the sleeve *h* is a bushing *k*.

The hammer consists of a spindle *l* having a head *m* at its lower end adapted to 70 effect with the anvil *g* in exploding a percussion cap or the like *n* resting on the anvil, and having its upper end turned off to form 75 the laterally projecting arm *o*, the spindle *l* being guided in the bushing *k*. Interposed between the bushing and the head *m* of the spindle, and coiled about the latter, is a 80 spiral compression spring *p*.

The back of the casing is preferably provided with the flat-faced lug *q* which bears 85 squarely against the jamb *d* and so cooperates with the screw *c* to hold the device firmly in position.

In setting the device, having closed the door, the hammer is raised and then turned until its arm *o* overlaps the door and stands supported by the detent afforded by the sleeve *h*. A percussion cap is assumed to 90 have been introduced by removing the plug, placing the cap thereon and returning the plug to its place. If the door is now opened, it will engage the arm *o* and thereby turn the hammer until the arm is over the slot *j*, 95 whereupon, being no longer restrained by the detent, the hammer is forced by the spring into contact with the cap resting on the plug.

As the distance between the edge and the 100 jamb of doors or the like is seldom the same, it is necessary to make the device adjustable so as to be perfectly efficient under different conditions, such as the one mentioned, in connection with which it is used. It is for 105 this purpose that the sleeve *h* is arranged so as to be revolvably adjustable in the casing *a*, thus requiring more or less of a turn of the hammer to effect its release according to the position to which the sleeve is adjusted. The 110

sleeve may also be adjusted vertically for the purpose of changing the tension of the spring.

Having thus fully described my invention, 5 what I claim as new and desire to secure by Letters Patent is:—

1. The combination of a supporting member including an anvil, a hammer rectilinearly movable in said member against the anvil, a detent arranged in the supporting member and adjustable therein around the path of movement of the hammer, and a spring normally forcing the hammer against the anvil, said hammer being normally restrained from such movement by the detent but being revoluble out of engagement therewith and having a lateral projection affording means to rotate it, substantially as described.
- 15 2. The combination of a supporting mem-

ber including an anvil, a hammer rectilinearly movable in said member against the anvil, a sleeve-shaped detent arranged in the supporting member and adjustable therein around the path of movement of the hammer 25 and surrounding the hammer, and a spring normally forcing the hammer against the anvil, said hammer being normally restrained from such movement by the detent but being revoluble out of engagement therewith and having a lateral projection affording means to rotate it, substantially as described. 30

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

EDWARD B. WALDRON.

Witnesses:

JOHN W. STEWARD,
WM. D. BELL.

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