(Model.)

W. H. REIFF.

BURGLAR ALARM.

No. 315,838. Patented Apr. 14, 1885.

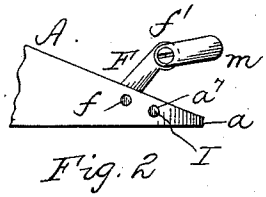


Fig. 2

Fig. 1

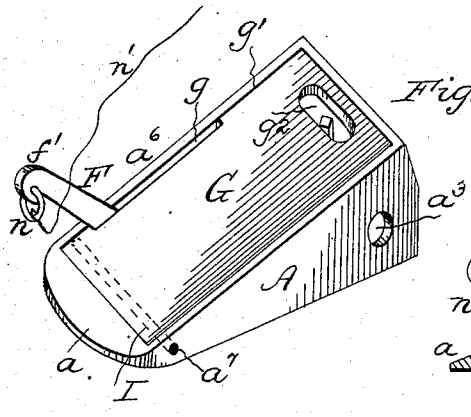


Fig. 3

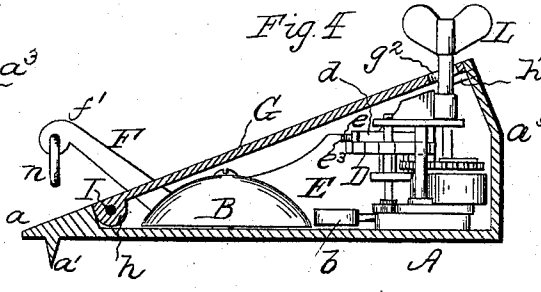


Fig. 4

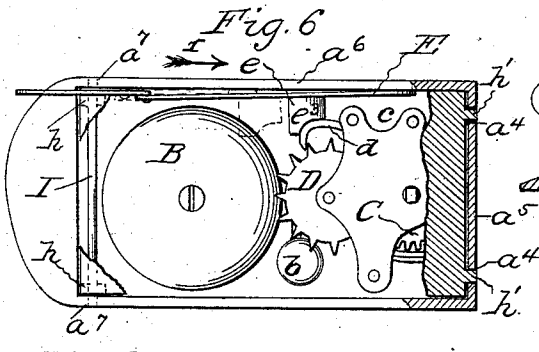


Fig. 6

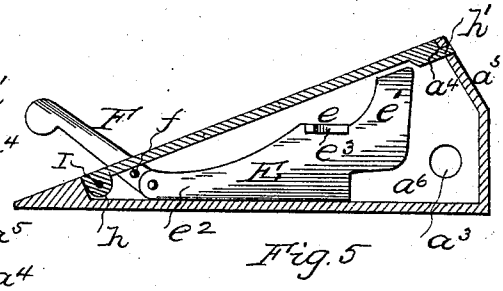


Fig. 5

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UNITED STATES PATENT OFFICE.

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BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 315,838, dated April 14, 1885.

Application filed July 8, 1884. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM H. REIFF, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Burglar-Alarms, of which the following is specification, reference being had therein to the accompanying drawings, wherein—

Figure 1 is a sectional elevation showing the burglar-alarm in position in front of a door and set for operation. Fig. 2 is a broken elevation illustrating a two-part or adjustable trigger for the alarm. Fig. 3 is a perspective of the alarm. Fig. 4 is a longitudinal vertical section of same. Fig. 5 is a like view showing the trigger and locking-lever for the escapement-wheel pallet; and Fig. 6 is a plan, partly sectional, of the alarm.

My invention has relation to burglar-alarms of that form comprising a wedge-shaped box containing an alarm and trigger mechanism, and adapted to be placed upon the floor adjacent to a door, so that when it is opened it impinges against the trigger to sound the alarm and wedges itself against the alarm-box to prevent further opening; and it has for its object to provide a simple and inexpensive alarm which may be handled with safety and readily placed in position for protecting a door or other entrance to a room or building.

My invention accordingly consists of the combination, construction, and arrangement of parts, as hereinafter described and claimed.

In the drawings, A represents the wedge-shaped box, having a toe-piece, *a*, with downwardly-projecting pin or prong *a'*, for fastening the box to the floor or other fixture, an open top, a^2, sound-escape openings a^3, and recesses or apertures a^4 in the rear wall, a^5, near its top edge.

In box A is suitably secured a bell, B, having striker *b*, operated by spring-power mechanism C, provided with an escapement-wheel, D, and oscillating pallet *d*, for controlling the expenditure of the spring-power.

The parts of the spring-power mechanism may be of any suitable construction and arrangement.

Between one side, a^6, of the box A, or that adjacent to the escapement-pallet *d*, and the frame-work *c* of the spring-motor, and resting upon the bottom of box A, is a vertically-arranged sliding plate, E, moving horizontally in the box, and having a horizontally-projecting catch or toe-piece, *e*, and an end or tail piece, *e'*, which extends upwardly to near the top of the box, as more plainly shown in Fig. 5.

To the end e^2 of sliding plate E is pivoted a lever or trigger, F, having its fulcrum *f* in the side a^6 of box A. The trigger F projects through a recess, *g*, formed in the edge *g'* of cap or cover G, and extends above the same, said recess *g*, in conjunction with the adjacent part of the box-side a^6, forming a guide for the trigger to move in. The toe-piece or lip *e* of plate E is in the plane of and is adjacent to the pallet *d*, and is cut out at e^3 to form a curve side for fitting around one end of the pallet when closed against it, as shown in Fig. 6. The lid G is provided at its front end or its under side with perforated lugs *h*, which are in line with the openings a^7 in the sides of box A, and at its rear end with pins or studs *h'*, which pass into the box-openings a^4 in its rear wall, a^5, to sustain one end of the lid or cap, its other end being fastened to the box by a pintle or rod, I, passing through the box-openings a^7 and perforated lugs *h*. Said rod I is removable from its bearings to provide for detaching the lid from the box whenever it is necessary to do so. In lid G is an opening, g^2, for the passage of the winding-key L. (See Fig. 4.)

The operation is as follows: The alarm being suitably placed adjacent to the door or other fixture to be protected, or as illustrated in Fig. 1, the trigger F is then moved to the right, or toward the toe *a* of box A, so as to bring its end *f'* as near to the door as possible. Such described movement slides the plate E in the direction indicated by arrow 1, Fig. 6, or backwardly, and causing its toe-piece or lip *e* to close against and lock the pendulum *d* in a fixed position, as illustrated in said last-named figure, to prevent the unwinding of the spring of the motor. In such position of said parts the alarm is set and the door protected. A slight opening movement of the latter, or to the extent indicated by dotted line *x*, Fig. 1, moves the trigger F on its

fulcrum *f* a sufficient distance to slide the plate E forward the extent required for releasing the toe-piece or lip *e* from engagement with pendulum *d*, as indicated by dotted lines in Fig. 6, whereupon the spring-power is free to act and the alarm is sounded. Further movement or opening of the door, or past the dotted line *y*, Fig. 1, causes the lower edge of the door to contact with and wedge itself upon the box to stop its still further movement, so that while the alarm is ringing, or after it ceases, the door cannot be opened to its fullest extent, or to such extent that will enable a burglar or other person to pass in and out of the room.

To make the action or movement of the trigger F more sensitive, it may be provided with an adjustable extension piece or bar, *m*, (see Fig. 2,) so that the slightest movement of the door will set off the alarm.

In Fig. 3 the trigger is provided with a ring, *n*, and string or cord *n'*, for attachment to a window-sash, whereby both the door and other entrances of a room or building are protected by one and the same alarm.

What I claim is—

1. In a burglar-alarm, the combination of a wedge-shaped box, a power gong or bell having an escape-wheel and pallet, a sliding plate or lock resting upon the bottom of the box, between the pallet and one of the side walls, and having lip *e*, and a trigger mechanism operated from the outside of the box, substantially as set forth.

2. The combination of box A, having openings a^4 a^7, the lid G, having perforated lugs *h* and pins *h'*, and bar I, substantially as shown and described.

3. The combination of box A, having removable lid G, with recess *g*, bell B, motor C, plate E, and trigger F, projecting through said recess, substantially as shown and described.

4. The combination of box A, having lid G, bell B, motor C, plate E, and trigger F, with end piece, *m*, substantially as shown and described.

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

WILLIAM H. REIFF.

Witnesses:
S. J. VAN STAVOREN,
CHAS. F. VAN HORN.