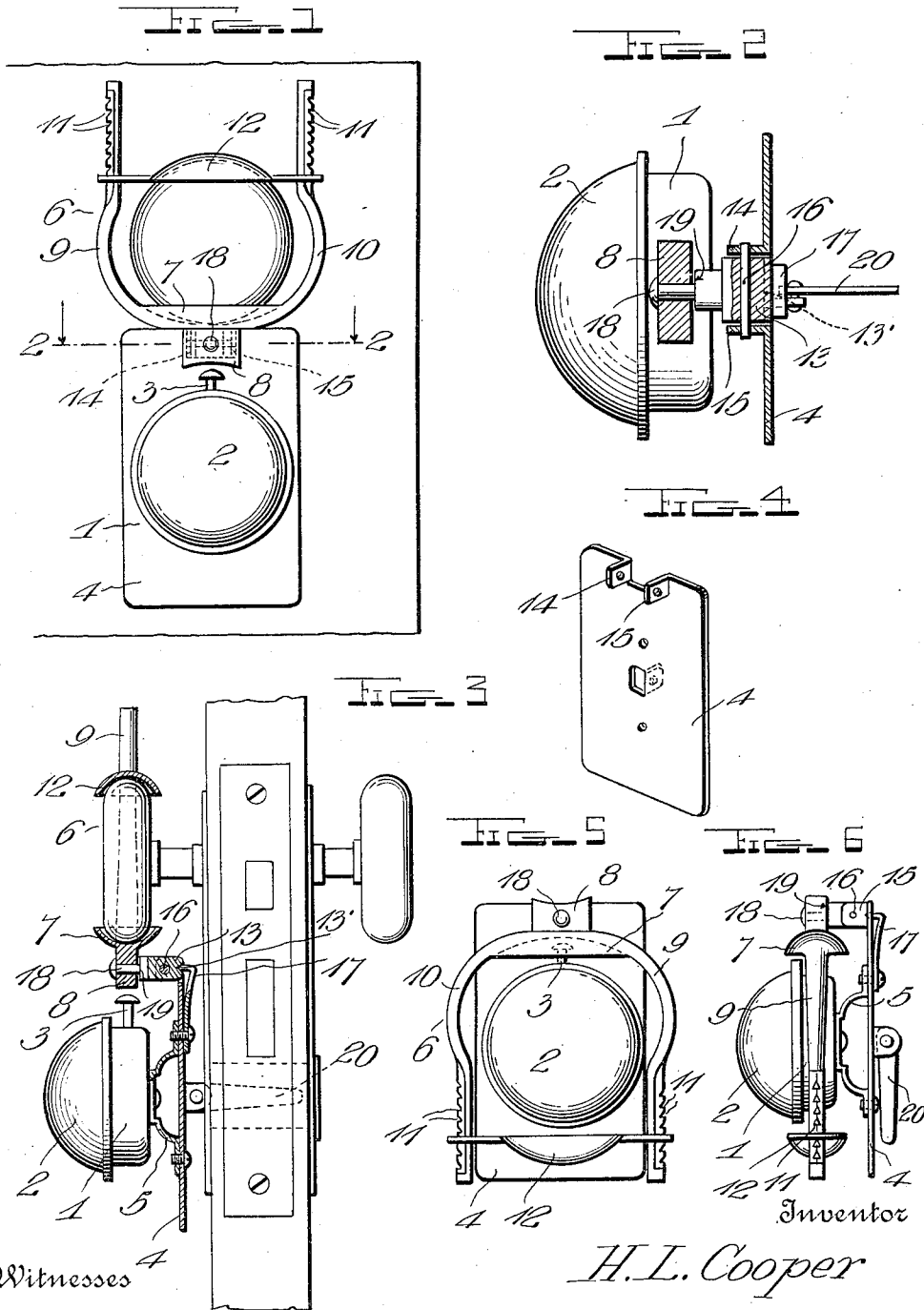


H. L. COOPER.
BURGLAR ALARM.
APPLICATION FILED APR. 15, 1912.

1,060,535.

Patented Apr. 29, 1913.



Witnesses

E. Clement
L. M. M. Coll.

H. L. Cooper

by *A. B. Wilson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

HARRY L. COOPER, OF ALBANY, OREGON.

BURGLAR-ALARM.

1,060,535.

Specification of Letters Patent.

Patented Apr. 29, 1913.

Application filed April 15, 1912. Serial No. 690,814.

To all whom it may concern:

Be it known that I, HARRY L. COOPER, a citizen of the United States, residing at Albany, in the county of Linn and State of Oregon, have invented certain new and useful Improvements in 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.

This invention relates to improvements in burglar alarms, adapted to be attached to door knobs.

The object of the invention is to provide a simply constructed and efficient device which may be readily attached to a door knob in such a manner that the insertion of a key or the turning of the knob from the side opposite to that on which the device is applied, will cause an alarm to be sounded and give timely warning of an impending intrusion.

Another object is to provide a device of this character of compact form which can be readily attached to and slipped off a door knob and is therefore adapted to be carried in the pocket or grip of a traveler and applied to the door knob in a hotel or elsewhere as the occasion may require. It can also be conveniently applied at night to a house or store door and removed in the daytime.

Another object is to provide a device of this character which requires no electricity for the operation thereof.

The invention consists in the combination and arrangement of parts, the novel features of which will be hereinafter fully described and claimed.

In the accompanying drawings—Figure 1 is a front elevation of this improved door knob alarm applied and in operative position; Fig. 2 is a horizontal section on line 2—2 of Fig. 1; Fig. 3 is a side elevation partly in vertical section; Fig. 4 is a detail perspective view of the bell carrying plate; Fig. 5 is a front elevation of the device folded ready for storage or transportation; Fig. 6 is a side elevation thereof.

In the embodiment illustrated an alarm

bell 1 of any suitable or usual construction is shown having one member 2 thereof rotatable to wind the spring contained therein and a controlling trigger or push button 3, which when pushed in actuates the alarm and sounds the bell in the same manner that spring controlled bicycle bells are operated. This bell 1 is secured to a plate 4 by means of a bracket 5 or in any other suitable manner, and the trigger or push button projects upwardly from the periphery of the bell in the path of a movable knob engaging member 6 to be described. This knob engaging member 6 is preferably constructed in the form of a U-shaped stirrup with the cross bar 7 thereof concave on its inner face to form a recess for receiving one portion of the periphery of a door knob. Depending from the outer face of this cross bar 7 is an apertured lug 8 for connection to the plate 4, as will be presently described, and said lug has a straight lower end for a purpose to be described. The legs 9 and 10 of this knob engaging member are preferably bowed outwardly adjacent said cross bar 7 to adapt them to embrace and fit a door knob, as shown in Fig. 1. The free ends of said legs are preferably straight and their outer faces are serrated or toothed, as shown at 11, for engagement by an adjustable plate 12 which is apertured to slidably engage said ends, the outer walls or edges of said apertures engaging the teeth on said legs and holding said plate in adjusted position. This plate 12 is preferably bowed outward or concaved to fit the upper portion of a door knob, said plate being adjustable to adapt the device to fit knobs of different sizes.

A block 13 having flat faces is mounted to revolve in apertured ears 14 and 15 formed at the upper edge of the plate 4, being preferably struck out therefrom and extended forwardly to form bearings for the spindle 16 of said block. This spindle 16 is fixedly mounted in said ears and the block has a bore extending longitudinally through it which loosely engages the spindle, permitting the block to turn freely thereon for a purpose to be described. A spring tongue 17 is secured at one end to

the rear face of said plate 4 at a point spaced from its upper edge and the free end of said tongue is disposed opposite the opening in the edge of the plate formed by the striking out of the ears 14 and 15 and in the path of the block 13 having a yielding engagement with said block to hold it in adjusted position. The terminal of this tongue is preferably bent at right angles and extended forwardly to engage a groove 13' in the block to afford a firmer engagement with the block. A stud or pin 18 projects laterally from one face of said block 13, preferably midway of its length, and has a shoulder 19 at its base to properly space the lug 8 through which the stud 18 extends transversely, a proper distance from said block. The lug 8 of the knob-engaging member is mounted to oscillate or swing on said stud in a plane at right angles to the plane of movement of the block 13, and a slight turning of said member 6 on said stud will cause the lower edge of the lug 8 to engage and depress the trigger 3 and thereby ring the bell. This occurs when the block is turned to position to cause the pin or stud 18 to project forwardly at right angles to the front face of the plate 4, in which position it is held by engagement of the flanged end of the tongue 17 bearing yieldably thereon. When said block is turned in position to project the pin 18 upwardly in longitudinal alinement with the plate 4 the lug 8 is moved out of the path of the button or trigger 3.

An arm 20 is pivotally connected at one end to the rear face of the plate 4 in position to dispose it opposite the key-hole of the door lock when the member 6 is engaged with the knob. When the device is applied to the knob the arm 20 is inserted in the keyhole with its free end extending toward the outside of the door so that the insertion of a key in the lock from the outer side will force said arm forwardly and with it the plate 4 thereby causing the button 3 to engage the lug 8 and be thereby forced inward to sound the alarm.

It will thus be obvious that when the device is in operative position the insertion of a key or the turning of the knob will depress the trigger 3 and sound the alarm. When the device is not in use this arm 20 may be folded flat against the rear face of the plate 4, and the member 6 may be turned rearwardly at right angles to the plate or it may be folded down around the bell as shown clearly in Fig. 6 whereby the device is in compact form ready for storage in the least possible space.

I claim as my invention:

1. A door knob alarm comprising a signal carrying member, a signal on said member provided with an actuating trigger, a knob engaging member, said signal carrying and

knob engaging members being connected to move in directions at right angles to each other, said knob engaging member having means disposed in alinement with said trigger when the alarm is in operative position, and operable on the movement of said knob engaging member to engage said trigger and thereby sound the alarm, said signal carrying member having an arm for insertion in the key-hole of a door lock and operable when engaged by the key to move said member in a direction at right angles to the direction of movement of said knob engaging member and thereby cause said trigger to be engaged by the knob engaging member and the signal sounded.

2. A door knob alarm comprising a signal carrying member, a signal thereon provided with an actuating trigger, a knob engaging member, means connecting said signal carrying and knob engaging members to permit them to move in directions at right angles to each other, said knob engaging member having means disposed in alinement with said trigger when the alarm is in operative position and operable on the movement of said knob engaging member to engage said trigger and thereby sound the alarm, said signal carrying member having a foldable arm for insertion in the key-hole of a door lock and operable when engaged by a key to move said member in a direction at right angles to the direction of movement of said knob engaging member and thereby sound the signal.

3. A door knob alarm comprising a signal carrying member, a signal mounted thereon and provided with an actuating trigger, a U-shaped knob engaging member pivotally connected to said signal carrying member to permit said last mentioned member to swing in directions at right angles to each other, said knob engaging member having means for detachably and adjustably connecting it with a door knob, said member being provided with a depending trigger actuating element operable to engage said trigger on the movement of the knob engaging member or of said signal carrying member when moved in either direction.

4. A door knob alarm comprising a plate, a signal thereon provided with an actuating trigger, a block pivotally mounted on said plate above said trigger and having a stud extending laterally from one face thereof, a knob engaging member pivotally mounted on said stud, means for holding said block in adjusted position, said block being movable to bring said knob engaging member into or out of position for engagement with said trigger.

5. A door knob alarm comprising a plate, a signal thereon provided with an actuating trigger, a block pivotally mounted on said plate above said trigger and having a stud

extending laterally from one face thereof, a knob engaging member pivotally mounted on said stud, yieldable means for holding said block in adjusted position, said block
5 being movable to bring said knob engaging member into or out of position for engagement with said trigger.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HARRY L. COOPER.

Witnesses:

C. C. BRYANT,

A. M. CHASE.

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