No. 775,723. PATENTED NOV. 22, 1904.

A. GETTO.

ELECTRIC BURGLAR ALARM.

APPLICATION FILED APR. 27, 1904.

NO MODEL.

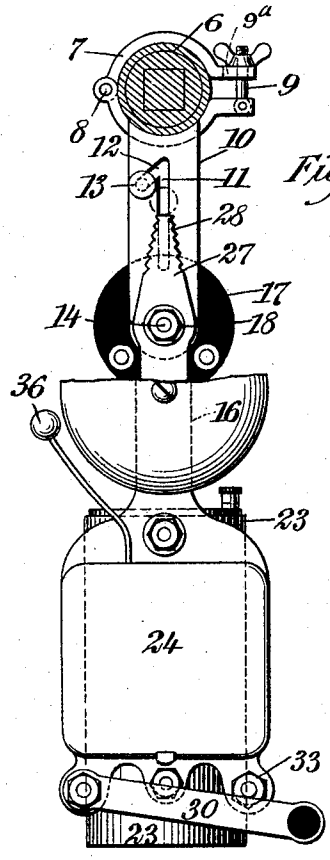


Fig. 1.

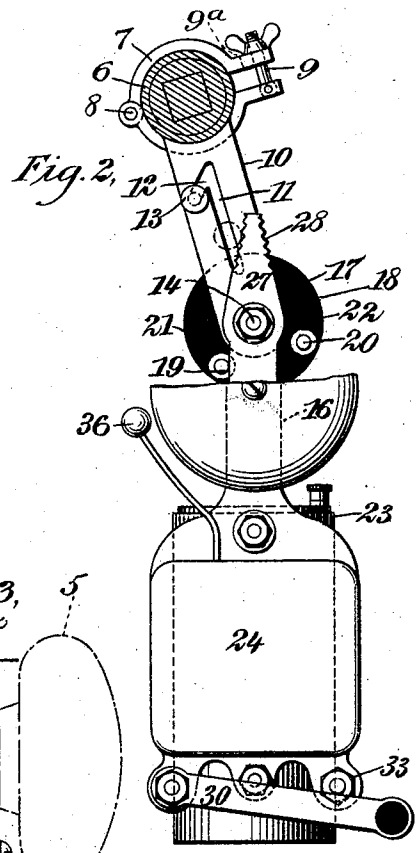


Fig. 2.

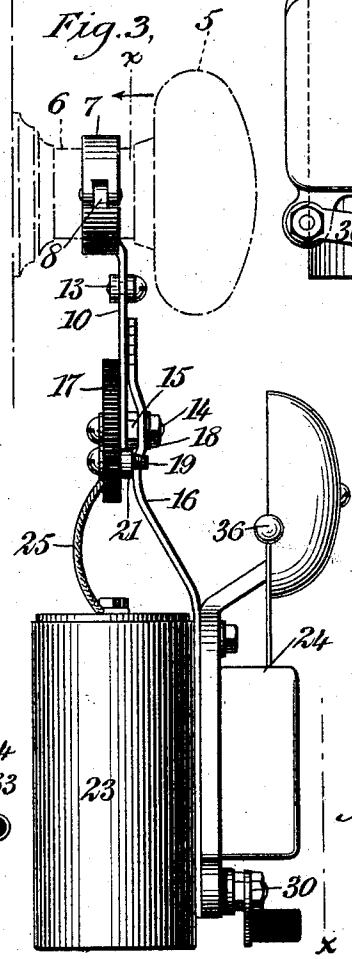


Fig. 3.

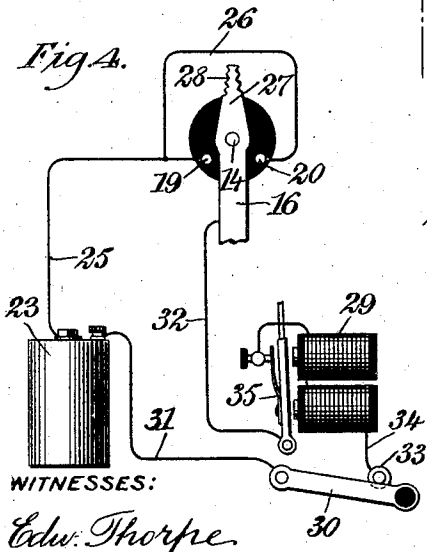


Fig. 4.

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No. 775,723. Patented November 22, 1904.

UNITED STATES PATENT OFFICE.

AMOS GETTO, OF NEW YORK, N. Y.

ELECTRIC BURGLAR-ALARM.

SPECIFICATION forming part of Letters Patent No. 775,723, dated November 22, 1904.

Application filed April 27, 1904. Serial No. 205,079. (No model.)

To all whom it may concern:

Be it known that I, AMOS GETTO, a citizen of the United States, and a resident of the city of New York, borough of Manhattan, in the county and State of New York, have invented a new and Improved Electric Burglar-Alarm, of which the following is a full, clear, and exact description.

My invention relates to electric burglar-alarms, my more particular object being to produce a simple, cheap, and compact alarm to be secured upon the spindle of a door-knob and capable of use also as an annunciator.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a view, partly in section, upon the line *x x* of Fig. 3 looking in the direction of the arrow and partly in elevation, showing my invention as applied to a door-knob spindle. Fig. 2 is a somewhat similar view showing the spindle as partially turned. Fig. 3 is a side elevation showing the device as it would be seen from the left of Fig. 1, and Fig. 4 is a diagram of the circuit.

The inner door-knob is shown at 5 and the common spindle of the inner and outer knobs at 6, these parts being of the usual construction. A two-part clamp 7 is provided with a hinge 8 and a stem 9, pivoted at one end to one of the members of the clamp and which swings into a slot 9^a in the other member of the clamp, and is provided with a thumb-nut for securing the clamp rigidly upon the spindle 6. A plate 10 is rigidly connected with the clamp 7 and depends therefrom, normally occupying the position indicated in Fig. 1. This plate 10 is provided with a central slot 11 and with an ancillary slot 12. A pawl 13 of substantially dumb-bell shape is free to move relatively to both slots, as indicated by full and dotted lines in Figs. 1 and 2. The lower end of the plate 10 is provided with a pin 14, having a spacing-nut 15 mounted thereon. Pivotally mounted upon this pin and depending therefrom is a strap 16 for supporting the battery 23 and the bell 24. A disk 17, of insulating material, is also mounted upon this pin. A nut 18 secures the outer end of the pin, being preferably threaded for the purpose. In the lower part of the disk 17 are mounted two screws 19 20, provided with contact-nuts 21 22. The battery 23 and the bell 24 are connected together and suspended by means of the straps 16, as above stated. From the battery 23 a wire 25 leads to the contact-screw 19, and from the wire 25 another wire 26 leads to the contact-screw 20. The upper end of the strap 16 is provided with a head 27, provided with ratchet-teeth 28, which may be engaged by the pawl 13, as indicated by dotted lines in Figs. 1 and 2. The electric bell 24 is provided with a magnet 29. A switch 30 is used for opening and closing the circuit, so that the device may be thrown into or out of service, as desired. From the switch 30 a wire 31 leads to the battery 23, and from the strap 16 a wire 32 leads to the vibrator 35 of the bell. A wire 34 connects the contact member 33 of the switch 30 with the magnet 29.

My invention is used as follows: The clamp 7 is placed upon the spindle 6 of the knob 5 inside of the door, so as to be inaccessible from the exterior of the building. When therefore the spindle 6 is turned in either direction, the plate 10 being rigid with the spindle is turned angularly, as indicated in Fig. 2. As the spindle may be rocked in either direction, it is obvious that the plate 10 may be turned to different angles. If now the device is to be thrown completely out of service, the switch 30 is simply opened and the pawl 13 is placed in the position indicated in Fig. 1. If the alarm is to be used merely for purposes of announcing the opening of the door, the pawl is placed in the position indicated by full lines in Fig. 2. With the pawl in this position when the spindle 6 is turned the strap 16 engages one or the other of the contact-screws 19 20, thereby completing the following circuit: battery 23, wire 31, switch 30, wire 34, magnet 29, vibrator 35, wire 32, strap 16, contact-screw 19 or 20, and wire 25 back to the battery 23, thus completing the circuit through the magnet 29 and ringing the bell. As the contact-nuts 21 22 are in metallic communication with the contact-screws 19 20, they facilitate making contact with the strap 16—

that is to say, the strap 16 makes a sliding contact with the contact-nuts and a direct-pressure contact with the contact-screws, so that should the mechanical engagement between the strap and either contact-screw be imperfect a fairly good contact is nevertheless made by pressure upon the face of the contact-nut. The instant the spindle 6 springs back to its normal position (indicated in Fig. 1) the circuit is broken, the result being that the bell rings only so long as the knob remains turned by the torsional effect of the hand. When, however, it is desired to use the device as a burglar-alarm, the pawl 13 is moved into the position indicated by dotted lines in Fig. 1, the switch 30 being closed. If now the spindle 6 be turned, the pawl 13 drops into the position indicated by dotted lines in Fig. 2, being engaged by the ratchet-teeth 28, and thus preventing the disengagement of the strap 16 and the contact-screw 19 or, at least, the contact-nut 21. By this means the bell is caused to ring continuously and is intended to have the effect of frightening off the burglar, as well as of alarming the people living upon the premises. The alarm is restored to its normal position by merely raising the pawl into the position indicated by full lines in Fig. 1.

My invention admits of general use and is not limited to application upon dwelling-houses only. It may be employed in connection with safes, warehouses, and in all relations where a closure member is not to be opened except by giving warning.

I do not limit myself to the exact construction shown, for the reason that the operation of the device may be varied considerably without departing from the spirit of my invention.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. An electric burglar-alarm, comprising a plate, means for connecting the same rigidly with the spindle of a door-knob, a member mounted upon said plate and depending therefrom, contact mechanism connected with said plate and with said last-mentioned member and actuated by movements of said plate for the purpose of opening and closing an electric circuit, and an electric bell mounted upon said member and energized by said circuit.

2. In an electric burglar-alarm, the combination of a plate, means for connecting the same rigidly with the spindle of a door-knob so that said plate is turned to divers angles by movements of said door-knob, a member connected with said plate and depending therefrom, a contact to be opened and closed by movements of said member, and a pawl for locking said member and said plate in a predetermined relative position for the purpose of keeping said contact closed continuously after said plate has been moved.

3. An electric burglar-alarm, comprising a spindle to be rotated by movements of a knob, a plate rigidly connected with said spindle and provided with a central slot and with an ancillary slot, a pawl connected with said plate and movable relatively to both of said slots, a member connected with said plate and provided with a ratchet, means for normally maintaining said ratchet in a predetermined position relatively to the horizon, and a contact to be closed by relative movements between said plate and said member.

4. In an electric burglar-alarm, the combination of a plate provided with means for connecting the same to a spindle, and also provided with a slot, a pawl connected with said plate and movable along said slot, means for temporarily supporting said pawl in a predetermined position relatively to said plate and independently of said slot, a ratchet to be engaged by said pawl when said plate is turned, said ratchet being for the purpose of maintaining said plate in a predetermined position relatively thereto, contact mechanism connected with said ratchet and adapted to be opened and closed thereby, and alarm mechanism connected with said contact mechanism.

5. In an electric burglar-alarm, the combination of a plate provided with means for connecting the same to a spindle, a member connected with said plate and depending therefrom, an electric bell mounted upon said member, contact mechanism connected with said plate and adapted to be opened and closed by movements thereof, an electric circuit extending from said contact mechanism to said electric bell, and a manually-operated switch for opening and closing said electric circuit.

6. In an electric burglar-alarm, the combination of a member to be connected rigidly upon a spindle and to be turned to different angles by movements thereof, contact mechanism mounted upon said member and opened and closed by movements thereof, electric circuits connected with said contact mechanism, and a bell included within said circuit and energized thereby.

7. In an electric burglar-alarm, the combination of a plate, means for securing the same rigidly upon a spindle, a pin mounted within said plate, a strap pivotally mounted upon said pin and adapted to support the weight of a battery and an electric bell, a contact member to be engaged by said strap, and wiring connected with said strap and with said contact member, said wiring being further connected with said battery and with said electric bell.

8. In an electric burglar-alarm, the combination of a spindle, a plate rigidly connected therewith and adapted to be turned to different angles, said plate being provided with a central slot and with an ancillary slot disposed at an angle to said central slot and merged thereinto, a pawl having substantially the form of a dumb-bell and slidably mounted within said slots so as to be movable from one

of said slots to the other, a ratchet to be engaged by said pawl, contact mechanism connected with said ratchet and adapted to be opened and closed by movements of said plate relatively to said ratchet, and electric mechanism connected with said contact mechanism for the purpose of sounding an alarm.

9. In an electric burglar-alarm, the combination of a member to be connected rigidly with the spindle of a door-knob, a comparatively heavy member journaled upon said first-mentioned member and free to move to different angles relatively thereto, a battery and a bell mounted upon said second-mentioned member and adding their weight thereto so that said member provided with said bell and with said battery depends from said first-mentioned member, and contact mechanism to be opened and closed by relative movements of said first-mentioned member and said second-mentioned member, the arrangement being such that said first-mentioned member may be moved to different angles while said second-mentioned member, by virtue of its weight, occupies a predetermined normal position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

AMOS GETTO.

Witnesses:
GEORGE W. TRICE,
RICHARD ROTT.