C. P. CAULKINS.

DOOR ALARM.

APPLICATION FILED SEPT. 16, 1913.

1,110,893. Patented Sept. 15, 1914.

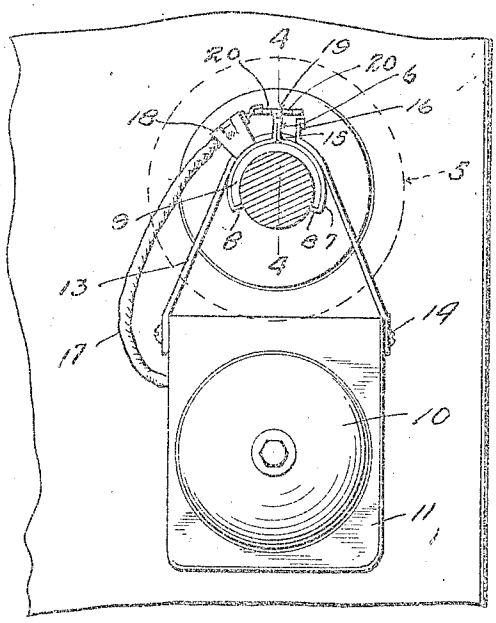


Fig. 1.

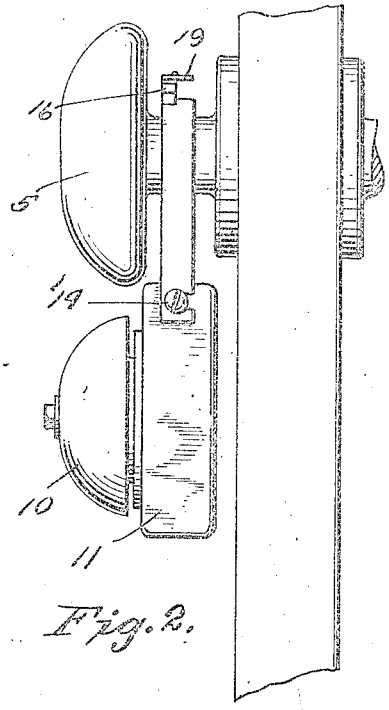


Fig. 2.

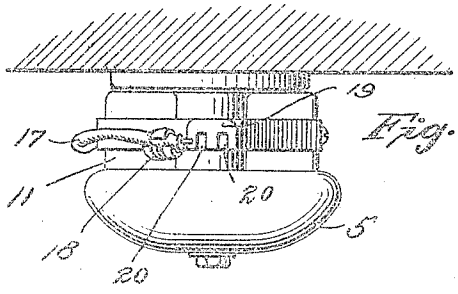


Fig. 3.

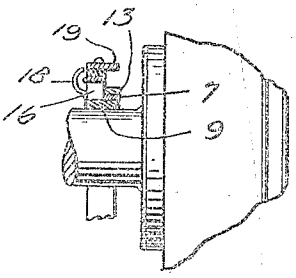


Fig. 4.

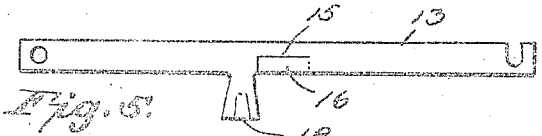


Fig. 5.

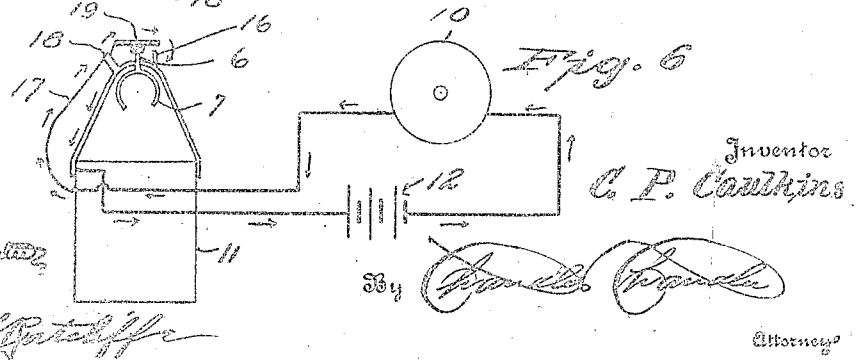


Fig. 6

Witnesses

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DOOR-ALARM.

1,110,893. Specification of Letters Patent. Patented Sept. 15, 1914.

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To all whom it may concern:

Be it known that I, CECIL P. CAULKINS, a citizen of the United States, residing at New London, in the county of New London, State of Connecticut, have invented certain new and useful Improvements in Door-Alarms; and I do hereby 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 new and useful improvements in alarms and particularly to electrical alarm devices actuated by turning the knob of a door.

The object of the present invention resides in the provision of a device which may be positioned on the knob of a door so that when the knob is turned the device will be actuated to give forth an audible alarm.

A further object of the invention resides in the provision of a device of the class described which is of such design that it may be readily attached to or removed from a door knob and reset to be actuated by turning the knob.

A still further object is to provide such a device which is durable and efficient in use and which is of a pleasing design and compact structure and which comprises a minimum of parts so that it may be manufactured at a comparatively low cost.

With these and other objects in view, the invention resides in the novel combination, formation and arrangement of parts to be more fully hereinafter described and illustrated in the accompanying drawings and particularly pointed out in the claims hereto appended.

Reference is had to the accompanying drawings wherein similar characters of reference designate corresponding parts throughout the several views, and in which:

Figure 1 is a front elevational view of a door knob with the improved alarm associated therewith, Fig. 2 is a side elevational view of what is shown in Fig. 1, Fig. 3 is a top plan view of what is shown in Fig. 1, Fig. 4 is a sectional view on the line 4—4 of Fig. 1, Fig. 5 is a plan view of the blank from which the strap is formed, and Fig. 6 is a diagrammatic view showing the electrical circuit of the device.

Referring now more particularly to the drawings wherein is shown the preferred form of the invention, 5 designates a door knob to which is fixed at its shank portion the radial finger 6 which operates the switch hereinafter described. For securing the finger 6 to the knob, an arcuate strap 7 of spring metal is provided having its ends 8 inwardly directed and having disposed on its inner surface an arcuate rubber band 9 so that the band may be snapped over the shank of the door knob and firmly held against relative movement. The finger 6 extends vertically from the strap at one side of its longitudinal axis. The bell 10 is carried by a casing 11 which also carries the battery 12 and this casing is suspended from the door knob by a flexible and preferably brass strap 13 which has one end permanently secured to one end of the casing and has its other end detachably secured as at 14 to the other side of the casing. The strap 13 rests on the strap 7 and the finger 6 is slidable in a slot 15 cut therein. The material cut to form the slot is bent upwardly to form a contact finger 16 of less height than the finger 6. An insulated connection 17 extends from the casing to the intermediate portion of the strap and is there supported by fingers 18 bent upwardly from the strap 13. This insulated connection has secured to the free end a spring contact member 19 resiliently tending to engage the contact finger 15 but normally held therefrom by the engagement of the finger 6 with its under face.

To provide means whereby rotation of the door knob will bring the contact members 19 and 16 together, the contact member 19 is provided on each side of the finger 6 with cutaway portions 20 so that when the door knob is rotated the finger 6 will slide into one of the cutaway portions and allow the members 19 and 16 to contact, it being understood that by the weight of the casing and battery the strap has little or no tendency to rotate. One end of the circuit containing the bell and the battery is connected to the fixed end of the strap 13 and the other end of the circuit is secured to the connection 17. Thus when the door knob is rotated the circuit will close and the bell will ring until the device is reset.

What is claimed is:

1. An alarm of the class described, comprising the combination with a rotatable member, of a pin carried thereby, a non-rotatable member including a bell circuit, contact points in the circuit, said contact

points being normally held apart by the pin and said pin adapted upon rotation of the rotatable member to release the contact points.

2. An alarm of the class described, comprising the combination with a door knob, of a finger fixed thereon, a casing, a strap suspending the casing from the knob, a bell circuit carried by the casing, said strap forming a part of the circuit, a connection forming part of the circuit extending from the casing and supported by the strap, a spring contact member carried at the free end of the connection and normally tending to engage a portion of the strap and said finger adapted to engage the contact to hold it spaced from the strap.

3. An alarm of the class described comprising the combination with a door knob, of a finger fixed thereto, a strap hung over the knob, a casing carried by the strap, a portion of the strap being cutaway and bent upwardly to form a finger, a connection extending from the casing and terminating in a contact member resiliently tending to engage the strap finger and the first-mentioned finger normally engaging the contact member to hold it spaced from the strap finger.

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

CECIL P. CAULKINS.

Witnesses:
FRANK H. CAULKINS,
CHARLES B. GARDNER.