Feb. 19, 1924. 1,484,502

H. M. L. JAMES

DOORKNOB ALARM

Filed Nov. 28, 1921

Fig. 1.

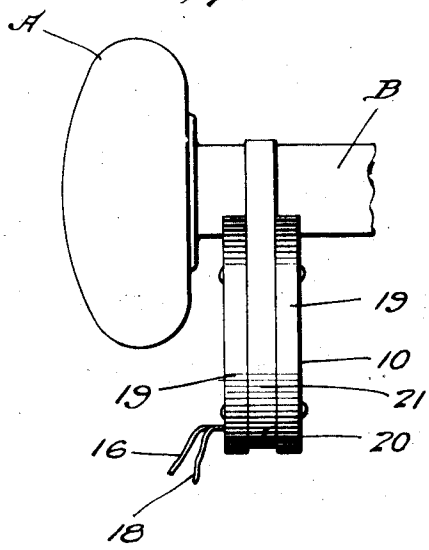


Fig. 2.

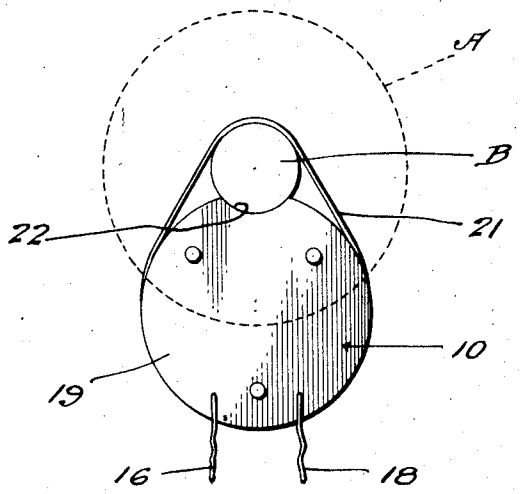


Fig. 3.

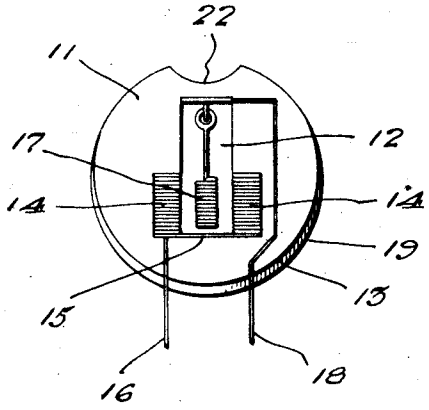
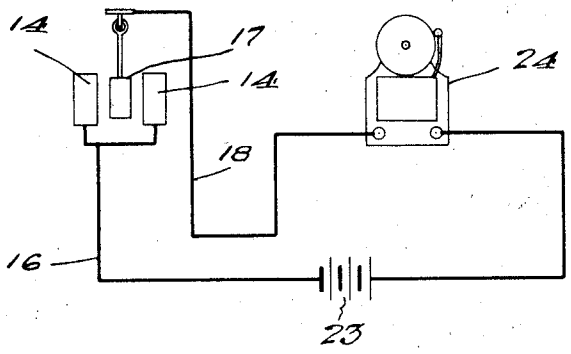


Fig. 4.



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UNITED STATES PATENT OFFICE.

HENRY M. L. JAMES, OF RICHMOND, VIRGINIA.

DOORKNOB ALARM.

Application filed November 28, 1921. Serial No. 518,361.

To all whom it may concern:

Be it known that I, HENRY M. L. JAMES, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented new and useful Improvements in Doorknob Alarms, and of which the following is a specification.

This invention relates to signal devices, particularly to burglar alarms, and has for its object the provision of an electrically operated signal adapted to be suspended from a door knob at the inside of a room or building whereby to close a circuit through an alarm bell, light or other similar device in case the knob is tampered with by a wouldbe intruder.

An important object is the provision of a device of this character which includes a pendulum operated circuit closer suspended from a door knob whereby turning of the knob in either direction in an attempt to open the door will result in energizing whatever signal device is employed in connection with the circuit closer.

An additional object is the provision of a device of this character which will be simple and inexpensive in manufacture, easy to install and remove, positive in action, efficient and durable in use, and a general improvement in the art.

With the above and other objects and advantages in view, the invention consists in the details of construction to be hereinafter more fully described and claimed and illustrated in the accompanying drawings in which—

Figure 1 is a side elevation of my device associated with a door knob.

Figure 2 is an elevation at right angles to Figure 1, the knob being shown by dotted lines.

Figure 3 is a view of the circuit closer with the cover removed.

Figure 4 is a diagram of the electric circuit.

Referring more particularly to the drawings, the letter A designates a door knob mounted upon the usual spindle B. In ordinary door knob construction both knobs turn when either one is turned, as is well known. I take advantage of this fact by providing a circuit closing device associated with the spindle B at the inside of the door. This circuit closing device comprises a substantially circular casing 10 which includes a central block member 11 having a cut-out central portion 12 and having a portion of its periphery formed with an arcuate recess 13. The cut-out portion 12 is of substantially inverted T-shape, as shown, and located within the opposite branches thereof are wire coils 14 which are connected by a wire 15 with which is connected a lead wire 16, for a purpose to be described. Suspended from the uppermost portion of the cut-out portion 12, is a wire coil 17 which has pendulum action and which is adapted to contact with either of the coils 14. A lead wire 18 is connected with this pendulum coil, as clearly shown. The central block member 11 has both sides covered by circular plates 19 which are of greater diameter than the block 11, for the purpose of defining an annular groove 20 within which is engaged an elastic band 21 designed to be passed over the door knob and engaged upon the spindle B for suspending the device. The plates 19 are likewise formed with recesses 22 registering with the recess 13 of the block 11 for the accommodation of the knob spindle.

The above described device is adapted to be used in association with a source of current indicated by the numeral 23, located at any desired point, the wire 15 being connected with one terminal of this course. The wire 18 is connected with one terminal of a signal device which is here illustrated as being a bell or buzzer 24, though it might just as easily be an alarm or other signal device. The other terminal of the source of current is connected with the remaining terminal of the bell.

In the operation of the device, it will be seen that in case a burglar or other unauthorized person tampers with the door knob in an attempt to make an entry, my device will be oscillated which will of course result in bringing the pendulum coil 17 into contact with one or the other of the coils 14 and this will of course result in closing the circuit from the source of current through my device and through the signal bell so that the occupant of the dwelling or other building equipped with my device will be apprised of the attempted intrusion. In actual practice a convenient arrangement might be to have a dry cell or a plurality thereof provided with a bell secured by tape or some other means upon one side thereof, with the necessary length of wire attached

so that the device might be used by travelers who have occasion to stop at more or less insecurely locked places.

While I have shown and described the preferred embodiment of the invention it is of course to be understood that I reserve the right to make such changes in the form, construction and arrangement of parts as will not depart from the spirit of the invention or the scope of the subjoined claims.

What is claimed is:—

1. A circuit closer of the character described comprising a supporting member having an intermediate cut out portion, coiled wire contacts located within opposite ends of said cut out portion, a pendulum coiled wire contact pivoted within said cut out portion and movable to engage either of said first named contacts, cover plates secured upon opposite sides of said support and projecting therebeyond to define a groove, and a securing member engaged within said groove and adapted to be engaged upon the spindle of a door knob.

2. A circuit closer of the character described comprising a supporting member having an intermediate cut out portion, contacts located within opposite sides of said cut out portion, a pendulum contact pivoted within said cut out portion and movable to engage either of said first named contacts, and a resilient band secured about said support and engageable about the spindle of a door knob.

3. A circuit closer of the character described comprising a central block member having an intermediate cut-out portion of inverted T-shape, coiled wire contacts located within the opposite branches of said cut-out portion, a pendulum coiled wire contact pivoted within said cut-out portion and movable to engage either of said first named contacts, cover plates secured upon opposite sides of said block member and having a greater diameter than the latter whereby to define an annular groove, and an elastic band engaged within the groove and adapted to be passed over a door knob to be engaged upon the knob spindle, said cover plates and the central block thereof being formed with registering recesses conformingly engaging the spindle.

In testimony whereof I affix my signature.

HENRY M. L. JAMES.