Feb. 1, 1955 C. R. BERRY 2,701,282

BURGLAR ALARM

Filed June 25, 1951

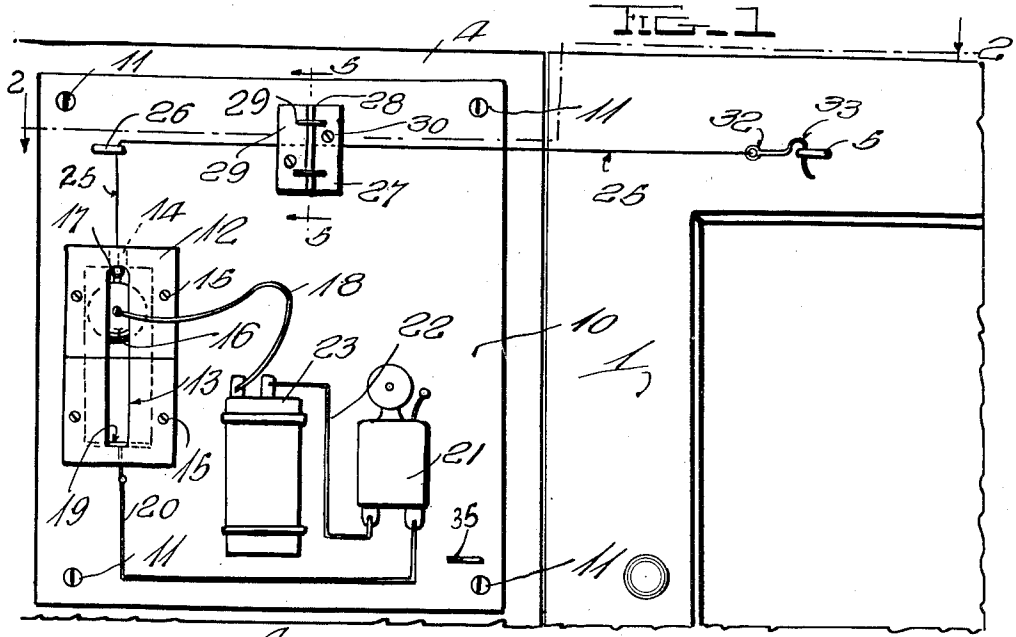


FIG. 1

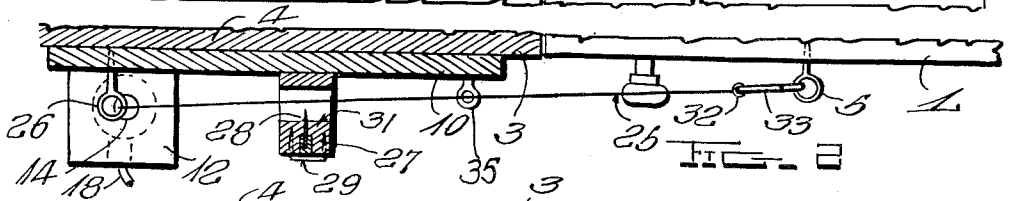


FIG. 2

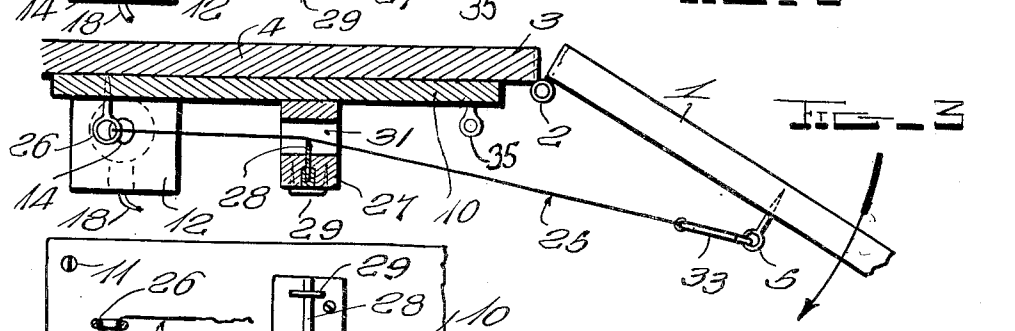


FIG. 3

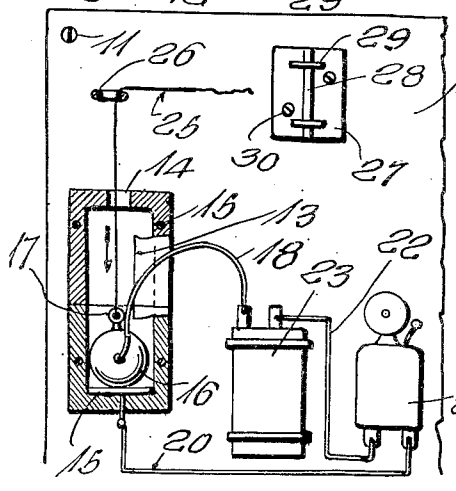


FIG. 4

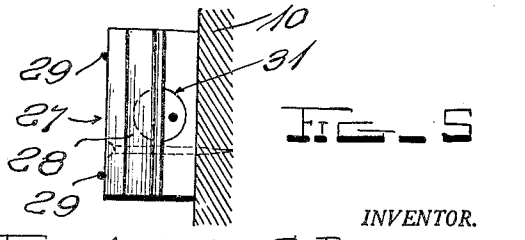


FIG. 5

INVENTOR.
Cleveland R. Berry.
BY
Linton & Linton.
ATTORNEYS

United States Patent Office

2,701,282

Patented Feb. 1, 1955

2,701,282

BURGLAR ALARM

Cleveland R. Berry, Conway, Ark.

Application June 25, 1951, Serial No. 233,431

1 Claim. (Cl. 200—61.83)

The present invention relates to burglar alarms and more particularly is concerned with an alarm which is set off upon the opening of a door after the alarm has been set.

The principal object of the present invention is to provide a very simply operated and economical alarm which will operate upon the opening of a door to which the alarm is connected.

A further and important object of the invention is to provide an alarm to be operated by the opening of a door and which alarm can be connected to or detached from the door as desired.

Further objects of the invention will be in part obvious and in part pointed out in the following detailed description of the accompanying drawings wherein,

Fig. 1 is a side elevation of a door and a wall with the present burglar alarm connected thereto and set for enunciating unwarranted entrances through the door;

Fig. 2 is a horizontal section taken on line 2—2 of Fig. 1;

Fig. 3 is a horizontal section with the present alarm mounted on the hinged side of the door just prior to setting off the alarm;

Fig. 4 is a front elevation of the burglar alarm with the front of the electric switch removed showing the interior thereof at the time the alarm is put into operation;

Fig. 5 is an enlarged side elevation of the thread cutter block taken on line 5—5 of Fig. 1.

Referring now more in detail to the drawing, wherein like and corresponding parts are indicated by similar reference characters, numeral 1 indicates a door pivotally supported by hinges 2 to a jamb 3 fastened to a wall 4. Numeral 5 refers to an eye screwed into the door and thus fixedly attached thereto.

One arrangement of the burglar alarm as shown on the drawings consists of a base plate 10 fastened to the wall 4 by screws 11.

A switch box 12 having a longitudinal slot 13 formed in one side thereof and an opening 14 through its top is fastened to said plate 10 by screws 15. Within this box there is slidably positioned a metallic ball 16 having an eye 17 extending from the top thereof and an electrical conductive wire 18 connected to a side of said ball and extending therefrom through said slot 13. In the bottom of the interior of said box there is flatly positioned a metallic perforated disc 19 from which extends an electrical wire 20. Said ball 16 and disc 19 are formed from electrically conductive metal such as copper.

Said wire 20 extends to one connector of an electric bell 21, while the other connector of said bell is connected by a wire 22 to one connector of a battery 23. Said wire 18 is connected to the other connector of said battery 23.

A thread or string 25 is connected to eye 17 of ball 16 and extends through opening 14 of said box vertically to and through an eye 26 mounted on said plate 10 directly above said opening 14. Said string 25 then extends substantially at a right angle to a block 27. Said block 27 contains a cutting element such as a razor blade 28 which is retained therein by staples 29. Said block 27 is in turn fastened to plate 10 by screws 30 and has an opening 31 formed therethrough into which extends the cutting edge

of said blade 28. String 25 extends through said opening 31 to eye 32 to which it is attached to the hook 33. Eye 26, opening 31 and eye 5 are thus in substantially a straight line whereupon the string 25 is held taut in said straight line when hook 33 is fastened to eye 5 due to the weight of ball 16. Block 27 is sized for holding blade 28 out of contact with string 25 when it is taut until such time as the door is opened.

When it is desired to permit the free use of the door 1 without setting off the alarm, hook 33 can be detached from eye 5 and wire 18 detached from the battery 23 either manually or by means of a switch. However at such times as it becomes desirable to have the bell 21 indicate the unwarranted opening of said door 1, then hook 33 is fastened to eye 5 and the circuit positioned as shown in Figs. 1 and 2 of the drawings. When the door is opened by an intruder as indicated in Fig. 3, string 25 being held taut is caused to bear upon cutting edge of blade 28 which severs said string and as shown in Fig. 4 the string then slides over eye 26 and through opening 14 causing ball 16 to drop by gravity until it contacts the perforated disc 19. The perforations in said disc 19 provide a plurality of faces for being contacted by said ball 16 thus assuring a good electrical connection therebetween and the circuit between batteries 23 and bell 21 is thus closed causing the bell to enunciate and give a warning of the entrance of a possible burglar.

As can be noted, the alarm can be mounted on the latch side of the door, as shown in Figs. 1 and 2 or on the hinge side of the door as shown in Fig. 3. The operation of the alarm is substantially the same in either instance.

When it is desired to unhook the alarm from the door by removing hook 33 from eye 5, the hook 33 can then be attached to eye 35 whereupon ball 16 will be prevented from dropping and setting off the bell.

The present invention is capable of considerable modification and such changes thereto which come within the scope of the appended claims are deemed to be a part of the invention.

I claim:

A door operated electrical circuit closing device comprising in combination with a hinged door, a vertically positioned support, a string, means for detachably connecting an end of said string to the opening side of said door, a weight attached to the opposite end of said string, means mounted on said support slidably supporting a portion of said string on a horizontal line with said connecting means with the remainder of said string extending vertically with said weight at the lower end thereof, a block fixedly positioned on said support between and on a horizontal line with said detachable means and said supporting means, said block having an opening provided therethrough with said horizontal portion of said string freely extending through said opening, a cutting member supported by said block and extending into said opening, but normally out of contact with said string therein until said door is pivoted open whereby said string is drawn across said cutting member and cut thereby, an electrical circuit, and switch means for said circuit positioned for being closed by said weight upon its downward movement at the cutting of said string.

References Cited in the file of this patent

UNITED STATES PATENTS

761,572	Barger	May 31, 1904
886,355	Dawson	May 5, 1908
1,099,777	Sundel	June 9, 1914
1,107,945	Hesse	Aug. 18, 1914
1,252,196	Taylor et al.	Jan. 1, 1918

FOREIGN PATENTS

20,678	Great Britain	Nov. 27, 1891
5,562	Great Britain	Mar. 16, 1901