April 21, 1925. 1,534,363

J. H. DAY

BURGLAR ALARM

Filed April 19, 1921

Fig. 2.

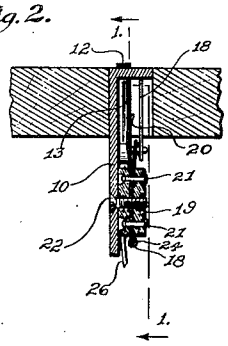


Fig. 3.

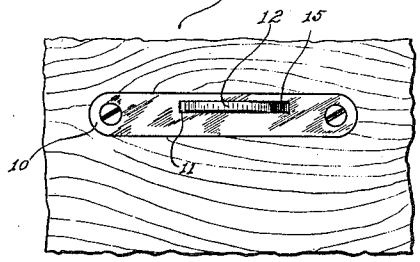
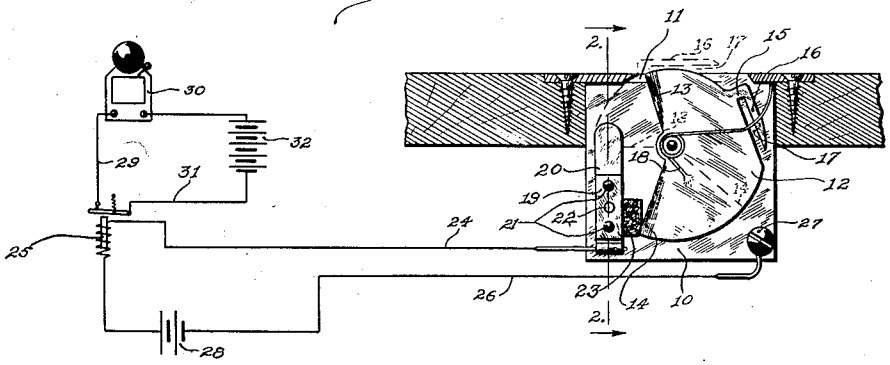


Fig. 1.



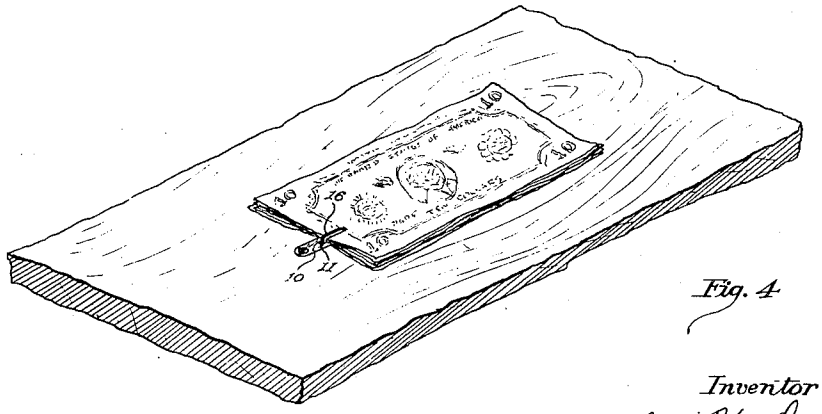


Fig. 4

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by Orwig & Hague Attys.

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UNITED STATES PATENT OFFICE.

JOHN H. DAY, OF DES MOINES, IOWA.

BURGLAR ALARM.

Application filed April 19, 1921. Serial No. 462,510.

To all whom it may concern:

Be it known that I, JOHN H. DAY, a citizen of the United States, and resident of Des Moines, in the county of Polk and State of Iowa, have invented a certain new and useful Burglar Alarm, of which the following is a specification.

My invention relates to an electric alarm device, especially adapted for use in the protection of piles of paper currency, securities, valuable letters and the like.

My object is to provide a burglar alarm of this class, of simple, durable and inexpensive construction, that may be readily, quickly and easily applied to a table or drawer, and which will be wholly out of sight when in use and which will not in any way interfere with the removal of the pile of paper currency or the like, but will instantly, upon such removal, cause an alarm to be sounded.

More specifically it is my object to provide a device of this kind which may be used interchangeably either for an open or a closed circuit as may be desired and which may be readily, quickly and easily adjusted for either an open or a closed circuit and which will operate noiselessly, except of course, for the sounding of the alarm at a distant point and also to provide a device of this kind which may be readily and quickly and easily moved by the operator to position for receiving paper currency or the like.

My invention consists in the construction, arrangement and combination of the various parts of the device, whereby the objects contemplated are attained, as hereinafter more fully set forth, pointed out in my claims, and illustrated in the accompanying drawings, in which:

Figure 1 shows the detail view, partly in section, showing my improved burglar alarm device as in use. The solid lines show the bill holder in the position which it automatically assumes when the bills are removed, the dotted lines in this figure show the position of the bill holder when in use with bills therein.

Figure 2 shows a transverse sectional view on the line 2 of Figure 1.

Figure 3 shows a top or plan view of the device as installed for use, and

Figure 4 shows a perspective view of part of a table top having my improved device applied thereto with some paper currency inserted in position for holding the alarm device in its inoperative position.

Referring to the accompanying drawing I have used the reference number 10 to indicate the frame of the contact making and breaking device, which frame comprises a flat top and a side extending downwardly, in the top is a slot 11.

Pivotally mounted between the sides of frame 10 is the currency holder and contact making and breaking device which comprises a substantially disk shaped body portion 12, a segment of which is cut away and the edges of the part adjacent to the cut away portion are sharpened as at 13 and 14 in Figure 1. On one edge of the body portion 12 is an arm 15 extended substantially radially outward and then in a direction, at 16 approximately concentric with the outer edge of the disk leaving a slot 17.

A spring 18 is provided, having one end attached to the disk 12, and the other end to a part of the frame 10 which spring normally holds the disk in the position shown by solid lines in Figure 1. The arrangement of the disk within the frame is such that when the disk is in the position shown by solid lines in Figure 1 a small portion of the edge of the disk protrudes above slot 11, so that an operator may, by pressing his finger against this protruding part, rotate the disk to position where the arm 16 will project up through the slot 11 as shown by dotted lines in Figure 1, ready to receive paper currency or the like.

Mounted in the frame 10 is a circuit making and breaking device comprising two insulating blocks 18 and 19, and with a conductor spring member, 20, between them. These two insulator blocks and the spring are all firmly connected by the rivets, 21. A screw in 22 is extended through the frame and is seated in the blocks 18 and 19. When the device is intended to be used in connection with a closed circuit this spring 20 is placed in the position shown by solid lines in Figure 1 and when it is intended to be used for an open circuit then the screw 22 is slightly loosened and the spring moved to the position shown by dotted lines in Figure 1, after which the screw is tightened and the spring secured in said position. On one side of the insulator blocks, 18 and 19 is a yielding pad, 23 so positioned that when the device is being used on a closed circuit and the disk 12

goes to the position shown by solid lines in Figure 1, the edge 14 thereof will strike said pad making the operation noiseless.

My improved device as illustrated in the drawings is used in connection with a closed circuit and comprises an electric conductor 24 connected with the spring 20. This conductor 24 leads to a circuit breaker 25, and the return conductor 26 leads to the binding post 27 on the frame 10. Included in this circuit is a battery 28 connected with the circuit breaker 25, and a conductor 29 leads to an electric bell 30 or other alarm device, and a conductor 31 leads to the circuit breaker. In this circuit is a battery 32.

In practical operation and assuming that the device is installed as shown, then the operator places one or more currency bills in the slot 17, thus holding the disk 12 in its inoperative position. In use I preferably pile other currency bills on top of the ones resting in the slot so that the arm, 16 is wholly concealed. When the currency bills are removed the spring 20 moves the disk 12 to position for sounding the alarm. The alarm of course is located at a distant point and the operation of the device itself is noiseless because of the fact that the disk makes a rotary movement and this movement is stopped by the pad. My improved device may be very conveniently and easily moved from its inoperative to its operative position, by simply having the operators' finger engage in projecting part of the disk and move it in the direction required for bringing the arm, 16 to its upwardly extended position. One of the advantages of my improvement is that the device may be very readily, quickly and easily adjusted for use in connection with either an open or a closed circuit and this may be done by simply swinging the spring, 20 from one position to the other. When the spring 20 is in the position shown by solid lines in Figure 1 and the disk 12 is in the position for use as shown by dotted lines in Figure 1, then the circuit is completed through the spring, and the disk, when the bills are removed, rotates until its edge 14 strikes the pad 23, thus breaking the circuit. When the device is used in an open circuit the spring 20 is moved to the position shown by the dotted lines in Figure 1 and then when the disk 12 moves to the position shown by solid lines in Figure 2 the circuit is established through spring 20 and disk 12 and the alarm is sounded.

I claim as my invention:

1. In an alarm device of the class described, a frame member designed to be inserted in a table top, a rotary member mounted therein, said rotary member having a part of its edge normally projected above the frame member and also having an arm projected outwardly from the edge and then in a direction approximately concentric therewith, there being a slot between the arm and the edge of the rotary member, and an electric contact device mounted in the frame to co-operate with the movable member.

2. In an alarm device of the class described, a frame designed to be set into a table top and having a slot at its upper surface, a rotary disk mounted in the frame, said disk having a segmental part of its body removed and said disk being mounted so that a part of its edge normally projects through the slot in the frame, an arm formed on the periphery of the disk and extended over the edge of the disk to form a slot between the arm and the disk, a spring contact device insulated from the frame and pivotally connected with it and designed to be engaged by the disk when the latter is in a certain position of its movement.

Des Moines, Iowa, April 1, 1921.

JOHN H. DAY.