Nov. 22, 1932. W. G. BUNTEN 1,888,905

LIFE AND PROPERTY PROTECTOR

Filed April 6, 1931

Fig. 1.

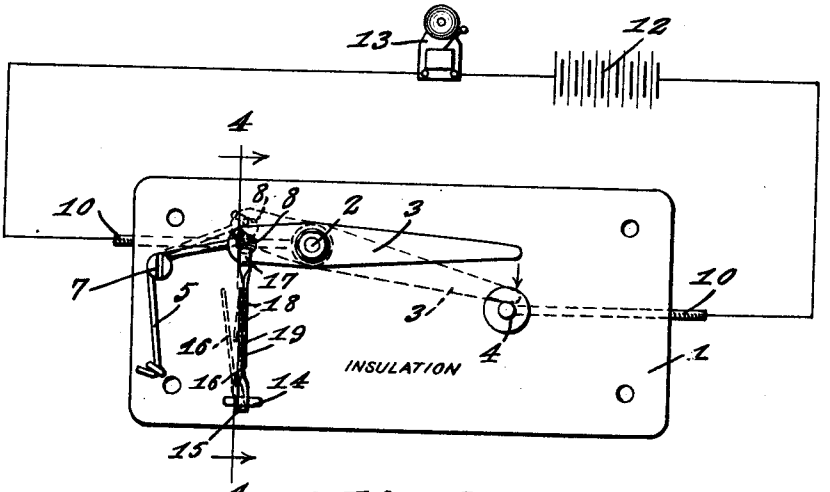


Fig. 2.

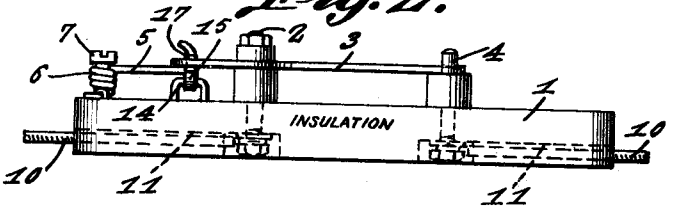


Fig. 3.

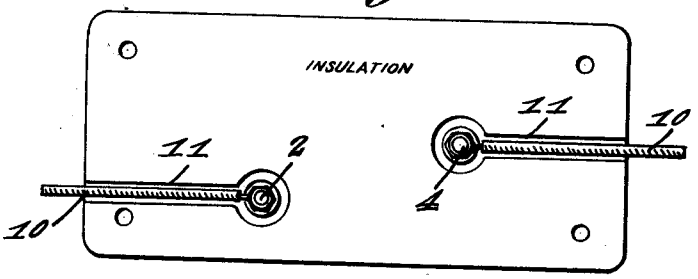
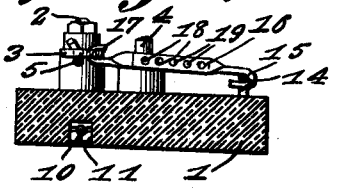


Fig. 4.



W. G. Bunten, INVENTOR

BY Victor J. Evans and Co. ATTORNEYS

Patented Nov. 22, 1932 1,888,905

UNITED STATES PATENT OFFICE

WILLIAM G. BUNTEN, OF DETROIT, MICHIGAN, ASSIGNOR OF ONE-FIFTH TO LEM L. REECE, OF ELIZABETHTON, TENNESSEE

LIFE AND PROPERTY PROTECTOR

Application filed April 6, 1931. Serial No. 528,143.

My present invention has reference to a life and property protecting device in the nature of a fire alarm, my object being the provision of electrically operated means for sounding an alarm when the temperature of a room increases beyond a predetermined degree.

A further object is the provision of a device for this purpose which may be set to operate at predetermined degrees of temperature.

A still further object is the provision of a device for this purpose which shall be of a simple construction and automatic in action, one which will operate at a predetermined rise of temperature, without being contacted by the flame of a burning building and one which cannot be effected by climatic changes, rodents or other causes.

To the attainment of the foregoing the invention consists in the improvement hereinafter described and definitely claimed.

In the drawing:

Figure 1 is a top plan view of the improvement.

Figure 2 is a side elevation thereof.

Figure 3 is a bottom plan view thereof.

Figure 4 is a sectional view approximately on the line 4—4 of Figure 1.

The improvement includes a base 1 of insulating material designed to be attached to a portion of a building in which a fire is liable to occur. There is mounted upon a post 2, secured on the block or body 1 a blade switch 3. The switch is normally influenced to engage with a contact 4 (also fixed on the block 1), through the medium of a spring 5. Preferably the spring is in the nature of a strand of resilient wire, the same being coiled upon itself, as at 6, and formed with arms extending from the coil. A bolt or like headed member 7 passes through the coil and enters the block and both of the arms of the spring are hooked, one of such arms being received in a round opening 8 in one end of the switch blade 3, the other being fixed by a staple or like element on the block. The contacts 2 and 4 are in the nature of binding posts and have secured thereon the wrapped wires 10, respectively, which pass through grooves 11 respectively in the bottom block 1, the said wires being connected to a battery 12, and being also connected to a bell 13 of the ordinary construction. In lieu of the bell a buzzer may be provided.

On the outer face of the block 1 there is a staple 14. Fixed on this staple there is the hooked end 15 of a plate 16. A similar plate has its hooked end 17 engaged in the opening 8 in the switch 3. The plates are given a half twist from the hooked ends thereof so that the same are arranged in lapping relation and each of the plates is provided with a series of apertures 18 designed to aline, and passed through one or more of these alining apertures there is a fusible plug 19. The plug or plugs are designed to fuse or melt when subjected to different rises in temperature and the spring for the switch draws upon the plates 16 to assist in severing the fuse plugs. By the employment of fuse plugs of this nature the alarm is set to operate at temperatures rising to predetermined degrees so that in case of fire the flames will not contact with the device but will cause the plugs to fuse and thereby separate the plates 16 to allow the spring to swing the switch blade 3 against the contact 4 and thereby completing the electric circuit. Of course, it is understood that the plates 16 hold the switch blade 3 away from the contact 4.

It is thought the foregoing description will fully and clearly set forth my construction so that further detailed description will not be required.

Having described the invention, I claim:

In a switch construction, a block of insulating material having binding posts providing contacts thereon, a switch blade pivoted to one of the contacts, swingable against the other contact, and having one of its ends provided with an opening, a spring comprising a centrally coiled member having a pivot passed therethrough, one of its arms fixed on the block and its second arm hooked to be received in the opening in the switch blade, plates having hooked ends, the hooked end of one of the plates being received in the opening in the switch blade and a staple on the plate to receive the hooked end of the second plate therethrough, said plates being

arranged in lapping relation and being provided with a plurality of apertures designed to aline, and fuse plugs meltable under predetermined degrees of heat received through certain of the apertures and connecting the plates and the connected plates holding the blade away from the contact.

In testimony whereof I affix my signature.

WILLIAM G. BUNTEN.