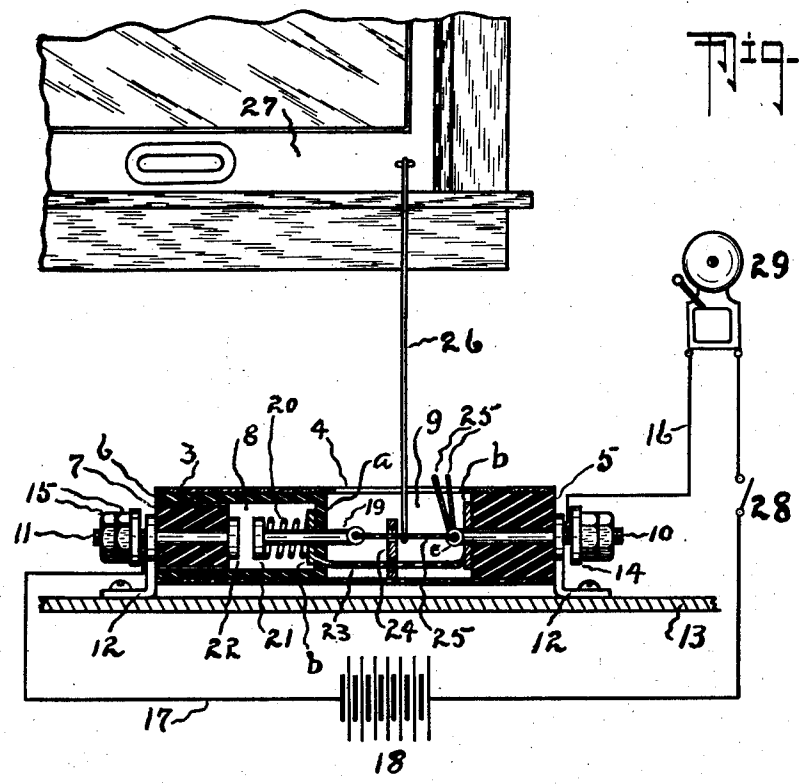
A. A. TAYLOR & H. J. SCHATZ.

COMBINED FIRE AND BURGLAR ALARM.

APPLICATION FILED MAR. 2, 1917.

1,252,196. Patented Jan. 1, 1918.

Fig. 1.



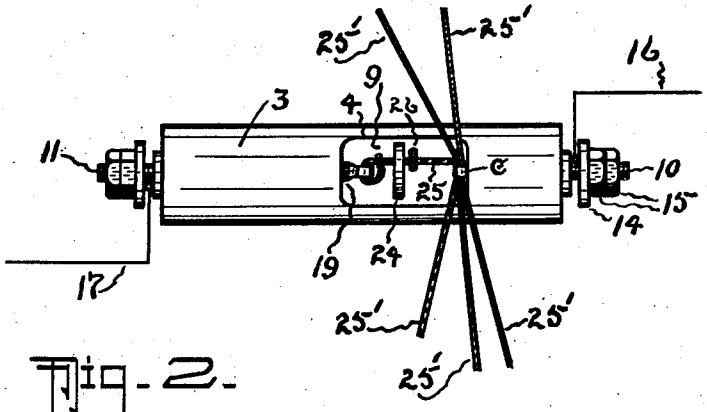


Fig. 2.

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COMBINED FIRE AND BURGLAR ALARM.

1,252,196. Specification of Letters Patent. Patented Jan. 1, 1918.

Application filed March 2, 1917. Serial No. 151,972.

To all whom it may concern:

Be it known that we, ARTHUR A. TAYLOR and HENRY J. SCHATZ, citizens of the United States, residing at Omaha, in the county of Douglas and State of Nebraska, have invented certain new and useful Improvements in Combined Fire and Burglar Alarms, of which the following is a specification.

This invention relates to a combined fire and burglar alarm, and has for its object to provide an apparatus consisting of few and simple parts which may be conveniently installed in a garage or other building for sounding an alarm, if unauthorized persons attempt to enter, or if fire occurs.

The invention has reference particularly to the provision of a holder having chambers and recesses suitably insulated so that the parts therein will not become disarranged, but will be maintained in normal positions, to be effective in operation, and to the use of a burglar alarm pull-member and a plurality of fuses connected with a releasing-fuse so that entrance through a door or window or the starting of a fire in a remote part of a building may cause the sounding of the alarm.

The invention consists of the novel construction, combination and arrangement of parts as described herein and claimed, and as illustrated in the accompanying drawing, wherein:—

Figure 1 is a view of the device in longitudinal section, showing a plurality of ignition fuses and a pull-wire connecting the releasing-fuse with a window sash. Fig. 2 is a plan view of the housing or sleeve for containing operative parts, a plurality of fuses being also shown.

Referring now to the drawing, numeral 3 indicates a sleeve provided with an aperture 4. In one end of the sleeve is mounted an insulating block or plug 5, and at 6 is indicated a barrel constructed of insulating material, its outer, open end preferably being disposed flush with the end of the sleeve, and in this end of the barrel is inserted an insulating plug 7, and thereby providing an insulated chamber 8 between the bottom *a* of the barrel and the plug 7, a compartment or recess 9 also being provided between said bottom *a* and the insulating block 5.

Numeral 10 indicates an electrical conductor and numeral 11 indicates a second electrical conductor; each preferably consisting of a rod, bolt or piece of wire supported upon a bracket 12 which is secured to any desired support 13, and by use of conventional washers 14 and keepers 15 the respective conductors 16 and 17 may be secured to said members 10 and 11 for a part of an electrical circuit, energized by a battery 18, the cylindrical blocks or plugs 5 and 7 being suitably apertured for receiving said members 10 and 11.

At 19 is indicated a third electrical conductor or plunger, which may consist of a rod or piece of wire disposed between and in line with members 10 and 11, said plunger being mounted slidably in and projecting through the bottom *a* of the barrel 7, and by means of a spring 20, said member 19 is pressed in a direction of the electrical conductor 11 to cause engagement of its disk 21 with the disk 22.

Numeral 23 indicates a fourth electrical conductor disposed near the bottom of the compartment 9, in electrical communication with the conductors 10 and 19 since its ends are in engagement with suitable contact-plates *b* which also engage said members 10 and 19, and at 24 is indicated an upright apertured bracket disposed midway between the ends of the compartment 9 and secured to the sleeve.

At 25 is indicated a fuse having one of its ends secured to member 19, its opposite end being secured to a suitable collar or ring *c* of member 10. The fuse 25, when thus secured, is drawn taut in a manner to compress the spring 20 between the disk 21 and the plate *b* to prevent a contact of the metallic disks 21 and 22, and the fuse 25 is provided with a plurality of branches 25′.

Numeral 26 indicates a strand or pull-wire connecting a window sash 27 with the fuse 25, and it will be understood that when the electrical switch 28 is closed, the battery will be in electrical communication with an alarm bell 29. The operation of raising the sash 27 will cause severing of the releasing fuse 25 which permits the electrical plunger 19 to move by force of the spring 20, its disk 21 engaging the disk 22, which closes the electrical circuit for actuating the bell. The branches 25′ may be disposed in remote parts of a building and any one of them, when ignited, will cause ignition of the fuse 25, the severing of the last named

fuse, by ignition, also causing a closure of the electrical circuit, and resulting ringing of the bell.

In connection with the device any number of branches 25′ may be employed, and strands 26 may be connected with any number of doors or windows, as is obvious. The several parts employed may be constructed of any suitable material to perform the functions described, and changes may be made in size, form, proportion and minor details provided such changes are within the scope of the invention as claimed.

It will be noted that the parts are so arranged that they may be conveniently assembled. The metallic contact parts 21 and 22 are housed in a chamber which prevents accidental closure of the electric circuit, and the flexible fuse 25 is not exposed to injury since the walls of the chamber 9 provide a housing therefor. The aperture 4 permits access for making adjustments. The bracket 24 provides a support for the fuse 25 so that the latter will become immediately broken by a limited movement of the closure member 27.

Having fully described our invention, what we claim and desire to secure by Letters Patent is,—

1. In a device for the purpose described, the combination with a support, a sleeve having an aperture in its side, a cylindrical insulating-block disposed within and adjacent to one end of the sleeve, a second cylindrical insulating-block within the sleeve, said second insulating-block having a chamber formed therein and disposed adjacent to the opposite end of the sleeve and forming between said blocks a recess opening on the aperture of said sleeve, a stationary electrical conductor in the first insulating block, a stationary electrical conductor in the second insulating block, a third electrical conductor having bearings in the second insulating block in electrical communication with the first electrical conductor, a spring to cause normal engagement of the third electrical conductor with the second electrical conductor, a fuse provided with branches, said fuse being connected with the first electrical conductor and third electrical conductor for maintaining the third electrical conductor in disengaged relation with the second electrical conductor against the force of the spring.

2. In devices for the purpose described, a sleeve, an insulating block within the sleeve, a second insulating block provided with a chamber and disposed within the sleeve adjacent to the first named insulating block, an electrical conductor stationary with and circumscribed by the first named insulating block, a second electrical conductor circumscribed by the second insulating block and having a stationary part within the chamber thereof, a third electrical conductor slidably mounted in a part of the second insulating block and projecting within said chamber, a fourth electrical conductor in electrical communication with the first named and third electrical conductors, resilient means tending to cause a longitudinal movement of the third electrical conductor into engagement with the second electrical conductor, and a fusible strand in the sleeve connected with the third electrical conductor to control said resilient means for maintaining the second and third electrical conductors in disengaged relation.

3. In devices for the purpose described, a sleeve, an insulating block within the sleeve, a second insulating block provided with a chamber and disposed within the sleeve, a bracket connected with the sleeve and disposed between the insulating blocks, an electrical conductor stationary with and circumscribed by the first named insulating block, a second electrical conductor circumscribed by the second insulating block and having a stationary part within the chamber thereof, a third electrical conductor in electrical communication with the first named electrical conductor, said third electrical conductor being slidably mounted in a part of the second insulating block and project ing within said chamber, resilient means tending to cause a movement of the third electrical conductor into engagement with the second electrical conductor, and a fusible strand in the sleeve traversing the bracket, said strand having its respective ends connected with the first and third electrical conductors to control said resilient means for maintaining the second and third electrical conductors in disengaged relation.

In testimony whereof, we have affixed our signatures in presence of two witnesses.

ARTHUR A. TAYLOR.
HENRY J. SCHATZ.

Witnesses:
ARTHUR H. STURGES,
HIRAM A. STURGES.