H. HESSE.

FIRE AND BURGLAR ALARM.

APPLICATION FILED APR. 18, 1914.

1,107,945. Patented Aug. 18, 1914.

Fig. 1.

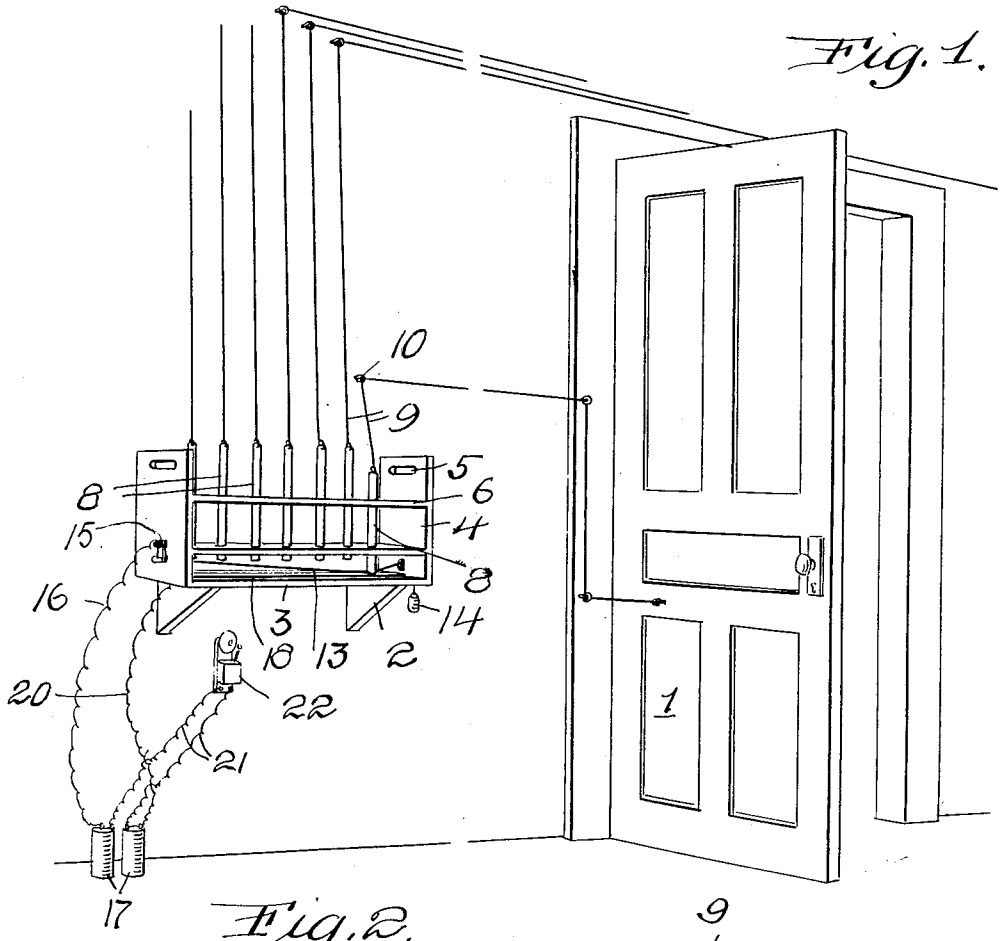
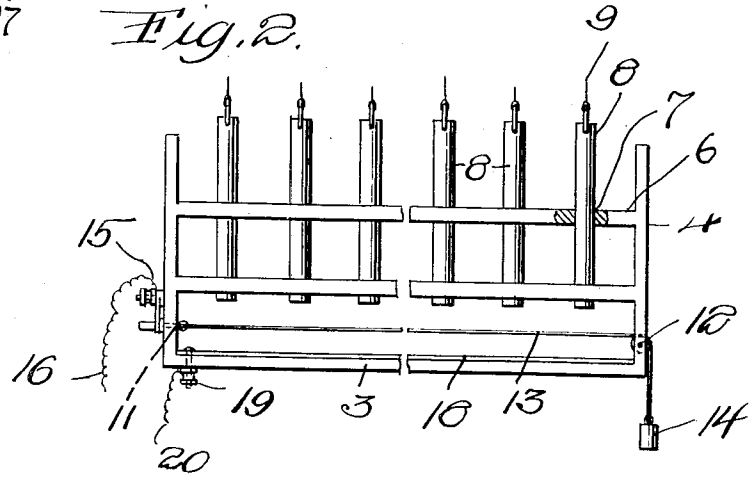


Fig. 2.



WITNESSES

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FIRE AND BURGLAR ALARM.

1,107,945. Specification of Letters Patent. Patented Aug. 18, 1914.

Application filed April 18, 1914. Serial No. 832,973.

To all whom it may concern:

Be it known that I, HERMAN HESSE, a subject of the Emperor of Germany, residing at Easton, in the county of Northampton and State of Pennsylvania, have invented certain new and useful Improvements in Fire and Burglar Alarms, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to a fire and burglar alarm, and the primary object of my invention is to provide a device that can be used for either purpose and in either instance an audible signal is sounded notifying persons in the vicinity of the alarm that a door has been surreptitiously opened or that there is a fire in proximity to the door or window.

Another object of this invention is to provide an alarm device that can be easily and quickly installed in connection with a dwelling whereby the opening or destruction of a door or window will produce an alarm.

A further object of this invention is to provide a simple, durable and inexpensive alarm device that can be used in connection with a suitable source of electrical energy for producing an audible signal.

With the above and other objects in view the invention resides in the novel construction, combination and arrangement of parts to be hereinafter specifically described and then claimed.

Reference will now be had to the drawing, wherein:—

Figure 1 is a perspective view of the device in connection with a door, and Fig. 2 is a front elevation of a portion of the device partly broken away and partly in section.

The reference numeral 1 denotes, by the way of an example, a door, and in proximity to said door the wall of the apartment is provided with brackets 2. Arranged upon the brackets 2 is a carrier, comprising a bottom plate 3 and end walls 4, said end walls having slots 5 whereby the upper edges of the end walls will provide hand grips to permit of the carrier being easily moved. The end walls 4 are connected by parallel guide plates 6 having vertically alining openings 7 for weights 8. Attached to the upper ends of the weights 8 are cables 9 that pass through screw eyes 10 and are connected to doors or windows, for instance the door 1. With the door 1 in a closed position a weight is held in an elevated position and when the door is opened, as shown in Fig. 1 the weight 8 is lowered by gravity. One of the end walls 4 is provided with a binding post 11 and the other end wall with a revoluble sheave 12. Attached to the binding post 11 and passing over the sheave 12 is a taut wire 13, said wire having the free end thereof provided with a weight 14 for maintaining said wire taut. The wire 13 is located directly beneath the lower ends of the weights 8 and the binding post 11 of said wire is adapted to be engaged by an open and shut switch 15, which is connected by a wire 16 to a suitable source of electric energy, as dry cells 17. The switch 15 is of the ordinary and well known type which permits of the alarm device being placed in or out of operation. Located upon the bottom plate 3 is a contact plate 18 having a binding post 19 at one end thereof, connected by a wire 20 to the source of electrical energy.

The dry cells 17 are connected by wires 21 to an audible signal, as an electric bell 22. The device maintains a normally open circuit and when one of the weights 8 is lowered it shifts the wire 13 into engagement with the contact plate 18 and therefore closes the circuit through the audible signal. The electric bell is sounded to notify persons within the vicinity of the door 1 that the same has been opened or destroyed. When the device is used as a fire alarm the cables 9 can be made of fusible wire or provided with fusible joints, whereby a fire in proximity to said cables will melt the same or joints thereof and allow the weights to descend and complete an electrical circuit by shifting the wire 13 into engagement with the contact plate 18.

One embodiment of the invention has been illustrated, but it is to be understood that the structural elements are susceptible to such variations and modifications as fall within the scope of the appended claims.

What I claim is:—

1. In an alarm, the combination with doors, an audible signal, and a suitable source of electrical energy in circuit with said audible signal, of a carrier, weights movably supported in said carrier and connected to said doors and adapted to be maintained in an elevated position by said doors being closed, a contact plate carried by said carrier and in circuit with said source of electrical energy, and a taut wire supported

by said carrier and in circuit with said source of electrical energy and adapted to be shifted by said weights into engagement with said contact plate to complete an electric circuit through said source of electrical energy and said audible signal.

2. In an alarm, the combination with doors, a suitable source of electrical energy, and an electric bell in circuit with said source of electrical energy, of a carrier in proximity to said doors, weights movably supported by said carrier and connected to said doors and adapted to be maintained in an elevated position by said doors being closed, a contact plate supported by said carrier and in circuit with said source of electrical energy and said bell, and a taut wire in connection with said carrier beneath said weights and in circuit with said source of electrical energy for maintaining a normally open circuit adapted to be closed by one of said weights shifting said wire into engagement with said contact plate.

3. In an alarm, the combination with doors, a suitable source of electrical energy, and an electric bell in circuit with said source of electrical energy, of a carrier in proximity to said doors, weights movably supported by said carrier and connected to said doors and adapted to be maintained in an elevated position by said doors being closed, a contact plate supported by said carrier and in circuit with said source of electrical energy and said bell, a taut wire in connection with said carrier beneath said weights and in circuit with said source of electrical energy for maintaining a normally open circuit adapted to be closed by one of said weights shifting said wire into engagement with said contact plate, and means at one end of said carrier for controlling the electrical circuit through said source of electrical energy and said bell.

In testimony whereof I affix my signature in the presence of two witnesses.

HERMAN HESSE.

Witnesses:
WENZL BOXMANN,
JULIUS LÜSK.