Nov. 7, 1933. C. H. GUETTLER 1,934,531

FIRE ALARM

Filed July 20, 1932

Fig. 1.

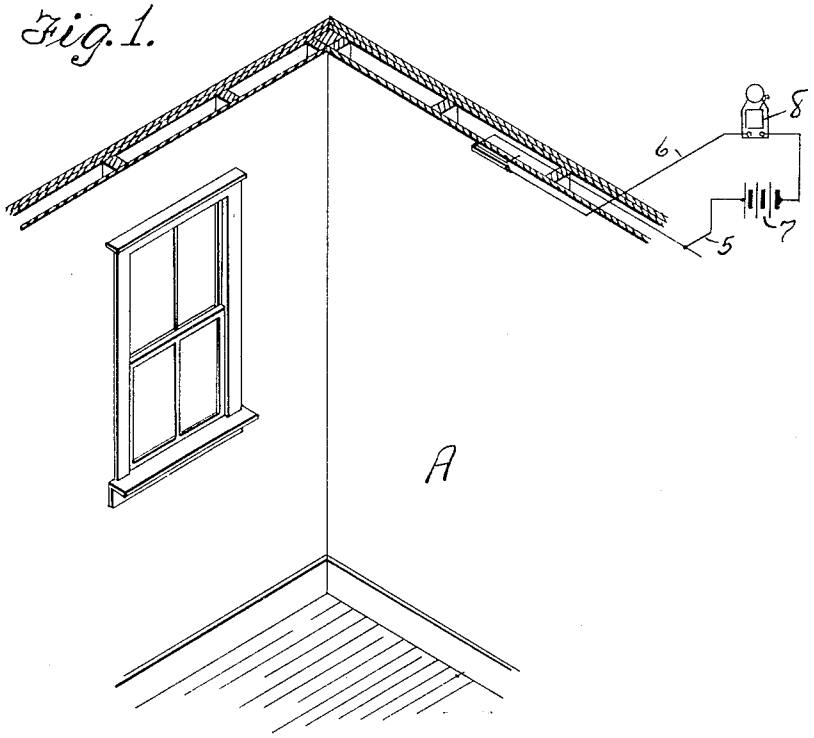


Fig. 2.

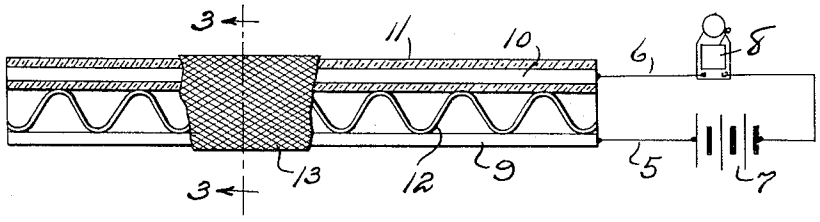
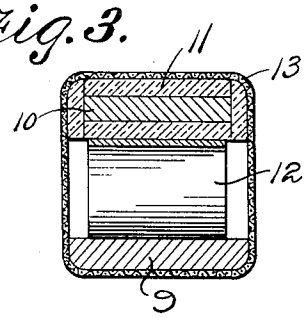


Fig. 3.



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1,934,531

FIRE ALARM

Carl H. Guettler, Chicago, Ill.

Application July 20, 1932. Serial No. 623,657

1 Claim. (Cl. 200—143)

The invention relates to a fire alarm for inclosures, such for example as buildings, barns, garages, sheds or the like.

The primary object of the invention is the provision of a device of this character, wherein a detecting wire of a particular construction is associated with a normally open electric circuit including a signal such as a buzzer, bell or the like, so that in event of the temperature rising above a determined point such wire will be affected so that the circuit will become closed and the signal sounded, thereby indicating conflagration so that persons threatened by the same will have sufficient warning and thus be enabled to save stock, property and the like.

Another object of the invention is the provision of a device of this character, wherein in the use of the fire detecting wire the same is capable of being mounted at any locality within an inclosure so that upon the breaking out of fire or the rising of the temperature within said inclosure beyond a determined point an alarm will be given for signaling purposes.

A further object of the invention is the provision of a device of this character, which is extremely simple in construction, capable of use in any building, barn or other edifice and may be placed under the baseboard or sill, plastered into the wall, located in joists, rafters or beams, thoroughly reliable and efficient in its purpose, and inexpensive to manufacture and install.

With these and other objects in view, the invention consists in the features of construction, combination and arrangement of parts as will be hereinafter more fully described in detail, illustrated in the accompanying drawing, which discloses the preferred embodiment of the invention, and pointed out in the claims hereunto appended.

In the accompanying drawing:—

Figure 1 is a fragmentary perspective view of an inclosure, for example, a room, showing the device constructed in accordance with the invention applied.

Figure 2 is an enlarged elevation partly in section and partly diagrammatic of the device.

Figure 3 is a sectional view on the line 3—3 of Figure 2.

Similar reference characters indicate corresponding parts throughout the several views in the drawing.

Referring to the drawing in detail, A designates generally a portion of an inclosure as for example, a room of a building or other edifice and is of conventional build. Adapted to be located at a selected locality within the inclosure A is the fire alarm constituting the present invention and hereinafter fully described.

The fire alarm comprises a normally open electric circuit including the wires 5 and 6, these having arranged in association therewith a battery 7 and a signaling device 8, in this instance a bell although it may be of another type, such as a buzzer, illuminating device or the like. Of course, in lieu of the circuit which is of independent character this may be arranged in a house wiring system and the current being supplied from external source.

Included in this circuit having the wires 5 and 6 is a fire detecting medium in the nature of a wire composed of a copper strip 9, a celluloid covered strip 10, the celluloid covering being indicated at 11, and an intermediate corrugated spring strip 12, these strips in their number being arranged side by side and confined or enveloped within a fiber sheath or covering 13 simulating the outer covering of an ordinary electric wire, the strips 9 and 10 being connected with the wires 5 and 6 respectively so that the medium is arranged within the electric circuit.

The electric circuit is open until the strips 9 and 10 contact at any point of the medium which would complete the circuit or close the same and thereby cause the sounding of the signal 8. This circuit will be closed or completed whenever the heat at any point along the medium will rise to a degree just before that which would ignite paper, at which degree the celluloid covering 11 will be dissipated, causing the spring strips 12 to effect contact between the strips 9 and 10 and thereby closing the circuit to the signal 8 for the sounding of the same.

The medium hereinbefore described, as shown in Figure 1 of the drawing, is embedded in the plastic wall of the inclosure A although the same may be otherwise arranged within the inclosure as before mentioned.

It is of course to be understood that the fire detecting medium may be of any desirable size and likewise of any length as may be determined upon.

From the foregoing it is thought that the construction and manner of operation of the signal will be clearly understood and therefore a more extended explanation has been omitted.

What is claimed is:—

A fire detecting medium constituting a circuit closer comprising a relatively wide flat copper strip, a celluloid covered strip of a corresponding width to the latter, a corrugated spring strip of a width alike to the other strips interposed between the copper and celluloid covered strips, and a fibrous sheath enveloping all of said strips.

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