W. MAGINOT.

ELECTRIC AUTOMATIC ALARM.

APPLICATION FILED MAY 8, 1912.

1,052,932. **Patented Feb. 11, 1913.**

2 SHEETS—SHEET 1.

Fig. 1

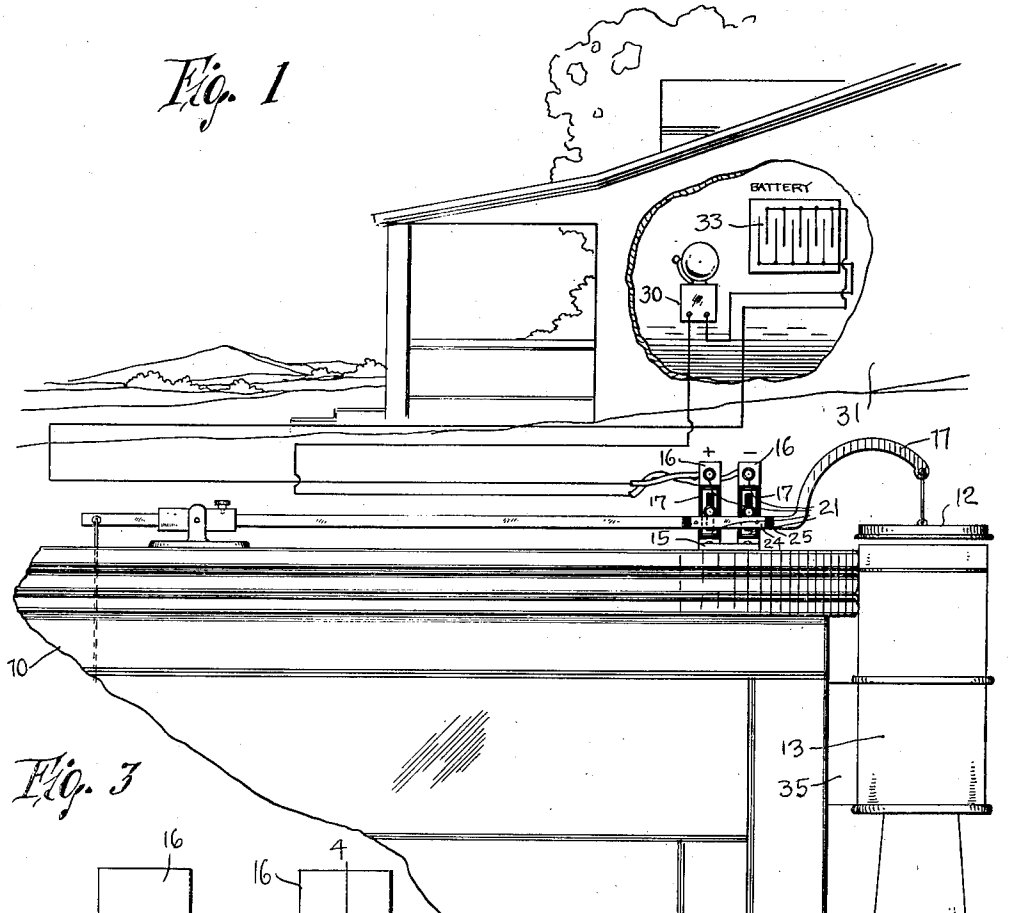


Fig. 3

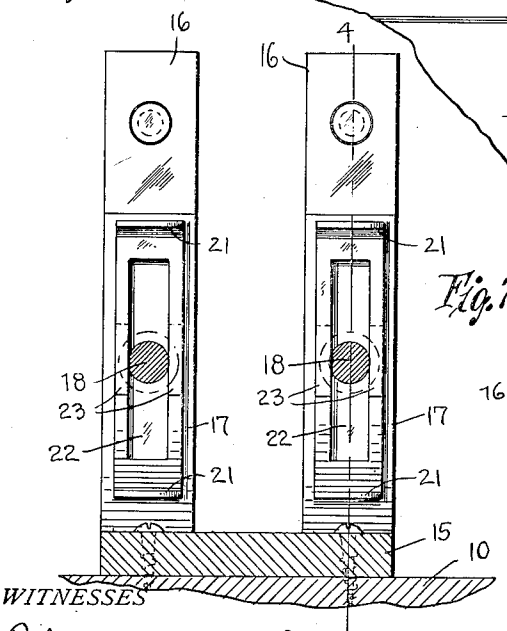


Fig. 7

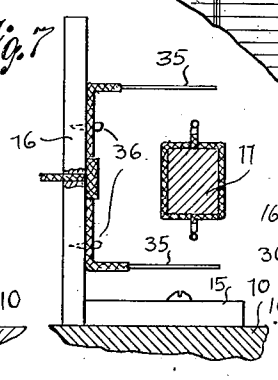
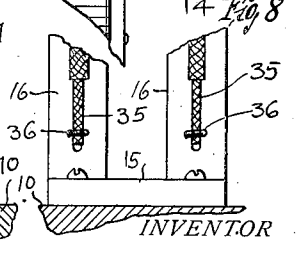


Fig. 8



WITNESSES

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2 SHEETS—SHEET 2.

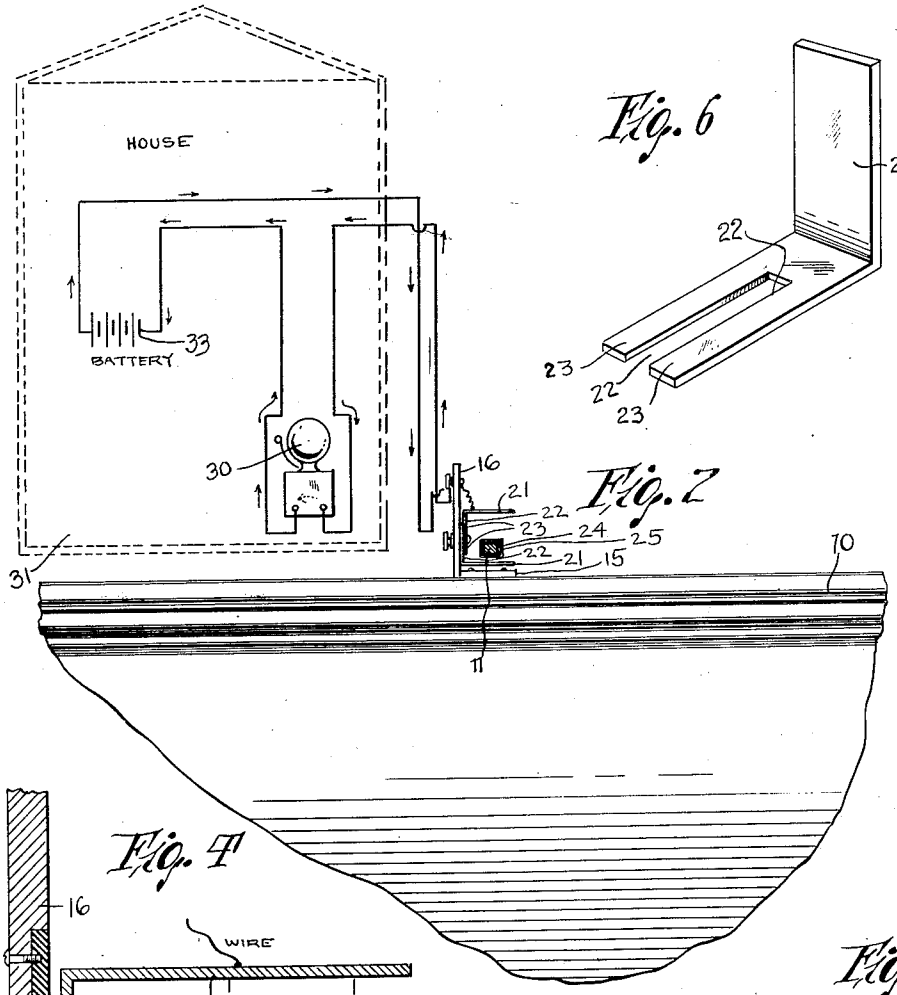


Fig. 6

Fig. 7

Fig. 4

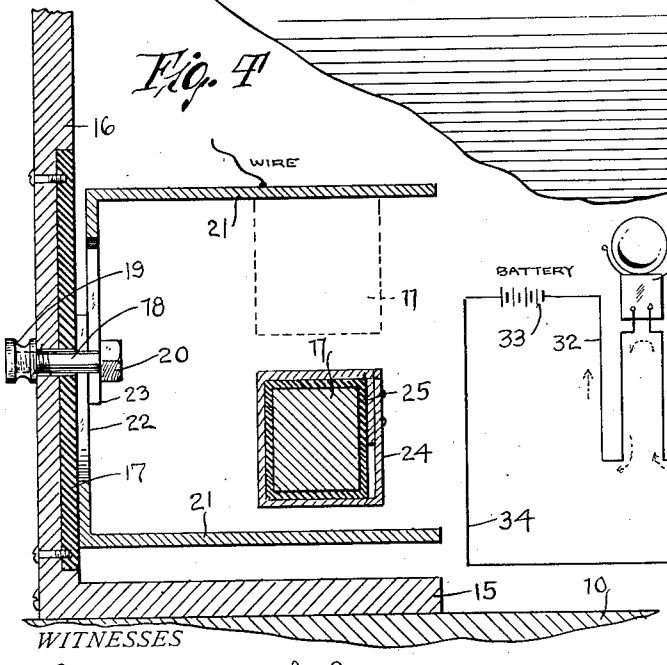
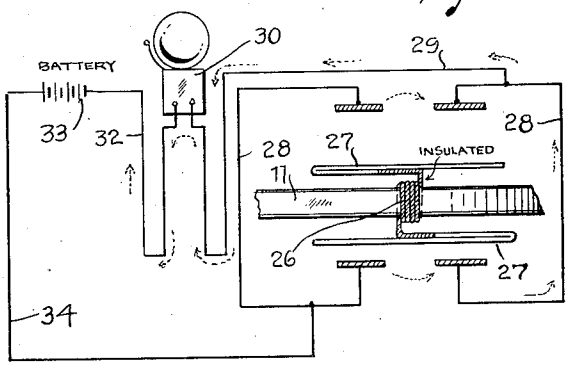


Fig. 5



WITNESSES

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UNITED STATES PATENT OFFICE.

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ELECTRIC AUTOMATIC ALARM.

1,052,932. Specification of Letters Patent. Patented Feb. 11, 1913.

Application filed May 8, 1912. Serial No. 696,013.

To all whom it may concern:

Be it known that I, WILLIAM MAGINOT, a citizen of the United States, residing at Hammond, in the county of Lake and State of Indiana, have invented certain new and useful Improvements in Electric Automatic Alarms, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to alarms and has special reference to an alarm designed to produce a signal when the temperature of an incubator rises or falls above or below predetermined points.

The principal object of the invention is to improve and simplify the general construction devices of this character.

Another object of this invention is to provide an improved contact strip which is of cheap construction and readily made.

With the above and other objects in view, this invention consists in general of certain novel constructions, combinations and arrangements of parts, as will be hereinafter fully described, illustrated in the accompanying drawings, and specifically claimed.

In the accompanying drawings like characters of reference indicate like parts in the several views, and: Figure 1 is an elevation of a portion of an incubator showing the device attached thereto and the alarm located in a house. Fig. 2 is a similar view taken at right angles to Fig. 1. Fig. 3 is a front elevation of the stationary contact pieces. Fig. 4 is a section along the line 4—4, Fig. 3. Fig. 5 is a view showing a modified form of movable contact, the view being partly diagrammatic. Fig. 6 is a perspective view of one of the adjustable contact pieces or fixed contacts. Figs. 7 and 8 are views showing a modified form of contact.

In the present disclosure there is illustrated a portion of an incubator 10 which is provided with the usual thermostatically-controlled damper bar 11 carrying a damper 12, arranged to regulate the opening in a chimney 13 leading from a lamp. Secured adjacent the damper bar is a block of wood or the like 15 extending up wherethrough are spaced strips 16 which may, if desired, have insulation 17 set therein or applied thereto. Extending through each of the strips 16 is a bolt 18 and this bolt is provided with a nut 19 on the back of the strip and a head 20 on the front thereof.

The stationary and adjustable contact pieces each consists of an L-shaped strip of conductive material, such as copper, brass, or the like, as shown at 21, and one leg of the L in each of these strips is provided with a longitudinally extending slot 22 so as to form a pair of arms 23 which straddle the respective bolt 18. Two of these contacts are used on each bolt 18 and one extends above and the other beneath the bar 11. By means of the nut 19 the positions of these contacts may be adjusted so that they will be in proper position for engagement by the movable contact carried on said bar. This movable contact may consist of a metallic band 24 surrounding the bar and insulated therefrom by an insulating sleeve 25, as illustrated in Fig. 4, or it may consist of a strip of insulated wire wound several times around the bar as at 26 in Fig. 5 and then bent to lie longitudinally along the bar and rebent as at 27. This rebent portion has the insulation removed therefrom. Connecting the upper and lower contacts 21 of each pair is a wire 28. To one of the wires 28 is connected the wire 29 which leads to a bell 30 suitably positioned, as for instance in the house 31. From this bell a wire 32 leads to a battery 33 which is connected to the remaining wire 28 by a wire 34.

In the operation of the device when the egg chamber becomes too warm the thermostatically-controlled lever 11 will rise and lift the damper 12 to permit the heat from the lamp to pass out of the chimney without being driven through the lateral passage or tube 35 in the egg chamber. If the lifting of the damper is insufficient to cool the egg chamber the bar 11 will continue to rise and carry with it the movable contact. This will then bridge across the two upper contacts 21. If, on the contrary, the egg chamber becomes chilled and the lowering of the damper does not send sufficient heat into the chamber to stop the chilling, the bar 11 will drop until the movable contact carried thereby engages the two lower contacts and bridges across them. In either event current will flow from the battery 33, through the wire 34, wire 38, one of the contacts 21, movable contact, a second contact 21, a second wire 28, wire 29, bell 30 and wire 32, back to the battery. This will, of course, ring the bell and notify the people in the house that the incubator requires attention.

There has thus been provided a simple and efficient device of the kind described and for the purpose specified.

In the form shown in Fig. 7 there is disclosed a pair of U-shaped wires 35 in place of the L-shaped contacts, and these wires are held in position by suitable staples 36 and have the wires 29 and 34 connected thereto.

While the elements herein shown and described are well adapted to serve the functions set forth, it is obvious that minor changes may be made in the proportions, shape and arrangement of the several parts, without departing from the spirit and scope of the invention as defined and described in the following claim.

Having thus described the invention, what is claimed as new, is:—

In a device of the kind described, a pair of supporting posts, bolts passing through said supporting posts, a pair of L-shaped members each provided with a slot fitted on each of said bolts and having lateral portions in spaced relation, a thermostatically-controlled bar movable between said pairs of L-shaped members, and a contact carried by said bar, said contact comprising a length of wire having a central insulated portion wound around the bar, and terminal uninsulated portions extending along the bar to bridge the upper and lower contacts of each pair.

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

WILLIAM MAGINOT.

Witnesses:

JOHN BOSSARD,

WILLIAM HEFFMON.