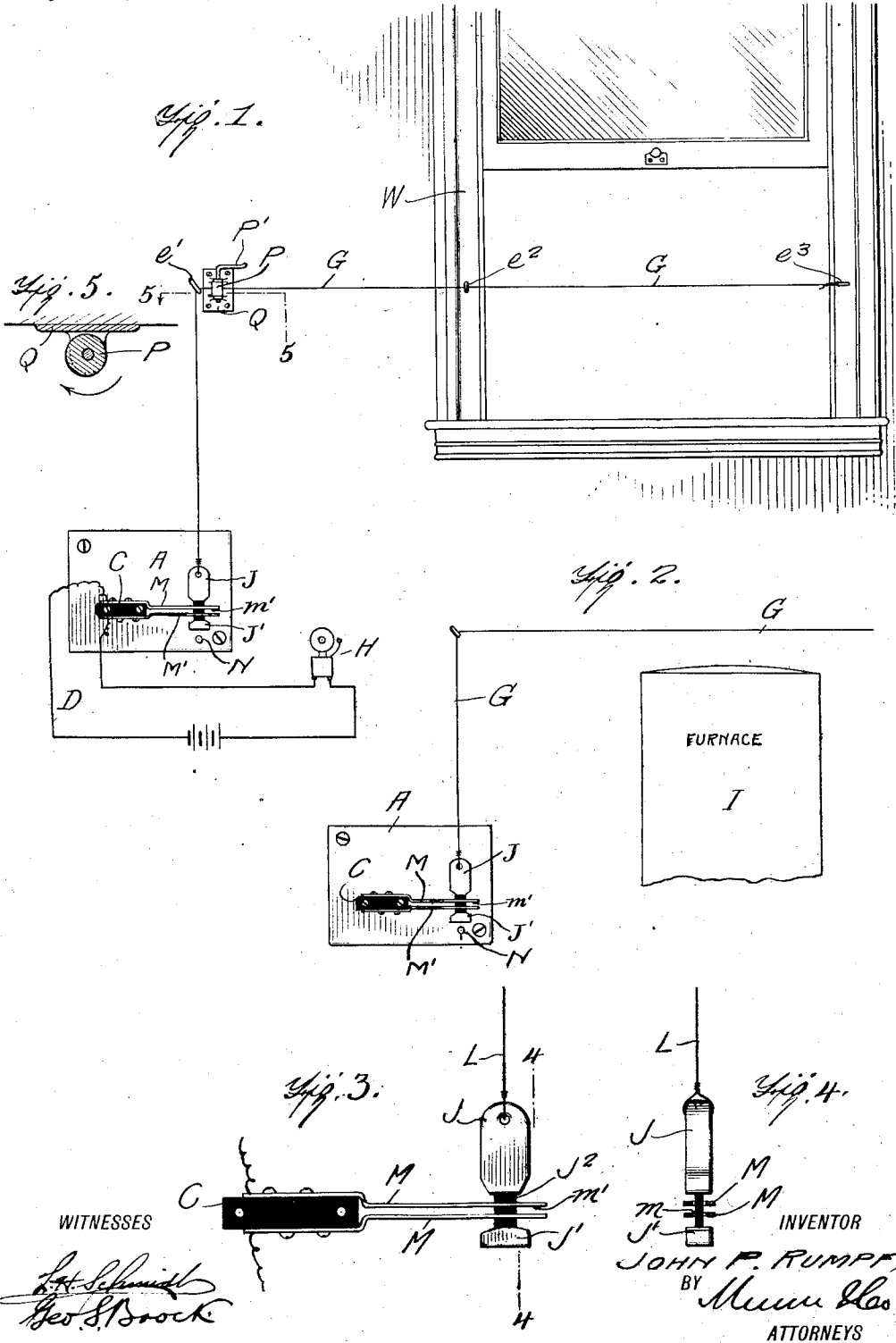


J. P. RUMPF.
 AUTOMATIC BURGLAR AND FIRE ALARM.
 APPLICATION FILED OCT. 5, 1914.

1,246,471.

Patented Nov. 13, 1917.



UNITED STATES PATENT OFFICE.

JOHN P. RUMPF, OF BALTIMORE, MARYLAND.

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To all whom it may concern:

Be it known that I, JOHN P. RUMPF, a citizen of the United States, and a resident of Baltimore and State of Maryland, have invented a new and useful Improvement in Automatic Burglar and Fire Alarms, of which the following is a specification.

My invention relates to improvements in automatic burglar and fire alarms and has for its object to improve and simplify the construction of burglar and fire alarms, and to provide an efficient and inexpensive device of the character which shall be positive and reliable in operation and capable of automatically ringing a bell or alarm in case of an attempt to enter a house surreptitiously or in case of fire or over-heating of a furnace, etc.

To these ends my invention consists of certain novel features of construction, arrangement and combination of parts as will be hereinafter fully set forth and claimed, reference being had to the accompanying drawings, in which:—

Figure 1 is an elevation showing my improvement as applied for use as a burglar alarm,

Fig. 2 is a similar view showing use as a fire alarm.

Fig. 3 is a side elevation of the circuit closer,

Fig. 4 is a sectional end elevation on line 4—4 of Fig. 3, and

Fig. 5 is a sectional view showing the cord clamping means.

In carrying out my invention I use a baseboard suitably insulated and secured to the wall or other part of a room by means of screws or otherwise; mounted on this base board are the contact arms M, M' of a circuit closing mechanism, said arms being formed of thin strips of spring metal preferably brass and spaced apart from each other a suitable distance and secured to the insulated block C at one end; at this end the contact arms are connected to the terminals of a bell circuit D; the free ends of the contact arms M, M' are normally apart through their own resiliency lying substantially parallel, and the upper arm has near its outer end a protuberance m' on its inner face opposite the inner face of the opposing contact arm M'.

Mounted on the baseboard to slide vertically is the circuit closing device J which

as shown in Figs. 1, 2 and 3 lies against the baseboard and may slide vertically thereon. The upper end of J is provided with a hole or opening to which is attached a cord G, which passes to and through the guide eye e', thence through another guide e² fastened to one side of a window frame W and thence across to the other side of a window frame where it is securely fastened as at e³; this cord it will be noticed passes across the open space below the lower sash of the window, so that should a person attempt to get under the cord it will be raised or more likely broken, as the cord is to be a very light and weak one; if the person attempted to get over the cord or put pressure on it from above it will be forced downward or break; in either event the slide J will cause the contact arms to come together, as should the cord be broken the slide will drop by gravity and force the upper arm M with its protuberance m' against the lower arm, thus closing the circuit and causing the bell to ring; if the cord is forced upwardly or downwardly and does not break, the slide will be pulled upwardly forcing the lower contact arm M' against the upper arm M and thus completing the circuit and ringing the bell. The slide J may be made of any suitable material.

In Fig. 2 is shown the manner in which my device may be used as a fire alarm; when so used, the cord G is disposed so that it passes just above a furnace or other heating member I and upon fire breaking out or over-heating, the cord is burnt and becomes ruptured, releasing circuit closing slide J and closing the circuit through the arms M, M' and sounding the alarm.

In the drawing I have shown a modified form of the device in which the circuit closing slide consists of a weighted upper portion J connected to the lower portion J', by an insulated strip J² which passes through aligned openings m m in spring contact arms M M' as plainly shown in Figs. 3 and 4, the slide member being held in its normal position by the cord L, which is applied as shown in Figs. 1 and 2.

As seen in Figs. 1, and 2 a stop N is located beneath the slide so that said slide cannot fall in the event of breakage of the spring contact arms; when it is desired to lock or hold the device out of action or use as during the daytime, for instance, a

pin may be passed through the hole at the upper end of J and rest on the top of the baseboard.

Thus it will be seen that when the cord
5 L breaks the weight of the upper part or abutment J bearing on the upper contact arm causes it to engage the lower contact arm and thus close the circuit and cause an alarm; when the cord is pulled upwardly
10 the action is the same, namely, the lower part or abutment J' lifts the lower contact arm against the upper contact arm and closes the circuit.

To hold the cord so that the device will
15 not operate, as during the day time or when not needed, I use a cord clamp consisting of a cam P mounted vertically on the bracket Q secured to the wall adjacent the guide eye e', said cam having a handle P' extending
20 laterally from the upper end thereof as shown in Figs. 1 and 6. By throwing the handle to one side the same forces the cord

against the bracket and holds it securely in place; to release the cord so that it may act with the other parts of the device, the
25 handle P' is thrown to the other side.

I claim:

A circuit closer for use in an open alarm circuit consisting of two movable contacts normally spaced apart and having alined
30 vertical openings therethrough, a slide movable transversely with respect to the contact arms and consisting of a pair of abutments spaced apart and on opposite sides
35 of the contacts, an insulated strip connecting said abutments and passing through the aforesaid openings in the contact arms, and a cord rigidly secured at one end and at its other end to the upper end of the slide.

JOHN P. RUMPF.

Witnesses:

GEO. S. BROCK,
WM. H. HADAWAY.