No. 681,637. Patented Aug. 27, 1901.

S. C. GUTHRIE.

EXPLOSIVE FIRE ALARM.

(Application filed Dec. 8, 1900.)

(No Model.)

Fig. 1.

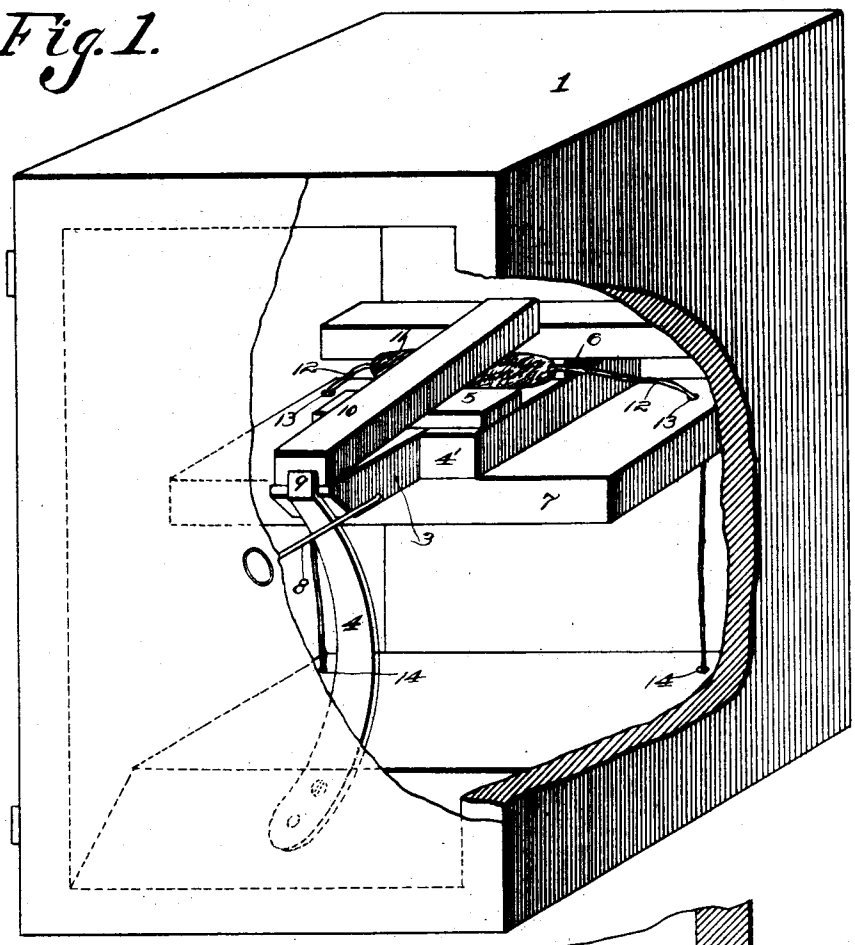
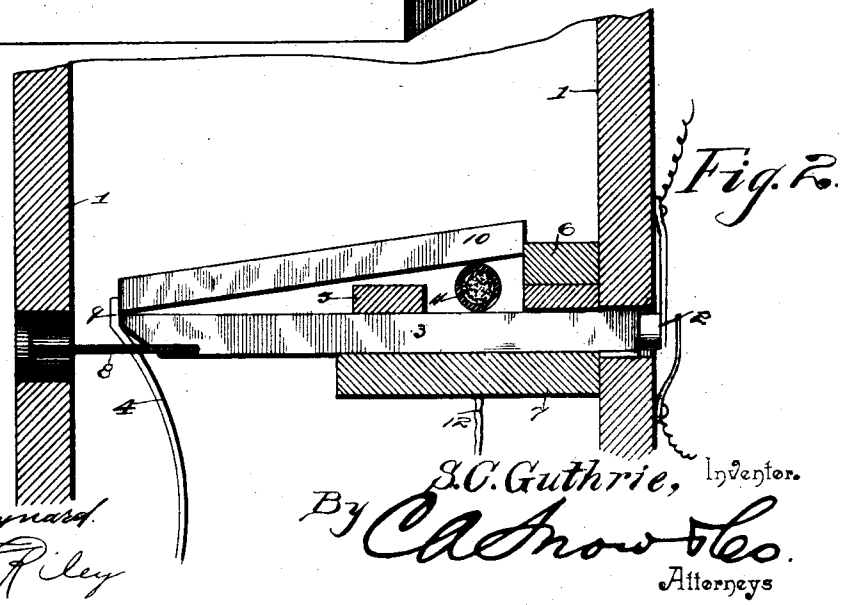


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

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EXPLOSIVE FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 681,637, dated August 27, 1901.

Application filed December 8, 1900. Serial No. 39,151. (No model.)

To all whom it may concern:

Be it known that I, SHERMAN C. GUTHRIE, a citizen of the United States, residing at Findlay, in the county of Hancock and State of Ohio, have invented a new and useful attachment for electric call-bells as an alarm in case of fire in places where such call-bells are used and to be operated by an explosive; and I do declare that the following is a full, clear, and exact description of the invention.

The invention relates to improvements in explosive fire-alarms.

The object of the present invention is to improve the construction of fire-alarms of that class which in event of a fire will automatically close the circuit and ring a bell and to provide a simple and inexpensive device of this character designed to be used in connection with a call-bell and adapted to be readily mounted adjacent to a push-button and capable of automatically engaging the same and of sounding a continuous alarm in event of a fire.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a fire-alarm constructed in accordance with this invention, the casing being broken away to illustrate the interior mechanism. Fig. 2 is a vertical sectional view of the same.

Like numerals of reference designate corresponding parts in both figures of the drawings.

1 designates a metallic box or casing designed to be secured to a wall directly in front of a push-button 2 and provided with a plunger 3, adapted to be actuated by a spring 4 in event of a fire, as hereinafter explained.

The plunger is mounted in a suitable guide or way, preferably composed or bars or cleats 4 and cross-pieces 5 and 6, and these parts—the bars or cleats and the cross-pieces—also form a support for a bomb and are mounted on a shelf 7, arranged within the casing.

The plunger 3 is adapted to reciprocate longitudinally and is located directly in line with the push-button, and it is also connected with the rod 8, extending through the outer wall of the casing and terminating in a suitable head or button and adapted to be pushed inward by hand to operate the push-button and ring the call-bell. The plunger extends to the push-button 2, which is spring-actuated, and the spring thereof is adapted to force the plunger outward after the latter has been operated by hand. The spring, which is adapted to actuate the plunger, is secured at its lower end to the bottom of the casing by a screw or other suitable fastening device, and it is provided at its upper end with an arm or extension 9, projecting above the outer end of the plunger and adapted to be engaged by a setting-bar 10, which is interposed between the bar 6 and the upper free end of the spring and which is adapted to hold the same in a flexed condition, as illustrated in Fig. 1 of the drawings. The setting-bar 10 is supported upon the small bomb 11, which is provided with suitable fuses 12, extending through perforations 13 and 14 of the support and the casing and adapted to be arranged in different portions of a room and to be ignited by a fire therein. In event of a fire the fuses will be ignited and the bomb exploded, which explosion will throw the setting-bar out of engagement with the spring and release the latter. The spring will reciprocate the plunger and depress the push-button, and thereby ring a continuous alarm.

What I claim is—

1. In a device of the class described the combination of a casing provided with a suitable guide or way, a reciprocating plunger mounted in the guide or way and adapted to engage and depress a push-button, a spring arranged to engage the plunger, and a setting-bar holding the spring against movement and adapted to rest upon a bomb and to be thrown by the same out of engagement with the spring, substantially as described.

2. In a device of the class described the combination of a casing designed to be mounted over a push-button and provided with a guide or way, a plunger mounted in the guide or way, a spring arranged to engage the plunger, a setting-bar holding the spring against movement, a bomb for throwing the setting-bar out of engagement with the spring, and

an operating-rod connected with the plunger and extending through the casing to enable the push-button to be operated by hand, substantially as described.

3. In a device of the class described the combination of a casing designed to be arranged over a push-button, a shelf arranged within the casing, a guide or way arranged on the shelf, a plunger mounted in the guide or way, a spring arranged to engage the plunger and secured at one end, a setting-bar engaging the other end of the spring to hold the latter against movement, and a bomb for throwing the setting-bar out of engagement with the spring, substantially as described.

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