

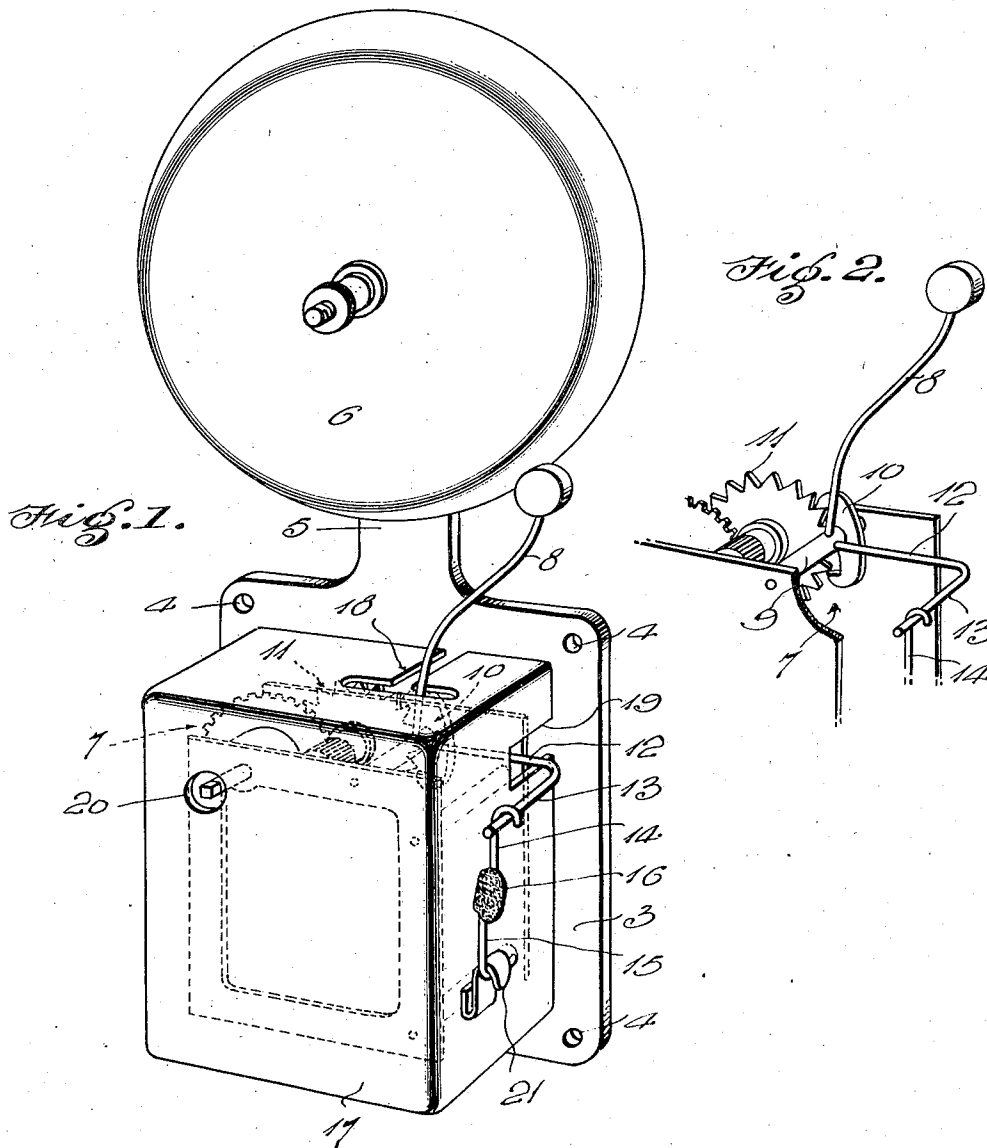
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FIRE ALARM

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UNITED STATES PATENT OFFICE

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FIRE ALARM

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The invention aims to provide an exceptionally simple and inexpensive, yet an efficient and reliable spring-actuated fire alarm which is normally held against operation by a fusible link.

With the foregoing in view, the invention resides in the novel subject matter hereinafter described and claimed, description being accomplished by reference to the accompanying drawing.

Fig. 1 is a perspective view of the complete alarm.

Fig. 2 is a fragmentary perspective view of a portion of the spring-actuated hammer-operating means and the means for normally holding it against operation.

For the sake of simplifying explanation, the device will be described and claimed as if used in a vertical position, it being understood however that it may be advantageously employed in any other position if desired.

The numeral 3 denotes a rectangular back plate having openings 4 for attaching it to a support, the upper end of said back plate being provided with an upstanding neck 5 carrying a gong 6. Suitably mounted at the front side of the back plate 3, is a spring-actuated operating mechanism 7 for a hammer 8, said mechanism employing the conventional escapement arbor 9, the escapement wheel 11 engaging said escapement. The hammer 8 is mounted directly on the arbor 9 and this arbor is also provided with a laterally projecting arm 12 whose outer end 13 is preferably turned forwardly at right angles. This end 13 of the arm 12 is normally held by a fusible link which preferably consists of upper and lower wire hooks 14—15 connected with each other by solder 16 or any other fusible medium.

A casing 17 is provided for the mechanism 7, said casing being connected with the back plate 3 in a conventional manner and having a hammer-receiving slot 18 and another slot 19 through which the arm 12 projects. The casing 17 is also formed with an opening 20 through which a key (not shown) may be inserted to wind the spring of the mechanism 7. One vertical side of the casing is provided

with a hook 21 engaged by the lower hook 15 of the fusible link, the upper hook 14 of this link being engaged with the arm 13.

Normally, the fusible link holds the entire alarm against operation but in case of fire in the vicinity of the alarm, the connection 16 is melted, thereby releasing the arm 12 with the result that the hammer 8 is actuated to sound the alarm.

Not only is the device of extreme simplicity, but it is efficient and reliable and is not liable to get out of order.

I claim:—

1. In a fire alarm, an escapement arbor, an escapement on said arbor, a spring-actuated escapement wheel operatively related with said escapement, an alarm-actuating hammer directly secured to said escapement arbor, a lateral arm also directly secured to said escapement arbor, a fusible link connected at one end with said arm, and an anchor for the other end of said fusible link.

2. A fire alarm comprising a back plate having an upstanding portion, a gong mounted on said portion, a spring-driven mechanism mounted at the front side of said back plate and embodying an escapement arbor, an escapement on said arbor and an escapement wheel engaging said escapement, a hammer secured to and rising from said arbor, a horizontal arm secured directly to and projecting laterally in a horizontal direction from said arbor, a casing over said mechanism and detachably connected with said back plate, said casing having one slot in its top receiving said hammer and another slot in a vertical side through which said arm passes, the outer end of said arm being bent forwardly at right angles and disposed in outwardly spaced parallel relation with said one vertical side of said casing, a rigid hook carried by this side of the casing below said forwardly bent arm end, and a fusible link having hooks at its ends, one of these hooks being engaged with said forwardly bent arm end and the other being engaged with said rigid hook.

In testimony whereof I have hereunto affixed my signature.

WILLIAM M. RILEY. 100