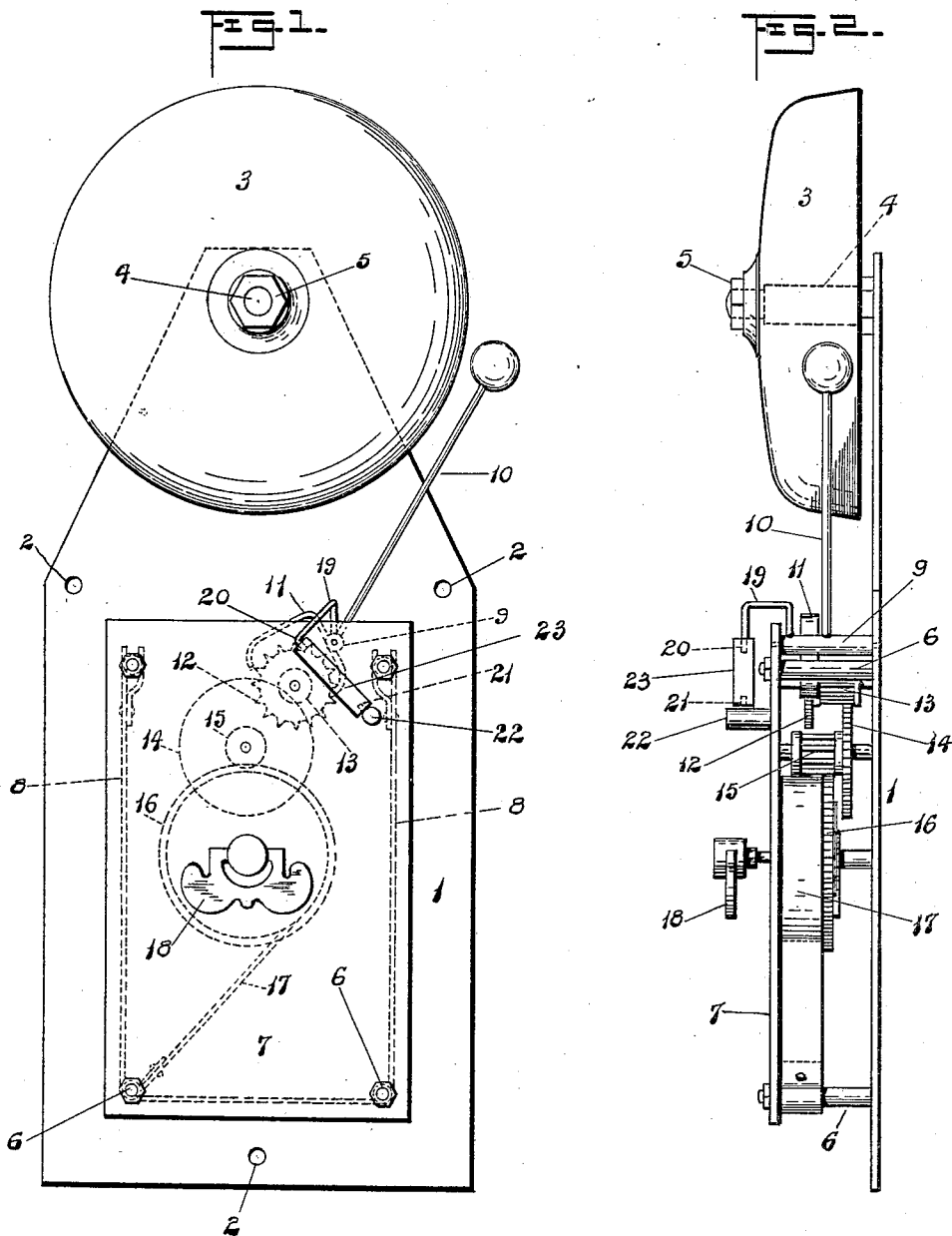


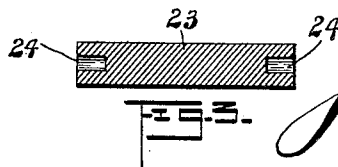
J. MOSMANN.
 AUTOMATIC FIRE ALARM.
 APPLICATION FILED APR. 6, 1909.

1,042,025.

Patented Oct. 22, 1912.



WITNESSES
Friedrich Hermann
Francis E. Dlodgett



INVENTOR
John Mosmann
 BY
Russell M. Everett
 ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN MOSMANN, OF NEWARK, NEW JERSEY.

AUTOMATIC FIRE-ALARM.

1,042,025.

Specification of Letters Patent.

Patented Oct. 22, 1912.

Application filed April 6, 1909. Serial No. 488,223.

To all whom it may concern:

Be it known that I, JOHN MOSMANN, a citizen of the United States, residing at Newark, in the county of Essex and State of New Jersey, have invented certain Improvements in Automatic Fire-Alarms, of which the following is a specification.

The objects of this invention are to provide an automatic fire alarm which can be secured to the wall of a room, or any similar place desired, and be ready for instant operation; to employ a simple spring-actuated construction; to provide a fusible link normally holding the alarm against ringing, which releases the hammer as soon as melted, that cannot drop or work out of place accidentally and cause a false alarm; to obtain such a fusible link which can be readily inserted and removed by the fingers, without any special tools or skill, to thus enable the alarm to be conveniently tested as often as desired; to locate the fusible link in plain sight at the front of the alarm, so that it is easily accessible, and to obtain other advantages and results as may be brought out in the following description.

Referring to the drawings, in which like numerals of reference indicate corresponding parts in each of the several figures, Figure 1 is a front view of an automatic fire alarm of my improved construction; Fig. 2 is an edge view of the same, with the side walls of the casing removed to show the mechanism more clearly, and Fig. 3 is a longitudinal section of the fusible link or prop employed in my automatic fire alarm.

In said drawings, 1 indicates a plate which is adapted to be fastened against a wall or the like wherever it is desired to locate the automatic alarm, by means of holes 2 in itself through which screws or nails may be driven. Upon the end portion of this plate 1 a gong 3 is mounted in any suitable and well-known manner, as by means of a post 4 and nut 5. Struts 6 project from the main portion of the said plate 1, and hold an auxiliary plate 7 in parallel relation thereto and at a little distance therefrom, the said two plates forming a support and bearings for the parts hereinafter described. Side walls 8 may be provided between the two plates 1 and 7, to form a closed casing for the parts between said plates, in any suitable manner.

Between the plates 1 and 7, and preferably at the end of the plate 7 adjacent to

the gong 3, an escapement arbor 9 is pivoted, and which arbor carries a hammer 10 adapted to strike the gong 3. Said arbor 9 also has an escapement 11 of the usual type, and this escapement engages an escapement wheel 12. Said escapement wheel may obviously be rotated in any suitable and well-known manner, although in the drawings I have shown it done by a pinion 13 on the escapement wheel shaft adapted to be driven by a gear 14 having on its shaft a pinion 15 which meshes with a large driving gear 16. Upon the shaft of this large driving gear is a clock spring 17 which can be wound by means of a handle 18 on the projecting end of the shaft of said gear 16, to supply actuating-power, as is common in clockwork. The escapement shaft 9 is also provided with an arm 19, which may be made of stiff wire, and which arm projects around the edge of the plate 7 to overlie its front side, being thereat provided with a bent end forming a pin 20. The said pin 20 is substantially in alignment with another pin 21 fixed upon the plate 7 as by means of a post 22. Between the said opposing pins 20 and 21 is adapted to be inserted a fusible link or prop 23, which has in its opposite ends sockets or recesses 24 adapted to loosely receive the said pins. By pressing the arm 19 backward until the hammer 10 is held away from the gong 3, and springing said arm 19 a little if necessary, the said link or prop 23 can be inserted between the two pins 20 and 21, and will thus lock the apparatus against operation, even though the spring 17 be wound entirely. The said link or prop 23 is made of fusible metal, so that the heat of a fire will melt it and thus release the alarm. By its improved construction the link 23 can be easily and readily inserted by the fingers and does not require any tools or skill on the part of the person doing it. The link is also easily removed, so that if one wishes to test the apparatus he can take the link out for a moment and assure himself that the alarm is in good working condition. At the same time, the link or prop is held securely against displacement under normal conditions, since it cannot move laterally, and there is no danger of a false alarm because of it dropping or working out accidentally. Furthermore the link or prop 23 is exposed at the front of the alarm, so that it will always be in sight,

and is readily accessible and easily reached whenever one desires to do so.

Obviously different forms of escapement or means for oscillating the hammer shaft
5 9, as well as different means for driving said escapement, can be employed without departing from the spirit and scope of my invention.

Having thus described the invention, what
10 I claim is:

In an automatic fire alarm, the combination with parallel supporting plates adapted to stand in substantially vertical position the rear plate being extended beyond the
15 front plate, a gong on the extended portion of said rear plate, an escapement and spring-controlled clockwork adapted to actuate said escapement between said plates, a hammer projecting from the arbor of said es-

capement and adapted to engage said gong, 20
a resilient arm on said arbor extending forward around the edge of the front plate and having a portion parallel to said front plate at a distance therefrom with a projection at the end of said parallel portion, 25
a post on the front plate having a lateral pin in alinement with said projection, the line of said pin and projection being other than vertical, and a fusible prop between said pin and projection having in its op- 30
posite ends longitudinal sockets receiving said pin and projection and holding the hammer away from the gong.

JOHN MOSMANN.

In the presence of—

HUGO WOERNER,

EDWARD F. SCHWARTZ.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,
Washington, D. C."