J. G. NOLEN.

CALL BOX.

APPLICATION FILED NOV. 26, 1902.

1,025,713.

Patented May 7, 1912.

Fig. 3

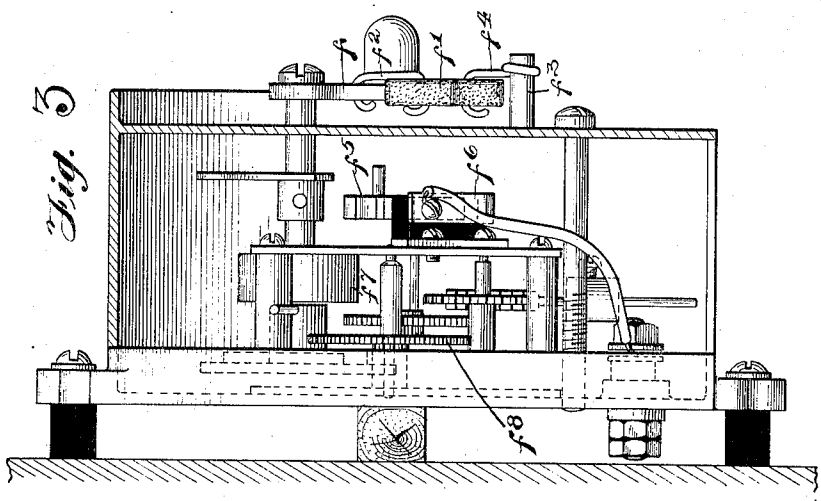


Fig. 2.

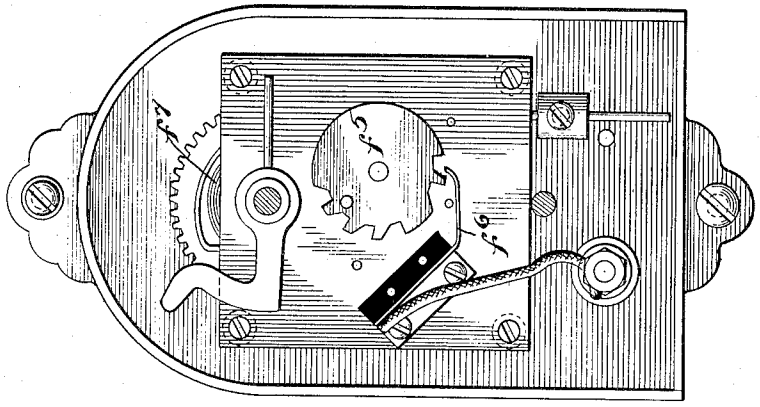
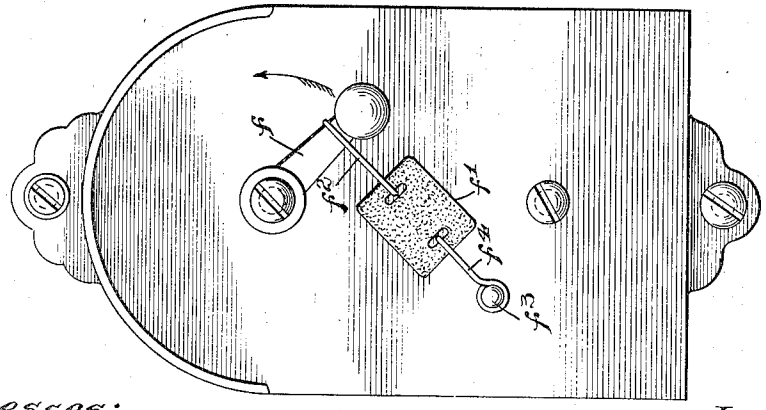


Fig. 1.



Witnesses:

Ira D. Perry

J. B. Weir

Inventor:

James G. Nolen

By Buckley & Duncan

Attys.

UNITED STATES PATENT OFFICE.

JAMES G. NOLEN, OF CHICAGO, ILLINOIS, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF ONE-HALF TO FRANK B. COOK, OF CHICAGO, ILLINOIS, AND ONE-HALF TO AUTOMATIC FIRE PROTECTION COMPANY, A CORPORATION OF MAINE.

CALL-BOX.

1,025,713. Specification of Letters Patent. Patented May 7, 1912.

Application filed November 26, 1902. Serial No. 132,857.

To all whom it may concern:

Be it known that I, JAMES G. NOLEN, a citizen of the United States of America, and resident of Chicago, Cook county, Illinois, have invented a certain new and useful Improvement in Call-Boxes, of which the following is a specification.

My invention relates to improvements in fire alarm call boxes, and more particularly in call boxes wherein there is provided a fusible member for operation to initiate an alarm.

One of the objects of my invention is to provide a call box having a fusible link and attaching means of advantageous character, so that the device shall be cheap, easily set up or disassembled, and efficient in initiating a fire alarm signal.

In the drawings, wherein I have illustrated an embodiment of my invention, Figure 1 is a front elevation of the box, showing the fusible link in position with the box in wound position; Fig. 2 is a view of the interior of the box with the cover removed; and Fig. 3 is a side elevation of the interior and of the fusible link and attaching devices, with parts broken away.

In many systems, it is desirable that there be provided a call box which is normally potentiated to and capable of operating a signal, but which is restrained from operation by a fusible member, which will break down under the influence of predetermined heat, to permit the call box to run. While devices of this general character have heretofore been installed in alarm and signal systems, they have all had disadvantages in the use and manufacture which my invention avoids by the provision of a normally wound spring motor, having a winding handle, a fusible link member, having at each end a slit, and a pair of attaching wires, adapted for detachable engagement in the slits of the link, and with the handle and a suitable post, provided upon the casing.

Specifically, I have illustrated the application of my invention to an ordinary clockwork call box, comprising a spring f^7 adapted to be wound by handle f and operating through gear train f^8 to rotate signal wheel f^5, the notches of which successively coact with contact f^6 to make and break the signal circuit in well-known fashion. The arrangement of the spring and gears is such that the signal wheel f^5 shall stand in position ready for signaling operation and the handle f shall stand in position shown in Fig. 1, when the spring is wound and the mechanism thereby potentiated.

For holding the spring motor in wound position, I provide a fusible connection between the post f^3, upon the casing of the call box and the handle f. Specifically, the connection contemplated by my invention provides a fusible link f^1, of suitable material to break down under predetermined temperature conditions, the link f^1 having at each end an elongated slit, into which engage the attaching members f^2 and f^4 of suitably bent wire. The attaching member f^2 has one end bent for engagement over the handle, as shown in Figs. 1 and 3, and for this purpose the handle preferably provides a thin flat portion over which the bent end of wire f^2 may loosely engage, the other end of the wire being bent for detachable engagement in the elongated slit in the fusible link f^1. The member f^4 similarly has one end bent for engagement in the slit of the fusible link f^1 and its other end curled for engagement around the post f^3, as shown.

Now, it will be apparent that with the structure above described, the handle f, tending to move in the direction of the arrow in Fig. 1, is restrained by the fusible link f^1 and the attaching members f^2 and f^4, and that the connection between the parts is such that variation in the length of the parts or in the relative location of the post and handle does not cramp or otherwise harm the link at the point of engagement between it and the wires f^2 and f^4, so that the link will not be likely to be unduly weakened. Further, it will be seen that after breaking down of the link, following occurrence of the predetermined temperature conditions, and the operation of the clockwork to rotate the signal wheel f^5 and move handle f to a position at substantially right angles to its position in Fig. 1, the handle may be readily returned to the position shown, the members f^2 and f^4 hooked in the elongated slits in a new fusible link f^1, and the device thus prepared for operation anew. Thus, the arrangement and coaction of the parts

makes for increased efficiency in operation and ease and convenience in use, while the parts are all easily and cheaply made.

It will be apparent that slight changes in the form of the parts, such as the form of handle and the particular engagement between it and the wire, may be made without departing from the novel correlation of parts herein described and within the scope of the following claim:

A device for the purposes described, comprising a casing, signaling means, a spring motor, a rotarily movable handle for winding the motor, a stud upon the casing at a distance from the said handle when the latter is in wound position, a fusible link, and connecting wires, one detachably fastened around the stud, and detachably connected with the fusible link, and the other detachably connected to the link at its opposite end and adapted to be hooked over the rotarily movable handle when it is in wound position, whereby to maintain the handle in wound position, and when the link is fused to release the handle for operation of the spring motor of the signaling means to transmit a signal over the line.

Signed by me at Chicago, Cook county, Illinois, this 21st day of November, 1902.

JAMES G. NOLEN.

Witnesses:
HARRY P. BAUMGARTNER,
WM. A. HARDERS.