

H. J. HEENEY.
 SIGNAL DEVICE.
 APPLICATION FILED OCT. 10, 1907.

931,604.

Patented Aug. 17, 1909.

Fig. 3.

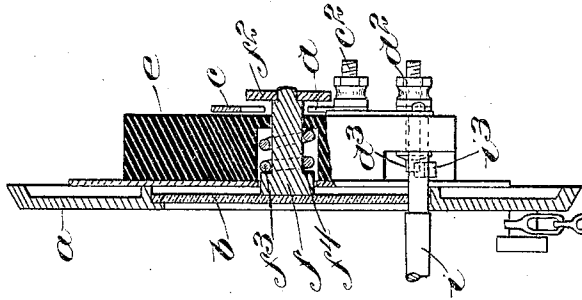


Fig. 2.

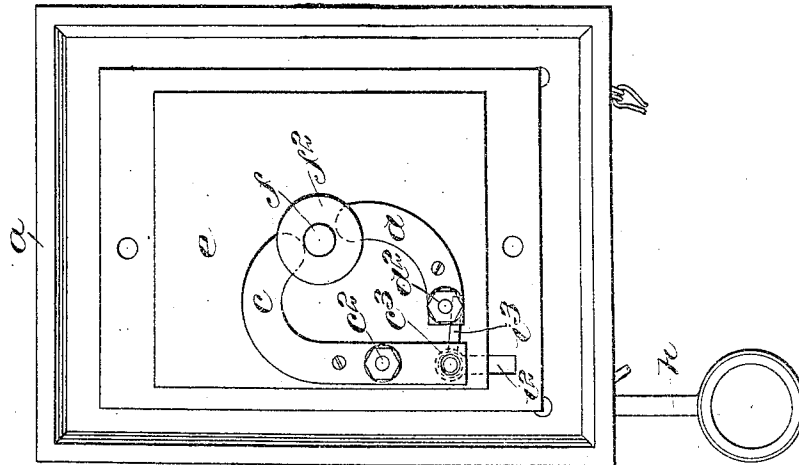
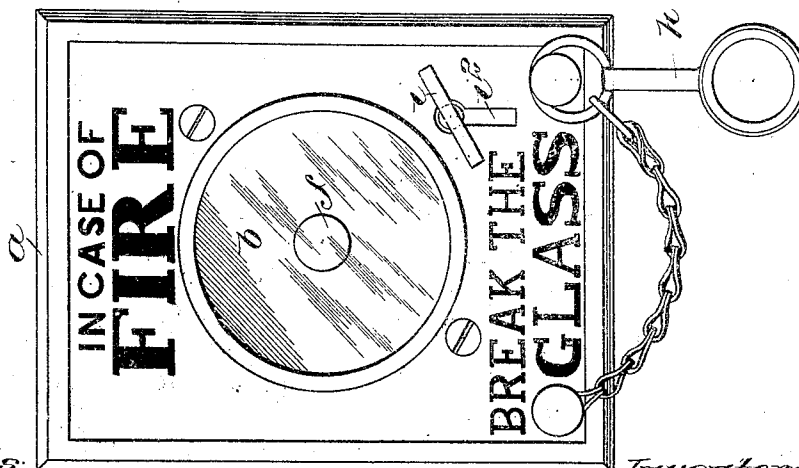


Fig. 1.



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UNITED STATES PATENT OFFICE.

HENRY J. HEENEY, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HOLTZER-CABOT ELECTRIC COMPANY, A CORPORATION OF MASSACHUSETTS.

SIGNAL DEVICE.

No. 931,604.

Specification of Letters Patent.

Patented Aug. 17, 1909.

Application filed October 10, 1907. Serial No. 396,749.

To all whom it may concern:

Be it known that I, HENRY J. HEENEY, a citizen of the United States, residing in Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Signal Devices, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

The present invention relates to a signaling device, and is embodied in an alarm signal of that class in which the signal actuating mechanism is inclosed in a destructible case, so that, when there is any reason for giving an alarm, the case may be broken and the signaling actuator reached for operation.

In accordance with the present invention, the signaling circuit is automatically closed upon the destruction of the inclosing case, the device being shown as an electric signal having two cooperating contacts mounted on a support of insulating material within the case, one of said contacts being acted upon by a spring which is held out of action by the destructible part of the case.

The device is further provided with a testing appliance by means of which the signal can be tested from time to time without destroying the casing, this being accomplished in the case of an electric signal by means of a detachable circuit closer which is adapted to be inserted in the casing and moved to a position to close the circuit.

Figure 1 is a front elevation of a device embodying the invention; Fig. 2 is a rear elevation of the parts within the case, the back portion of the case being removed; Fig. 3 is a vertical section through the middle of Fig. 2.

The signaling device embodying the invention is herein shown as an electric signal and consists in an inclosing case *a* which is preferably of metal, the said case being provided with an easily destructible portion *b*, which is preferably a pane of glass set into the front wall of the case. The electric terminals *c* and *d* which are connected through the binding posts *c'* and *d'* with the circuit wires leading to the alarm signal are inclosed within the case and mounted on a block of insulating material *e* such, for example, as a block of wood supported on the inner surface of the face or cover of the case.

To close the circuit in case of need, the

terminals *c* and *d* are arranged to be electrically connected by means of a bridging member *f* which is herein shown as a longitudinally movable pin or rod provided at one end with a disk *f'* of conducting material which is adapted to bridge the terminal members *c* and *d* to close the circuit. The member *f* is acted upon by a spring *f''* which bears at one end upon a shoulder formed in the support *e* and at the other end against a shoulder *f''* formed on the member *f* so that the tendency of the spring is to push the member *f* to the left (Fig. 3) and bring the disk *f'* into contact with the terminals *c* and *d*. The member *f*, however, in accordance with the invention, is arranged to bear against the destructible portion *b* of the case which is herein shown as a pane of glass supported in the front of the case in such position as to act against the spring *f''* and normally hold the disk *f'* out of contact with the members *c* and *d*. It is obvious, however, that the destruction of the member *b* will release the member *f*, thus allowing the spring to act so as to close the circuit. The case may be provided with a small hammer *h* hung on the outside of the case so that the glass front can be broken at a moment's notice in case of need.

In order that the signal circuit may be tested from time to time, so as to ascertain if it is in operative condition, the device is provided with a testing key *i*, adapted to be inserted through an opening *i'* in the front of the casing, the arrangement being such that upon the insertion of the key and the partial turning of the same, the contact members within the casing will be bridged, thereby closing the circuit and causing the alarm to be sounded. In the construction shown, the key which is similar to an ordinary door key, is so arranged that the shank portion will fit an opening *c''* in the member *c*, while the tongue portion *i''* can be turned so as to engage an extension *d''* from the binding post *d'*. Thus, while the circuit terminals are completely inclosed so that they cannot be tampered with or put out of order except by breaking the glass, it is possible, by means of the testing key, to close the circuit from time to time to ascertain that the device is in operative condition.

Claims.

1. A signaling device comprising a case having an opening in the front face and

10 mally closed by a wall portion of easily destructible material such as glass; a support of insulating material within the case, said support having a recess extending inward
5 from the front, and an opening of smaller diameter at the bottom of said recess; contact springs mounted on the back of said support; a bridging piece overlying said contact
10 springs, and mounted on a stem projecting through said support into contact with the destructible wall portion; and a spring contained in the recess to draw the bridging
15 piece into contact with the contact springs upon the destruction of said wall.
2. A signaling device comprising a closed
15 case; a support of insulating material within the case; normally separated contact springs mounted on the back of said support; a
spring actuated bridging piece adapted to
20 bridge said contact springs; a destructible

wall holding said bridging piece out of bridging contact; an opening through the case; an opening through the insulating support in alinement therewith and with one of the contact springs; a projection of conduct- 25
ing material extending from the other contact spring into a recess in the front of the support adjacent to said opening; and a testing key having a shank adapted to extend
30 through said opening and a lateral projection adapted to be brought into engagement with said projection when the key is turned.

In testimony whereof, I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY J. HEENEY.

Witnesses:

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