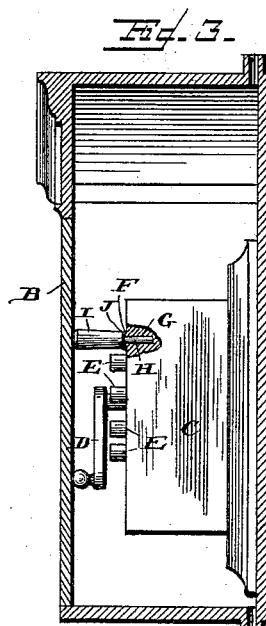
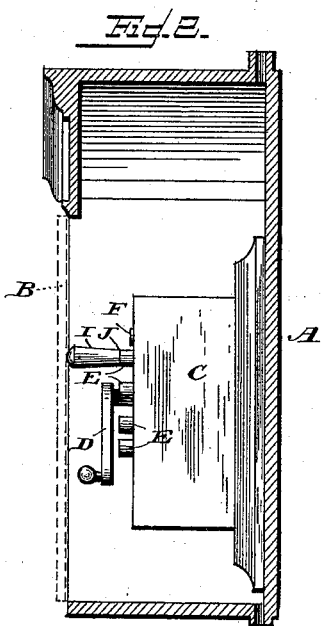
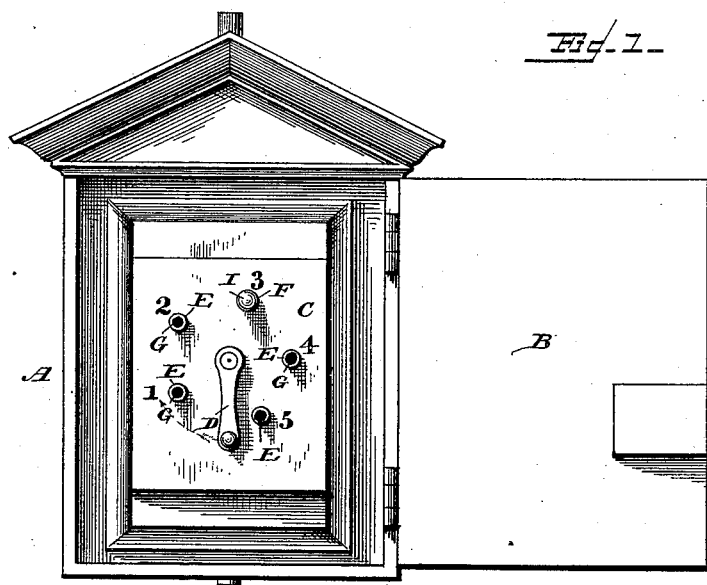


(No Model.)

S. A. CHASE.  
FIRE ALARM SIGNAL BOX.

No. 345,572.

Patented July 13, 1886.



WITNESSES  
*C. H. Curran*  
*Edward Stanton*

INVENTOR  
*Sidney A. Chase*  
By *Louis Bagger & Co.*  
Attorney-S.

# UNITED STATES PATENT OFFICE.

SIDNEY A. CHASE, OF EVART, MICHIGAN, ASSIGNOR OF ONE-HALF TO  
WILLIAM R. MAPES, OF SAME PLACE.

## FIRE-ALARM SIGNAL-BOX.

SPECIFICATION forming part of Letters Patent No. 345,572, dated July 13, 1886.

Application filed March 29, 1886. Serial No. 196,978. (No model.)

*To all whom it may concern:*

Be it known that I, SIDNEY A. CHASE, a citizen of the United States, and a resident of Evart, in the county of Osceola and State of Michigan, have invented certain new and useful Improvements in Fire-Alarm Signal-Boxes; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figure 1 is a front view of a fire-alarm box provided with my improvement, showing the door of the outer box opened. Fig. 2 is a vertical sectional view of the same, and Fig. 3 is a similar view showing the door of the outer box closed.

Similar letters of reference indicate corresponding parts in all the figures.

My invention has relation to that class of signal-boxes in which a plug may be secured removably in any one of a number of perforations arranged in a circle around the center of the operating-crank, for the purpose of acting as a stop for the said crank, and for the purpose of preventing the said crank from being turned too far or not far enough in giving a signal; and it consists in the improved construction and combination of parts of such a box inclosed in an outer box, in which the apertures are made in lugs arranged in a circle around the shaft of the crank, and in which the pin or plug is provided with a shoulder to bear against the end of the lugs, one of the lugs being shorter than the others, so that the door of the outer box or casing may only be closed when the plug is in the short lug, while the door may not be closed when the plug is in any of the other lugs, as hereinafter more fully described and claimed.

In the accompanying drawings, the letter A indicates a box, which may be provided with a hinged or sliding door, B, of any suitable construction, and provided with any suitable means for locking it, and C is the signal-box, which is provided with the usual crank, D, in the center of its face, and with the usual means for giving a number of different signals, according to the point upon the face or dial of

the box to which the crank is carried before releasing it.

The face or dial of the box is provided with a number of lugs, E, arranged in a circle around the shaft of the crank, and one, F, of these lugs is shorter than the others; and these lugs are formed with perforations G, into which the reduced end H of the plug I may fit, bearing with its shoulder J against the end of the lug.

The door of the outer box or casing is so located that it may be closed when the plug is inserted into the perforation of the low lug, while it may not be closed when the plug is in the perforations of any of the other lugs, and each lug has a number which corresponds to the number of an alarm-box in the circuit of alarms, and the low lug has the number of the box within which the alarm-box is secured, so that the crank will turn in the alarm corresponding to that box when the plug is in the low lug and the crank is turned to that plug.

It will thus be seen that the plug may be moved to any one of the lugs upon the face of the alarm-box, allowing a person to send in an alarm for another box from one box, and thus enabling the person sending in the alarm to send in the alarm for the exact locality in which the fire occurs without obliging him to go to the said locality and thus lose time, or without calling the assistance to the wrong locality, and thereupon directing them to the correct locality, as would happen if the alarm is sent out from the wrong locality, and the person sending in the alarm would thereupon have to wait and direct the assistance to the correct locality.

Although this box is principally designed as a fire-alarm box, it follows that it may be used as a common signal-box, the low lug indicating some principal signal which is most generally used, while the other lugs may register with alarms of various kinds. The plug may be attached in any desired manner, although it is shown in the drawings as being free and without any attachment.

I am aware that it is not new to construct signal-boxes with a removable plug fitting into a number of perforations upon the face of the box, which perforations register with different calls or signals, the plug serving as a stop for

the signal-crank, and I do not desire to make broad claims for such constructions; but

I claim and desire to secure by Letters Patent of the United States—

5 1. In a signal-box, the combination of an inner box having a crank at the center of its face operating the signal mechanism, and provided with a series of perforations arranged circularly around the crank-shaft and having  
10 the surrounding portions of one perforation at a lower level than the others, a plug fitting in the perforations and bearing with its shouldered portion against the surrounding portions, and an outer box or casing having a door  
15 at a distance from the surroundings of the lower perforation equal to the length of the shouldered part of the plug, as and for the purpose shown and set forth.

2. In a signal-box, the combination of an  
20 inner box having a signal-operating crank, and provided with a circular series of lugs upon its face arranged around the shaft of the crank and having perforations, and having one lug shorter than the others, a shouldered plug  
25 fitting with its reduced end in the perforations of the lugs, and an outer casing or box having a door at a distance from the end of the lower lug equal to the length of the shouldered portion of the plug, as and for the purpose shown  
30 and set forth.

3. In a signal-box, the combination of an inner box having a dial provided with a number of lugs formed with perforations, and having each a number, and having the lug having the number corresponding to the number of 35 the outer box lower than the others, a shouldered plug fitting in the perforations of the lugs, and an outer box having a door at a distance from the end of the lower lug equal to the length of the shouldered portion of the 40 plug, as and for the purpose shown and set forth.

4. As an improvement in automatic fire-alarm signal-boxes, the combination, with an inner box cover or dial having perforations 45 formed therein at different circumferential positions, one of these perforations having its rim on a lower plane than the others, and a plug adapted to fit adjustably in said perforations, and to prevent the outer-box door from 50 closing, while the plug remains in any perforation except the one having the lowest rim, as and for the purpose shown and set forth.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature 55 in presence of two witnesses.

SIDNEY A. CHASE.

Witnesses:

L. F. SOUTHWORTH,  
C. O. TRUMBULL.