(No Model.)

H. SMITH.

KEY HOLE GUARD FOR FIRE ALARM SIGNAL BOXES.

No. 380,357. Patented Apr. 3, 1888.

Fig. 1.

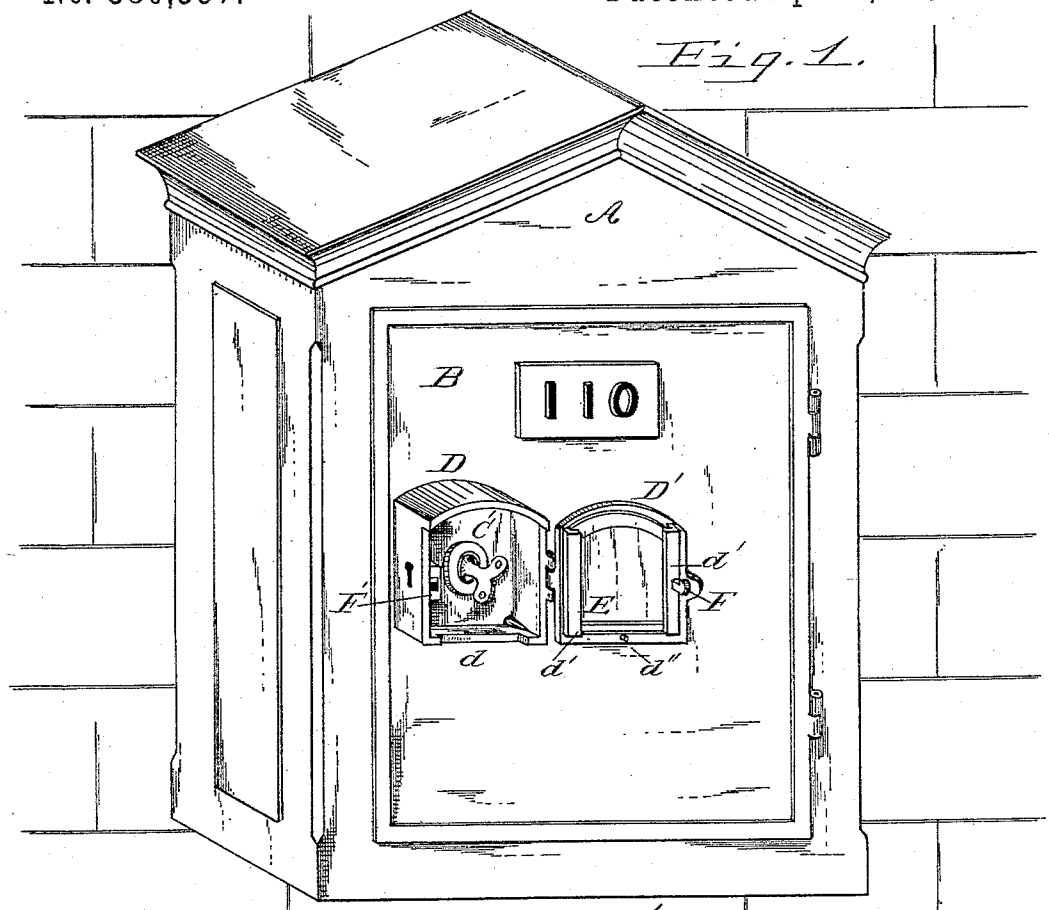


Fig. 3.

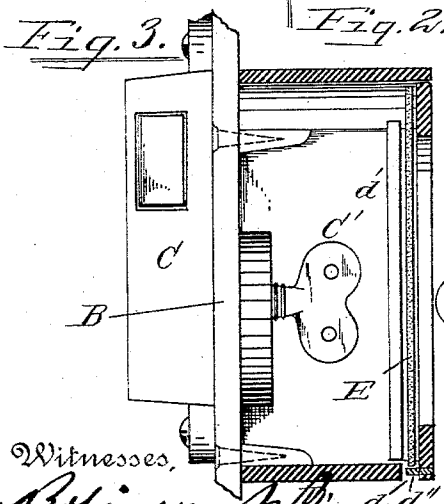


Fig. 2.

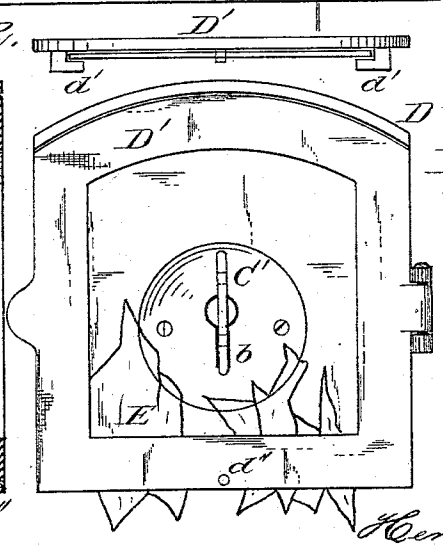


Fig. 4.

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UNITED STATES PATENT OFFICE.

HENRY SMITH, OF BUFFALO, NEW YORK.

KEY-HOLE GUARD FOR FIRE-ALARM SIGNAL-BOXES.

SPECIFICATION forming part of Letters Patent No. 380,357, dated April 3, 1888.

Application filed December 22, 1887. Serial No. 258,689. (No model.)

To all whom it may concern:

Be it known that I, HENRY SMITH, a citizen of the United States, residing at Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Key-Hole Guards for Fire-Alarm Signal-Boxes; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters and figures of reference marked thereon, which form a part of this specification.

My invention relates to fire-alarm systems, and its object is to facilitate the turning in of an alarm by so constructing the signal-box as to save time in opening it and setting the mechanism in operation.

It is customary to lock signal-boxes with an ordinary key, which is then deposited at some store or dwelling in the neighborhood, sometimes at the distance of a block from the signal-box. When a fire breaks out, valuable time is consumed in going to the place where the key is kept, rousing up the inmates, procuring the key, and returning to the box. Furthermore, the key is liable to be lost or mislaid, especially in the confusion attending a fire.

My invention obviates all these difficulties, and will be clearly understood from the accompanying drawings, the especial novelty being pointed out in the claim hereunto annexed.

Figure 1 represents a signal-box with my improvements applied thereto. Fig. 2 is a plan view of the door of the guard-casing. Fig. 3 is a vertical section, and Fig. 4 a front elevation of the guard-casing.

The same letters indicate like parts in all the figures.

The signal-box A is of the ordinary construction, having a door, B, provided with a lock, C, and a key-hole, *b*. In order to prevent the loss of the key C', I attach it permanently and irremovably to the lock in any convenient manner, so that it is always in place and ready for use, and no time need be lost in procuring it. In order, however, to prevent mischievous or malicious tampering with the key and box, I surround the key-hole and key with a guard-casing, D, which is firmly attached to or formed integral with the door B. The casing may be of any desired shape, but is preferably a rectangular box, as shown. The front of the box is hinged, forming a door, D'. The top of the box projects, so as to cover the upper edge of the door when the latter is closed. The bottom of the box is cut away in front at *d*, for a purpose hereinafter explained.

The door D' consists of an open frame, as shown. On its back and parallel with the sides are fastened flanged strips *d'*, so located as to be received within the box when the door is shut. A panel of glass, E, is loosely held between the door and the flanges of these strips, its lower edge resting on a pin, *d''*, inserted in the bottom rail of the door. When the door is shut, the glass is held above the recess *d* in the bottom of the casing. A catch, F, and lock F' secure the door when closed.

Whenever it is necessary to turn in an alarm, the glass panel can be broken, thereby giving immediate access to the key C'. The pieces of broken glass fall through the recess *d* in the bottom of the casing, as illustrated in Fig. 4, thus relieving the operator from the danger of cutting his hands while manipulating the key C'. Upon unlocking and opening the casing-door D' another glass panel can be slipped down between the flanged strips *d'*, and when the door is closed again the signal-box is once more ready for use. The key to the casing D may be carried by the police officer patrolling the district in which the box is located, or by one of the fire-department officials, who will also keep on hand a supply of extra glass panels to replace those that are broken.

By having the key C' permanently fastened to the lock it cannot be carried off by unauthorized persons, even though the casing D is left open. The casing not only prevents improper meddling with the key, but protects the key-hole and lock from rain, snow, and ice. It may therefore be advantageously applied to the ordinary signal-boxes, which do not have a permanently-attached key, in which event the key may be stored in the casing D, ready for instant use when wanted.

Printed directions may be placed in the cas-

ing, either at the back or upon the glass panel, instructing persons how to give an alarm. Instead of glass, some other easily-frangible material may be used for the door-panel, such as a clay tile or mica, or even waterproofed paper.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The improved key-hole guard for fire-alarm boxes hereinbefore described, consisting of the casing D, having the recess *d*, and the door D′, provided with the flanged strips *d′*, the pin *d″*, and the frangible panel E, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY SMITH.

Witnesses:

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