(Model.)

W. H. FLINN.

KEY FASTENER.

No. 290,876. Patented Dec. 25, 1883.

Fig. 1.

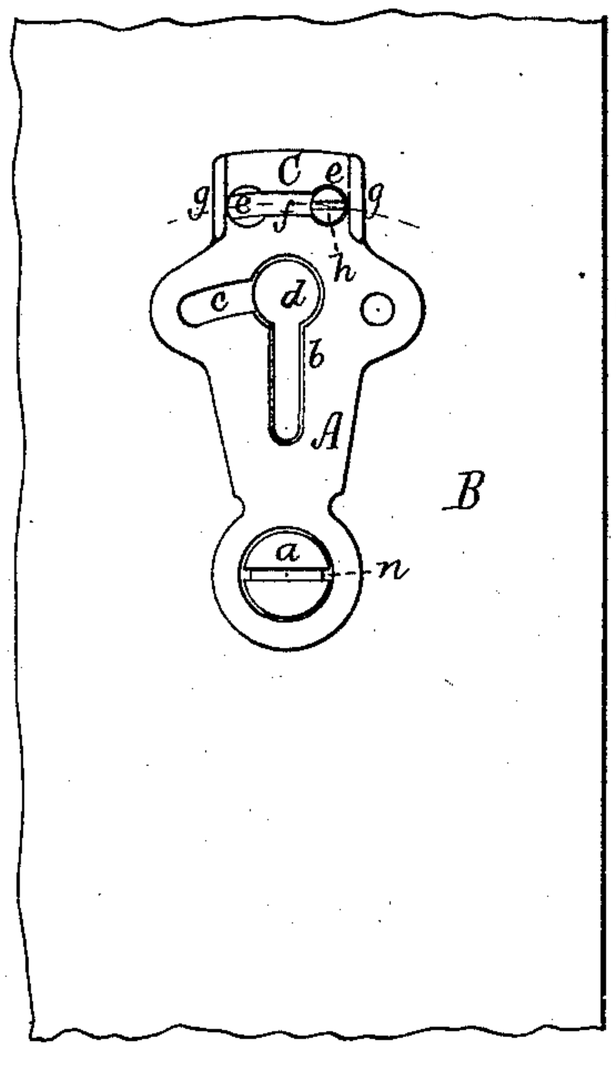


Fig. 2.

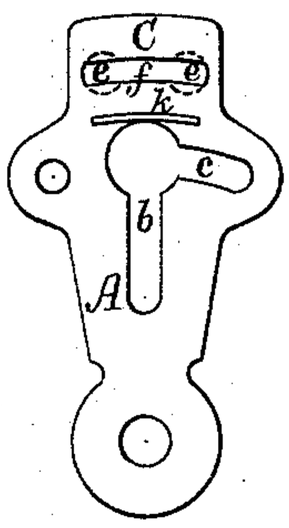


Fig. 3.

Fig. 4.

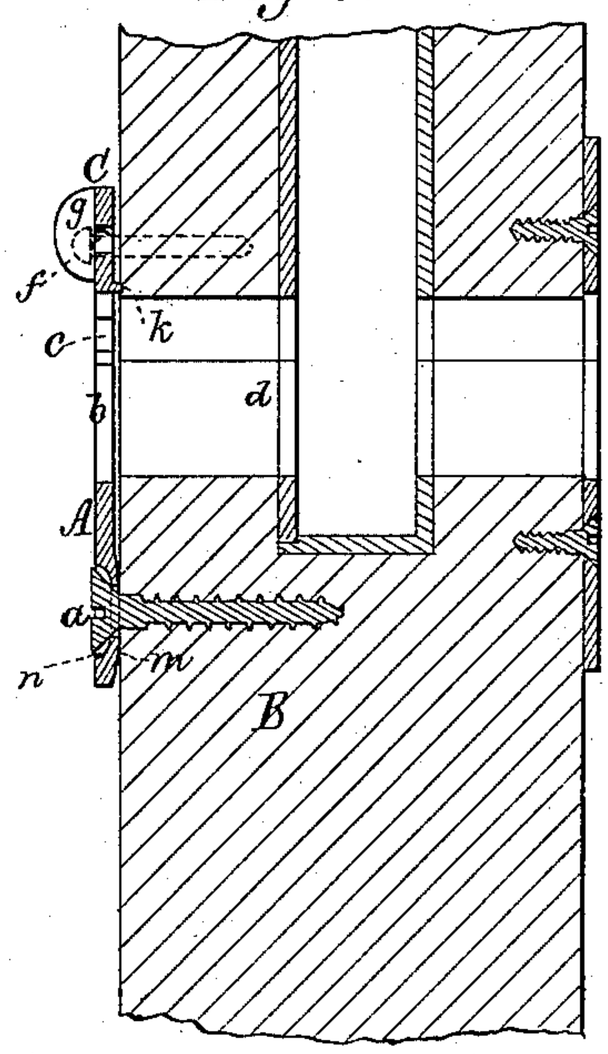


Fig. 5.

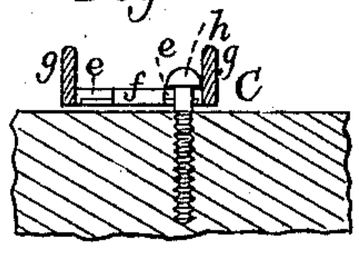


Fig. 6.

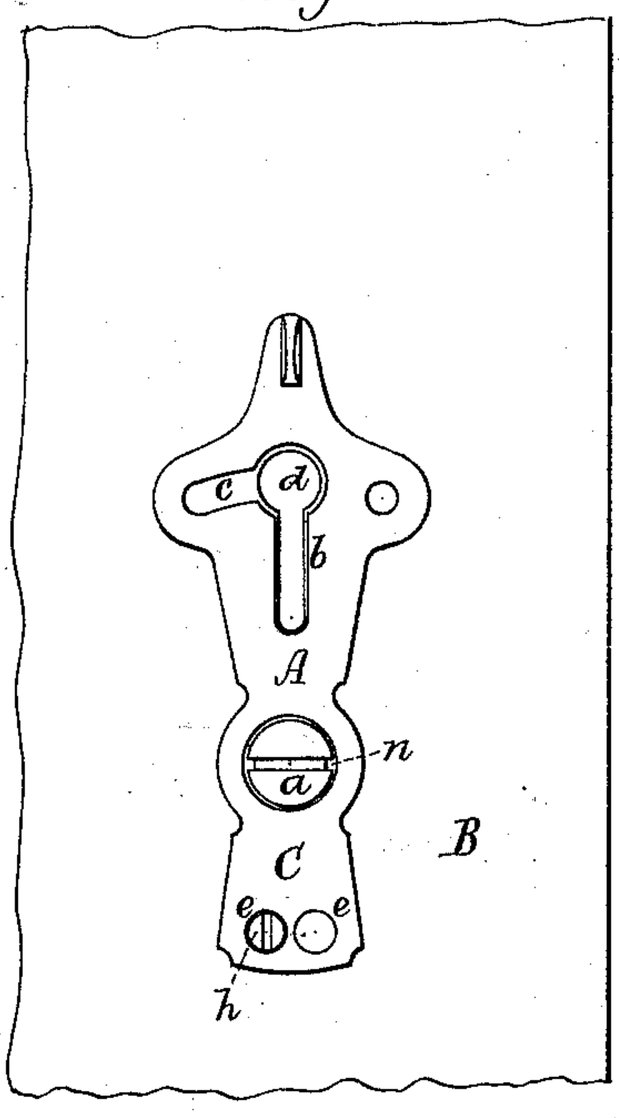


Fig. 7.

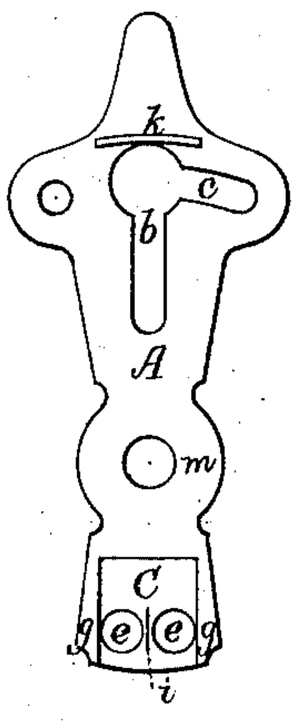


Fig. 8.

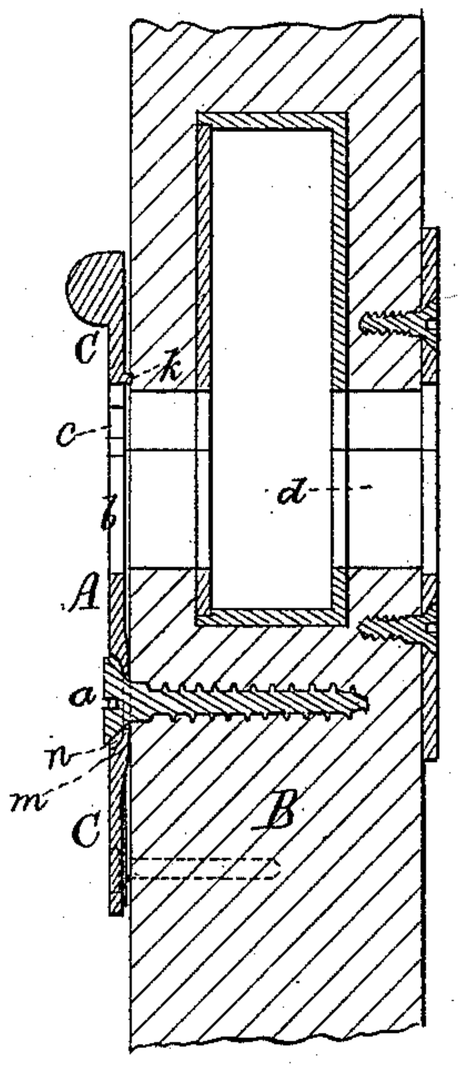
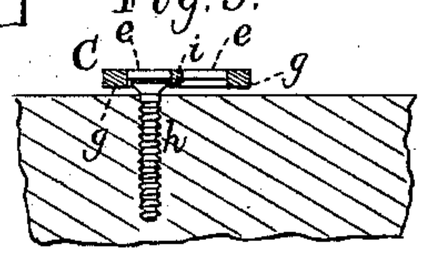


Fig. 9.



Witnesses.

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E. B. Pratt

Inventor.

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by R. K. Eddy atty.

UNITED STATES PATENT OFFICE.

WILLIAM HENRY FLINN, OF NASHUA, NEW HAMPSHIRE.

KEY-FASTENER.

SPECIFICATION forming part of Letters Patent No. 290,876, dated December 25, 1883.

Application filed July 25, 1883. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM HENRY FLINN, of Nashua, in the county of Hillsborough, of the State of New Hampshire, have invented a new and useful Improvement in Key-Fasteners for Door-Locks; and I do hereby declare the same to be described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a front view, Fig. 2 a rear elevation, Fig. 3 an edge view, Fig. 4 a longitudinal section, and Fig. 5 a transverse section, of one form of my improved key-fastener. Fig. 6 is a front view, Fig. 7 a rear view, Fig. 8 a longitudinal section, and Fig. 9 a transverse section, of another form of the said fastener.

The key-fastener embracing my present improvement is of the class shown in the United States Patents Nos. 272,037 and 279,930, granted to me, its principal characteristic being a pivotal screw-hole, a key-hole, and a notch, the said notch leading laterally out of the key-hole. The key adapted for use with this class of fastener is described and represented in the said Patent No. 272,037.

In carrying out my present invention I provide the vibratory key-fastener with a stopping projection, perforated and constructed, substantially in manner as hereinafter described, to operate with a screw inserted in the door.

In the first four figures of the drawings the stopping projection is shown as arranged wholly above, while in Figs. 6, 7, and 8 it is exhibited as wholly below, the key-hole and the pivotal screw or its hole, it being designed to have the projection above them when the part of the door in front of the lock is of sufficient thickness to receive and support the stop-screw; but when it is not so the stopping projection may extend below the fastener pivotal screw-hole, in order for the stop-screw to be inserted in the part of the door that may be below the lock, such lock being supposed to be what is usually termed a "mortise-lock" let into the door. This stopping projection is not only to limit the vibratory movements of the key-fastener, but to operate as a means for preventing the said fastener, when engaged with the key, from being moved aside by a wire or implement introduced into the key-hole of the door from the opposite side of such door to which the fastener may be pivoted, for in such case the pressure of the wire or implement against the fastener will move or spring it in such manner as to cause the stop-screw to operate as an obstacle to a lateral movement of the fastener, such as would carry its key-hole notch out of engagement with the key.

In the drawings the key-fastener is shown, at A, as fixed by its pivotal screw *a* to a door, B, and provided with a key-hole, *b*, and a notch, *c*, leading laterally therefrom, in manner as represented, the key-hole of the door being indicated at *d*.

C is the stopping projection, which, in Figs. 1, 2, 3, 4, and 5, is represented as extending above the key-hole of the fastener, and perforated with two circular recesses, *e e*, and a connecting-slot, *f*, and as having two stopping-flanges, *g g*, extending from it, and arranged with the said recesses in manner as shown.

Fig. 5, which is a transverse section taken through the said flanges, recesses, and slot, shows the arrangement of the stopping-screw *h* in the door and relatively to the fastener. When the stopping projection of the fastener is close up to the door, the head of the screw projects slightly beyond the fastener, in manner as shown in said Fig. 5; but should a tool be pushed into the key-hole so as to bear the fastener away from the door, the movement of the fastener would cause the screw-head to enter the recess, and thereby with such prevent the fastener from being pressed laterally in a manner to disengage its key-shank slot with the key. The stop-flanges are so arranged that when the axis of the screw is coincident with that of either recess *e* the screw-head shall abut against the next adjacent flange, which thereby, when against the head, determines its proper position to enter the recess.

In Figs. 6, 7, 8, and 9 the stopping projection C is represented as extending downward from the fastener, and as perforated with two holes, *e e*, and as having stop-flanges *g g* extending from its rear face. It also has be-

tween the two holes a slight swell, projection, or cam, *i*, leading from one hole to the other, and formed as represented. This projection or cam, in a lateral movement of the fastener, keeps the holes out of engagement with the stop-screw head, such screw being shown at *h* in Fig. 9, it being arranged, essentially as hereinbefore described, with the holes and stopping-flanges of the stopping projection. Should a tool be passed into the key-hole so as to bear the fastener away from the door, when such fastener is in engagement with the key, it will be seen that the stopping projection will be forced toward and close up to the door and into engagement with the screw-head, which, entering one of the holes *e*, will prevent a lateral movement of the key-fastener.

From the back of the key-fastener shown in Figs. 1, 2, 3, and 4, I usually have extended a curved flange, *k*, to bear against the door, in order to keep the said back out of contact with the door and prevent it from being marred by the fastener during vibratory movements of it. The pivotal screw of the key-fastener is to be below the box of the lock. The bearing part *m* of the key-fastener, through which its pivotal screw passes, I make slightly crowning or convex, as shown, in order that the fastener may be readily moved, as described, into engagement with the stopping-screw, the recess *n*, for reception of the screw-head, being duly formed to allow of such action of the fastener.

I am aware that a vibratory key-fastener of circular form has been pivoted to a circular piece or plate of metal fastened to a lock, such key-fastener having not only a key-hole and notch leading therefrom to operate with a key-hole in the said circular plate, but a stud to enter a curved slot in the bearing-plate, all being as shown in the United States Patent No. 269,744; consequently I do not claim such. My improvement differs from this, inasmuch as I make use of no slotted bearing-plate for the key-fastener, but simply employ a screw to enter and project from the door, and I have therewith a perforated stopping projection extending from the fastener, and to operate as described with the head of the screw. The said improvement not only renders the said circular plate unnecessary to the key-fastener, but saves the expense thereof.

I claim—

1. The vibratory key-fastener provided with the key-hole *b* and the lateral notch *c*, leading therefrom, and with a perforated stopping projection, C, substantially and to operate with the head of the screw projecting from the door, as explained.

2. The vibratory key-fastener provided with the key-hole and the lateral notch leading therefrom, and also with the stopping projection having the screw-head-receiving holes and the stopping-flanges, arranged essentially as set forth.

3. The vibratory key-fastener provided with the key-hole and the lateral notch leading therefrom, and also with the stopping projection having the stopping-flanges and the screw-head-receiving holes or recesses, and the slot connecting such holes, as set forth.

4. The vibratory key-fastener provided with the key-hole and the lateral notch leading therefrom, and also with the stopping projection having the stopping-flanges, the screw-head-receiving holes, and the swell or cam, arranged as set forth.

5. The key-fastener provided with the key-hole and its lateral notch, the perforated stopping projection, and the bearing-flange thereto, all arranged substantially in manner as represented.

WILLIAM HENRY FLINN.

Witnesses:
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E. B. PRATT.