(No Model.)

W. S. OWEN.

Sash Fastener.

No. 231,352. Patented Aug. 17, 1880.

Fig. 6.

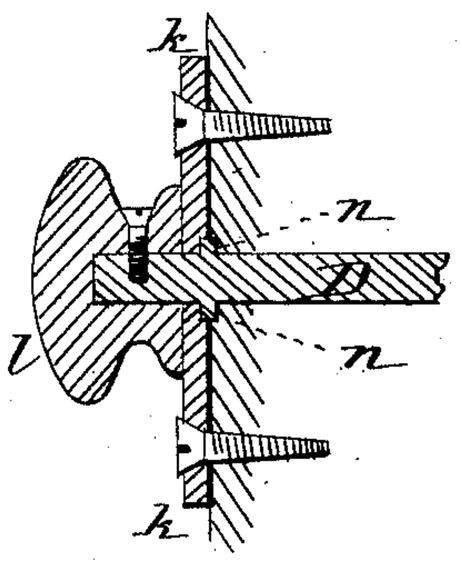


Fig. 2.

Fig. 1.

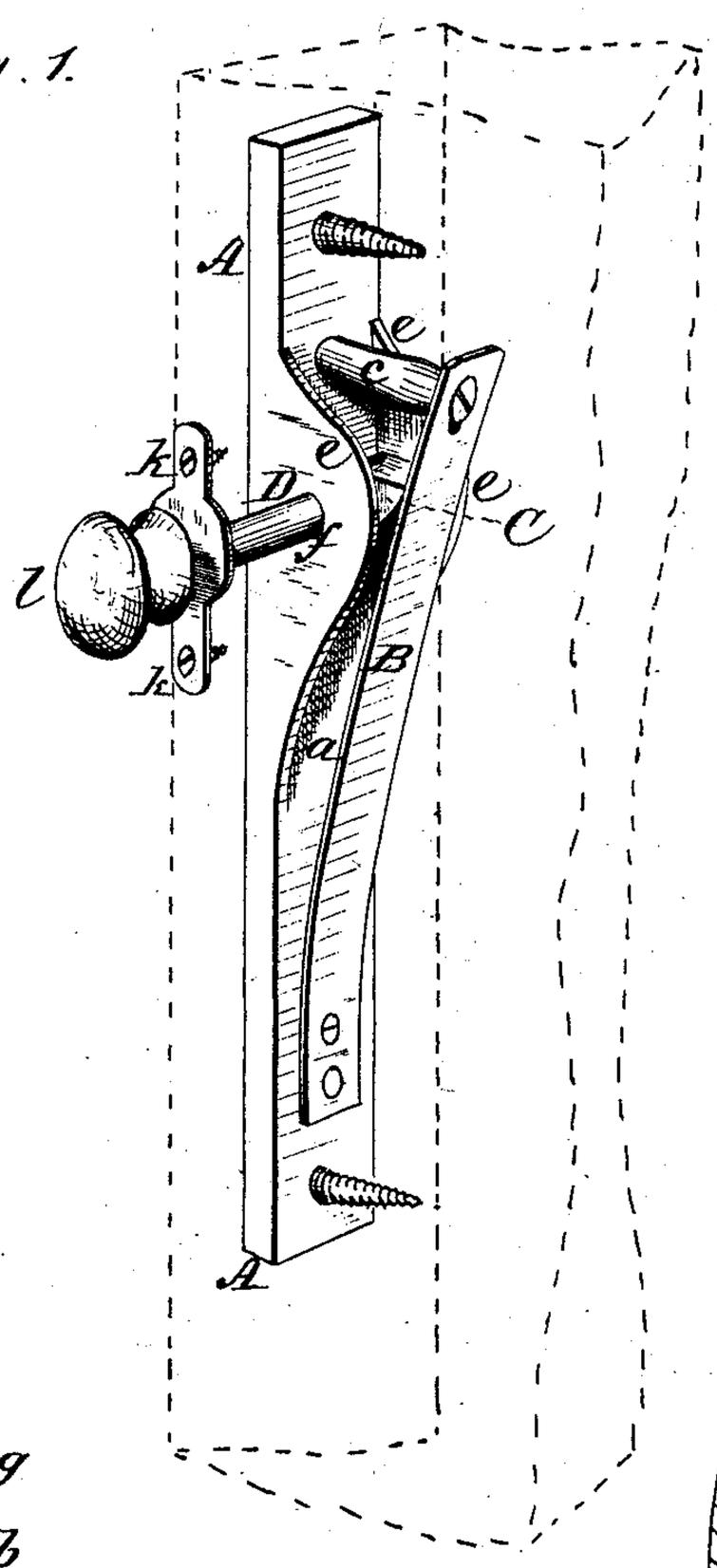
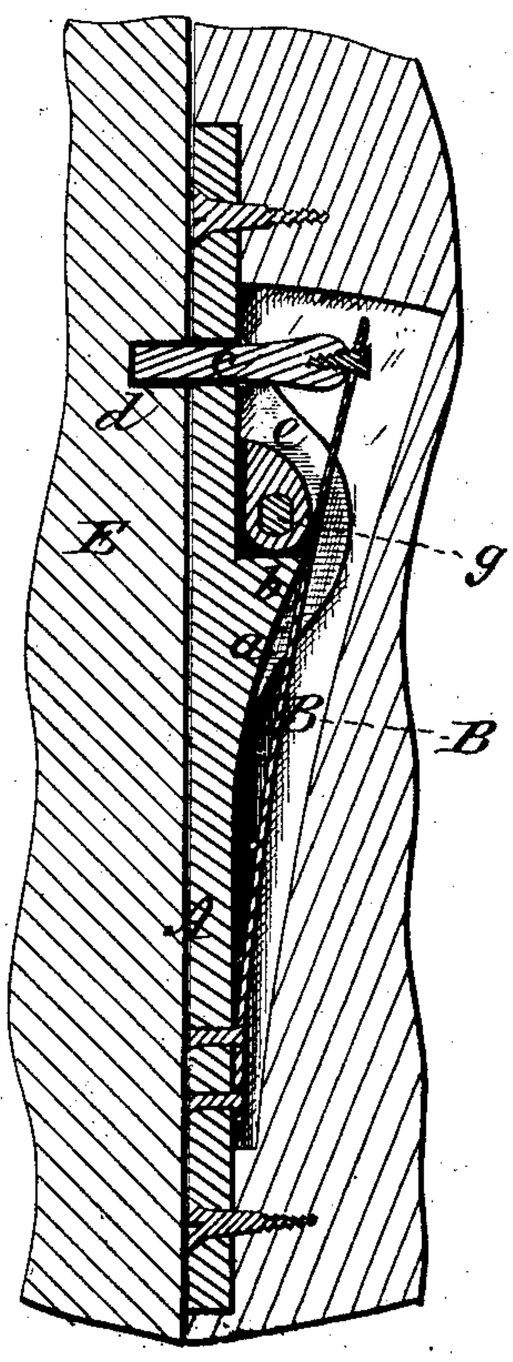


Fig. 3.



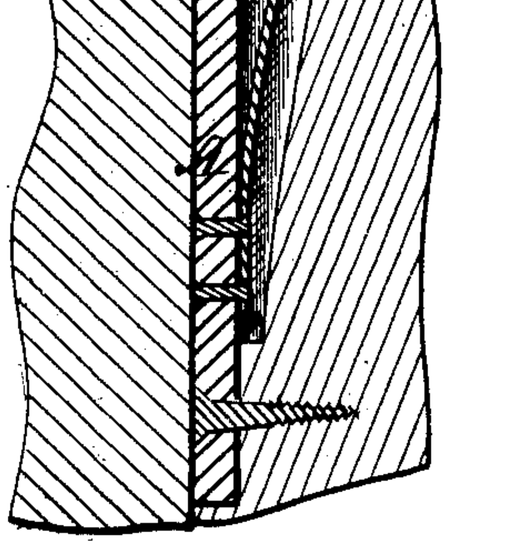


Fig. 4.

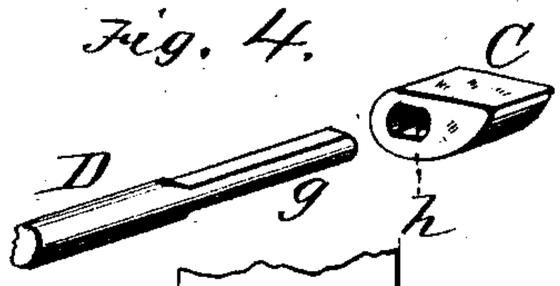
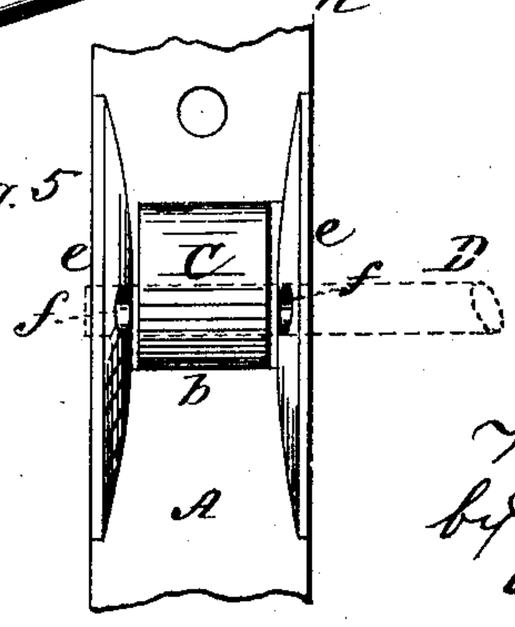


Fig. 5



Attest.

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Floyd Norris.

Inventor,

William S. Owen

by Johnson & Johnson

Attys.

UNITED STATES PATENT OFFICE.

WILLIAM S. OWEN, OF WASHINGTON, DISTRICT OF COLUMBIA.

SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 231,352, dated August 17, 1880.

Application filed June 2, 1880. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM SMITH OWEN, a citizen of the United States, residing at Washington, in the District of Columbia, have invented new and useful Improvements in Sash-Fasteners, of which the following is a specification.

My object is to obtain by the simplest construction a cheap and effective fastening device, applicable for window-sash and doors.

The face-plate is formed with a rear projecting shoulder-seat for a cam-shaped tumbler which is held upon said seat by side ears and the plate-spring which carries the fastening-bolt, whereby I am enabled to use a tumbler merely placed upon a shoulder on the back of the face-plate, and held thereon in position to maintain the angular opening in said tumbler coincident with circular openings in the side ears to receive the operating stem-key, while at the same time this shoulder forms a stop for the tumbler to hold the fastening-bolt withdrawn. By this construction the tumbler only moves through a quarter-arc, and requires no centering-hubs or bearings, and thus saves the expense and labor of such fitting. The casing having been suitably excavated, the face-plate is fitted in place, and before being secured the hole for the stem-key is bored so as to match with the eye of the tumbler.

The key-stem fits and turns in the ears of the face-plate; but the tumbler, by the means described, is held in position to receive the angular stem, and the shoulder forms a stop to hold the spring-bolt retracted, thereby giving the advantage of using the device as a safety-fastening for doors.

Referring to the accompanying drawings, Figure 1 represents the device in perspective, the casing in which it is mortised being shown in dotted lines; Fig. 2, a vertical section, showing the spring-bolt held retracted; Fig. 3, a similar section, showing the spring-bolt locked; Fig. 4, the cam-tumbler and the angular stem-key; and Fig. 5, a detail, showing the tumbler supported on the shoulder. Fig. 6 shows a detail of the key-stem, its handle, and the face-plate.

The face-plate A is cast with side ears, *e e*, and between them a rear projecting shoulder, *b*, standing at right angles to the face-plate, and with the ears forming a recess, within which the cam-tumbler C is placed. The ears are provided with circular openings *f*, and the tumbler has an angular opening, *h*, and the relation of the shoulder to these openings is such as to support the tumbler, so that they will be coincident, to allow the stem-key to be passed through them after the face-plate has been mortised into the casing. In this connection the spring B, which carries the bolt *c*, serves to hold the tumbler upon the shoulder and against the back of the face-plate. By this means the tumbler is held in proper position to receive the key-stem without hub-bearings in the ears; but the shoulder serves also the important function of a stop to limit the turning of the tumbler to retract the bolt. The tumbler being of cam form will, when turned a quarter-circle against the spring B, rest against the shoulder, and thus hold the bolt retracted, as shown in Fig. 2. It is this feature which renders the device applicable to a door as a safety-fastening.

The spring is secured to the inner side of the face-plate, and carries the bolt *c* at its free end, so as to operate through an opening in the face-plate and to engage with a hole, *d*, in the window-casing or door-jamb.

The stem-key D has an angular termination, *g*, by which it is secured to and turns the tumbler, while it turns freely in the ears, and it is by this construction that the device is adapted for use with a right or left opening door.

A plate, *k*, in connection with a shoulder, *n*, on the stem-key serves to secure the latter in place; or it may be removable, if desired.

The tumbler is turned by the knob *l* to force back the spring and retract the bolt; but the tumbler striking the shoulder is stopped in a position to be held by the spring, and so hold the bolt retracted until it is desired to again throw the bolt.

In fitting the face-plate into the mortise the shoulder *b* must be upward and the cam-tumbler placed thereon so that the spring will bear upon and hold it against the face-plate with its longest side up, as shown in Fig. 3, so that the tumbler is merely placed upon the shoulder, and by the spring and the ears it is held in position to receive the stem-key, inserted through an opening in the casing.

As a sash-lock, it is understood that the sash is provided with holes arranged to lock the sash and to hold it open when the same is not provided with weights.

I am aware that prior to my invention sash-locks have been made with a plate-spring carrying a locking-pin and operated by an arm fixed upon a rod so as to press back the spring and retract the bolt; that pivoted claw-arms have been operated by a tumbler having an angular eye to receive an angular stem-key to open the claw-arms to release the sash, and that a reversible locking-lever has been used within a case in connection with an angular stem-key, and I do not claim, broadly, the combination of a spring-bolt with an operating-lever, nor an angular-shanked stem-key adapted to operate an angular-eyed tumbler; but the specific thing which I have shown and described is an improvement on such fastenings.

I claim—

In a sash and door lock, the face-plate A, formed with the shoulder-stop *b*, and provided with the plate-spring bolt B *c*, in combination with the freely-movable tumbler-cam C, provided with an angular eye, *h*, and angular key-stem D *g*, the said tumbler being supported and held in position to receive said stem by means of said shoulder-ears and plate-spring, substantially as described.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

WILLIAM S. OWEN.

Witnesses:

A. E. H. JOHNSON,

J. W. HAMILTON JOHNSON.