

(No Model.)

F. T. FROST.
SASH LOCK.

No. 566,856.

Patented Sept. 1, 1896.

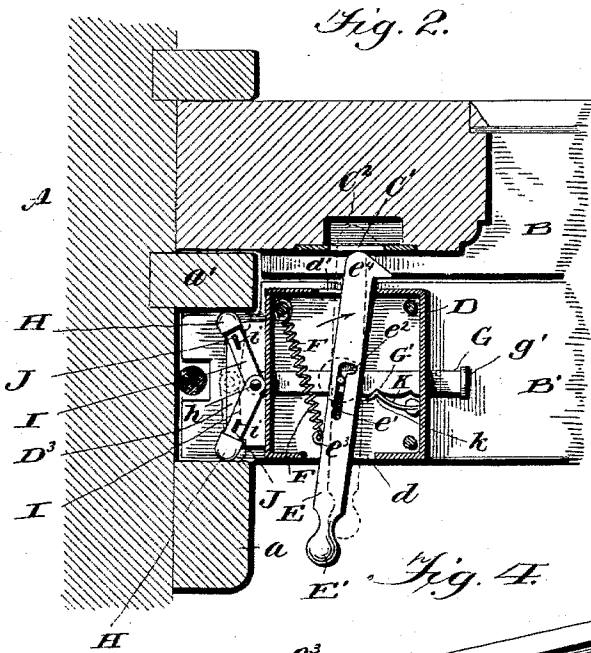
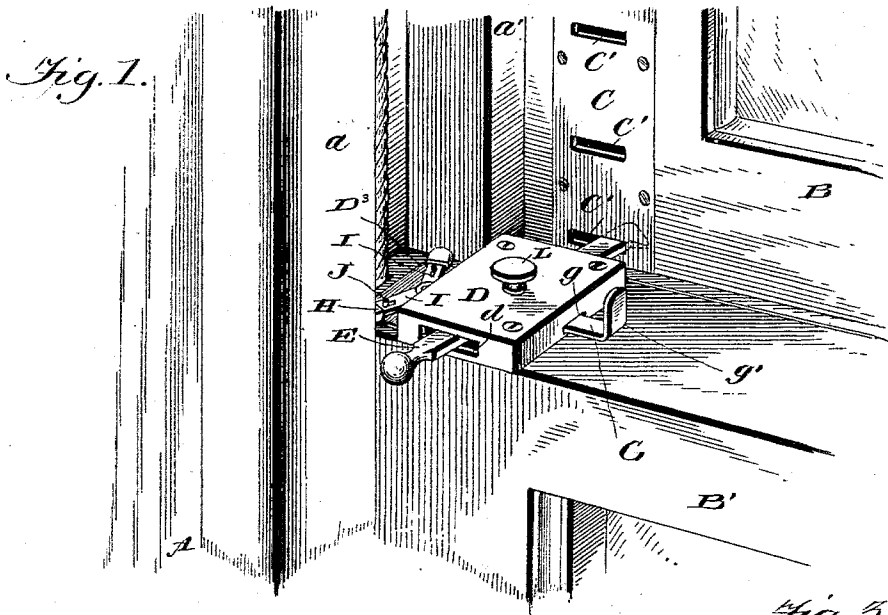


Fig. 3.

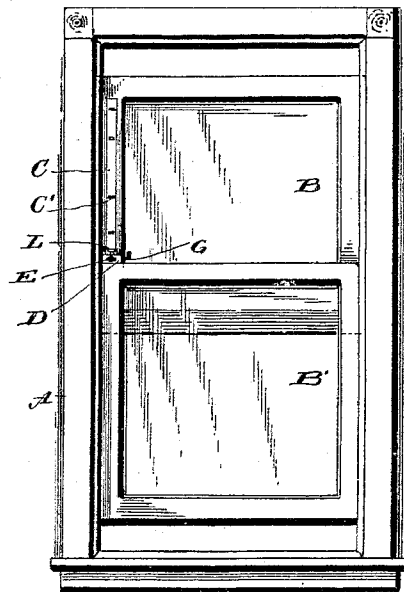
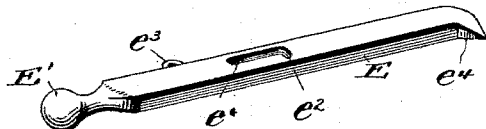


Fig. 4.



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UNITED STATES PATENT OFFICE.

FLOYD T. FROST, OF WASHINGTON, DISTRICT OF COLUMBIA.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 566,856, dated September 1, 1896.

Application filed December 24, 1895. Serial No. 573,206. (No model.)

To all whom it may concern:

Be it known that I, FLOYD T. FROST, a citizen of the United States, residing at Washington, in the District of Columbia, have invented certain new and useful Improvements in Sash-Locks; 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 of reference marked thereon, which form a part of this specification.

This invention relates to certain new and useful improvements in sash-locks of that class in which is employed a casing or the like secured to the top rail of the bottom sash and provided with a spring-actuated movable bar or bolt to engage a catch or the equivalent for holding the sash in the adjusted position.

It has for its object, among others, to provide an improved lock of this character which shall be simple and cheap, yet positive and efficient in its action, and by which the sash can be locked in any desired position, the sash locked together, and the lower sash either by itself or together with the upper sash locked against movement. I provide means for throwing out of operative position the bolt or bar that is employed for locking the one sash to the other when desired.

Other objects and advantages of the invention will hereinafter appear, and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective detail showing the application of my invention. Fig. 2 is a horizontal section through the same, the section being taken through the casing of the lock just above the sliding bolt or bar. Fig. 3 is an elevation, on a smaller scale, with the two sash locked together. Fig. 4 is a perspective view of the sliding bolt removed.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the window-frame,

a the band or molding, and a' the parting-bead, all of known construction.

B is the upper sash, and B' the lower sash, hung upon cords and weights in the usual manner. To one of the side stiles of the upper sash, preferably that at the left-hand side of the sash, I secure the metal strip C, having the transverse slots C' located at proper distances apart, and this strip is by preference set in flush with the face of the stile, as seen in Fig. 2, and in the stile behind said strip is the recess C², into which the end of the bolt or bar soon to be described may work.

D is a casing secured to the upper face of the top rail of the lower sash, as shown best in Fig. 1, and this casing has at the back and front the slots or openings d and d', as shown in Fig. 2, through which extend the opposite ends of the bolt or bar E, one end of which is shaped into a knob or handle E', as shown, and the other end is turned at a right angle, as seen in Figs. 2 and 4, and is beveled from opposite sides, as shown best in Fig. 4. This bolt or bar is formed near the center of its length with the slot e', disposed longitudinally of the bolt or bar and at one end extended at substantially a right angle, as shown at e².

F is a spring attached at one end to some fixed part within the casing and its other end connected with the lug or eye e³ on the bolt or bar E near its outer end.

G is a bar disposed at substantially a right angle to the bar or bolt E and working through openings g in the sides of the casing, its outer end being turned upward to form a thumb-piece or handle g', as seen in Figs. 1 and 2. The other end of this bar is pivotally connected, as at h, with the two bars I, which constitute a toggle, and the outer ends of which are provided with the pads or their equivalents H, which may be of rubber or other suitable material which will not mar the woodwork. These bars I have elongated slots i near their outer ends, in which work the pins J, projecting upward from the extension D³ of the casing at that end, as seen best in Fig. 2, so that as the bar G is moved inward the bars I will change their position from that shown in full lines in Fig. 2 to that in which they are shown in dotted lines in the same figure. The bar G near its outer end

is provided with the notches G', as shown in Fig. 2, into which is designed to engage the free V-shaped end or portion *k* of the spring K, the other end of which is secured to some fixed part within the case.

L is a thumb-screw threaded into the upper wall of the casing and extended through the slot *e'* of the bar or bolt E and engaging the bar G.

The operation will be readily understood. Normally the thumb-screw is turned out, so as to leave the parts all free for movement. As the sash is raised or lowered, the bolt E being pulled out, the rounded end of the bolt rides upon the strip C, and when the end of the bolt or bar comes opposite a slot C' therein it enters the said slot, being urged thereinto by the spring F, which, as soon as the point of the bolt has entered the slot, is forced in the direction of the arrow in Fig. 2, so that its shoulder *e*⁴ will engage behind the strip, as shown by dotted lines in Fig. 1, and the two sash locked together. The bolt is disengaged by movement of the bar E to the right and then withdrawing it from the slot in the strip. When it is pulled out, the spring F throws the bar, so that the thumb-screw will be engaged in the right-angled slot *e*² of the said bar, and the bar thus held in its inoperative position by the turning of the thumb-screw. When it is desired to lock the sash against being moved up or down, the bar G is pushed inward, so that the bars I will be

thrown into the position seen in dotted lines in Fig. 2.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. The combination with the casing, of the bar mounted to slide therein and having an elongated slot with right-angled portion, a spring acting upon said bar, and a thumb-screw passed through the casing and entering said slot, substantially as specified.

2. The combination of the casing, the two bars mounted to slide therein at right angles to each other independently of each other, the spring acting on one of the bars, the toggle connected with the other, and the thumb-screw, all substantially as and for the purpose specified.

3. The combination of the casing, the two bars mounted to slide therein at right angles to and independently of each other, the one provided with a slot with a right-angled portion, a thumb-screw passed through the casing and into said slot, and the toggle pivotally connected with the inner end of the other bar, substantially as specified.

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

FLOYD T. FROST

Witnesses:

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CHAS. T. SPARO.