No. 648,808. Patented May 1, 1900.

C. F. STEIN.

SASH LOCK.

(Application filed Feb. 9, 1900.)

(No Model.)

Fig. 1

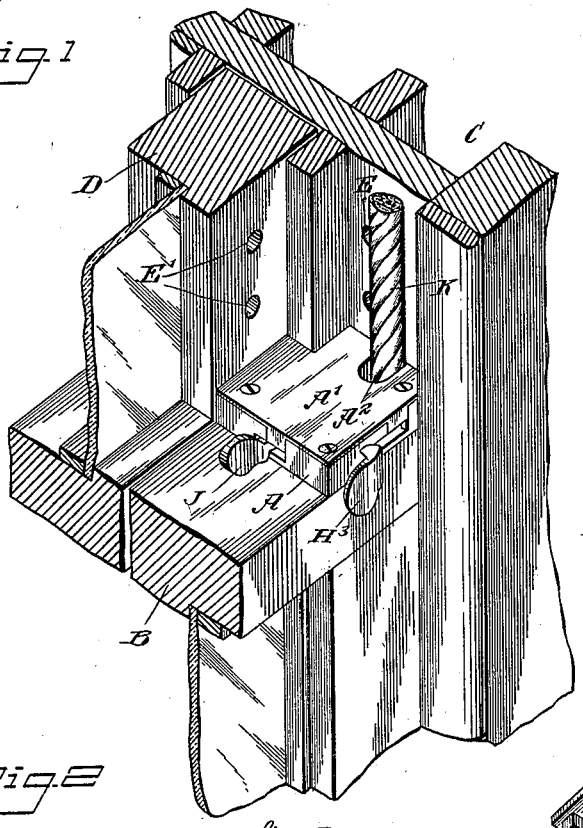


Fig. 2

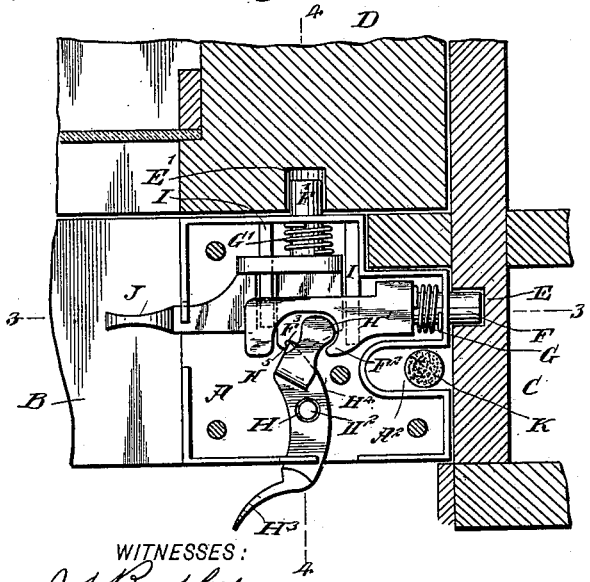


Fig. 3

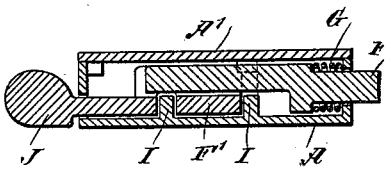


Fig. 4

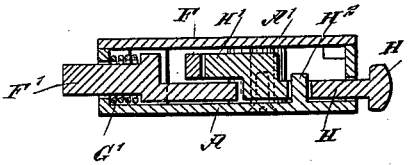


Fig. 5

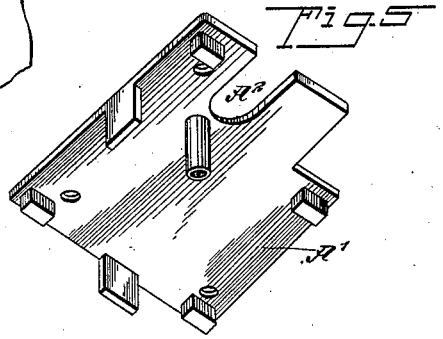
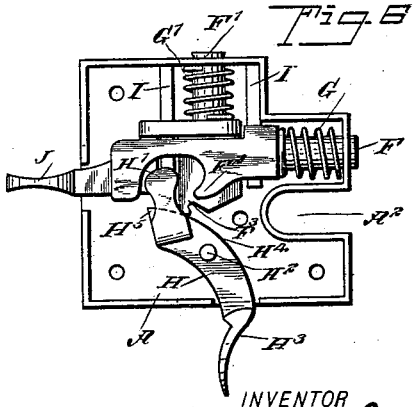


Fig. 6



WITNESSES:

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CONRAD FREDRICK STEIN, OF BAYONNE, NEW JERSEY, ASSIGNOR OF ONE-HALF TO GEORGE BICKELHAUPT, OF NEW YORK, N. Y.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 648,808, dated May 1, 1900.

Application filed February 9, 1900. Serial No. 4,657. (No model.)

To all whom it may concern:

Be it known that I, CONRAD FREDRICK STEIN, a citizen of the United States, and a resident of Bayonne, in the county of Hudson and State of New Jersey, have invented a new and Improved Sash-Lock, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved sash-lock which is simple and durable in construction, cheap to manufacture, not liable to get out of order, readily applied, and arranged to lock the upper and lower sashes together and to lock the lower sash to the window-casing to prevent opening of the window from the outside by unauthorized persons trying to force the screws used for securing the lock to the lower sash.

The invention consists of novel features and parts and combinations of the same, as will be fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a sectional perspective view of part of a window-casing and sashes with the improvement applied. Fig. 2 is a sectional plan view of the same with the top covering of the lock removed. Fig. 3 is a sectional side elevation of the improvement on the line 3 3 in Fig. 2. Fig. 4 is a transverse section of the same on the line 4 4 in Fig. 2. Fig. 5 is a perspective view of the top cover for the casing, and Fig. 6 is a plan view of the improvement with the top cover removed and the parts in an unlocked position.

The improved sash-lock is mounted in a suitably-constructed casing A, having a cover A′ and adapted to be fastened by screws or other means to the top cross-bar of the lower sash B adjacent to the side of the window-frame C and next to the corresponding stile of the upper sash D, as is plainly indicated in Figs. 1 and 2.

In the side of the window-casing C are arranged a series of apertures E, and corresponding apertures E′ are formed in the stile of the upper sash D, and said apertures are adapted to be engaged by bolts F F′, respectively, standing at a right angle to each other and mounted to slide in the casing A, the ends of said bolts projecting through the walls of the casing to engage said apertures when the bolts are shot out, as hereinafter more fully described, to simultaneously engage both the casing and the upper sash. The bolts F F′ are normally held in an innermost position by the action of coil-springs G G′, respectively, (see Fig. 6,) so that the outer ends of the bolts are disengaged from the window-casing and the upper sash to allow of moving the sash D to open or close the window in the manner described.

On the bolt F inside of the casing A is arranged a lug F^2, (see Figs. 2 and 6,) adapted to be engaged by a projection H′ on the inner end of a lever H, fulcrumed at H^2 in the casing A and having a finger-piece H^3 projecting through the front of the casing A, so as to permit of being taken hold of by the operator for manipulating the lock, as hereinafter more fully set forth.

The inner end of the lever H has a curved or cam face H^4, adapted to engage the inner end of the bolt F′, so as to push the same in a transverse direction against the tension of its spring G′ to shoot the bolt F′ into an outermost position at the time the bolt F is moved sidewise by the action of the arm H′ on the lug F^2. The extreme end H^5 of the lever H is adapted to engage a notch F^3 in the inner end of the bolt F′, so that when the latter has been forced outward by the cam-face H^4 then the end H^5 finally drops into the notch F^3 and thereby locks the bolt F′ against return movement, as will be readily understood by reference to Fig. 2. As the bolt F′ engages the lever H when the two stand in alinement with each other, as shown in Fig. 2, it is evident that the other bolt F is held in an outermost locked position by the arm H′, and consequently both bolts are held in this position at the time they engage corresponding apertures E E′ in the window-casing C and upper sash D to lock the sashes together and the lower sash B to the window-casing C.

The inner portion of the bolt F′ is mounted to slide in transverse guideways I, and on said inner portion is arranged a finger-piece J, extending to the left through the left-hand

side of the casing A to be within convenient reach of the operator to allow the latter to press the finger-piece J in a transverse direction and move the bolt F′ still farther outward a short distance to release the end H^5 of the lever H from the recess F^3 in the bolt F′, so that the spring G of the bolt F can force the latter inward to its former innermost position, thereby returning the lever H to the position shown in Fig. 6. Now when the operator releases the pressure on the finger-piece J the spring G′ returns the bolt F′ back to an innermost position, so that both bolts F F′ are out of engagement with the apertures E E′, and consequently the sashes are unlocked.

From the foregoing it will be seen that when the several parts are in an unlocked position, as illustrated in Fig. 6, and it is desired to lock the sashes the operator simply pushes the finger-piece H^3 from right to left, so as to simultaneously move the two bolts F F′ into an outermost position and in engagement with the corresponding apertures E E′, and at the same time the end H^5 of the lever H engages the notch F^3 in the bolt F′, so as to hold the bolts and the lever from return movement. When it is desired to unlock the sashes, the operator presses the finger-piece J in a transverse direction to release the lever H, as described, and allow the spring G to return the bolt F and allow the spring G′ to return the bolt F′ as soon as the operator releases the pressure on the finger-piece J.

The casing A and its cover are formed with a cut-out portion A^2 for the convenient passage of the counterbalancing cord or rope K, as illustrated in Figs. 1, 2, and 5.

Having thus fully described my invention, I claim as new and desire to secure by Letters Patent—

1. A sash-lock, comprising two movable bolts standing at an angle to each other, an operating-lever for engaging both bolts and sliding the same into an outer locking position, the said lever being also arranged to positively lock the bolts against return movement, and a finger-piece on one of the bolts, to move the latter out of locking engagement with the lever and release the latter and the other bolt, as set forth.

2. A sash-lock, comprising two bolts movable at an angle to each other, an operating-lever for engaging with and moving both bolts outward to locking position, a locking device for holding the bolts in a locking position, and another lever for releasing said locking device, substantially as specified.

3. A sash-lock, comprising a casing, spring-pressed bolts mounted to slide in said casing at an angle to each other, one of the bolts having a finger-piece and the other having a shoulder, and a lever having its inner end formed with a cam-face for engagement with the inner end of the bolt having the finger-piece, said lever also having its inner end provided with an arm engaging the shoulder on the other bolt, and the extreme end of said lever being adapted to engage a notch in the bolt having the finger-piece, substantially as shown and described.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CONRAD FREDRICK STEIN.

Witnesses:

CHAS. HAAG,

GEORGE BICKELHAUPT, Jr.