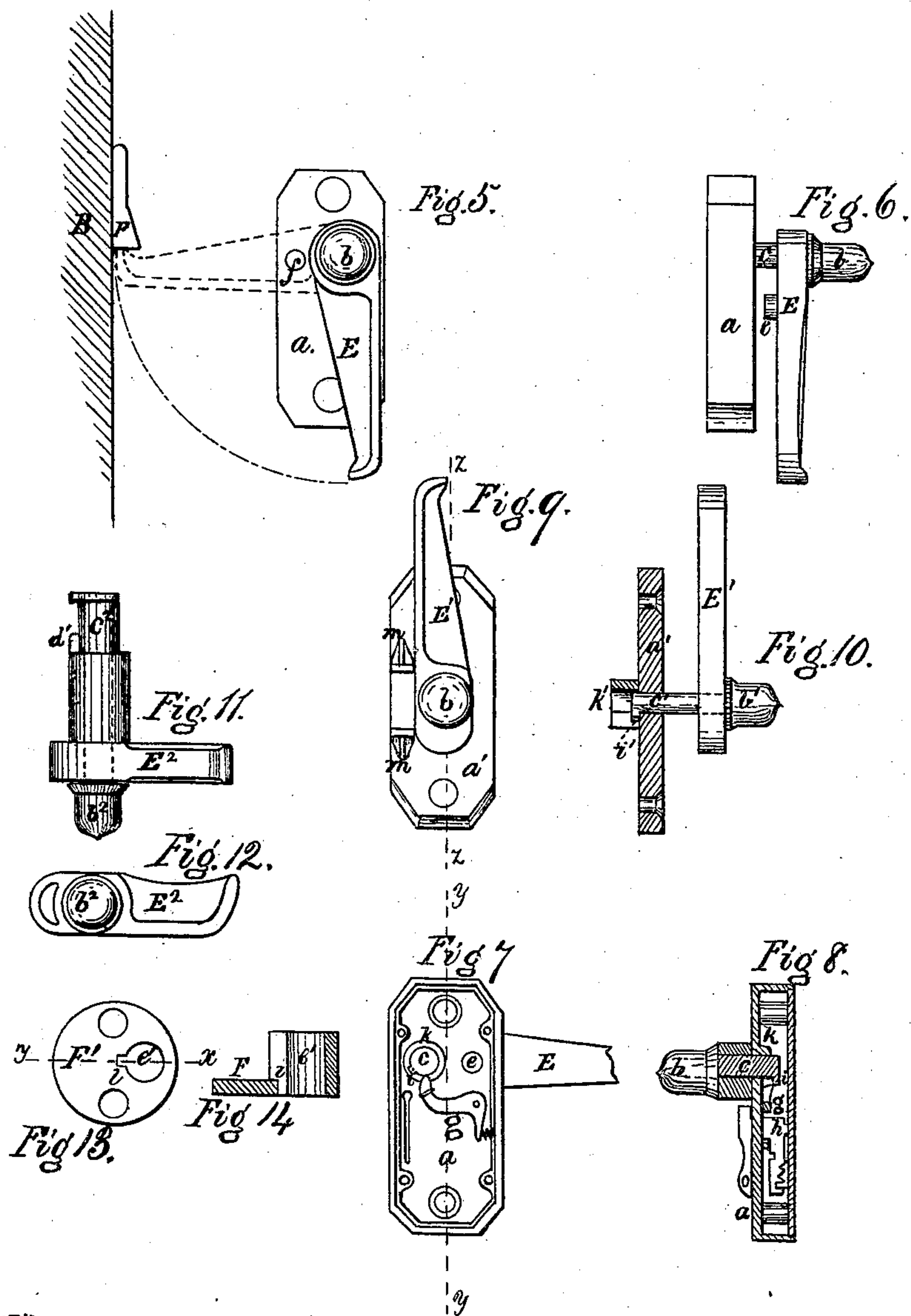


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Improvement in Sash-Holders.

No. 127,493.

Patented June 4, 1872.



Witnesses.

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IMPROVEMENT IN SASH-HOLDERS.

Specification forming part of Letters Patent No. 127,493, dated June 4, 1872.

Specification describing certain Improvements in Sash-Locks, invented by ABRAHAM W. LOZIER, of Yonkers, in the county of Westchester and State of New York.

My invention consists in certain combinations and arrangements of parts applied to and combined with the sashes of a window to properly and safely hold and secure the sashes either closed or partly open at top and bottom, to admit the ingress and egress of air for purposes of ventilation; and it has for its object to control the opening of the window and prevent it being raised or tampered with from the outside, as will be particularly described hereafter.

Figures 5 and 6 are enlarged views of the sash-lock. Fig. 7 is a view of the lock, with the back plate removed to show the arrangement of the mechanism within. Fig. 8 is a vertical transverse section through Fig. 7. Figs. 9, 10, 11, 12, 13, and 14 are views showing different constructions of the sash-lock.

General Description.

The lock E and stop F act to hold and lock both sashes of the window and prevent either of them from being raised or opened far enough to admit any one into the room from the outside. These two parts are firmly screwed or bolted to the window, and are strong enough to resist any force or pressure that may be applied to the window to force it open. They are further strengthened by the introduction of screws into the wood of the casing beneath them. The stop F on the upper sash is placed just above the arm E of the lock to permit the upper sash to be opened far enough for purposes of ventilation, and yet hold it from being lowered sufficiently to allow entrance through the opening. The lock E is secured at the proper distance from the top of the lower sash for the same purpose, as the lower sash, when raised, will strike against the arm of the lock and be arrested. The edge of the upper sash, at the point where the stop F is secured, is bedded with screws to prevent any person cutting through the sash to it from the outside; and the edge of the lower sash is constructed in the same way for this purpose. The construction of the lock E, shown in detail in Figs. 5, 6, 7, and 8, is such that the window cannot be improperly opened from the outside or the lock tampered with. It consists of the lock-case *a*

provided with suitable screw-holes for attaching it to the frame, and having an arm or bridge, E, secured to it by, and turning upon, the stud *c*. A pin, *e*, upon the inner side of the arm E fits into a hole, *f*, in the plate *a* of the lock, and holds the arm rigidly in a horizontal position and prevents it being moved either up or down. The stud *c* passes through the arm E and through a collar or rim, *k*, cast upon the inside of the plate *a*, and is formed with a tooth, *i*, upon the end inside the lock of the same width as the slot cut in the collar *k*; and when the stud *c* is turned from the outside so that the tooth *i* is in line with the slot in the collar *k*, the stud can be drawn out sufficiently to permit the pin *e* on the arm E to be withdrawn from the hole *f* and allow the arm to drop into the position shown in Figs. 5 and 6. When the arm of the lock is raised to a horizontal position for locking and the head *b* of the stud pressed in, the pin *e* will enter the hole *f* in the plate, and the tooth *i* will pass through the slot in the collar *k*, and project beyond the edge of the collar sufficiently to be turned. A slight revolution of the head *b* will cause the tooth *i* to turn over the end of the collar *k*, so that the stud will be held from any longitudinal movement. The arm or bridge E can, therefore, be dropped down to allow the window to be opened only when the stud *c* is withdrawn from the lock, and this cannot be done until the head *b* is turned to bring the tooth *i* on the stud in line with the slot in the collar *k*.

In order to prevent the window being improperly opened, the lock, as shown in Figs. 5, 6, 7, and 8, is provided with a tumbler, *g*, held up against the collar *k* by a spring and operated from the outside of the lock by the key *h*. The end of the tumbler *g* is made to fit into the slot in the collar *k*, and is held up into it so that the stud *c* cannot be withdrawn until the tumbler *g* is brought down free of the collar *k* to permit the tooth *i* to enter the slot.

The other modifications of construction of the window-lock, shown in Figs. 9, 10, 11, and 12, will be readily understood. The one represented in Figs. 9 and 10 is provided with two lugs, *m m*, on the outside of the plate *a'*, which serve to hold the arm E¹ in place, and act the same as the pin *e* and the hole *f* in the lock first described.

The other construction, shown in Figs. 11,

12, 13, 14, is intended to be used in that part of the window-casing in which the lower sash runs when the inside wood-work of the casing will not permit the other style of lock to be used. The plate F' is let into a mortise cut in the casing above the top of the lower sash and held by screws, so that it is flush with the wood-work to allow the sash to pass it, and the spindle of the arm E^2 fits into this plate, and the arm is held by it over the top of the lower sash and under the stop F on the upper sash. A projection, d' , on this lock fits into a slot or mortise, l , in the side of the hole in the plate F' , Figs. 13, 14, and holds the arm horizontally and prevents it from turning. This lock can be drawn out of the plate and removed to permit the window to be opened only when the tooth on the end of the stud c^2 is turned to be in line with the slot F' .

Having thus fully described my invention, what I claim therein is—

1. The device for locking the sash, consisting of the arm or bridge E^1 , stop e , and socket-plate a , combined with the stop F , constructed and operating substantially as described.

2. The arrangement and combination, with the spindle c , of the collar k and tumbler g , operated by the key h for the purpose of preventing the spindle from being withdrawn and the lock tampered with, constructed and operating substantially as set forth and specified.

A. W. LOZIER.

Witnesses:

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