(No Model.)

# E. W. DUNLAP.

## SASH FASTENER.

No. 455,708. Patented July 7, 1891.

Fig. 1.

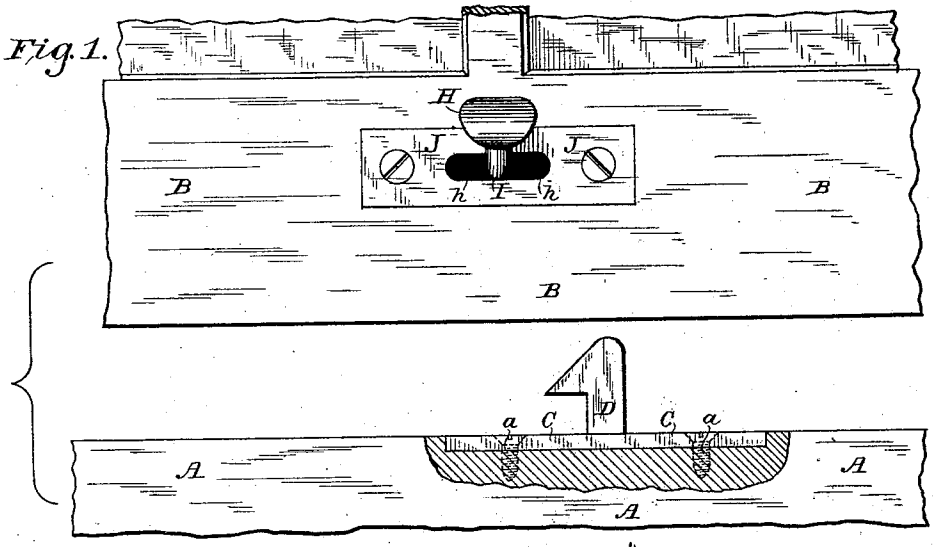



Fig. 2.

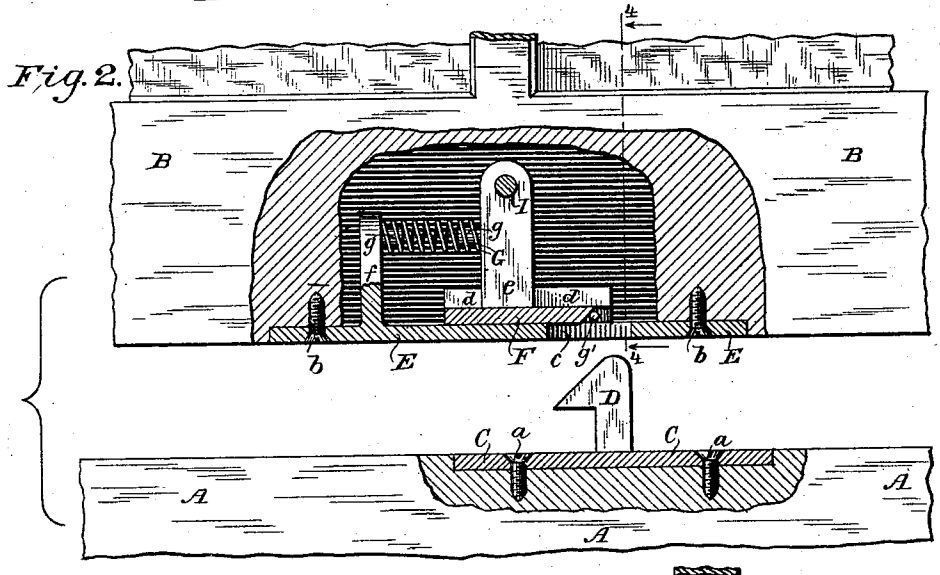
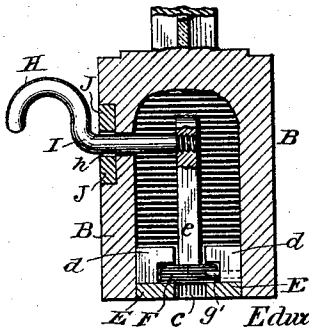



Fig. 3.




Fig. 4.




Witnesses
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THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

EDWARD WILER DUNLAP, OF NEW CASTLE, DELAWARE, ASSIGNOR OF ONE-HALF TO GEORGE A. MAXWELL, OF SAME PLACE.

## SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 455,708, dated July 7, 1891.

Application filed October 9, 1890. Serial No. 367,500. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD WILER DUNLAP, of New Castle, in the county of New Castle and State of Delaware, have invented certain new and useful Improvements in a Combined Sash Lift and Fastener, of which the following is a specification.

The present invention consists in an improved window-sash fastener applicable to either the upper or lower window-sash, which automatically locks the sash when it is closed, and which when the sash is closed is entirely concealed. In connection with the sash-fastener is used a lift applied to the sash, by means of which the sash may be raised and lowered, as in the case of the ordinary sash-lift. In the present invention, however, the lift is connected with the sash-fastener, so that by a slight lateral movement of the lift the fastener is unlocked, thus enabling the sash to be raised or lowered.

The improved lift and fastener is illustrated in the accompanying drawings, wherein—

Figure 1 is a side view of a portion of the lower rail of a window-sash and of a portion of the window-sill, the latter being partly broken away, this view showing the lift and the part of the fastener which is carried by the window-sill. Fig. 2 is a vertical section of the sash-rail and window-sill provided with the improved fastening devices. Fig. 3 is a bottom view of a portion of the window-sash. Fig. 4 is a vertical cross-section of the sash-rail in a plane indicated by the line 4 4 in Fig. 2.

A is the window-sill, and B the bottom rail of the lower window-sash.

C is a metallic plate, which is mortised into the window-sill and is secured thereto by screws *a a*. This plate is provided with a vertically-extending fixed hook-catch D, beveled on its upper surface. This plate and fixed catch are located immediately in line with the window-sash, so that when the sash is lowered it comes directly upon the plate C, thus entirely concealing the same when the sash is closed. The reciprocal portion of the fastener is carried by the lower rail B of the window-sash.

E is a plate which is set into the lower face of the rail B, and it carries on its upper side the fastening devices which co-operate with the fixed catch D. The rail B is chambered out to accommodate these co-operating fastening devices. The plate E is fastened to the rail by screws *b b*, and it is provided with a slot *c*, which registers with the fixed catch D, so that when the sash is lowered the catch passes through said slot *c*, thus permitting the sash to close tightly. The plate E carries two fixed guides *d d*, between which slides a spring-actuated locking-bolt F. This bolt slides back and forth in line with the slot *c*—that is, lengthwise of the plate E. The bolt carries an upwardly-projecting post *e*, and between this post and a fixed post *f*, carried by the plate E, is a coiled spring G, which is maintained in place by studs *g g* on the two posts. This spring presses the bolt toward the slot *c*. When the window-sash is elevated, the front edge of the bolt (which is beveled on the under side) extends across the slot *c* and in the path of the fixed catch D. The bolt is prevented from being projected too far forward by a stop *g'*. When the sash is lowered, the fixed catch D enters the slot *c*, and encountering the bolt F pushes it back out of the way. When, however, the head of the catch passes the bolt, the bolt is projected forward under the head of the catch, thus locking the sash. When thus locked, the sash cannot be moved until the bolt F is withdrawn.

For the purpose of withdrawing the bolt a manipulating-handle H is employed, which extends outside of the sash-rail and which may conveniently serve also as the sash-lift. This lift (which may be of any suitable shape) is provided with a stem I, which is secured to the post *e* on the bolt. This stem passes through a longitudinal slot *h* in a guard-plate J, which is countersunk in the face of the rail B. The lift is thus capable of being moved laterally far enough to withdraw the bolt, and the sash can then be raised by the lift. A slight lateral movement of the lift is sufficient, and the lift can readily be constructed so as to entirely conceal the slot *h*. It will thus be evident that the window-sash is automatically locked whenever it is closed, and that when closed the fastening devices are

entirely concealed. The catch D need not extend above the usual bead or molding on the sill, so that it is not in the way when the window is raised.

While the foregoing description has referred only to the lower window-sash, it is quite evident that the same fastening devices can be used to lock the upper sash. In that case the fixed catch would be carried by the head of the sash-frame and the bolt would be mounted in the upper rail of the upper sash.

I claim as my invention—

The plate E, which is fastened to the sash-rail, having longitudinal slot *c*, inwardly-projecting guides *d d* on each side of and parallel with said slot, and fixed post *f*, the sliding bolt F, which slides between said guides across said slot, said bolt having an inwardly-projecting post *e*, a spring G between said posts, which actuates said bolt and moves the same across said slot, in combination with a fixed catch D on the sash-frame, which enters said slot *c* when the sash is closed and with which said bolt co-operates, a plate J, attached to the face of the sash-rail, having longitudinal slot *h*, and the lift H, having stem I, which passes through said slot and is secured to said post *e* on the bolt, substantially as set forth, whereby when said lift is moved laterally in said slot said bolt is released from said fixed catch.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

EDWARD WILER DUNLAP.

Witnesses:
TILGHMAN JOHNSTON,
PETER A. HORTY.