

No. 708,406.

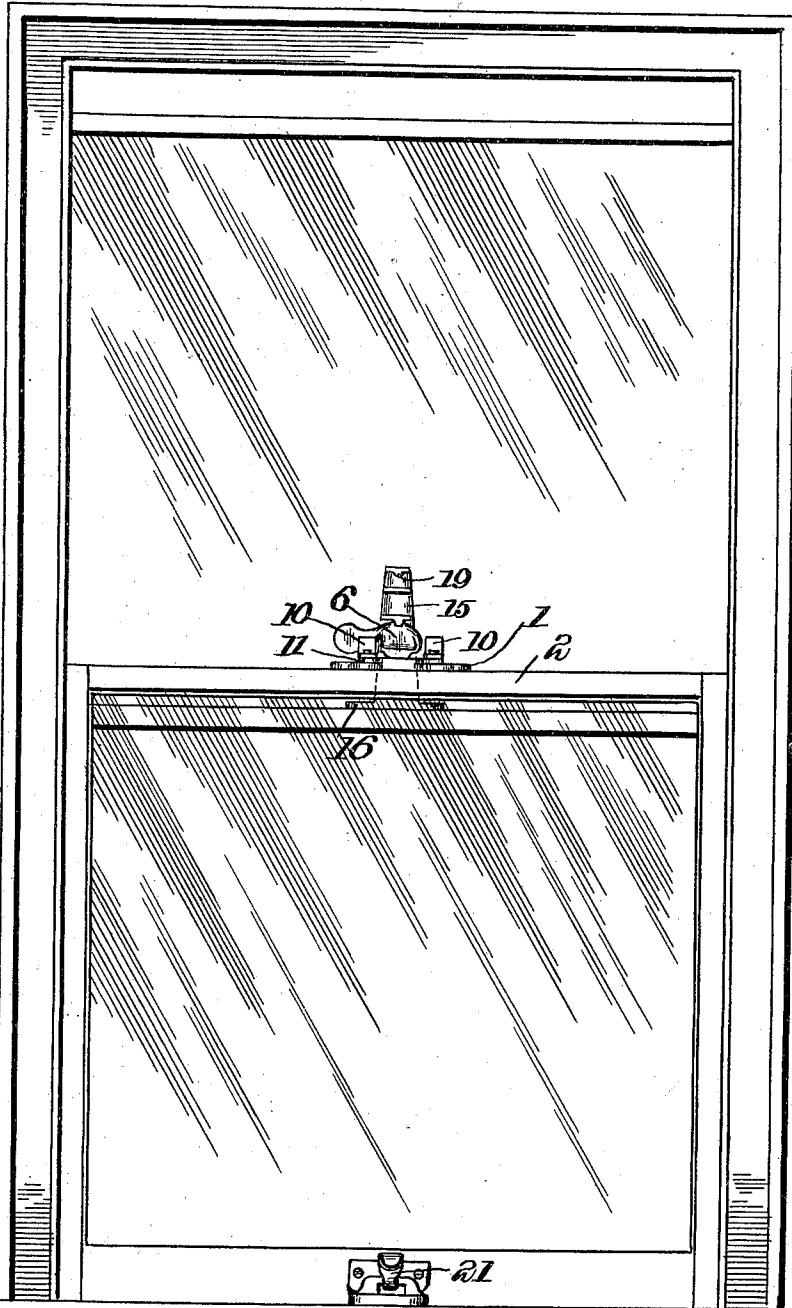
Patented Sept. 2, 1902.

C. W. ROBISON.
SASH LOCK AND LIFT.

(Application filed May 10, 1902.)

(No Model.)

2 Sheets—Sheet 2.



Witnesses:
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UNITED STATES PATENT OFFICE.

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SASH LOCK AND LIFT.

SPECIFICATION forming part of Letters Patent No. 708,406, dated September 2, 1902.

Application filed May 10, 1902. Serial No. 106,745. (No model.)

To all whom it may concern:

Be it known that I, CHARLES W. ROBISON, a citizen of the United States of America, residing at McKees Rocks, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sash Locks and Lifts, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in sash locks and holders, and has for its object to construct a sash-lock by the aid of which the window-sash may be supported and locked at different positions; and my invention further aims to provide means whereby both the upper and lower sash may be supported at different positions and securely locked.

The invention further aims to provide means whereby when the sash are locked with my improvement the device may not be tampered with from the outside of the window, irrespective of whether the lock may be engaged when the sash are in the closed or partially-opened position.

With the above and other objects in view the invention further resides in the novel construction, combination, and arrangement, as will be hereinafter more particularly described and then specifically set forth in the claims; and in describing the invention in detail reference is had to the accompanying drawings, forming a part of this specification, and wherein like numerals of reference will be employed for designating like parts throughout the several views, in which—

Figure 1 is a front elevation of a portion of a window, showing my improved device in the locked position. Fig. 2 is a top plan view of the frame carrying the locking lever or cam, which in practice is secured to the mid-rail of the lower sash. Fig. 3 is a top plan view of the frame to be attached to the lower sash, with locking-button or cam-lever removed. Fig. 4 is a rear elevation of the member which in practice is attached to the mid-rail of the upper sash. Fig. 5 is an edge view of the same. Fig. 6 is a transverse vertical sectional view taken on the line 6 6 of Fig. 2. Fig. 7 is a front view of a window, showing the upper sash partly lowered and locked in the lowered position.

I am aware that it is old to provide a locking device consisting of two members, one in

the form of a pivoted button or cam-lever adapted to be connected to the mid-rail of the lower sash of the window and the other adapted to be attached to the mid-rail of the upper sash of the window and adapted to receive the button or cam-lever for locking the upper and lower sash together. My invention, however, while accomplishing this also provides means whereby the upper or lower window-sash may be respectively raised or lowered within certain limits and locked in their partially-open positions, or both the upper and lower sash may be raised and lowered, respectively, and locked in their respective partially-opened positions.

To this end I provide a frame or casting which is adapted to be secured to the mid-rail of the lower sash and for this purpose is provided with one or more apertures to receive fastening-screws, nails, or the like. Centrally mounted on this frame or casting by a pivot-pin 4 is a button or cam-lever, which when in position for locking the sash lies partially beyond the inner edge of the frame or casting 1, as illustrated most clearly in Fig. 2. This button or cam-lever is provided along the edge which projects beyond the frame or casting 1 with an upwardly-extending flange 6, extending outwardly beyond the body of the button or cam-lever at one end of the latter and forming a handle 7. This flange at its other end tapers off to a point with the plane of the body of the cam-lever for a purpose as will presently appear.

The frame or casting 1 near each end thereof is provided with slots 8, and mounted on the frame or casting by riveting or like means, as at 9, are springs 10, which are inclined upwardly and then bent downwardly at right angles into the slots and have their free ends turned outwardly to form the stops 11, which engage underneath the frame or casting 1, as most clearly shown in Fig. 6. The shoulders 12 of these springs form stops, against which the handle rests when the cam-lever is in either the locking or unlocked position. In order to prevent the handle moving around a greater distance than is desired, I provide small stops 14 on the casting or frame 1, as shown in Fig. 2, which will limit the movement of the button or cam-lever, especially when being moved to the unlocked position.

In order to lock the sash at varying positions, I provide a standard which in practice

is secured to the mid-rail of the upper sash and has means to receive the button or cam-lever of the member carried by the mid-rail of the lower sash. This standard takes the place of the keeper ordinarily employed and is of a length sufficient to extend a considerable distance above the mid-rail of the upper sash and is provided at different points throughout with means to receive the locking-button or cam-lever instead of being capable of engagement with the button or cam-lever at one position only, as is the case with the ordinary keeper. The standard consists of an upright 15, having an apertured base 16, which is secured by screws or like fastening means to the mid-rail of the upper sash. For giving the same a neat appearance on the window it is preferably tapered toward the top and is somewhat concavo-convex in form, the concave inner face being toward the inside of the window. To the inner or concave face of this standard is secured in pairs a series of shelves 17 18, each shelf 18 being provided with a downwardly-extending projection or lug 19. These standards will of course be most cheaply manufactured by molding, and in practice I have found that in order to cast the standard with the shelves it is necessary to provide openings 20 in the standard, so that the same may be tapped in under the concave face.

In Fig. 1 I show a fastening device 21 at the bottom of the lower sash, so that the latter may be fastened down and locked, and the upper sash may be lowered a desired distance and locked with my improved device, as will be apparent.

The lock is shown in Fig. 1 in position for locking the two sash together, and when it is desired to disengage the lock the spring 10 is depressed, so that the button or cam-lever may be moved around on its pivot-pin and swung around to the reverse position to that shown in Fig. 2. As the handle passes over the other spring 10 it depresses the same until it has passed beyond such spring, when the latter returns to its normal position and holds the button or cam-lever in this unlocked position, the said button or cam-lever being prevented from further inward movement by engagement with the stop 14. In the locked position the button or cam-lever passes between one of the shelves 17 and the adjacent shelf 18, with the flange 6 back of the projection or lug 19 and the handle lying behind one of the springs 10, as shown in Figs. 1 and 2. With this construction it will be observed that the upper sash may be lowered and locked at various positions, according to the number of places provided for locking engagement of the button or cam-lever with the standard. It will also be observed that the upper sash may be lowered a slight distance and the lower sash raised a slight distance and both sash locked in their partially-opened positions.

It will be noted that various changes may

be made in the details of construction without departing from the general spirit of my invention.

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

1. In a device of the type set forth, the combination of a standard secured to the mid-rail of the upper sash, with shelves arranged in pairs on the standard, each alternate shelf having a downwardly-projecting flange, a frame carried by the mid-rail of the lower sash with a cam-lever pivotally mounted on the frame, and a flange carried by the cam-lever, the under face of the cam-lever engaging and guided by one of said shelves, the flange of the succeeding shelf engaging the flange of the cam-lever, when the latter is in its locked position, and means for automatically locking the handle of the cam-lever, when the latter is locked to the standard.

2. In a device of the type set forth, the combination of a standard secured to the mid-rail of the upper shelf and carrying engaging means, a frame mounted on the mid-rail of the lower sash, with a cam-lever, pivoted to the frame, depressible means secured to the frame and adapted to engage the cam-lever and means on the casing to limit the movement of the cam-lever, whereby the latter may be locked between the last-named and the depressible means.

3. A device of the type set forth, comprising a standard secured to the mid-rail of the upper sash and carrying engaging means, with a frame secured to the mid-rail of the lower sash and having a cam-lever pivoted thereto, said frame having openings formed therein, with springs secured to the frame and inclining upwardly and having their ends bent downwardly and outwardly, with the outwardly-bent portion engaging the under side of the frame adjacent said openings thereby limiting the upward movement of the spring, and stops carried by the casing, with the handle of the cam-lever adapted to be received between said stops and downwardly-bent portions of the springs.

4. A device of the type set forth, consisting of a standard secured to the mid-rail of the upper sash, with engaging means thereon, a frame having openings therein and carrying a pivoted cam-lever with a handle thereon secured to the mid-rail of the lower sash, depressible means carrying shoulders secured to the frame and operating in the said openings with stops carried by the frame, the handle of the cam-lever when actuated depressing said depressible means and being locked between said stops and the shoulder of the depressible means.

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

CHARLES W. ROBISON.

Witnesses:

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