



(No Model.)

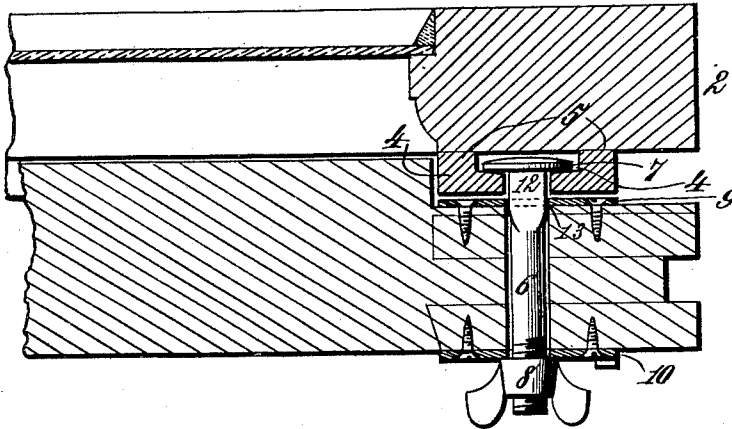
2 Sheets—Sheet 2.

L. DAMON.  
SASH HOLDER.

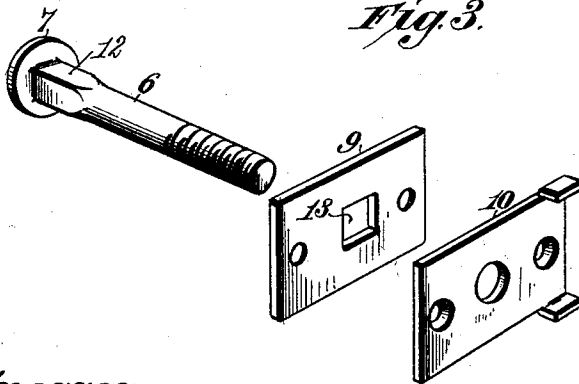
No. 477,103.

Patented June 14, 1892.

*Fig. 2.*



*Fig. 3.*



Witnesses,  
*Robert Emmett*  
*J. A. Rutherford*

*Inventor.*  
*Lorenzo Damon.*  
By *Samuel H. Norris.*  
*Atty.*

# UNITED STATES PATENT OFFICE.

LORENZO DAMON, OF WEST CHESTER, PENNSYLVANIA.

## SASH-HOLDER.

SPECIFICATION forming part of Letters Patent No. 477,103, dated June 14, 1892.

Application filed December 5, 1891. Serial No. 414,146. (No model.)

*To all whom it may concern:*

Be it known that I, LORENZO DAMON, a citizen of the United States, residing at West Chester, in the county of Chester and State of Pennsylvania, have invented new and useful Improvements in Sash Fasteners or Holders, of which the following is a specification.

This invention relates to that type of sash fastening or holding devices wherein a clamping mechanism mounted in the window-frame operates to force one sash against the other for locking the two sashes in any position of adjustment, whereby one or both sashes can be opened or partially opened and held in such position.

The objects of my invention are to simplify the construction of this character of sash fasteners or holders, to reduce the cost of the clamping devices and the labor involved in applying the same, and to avoid the necessity of cutting or otherwise disturbing the window-frame in which the sashes move.

To accomplish all these objects my invention involves the features of construction and the combination or arrangement of devices hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view showing my invention applied to two sashes, which are in their closed position. Fig. 2 is a horizontal sectional view through the meeting-rails of the sashes, the window-frame being omitted; and Fig. 3 is a detail perspective view of the clamping devices.

In order to enable those skilled in the art to make and use my invention, I will now describe the same in detail, referring to the drawings, wherein—

The numeral 1 indicates a window-frame, 2 the upper sash, and 3 the lower sash. These two sashes are suspended through the medium of sash-cords and balance-weights in the usual manner, so that both sashes can be moved to any desired position in the window-frame. The upper sash has one of its side-rails provided with a vertical dovetailed groove 4, which, as here shown, is composed of a pair of parallel strips 5, attached to the side rail of the sash and constructed with undercut edges for the purpose of producing the dovetailed form of the groove. By construct-

ing the groove through the medium of a pair of attached parallel strips formed with undercut inner edges I am enabled to entirely avoid cutting away any part of the upper sash, which is of material advantage in applying the invention to window-sashes already in use. The overhang of top rail of the lower sash is cut out at one end portion for the reception of the strips 5. By this arrangement my invention can be applied to existing window-sashes of the ordinary type by simply attaching the strips 5 to the upper sash, cutting a recess in the overhang of the lower sash, and boring a hole for the reception of the shank. Through the lower sash at this point extends a shank 6, having at one end a suitably-constructed head 7, arranged in engagement with the dove-tailed groove 4, and at its opposite end a screw-threaded portion, with which is engaged a thumb-nut 8. The shank 6 extends through metallic bearing-plates 9 and 10, attached, respectively, to the outer and inner sides of the lower sash, and the metallic plate 9 constitutes a bearing-surface for that portion of the upper sash which is provided with the vertical dovetailed groove. The shank 6 is incapable of rotating or turning axially, and to accomplish this it is formed with an angular portion 12 in juxtaposition to the head 7, which angular portion engages an angular orifice 13, formed in the metallic bearing-plate 9, attached to the outside of the lower sash. If the thumb-nut 8 is loosened, either sash can be adjusted to any desired position, and then by tightening up the nut until it comes to rest against the metallic plate 10 the shank 6 will be drawn lengthwise and the head 7 thereof will force the upper sash against the lower sash for the purpose of locking the two sashes rigidly together and preventing one moving independent of the other. It will be obvious that by loosening the nut both sashes can be adjusted more or less to an open position, and then by tightening the nut the two sashes will be locked in the position to which they have been adjusted, or one sash can remain in its closed position and the other sash be more or less opened and locked in such position. If both sashes are opened and clamped together to prevent the movement of one independent of the other, it may be desirable to lock one of the sashes to

the window-frame in such manner that the two sashes cannot be moved in unison in the frame, and for this purpose I provide a locking-catch 12, carried by the lower sash and adapted to engage and disengage any one of a series of orifices 13 in the window-strip 14. The locking-catch 12 may be of any construction suitable for the conditions required, and therefore I do not deem it essential to more fully illustrate and describe the same, as any device may be employed which will rigidly lock one of the sashes to the window-frame to prevent the two sashes being moved in unison after they have been adjusted to an open position and rigidly clamped together by the action of the shank 6 and its head 7 and nut 8.

I do not confine myself to the employment of a thumb-nut for the purpose of moving the shank 6 lengthwise to clamp one sash against the other, as different devices for this purpose will suggest themselves to those skilled in the art.

The essential and important feature of my invention resides in the fact that one of the sashes carries a clamping mechanism which engages a dovetailed groove in the other sash for the purpose of clamping the two sashes together and locking them in a fixed position relatively to each other.

By my invention it is possible to open either or both sashes a sufficient distance for proper ventilation, but insufficient for a person outside the building to effect an entrance through the window, as the two sashes will be rigidly clamped together, and it is impossible to move one independent of the other.

The arrangement of the clamping mechanism

on one of the sashes and the provision of a vertical dovetailed groove on the other sash formed by the attached parallel undercut strips engaged with the clamping mechanism render it entirely unnecessary to cut or otherwise disturb any part of the window-frame for the purpose of applying the clamping devices, and consequently my invention can be effectually and economically applied to window-sashes already in practical use in buildings.

Having thus described my invention, what I claim is—

The combination, with a window-frame, an upper sash, a pair of parallel vertical strips attached to the inside of the upper sash and formed with undercut inner edges to provide a dovetailed groove, a lower sash having its outside cut away to provide a space which receives the parallel strips, a metallic bearing-plate attached to the outside of the lower sash and against which the parallel strips bear, a metallic bearing-plate attached to the inside of the lower sash, a shank extending through the said bearing-plates and having a head at its inner edge, which engages the undercut inner edges of the parallel strips, and means for moving the shank lengthwise to rigidly clamp the parallel strips against the metallic bearing-plate at the outside of the lower sash, substantially as described.

In testimony whereof I have hereunto set my hand and affixed my seal in presence of two subscribing witnesses.

LORENZO DAMON. [L. S.]

Witnesses:

JOHN A. RUPERT,  
JAS. L. KING.