

(No Model.)

A. B. COUGH.
SASH LOCK.

No. 545,778.

Patented Sept. 3, 1895.

Fig. 1.

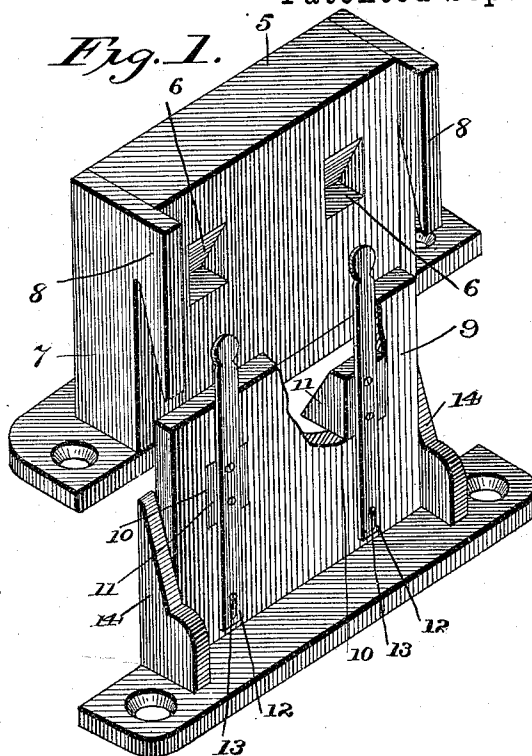
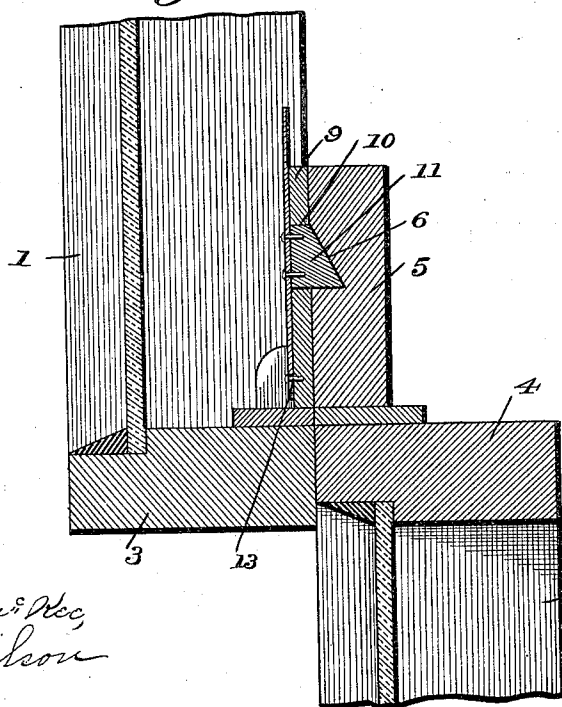


Fig. 2.



Witnesses

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UNITED STATES PATENT OFFICE.

ADONIRAM BIRD COUGH, OF TREMONT, MAINE.

SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 545,778, dated September 3, 1895.

Application filed May 8, 1895. Serial No. 548,474. (No model.)

To all whom it may concern:

Be it known that I, ADONIRAM BIRD COUGH, a citizen of the United States, residing at Tremont, in the county of Hancock and State of Maine, have invented certain new and useful Improvements in Sash-Locks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in locks for window-sashes, the object of the same being to provide a device of this kind which shall automatically draw together and lock the lower rail of the upper sash and the upper rail of the lower sash. The locking mechanism is made in two parts, one of which is secured in a recess in the upper rail of the lower sash, having notches therein, with a horizontal shoulder at the bottom thereof and two projecting angular fingers extending downwardly from the two sides thereof, the other part of the lock being secured in the lower rail of the upper sash, the front face thereof having slots therein, through which project locking dogs or stops secured upon flat springs pivoted in an elongated slot at the lower side of the inner face-plate of the lock and projecting upwardly beyond the upper edge of the lower rail of said upper sash, whereby upon pressing rearwardly said spring the locking-dogs connected thereto will be withdrawn from engagement with the notches in the other part of the locking device, enabling the window-sashes to be separated, and whereby upon lowering the lower sash and raising the upper sash the adjacent faces thereof will be drawn together and automatically locked in place.

The invention also consists in other details of construction and combinations of parts, which will be more fully hereinafter described and claimed.

In the drawings forming a part of this specification, Figure 1 is a perspective view of the two parts of my lock shown detached in the relative positions which they will assume toward one another. Fig. 2 is a vertical section through the window-sashes, showing the parts of my lock secured thereto.

Like reference-numerals indicate like parts in the views.

It will be seen that 1 and 2 indicate, respectively, the upper and lower sashes of the window.

3 is the lower rail of the upper sash and 4 is the upper rail of the lower sash. Fitting a recess in the rail 4 is one part of my locking device 5, which has notches 6 6 along its face, adjacent to the rail 3, the shoulder thereof being formed at the lower edge of said notches. The side pieces 7 7 of this part of my locking device have two projecting fingers or arms 8 8, which are angularly cut along their inner edges. These project slightly beyond the edge of the rail 4. The other part of my locking device 9 is secured by screws or otherwise on the inner face of the rail 3. The front face-plate of the part 9 is provided with two slots 10 10, through which project dogs or stop-pieces 11 11, which are adapted to fit into the notches 6 in the part 5 when the two sashes are in their closed position. These dogs 11 are secured to flat springs 12 12, connected at their lower ends by pins 13 in the inner face of the plate 9. This connection is made in an elongated slot in the springs 12, which permits an upward movement of said springs but prevents a downward movement thereof. Secured to the sides of the face-plate 9 are two guide-bars 14 14, which are adapted to fit into and bear against the angularly-cut sides or arms of the wings 7 7.

With the parts constructed as just described, the operation of my device is as follows: When the window-sashes 1 2 are in their closed position, the dogs 11 fit the notches 6 6 in the part 5. To open the sashes, the springs 12 12 are forced backward, which withdraws the dogs from the notches 6 6 and the lower sash is free to be moved upwardly and the upper sash free to be moved downward. In closing the sashes the dogs 11 11 automatically drop into the notches 6 6 and the parts are locked. At the same time the rails 3 and 4 are drawn into close contact by reason of the engagement of the guide-pieces 14 with the angular sides or arms of the wings 7. The slots 13 are provided in the

lower ends of the springs 12 for the purpose of preventing the withdrawal of the dogs 11 from the notches 6 by strong pressure on the sash. These slots permit a slight upward movement of the springs 12, and if an attempt is made to force the separation of the sashes the lower face of the dogs 11 will be forced upward by the shoulder of the notches 6 and the upper face of said lock forced into engagement with the upper edge of the slot 10, so that the greater the force applied the tighter these locks will be held in place.

Having thus described the invention, what is claimed as new is—

1. The combination with the upper and lower sashes of a window, of a locking device therefor, made in two parts, one of which is secured to the upper rail of the lower sash and is provided with notches therein having shoulders at their lower edge, and the other part secured to the lower rail of the upper sash, the front face plate thereof being provided with slots, springs secured at their lower ends to the inner face of said face plate and dogs fitting the slots in said face plate secured to said

spring and adapted to engage the notches in the other part of said lock, substantially as and for the purpose described.

2. The combination with the upper and lower sashes of a window, of a locking device therefor, made in two parts, one of which is secured to the upper rail of the lower sash and is provided with notches therein having shoulders at their lower edge, and the other part secured to the lower rail of the upper sash, the front face plate thereof being provided with slots, springs secured in elongated slots at their lower ends to the inner face of said face plate and dogs fitting the slots in said face plate secured to said springs and adapted to engage the notches in the other part of said lock, substantially as and for the purpose described.

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

ADONIRAM BIRD COUGH.

Witnesses:

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