

A. W. ADAMS.
AUTOMATIC SASH LOCK.
APPLICATION FILED JULY 18, 1901.

NO MODEL.

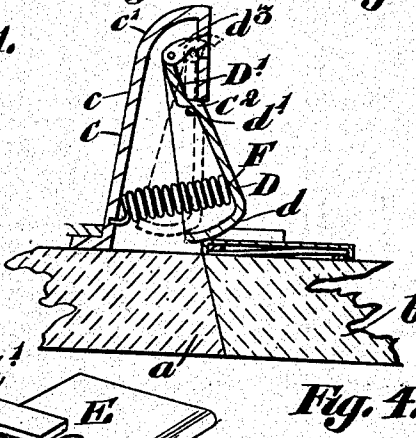
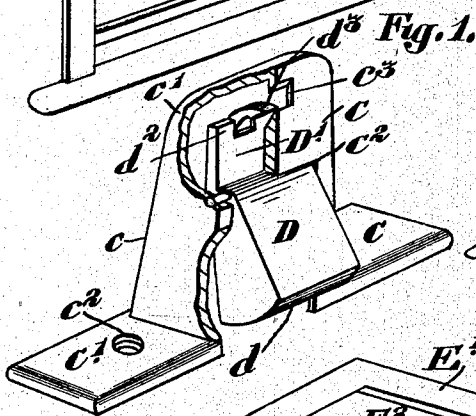
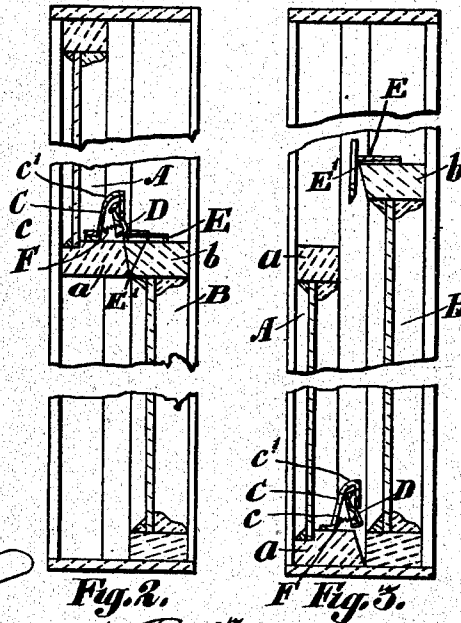
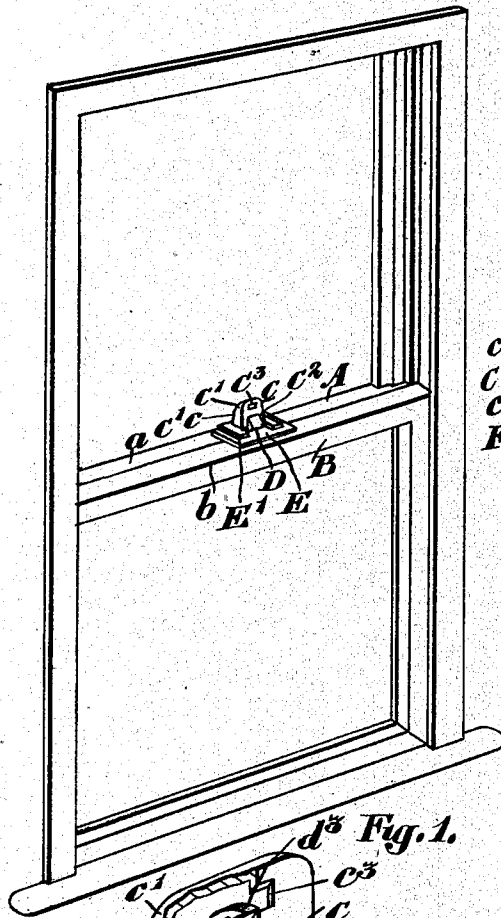


Fig. 5.

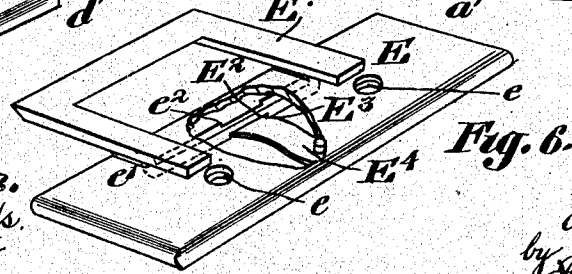


Fig. 6.

Witnesses.
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UNITED STATES PATENT OFFICE.

ALEXANDER WILLIAM ADAMS, OF TORONTO, CANADA.

AUTOMATIC SASH-LOCK.

SPECIFICATION forming part of Letters Patent No. 719,981, dated February 10, 1903.

Application filed July 18, 1901. Serial No. 68,806. (No model.)

To all whom it may concern:

Be it known that I, ALEXANDER WILLIAM ADAMS, carpenter, of the city of Toronto, in the county of York, in the Province of Ontario, Canada, have invented certain new and useful Improvements in Automatic Sash-Locks, of which the following is a specification.

My invention relates to improvements in automatic sash-locks; and the object of the invention is to devise a simple window-fastener, which when the window is closed may be readily unlocked and which when the window is opened will readily lock upon the window being closed; and it consists, essentially, of a fastener comprising one member having a beveled outer form and an inclined gravity-catch suitably pivoted therein, and the other member on the opposing sash having a swinging link designed to swing down when the window is open and be guided in position by the beveled form of the other member when the window is being closed, the parts being otherwise constructed and arranged in detail as hereinafter more particularly explained.

Figure 1 is a perspective view of a window, showing the general construction and arrangement of my improved fastener when the window is closed. Fig. 2 is a longitudinal section, intermediately broken away, showing the fastener with the window closed. Fig. 3 is a similar view showing the position when the window is open. Fig. 4 is an enlarged sectional detail of the fastener with the window closed. Fig. 5 is an enlarged perspective view with one side broken away to exhibit the construction and arrangement of my invention. Fig. 6 is a detail of the opposing member.

In the drawings like letters of reference indicate corresponding parts in each figure.

A is the upper sash, and B is the lower sash, and *a* is the lower rail of the upper sash, and *b* is the top rail lower sash. The upper rails of the sashes are beveled in the ordinary manner, so as to close and fit against each other.

C is one member of the fastener, which is provided with a substantially beveled back *c*, with a curved upper portion *c'*, such portion C being fastened to the lower rail of the up-

per sash by suitable screws passing through the holes *c*² in the end flanges C'.

D is a catch, which extends through a rectangular opening C² in the front of the member C. The catch D is normally when locked in a slanting position and has a curved or arc-shaped bottom *d* and is suitably pivoted on the pin *d'*. The catch D has an upward extension D', between the jaws *d*² of which is pivoted the hooked catch *d*³.

*c*³ is a rectangular opening above the opening C². The opening *c*³ is provided with inclined top and bottom edges, as indicated.

F is a spiral spring extending between the inside of the catch D and the inside of the back of the member C and suitably held in position.

E is the opposing member, which is suitably fastened to the top rail of the lower sash by suitable screws passing through the holes *e*.

E' is a swing-link, which is preferably rectangular in form and provided with an inner connecting cross-bar E², which is integral with the link and the ends of which depend through notches *e'*. The bar E² fits closely against the edge rib *e*² on the inner side of the member E. The bar E² is provided with a notch E³ on the two sides thereof, into which notch extends the end of the flat spring E⁴, which is secured to the plate E at the outer side, as indicated. The end of the link E' is beveled, as indicated.

I shall now describe the operation and utility of my lock. As shown in Figs. 1 and 2, the catch D is shown as extending over the edge of the member E and the link E' as extending over and straddling the member C. To open the window, it is simply necessary to press upon the catch D, forcing it inwardly against the spring F until the pivoted catch *d*³ moves through the opening *c*³ and catches upon the edge thereof. In this position it will be readily seen from the dotted lines shown in Fig. 4 that the outer face of the catch D will be flush with the face of the member C, and therefore the lower sash may be pushed upwardly or, as shown in Fig. 3, the upper sash pushed downwardly, this making, of course, no difference in the catch working. When the lower sash is pushed downwardly, the edge of the member E contacts with the

end of the catch d^3 , as shown in dotted lines, and thereby relieves such catch, whereupon the spring forces the catch D outwardly, it beforehand, however, having passed the member E, so that it is free to move downwardly into any position or such as shown in Fig. 3. When the top rail of the other sash moves past the swing-link E', it throws it down into the position shown in Fig. 3, and thus when the sash has been raised again the top rail of the sash readily passes the swing-link. When, however, the upper sash is being thrown upwardly, the beveled edge of the link E' contacts with the substantially beveled end c' of the member C, thereby throwing the swing-link to the horizontal and allowing it to pass down over the member E, the catch D being in such movement forced inwardly until it has passed the top edge of the member E, when it springs back into position over the member E, when the window is securely locked. In either position the link E' is caused to assume the spring E⁴ practically holds the link rigid or at least quite free from springing until it is engaged to throw it either up or down.

I may also mention that quite an advantage in the construction of my improved window-fastener resides in the construction of the bottom of the main catch, which, it will be noticed, is arc-shaped. By this means even should the sash not come quite together the arc-shaped bottom will always hold the window locked as long as any portion of it overlaps the top rail of the lower sash. It may also be mentioned that the inclined or beveled back of the member of the fastener on the lower rail of the upper sash serves when

the link of the opposing member passes over the same to draw the rails together, and thereby preclude any possibility of rattling or dust or wind passing into the apartment. Such arc-shaped bottom may, if desired, be provided with cross-notches or corrugations to prevent the possibility of it slipping.

What I claim as my invention is—

1. In a fastener, the combination with the upper and lower sashes, of a member secured to the lower rail of the upper sash and having inclined rear faces and a hinged link carried by the lower sash and adapted to always overhang the top of the member on the lower rail of the upper sash, such hinged link being caused to fold downwardly by the contacting with the top rail of the upper sash and thereby allow the top of the upper sash to pass beneath the level of the top of the lower sash and yet pass over the member of the upper sash when the windows are about closed, as and for the purpose specified.

2. In a device of the class described, the combination with the one member having an upward extension, of an opposing member having a swing-link provided with a substantially square cross-bar extending underneath the member and close to the under edge of the same and a flat spring held to the member and extending against one of the sides of the bar, so as to hold the link in a horizontal or vertical position and for the purpose specified.

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Witnesses:

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