

(No Model.)

W. J. NEIDL.
SASH FASTENER.

No. 546,784.

Patented Sept. 24, 1895.

Fig. 1

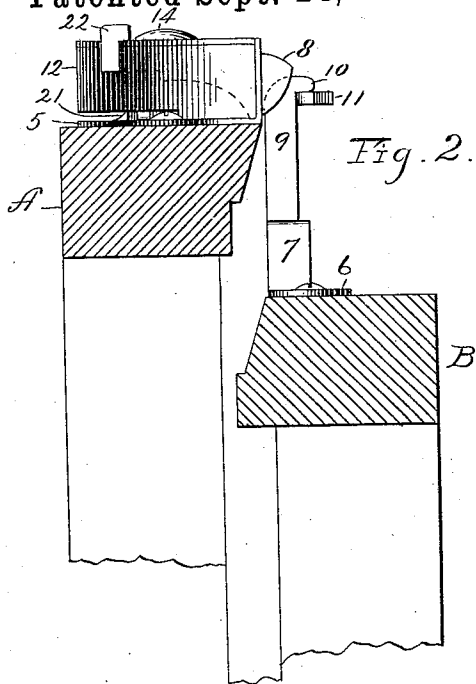
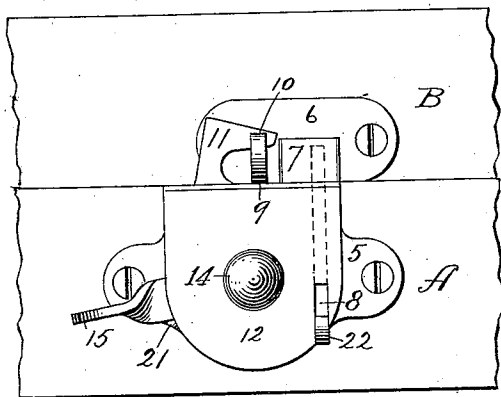


Fig. 3.

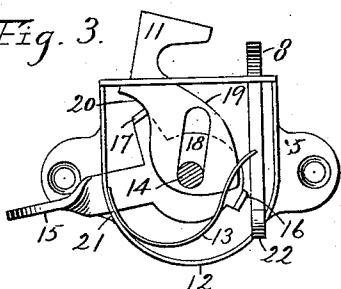
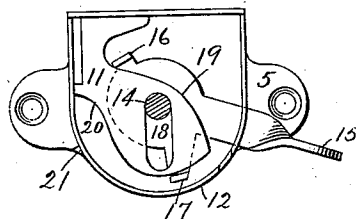


Fig. 4.



Witnesses

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SASH-FASTENER.

SPECIFICATION forming part of Letters Patent No. 546,784, dated September 24, 1895.

Application filed August 3, 1894. Serial No. 519,391. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM J. NEIDL, a citizen of the United States, residing at New Britain, in the county of Hartford and State of Connecticut, have invented certain new and useful Improvements in Sash-Fasteners, of which the following is a specification.

My invention relates to improvements in sash-fasteners for meeting-rails; and the objects of my improvements are simplicity and economy of construction and general efficiency in use, particularly with reference to a self-locking device and to locking the sashes when partly opened.

In the accompanying drawings, Figure 1 is a plan view of my fastener, together with a portion of the sash-rails. Fig. 2 is a side elevation of my fastener with the sash-rails in section. Fig. 3 is a plan view of the main part of my fastener with the cap removed, and Fig. 4 is a like view of the same (less the self-fastening catch) with the parts in their other position.

The fastener portion of my fastener may be provided with any suitable base-plate 5 for securing it to the top rail A of the lower sash, while the base-plate 6 of the keeper portion is to be secured to the lower rail B of the upper sash. This keeper base-plate is provided with a staple-like keeper 7, open at the front to receive the end of the self-fastening catch 8, and also with a post-like keeper 9, having a rearwardly-projecting shoulder 10 at its upper end, which keeper 9 is for being engaged by the hook-bolt 11.

The base-plate 5 is provided with any suitable case 12, within which I arrange the self-fastening catch 8, which in the form shown is a sliding catch guided within bearings in the case and having a beveled outer end and a spring 13, Fig. 3, secured by one end to said catch, while its opposite end bears on the inner wall of the case with a constant tendency to force the catch outwardly into its position for engaging the keeper 7. The base-plate 5 is also provided with a central pin or post 14 for holding the parts in their assembled position, guiding the hook-bolt 11, and centering its operating-lever 15. Said lever is provided with two lugs 16 and 17, between which the opposing convex edges of the inner end of the hook-bolt lie. The outer end of the hook-bolt

11 is of a hooked form to hook around the keeper-post and draw the sash-rails toward each other, while its inner end is slotted, as at 18, the post 14 passing through said slot. Said inner end is also provided with the convex edges 19 and 20, of the form shown, thereby forming a narrow neck with concave edges at the junction of the outer and inner ends of said hook-bolt 11. The front side of the case is slotted for the passage of the lever 15, and the base-plate 5 is provided with a beveled locking-lug 21. Any suitable friction device may be placed on the post 14 to create sufficient friction to make the parts 11 and 15 stay in position; but as such devices are common in sash-fasteners I consider it unnecessary to illustrate or describe the same.

When the lever 15 is set in the position shown in Fig. 4, the hook-bolt 11 is withdrawn into its case and may remain so as long as may be desired. The self-fastening catch is, however, always projecting (when free). If the meeting-rails are separated by opening the sash and then again brought together, the under beveled edge of said catch will engage the top and front of the keeper 7, thereby forcing the catch inwardly against its spring until the point of the catch passes the upper wall of said keeper, upon which the cap is forced into engagement therewith to lock said rails together. If the rails are not quite closed the beveled upper edge of the catch will force them up or down into the closed position. The catch may be disengaged from its keeper by pressing the projecting end 22 to draw it out.

Whenever it is desired to draw the rails toward each other from front to rear, as well as to lock them from moving up or down, the lever 15 is turned from the position shown in Fig. 4 to that shown in the other figures. As the lever 15 is brought around, the lug 17 engages the concave edge of the narrow neck at the outer end of the convex edge 20 and pushes the hook-bolt out of the case, as shown in Fig. 3. At first its nose or end of the hook engages and rides along the left-hand side of the keeper-post; but as soon as the point of the hook passes said post the continued movement of the lever forces the hook back of said post and draws the rails together, as shown in Fig. 1. The lever rides over and snaps

down by the side of the lug 21 to lock the parts positively in this position. If desired to leave the window open a little, the self-fastening catch may be withdrawn and the upper sash lowered or the lower sash raised, while the hook-bolt still engages the keeper-post, and the sashes may be left at any desired point within the range of the length of said keeper-post, when they will be positively locked against being opened beyond the limit fixed by the hook-bolt 11 and shoulder 10 on the keeper-post, as shown in Fig. 2. In order to withdraw the hook-bolt, the lever 15 is lifted slightly to disengage the lug 21, and then turned back to the position shown in Fig. 4. In thus turning it back the lug 16 engages the convex edge 19 and first throws the hook-bolt to the left for disengaging the rear side of the keeper-post, and then riding along said edge to the concave edge of the narrow neck nearly opposite the point formerly engaged by the opposite lug 17 the continued movement of the lug 16 fully withdraws said bolt into its case, as shown in Fig. 4.

I claim as my invention—

1. A sash fastener having a self fastening catch for locking the rails against vertical movement and a separate hook fastener for drawing the rails toward each other, substantially as described and for the purpose specified.

2. A sash fastener consisting of a case having at one side the self fastening sliding catch 8, its spring 13, the post 14, lever 15 pivoted

thereon and having the lugs 16 and 17 and the hook bolt having the post slot 18 and curved edges 19 and 20 for being engaged by said lugs, substantially as described and for the purpose specified.

3. The combination of a frame or support, the post 14, the lever 15 pivoted on said post and having the lugs 16 and 17 nearly diametrically opposite each other, and the hook bolt having the slot 18 which receives said post and the opposing convex edges 19 and 20 forming a neck with opposing concave edges at the junction of the outer and inner ends of said hook bolt, against the opposite edges of which neck said lugs act respectively for forcing the hook bolt into and out of its case, substantially as described.

4. The combination of the hook bolt and its operating devices, with the keeper post 9 rigidly secured against independent movement and having the shoulder 10 at its upper end and underneath said shoulder a smooth rear edge of a vertical height many times exceeding the vertical thickness of that part of said hook bolt that engages therewith, and over which smooth edge said hook bolt may unobstructedly slide up and down when in engagement therewith, substantially as described and for the purpose specified.

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Witnesses:

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