Jan. 6, 1931. M. MARTINSON 1,787,540

AUXILIARY SASH CONNECTER

Filed Jan. 10, 1929

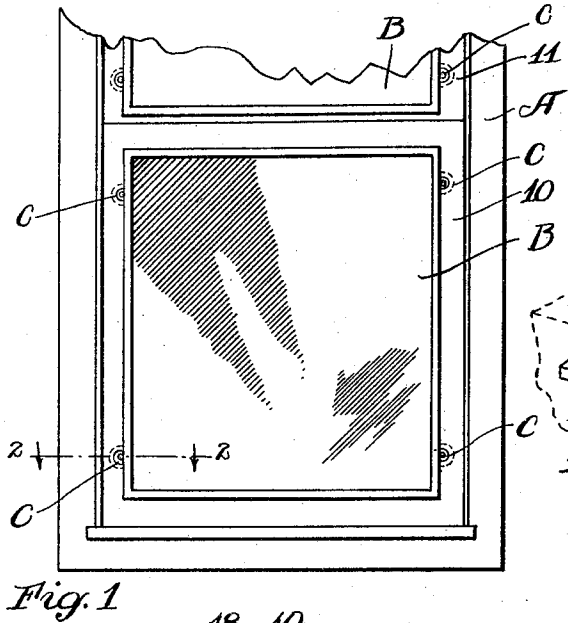


Fig. 1

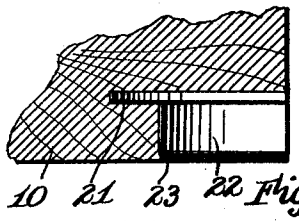


Fig. 3

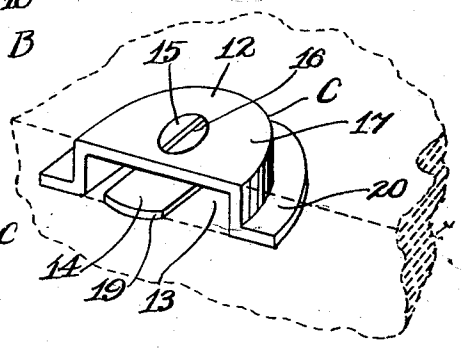


Fig. 4

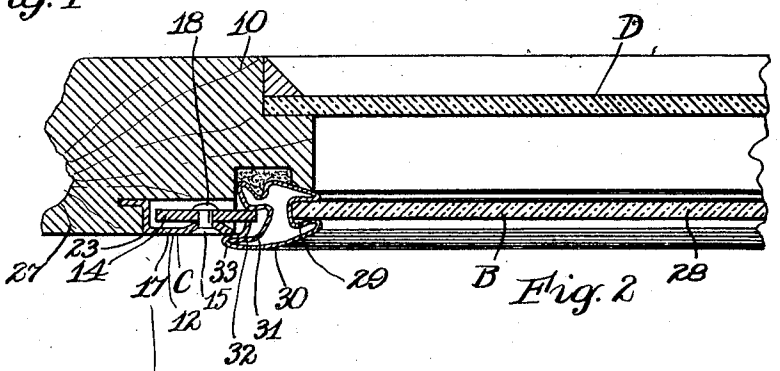


Fig. 2

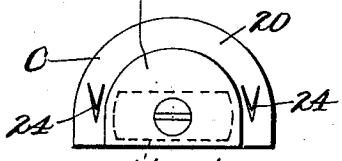


Fig. 5

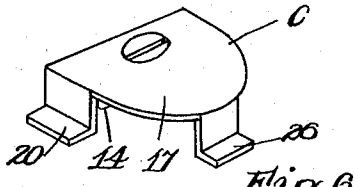


Fig. 6

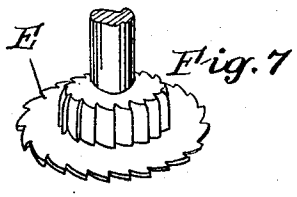


Fig. 7

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Patented Jan. 6, 1931 1,787,540

UNITED STATES PATENT OFFICE

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AUXILIARY SASH CONNECTER

Application filed January 10, 1929. Serial No. 331,691.

My invention relates to an auxiliary window sash connecter which is adapted to be mortised into the main sash in a manner so as to be very inconspicuous and yet provide a means of supporting an auxiliary sash to the regular sash of a window.

A feature of my invention resides in providing a simple, inexpensive fastener which is recessed into the main sash so that only a small portion of the fastener is visible.

It is also a feature of my fastener to provide flange means adapted to engage within a recess formed in the sash to form a strong and rigid attaching means for an auxiliary window sash.

My invention includes means of cutting or recessing the sash frame in a particular manner so as to receive my fastener to conceal and embed the same within the sash frame.

These features, together with other details and objects of my fastener will be more clearly and fully set forth in the specification and claims.

In the drawings I have illustrated in Figure 1 a window casing and sash where my fastener is employed to hold an auxiliary window.

Figure 2 is a cross section of a portion of a window showing my fastener in operative position on the line 2—2 of Figure 1.

Figure 3 is a cross section of a portion of a sash frame showing the manner of recessing the frame to receive my fastener.

Figure 4 is a perspective detail showing my fastener and showing in dotted outline a portion of the sash frame.

Figure 5 illustrates a top view of my fastener.

Figure 6 illustrates another form of my fastener.

Figure 7 illustrates a cutting tool used in forming the recess in the sash frame for receiving my fastener.

In the drawings I have illustrated a window A showing a portion of the casing and illustrating the sash frames 10 and 11 of the same as they would appear in ordinary construction.

The window A is provided with auxiliary windows B held in the frames 10 and 11 by means of my fastener C.

In securing the auxiliary windows B to the sash 10 or 11 which carry the main window D, as many fasteners C as may be desired can be used. Naturally the size of the window will determine the number of fasteners that are necessary to hold the auxiliary window B in proper position in relation to the main window D.

The fastener C is formed with a cup-like metal casing 12 to provide a recess 13 within the casing in which I position a locking lug 14. The lug 14 is pivotally connected to the operating stud 15 which is formed with a screw driver slot 16 in the head of the same which is exposed on the outer face 17 of the casing 12.

The operating stud 15 is rigidly connected by upsetting the end 18 of the same against the locking lug 14 or in any other suitable manner to rigidly connect the stud 15 and the lug 14 together. The lug 14, together with the stud 15 are free to rotate in the casing 12 and may be operated by placing a screw driver in the slot 16. The slot 16 is positioned to extend longitudinally with the lug 14 so that the position of the slot will indicate the position of the lug 14.

The lug 14 is formed with rounded ends 19 so that a long lug may be used within the recess 13 of the casing 12 to provide ample engaging means to hold the window B.

The casing of the fastener C is formed with an anchoring flange 20 which projects about the cup-like casing C and which is adapted to engage in the groove 21 formed in the frame 10 of the window.

The frame 10 of the window is cut out by means of the tool E to provide the narrow slot 21, as illustrated in Figure 3 and to form the recess 22 for the cup-like portion of the casing 12. In forming the recesses 21 and 22 the cutting tool E is so shaped as to provide an inwardly extending meeting edge 23 formed in the recess portion 22 so as to cause the body of the sash 10 to fit closely or flush with the outer surface 17 of the fastener C.

The fastener C may be provided with anchoring prongs 24 and the recess 21 may be so formed as to receive the fastener C with a snug or tight fit so that the fastener C

may be driven into position in the sash frame 10 to hold the same firmly in place within the frame of the window.

My fastener C may be also formed as illustrated in Figure 6 with the flange 20 extending only on either side of the fastener and providing an anchoring and bearing lug projecting from the surface 17 to hold the outer face 17 flush with the inner face 27 of the window casing 10 when the fastener C as illustrated in Figure 6 is driven into place in the recesses 21 and 22 formed in the window sash.

The auxiliary window B acts as a double window or storm window if it is desired and the glass 28 of the same is adapted to be held in the recess 29 of the metal frame 30 which is formed with a cross sectional shape such as is illustrated in Figure 2. The edge of the glass 28 is adapted to be puttied in the recess 29 anchoring the glass firmly in the frame 30. The frame 30 is provided with an outer recess 31 into which a felt strip is placed and wherein the spring tongue 32 formed by one edge of the frame 30 projects so that the lug 14 may engage against the spring edge 32 and extend into the recess 31 to hold the auxiliary window B rigidly connected to the sash 10 of the main window D.

The frame 30 is provided with a projecting lip which projects over the inner edge of the frame 10 and also over the edge of the fastener C.

A primary feature of my invention is in a fastener which is very inconspicuous and this is important because the auxiliary window is attached on the inside of the regular sash. Thus, any fastening means for the auxiliary sash which holds the window B would be objectionable if it were large and unsightly. Therefore, an important feature of my invention is in a fastener which is virtually entirely embedded in the sash frame and by the particular construction set forth wherein the fastener C is driven into the recess formed in the sash frame it is obvious that the outer surface of the frame can be sanded so that the edge 23 will virtually meet with the outer small surface 17 of the fastener, thereby forming a smooth front or inner surface to the sash and only a very small portion of the fastener C being visible when the auxiliary sash is in place.

My fastener C is so completely embedded within the casing 10 as to be virtually concealed excepting for a small portion of the outer face 17 as illustrated in Figure 1. In this manner I provide a very inconspicuous and practical means of supporting the auxiliary window B to the ordinary window sash.

In accordance with the patent statutes, I have disclosed the principle of my fastener and means of anchoring my fastener and recessing the window sash and while I have illustrated a particular formation and construction of the same, I desire to have it understood that this is only illustrative and that other means may be employed in carrying out my invention within the scope of the following claims without departing from the spirit thereof.

I claim:

1. A fastener for an auxiliary window including, a cup-like body portion, an anchoring flange projecting therefrom and a locking lug rotatable within said cup-like portion and adapted to project therefrom to engage and hold an auxiliary window in the sash of a main window.

2. A fastener for supporting an auxiliary window to the sash of a main window including, a metallic cup-like body portion, an anchoring flange projecting from the edge thereof and a locking tongue rotatably positioned within said body portion.

3. A fastener for a window sash adapted to be virtually concealed therein including, a plate-like member, a locking tongue and operating stud rotatably connected to said plate member with said tongue beneath said plate, and flange means projecting from said plate in a manner to be embedded within a recess formed to receive the same in the edge of a window sash.

4. A fastener for auxiliary windows for a window sash including a recess formed in the side edge of said sash and a fastener having a rotatable locking tongue embedded within the said recess to virtually conceal the same when said fastener engages an auxiliary window frame.

5. A fastener for an auxiliary window to attach the same to a window sash, a recess formed in the window sash, a fastener having a body portion adapted to fit in said recess, a narrow flange projecting from the body of said fastener and a narrow groove formed in the window sash projecting beyond said recess for receiving the body of said fastener to anchor and conceal said fastener in the edge of a window sash.

6. A fastener for auxiliary windows adapted to be embedded in the edge of a window sash including, a plate member, a locking lug pivotally connected beneath said plate member, a stud for operating said lug, anchoring flanges projecting from said plate member and a recess formed in the edge of a window sash to embed and conceal said anchoring flanges of said fastener within the window sash.

MARTIN MARTINSON.