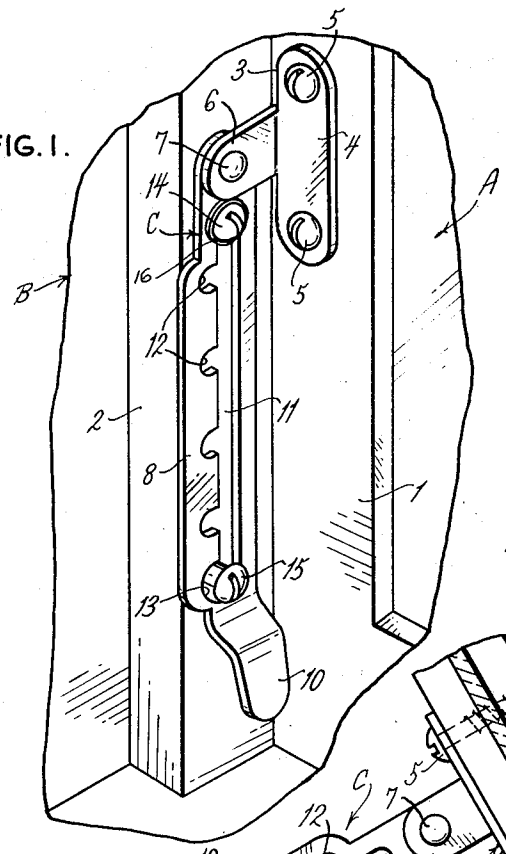
Aug. 28, 1956 J. H. STEVENS ET AL 2,760,805

STORM WINDOW BRACKETS

Filed Nov. 14, 1952

FIG. 1.



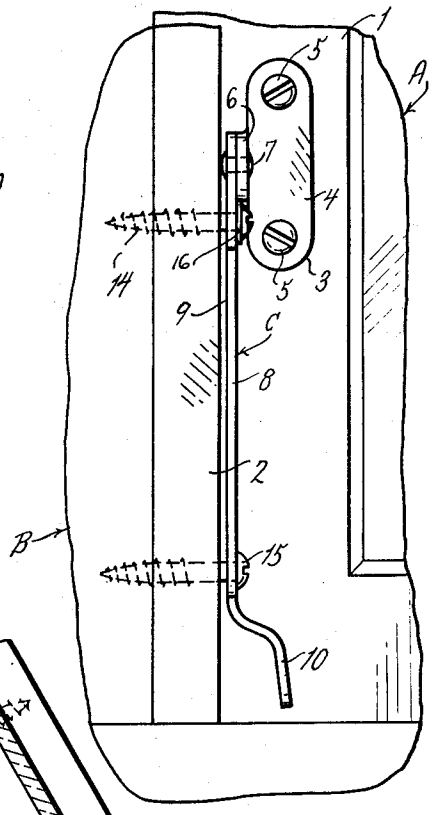


FIG. 2.

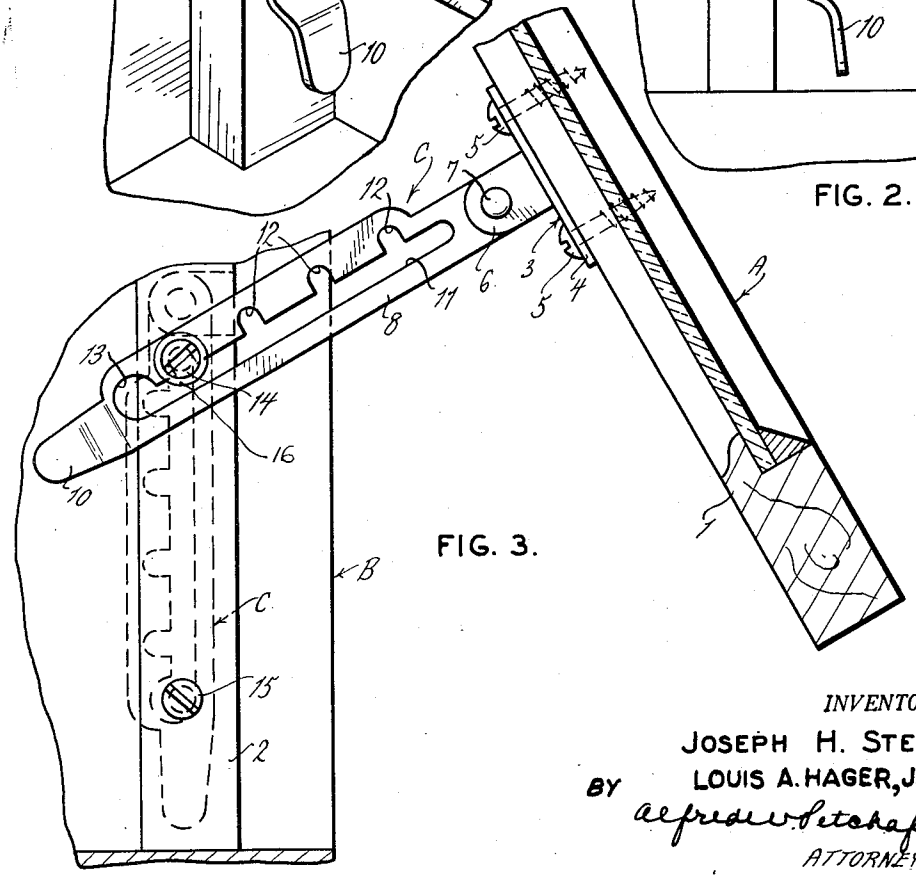


FIG. 3.

INVENTORS.
JOSEPH H. STEVENS
LOUIS A. HAGER, JR.
BY alfred w. Petcraft
ATTORNEY

United States Patent Office 2,760,805 Patented Aug. 28, 1956

2,760,805

STORM WINDOW BRACKETS

Joseph H. Stevens, Clayton, and Louis A. Hager, Jr., St. Louis County, Mo., assignors to C. Hager & Sons Hinge Mfg. Co., St. Louis, Mo., a corporation of Missouri

Application November 14, 1952, Serial No. 320,545

1 Claim. (Cl. 292—265)

This invention relates to certain new and useful improvements in storm window brackets.

It is the primary object of the present invention to provide a strong window bracket which is simple and economical in construction and can be mounted operatively between the storm window and the window casing in which the storm window is installed.

It is a further object of the present invention to provide a storm window bracket which will operate to lock the storm window tightly in closed position or optionally hold it in any one of several outwardly swung or open positions to afford ventilation on warm days or whenever necessary.

It is also an object of the present invention to provide a storm window bracket which may be simply and quickly disconnected from the window casing or reconnected thereto whenever it is necessary to remove or install the storm window as is usually done in spring and fall, respectively.

With the above and other objects in view, our invention resides in the novel features of form, construction, arrangement, and combination of parts presently described and pointed out in the claim.

In the accompanying drawing (one sheet)—

Figure 1 is a fragmentary perspective view showing a storm window and window casing equipped with a storm window bracket constructed in accordance with and embodying the present invention;

Figure 2 is a fragmentary front elevational view of a storm window and window casing equipped with the storm window bracket; and

Figure 3 is a fragmentary sectional view showing the position of the storm window bracket when the storm window is in open position.

Referring now in more detail and by reference characters to the drawing, which illustrates a preferred embodiment of the present invention, A designates a conventional storm window having a vertical stile 1 and B designates a conventional window casing having a vertical stop-bar 2 against which the storm window stile 1 is ordinarily tightly pressed to seal the window area against the weather. Operatively mounted between the stile 1 and stop-bar 2 is a storm window bracket C comprising a hinge-fitting 3 integrally including an elongated base-flange 4 fastened rigidly to the storm window stile 1 by means of screws 5 and having a perpendicularly inwardly extending ear 6 provided at its outer ends with a hinge-rivet 7 for swingable connection to one end of a long, narrow bracket arm 8 formed preferably of heavy gauge sheet metal or other suitable material. The bracket arm 8 is relatively flat on its outer face 9, that is to say the face presented outwardly with respect to the ear 6 and at its free ends the bracket arm 8 is deformed inwardly away from its flat face 9 in the provision of an offset finger-grip portion 10. Intermediate its ends, the bracket arm is provided with a lengthwise extending slot 11, one longitudinal margin of which is provided with a plurality of uniformly spaced notches 12

and at its outer end terminates in an enlarged notch 13. As will be seen by reference to Figure 1, the innermost notch 12, that is to say the notch nearest to the point of hinge connection with the hinge-rivet 7 is spaced outwardly from the end of the slot 11.

Mounted in the outwardly presented face of the stop-bar 2 are two vertically spaced round-headed screws 14, 15. As will be seen by reference to Figure 2, the screws 14, 15, are threaded only partially into the stop-bar 2, so that there is substantial space under the heads to loosely accommodate the bracket arm 8. Furthermore, the screws are so positioned vertically that when the storm window A is in closed position, the upper screw 14 will fit snugly within the upper terminal portion of the slot 11 and the screw 15 will fit within the enlarged notch 13 at the lower end of the slot 11, thereby holding the stile 1 tightly against the stop-bar 2. The head of the screw 14 is spaced outwardly from the stop-bar 2 by a somewhat greater distance than the head of the screw 15 and under its head the screw 14 is provided with a diametrally enlarged washer 16 which serves to prevent unauthorized disengagement of the bracket arm 8 by aligning the head of the screw 14 with the enlarged terminal aperture 13, the washer being substantially greater size than the terminal aperture 13. Whenever it is desired to open the window, the stop-bar 2 may be shifted slightly rearwardly so that the enlarged notch 13 will clear the head of the screw 15. The finger-grip portion 10 may be then pulled outwardly, deflecting or bending the bracket slightly to completely clear the head of the screw 15. Thereupon, the bracket arm 8 may be swung inwardly upwardly and the storm window A thereby pushed outwardly until any selected one of the notches 12 may engage the upper screw 14, holding the window in outwardly swung position, as shown in Figure 3. When it is necessary to take the storm window down in the spring of the year, the upper screw 14 and its associated washer 16 are removed from the stop-bar 2 by the use of a screw driver or other conventional hand tool and the bracket arm 8 is disengaged from the lower screw 15 by suitable alignment with the terminal aperture 13 and manual deflection of the bracket arm 8. Thereupon, the bracket arm 8 may again be deflected or bent slightly outwardly to remove it from engagement with the screw 14. The window, thereupon, may be removed from whatever conventional type of hinge or catch has been employed along its upper margin to hold it in place and the window may thus be readily taken down for summer storage. Similarly, in the fall of the year when it is necessary to install the storm window again, the reverse series of operations may be very quickly and conveniently performed, thus obviating the necessity of tools and the manipulation of complicated mechanisms for disconnecting the window-holding bracket C.

It should be understood that changes and modifications in the form, construction, arrangement, and combination of the several parts of the storm window bracket may be made and substituted for those herein shown and described without departing from the nature and principle of our invention.

Having thus described our invention, what we claim and desire to secure by Letters Patent is:

For use with a storm window swingably mounted in a window frame having a vertical stop-bar; a storm window bracket comprising a pivot forming fitting adapted to be rigidly mounted upon the storm window and having an inwardly projecting ear provided with a flat substantially vertical face, an elongated arm formed of a flat blade of springy metal, said arm being adapted to be pivotally mounted on the ear and being in facewise abutment against the vertical face of the ear so as to be free to swing without any appreciable lateral wobble and

extending swingably and slidably across the stop-bar, said arm having a longitudinal slot provided with a pair of straight parallel edges, one of said edges being unbroken and the other of said edges being formed with a plurality of notches which open inwardly toward said slot, said slot ending in a terminal notch substantially larger than the others, a first headed stud adapted to be set into the stop-bar and having a shank which is smaller in diameter than the width of said slot and being adapted to slide smoothly therealong without contacting said notches for optional engagement in any selected one of the notches, and a second headed stud, the head of which is larger in diameter than the width of the notches but smaller in diameter than the width of the terminal notch, adapted to be set into the stop-bar in downwardly spaced relation to the first stud for optional locking engagement in the terminal notch, said arm being adapted for disengagement from the second stud by being shifted so that the second stud is in alignment with the terminal notch and then manually deflecting the arm outwardly until the second headed stud is clear of said larger notch.

References Cited in the file of this patent

UNITED STATES PATENTS

747,866	Diehl	Dec. 22, 1903
1,142,140	Briggs et al.	June 8, 1915
1,565,713	Christiansen	Dec. 15, 1925
1,742,303	Christiansen	Jan. 7, 1930

FOREIGN PATENTS

13,805	Great Britain	of 1908
177,903	Switzerland	Sept. 2, 1935