May 4, 1937. H. A. ETLING 2,079,283

SUPPLEMENTAL WINDOW SASH

Filed Jan. 10, 1935

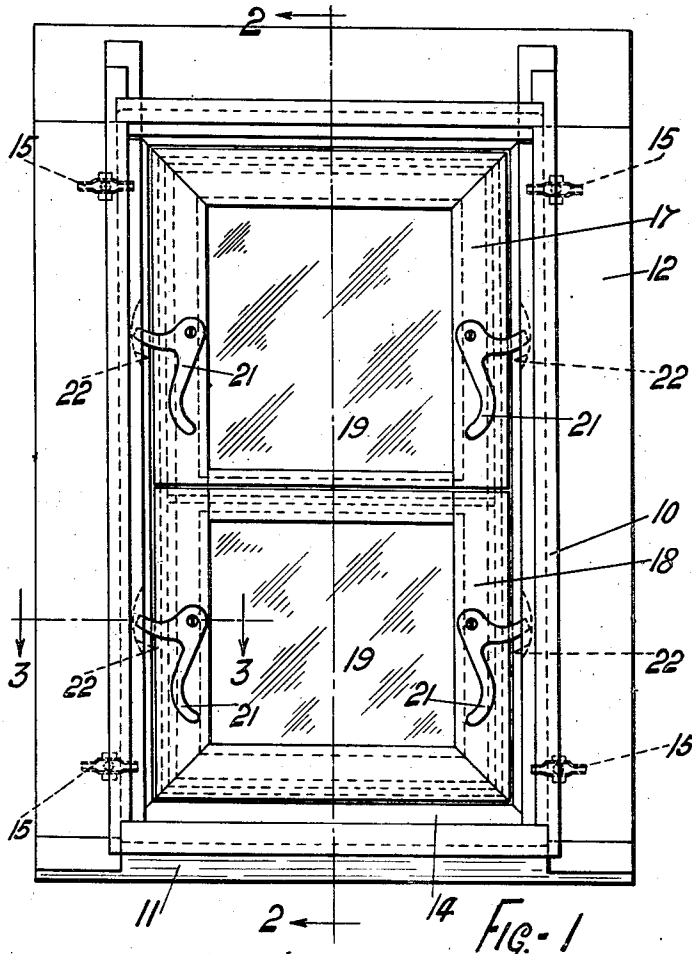

FIG.-1

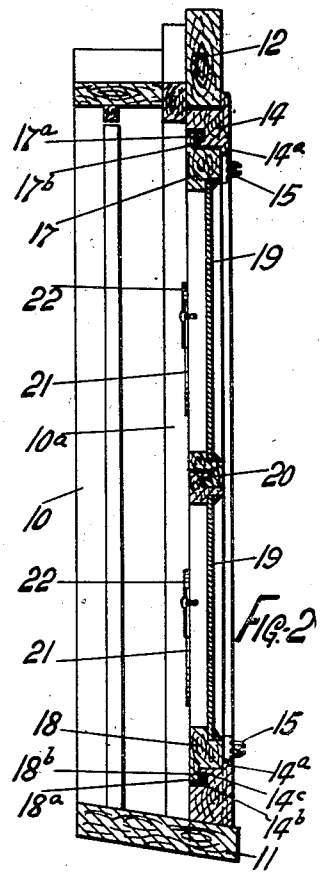

FIG.-2

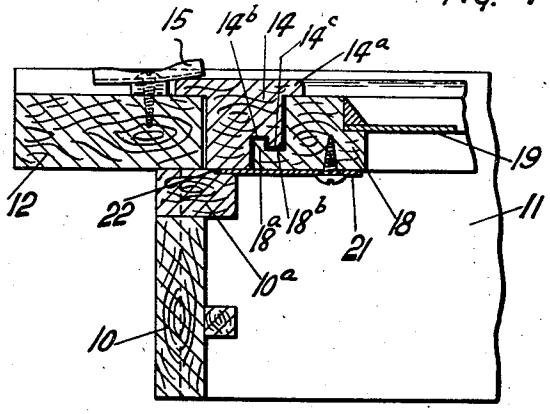

FIG.-3

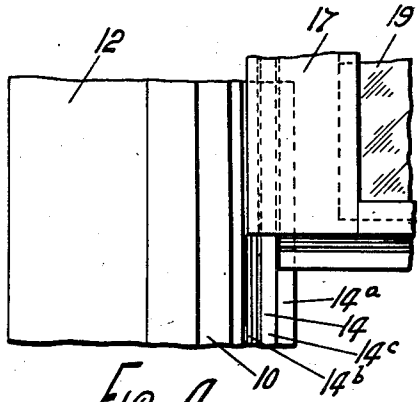

FIG.-4

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Patented May 4, 1937 2,079,283

UNITED STATES PATENT OFFICE

2,079,283

SUPPLEMENTAL WINDOW SASH

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Application January 10, 1935, Serial No. 1,174

1 Claim. (Cl. 20—55)

This invention relates to supplemental sash for windows or similar apertures, and more especially it relates to improved window sash applicable to storm window and fly screen construction. It is within the purview of the invention to use the invention interchangeably for storm windows or fly screens, although but one form of the invention is shown and described.

The chief objects of the invention are to provide supplemental window sash comprising upper and lower members, which members may be easily mounted, dismounted, or interchanged from inside the building; to provide ready application of the sash to an opening not especially constructed therefor; to provide weatherproof mounting of the sash about the margins thereof and at the juncture of the upper and lower sash, in the middle of the opening; and to provide such construction at the juncture of the upper and lower sash as not seriously to reduce the transparent area within the sash. Other objects will be manifest.

Of the accompanying drawing,

Figure 1 is an inside view of an ordinary window frame without sash, and the supplementary window sash mounted therein;

Figure 2 is a section on the line 2—2 of Figure 1;

Figure 3 is a section, on a larger scale, on the line 3—3 of Figure 1; and

Figure 4 is a fragmentary elevation, on a larger scale, of a lower corner of the upper supplementary sash and adjacent window frame.

Referring to the drawing, 10 is an ordinary window frame, which, for clearness of illustration, is shown without the ordinary window panes and sash therein. Said window frame includes the usual sill 11 at the bottom thereof, and a flat moulding 12 about the sides and top of that portion thereof that is disposed outermost when mounted in a building aperture.

Mounted upon the outer side of window frame 10 is a supplemental frame 14 that is rectangular in shape and rests upon the sill 11, the sides and top of the supplemental frame being so shaped as to fit within the moulding 12, and to rest against the outer face thereof. The supplemental frame is removably held in place by a plurality of clips 15, 15 that are pivotally mounted upon the outer face of the moulding 12 and are movable angularly over an adjacent edge of the supplemental frame. The inner marginal face of the supplemental frame 14 is formed with an inwardly extending flange 14^a at its outer edge. The inner lateral face of the supplemental frame is formed on all four sides with a longitudinally extending groove 14^b and longitudinal tongue or rib 14^c.

Mounted within the supplemental frame 14 in abutting relation with flange 14^a thereof is an upper sash 17 and a lower sash 18, each of said sashes being provided with a window pane 19. Said sashes substantially abut the inner marginal faces of the said frame, and upper sash 17 is formed on three sides with a longitudinally extending tongue 17^a and groove 17^b, which tongue and groove are complemental to groove 14^b and tongue 14^c of the supplemental frame 14 and snugly interfit therewith. Similar tongues 18^a and grooves 18^b are formed on three sides of lower sash 18 and similarly interfit with the tongues and grooves of said frame. The adjacent rails of the sashes 17, 18, at the middle of the structure, overlap each other, and have their adjacent lateral faces formed with interfitted, longitudinally extending, complemental tongues and grooves as is most clearly shown at 20, Figure 2. The respective sashes 17, 18 are retained in frame 14 by means of suitable latches 21, 21, one of which is pivotally mounted upon each side of the inner face of the sash, and is capable of angular movement to a position behind an inwardly extending flange 10^a on frame 10. The surface of flange 10^a may be recessed as shown at 22, 22 to receive the latches 21.

The feature of having the interfitting tongues and grooves of the frame and sashes on the lateral faces thereof facilitates the mounting and removal of the sashes. It also permits the overlapping of the adjacent rails of the sashes, at the middle of the structure, whereby the transparent area of the window is not seriously reduced. The sashes are mounted and removed from the inside, thus obviating the use of scaffolds or ladders which are required for mounting supplemental sash from the outside and simplifying the procedure of washing the window panes in said sashes. The invention contemplates the provision of a duplicate set of sash 17, 18, which sash will be provided with fly screening instead of window panes, and said duplicate sash may be easily and quickly substituted for the others.

Modifications may be resorted to without departing from the spirit of the invention or the scope of the appended claim which is not limited wholly to the specific construction shown and described.

What is claimed is:

The combination with a window frame, of a supplemental frame adapted to be secured in the

opening thereof, and a pair of removable sashes mounted in vertical alignment in said supplemental frame, said frame being formed on the rear face of its top, bottom and side members with a longitudinally extending, rearwardly projecting tongue and rearwardly opening groove, said sashes being formed on three sides with complemental tongues and grooves interfitting with those aforesaid, the top side of the lower sash and the bottom side of the upper sash partly overlapping each other, and said overlapping portions being formed with interfitting laterally projecting tongues and laterally opening grooves, each of said sashes being removable from the supplemental frame by lateral movement of translation normal to the plane of the sash.

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