W. E. MOORE & J. H. HULEHAN.

SCREEN SASH LOCKING MEANS.

APPLICATION FILED MAY 13, 1916.

1,220,259. Patented Mar. 27, 1917.

Fig. 1.

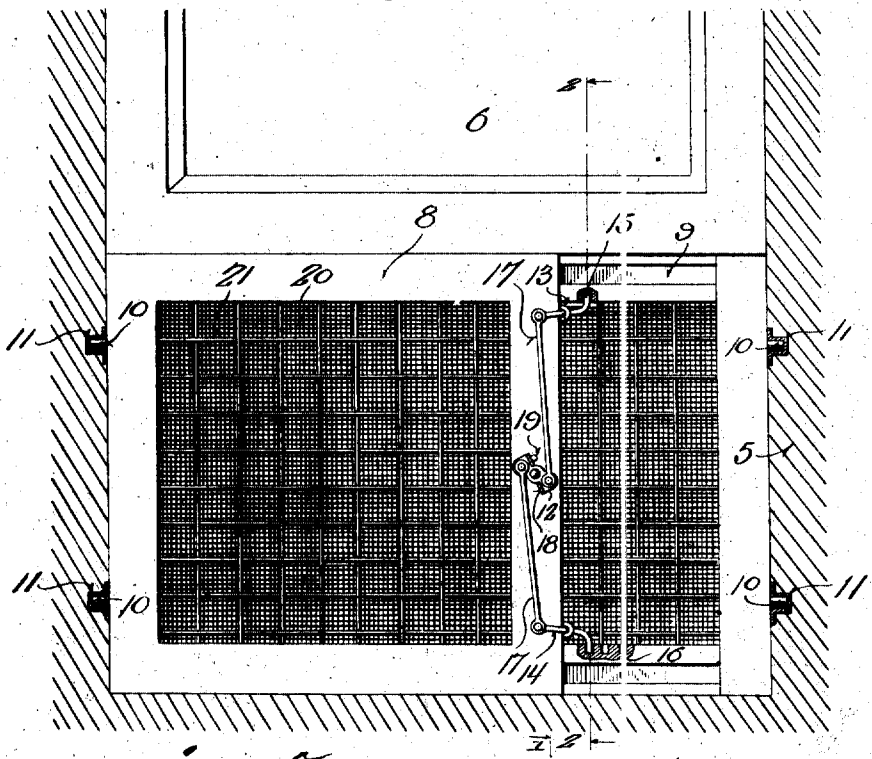


Fig. 3

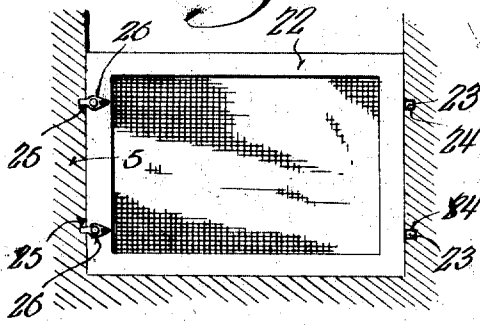
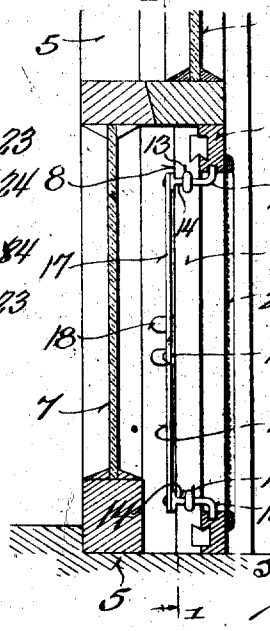


Fig. 2



Witness:

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UNITED STATES PATENT OFFICE.

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SCREEN-SASH-LOCKING MEANS.

1,220,259. Specification of Letters Patent. Patented Mar. 27, 1917.

Application filed May 13, 1916. Serial No. 97,537.

To all whom it may concern:

Be it known that we, WILLIAM E. MOORE and JOSEPH H. HULEHAN, both citizens of the United States, and residents of Wausau Junction, in the county of Marathon and State of Wisconsin, and of Eland, in the county of Shawano and State of Wisconsin, respectively, have invented certain new and useful Improvements in Screen-Sash-Locking Means; and we do hereby declare that the following is a full, clear, and exact description thereof.

The present invention relates to new and useful improvements in screen structures for windows and is more particularly directed to the provision of a means for locking a removable screen within a window frame.

It is in general the object of the present invention to provide a simple and readily operated means whereby a removable screen member may be locked against a window frame in a manner preventing removal of the screen from the outside of the window.

It is more particularly an object of the invention to provide a locking means adapted for association with screens of an extensible type to fit differing widths of windows, and wherein the locking means is operative in various relative positions of the screen sections, and serves to prevent telescoping movement of the sections.

With the above and other objects and advantages in view, the invention resides more particularly in the novel combination, arrangement and formation of parts more particularly hereinafter described and more particularly pointed out in the appended claims.

In the drawings:

Figure 1 is a side elevational view of an extension screen disposed in a window frame and with the improved locking means associated therewith, this view being taken sectionally through the window frame and looking from the inside of the window, as indicated by the section line 1—1 of Fig. 2.

Fig. 2 is a vertical sectional view through the lower portion of the window and screen, as indicated by the line 2—2 of Fig. 1.

Fig. 3 is a detailed view showing a modified embodiment of the improved locking means associated with a screen comprising a single unitary section.

Referring now more particularly to the accompanying drawings, 5 designates the frame of a window in which is mounted the upper and lower slidable sash members 6 and 7 respectively. In Figs. 1 and 2 an extension screen is shown associated with the window which is of a conventional type including the sections 8 and 9 having their top and bottom rails slidably connected in a conventional manner. The outer stile of each section is provided with a pair of outwardly projected lugs 10 which are adapted to engage in sockets 11 at the sides of the window frame 5, these sockets preferably comprising recessed plates, although they may merely comprise apertures in the frame. Thus when the screen is disposed in the frame, and extended with its lugs seating in this socket, means preventing inward sliding movement of the sections will hold the screen locked in the frame.

For this purpose, a locking means is provided which includes a bar 12 intermediately pivoted on the inner face of the inner stile of the screen section 8, which section it will be observed is disposed inwardly with respect to the window.

Pivotally secured as by staples 13 on the end portions of the outer edge face of the stile are transverse pawl bars 14 which have their ends adjacent the screen section 8 bent to form fingers 15 adapted upon rotation of the pawl bar to each selectively engage in one of a series of sockets 16 formed in the inner edge faces of the rails of the screen section 9. The other ends of the pawl bars are directed laterally to extend on the face of the inner stile of the section 8 and are pivotally connected to respective ends of the lever plate 12 by links 17. End portions of the plate are projected laterally to form finger pieces 18 and the plate is limited in its rotative movements by a stop 19 on the stile. Thus upon manipulating the plate, the sections may be locked against relative sliding movement and may consequently by reason of their lugs 10 be locked within the window. Thus a means is provided which positively prevents manipulation of the screen from the outside of the window, particularly as the screen would be normally of such height as to extend substantially to the upper sash 6 to prevent a person from possibly reaching around the top of the screen.

To prevent a person from gaining access

through the usual mesh 20 of the screen, a coarser mesh 21 formed of relatively strong wire is provided.

Fig. 3 illustrates more broadly one of the locking features of the invention, and in this figure a screen comprising a single unitary section 22 is disposed in the frame 5 and is provided at one end with lugs 23 similar to the lugs 10 of one end of the heretofore described screen and engageable in similar sockets 24 in one side of the frame. The other side of the frame is provided with sockets 25 adapted to receive the projected ends of lug plates 26 which are hinged to the adjacent stile of the screen and adapted to swing outwardly of the edge thereof to engage in the said sockets. Thus the screen is inserted and locked in the window frame by first engaging the lugs and sockets 23 and 24 and then when the screen has been positioned entirely within the frame, swinging the locking plates 26 into the sockets 25.

What is claimed, is:

1. The combination with a window frame provided with sockets in its sides, of a screen member including a rigid frame and a mesh carried thereby, rigid lugs projecting from one side of the screen frame and engageable in the sockets of one side of the window frame, and lugs movable relatively to that portion of the screen frame carrying the said rigid lugs and engageable in the sockets of the other side of the window frame.

2. The combination with a window frame and a screen member comprising slidably connected rigid frame sections, of the sides of the window frame being provided with sockets, lugs at the outer sides of the screen frame sections engageable in said sockets, and means for locking the screen frame sections against sliding movement.

3. The combination with a window frame and a screen member comprising slidably connected rigid frame sections, of the sides of the window frame being provided with sockets, lugs at the outer sides of the screen frame section engageable in said sockets and means for locking the screen frame sections against sliding movement in various relative positions of said frame sections.

4. The combination with a window frame and a screen member comprising slidably connected rigid frame sections, of the sides of the window frame being provided with sockets, lugs at the outer sides of the screen frame sections engageable in said sockets, one of the frame sections being provided with series of sockets in its top and bottom rails, pawl members pivoted to the adjacent side of the other frame section for selective engagement in the sockets, a bar intermediately pivoted to said adjacent side of the other frame section and links pivoted to the bar and to the pawls.

5. A screen comprising a pair of slidable sections, one of the sections being provided with series of sockets in its top and bottom rails, pawl members pivoted to the adjacent side of the other section for selective engagement in the sockets, a bar intermediately pivoted to said adjacent side of the other section and links pivoted to the bar and to the pawls.

In testimony that we claim the foregoing we have hereunto set our hands at Wausau, in the county of Marathon and State of Wisconsin, in the presence of two witnesses.

WILLIAM E. MOORE.
JOSEPH H. HULEHAN.

Witnesses:
SELMA EVERTSON,
JAMES P. RILEY.