

W. MANSFIELD.  
WINDOW SCREEN.  
APPLICATION FILED FEB. 5, 1919.

1,322,593.

Patented Nov. 25, 1919.

Fig. 1

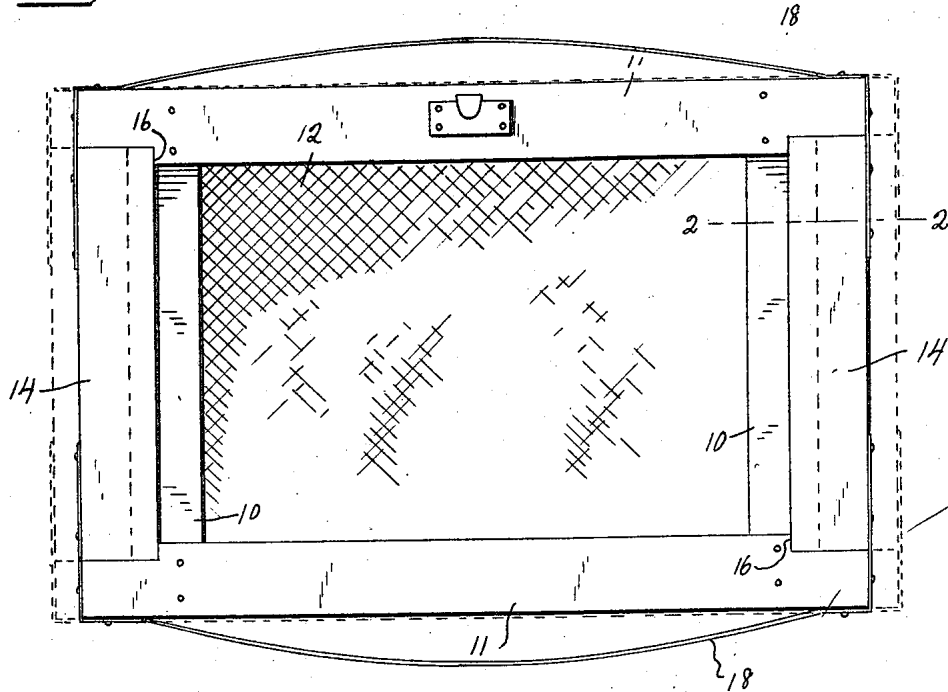


Fig. 3

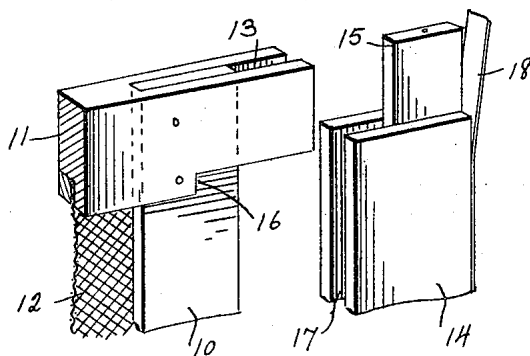
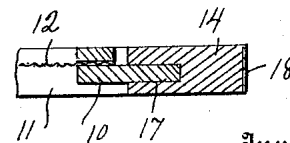


Fig. 2



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# UNITED STATES PATENT OFFICE.

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## WINDOW-SCREEN.

1,322,593.

Specification of Letters Patent.

Patented Nov. 25, 1919.

Application filed February 5, 1919. Serial No. 275,153.

*To all whom it may concern:*

Be it known that I, WILLIAM MANSFIELD, a citizen of the United States, residing at Ashville, in the county of Cambria and State of Pennsylvania, have invented certain new and useful Improvements in Window-Screens, of which the following is a specification, reference being had to the accompanying drawings.

10 This invention relates to window screens, and its general object is to provide a screen which will be caused to closely fit within the sash channels of a window frame.

A further object is to provide a screen of this character having laterally movable end pieces which will be yieldingly forced outward against the faces of the sash channels when the window sash is lowered onto the upper edge of the screen and the screen forced down firmly against the sill of the window.

Other objects will appear in the course of the following description.

My invention is illustrated in the accompanying drawings, wherein:—

25 Figure 1 is a front elevation of a window screen constructed in accordance with my invention;

Fig. 2 is a section on the line 2—2 of Fig. 30 1; and

Fig. 3 is a fragmentary perspective view of one corner of the screen with the parts separated.

Referring to these drawings, it will be seen that the body of the window screen comprises a rectangular frame formed of the vertical, lateral members 10, the upper and lower longitudinally extending members 11, and the screen proper 12. The end pieces 10 are less in thickness than the longitudinal pieces 11 and these upper and lower pieces 11 project beyond the end edges of the end pieces 10 and these projecting ends are longitudinally slotted or recessed, as at 13. Disposed between the upper and lower pieces 11 and outward of the pieces 10, are sliding members 14 shown most clearly in Fig. 3. These sliding members 14, as illustrated in Fig. 2, have a thickness equal to the thickness of the upper and lower pieces 11 and at their extremities the width of each piece 14 is reduced to provide an outwardly projecting tongue 15, these tongues being sufficiently thin so as to enter

the grooves or recesses 13 in the ends of the members 11. The end portions of these members 11 are reduced in width so as to provide shoulders 16 against which the sliding members 14 will bear and these members 14 are longitudinally grooved on their inner edge faces, as at 17, to receive the end members 10 and slide thereon. It will thus be seen that with this construction, the members 14 can slide in or out.

Attached to the outer edge faces of the members 14 are the extremities of the upper and lower springs 18. These springs are made of strips of resilient material, the ends of the strips being bent angularly so as to be attached firmly to the end faces of the members 14. These strips are longer than the length of the members 11 and as a consequence the strips will bow outwardly from the members 11 and will act to force the members 14 inward to the farthest extent permitted by the shoulders 16.

In the use of this device, the screen is placed in the sash channel with its lower spring resting upon the sill. Then the sash is pulled down onto the upper spring and this action forces the members 14 laterally outward so that they constitute strips bearing closely against the bottoms of the sash channels and preventing flies, mosquitoes, or other insects from entering around the screen at these points. The flattening of the springs consequent on closing the sash will, as before stated, shift the members 14 laterally outward, but there is sufficient yielding of the extremities of the springs as to permit the tight closing of the sash down upon the upper spring 18 without positively forcing the members 14 outward to their full extent, if this outward movement is resisted by the strip 14 engaging with the bottom of the sash channel.

A device of this character not only provides for the closing of the space between the screen and the sash channel, but it causes the screen to fit closely without rattling and prevents the inlet of air around the screen and the inlet of dust around the screen, and also permits the screen to fit window frames which are out of shape or wherein the opposite sash channels are not parallel to each other.

It will be seen that my invention is very simple, and that it may be embodied in a

number of different screens and that it may be very cheaply made.

I claim:—

1. A window screen having end members  
5 mounted upon the body of the screen for free lateral movement, and outwardly bowed springs disposed upon the top and bottom edges of the screen body and having their ends attached to the end members, said  
10 springs being arranged for engagement with the window sash and sill to simultaneously move the end members.

2. A window screen having end members  
slidingly mounted upon the ends of the  
15 screen, and an outwardly bowed spring extending longitudinally of the top and bottom of said screen, the ends of each spring being bent angularly, the ends of one spring being secured to the upper ends of the end  
20 members, the ends of the other spring being secured to the lower ends of the end members to permit simultaneous adjustment of said end members and their ends.

3. A window screen formed of a rectangular frame comprising upper and lower  
25 transversely extending members and later-

ally spaced vertically extending members, the longitudinally extending members being less in thickness than the horizontally extending members, said upper and lower  
30 members projecting beyond the vertical members and having their ends vertically grooved, and sliding members having tongues sliding in the grooves of the upper and lower members, each of said members  
35 being grooved on its inner edge face to receive and have sliding engagement with the vertical members of the frame, an outwardly bowed spring freely disposed on the top of the screen, and an outwardly bowed spring  
40 freely disposed on the bottom of the screen, the ends of said springs being secured to the ends of the end members, said spring being adapted to operate simultaneously to adjust  
45 the end members.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

WILLIAM MANSFIELD.

Witnesses:

J. J. RHODY,  
MARGARET RHODY.