(No Model.)

H. A. WAY.

EXTENSION SCREEN.

No. 569,073. Patented Oct. 6, 1896.

Fig. 1.

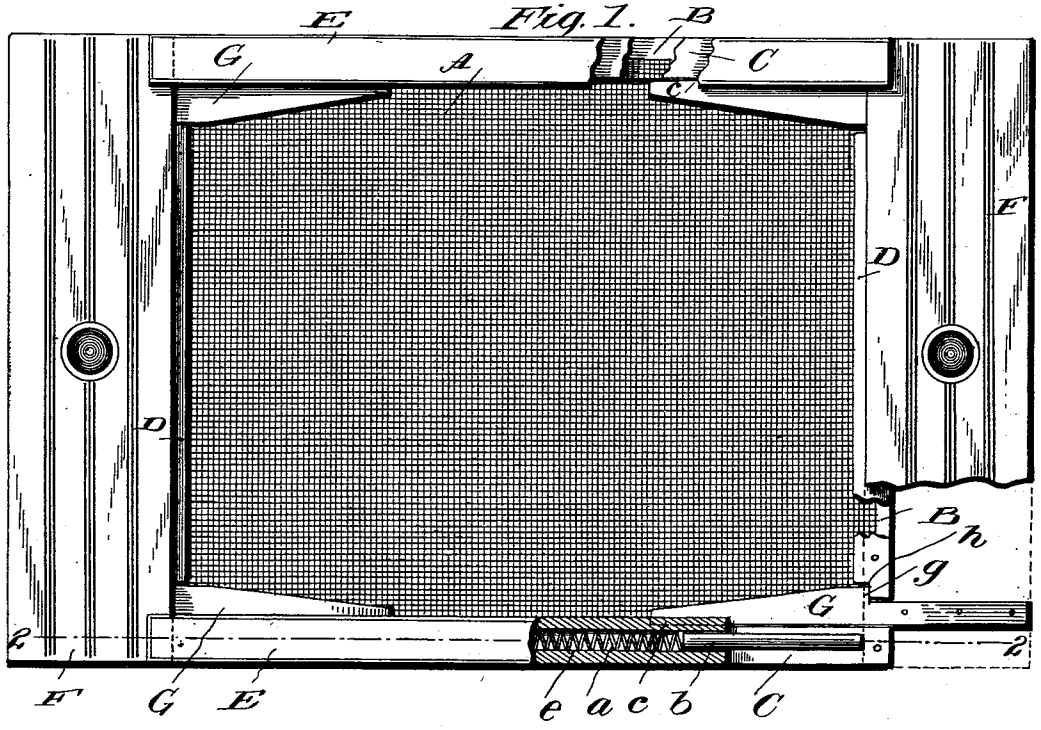


Fig. 2.

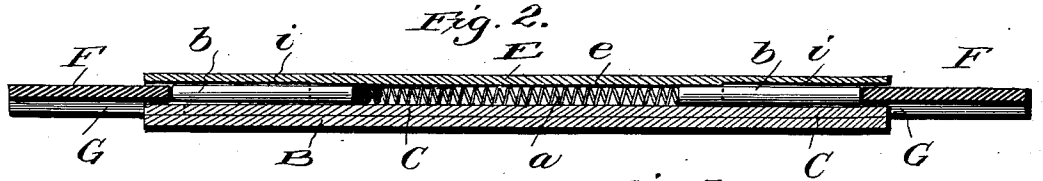


Fig. 3.

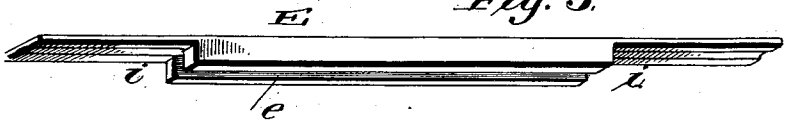
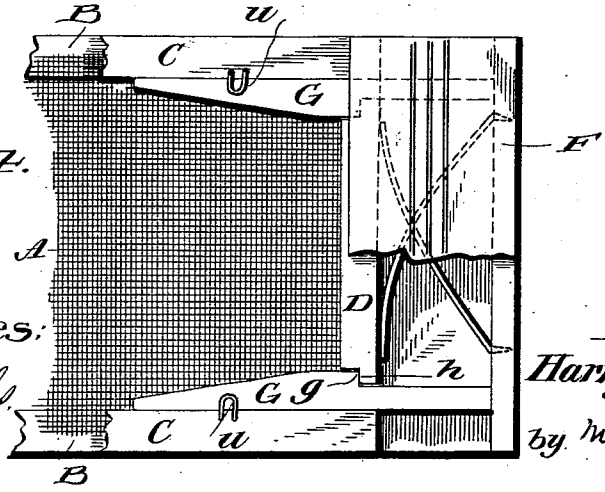


Fig. 4.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

HARRY A. WAY, OF BURLINGTON, VERMONT.

EXTENSION-SCREEN.

SPECIFICATION forming part of Letters Patent No. 569,073, dated October 6, 1896.

Application filed July 16, 1896. Serial No. 599,434. (No model.)

To all whom it may concern:

Be it known that I, HARRY A. WAY, of the city of Burlington, State of Vermont, have invented certain new and useful Improvements in Extension-Screens, of which the following is a specification.

My invention relates to that kind of extension-screen in which the body of the screen or screen proper is provided with sliding end panels capable of being moved out and in so as to increase or decrease the width or length of the screen at pleasure.

My improvements have reference to the means for supporting, guiding, and controlling the movable end panels. I shall first describe them by reference to the accompanying drawings, and will then point out more particularly in the claims those features which I believe to be new with me.

In the drawings accompanying and forming part of this specification, Figure 1 is a sectional front elevation of a screen embodying my improvements. Fig. 2 is a section of the same on line 2 2, Fig. 1. Fig. 3 is a perspective view of one of the longitudinal rails. Fig. 4 is a front elevation, partly in section, of one end of a modified form of screen.

The gauze A is mounted upon the rectangular frame B, and its edges are covered by the strips C D.

In the screen shown in Figs. 1 and 2 there are longitudinal rails E upon the face of the top and bottom strips C. These rails E are recessed at *e* upon their inner faces to contain both the coiled springs *a*, by which the panels F are extended, and also the spindles *b*, through the intermediary of which the pressure of the springs is exerted outwardly against the panels, these spindles being unattached to the panels. The rails E are a little wider than the strip C to which they are applied, thus providing in the screen at top and bottom longitudinal guideways *c*, the outer walls of which are formed by the rails E and the inner walls by the gauze A. In these guideways are seated and move the guide-tongues G, two of which are attached to each panel. The guide-tongues play through openings left for them between the side frame-strips D and the top and bottom strips C. They are provided with shoulders *g*, which enter notches or recesses *h* in the side strips D and bring up against the stop-shoulders at the outer ends of these recesses. In this way the outward movement of the panels is limited. The rails are cut away at *i* to permit the inward movement of the panels. Under this arrangement the rails E contain the coiled springs and spindles and also hold in place the sliding guide-tongues G against lateral displacement. The panels also slide easily and are susceptible of ready adjustment without checking or binding. This is due in a measure to the arrangement of the guide-tongues G, as well as to the fact that they are unattached to either the coiled springs or the spindles or other part by which they can be checked or cramped in this movement, and also to the fact that the spindles against which the springs bear are unattached to the panels which are forced out by them.

The stop formed by the interlocking of the guide-tongues G with the side strips D is a very effective one. By providing the recesses or notches *h* in the side strips D the capacity for extension is increased, this increase in full-sized screens being an inch or more over what would be the limit of extension without the notches. Then the guide-tongues G can be shaped or brought to the form shown at one operation. A board the length of the tongue and, say, from two to twenty inches wide is placed under revolving knives or cutters, which when the board is fed along under them shape its face into the outline of the irregular or shouldered face of the tongue G. Then by a saw the board thus shaped is cut or split up into a large number of tongues. In this way the tongues can be manufactured in quantity expeditiously and at small expense. The notched or recessed side strips D can be produced in the same way.

In Fig. 4 I have shown one end of a screen in which the panel has the form of a box-panel. The springs are not coiled springs, but are spring-strips housed in the panel and interposed between the latter and the adjoining end of the screen-frame. Under this arrangement I dispense with the rails E, and I hold the guide-tongues G against lateral dis-

placement by wire loops or fingers *u*, between which and the gauze the tongues are held and move.

I can dispense with springs, if desired, and instead of using in the structure shown in Fig. 4 a box-panel I can employ simply a single-strip panel, such as would be provided if the front strip only of the box-panel in Fig. 4 were used.

Having described my invention and the manner in which the same is or may be carried into effect, what I claim herein as new, and desire to secure by Letters Patent, is—

1. The combination with the screen-frame and end panels of the guide-tongues G having shoulders *g*, said tongues secured to the panels and arranged to slide in guideways provided for them on the interior opposite edges of the top and bottom rail of the screen-frame, and the strips D provided with recesses or notches *h*, which are entered and engaged by the shoulders *g* of the guide-tongues, when the panels are moved outwardly, as and for the purposes hereinbefore set forth.

2. The combination of the screen-frame; the end panels; the rails E; the coiled springs and spindles housed in said rails; the guide-tongues G provided with shoulders *g* and movable in guideways on the screen; and the strips D having notches or recesses *h*, which are entered and engaged by the shoulders *g* of the guide-tongue when the panels are moved outwardly—the parts being constructed and arranged for joint operation as hereinbefore shown and described.

In testimony whereof I have hereunto set my hand this 11th day of June, 1896.

HARRY A. WAY.

Witnesses:
ORMAN P. RAY,
MABEL S. WAY.