

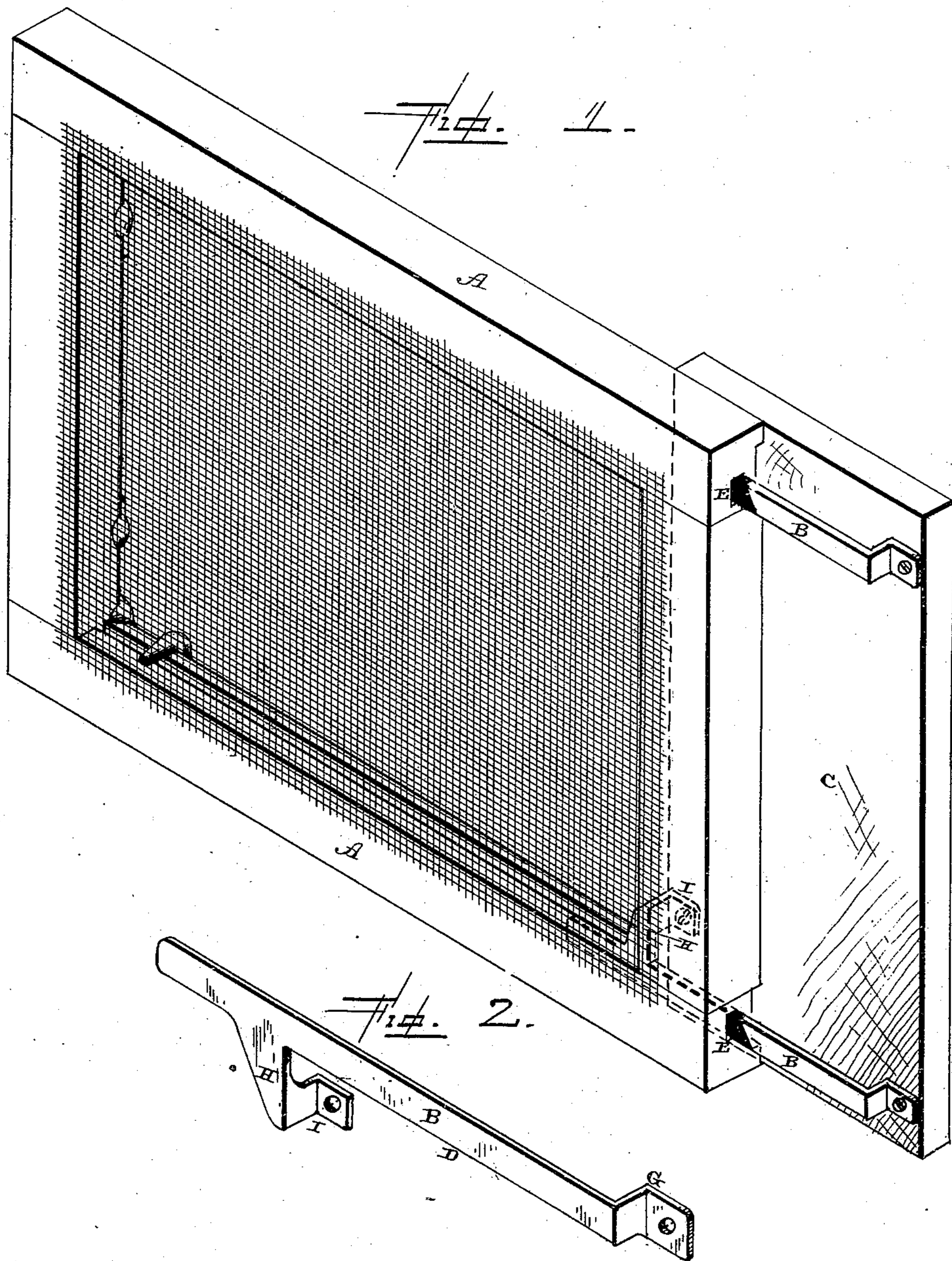
(No Model.)

E. N. PORTER.

SLIDE FOR EXTENSION SCREENS.

No. 370,654.

Patented Sept. 27, 1887.



Witnesses.

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# UNITED STATES PATENT OFFICE.

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## SLIDE FOR EXTENSION-SCREENS.

SPECIFICATION forming part of Letters Patent No. 370,654, dated September 27, 1887.

Application filed September 1, 1886. Serial No. 212,399. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD N. PORTER, a citizen of the United States, residing at Burlington, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Slides for Extension-Screens, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improvement in window-screens; and it consists in the combination, with the screen, of a slide which is attached to the screen-frame at one end, and sliding bars by means of which the screen-frame and the slide are connected together, the sliding bars being made to pass through suitable openings in the end of the frame, as will be more fully described hereinafter.

The object of my invention is to loosely attach a slide to the end of the screen-frame so that the slide can be adjusted back and forth upon the screen-frame, and thus adapt the screen to fill in a window-frame or other opening in which it may be placed, and to attach the parts together by means of sliding bars, which are fastened to the slide and which cause the slide to move freely back and forth without any binding or tension upon the screen-frame at any time.

Figure 1 represents a perspective of a screen-frame and slide to which my invention is applied. Fig. 2 is a perspective of one of the sliding bars.

A represents the screen-frame, which is of the ordinary construction, and which has its top and bottom pieces grooved at their inner sides, as shown, so as to receive the sliding bars B, which attach the screen-frame and the slide C together. The slide is just as long as the screen is wide, and will be given any desired width. As here shown, this slide is not as wide as the sliding bars are long; but the slide may be given any width desired, according to the length of the opening in which the screen is to be placed. Each sliding rod B consists of the horizontal portion D, which passes through the opening E made in the end of the screen-frame, and which has its outer end turned at an angle, as shown at C, where it is to be fastened to the slide. The inner end

of each casting has the extension H projecting beyond one edge, and from one edge of this extension H extends the base, foot, or rest I, by means of which the casting is secured a second time to the slide. This extension is placed a suitable distance inward from the inner end of the casting B, as shown, and this extension acts as a stop to the movement of the slide upon the frame whenever drawn outward. The horizontal portion D of the casting B passes through an opening in the end of the screen-frame, and fits snugly therein and in the groove in the bar of the frame, so as to prevent the entrance of flies or insects through the opening in the end of the frame. The inner end of the sliding bar or casting projects sufficiently beyond the extension to sustain the weight of the slide when it is drawn out to its fullest extent, and thus prevents kinks, sticking, or corner-binding when it is drawn out into position. The bar or casting, being made of metal, is not affected by dampness, and hence always allows the slide to move freely. As the horizontal portion of the bar B rests entirely in the grooves made in the inner sides of the bars of the frame, the ends of the slide are always held in position, so that the slide cannot be turned at an angle to the frame, and hence will move evenly and true under all circumstances. The bent outer ends of the castings serve as stops for the inward movement of the slide, while the extensions H serve as stops to the outward motion, and hence the slide can move back and forth upon the frame only the distance between the extensions and the turned-down ends. The casting, owing to this construction, serves not only to guide the slide back and forth, but at the same time serves to limit its movement in either direction.

As will be seen, the castings B are very light, require only two screws for each one to secure it in position upon the slide, and have merely to have the horizontal portion D placed in the groove in the inner side of one of the bars before it is secured in position, and then requires no further attachment to the screen-frame itself.

As here shown, the slide is attached to one end of the screen only; but it is evident that

a slide may be attached to the screen-frame at each end, if so desired.

I am aware that extension ends have heretofore been applied to screens and made to move upon stationary guiding-rods secured to the frame, and this I disclaim.

Having thus described my invention, I claim—

1. The combination of the screen-frame provided with grooves in two of its opposite inner edges and having openings through the ends of its top and bottom pieces or bars, with the extension-slide and the castings provided with stops, and which are fastened to the slide at both ends and pass through the openings in the ends of the top and bottom bars of the screen-frame, so as to catch and move in the grooves in their inner edges, substantially as shown.

2. The castings B, having their outer ends

turned at an angle and provided with the extensions H upon their inner sides, substantially as described.

3. The combination of the screen-frame A, having grooves in the inner edges of its top and bottom bars and the holes E through their ends, and which holes form extensions of the grooves with the slides C, which overlap the ends of the frame, and the castings B, secured to the slide at both ends and which catch in the grooves in the frame and pass through the openings E, substantially as described.

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

EDWARD N. PORTER.

Witnesses:

CHARLES E. ALLEN,  
CHARLES P. HIBBARD.