

(No Model.)

J. A. BALDWIN.
ADJUSTABLE WINDOW SCREEN.

No. 430,560.

Patented June 17, 1890.

Fig. 1.

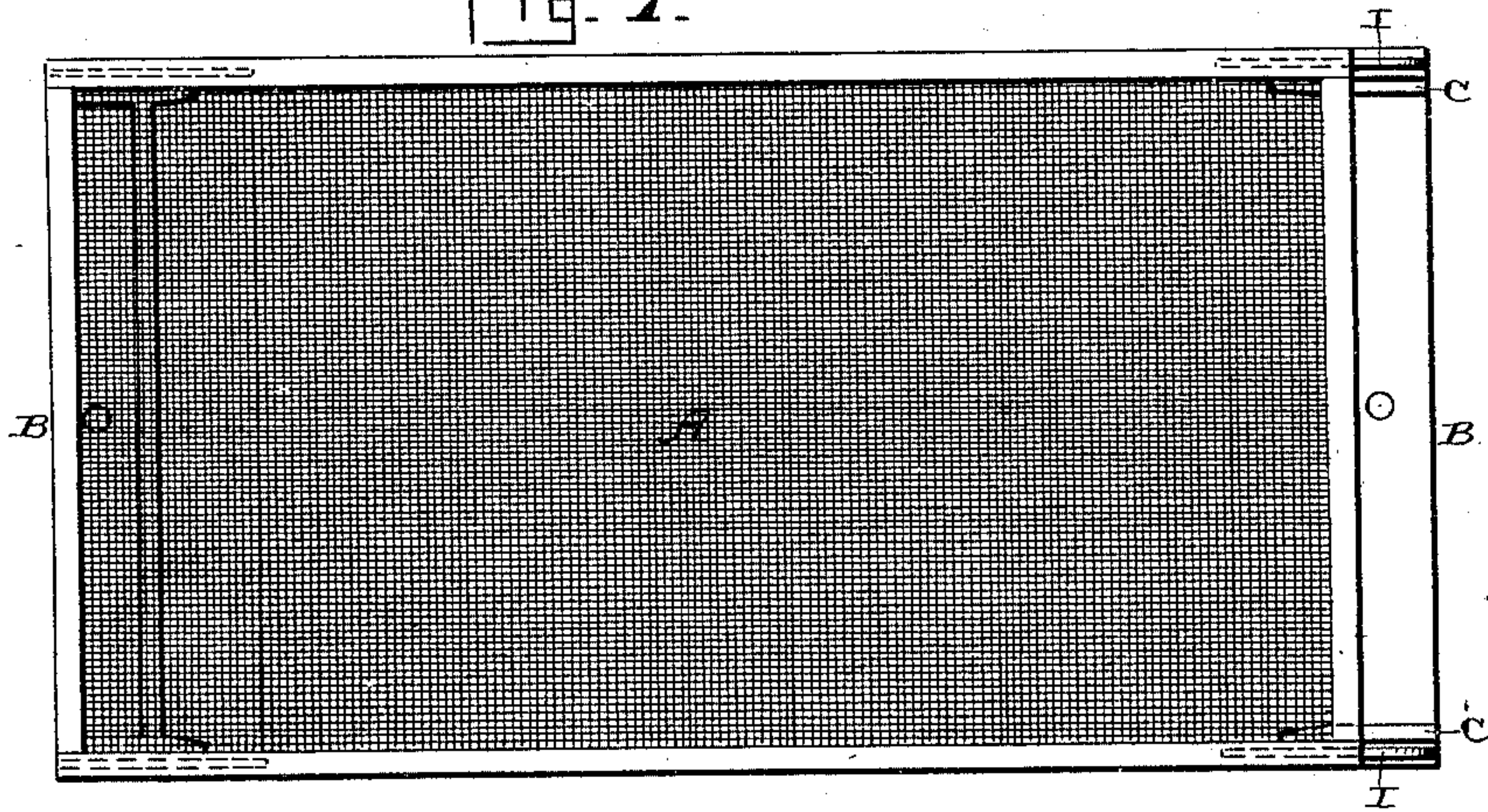


Fig. 2.

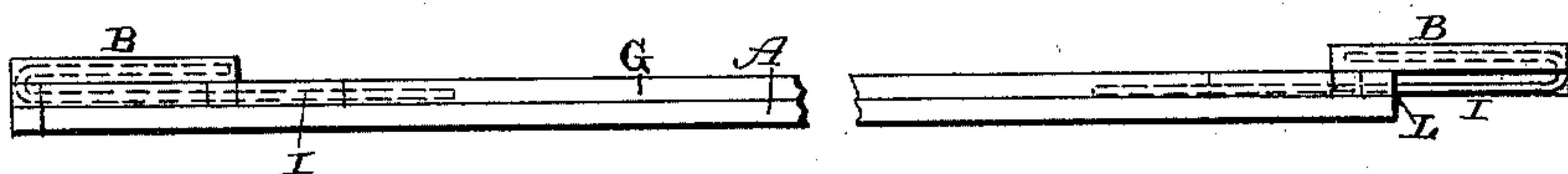


Fig. 3.

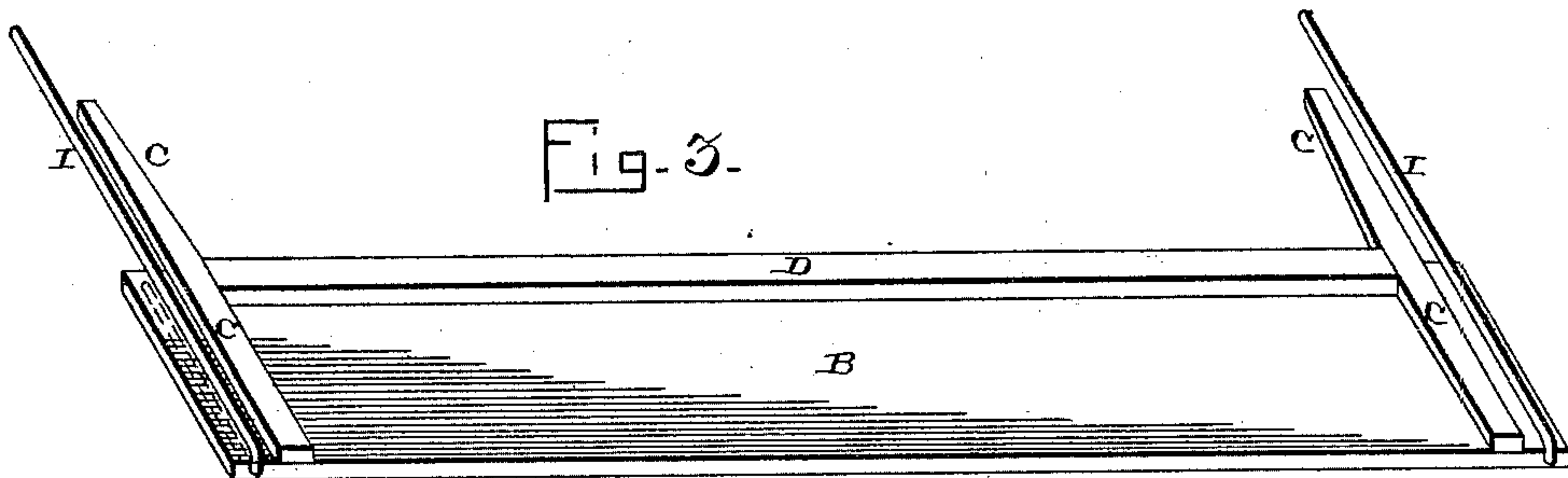
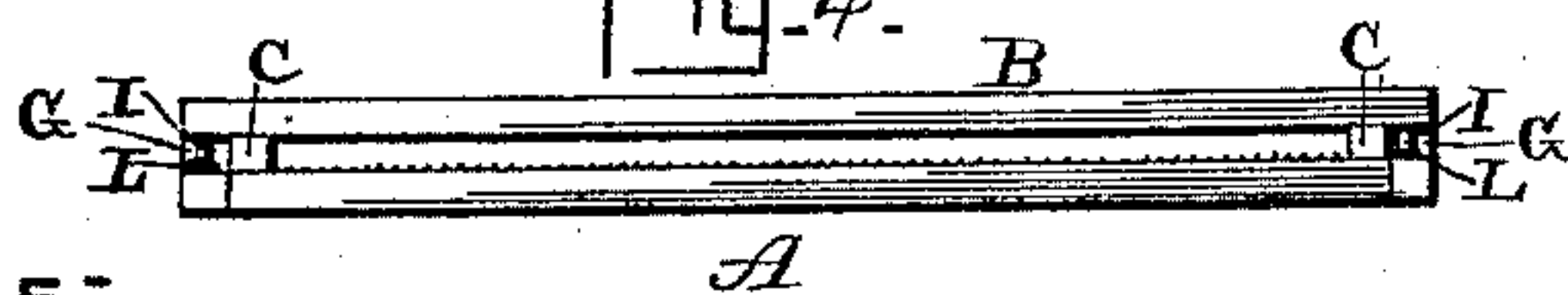


Fig. 4.



Witnesses:

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per
J. A. Lehmann,
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UNITED STATES PATENT OFFICE.

JUDSON A. BALDWIN, OF WINOOSKI, ASSIGNOR TO THE QUEEN ANNE
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ADJUSTABLE WINDOW-SCREEN.

SPECIFICATION forming part of Letters Patent No. 430,560, dated June 17, 1890.

Application filed September 26, 1889. Serial No. 325,212. (No model.)

To all whom it may concern:

Be it known that I, JUDSON A. BALDWIN, of Winooski, in the county of Chittenden and State of Vermont, have invented certain new and useful Improvements in Adjustable Window-Screens; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in screens; and it consists in the combination, with an ordinary screen, of extension-panels, which are applied to opposite ends thereof, and which panels are provided with guides which extend entirely across the panels upon one side and catch inside of the screen-frame, stops placed between the guides to limit the outward movement of the panels, and wire slides attached to the panels and sliding through them in the screen-frame, as will be more fully described hereinafter.

The object of my invention is to provide a screen-frame with extension-panels which move readily upon the frame, and which are not liable to bind by swelling during damp or shrinkage during dry weather, and to adapt the screen to windows of different sizes.

Figure 1 is a side elevation of a screen which embodies my invention, one panel being shown as extended and the other closed inward. Fig. 2 is an end view of the same. Fig. 3 is a detached view of one of the panels by itself. Fig. 4 is an end view of Fig. 2.

A represents an ordinary screen, which has an extension-panel B applied to each of its ends. Secured to the sides of the screen-frame are the longitudinal strips G, which are provided with the longitudinal grooves L in their ends, for the purpose hereinafter described. This panel consists of a wooden strip of any suitable width and thickness, and which has applied to its inner side at opposite ends the wooden guides C, which catch inside of the longitudinal strips G, as shown, and thus guide the panels back and forth in their movements. These guides project beyond the inner side of the panel any desired distance and simply catch between the inner

edges of the longitudinal strips G without having any grooves or fastening devices of any kind to hold them in position.

In order to prevent the panels from being drawn outward beyond a certain distance, a stop D is applied to one edge of each panel, and which preferably extends from one guide to the other, as shown. These stops consist of suitable strips, which also serve to strengthen and brace the panel, and by moving in contact with the wire screen prevent insects from passing between the panels and the screen and thus getting access into the house.

In order to prevent the ends of the panels not only from warping, but from splitting, when exposed to moisture and the weather, the ends of the wire slides I are passed through each panel at each end, and then the wire, after passing through the panel at its outer edge, is bent at right angles, and then rebent again at right angles and made to extend into grooves L, formed in the ends of the longitudinal strips G to receive them. These wire slides are preferably made to extend into the longitudinal strips about twice the width of the panels; but I do not limit myself in this respect. These wires, not being affected by weather, serve not only to assist the guides in keeping the panels in position, but also assist in preventing them from warping or binding upon the screen-frame, as the panels would otherwise do. These guides, being made of wire and first passed through the panels and then made to catch in the screen-frame, add very greatly to the strength and durability of the panels, and at the same time insure a more perfect and easy sliding movement of the panels upon the frame.

The invention herein shown and described is intended as an improvement upon the application filed by me October 26, 1888, Serial No. 289,235, in which is shown a screen having the panels thereof provided with guides and stops, but which are not fastened to the corners thereof, extending inward over and separate from the surface thereof, as herein shown and claimed, and therefore I disclaim the construction therein shown and claimed.

Heretofore adjustable screens have been made having panels and the panels provided with guiding-wires; but in such instances

the wires have been extended from the inner edge of the panel, and have in some cases passed through guiding and supporting eyes. This is objectionable for two reasons: first, 5 that the panel will not be supported firmly, but allowed to wiggle, and, secondly, it makes the screen more expensive by requiring the production of suitable eyes, and by requiring considerable time to properly apply them 10 to the screen. The wires in other instances have been secured to the inner edge of the adjustable panel and passed into a longitudinal groove in the frame; but in this instance it has been necessary to make a longitudinal 15 slot in the frame for the panel itself, which entails expense and makes an objectionable construction, in that the slightest warping of the panel will cause it to bind in the slot in which it moves. My object is to overcome 20 these objections, which are embodied in each of the above constructions, by allowing the panel to slide upon the outside of the frame, and at the same time the wires to move in a longitudinal groove made in one part of the 25 frame, which groove can be formed at the time that part of the frame is formed without additional cost. I accomplish this by securing the wires to the outer edges of the panels, bending them a suitable distance 30 therefrom and transversely over the surfaces, so as to form a space between the wire and the face of the panel. Thus I am enabled to provide a panel having wires which move in longitudinal grooves made in the screen- 35 frame, and the panels at the same time slide upon the outer surface of the screen, and hence overcome the objections above pointed out, which exist in the other constructions.

Having thus described my invention, I 40 claim—

1. In an adjustable screen, the combination, with the frame provided with longitudinal grooves in its corners, of sliding panels and guiding and supporting wires which are 45 secured to the panels at or near their outer corners and extending upward therefrom and bent inward toward the surface thereof and

extending transversely over and separate from the inner end surfaces of the panels, whereby a space is formed between the panel 50 and the wire, the wires allowed to catch in said grooves and the panel rest upon the outer surface of the frame, substantially as shown and described.

2. In an adjustable screen, the combination, with the frame having longitudinal strips secured to the sides thereof, the said strips provided with longitudinal grooves in their ends, of the panels, the guiding-strips secured to and extending transversely across 60 the inner sides of their ends and projecting beyond their inner edges and bearing against the inner edges of the longitudinal strips which are secured to the frame, the stops secured to the inner sides of the panels, and the 65 supporting and guiding wires secured to the panels at or near their outer corners and extending upward therefrom and bent so as to extend inward over and separate from the panels and to catch in the said grooves in the 70 said strips, whereby the guiding-strips secured to the panels and the guiding-wires prevent binding and sticking of the panel in its adjustment, substantially as shown and described. 75

3. The combination, with a screen-frame having longitudinal grooves, of the panels, and guiding and supporting wires which are passed longitudinally through the ends of the panels from their inner to their outer corners, whereby the wires prevent a warping of the panels, the said wires then extending upward from the outer corners of the panels and doubled back over and separate from the inner surface of the panels and catching in 85 the grooves formed in the said frame, substantially as shown.

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

J. A. BALDWIN.

Witnesses:

B. F. VAN VLIET,
F. A. LEHMANN.