

(No Model.)

F. GROSHANS.
WINDOW VENTILATOR.

No. 405,550.

Patented June 18, 1889.

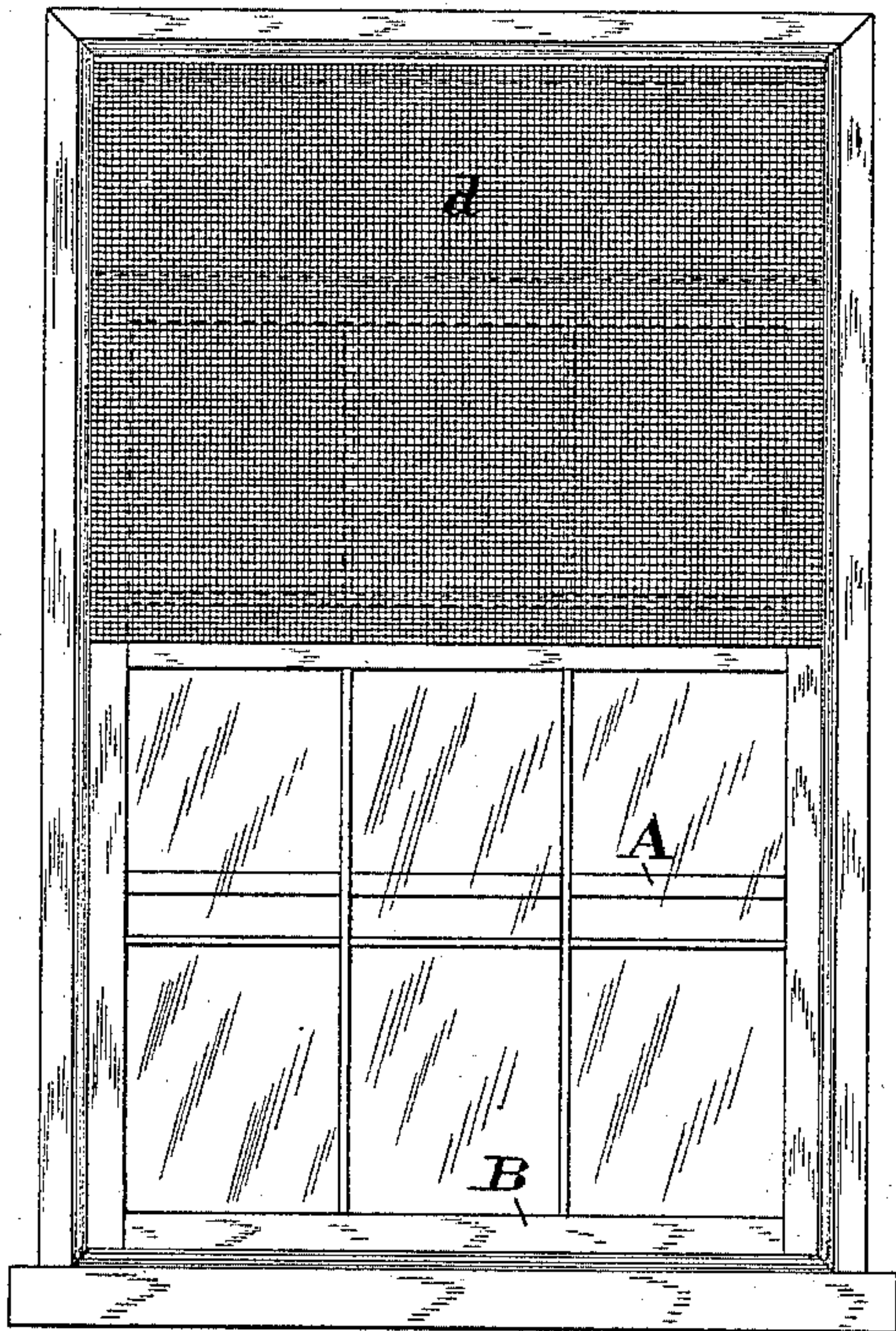


Fig. 1.

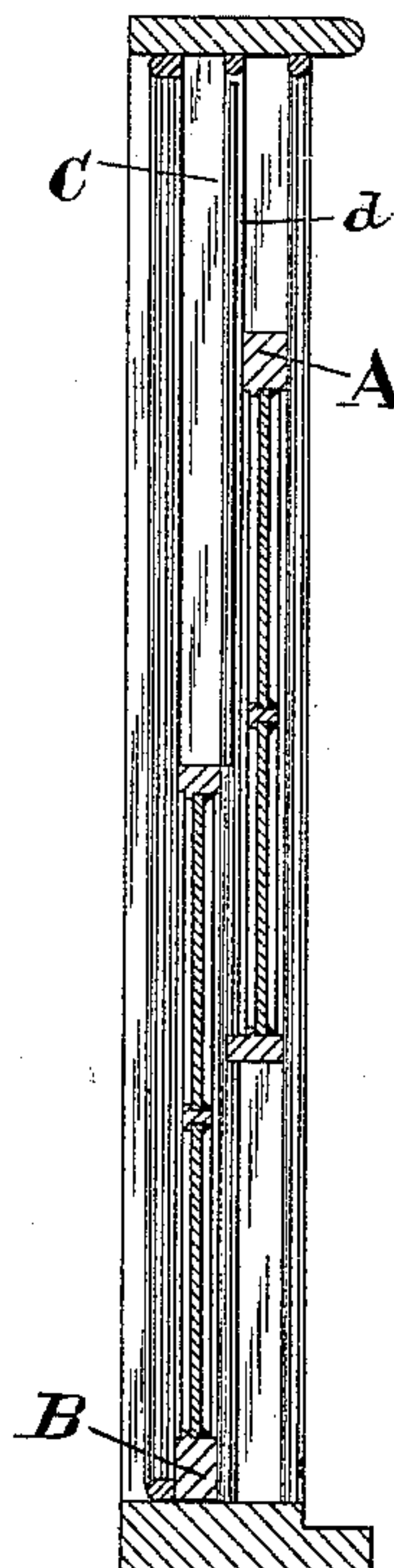


Fig. 2.

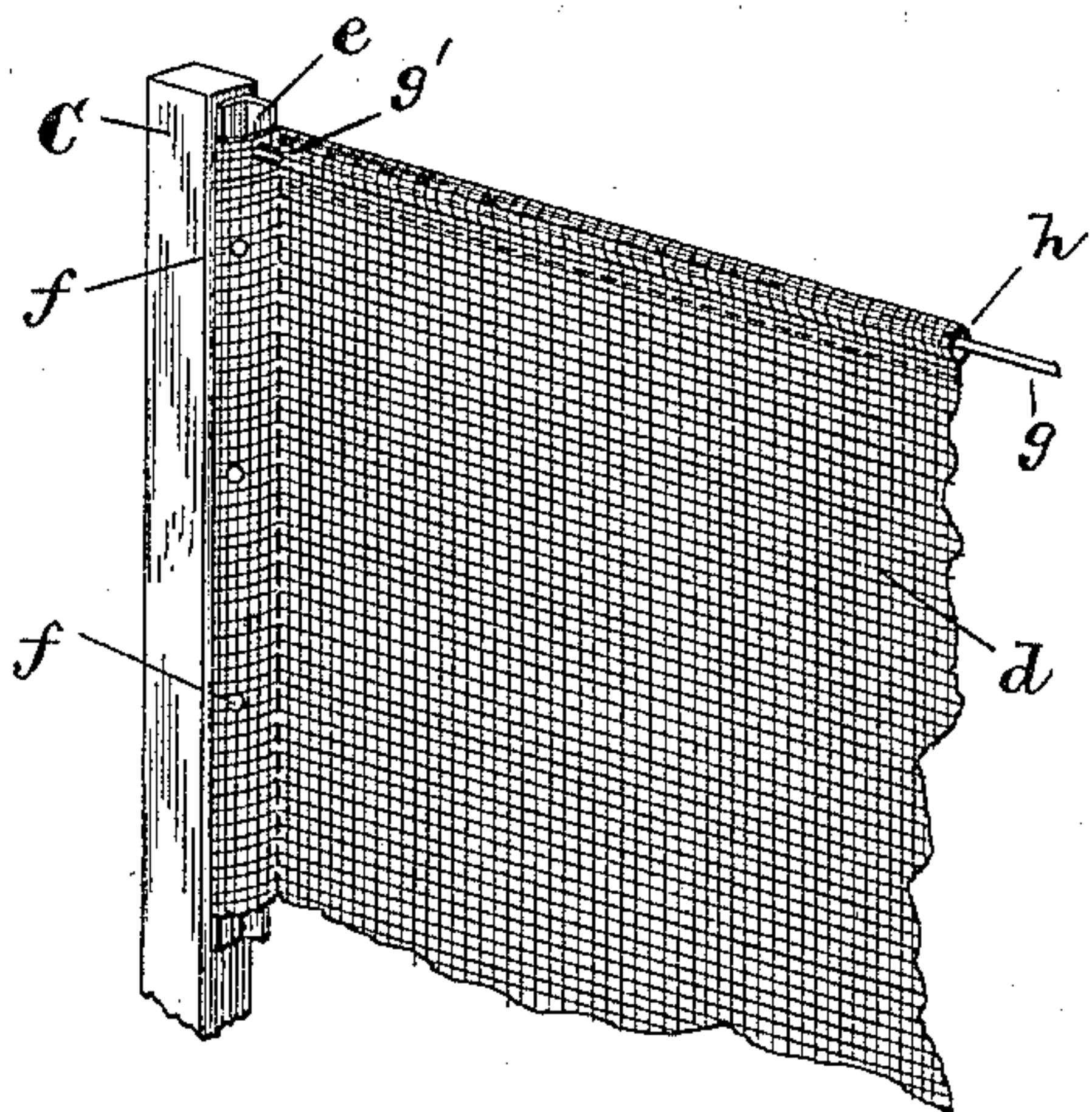


Fig. 3.

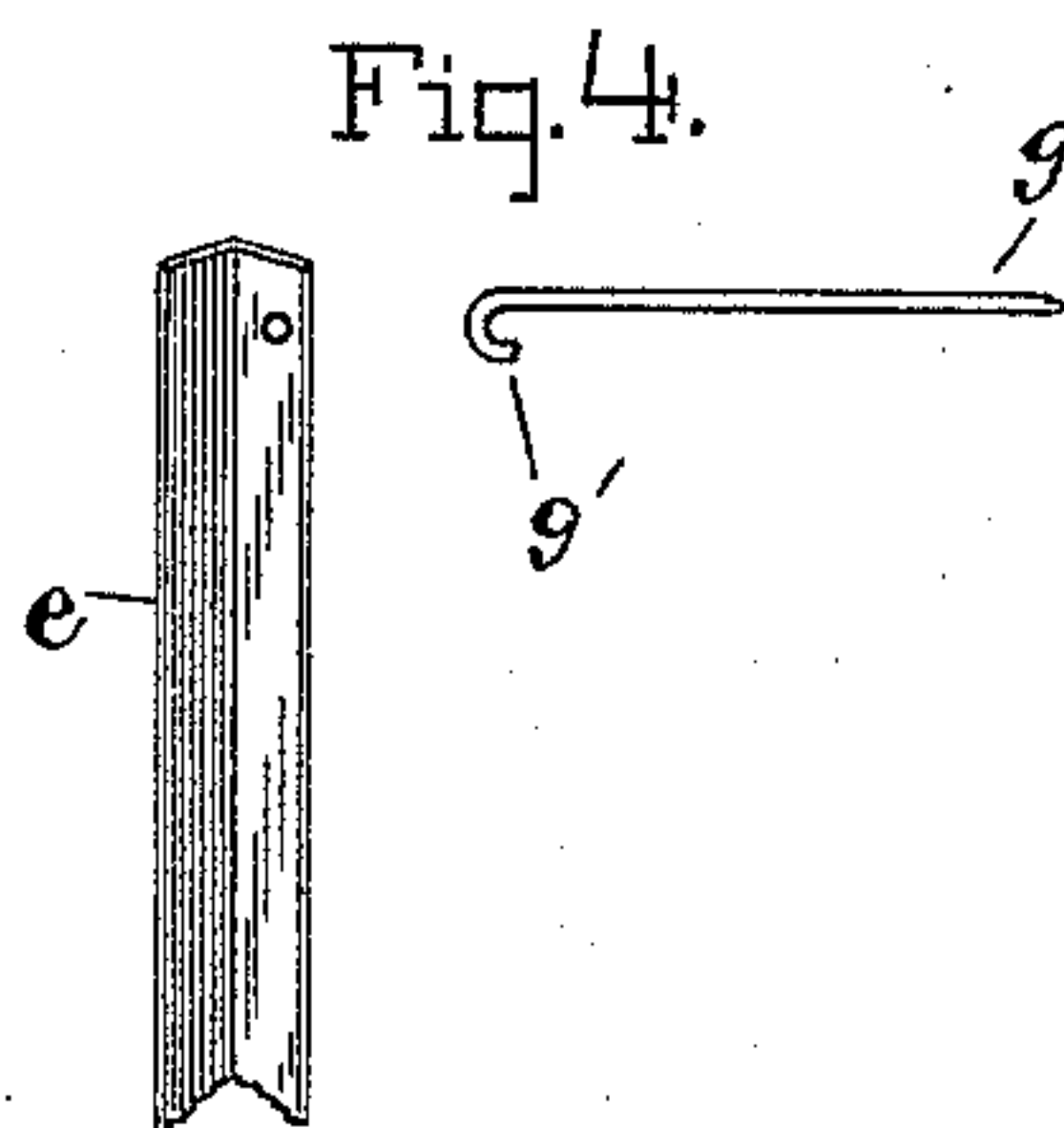


Fig. 4.

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FERDINAND GROSHANS, OF BALTIMORE, MARYLAND.

WINDOW-VENTILATOR.

SPECIFICATION forming part of Letters Patent No. 405,550, dated June 18, 1889.

Application filed March 8, 1889. Serial No. 302,406. (No model.)

To all whom it may concern:

Be it known that I, FERDINAND GROSHANS, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Window-Ventilators, of which the following is a specification.

This invention relates to a window-ventilator, and has for its object to provide a screen of thin fabric, which, when a sash is raised or lowered, will remain fixed to the parting-strips between the two sashes of a window, as hereinafter set forth.

The construction and combination whereby the desired result is accomplished will be described in connection with the accompanying drawings, in which—

Figure 1 is a view of a window from the inner side. Fig. 2 is a vertical section of same. Fig. 3 is a perspective view showing part of the screen-ventilator attached to the parting-strip. Fig. 4 shows some details.

The window-frame has two sashes—the upper sash A and the lower sash B—and the vertical parting-strips C, one at each side of the frame which separates the slideway of the two sashes.

My invention consists in attaching the screen-ventilator *d* to the parting-strips C, so that either and both sashes may be moved up or down, and thereby, when the sash is open, afford ventilation through the screen without allowing insects or dust to enter.

The vertical edges of the thin fabric *d*—such as cheese-cloth—are each attached to a binding-strip *e* by being wrapped around the

binding-strip and stitched or otherwise fastened. This binding-strip may be sheet metal bent to an angle form, as shown in Fig. 4. The binding-strips *e* are then secured by screws or tacks *f*, or otherwise, to the parting-strip C. This construction keeps the fabric screen taut and in position across the frame.

To keep the top of the screen from sagging down, I use a cross-wire *g* with a hook *g'* at each end, which engages with the binding-strip *e*. The top edge of the fabric has a hem *h*, and the cross-wire *g* is passed through the hem. By this arrangement the fabric will remain in position and act as a screen when the upper sash is lowered. In the same way the device would serve as a screen if attached adjacent to the lower sash.

Any suitable fabric may be used for the screen, the binding-strips of which may be attached to either of the sash-strips.

Having described my invention, I claim—

The window ventilator and screen having in combination the vertical parting-strips C on the window-frame, two binding-strips *e*, each secured to one of the said parting-strips, a cross-wire *g*, having its ends engaged with the binding-strips, and the thin fabric *d*, attached to the binding-strips and also to the said cross-wire, as set forth.

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

FERDINAND GROSHANS.

Witnesses:

JOHN E. MORRIS,
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