J. MILLER.

WINDOW-BLINDS.

No. 189,125. Patented April 3, 1877.

Fig. 1.

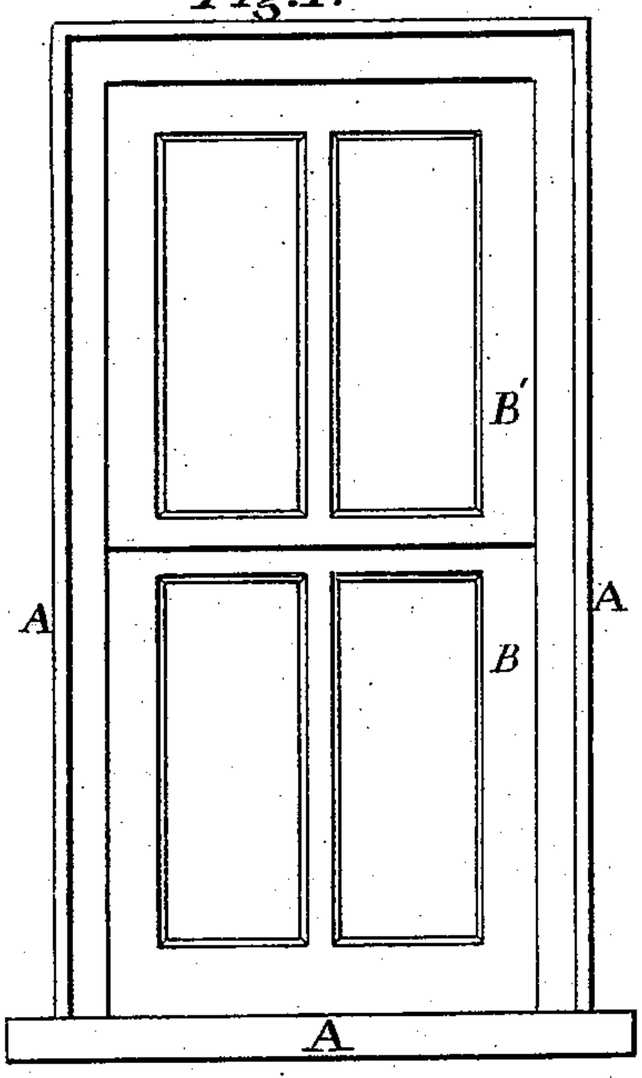


Fig. 4.

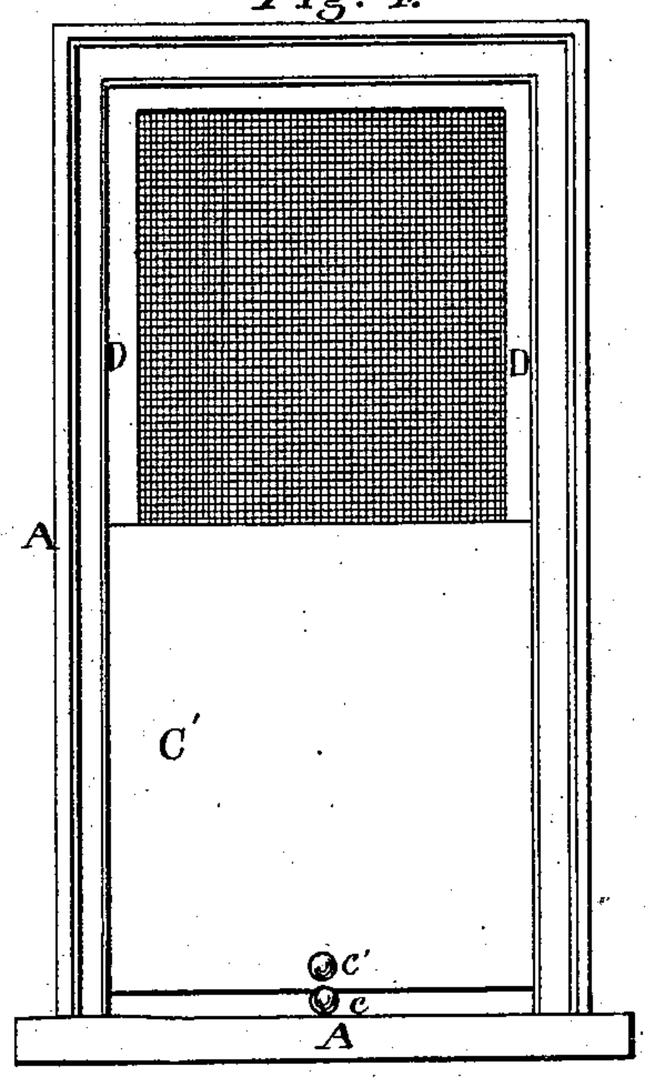


Fig. 5.

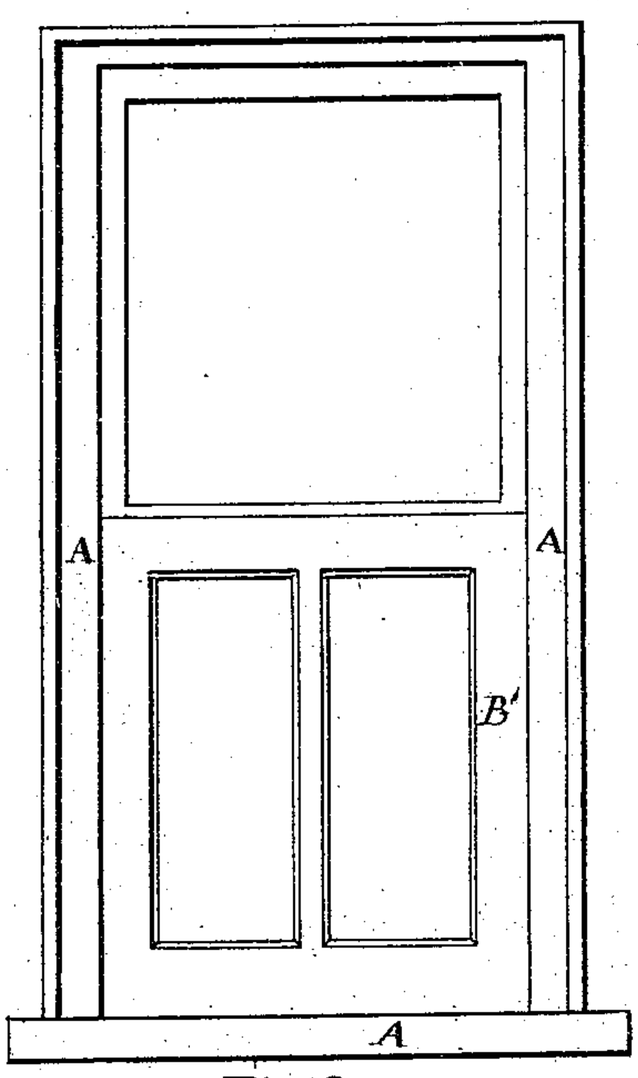
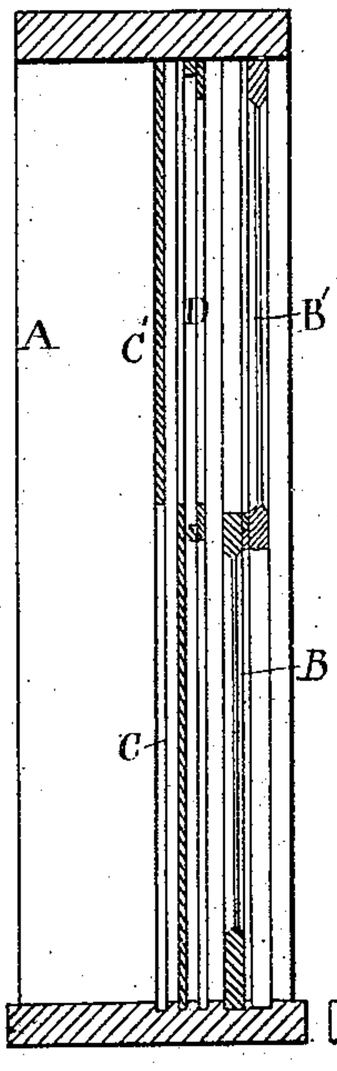


Fig. 3.



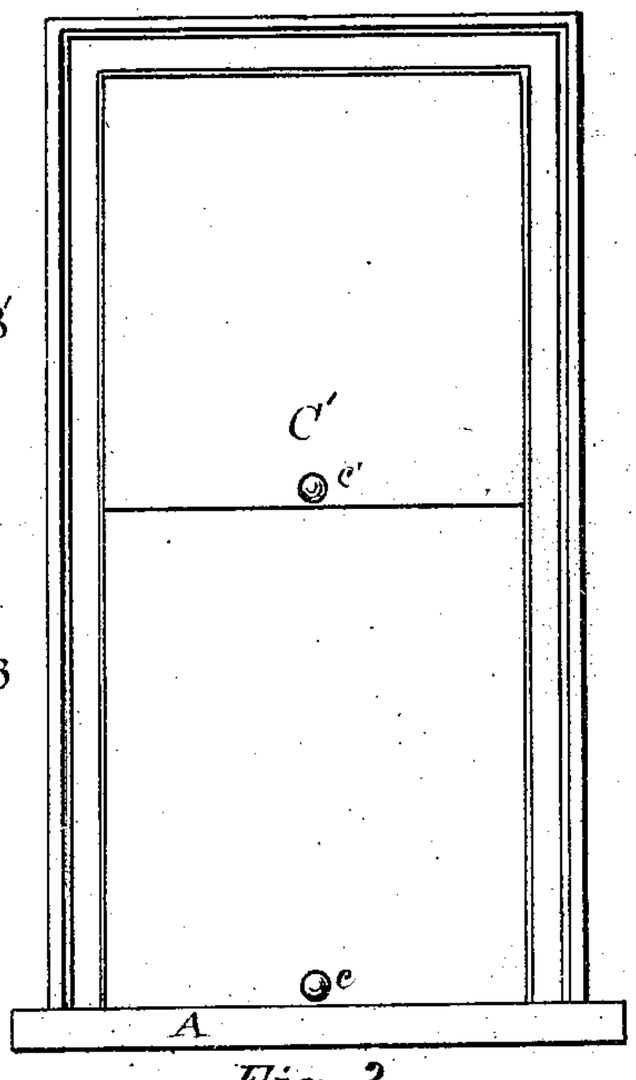


Fig. 2.

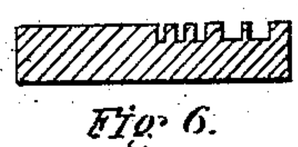


Fig. 6.

Witnesses
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UNITED STATES PATENT OFFICE.

JEREMIAH MILLER, OF CHAMBERSBURG, PENNSYLVANIA.

IMPROVEMENT IN WINDOW-BLINDS.

Specification forming part of Letters Patent No. **189,125**, dated April 3, 1877; application filed March 1, 1877.

To all whom it may concern:

Be it known that I, JEREMIAH MILLER, of Chambersburg, in the county of Franklin and State of Pennsylvania, have invented certain new and useful Improvements in Window-Blinds; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 is an outside view. Fig. 2 is an inside view. Fig. 3 is an outside view with upper sash lowered. Fig. 4 is an inside view with upper shade lowered. Fig. 5 is a transverse vertical section, and Fig. 6 a section of the window-jamb.

This invention relates to the construction of window-frames wherein two sliding shades are used, with a sliding screen, and the usual sash for glass, all of which will be hereinafter more fully described in the specification and set forth in the claim.

A represents the usual frame of a window, which may be solid, as represented in the drawing, or box-frame for weights to the upper and lower sash. B B′ are the ordinary sash, made to slide the whole length of the jamb. In this case they are set in grooves made in the frame, instead of being kept in by the bead-strip of ordinary construction. In Fig. 1 both sashes are shown. In Fig. 3 the upper sash is lowered, so that the space above is open. C C′ are opaque shades, which may be made of any suitable material, and are fitted into grooves in the jambs. Sheet metal may be used, or hardened thick paper, cloth, or thin paper attached to frames, the frames sliding in the grooves. These shades have knobs *c c′*, by which they are to be moved. D is a screen, made of a frame upon which is fastened the ordinary netting of muslin or fine gauze-wire, and it occupies but one-half of the window-opening. From Figs. 2 and 5 it will be observed that the two opaque shades C C′ close the window-opening to darken the room. In Fig. 4 the upper shade is lowered behind the lower one, and the upper sash is also down, so that air can be admitted; but the screen being up, no flies or other insects can enter. In Fig. 3 the upper opening is entirely clear. The same arrangement can be made in reference to the lower part of the window, and the air and light admitted, and yet keep out all insects.

It is thus obvious that in a window of ordinary construction, having the usual sash for glass, by the simple introduction into each jamb of grooved boards there can be two shades and a screen, each of which may be moved the entire length of the window to darken the room, to ventilate it either above or below, and yet keep out all insects.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

A window-frame having an upper and lower shade, and an insect-screen occupying one-half of the length of the frame, in addition to the ordinary double-hung glass-sashes, whereby either the top or bottom section of the window may be used for ventilation, and yet prevent the admission of insects, substantially as described.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

JEREMIAH MILLER.

Witnesses:

H. C. KEYSER,

W. RUSH GILLAN.