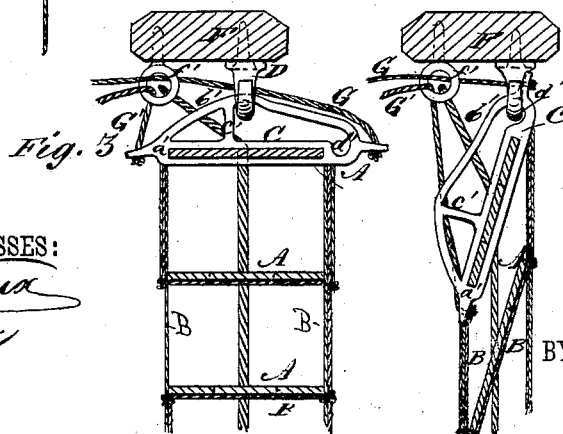
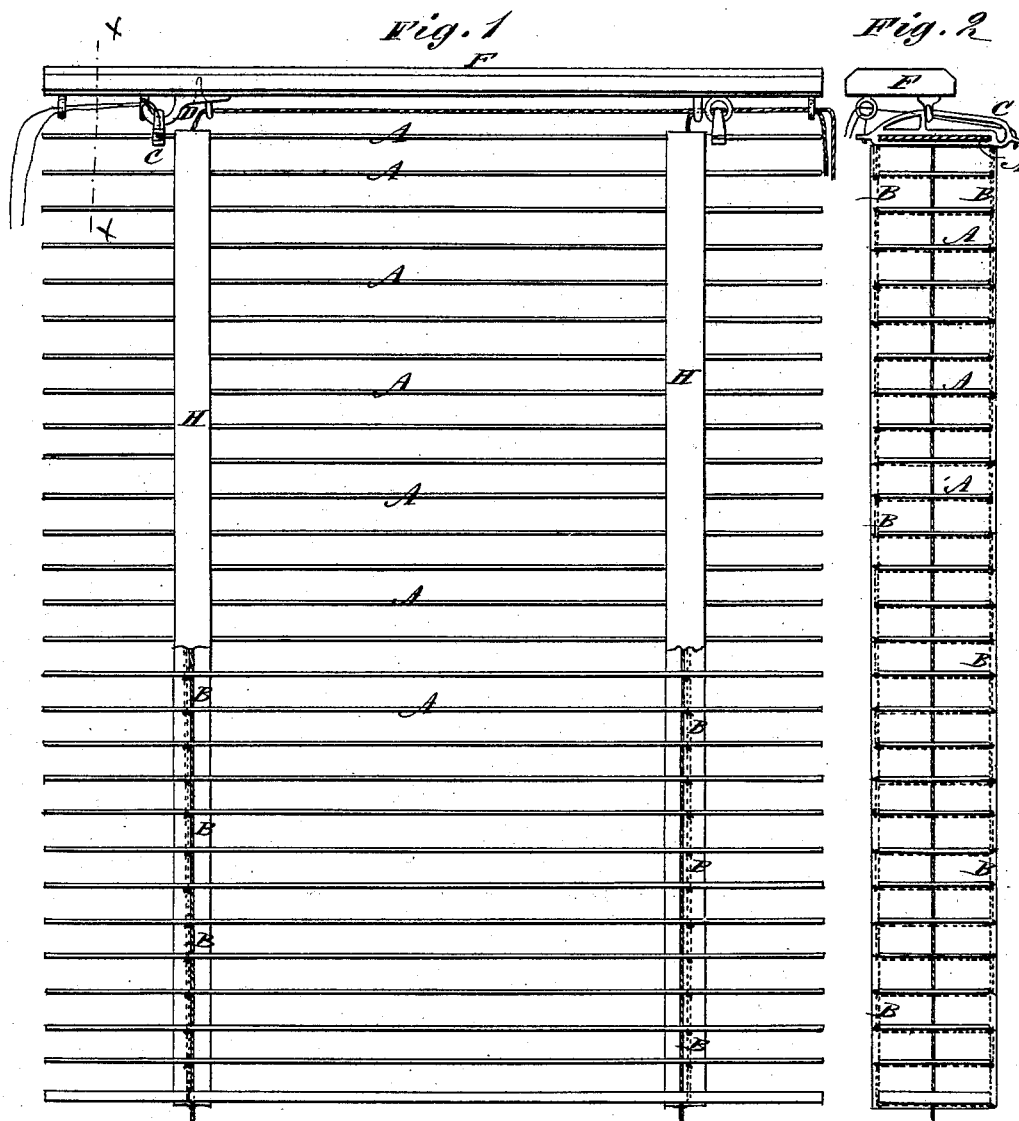


E. METCALF.  
Window-Shade Attachment.

No. 221,337.

Patented Nov. 4, 1879.



WITNESSES:  
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# UNITED STATES PATENT OFFICE

ELLIOTT METCALF, OF FINDLAY, OHIO, ASSIGNOR OF ONE-HALF OF HIS RIGHT  
TO YEATMAN BICKHAM, OF SAME PLACE.

## IMPROVEMENT IN WINDOW-SHADE ATTACHMENTS.

Specification forming part of Letters Patent No. **221,337**, dated November 4, 1879; application filed  
May 14, 1879.

*To all whom it may concern:*

Be it known that I, ELLIOTT METCALF, of Findlay, in the county of Hancock and State of Ohio, have invented a new and Improved Window-Shade Attachment, of which the following is a specification.

Figure 1 represents a front view of the blind when opened, with attachments. Fig. 2 is an end elevation of the same. Fig. 3 is a sectional end elevation on line *x x*, Fig. 1, showing the position of the hanger when blind is open. Fig. 4 is a like elevation, showing the position of the hanger when the blind is closed.

Similar letters of reference indicate corresponding parts.

The object of this invention is to provide a simple and effective device for suspending and opening and closing the blinds or shades known as "Venetian shades for windows."

The shade consists of slats *A*, which may be made of wood, metal, or other suitable material, connected together, so as to lap over each other, by means of cords, tapes, or webs *B*. The hanger *C*, by means of which the blind is opened or closed, is made of iron, brass, or other suitable material, and is hung upon a hook, *D*, that depends from the top rail, *F*, of the window-casing, or from a rod that may be attached thereto. This hanger resembles a yoke of irregular form, its lower bar, *a'*, being straight, and slotted for the reception of the upper slat of the blind, while its upper bar, *b'*, curves upward, and is connected with the other at its ends, and by the perpendicular stop-bar *c'*, that is set a little aside from the center of the device.

Within one end of the hanger, where the bars *a'* and *b'* unite, a curved recess, *d'*, is formed, by which the hanger is suspended from the hook when it is turned in such a manner as to close the blind, as shown in Fig. 4.

In each projecting end of the hanger is a hole, through which are passed, from above, the adjusting-cords *G G'*, that are held by knots made in them just below the holes. These adjusting-cords are passed through a contiguous screw-eye or ring, *f'*, and led thence over a pulley on the side of the window-casing. A pull upon the cord *G* will tip the hanger and throw the slats of the blind in the position shown in Fig. 4, while a pull on cord *G'* will restore them to the position shown in Fig. 3, where the stop-bar *c'*, it will be seen, stops the hanger centrally upon the hook, from which it is suspended.

Though two hangers are applied to each blind, adjusting-cords need be applied to but one of them, as the one follows the movements of the other.

The ring for passing the adjusting-cords through may be cast in one piece with the hook *D*, or the cords may be supported by any convenient device.

The lines of cords, tapes, or webs *B* that connect the slats are covered with strips of lace, ribbon, netting, or other suitable material, *H*, both for the purpose of strengthening and for improving the appearance of the blind.

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

1. The hanger *C*, constructed with lower straight slotted bar, *a'*, curved upper bar, *b'*, stop-bar *c'*, and recess *d'*, substantially as herein shown and described.

2. The hanger *C*, in combination with the hook *D*, screw eye or ring *f'*, and adjusting-cords *G* and *G'*, substantially as herein shown and described.

ELLIOTT METCALF.

Witnesses:

M. D. SHAFER,  
YEATMAN BICKHAM.