

M. ECKSTEIN.
Ventilators for Bulk Windows.

No. 217,732.

Patented July 22, 1879.

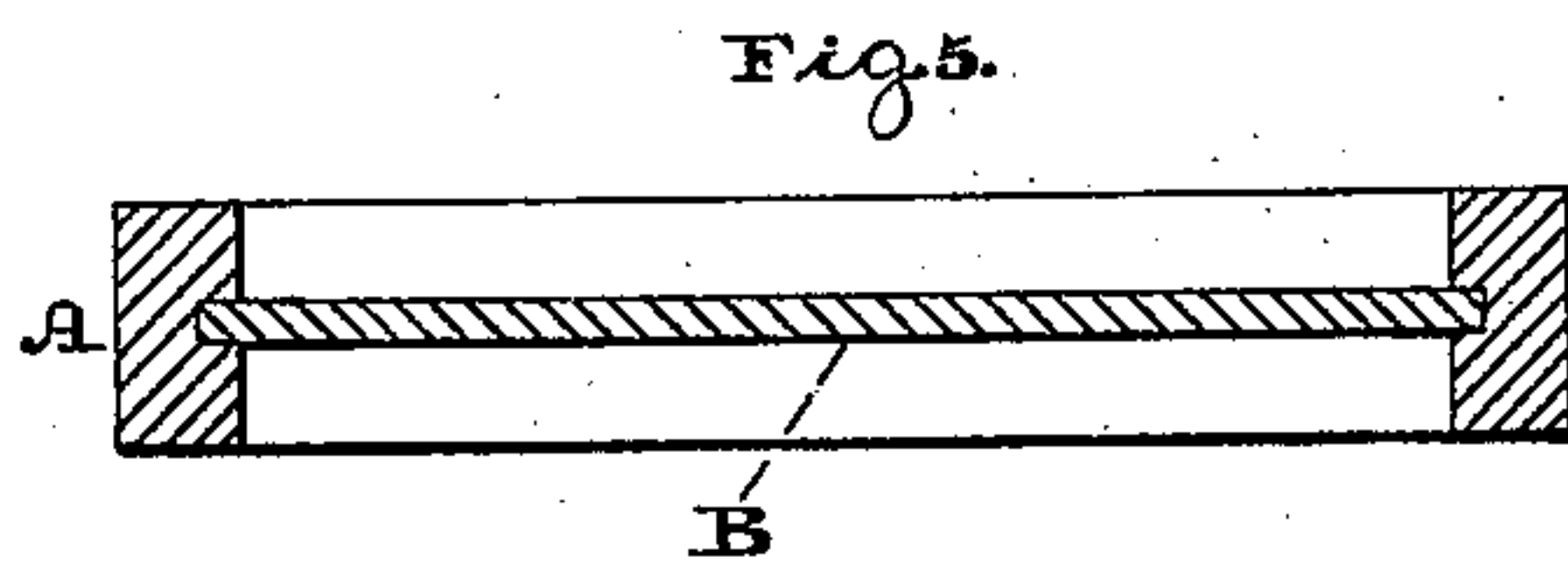
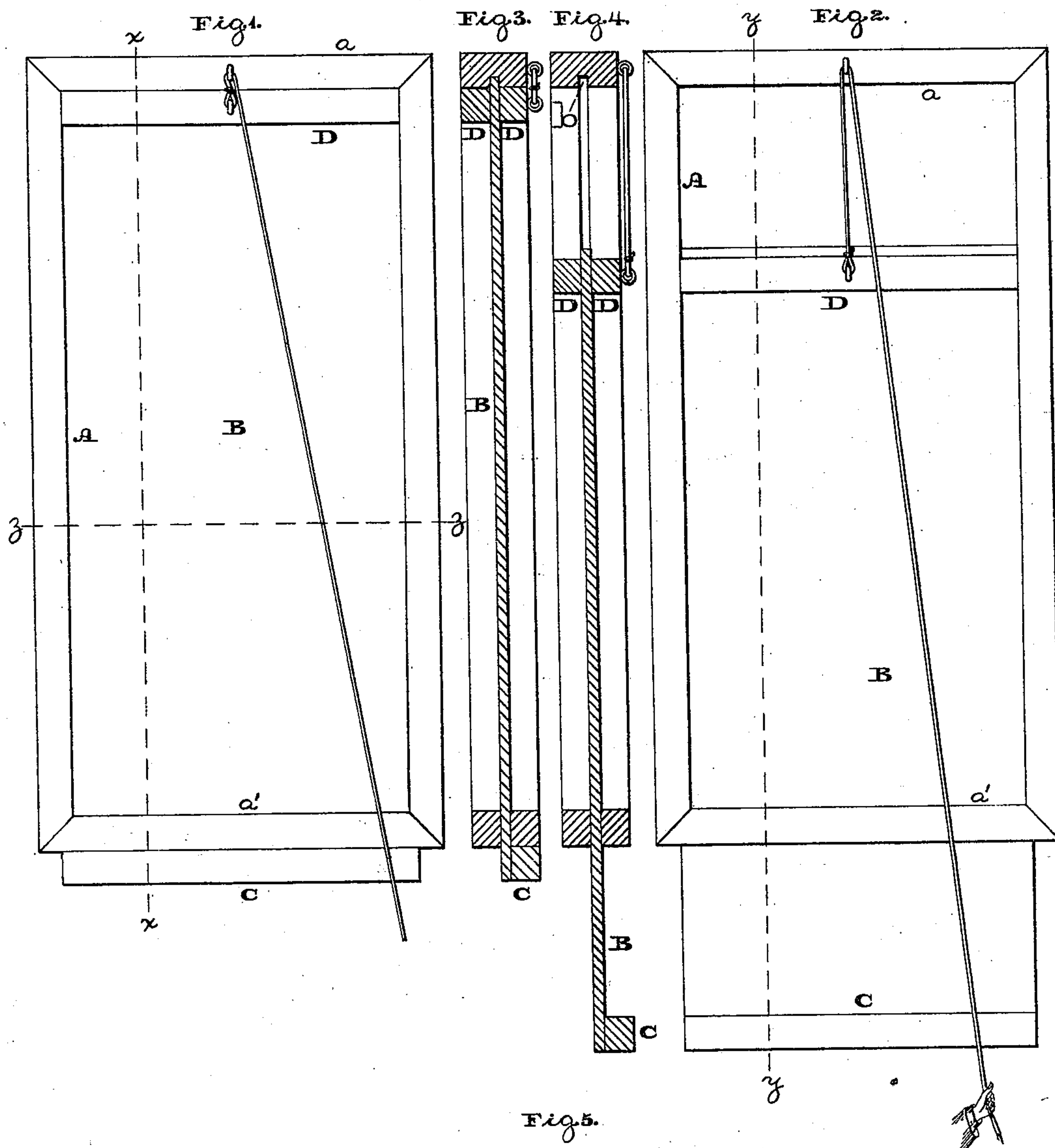
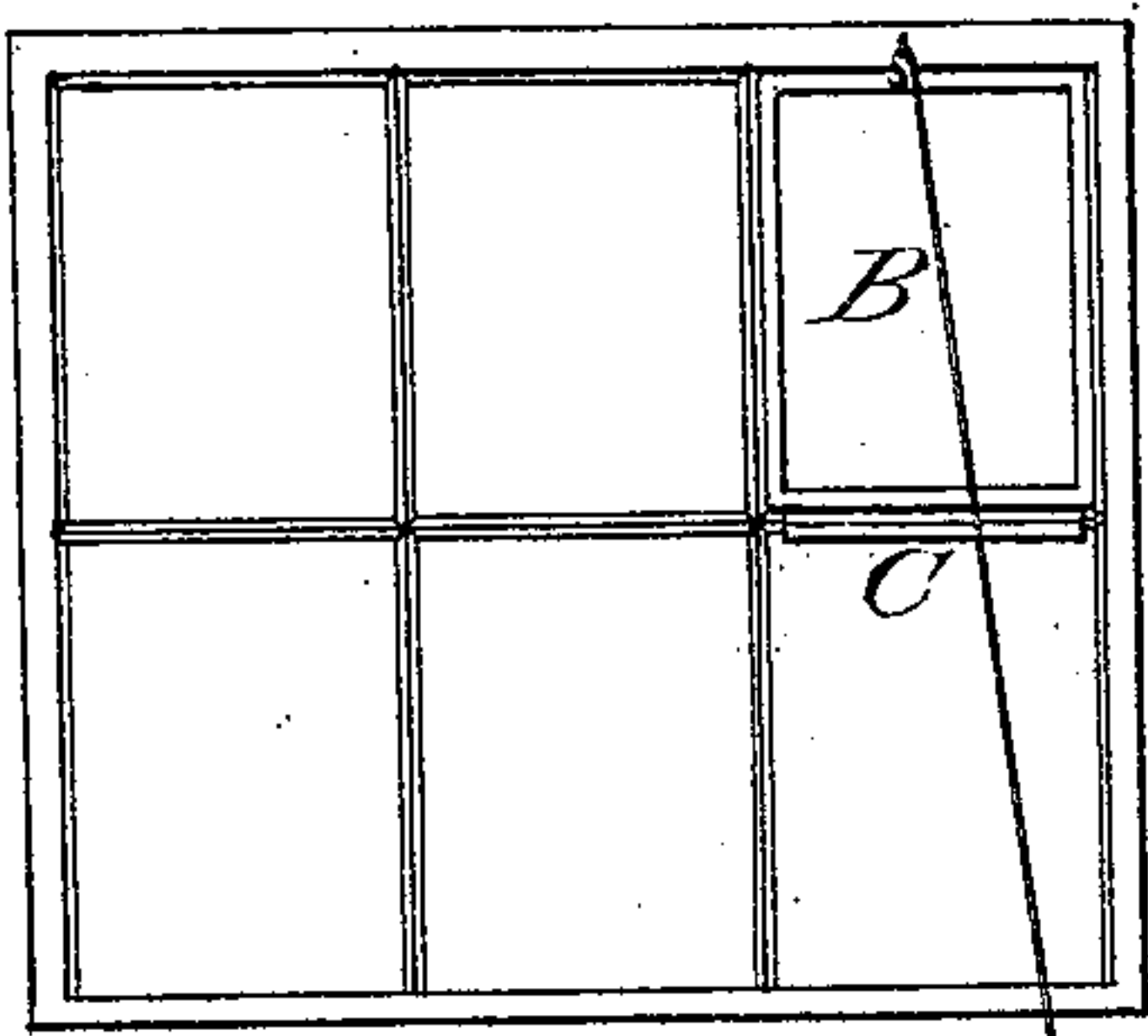


Fig. 6.



Witnesses:

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MOSES ECKSTEIN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN VENTILATORS FOR BULK-WINDOWS.

Specification forming part of Letters Patent No. **217,732**, dated July 22, 1879; application filed December 26, 1878.

To all whom it may concern:

Be it known that I, MOSES ECKSTEIN, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Ventilators for Bulk-Windows, which improvement is fully set forth in the following specification and accompanying drawings, in which—

Figures 1 and 2 are face views of the ventilator embodying my invention. Fig. 3 is a vertical section in line *xx*, Fig. 1. Fig. 4 is a vertical section in line *yy*, Fig. 2. Fig. 5 is a horizontal section in line *zz*, Fig. 1. Fig. 6 is a view showing the manner of applying the ventilator to the window.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a ventilator for bulk or show windows, for preventing the formation of moisture and frost thereon. I employ a slide, which is easily operated, and when closed has dust-tight joints.

Referring to the drawings, A represents a frame, which is secured to a proper portion of the top of the window-frame, and occupies part of the space of the glass. B represents a slide fitted to the frame A, so as to be lowered and raised, and formed of board or other material.

The lower piece, *a*, of the frame A is cut through or slotted for the passage of the slide, and to the bottom end of the slide is secured a cleat, *c*. The inner face of the upper piece, *a'*, of the frame is grooved, as at *b*, and when the slide is closed its upper end enters said groove, as more readily seen in Fig. 2. To the slide, near the upper end thereof, on one or both sides, there is secured a cleat, D, which is so disposed that when the slide is

closed said cleat comes in contact with the upper piece of the frame.

The operation is as follows: When it is required or desired to open the ventilator a cord which holds the slide is released, and the slide lowers, thus forming a communication between the interior of the bulk-window and atmosphere. When the ventilation is secured the slide is raised, thus closing the space of the frame A. As the upper end of the slide B enters the upper piece, *a*, of the frame, and the cleat D comes in contact with said piece, the top joint of the slide and frame, which is otherwise exposed, is prevented from admitting dust into the bulk-window, the advantage whereof is evident.

The cleats C D serve to brace the slide and prevent warping thereof, and likewise weight the same to insure its lowering or opening motion.

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

1. The slide B, provided near its top with the cleat D, and the top piece, *a*, of the frame, having a groove, *b*, substantially as and for the purpose set forth.

2. The slide B, provided at upper and lower ends with the cleats D C, respectively, substantially as and for the purpose set forth.

3. The window-ventilator consisting of the frame A, having its top and bottom pieces grooved and slotted, as stated, the slide B, and the cleats C D, all substantially as and for the purpose set forth.

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Witnesses:

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