

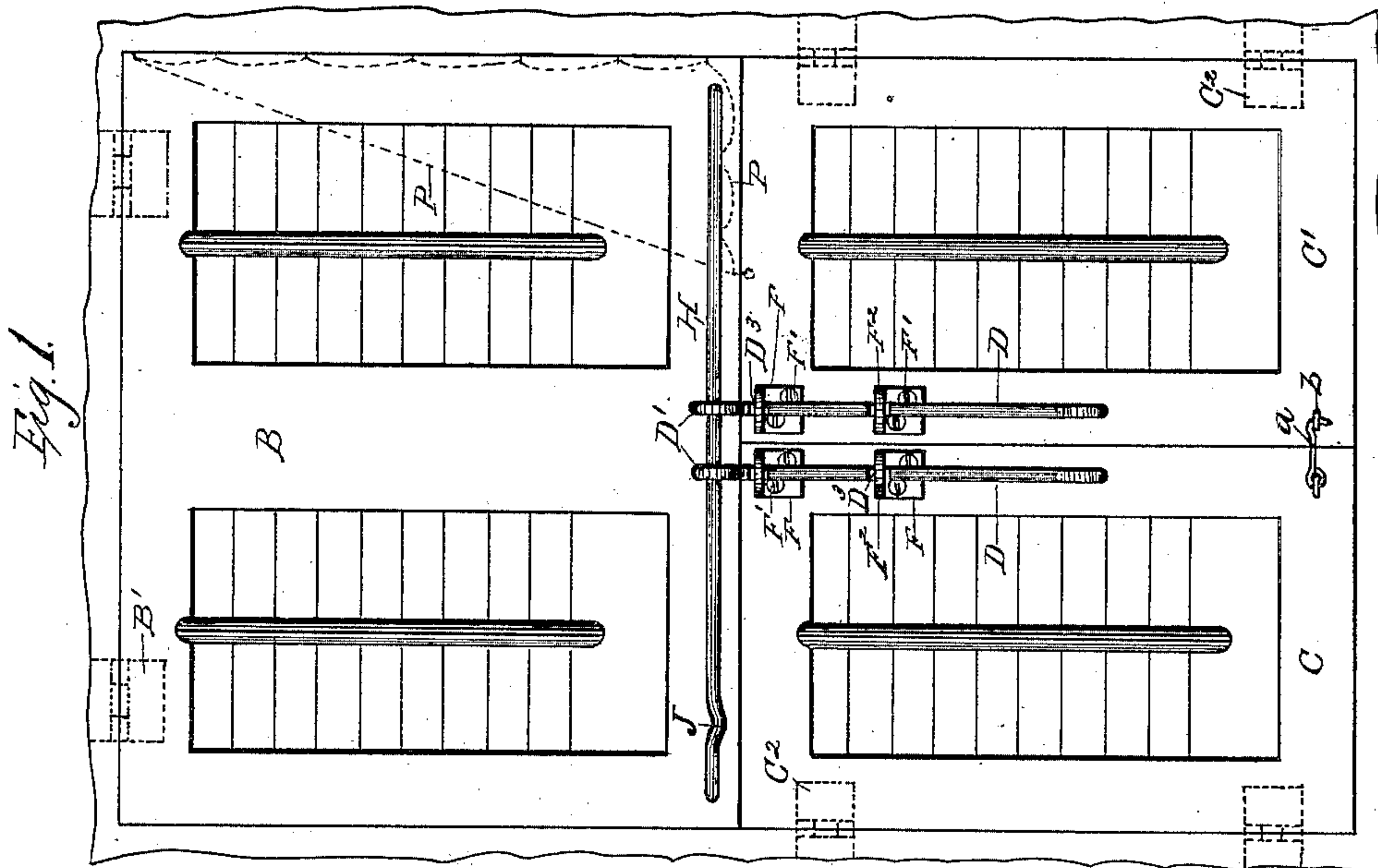
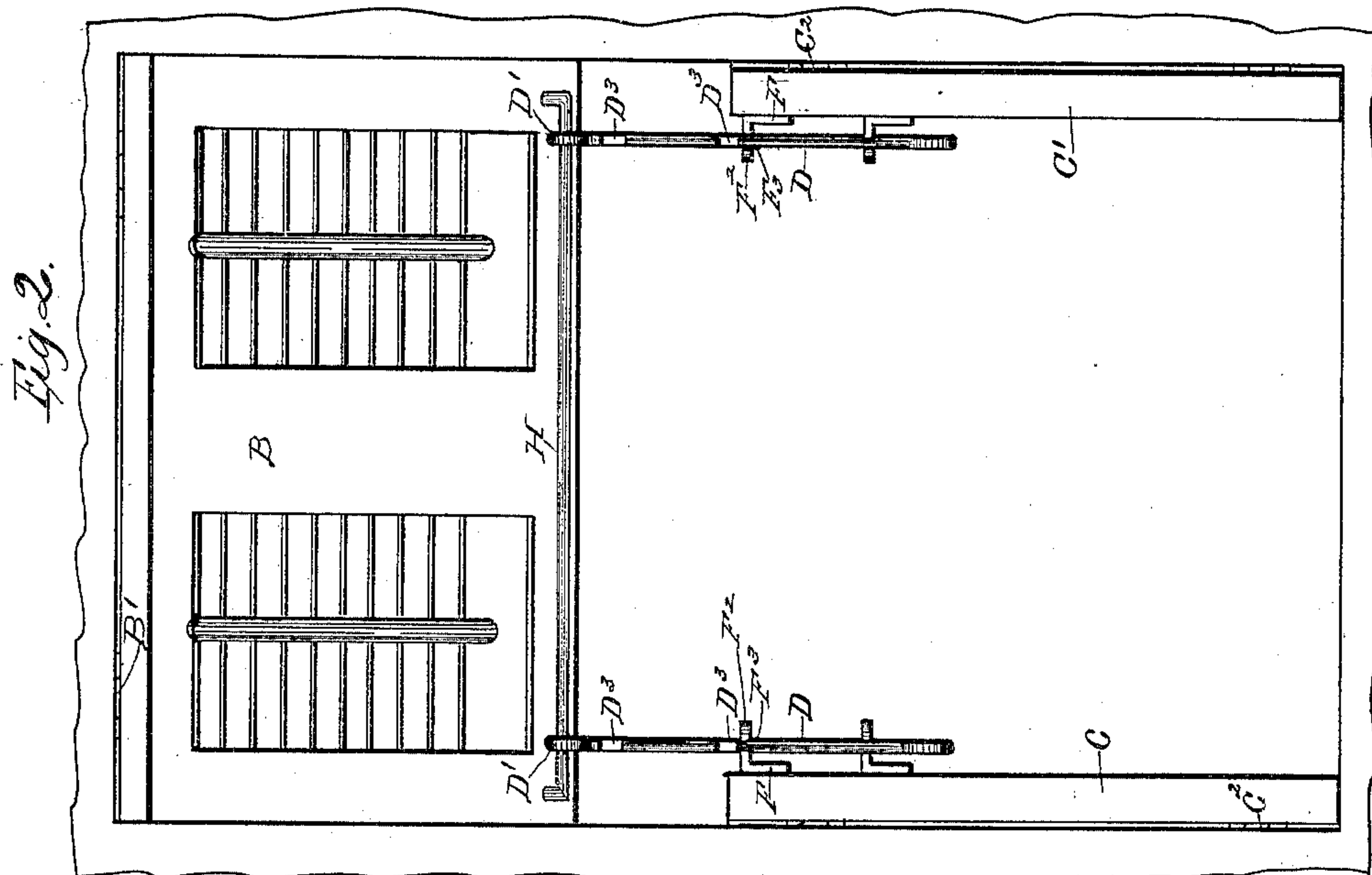
(No Model.)

2 Sheets—Sheet 1.

W. N. CARY.
WINDOW BLIND.

No. 448,177.

Patented Mar. 10, 1891.



Witnesses:
Frank C. Curtis
John T. Booth

Inventor:
William W. Cary,
by Geo. Amosher
Atty.

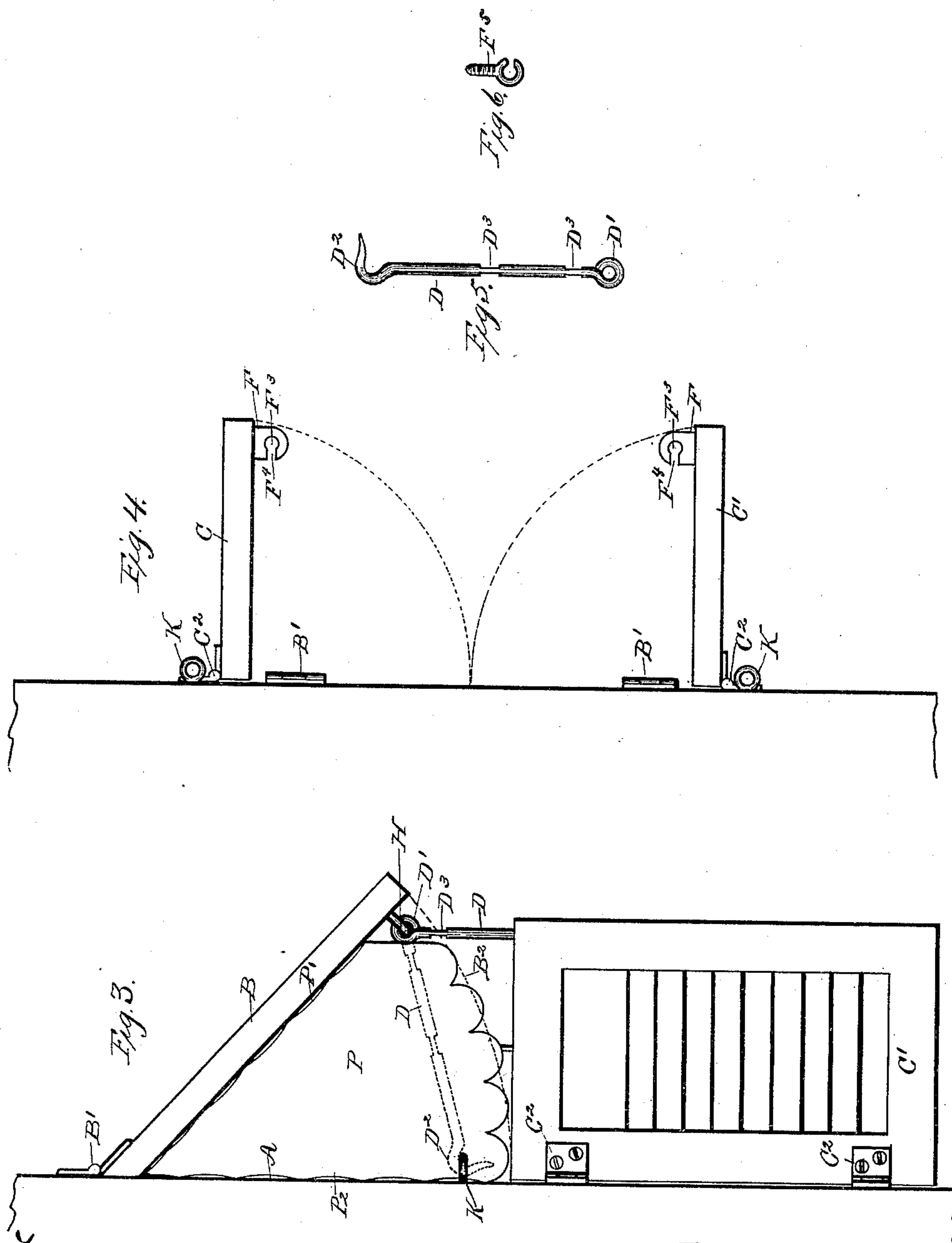
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UNITED STATES PATENT OFFICE.

WILLIAM N. CARY, OF MECHANICSVILLE, ASSIGNOR OF ONE-HALF TO
WALDEN L. HASKIN, OF GRANVILLE, NEW YORK.

WINDOW-BLIND.

SPECIFICATION forming part of Letters Patent No. 448,177, dated March 10, 1891.

Application filed January 7, 1890. Serial No. 336,213. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM N. CARY, a citizen of the United States, residing at Mechanicsville, county of Saratoga, and State of New York, have invented certain new and useful Improvements in Window-Blinds, of which the following is a specification.

My invention relates to such improvements; and it consists of the novel construction and combination of parts hereinafter described, and subsequently claimed.

Reference may be had to the accompanying drawings and the letters of reference marked thereon, which form a part of this specification.

Similar letters refer to similar parts in the several figures therein.

Figure 1 of the drawings represents an interior front view in elevation of my improved window-blinds closed. Fig. 2 is a similar view of the blinds open, the two lower blinds occupying a position right-angular to the window and the single upper blind having its lower end swung outward from the building. Fig. 3 is an exterior view in side elevation of the blinds open, as shown in Fig. 2. Fig. 4 is an exterior view in plan, showing the tops of the lower blinds open, as shown in Figs. 2 and 3, the upper blind being closed. Fig. 5 is a view in side elevation of a slide-brace detached. Fig. 6 is a modified form of slideway-hook.

A represents a window-frame with the outer portion broken away, and B a single depending blind or shutter hinged at its upper edge to the frame, as by hinges B', (indicated by dotted lines in Fig. 1,) with its lower edge free to swing outward from the window-frame on an arc represented by the broken curved line B² in Fig. 3. The blind B is preferably of a length to extend about half-way down the window-frame and to the lower blinds C C'. The latter blinds are each secured at one edge to one side of the window-frame, as by the hinges C², (indicated by dotted lines in Fig. 1,) in the same manner that horizontally-swinging blinds are commonly hinged to a window-frame.

The lower blinds are each provided with a slideway adapted to receive and support a

blind-supporting slide-brace and hook D. The slideway consists of two angle-irons F, secured to the swinging edge of the blind, one above the other in the same vertical line, by the screws F' through the vertical leaf of each iron, the horizontal leaves F² projecting out from the blind and being provided with a central aperture or eye F³, having a lateral opening or slot F⁴. The slide-braces D are each adapted to loosely fit and slide vertically or longitudinally of the brace in the eyes F³. They are each provided at their upper ends with an eye D' and at the lower ends with a hook D², also with the flattened or thinned parts D³ so located that such a thinned part will occupy the slideway-eyes when the blinds are closed, as shown in Fig. 1. The eyes D' at the upper ends of the braces are adapted to receive and slide along the slideway H, which may be a wire rod extended lengthwise of the upper blind along its lower edge and secured to the blind at the ends of the wire.

The lower blinds may be provided with the usual or any known means for securing them in a closed or open position, as gravity locking-hinges, (not shown,) or a hook a and staple b to secure them in a closed position. When it is desired to open the blinds from the position shown in Fig. 1 to that shown in Figs. 2 and 3, it is only necessary to remove the hook a from staple b and push outward upon one or both of the blinds until the eyes D' slide along slideway H from the position shown in Fig. 1 to that shown in Fig. 2. As the lower blinds swing open and outward the eyes D' of the braces, acting upon the slideway H, push the lower edge of the upper blind outward to the position shown in Fig. 3. It is obvious from an inspection of Fig. 3 that the lower edge of the upper blind rises as it swings outward, thereby causing the slide-braces D to slide upward in the slideways F to the position shown in Fig. 2. When the blinds are swung open to the position shown in Fig. 2, they are locked as against the action of ordinary winds, for the reason that the friction between slideway H and the material in which the eyes D' are formed is sufficient to retain the parts in any desired po-

sition along the respective arcs before mentioned and indicated by the curved broken lines. In addition to such frictional resistance, when desired, stops may be provided at different points on slideway H, as small offset or bend J, Fig. 1.

When it is desired to open the lower blinds C C' and leave the upper blind B closed, as shown in Fig. 4, the slide-braces D are first disengaged from their slideways F, the thinner parts D³ passing through the lateral slots F⁴, after which the lower blinds can be swung out and in, in the usual well-known manner of operating horizontally-swinging blinds. The braces D are left pendent from slideway H when the upper blind is closed; but they may be employed to brace and support the upper blind in an open or partly-open position, such as shown in Fig. 3, by inserting the hook end of the braces in the staples K, as shown by dotted lines in Fig. 3. The staples may be driven into the window-frame to project outward, as shown. The upper blind, when thus supported by the braces hooked into the staples, serves the purpose of an awning and leaves the lower blinds free to open and close in the ordinary well-known manner.

I have shown in Fig. 6 a modified form of slideway for the braces D, consisting of a hook or slotted eye having a screw-threaded shank F⁵, by which it is secured to a blind to occupy the same relative position thereto as the hooked leaf F. It is obvious that one only of the lower blinds with a single slide-brace would be sufficient to open the upper blind and support it in the position shown in Fig. 3. When the lower blinds are swung outward to the position shown in Fig. 3, the slideway H prevents the slide-braces from acquiring an absolute rotary movement, but causes a relative movement of the brace and its slideway, as though the former had been given a quarter-turn in the latter, thereby preventing the escape of the thinned part of the brace from its slideway by presenting the wide side of the thinned part toward the slot F⁴.

I have shown in Fig. 3 a flexible triangular-shaped side curtain P, which is secured along one side P' to the upper blind B, along another side P² to the window-frame, and at a middle point P³ of the third side to the lower blind C'. The curtain is not shown in the other figures, except that its position when the blinds are

closed is shown by dotted lines P in Fig. 1, the lower blind serving to draw the middle portion of the lower part of the curtain inward and fold it against the upper blind, as indicated by the dotted lines P.

What I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a window-frame, of an upper blind hinged by its upper edge to the upper part of the frame to swing vertically, a horizontal slideway secured to such blind, a lower blind hinged by one of its side edges to one side of the frame to swing horizontally, a slideway secured to such lower blind, and a slide-brace movable vertically in the slideway fixed upon the lower blind and movable horizontally in the slideway fixed upon the upper blind, substantially as described.

2. The combination, with an upper blind hinged to a window-frame to swing vertically and a pair of lower blinds the members of which are separately hinged to the frame to swing horizontally, of a pair of supporting-braces D, each secured at its lower end to one of the horizontally-swinging blinds and at its upper end to the lower end of the vertically-swinging blind for the purpose of supporting the several blinds in an open position, substantially as described.

3. The combination, with a horizontal slideway H upon an upper vertically-swinging blind and a vertical slideway having eyes F³, one above the other, with slide-slot F⁴ upon a lower horizontally-swinging blind, of a slide-brace D, having at its upper end an eye D', at its lower end a hook D², and intermediately of its ends thin parts D³, adapted to pass through the slots F⁴, substantially as described.

4. The combination, with an upper blind hinged to a window-frame to swing vertically and a lower blind hinged to the frame to swing horizontally, of a flexible triangular-shaped side curtain secured along one edge to the upper blind, along another edge to the window-frame, and at a middle point in its third edge to the lower blind, substantially as described.

In testimony whereof I have hereunto set my hand this 30th day of December, 1889.

WILLIAM N. CARY.

Witnesses:

GEO. A. MOSHER,

W. H. HOLLISTER, Jr.