

(No Model.)

M. B. BLAZIER.  
COMBINED WINDOW CHAIR AND STEP LADDER.

No. 459,571.

Patented Sept. 15, 1891.

Fig. I

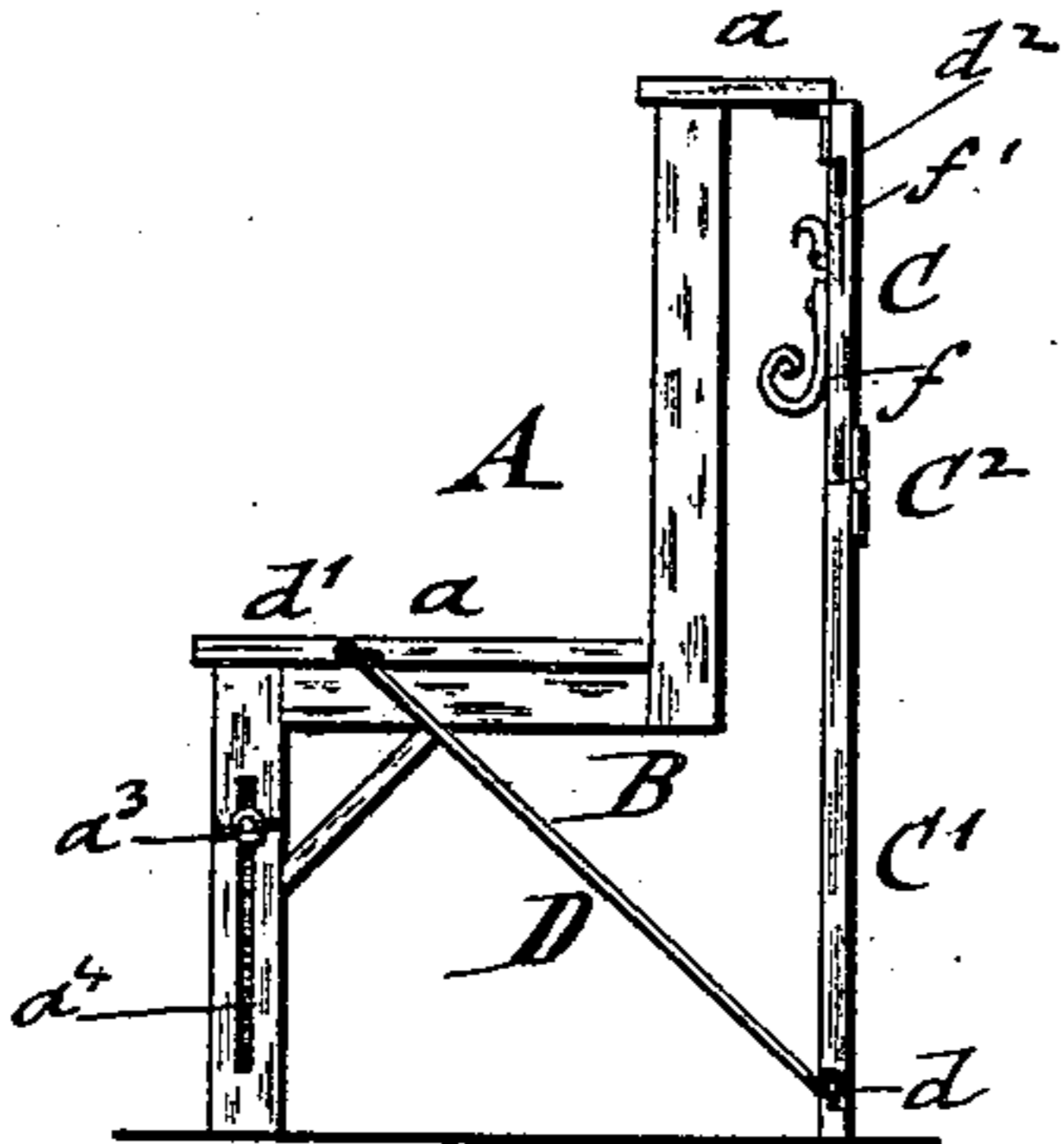


Fig. II

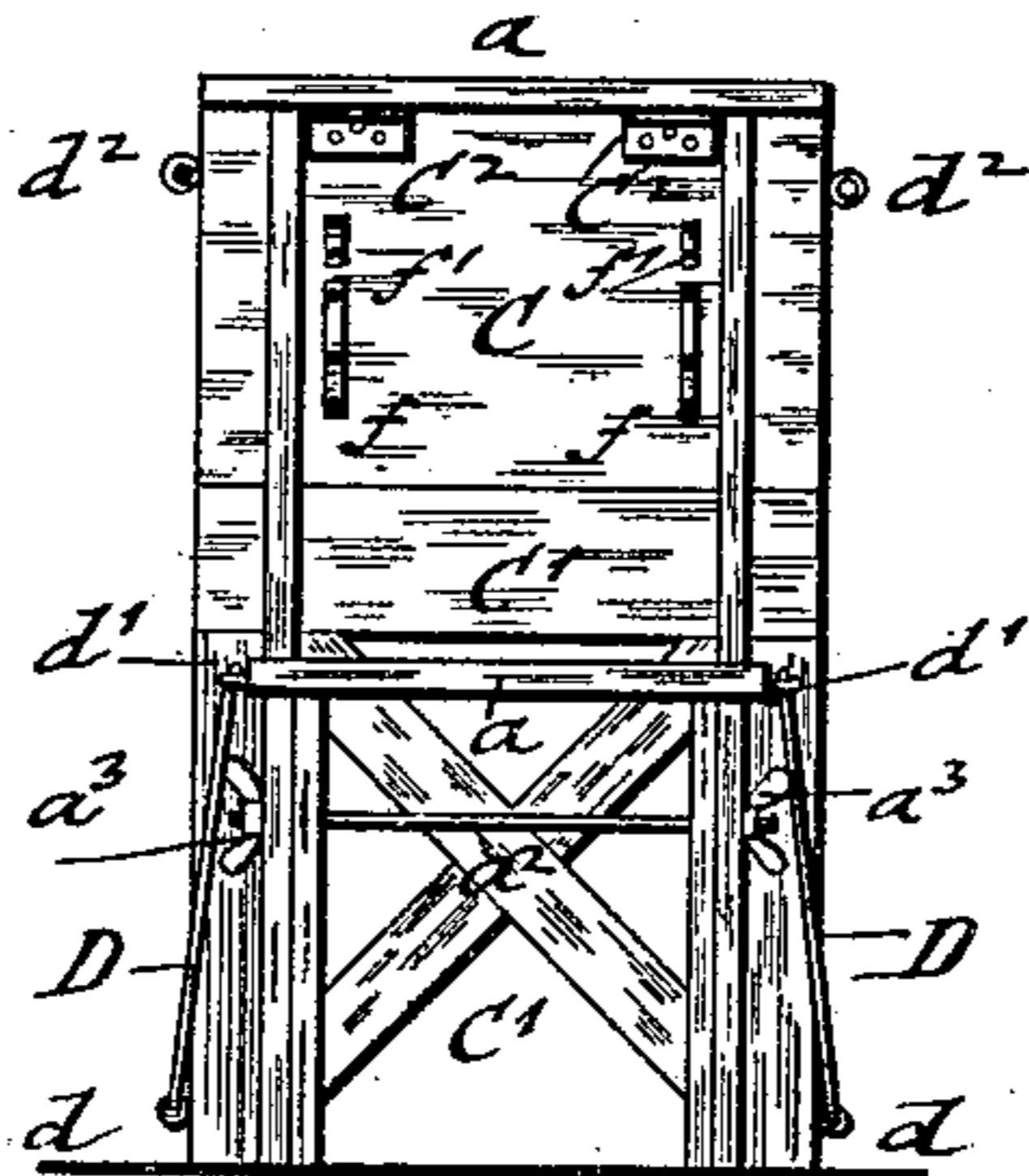


Fig. III

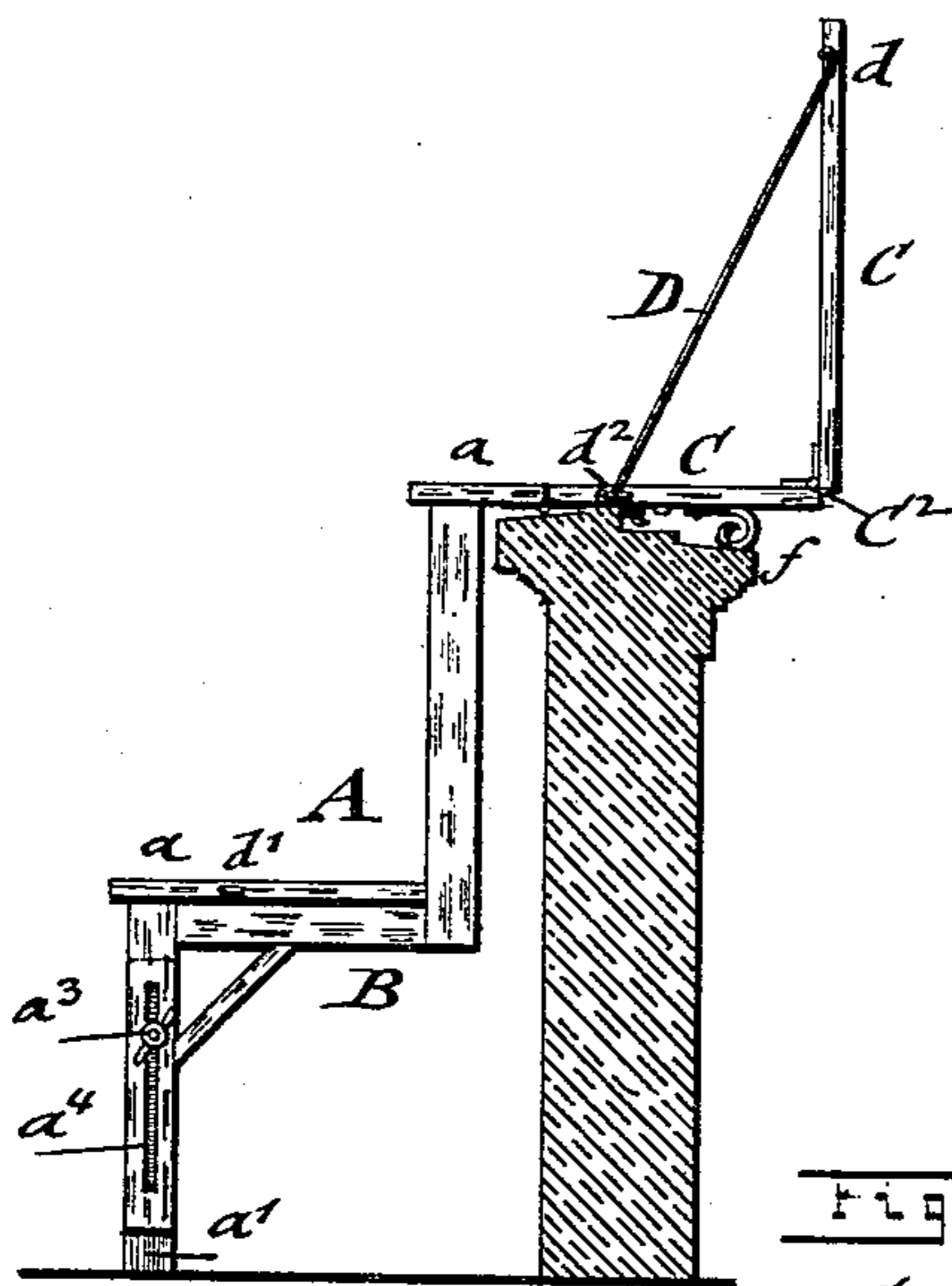
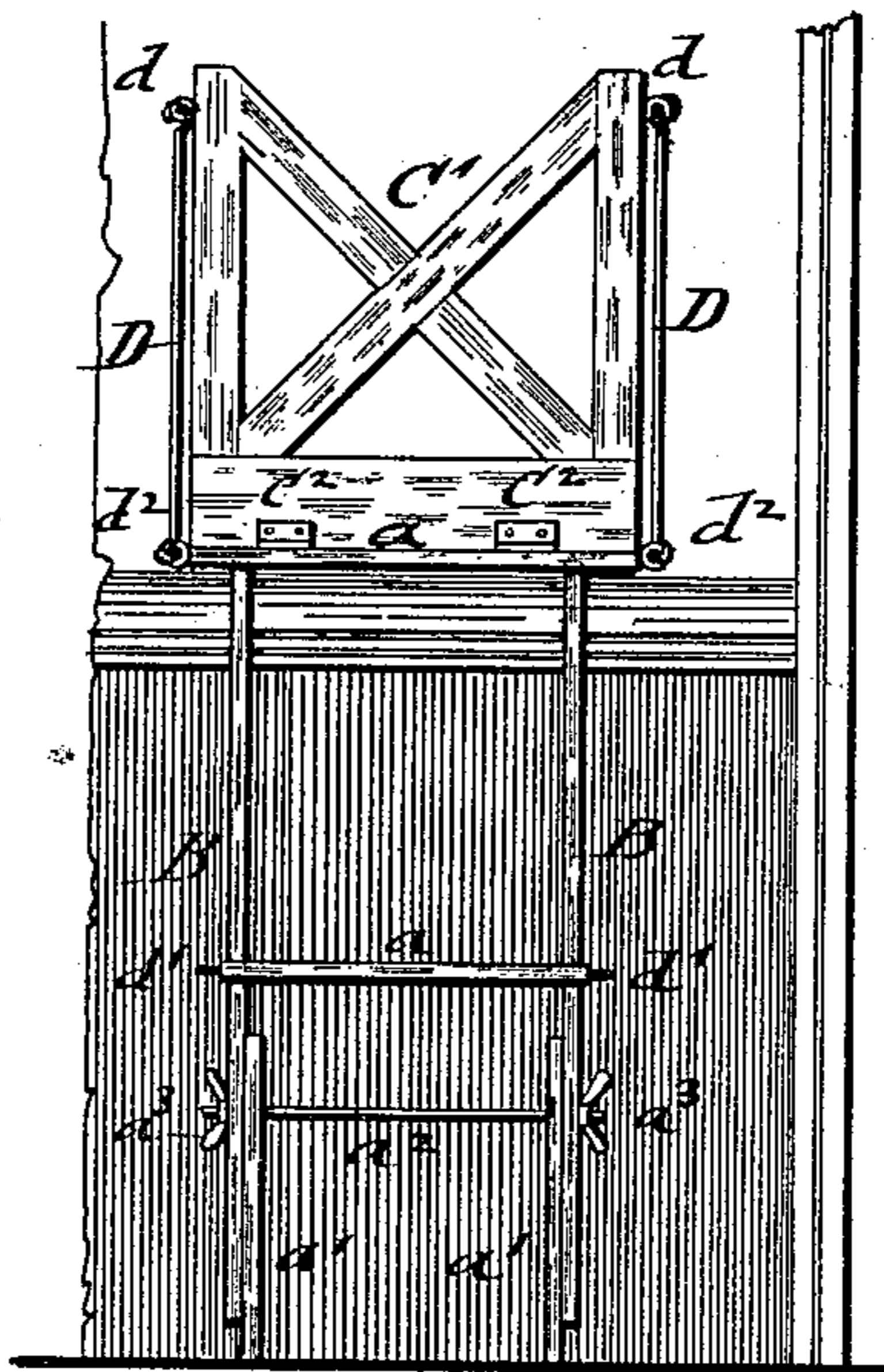


Fig. IV



WITNESSES:

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# UNITED STATES PATENT OFFICE.

MARY B. BLAZIER, OF BROOKLYN, NEW YORK.

## COMBINED WINDOW-CHAIR AND STEP-LADDER.

SPECIFICATION forming part of Letters Patent No. 459,571, dated September 15, 1891.

Application filed May 9, 1891. Serial No. 392,170. (No model.)

*To all whom it may concern:*

Be it known that I, MARY B. BLAZIER, of the city of Brooklyn, in the county of Kings and State of New York, a citizen of the United States, have invented certain new and useful Improvements in a Combined Window-Chair and Step-Ladder, of which the following is a specification.

This invention relates to an improved combination of step-ladder and window-cleaning chair, which is so arranged that the device can either be used as a step-ladder or a window-chair by which the window-sashes can be conveniently cleaned from the outside without any danger to the person cleaning the same; and the invention consists of steps supported on a suitable frame and provided with vertically-adjustable extension-legs and with a hinged rear part or back, which is connected by brace-rods with eyes of the lower step, said back being hinged to the upper step and formed of two sections, a seat-section and a back-section, that are hinged together and adapted to be changed, so as to form a seat with the upper step and a back for said seat, the brace-rods being then attached to eyes of the seat-section, which is placed in position on the sill. To the under side of the seat-section of the back are applied stout coiled springs that rest on the sill, and hooks that engage eyes screwed to the sill of the window-casing, so that the structure is rigidly held in position on the window-sill for use as a window-cleaning chair.

In the accompanying drawings, Figure I represents a side elevation showing my improved step-ladder and window-chair in position for use as a step-ladder. Fig. II is a front view of the same. Fig. III is a side elevation showing the same arranged as a window-chair and in position on the window-sill. Fig. IV is a front elevation of Fig. III, and Fig. V shows the seat-section of the window-cleaning chair as attached to the sill and drawn on a larger scale.

Similar letters of reference indicate corresponding parts.

In the drawings, A represents a step-ladder, which is formed of two or more steps  $a$ , that are supported on a frame B, which is made of the required size and strength. The legs of the lower step  $a$  are provided with extension-legs  $a'$ , which are adjusted on the main legs by means of a transverse rod  $a^2$ , having thumb-screws  $a^3$  applied to the threaded ends of said rod. The rod  $a^2$  passes through holes of the extension-legs  $a'$  and slots  $a^4$  of the main legs, so as to permit the adjustment of the extension-legs as required for the height of the window-sill above the floor when the device is used as a window-cleaning chair. To the rear edge of the upper step  $a$  is hinged the supporting rear part or back of my combined step-ladder and window-chair, which rear part or back is made of two sections C C'—a seat-section C and a back-section C'—that are connected by hinges C<sup>2</sup> and by means of braces D, which are pivoted to eyes  $d$  at the end of the back-section C' and attached by their hook-shaped ends to screw-eyes  $d'$  at the ends of the lower step  $a$ , as shown in Fig. 1. When the brace-rods D connect the lower end of the back-section C' with the lower step  $a$ , the device can be conveniently used as a step-ladder, the sections C C' of the back being then in line with each other and at right angles to the upper step  $a$ . When it is desired to use the device as a window-cleaning chair, the brace-rods D are detached from the lower step  $a$ , the section C' of the rear part or back is moved up into line with the upper step, and the section C' moved in upward direction at right angles to the section C, in which position the brace-rods D are connected to screw-eyes  $d^2$  at the ends of the seat-section C, as shown in Figs. 3 and 4. To the under side of the seat-section C of the rear part or back are applied C-springs  $f$ , which serve to support the seat-section C when the same is placed in position on the sill of the window, while hooks  $f'$ , also attached to the under side of the section  $b$ , are inserted into eyes  $f^2$ , attached to the window-casing, so as to secure thereby the rigid and reliable connection of the seat-section C with the window-casing without any chance of the tilting or shifting of the chair. When the outside of the window-sashes are to be cleaned, the girl places the window-chair in position and takes her seat on the upper step and seat-section, resting her feet on the lower step  $a$ , while the back is supported by the back-section C'. As the entire structure is firmly and reliably supported on the floor, on the sill,

55  
60  
65  
70  
75

80  
85  
90  
95  
100

and on the window-casing, a feeling of security is given to the person cleaning the window, as all danger of accident such as frequently happen in cleaning the outside of window-sashes is obviated.

My improved step-ladder and window-cleaning chair can be furnished at a low price and can be used at the inside of the house or apartment as a step-ladder and for cleaning the window-sashes, which twofold use renders it more convenient for domestic purposes.

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

1. The combination of a supporting-frame provided with steps, a rear part or back hinged to the upper step, and brace-rods connecting said rear part with the lower step, substantially as set forth.

2. The combination of a supporting-frame having steps, a rear part or back hinged to the upper step, and brace-rods pivoted to the lower end of the rear part and connected to the eyes of the lower step, substantially as set forth.

3. The combination of a supporting-frame having steps, a rear part or back hinged to the upper step and formed of two hinged sections, a seat-section and a back-section, and brace-rods pivoted to the back-section and attached to eyes of the lower step or to eyes of the section of the rear part, so that the back-section of the rear part can be connected to the lower step or to the seat-section of the rear part, substantially as set forth.

4. The combination of a supporting-frame having steps, extension-legs for said frame,

means for adjusting the extension-legs, and a rear part or back hinged to the upper step and formed of two hinged sections, a seat-section and a back-section, respectively, and brace-rods pivoted to the back-section and applied to either eyes of the lower step or to eyes of the seat-section, substantially as set forth.

5. The combination of a supporting-frame having steps, a rear part or back formed of two sections, a seat-section and a back-section, which are hinged together, brace-rods connecting the back-section with the lower step or seat-section, respectively, and springs attached to the under side of the seat-section and adapted to rest on the sill, substantially as set forth.

6. The combination of a supporting-frame having steps, a rear section or back hinged to the upper step, said rear part being made of two hinged sections, a seat-section and a back-section, brace-rods connecting the rear section with the lower step or with the seat-section, respectively, springs at the under side of the seat-section, and hooks also attached to the under side of the seat-section, which hooks are adapted to engage eyes of the window-casing, so as to attach the window-cleaning device to the window-casing, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

MARY B. BLAZIER.

Witnesses:

PAUL GOEPEL,  
A. M. BAKER.