

F. A. WINSLOW.

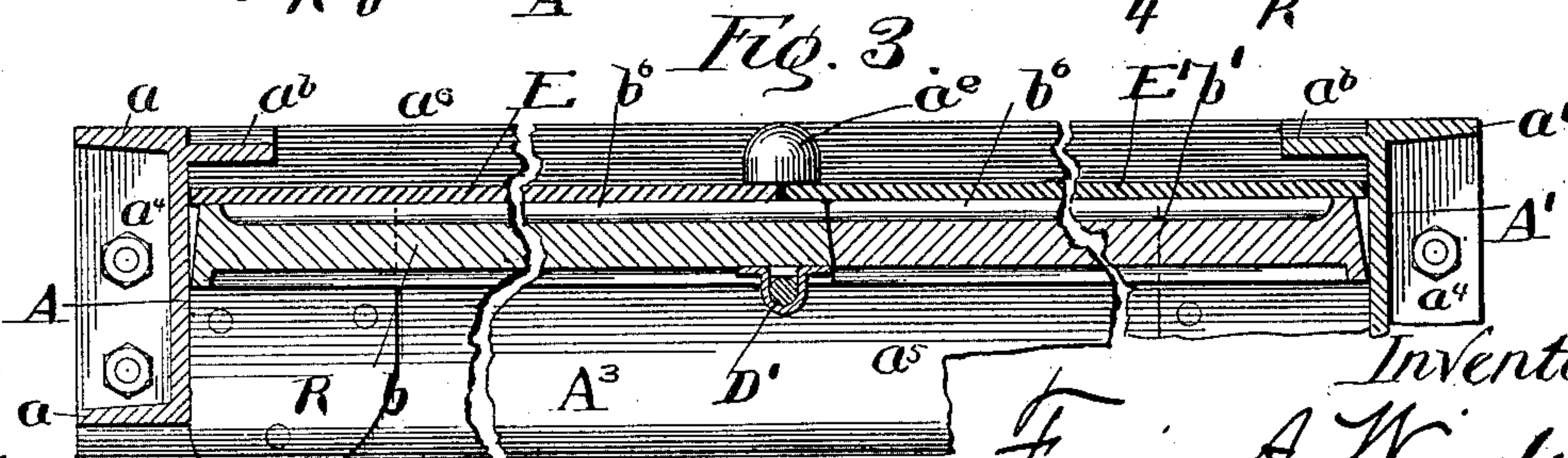
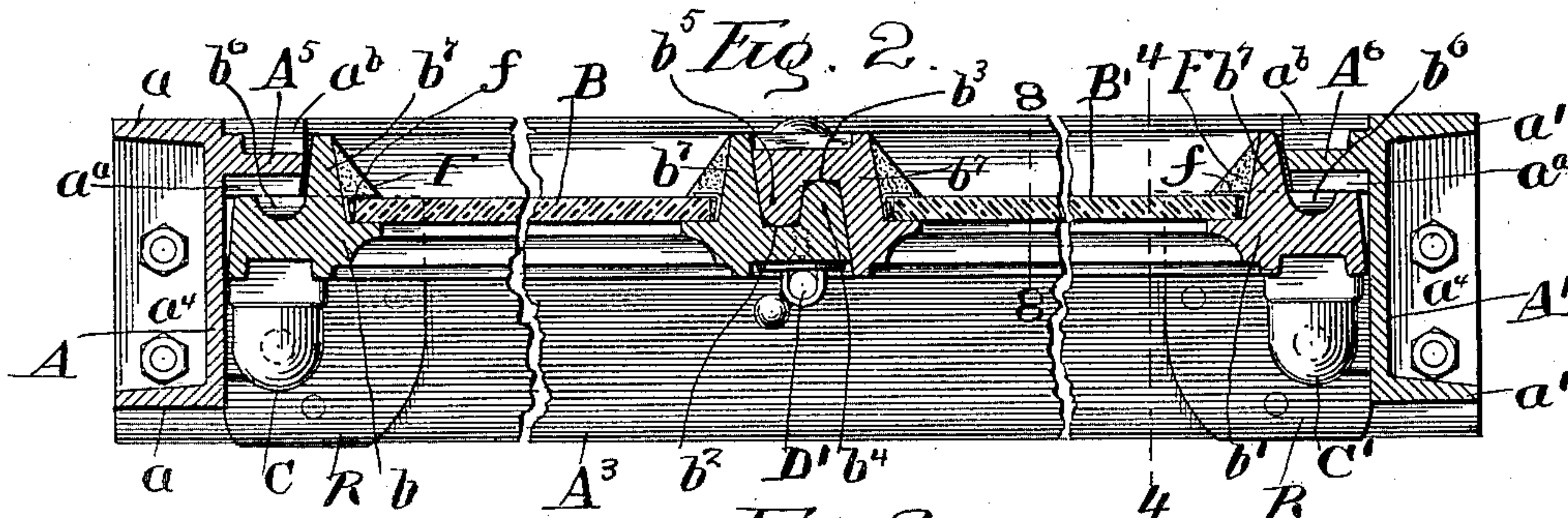
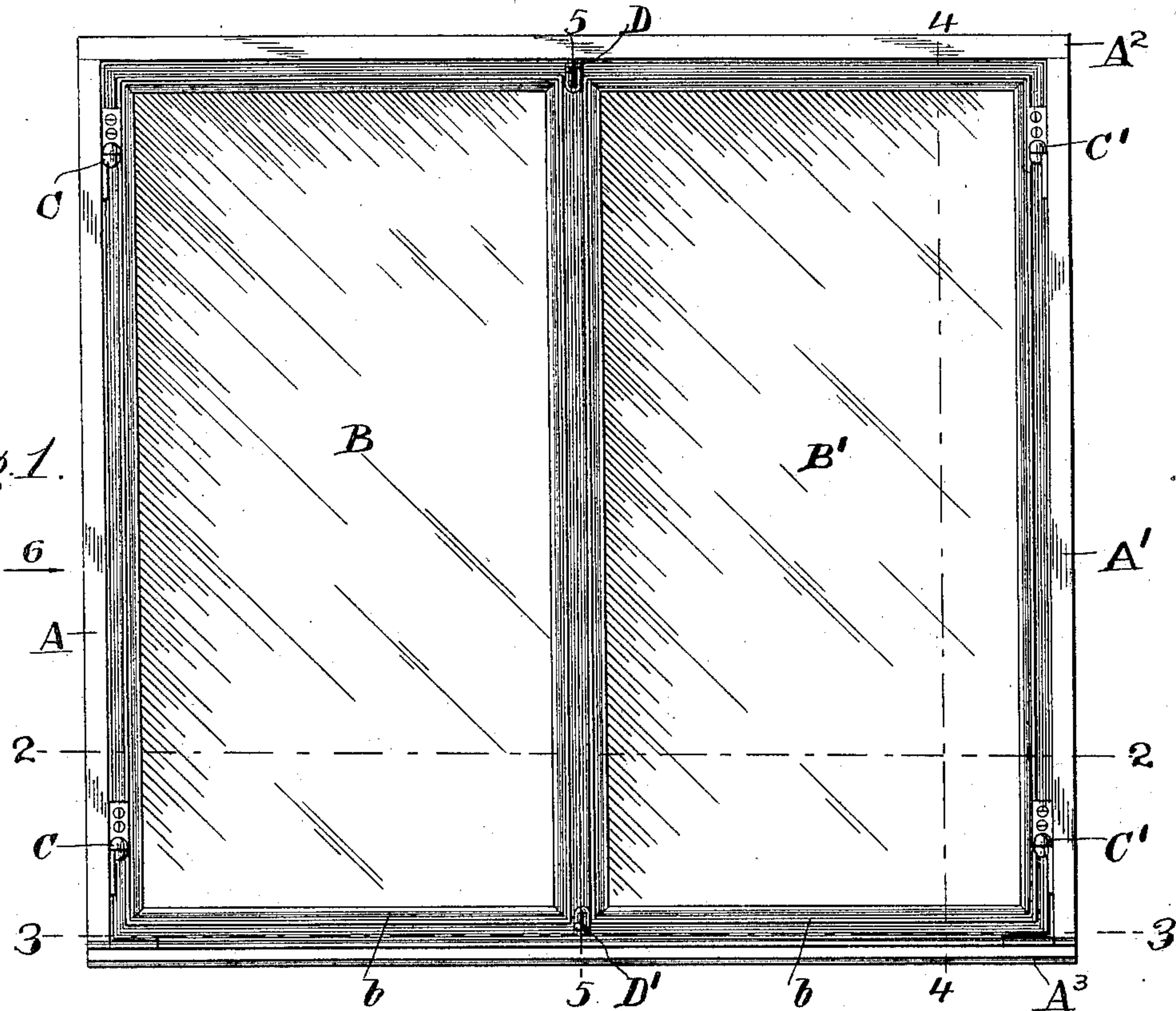
WINDOW.

(Application filed Aug. 5, 1899.)

(No Model.)

2 Sheets—Sheet 1.

Fig. 1.



Witnesses:
Chas. O. Sherway
J. Bliss.

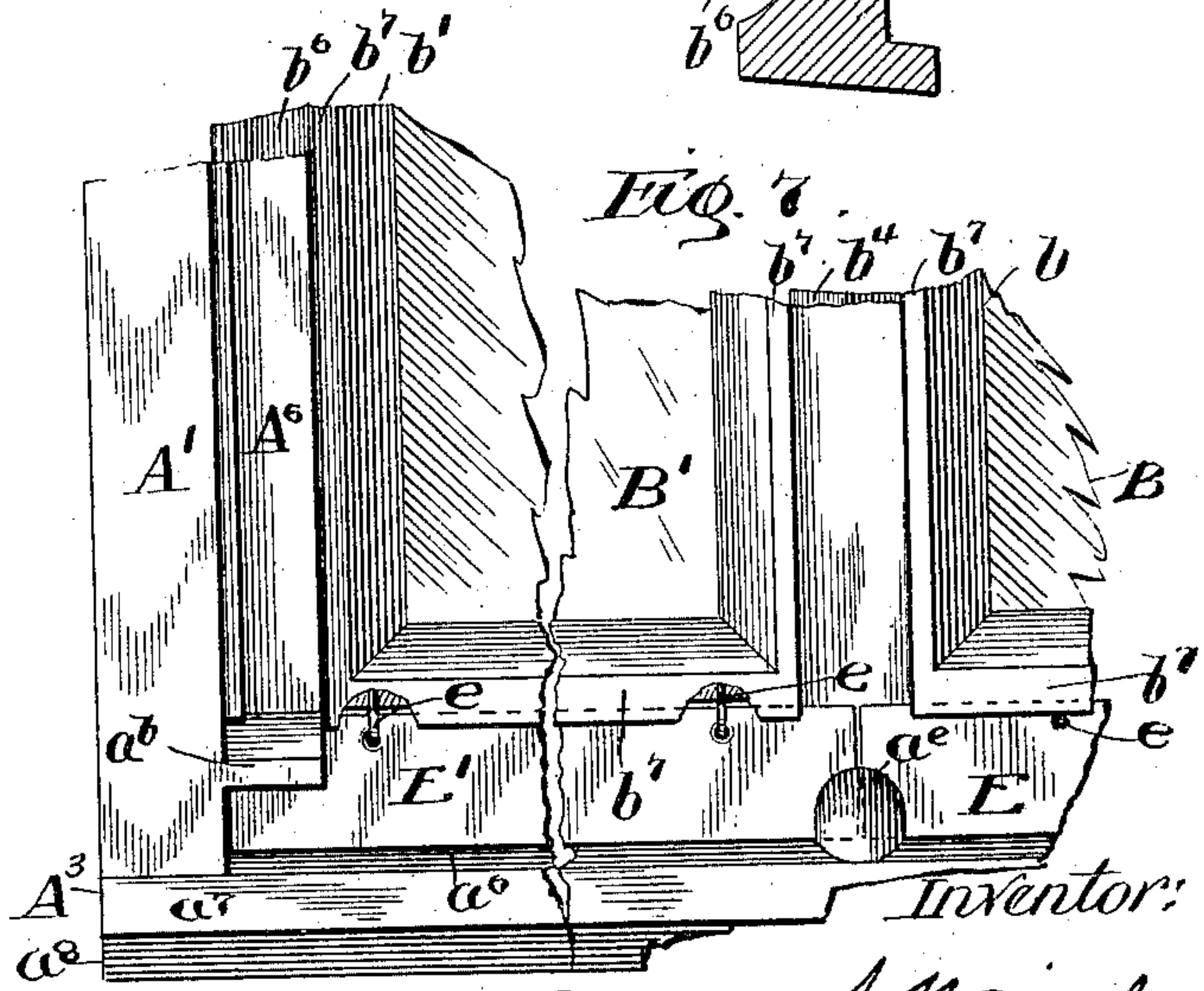
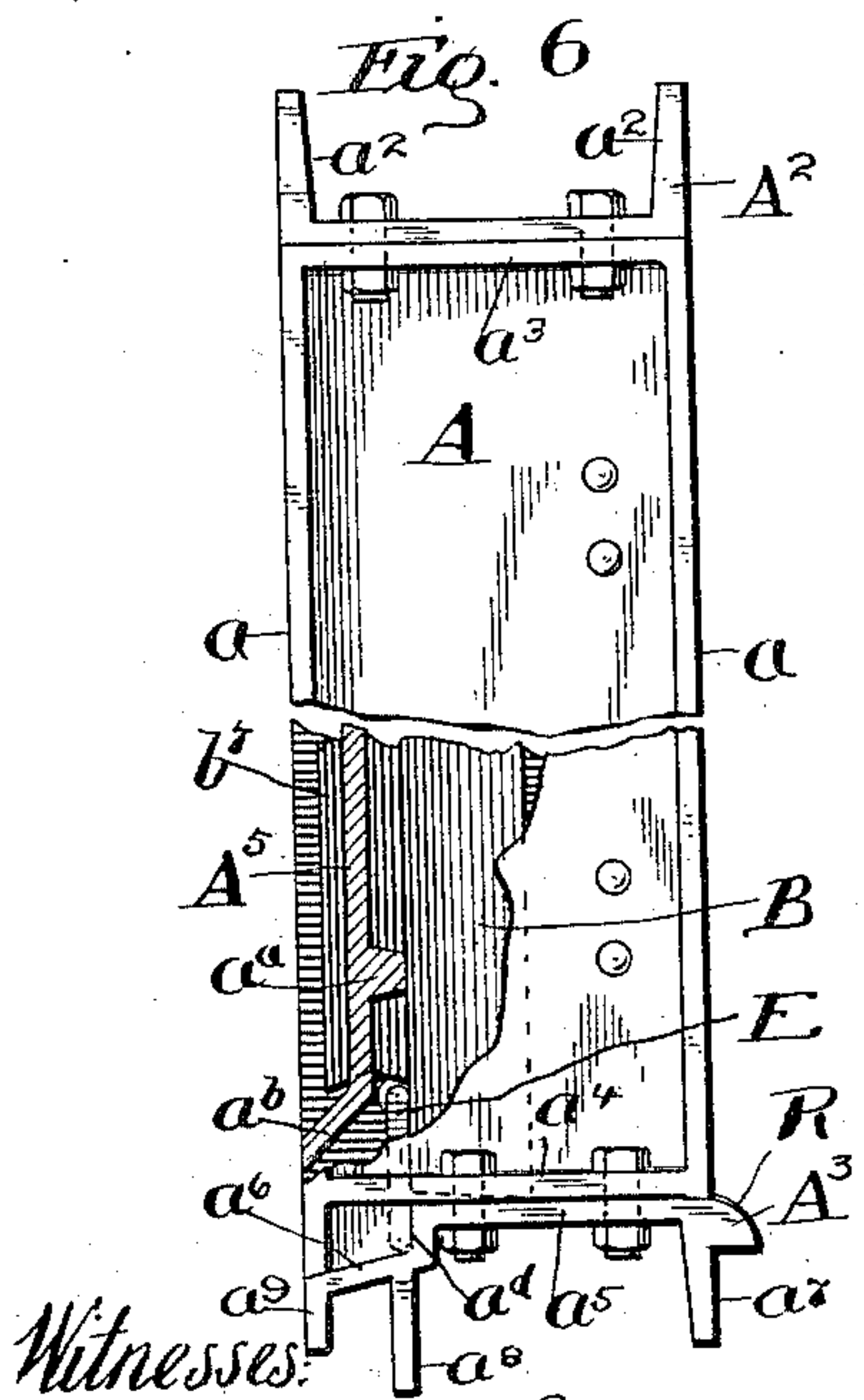
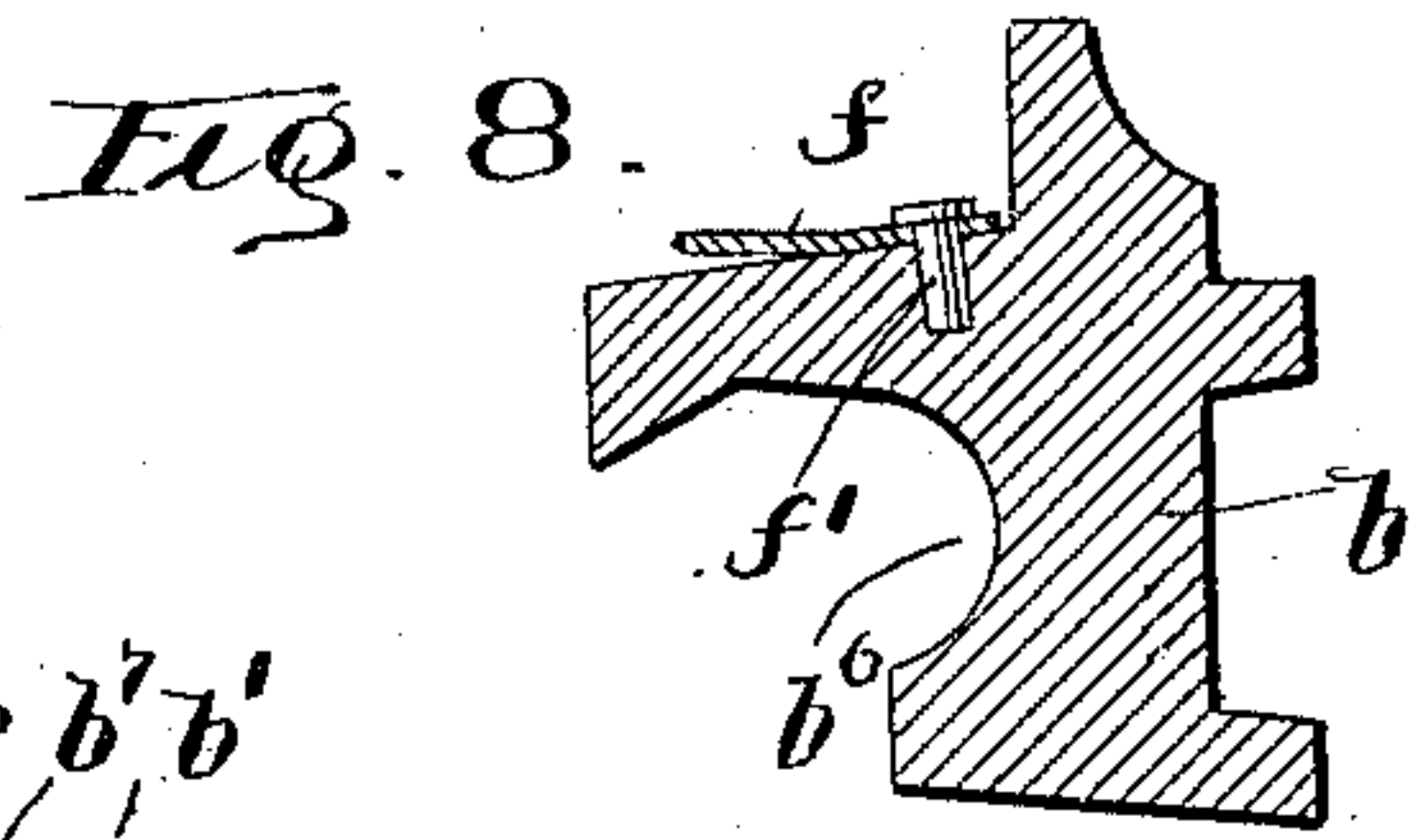
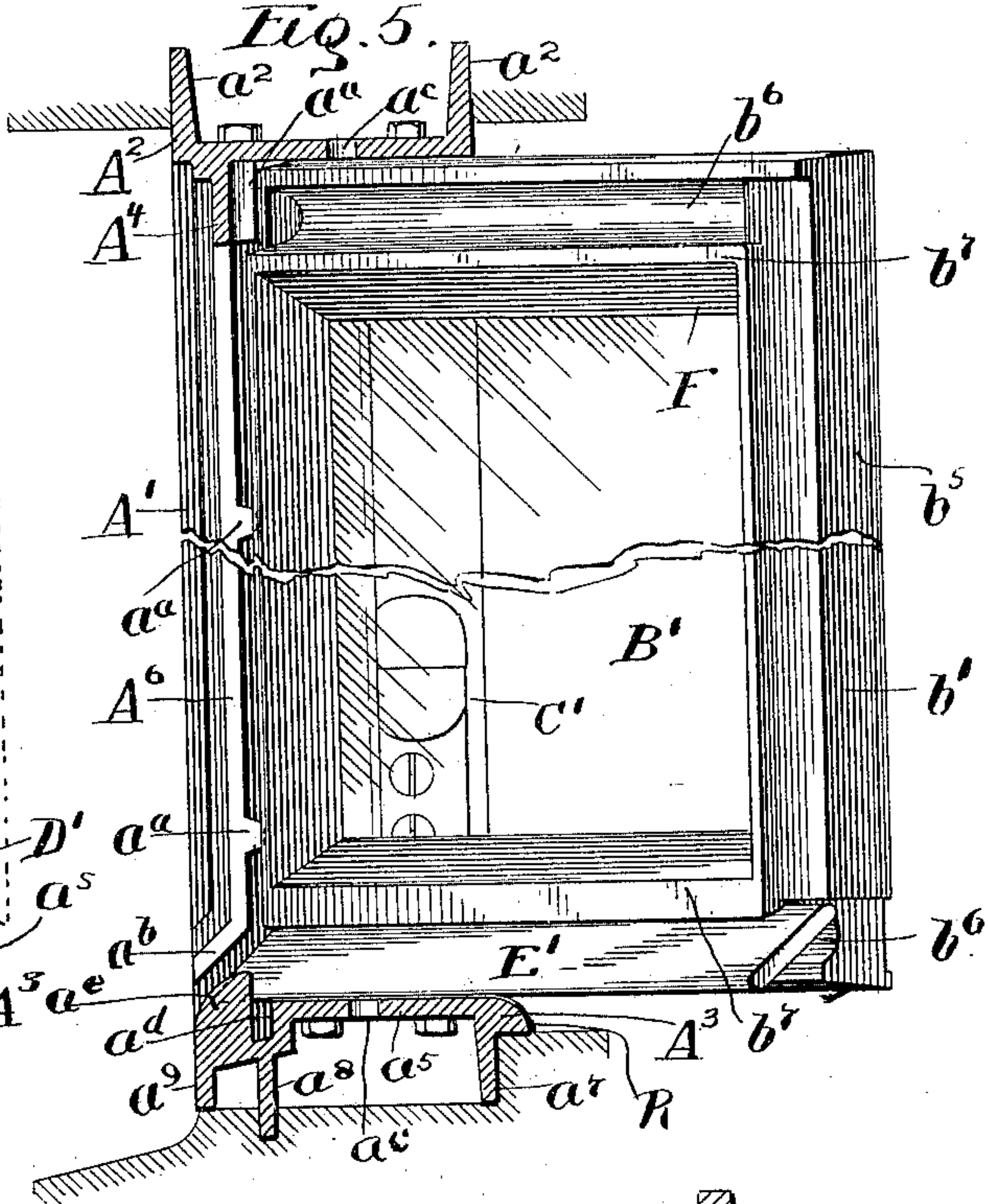
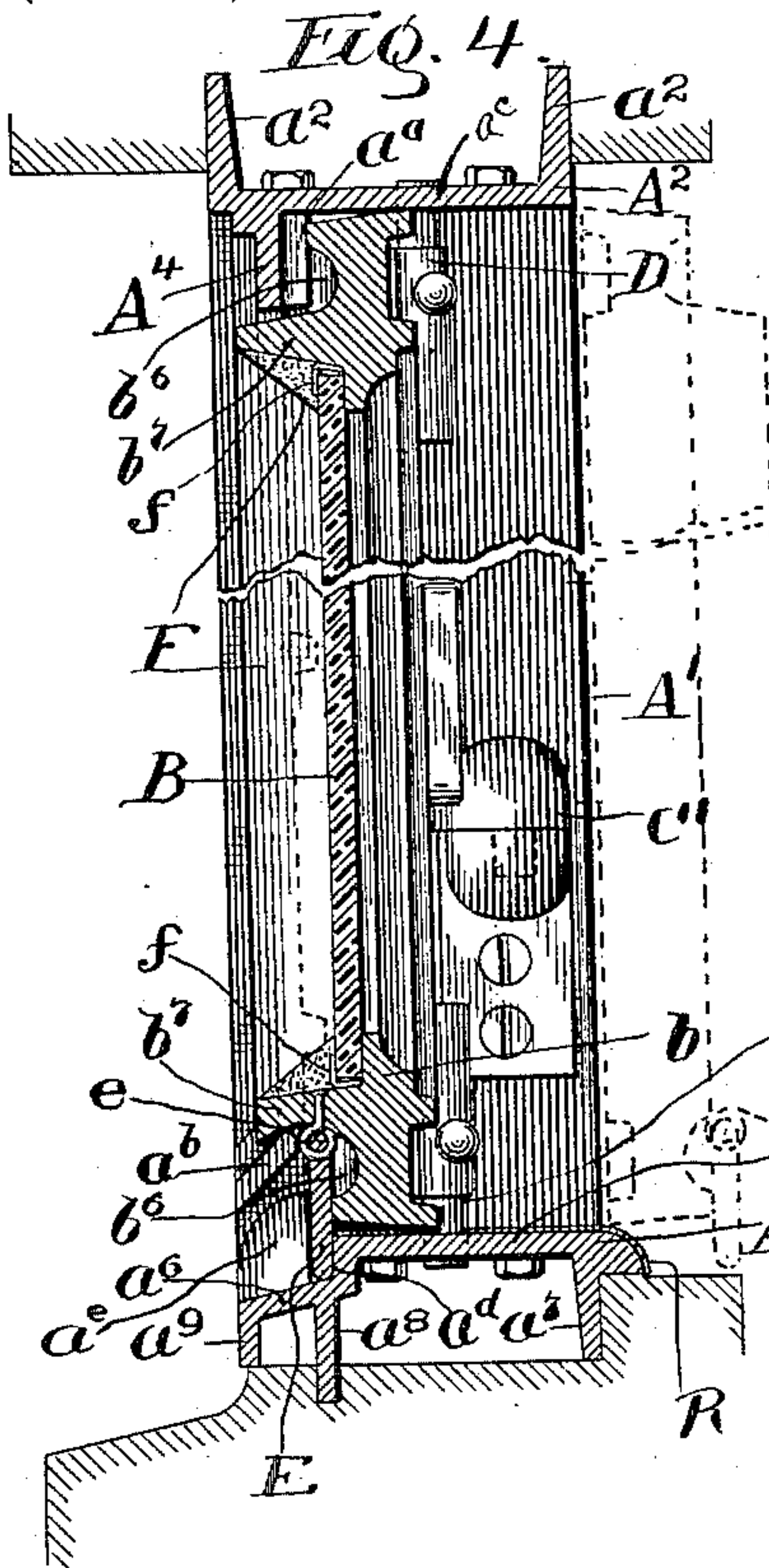
Inventor:
Francis A. Winslow
by Hiles & Patten
Attys.

F. A. WINSLOW.
WINDOW.

(Application filed Aug. 5, 1899.)

2 Sheets—Sheet 2.

(No Model.)



Witnesses:
Chas. O. Shewey,
D. Bliss.

Inventor:
Francis A. Winslow
by Kelsey & Bitner Attys.

UNITED STATES PATENT OFFICE.

FRANCIS A. WINSLOW, OF CHICAGO, ILLINOIS.

WINDOW.

SPECIFICATION forming part of Letters Patent No. 669,107, dated March 5, 1901.

Application filed August 5, 1899. Serial No. 726,243. (No model.)

To all whom it may concern:

Be it known that I, FRANCIS A. WINSLOW, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Windows, of which the following is a specification.

My invention relates to certain improvements in swinging windows, the object being to construct the same of metal, to guard against wind, rain, and the like getting into the room, and to permit the windows to be swung into the room in order that both sides of the same may be accessible for the purpose of cleaning, &c.

To such end the invention consists in certain novel features of construction, which will be clearly described in this specification and the essential features thereof more particularly pointed out in the claim appended hereto.

The device is shown in the accompanying drawings by means of eight figures, of which—

Figure 1 is an inner face view of a pair of casement-windows with their supporting-frame. Fig. 2 is a horizontal section in line 2 2 of Fig. 1 with certain portions broken away. Fig. 3 is a similar section in line 3 3 of Fig. 1. Fig. 4 is a vertical cross-section in line 4 4 of Figs. 1 and 2, certain parts being broken away. Fig. 5 is a section in line 5 5 of Fig. 1, showing the right-hand window swung into an open position. Fig. 6 is an end view looking in the direction of the arrow 6 of Fig. 1 with certain portions broken away. Fig. 7 is a rear elevation of a portion of the frame and windows, and Fig. 8 is a detail cross-section in line 8 8 of Fig. 2.

In the views, $A A'$ represent the vertical or upright members of the window-frame, A^2 the upper member, and A^3 the lower member, thereof. The side and upper members are formed with flanges $a a'$ along their edges to strengthen the same, and the side members are formed with horizontal flanges $a^3 a^4$ at their upper and lower ends, respectively, as seen in Fig. 6, to which the upper and lower members $A^2 A^3$ are bolted. The member A^3 consists, preferably, of a horizontal portion a^5 , having at its rear end an offset portion a^6 , and down from the lower faces of the portions $a^5 a^6$ extend flanges $a^7 a^8 a^9$. The

upper and side members are each formed near their rear edges with inwardly-projecting flanges $A^4 A^5 A^6$, (see Figs. 2, 4, and 5,) from which project lugs a^a . The vertically-extending flanges $A^5 A^6$ terminate at their lower ends in oblique portions a^b , extending out to the edge of the frame, the object of the same being hereinafter more fully described.

The window-sash are seen at $B B'$ and consist of rectangular frames $b b'$, hinged to the vertical members $A A'$ of the window-frame by means of hinges $C C'$. The adjacent edges of the two window-sash are formed with grooves $b^2 b^3$ and ribs $b^4 b^5$, the rib upon one sash being adapted to rest in the groove upon the other, as clearly indicated in Fig. 2, to shut out the wind, rain, &c. The rear edges of the sash are adapted to rest against the lugs a^a on the flanges $A^4 A^5 A^6$ of the window-frame, and the sash are formed near the edges of their outer faces with grooves b^6 , from the inner edges of which project rearwardly-extending flanges b^7 . This surrounding flange extends beyond the flanges $A^4 A^5 A^6$ upon the window-frame, and the grooves b^6 are adapted to resist any rain which may beat in between the flanges b^7 and those upon the window-frame and allow the water to run down between the flanges upon the window-frame and the window-sash.

The windows are locked in place by means of thrust-bolts $D D'$, secured upon the sash B , at the top and bottom thereof, openings $a^c a^c$ (see Fig. 5) being formed in the members $A^2 A^3$ of the frame to receive the bolts.

To prevent the rain from beating in between the window-sash and the lower member A^3 , bars $E E'$ are pivoted to the sashes by means of eyes e , (see Figs. 4 and 7,) said bars resting against a shoulder a^d upon the lower member A^3 of the frame and held against the same by means of an upwardly-extending lug a^e , formed upon the portion a^6 thereof. The flanges b^7 at the bottoms of the windows overhang slightly to protect the upper edges of the bars $E E'$ from the weather.

When the sash are thrown open, the bars $E E'$ swing upon the eyes, as seen in Fig. 5, their free edges resting upon riding-plates R , secured upon the horizontal portion a^5 of the member A^3 of the window-frame. These

riding-plates protect said member from being marred by the bars E E' in passing over them. As seen in the drawings, the forward edge of the member A³ is rounded off, the forward

5 edge of the riding-plate conforming thereto. When the windows are open to their full extent, as seen in dotted lines in Fig. 4, the bars E E' do not engage the riding-plates, but are suspended from the eyes *e*. When, however,

10 the windows are swung into a closed position, the lower edges of the bars E E' strike the rounded forward edges of the riding-plates and are tilted upward thereby until they again slide upon the upper faces of the plates.

15 When the window is completely closed, they drop back of the shoulder *a*^d.

The window-panes are held in place upon the sash by means of soft-metal strips *f*, secured to the sash by rivets *f'*, (see Fig. 8,) said

20 strips being bent up against the window-panes after they are put in place. Putty F is then

put in the angles formed by the window-sash and glass to make a perfectly waterproof joint.

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

A window comprising a frame having suitable vertical and horizontal members, a pair of window-sash hinged to said frame, their free ends being formed with engaging grooves and ribs, thrust-bolts upon one of said window-sash adapted to engage the window-frame and swinging bars pivoted to the bottom of the sash and adapted to engage the lower member of the frame; substantially as described.

In witness whereof I have hereunto set my hand, at Chicago, in the county of Cook and State of Illinois, this 2d day of August, A. D. 1899.

FRANCIS A. WINSLOW.

Witnesses:

CHAS. P. SAXE,

L. M. STURTEVANT.