

A. G. Safford,

Sash Holder.

N^o 11,499.

Patented Aug. 8, 1854.

Fig: 1.

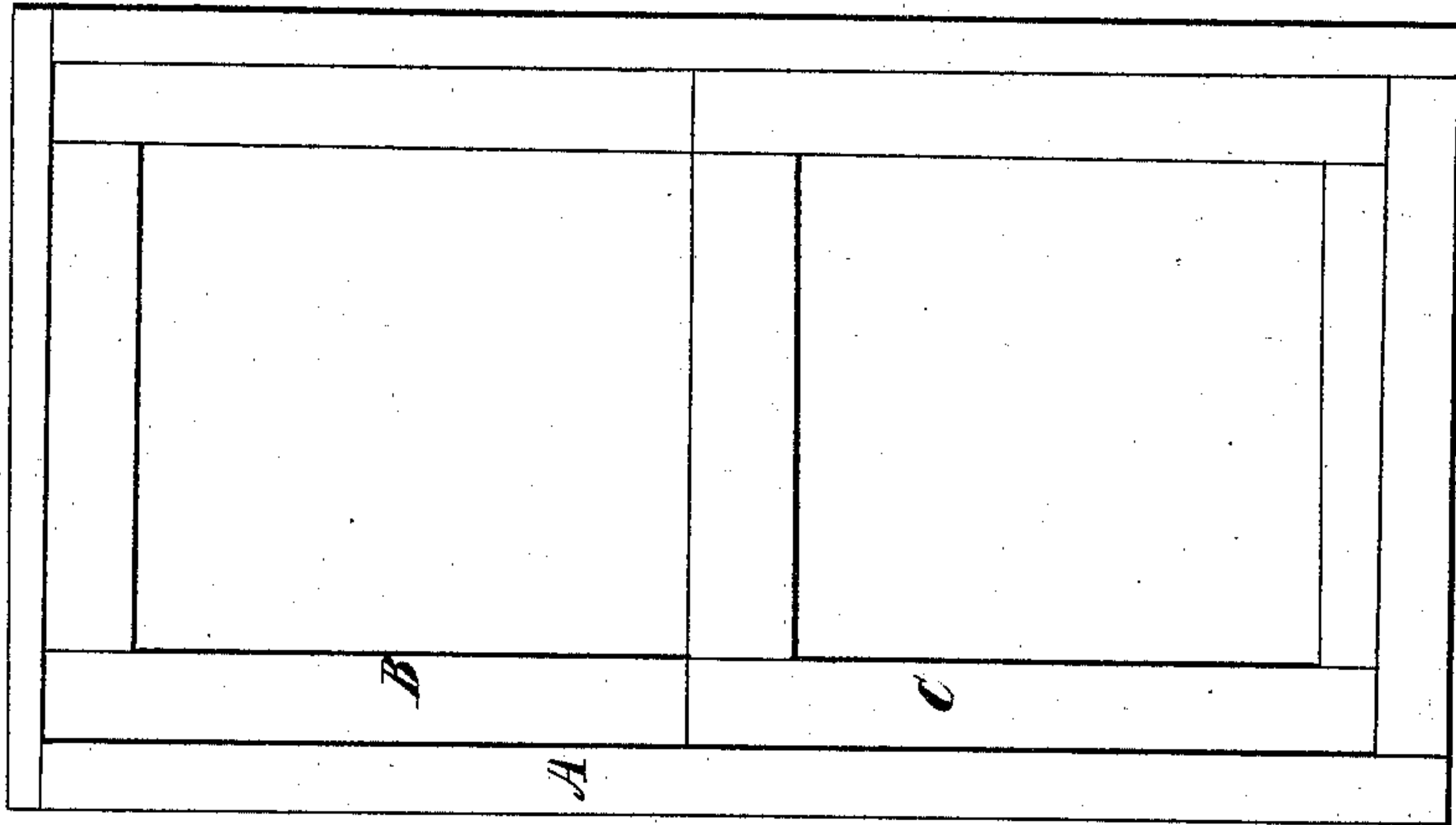


Fig: 2.

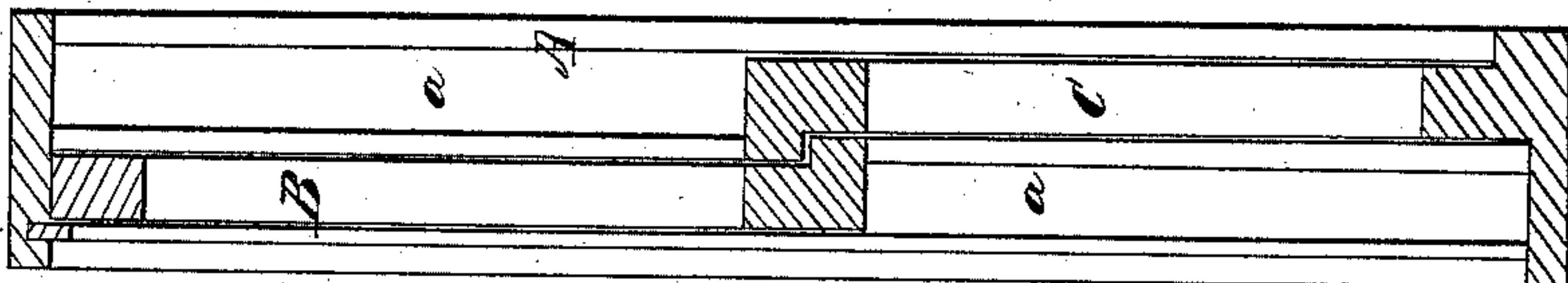


Fig: 5.

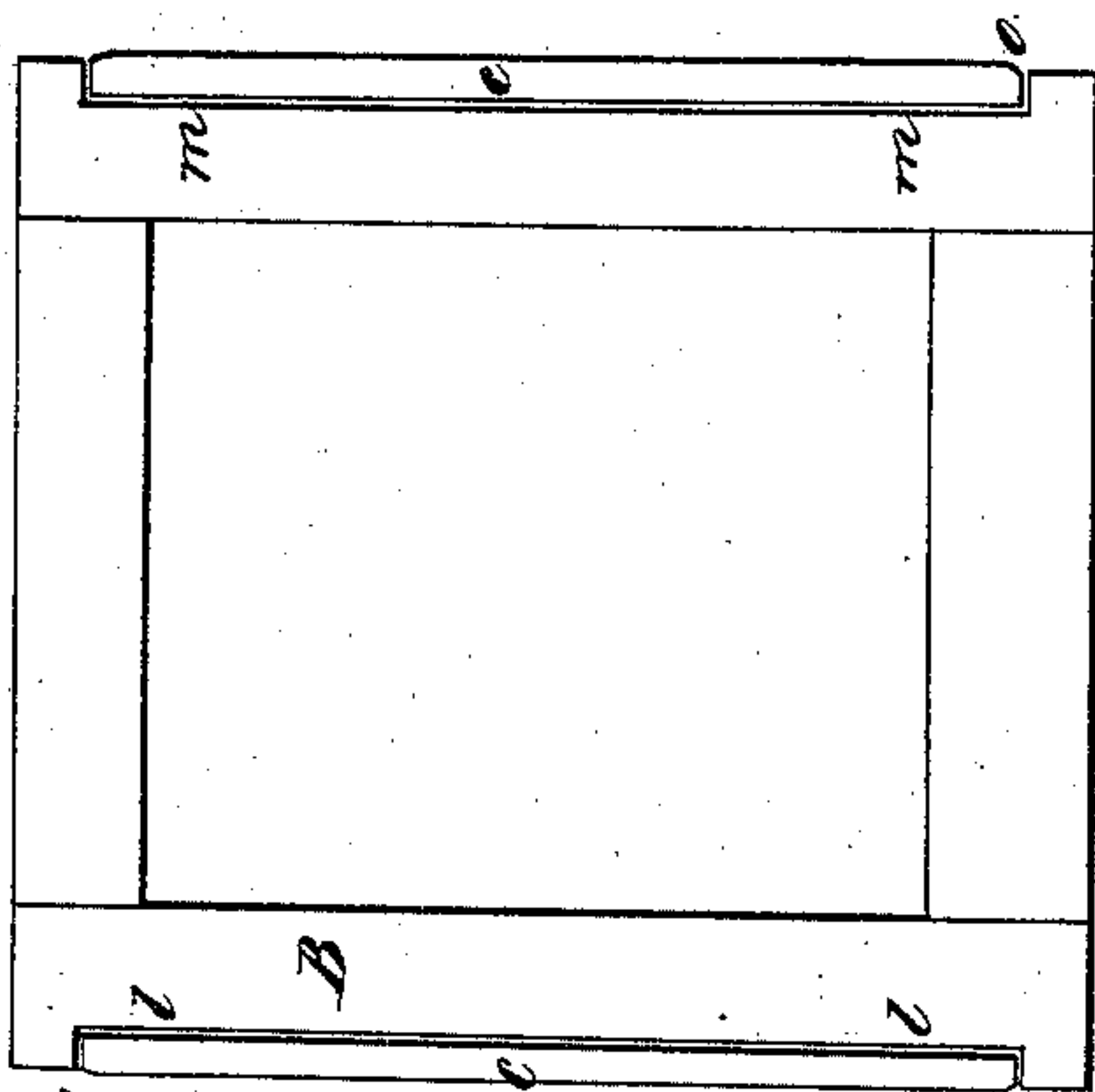


Fig: 6. Fig: 4.

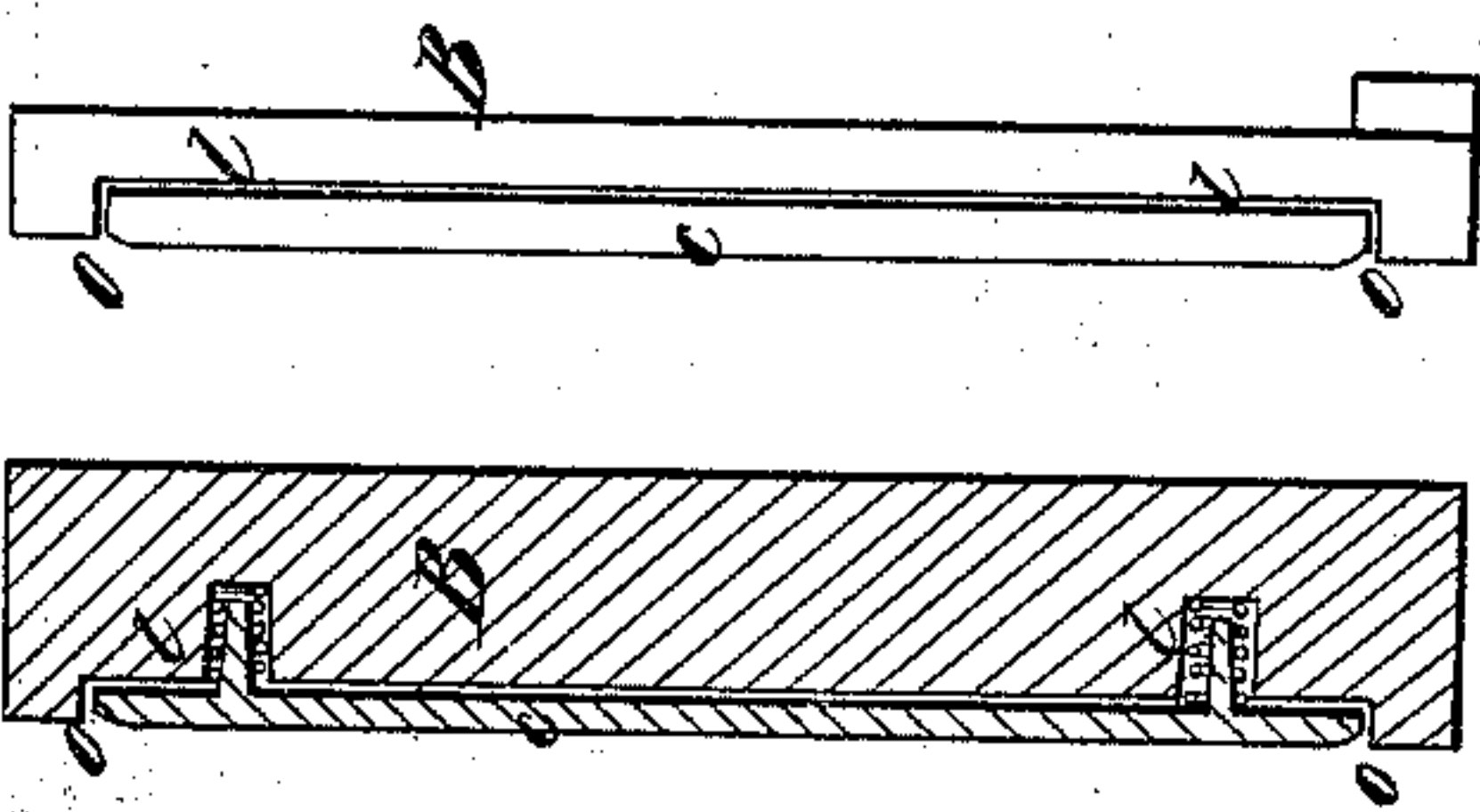
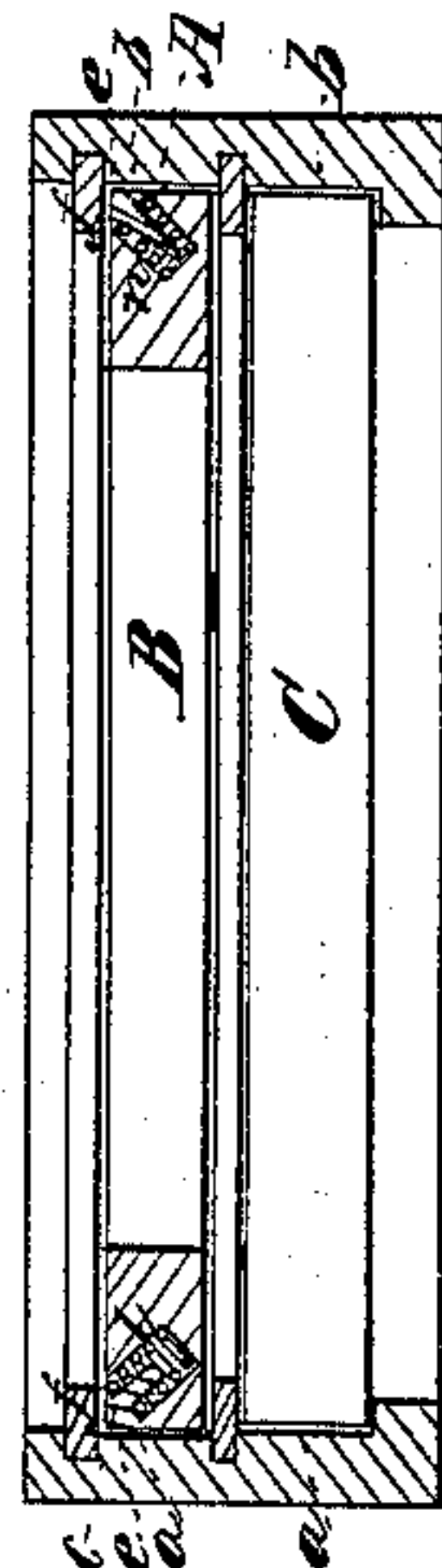


Fig: 3.



UNITED STATES PATENT OFFICE.

ALBERT G. SAFFORD, OF BOSTON, MASSACHUSETTS.

APPLYING SPRINGS TO WINDOW-SASHES.

Specification of Letters Patent No. 11,499, dated August 8, 1854.

To all whom it may concern:

Be it known that I, ALBERT G. SAFFORD, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new or
5 Improved Mode of Applying Springs to Window-Sashes when such springs are used as substitutes for counterbalance-weights for sustaining a window-sash at any desirable elevation within its frame; and I do hereby
10 declare that the same is fully described and represented in the following specification and the accompanying drawings, letters, figures, and references thereof.

Of the said drawings, Figure 1, shows an
15 elevation of a window frame and its two sashes. Fig. 2, is a central and transverse section of the same. Fig. 3, is a horizontal section taken through the upper sash, and its spring slide to be hereinafter described.
20 Fig. 4, is an end view of one of the sashes showing the spring slide. Fig. 5, is a side view of the sash with the spring slide as applied to it. Fig. 6, is a vertical section taken through the spring slide and its springs.

25 In the said drawings, A, indicates the window frame. B, the upper and, C, the lower sashes thereof. The sashes slide as usual within jambs or grooves, *a, a*, and *b, b*, of the window frame, and each sash has a metallic
30 slide, *c*, applied to the opposite corners of it and on its two vertical edges as seen in the drawings. These slides are made each right angled triangular in transverse section and they are applied against a corner of the win-
35 dow frame, which is beveled or chamfered down so as to permit the right angled faces of the slide or those two outer surfaces of it which are perpendicular to each to stand re-
40 spectively against or parallel with two sides, *e, f*, of the groove, in which the window sash is inserted. Each metallic slide so made is furnished with one or more springs, *l, m*,
45 so applied to the window sash as to press said slide outward away from the sash and not only force its two outer sides or surfaces respectively in contact with the adjacent sides of the groove, but at the same time force the sash in two directions, that is so as to press it laterally away from the bottom

and against the weather side of the groove 50 in which said sash is inserted. The slides and springs so applied not only serve in lieu of counterbalance weights to sustain the window sash at any desirable elevation but at the same time they serve to press it for- 55 ward against the weather side of its groove and thus make a close joint between it and such side.

The upper and lower portions of each slide should be rounded or curved a little as seen 60 at *o*, in order to prevent the slide from cutting into or wearing the groove or jamb of the window frame, and the slide should be so applied to the sash by means of pins, studs, or other suitable contrivances as will pre- 65 vent it from dropping out of place during the movements of the sash.

I do not claim the application of a slide and its spring or springs to a window sash so as to work or slide against the jamb and by friction 70 created by the pressure of the springs maintain the sash at any elevation within the window frame, nor do I claim the making of one of the joints of the window frame movable, and to be pressed toward the sash or sashes 75 by springs while said sash or sashes move or slide in curved grooves; nor do I claim the application of the springs to the movable jamb or bar so as either to press the sash in the direction of its plane or at right angles 80 thereto; but

What I do claim is—

My improved arrangement of the slide or slides and the springs with respect to the window sash and the rectangular groove of 85 the stile or jamb of the frame, whereby the two sides of each slide are pressed at once by the springs against the two right angular sides of the groove, and the sash forced in two directions and particularly against the 90 weather side of the groove as stated.

In testimony whereof I have hereto set my signature this second day of June, A. D. 1853.

A. G. SAFFORD.

Witnesses:

R. H. EDDY,
CALEB EDDY.