

R. A. DUNLAP.  
 WINDOW VENTILATOR AND STORM SHIELD.  
 APPLICATION FILED DEC. 12, 1908.

948,417.

Patented Feb. 8, 1910.

Fig. 1.

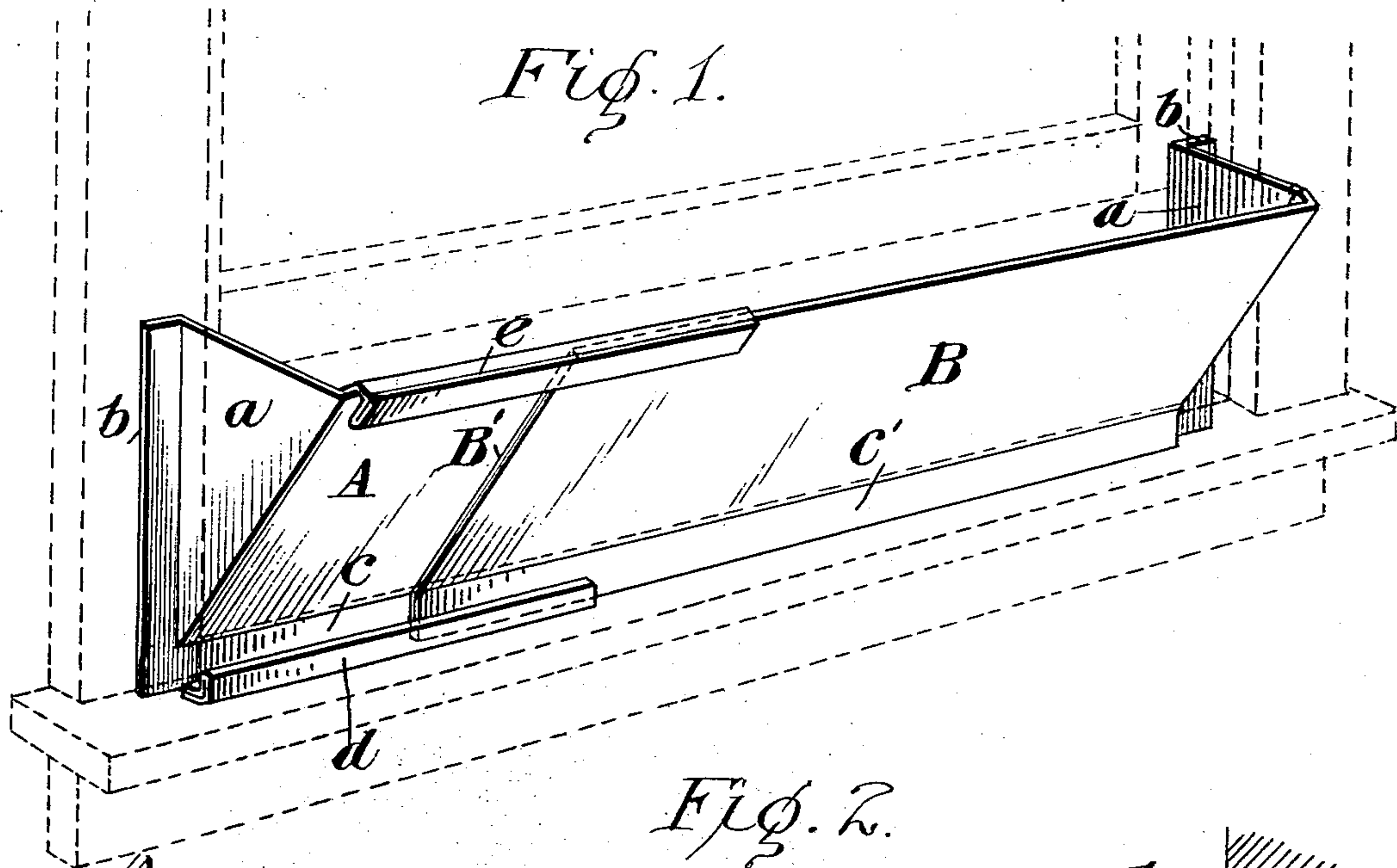


Fig. 2.

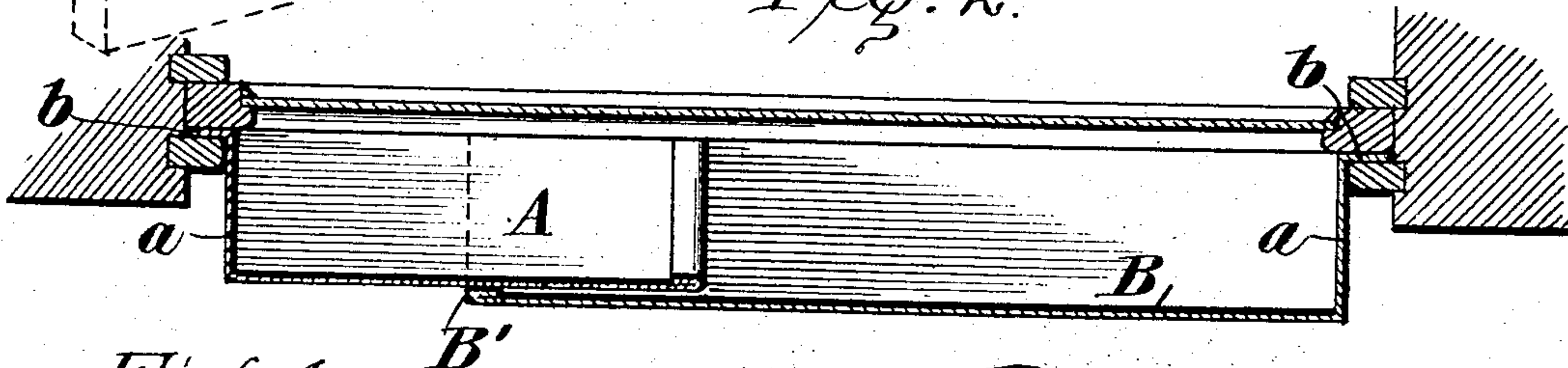


Fig. 4.

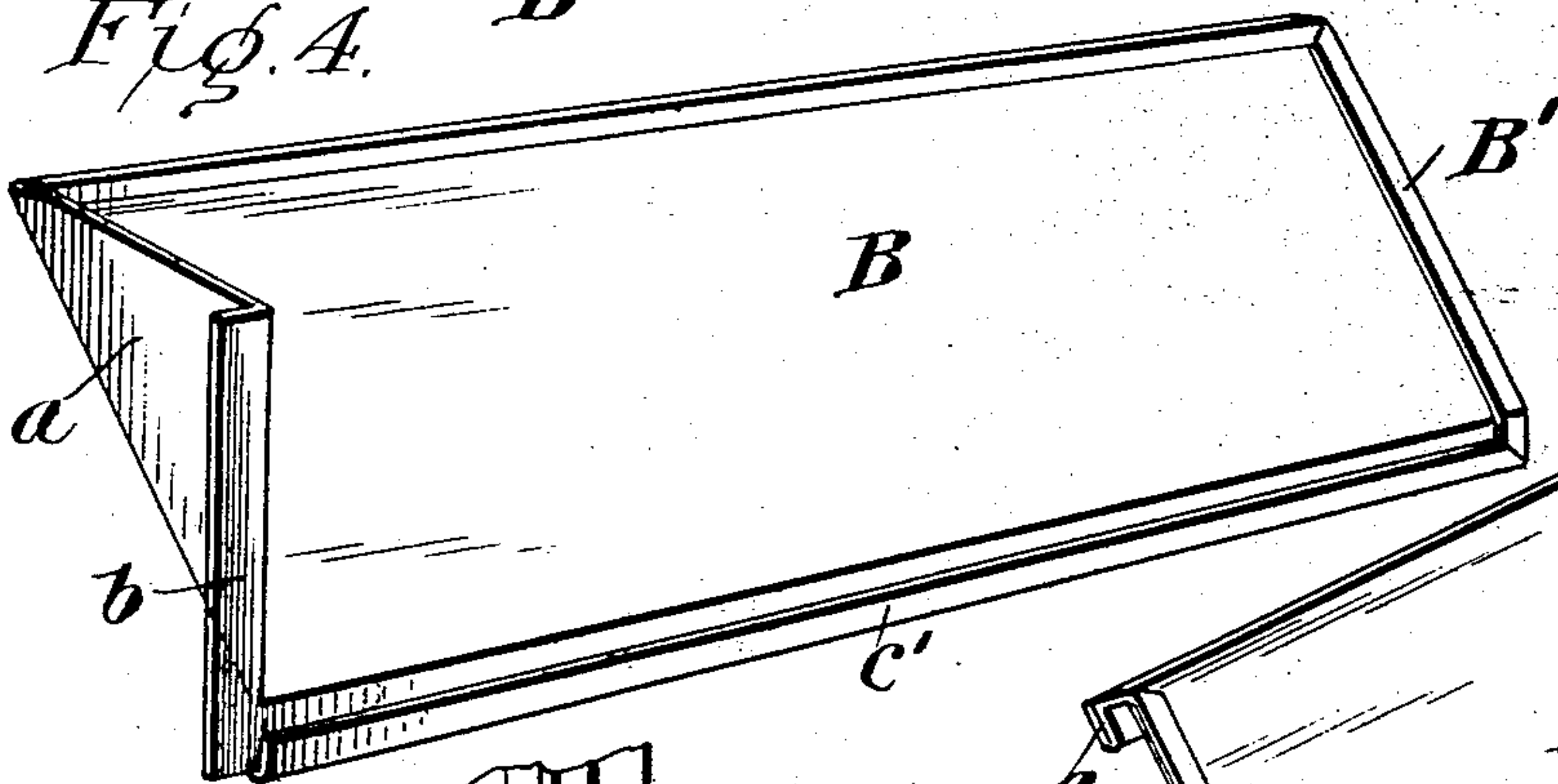


Fig. 5.

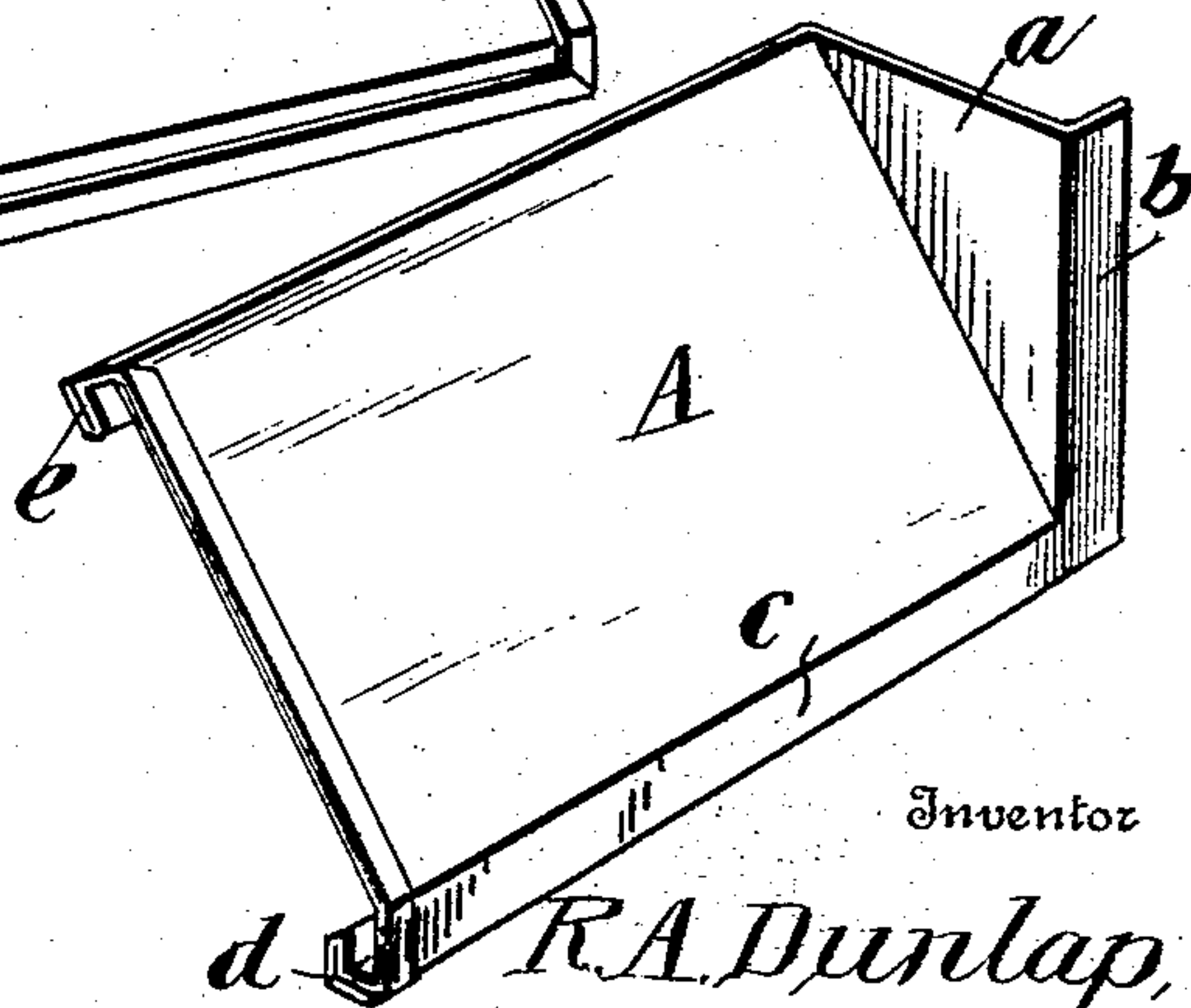
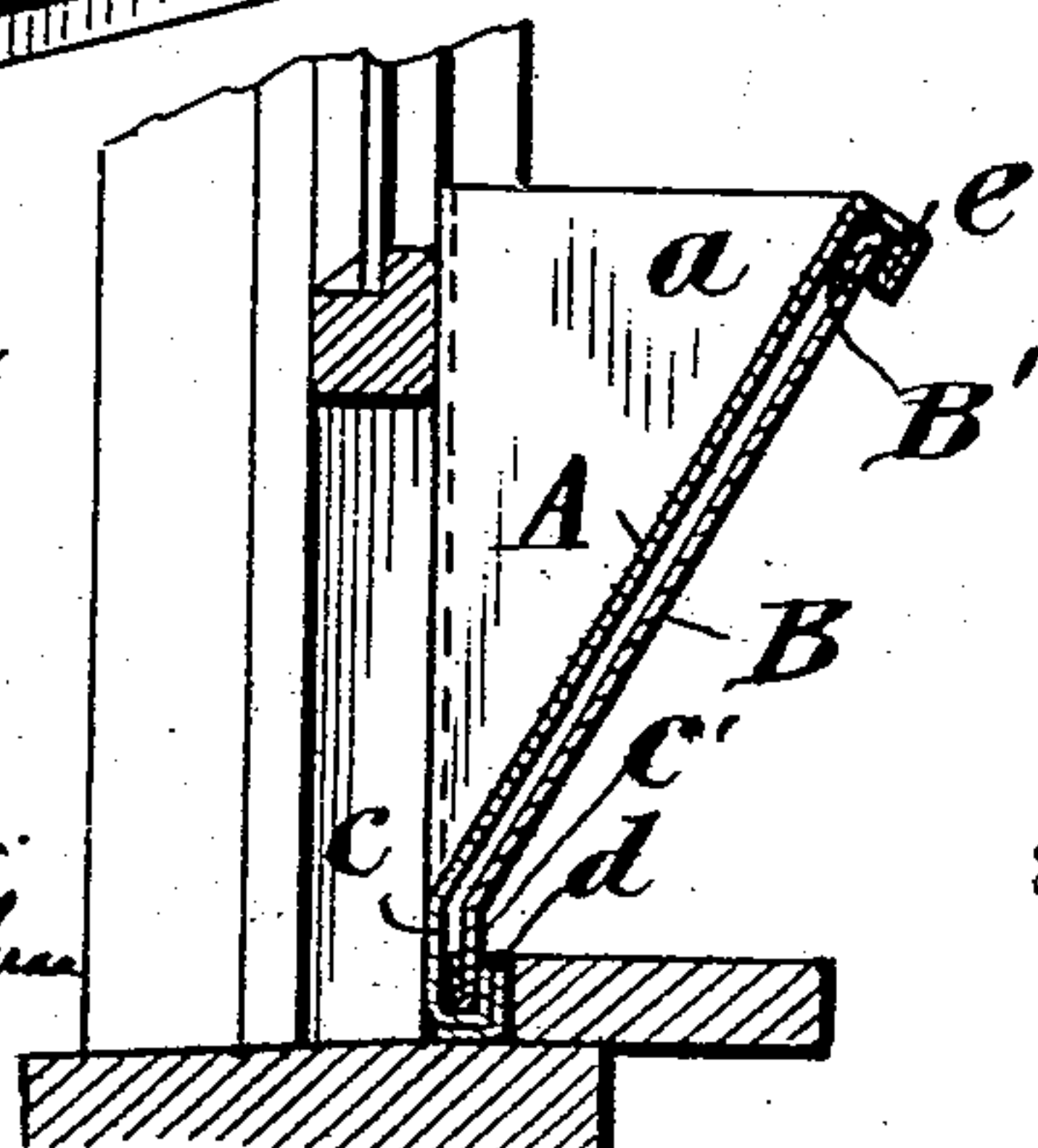


Fig. 3.



Witnesses  
 Stewart Rice.  
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 R. A. Dunlap,  
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 his Attorney.



# UNITED STATES PATENT OFFICE.

ROBERT A. DUNLAP, OF SEDALIA, MISSOURI.

WINDOW-VENTILATOR AND STORM-SHIELD.

948,417.

Specification of Letters Patent.

Patented Feb. 8, 1910.

Application filed December 12, 1908. Serial No. 467,199.

*To all whom it may concern:*

Be it known that I, ROBERT A. DUNLAP, a citizen of the United States, residing at Sedalia, in the county of Pettis and State of Missouri, have invented certain new and useful Improvements in Window-Ventilators and Storm-Shields, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to window ventilators of a type which may at the same time act additionally as a storm shield, and consists of a structure which may readily be attached to windows of various sizes, and, depending upon the height to which the window acting in conjunction with the device is raised, will admit a fresh supply of air to a room, and prevent the entrance of rain or snow thereto.

The invention has for its object the production of a device meeting the above requirements, which can be readily placed in position; which can be used on any window frame with the ordinary style of sash and window-sill, and which can be maintained in position without the intervention of any other mechanical means; which is formed in such a manner that accidental displacement of the parts relatively to each other is prevented; and which is formed so that its parts may be placed in such a relative position that shipment may be facilitated.

With these and other objects in view, the invention consists of certain novel features of construction, and arrangements of parts, as will be hereinafter referred to and claimed.

Referring to the drawings: Figure 1 is a perspective view, showing my improved device in operative position on a window frame inside a room, the parts of the window frame being shown in dotted lines. Fig. 2 is an approximately middle horizontal section of the device in operative position. Fig. 3 is a vertical end section taken some point where the two parts of the device are in a telescoping position. Figs. 4 and 5 are perspective views, showing the two telescoping sections separately.

The invention consists of two telescoping or interlocking sections, both of which are, preferably, cut or stamped from sheet-metal; what I will refer to as the primary section is lettered A in the drawings, and B represents the secondary section. The sec-

tions A and B are each provided with a triangular end portion "a", integral with and at right angles to the main body of the sections. The ends "a" are each provided with vertical flanges b along their edges, at substantially a right angle to the plane of the end portions; these flanges are, preferably, integral with the rest of the structure, but may, if desired, consist of separate pieces suitably attached thereto.

The purpose of the flanges b is to secure the device in its operative position, as in practice they are placed in a vertical position against the beads of the window-frame, and being held firmly throughout a portion of their length between the beads and the window sash, as will be perfectly clear on reference to Fig. 2, they thus hold the entire structure in position. Each of the sections A and B are provided at their lower edges with vertically-depending flanges C, each, preferably, in the same plane with its corresponding flange b, so that when the window ventilator is in an operative position, the flanges c c will rest on the outer window-sill and against the edge of the inner sill. The flanges of both sections may have a portion of their length turned over and pressed down firmly on the main body of the flange, as shown at c' Fig. 4, thus rendering the edge where it comes in contact with the window-sill, stronger and more durable, but this constitutes no part of my invention. The primary section A has its flange on its lower end made wider than the corresponding flange on the section B, and a portion of this additional width is bent first, at substantially right angles to the main plane of the flange, and then upwardly, forming an overlapping lip or channel d in which the flange c on the lower end of member B is snugly held, but easily slid to and fro. The primary member A is formed also at its upper edge with an extra width of metal which is formed into an overlapping lip or channel e, exactly similar to d, and in which the upper edge of member B is held and may slide. It will thus be seen that the two sections A and B are telescoping or interlocking throughout a portion of their length, and may be adjustably moved so as to accommodate any ordinary width of window when fitting the device. It will also be seen that the member A being constructed with two overlapping lips, projecting over the ends of



the section B, an excellent binding action is obtained, that is to say, throughout those portions of the two members which are in telescoping position, both the upper and lower edges of the secondary member B are surrounded and held firmly in interlocking position by the overlapping lips *d* and *e*. This particular structure is efficient to the highest degree for preventing accidental displacement as might otherwise happen from a blow and as the smaller section may be slid inward so that the flanged ends may be close together, shipment is greatly facilitated.

In operation, the lower depending flanges *c* are placed against the rear of the outer sill or outer edge of the inner sill, and when the sections A and B are so adjusted that their width is equal to the width of the window to which the device is to be fitted, the flanges *b* are placed against the edge of the bead which guides the lower sash, and said flanges are held firmly in position when the window sash is lowered to the degree desired. The amount of fresh air entering may be regulated by raising or lowering the window, as circumstances dictate, but, of course, never raising it above the upper end of the flanges *b*.

My improved device is capable of admitting any amount of air desired; according to the height to which the window is raised, and is so constructed that it admits the air by deflecting it upward and inward into the room. At the same time, the entrance of rain or snow into the room is prevented, as any of these elements which might be driven against the ventilator are deflected outwardly and will be carried down off the window-sill.

It is to be noted that the flanges or lips *e* and *d* overhang one and the same face, to wit: the outer face of the primary section A and the auxiliary section B slides within these grooves, and said section B is provided with an intumed end edge to provide a resilient flange B', which acts as a binding means in the grooves or lips for retarding the sliding movement, as I have found from

experience that the auxiliary section B would not readily slide in grooves or lips *e* and *d*, as B' acts as a brake and readily holds the sections in their adjusted position until they are permanently or otherwise fastened to the window-frame. Furthermore, it will be noted that the primary section will slide entirely between the ends of the auxiliary section, as the primary section is larger than the auxiliary section, thereby facilitating the packing of the device in a small space to minimize the amount of space required in shipment. The grooves formed upon the same side of the primary section are open at their ends and they open toward each other, that is to say, the upper longitudinally-extending groove, formed by flange or lip *e* has an open lower face, whereas the groove formed by flange *d* has an upper open face, permitting the auxiliary section B to be entirely mounted upon the outer face of the primary section A for allowing the quick assembling and also the adjustment of the primary section inward upon the auxiliary section for fastening the primary section between the ends of the auxiliary section, as stated hereinbefore.

Having thus described my invention, what I claim is:

A window ventilator comprising a primary section having an upper and a lower longitudinally arranged guiding channel, both of said channels overhanging the outer face of said section, a secondary section having its longitudinal edges slidable in said channels, and a resilient end flange carried by said secondary section and adapted for binding engagement in said channel to retard the movement of said secondary section relatively to the primary section.

In testimony whereof I hereunto affix my signature in presence of two witnesses.

ROBERT A. DUNLAP.

Witnesses:

WM. B. BYERS,  
K. WYAN.