

No. 875,191.

PATENTED DEC. 31, 1907.

M. LEVY.  
SCREEN OR GRATING.  
APPLICATION FILED MAR. 2, 1907.

Fig. 1.

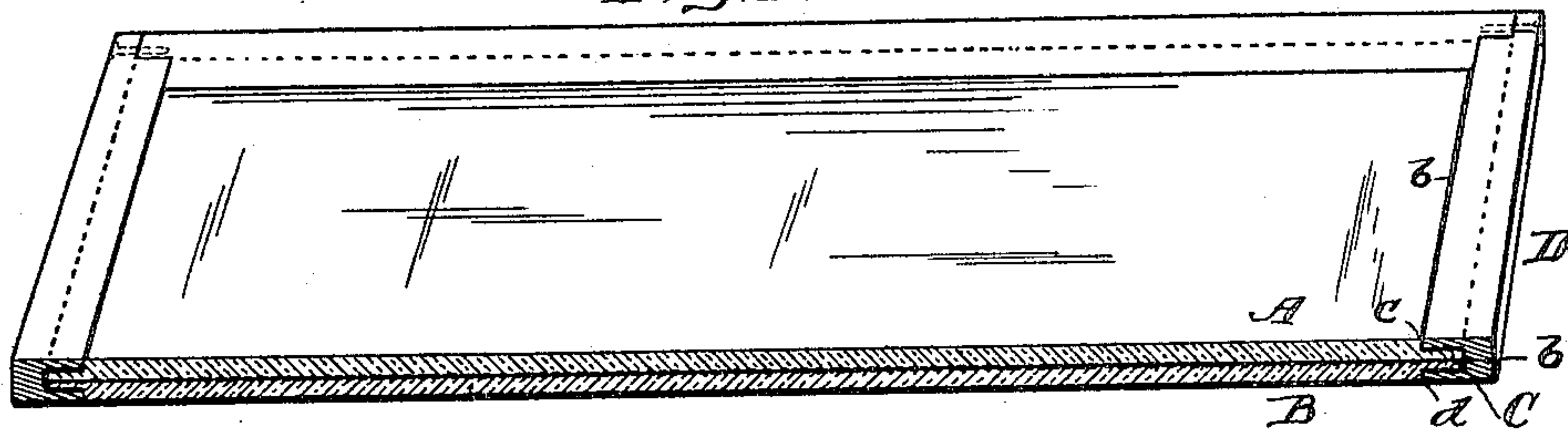


Fig. 2.

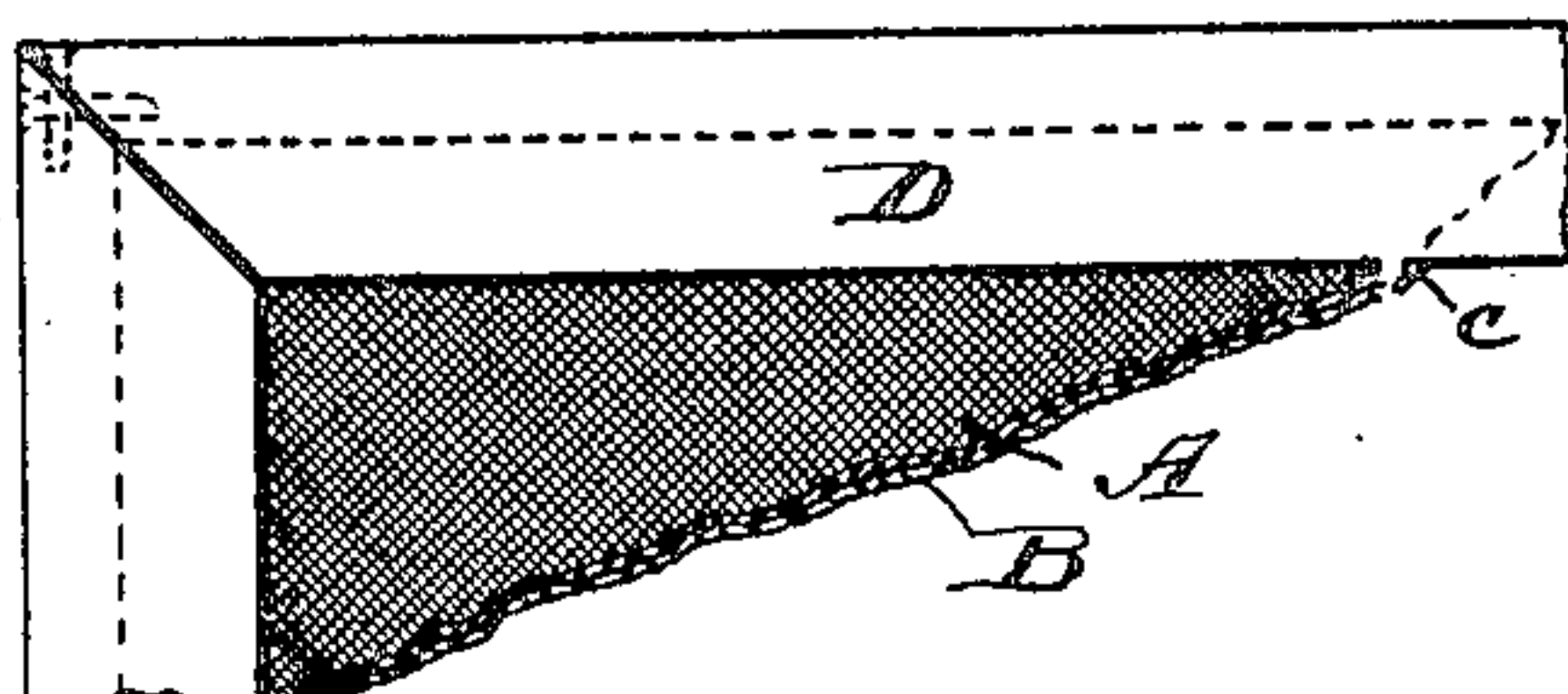


Fig. 2.<sup>a</sup>



Fig. 3.

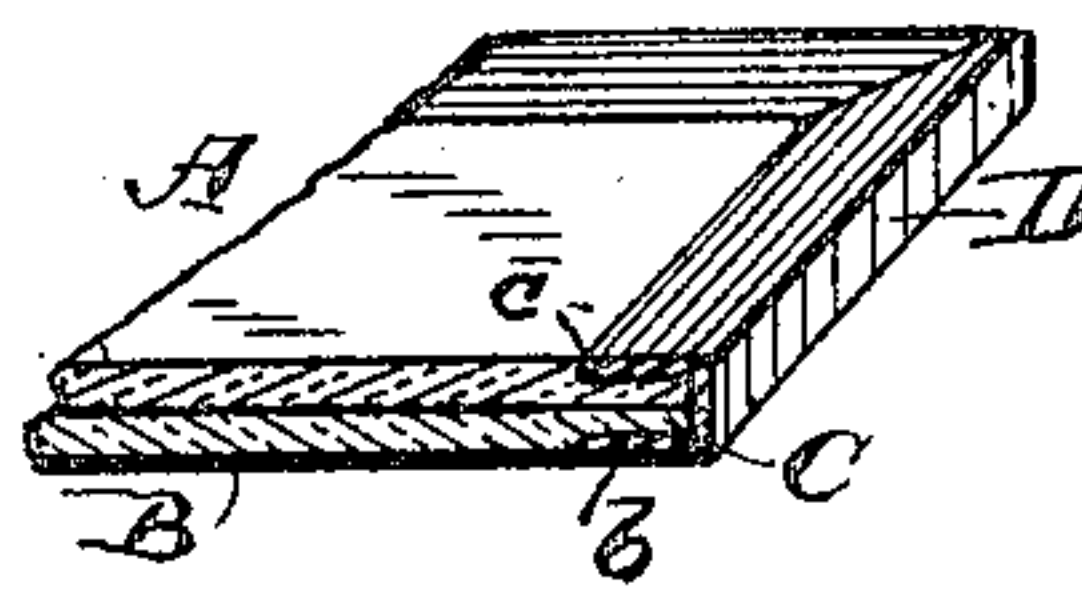


Fig. 4.<sup>b</sup>

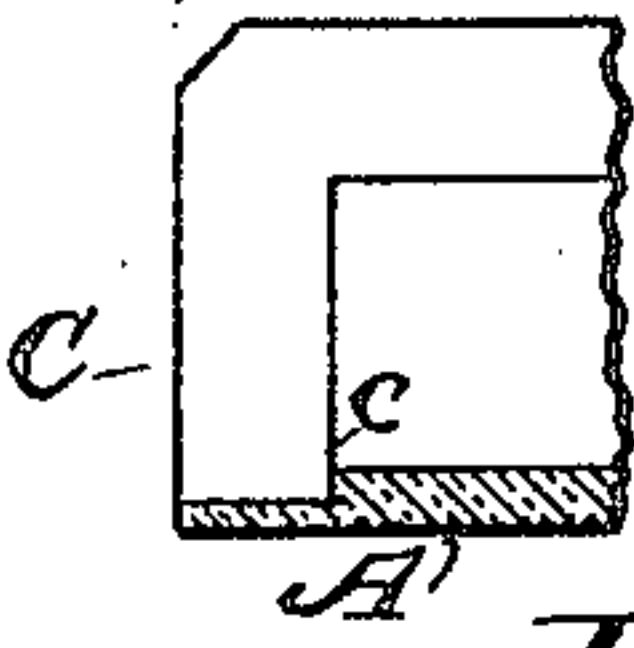


Fig. 4.

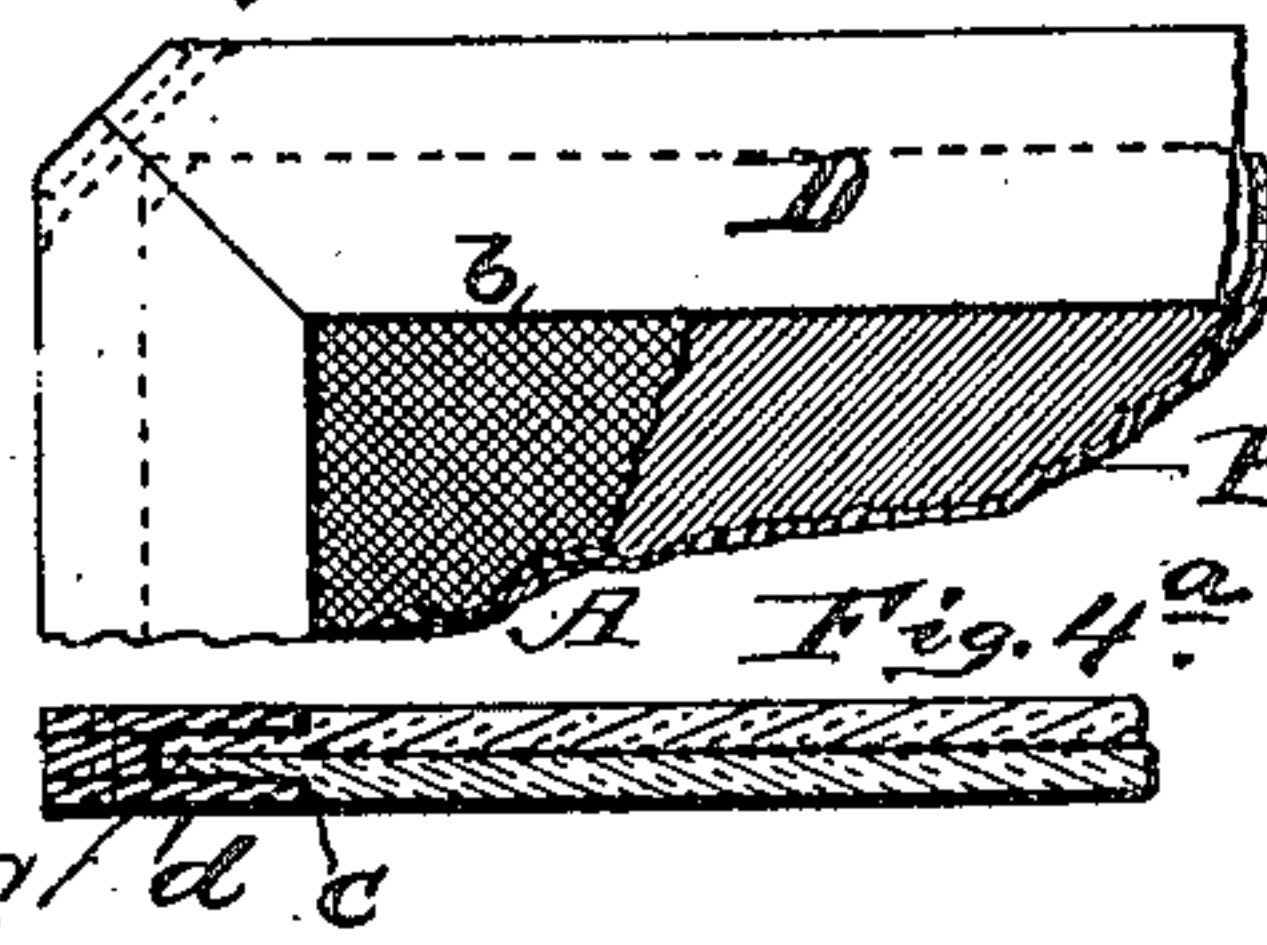


Fig. 4.<sup>a</sup>



Fig. 5.

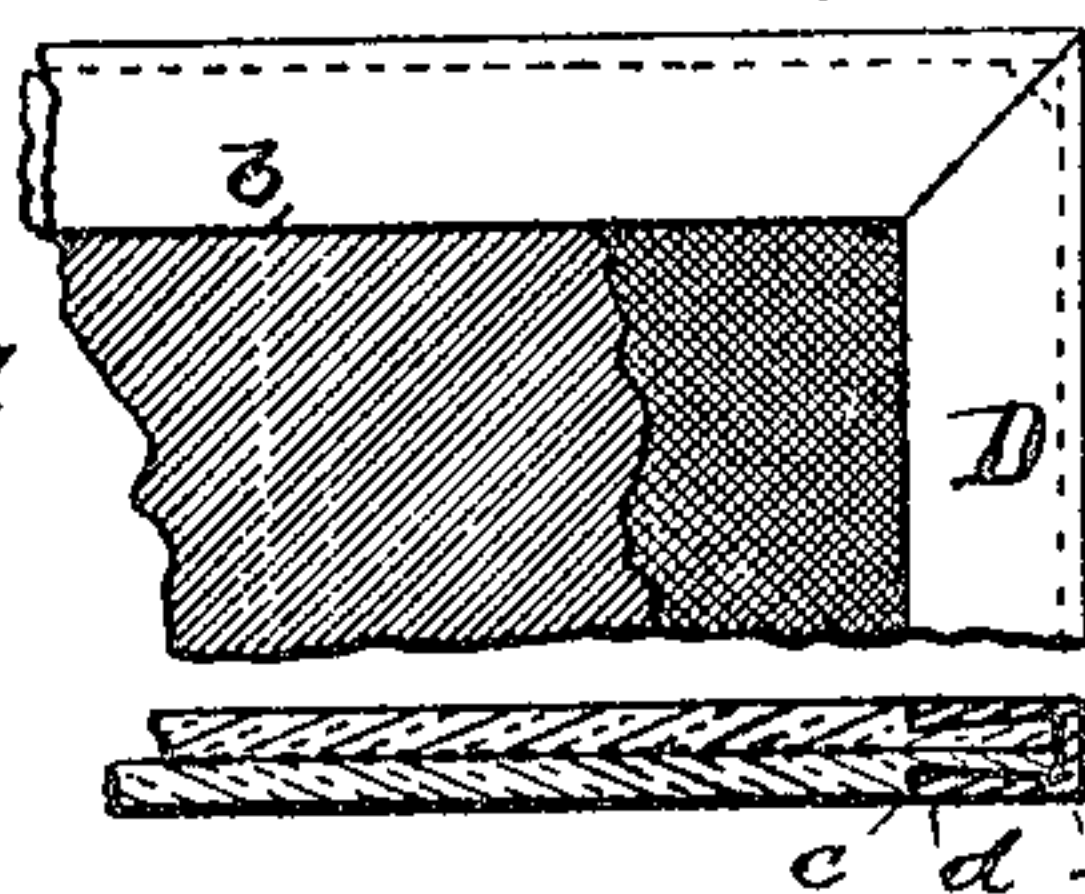


Fig. 5.<sup>b</sup>

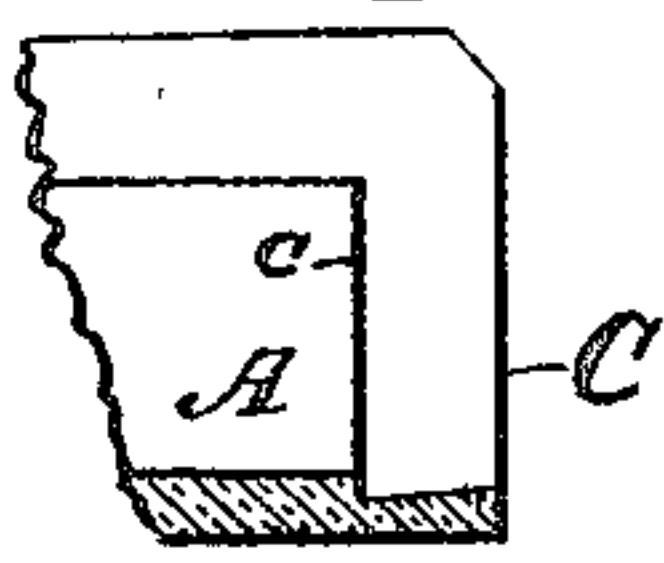


Fig. 5.<sup>a</sup>



Fig. 6.<sup>a</sup>

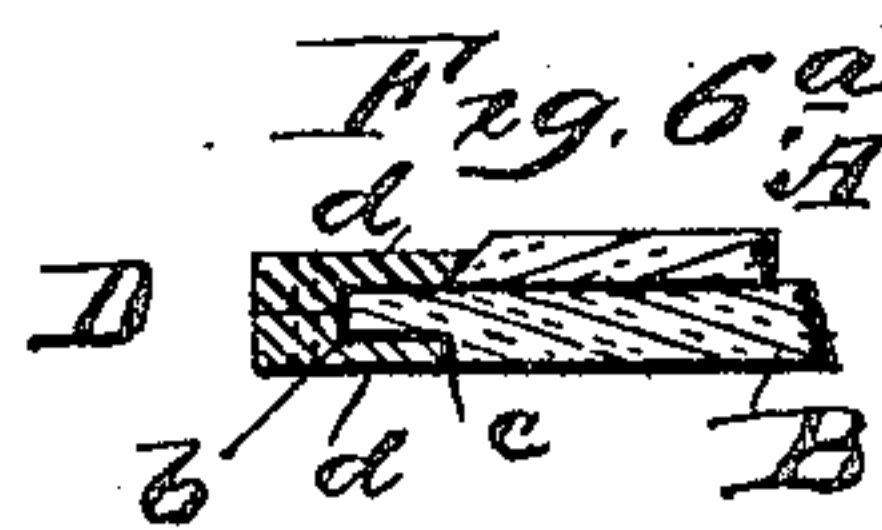


Fig. 6.

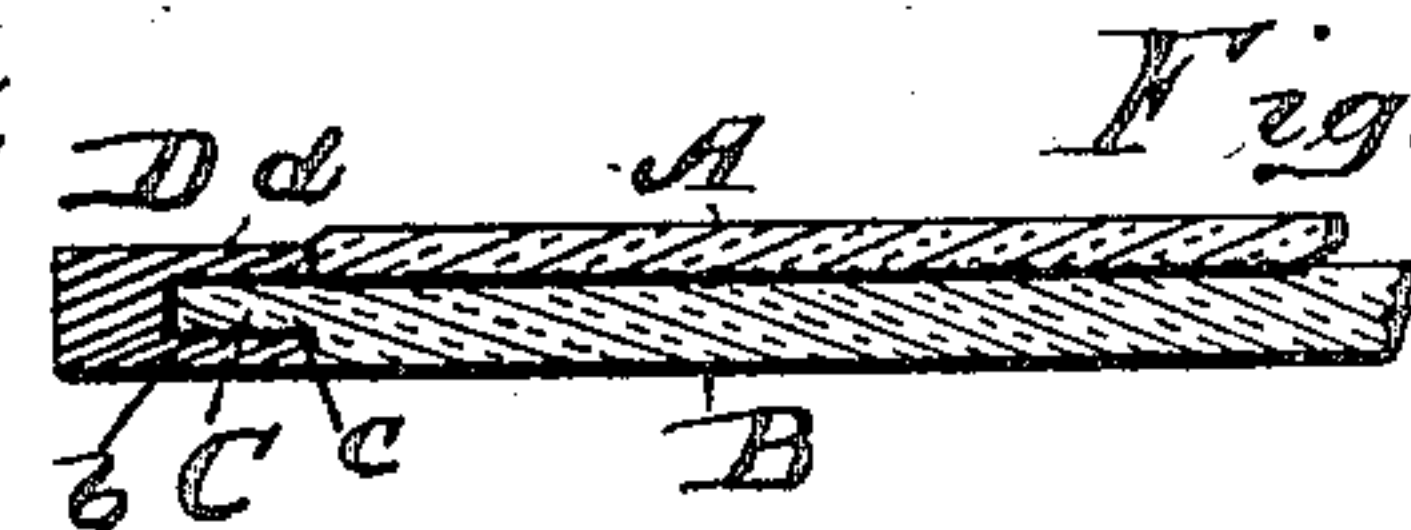


Fig. 6.<sup>b</sup>



Fig. 7.

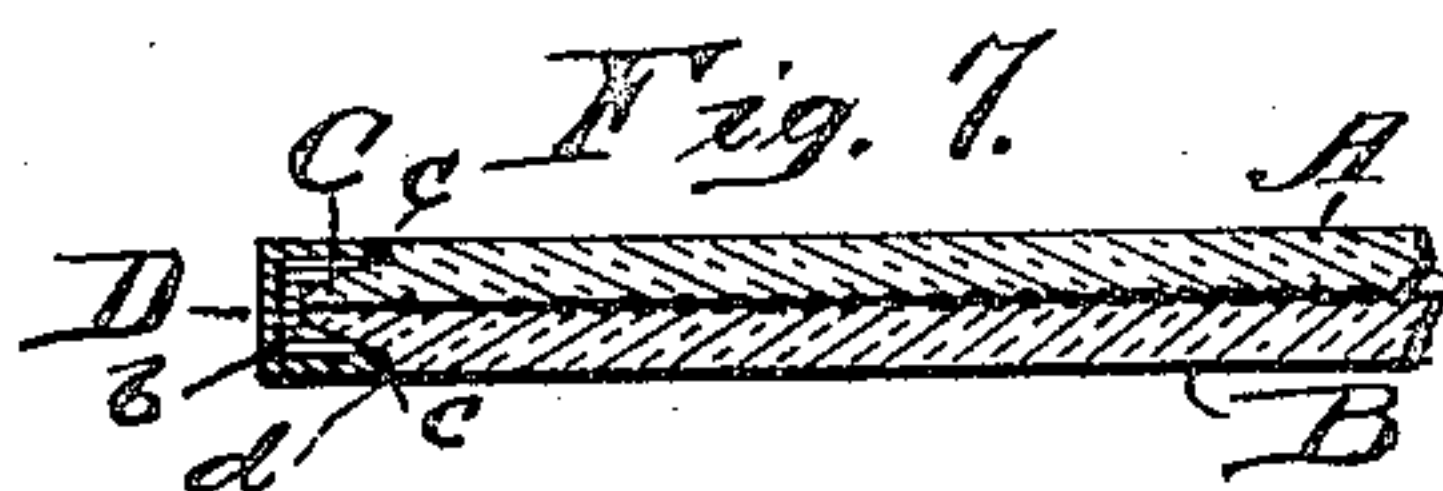
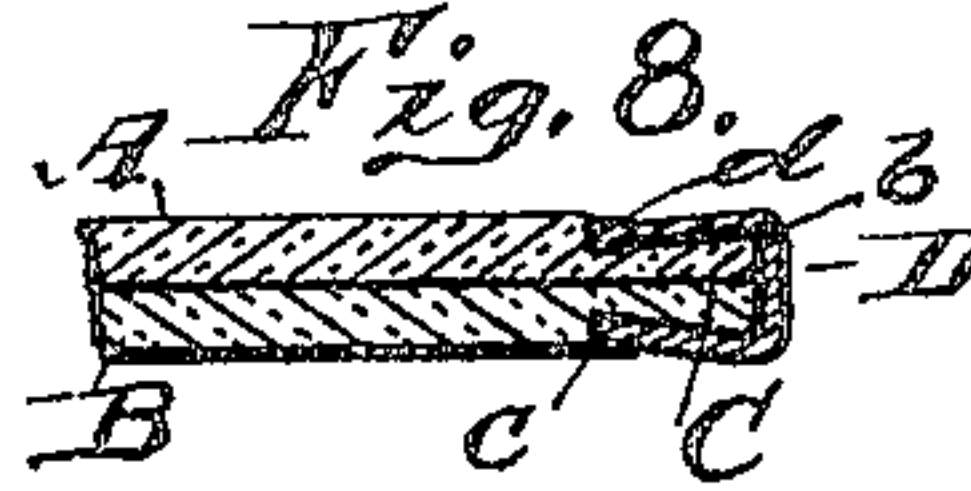


Fig. 8.



Inventor

Max Levy.

Witnesses

Theodore Johnson.  
C. Edgar Webb.

By

Eugene H. Johnson.

Attorney



# UNITED STATES PATENT OFFICE.

MAX LEVY, OF PHILADELPHIA, PENNSYLVANIA.

## SCREEN OR GRATING.

No. 875,191.

Specification of Letters Patent.

Patented Dec. 31, 1907.

Application filed March 2, 1907. Serial No. 360,132.

*To all whom it may concern:*

Be it known that I, MAX LEVY, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Screens or Gratings, of which the following is a specification.

This invention relates to improvements in screens or gratings, the purpose being to provide the same with a frame, the screen or grating being constructed to receive the frame, such frame when attached to the lined or ruled plates providing a covering for the joint between the plates, and means whereby the plates will be held against movement one upon the other.

Screens or gratings as at present manufactured are practically frameless, they being made up of two lined or ruled plates of glass which are cemented together, and in use such screens are liable to injury from a variety of causes, among which may be mentioned, a separation of the plates adjacent to their edges, or the staining of the margin by reason of the entrance of acid, chemicals, or moisture to the joint. The plates are liable to crack, especially at the corners from jars received in handling, and they are frequently injured or broken by pressure of the clamps used to secure the screen in position in the camera or plate-holder. In hot summer weather and in rooms where the temperature is high, the plates are liable to slide one upon the other, this is especially the case when the screen is placed at an inclination so that the screen rests upon the edge of one of the plates, the other plate then being supported by the Canada balsam which is used to connect the lined plates. The conditions under which a screen or grating is used precludes the use of a frame that extends beyond the surfaces of the glasses.

In carrying out my invention, I use lined or ruled plates which are cemented to each other with Canada balsam, and the margins of the screen or grating are reduced as to thickness, such reduced margins being overlaid by a frame, preferably of metal, and in practice the frame is cemented to the screen, all as will be hereinafter set forth.

In the accompanying drawings, Figure 1 is a sectional perspective view of a screen or grating made and framed in accord with my invention. Fig. 2, is a plan view, showing a

different form of corner joint. Fig. 2<sup>a</sup>, is a section of the form of frame shown by Fig. 2. Fig. 3, is a detail perspective view of one form of sheet metal frame. Figs. 4 and 5 are plan views of modified forms, Figs. 4<sup>a</sup> and 5<sup>a</sup>, being sections thereof. Figs. 4<sup>b</sup> and 5<sup>b</sup>, are perspective sections of the plates. Figs. 6, 6<sup>a</sup>, 6<sup>b</sup>, 7 and 8 are sectional views of other modifications of my invention.

The lined or ruled glass plates A and B which are cemented to each other in the usual manner have their opposite margins reduced or cut away to form a marginal tongue C, which is of less thickness than the combined thickness of the plates. In forming the tongues on the margins of the plates, I incidentally produce shoulders *c*, and also roughen the surface of the tongues. The shoulders and the ground surfaces are advantageous, for the shoulders as well as the edges provide bearing surfaces for the frame and the unpolished surfaces afford a better hold for the cement *b*, which is placed upon the tongue or in the groove of the frame. The cement used to produce a tight joint between the screen and frame may be Canada balsam or an asphaltic preparation. The margins of the plates may be reduced in thickness so that the tongues will have beveled surfaces as shown by Figs. 5<sup>a</sup>, 5<sup>b</sup>, 7, and 8 of the drawings.

The frame D, is preferably made of metal, and has a groove to receive the reduced margin of the screen, the depth of the groove being such that the inner edges *d* of the parts of the frame that overlie the tongue will be in line with the shoulders *c*, and the cement is placed either in the groove in the frame or upon the reduced margin of the screen before the frame is applied.

The cement not only serves to connect the frame to the screen but also forms a tight joint and allows for differences in expansion and contraction. The corners of the frame may be either squared or mitered, and as shown the frame may be made up of one or more parts or of sheet metal bent in shape.

The corners of the screen may be mitered so that the frame will not engage therewith.

Having thus set forth my invention what I claim as new, and desire to secure by Letters Patent, is:

1. The combination with a grating or screen made up of lined plates and provided with a margin of less thickness than its field,



of a frame that incases the reduced margin of the grating or screen, for the purpose set forth.

2. The combination with a grating or  
5 screen that is made up of lined glass plates which are cemented one to the other and are provided with a margin of less thickness than its field, of a frame that incases the reduced margin of the grating or screen the thickness  
10 of the frame being such as not to exceed the thickness of the field, for the purpose set forth.

3. The combination with a grating or screen having a margin of less thickness than  
15 the field of the screen, of a frame which incases the margin of the grating or screen and is connected thereto by cement.

4. A grating or screen made up of lined or ruled plates which are cemented to each  
20 other and provided with reduced margins,

and a rigid frame which is cemented to the margin of the grating or screen, the frame not exceeding in thickness the thickness of the grating or screen.

5. A screen or grating for use in photo- 25 mechanical engraving consisting of lined or ruled glass plates which are cemented together and provided with a marginal tongue, in combination with a grooved frame which does not exceed in thickness the thickness of 30 the screen or grating, and an interposed adhesive medium between the tongue and groove.

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

MAX LEVY.

Witnesses:

C. A. HANSSEER,  
E. L. WOODWARD.