

No. 730,230.

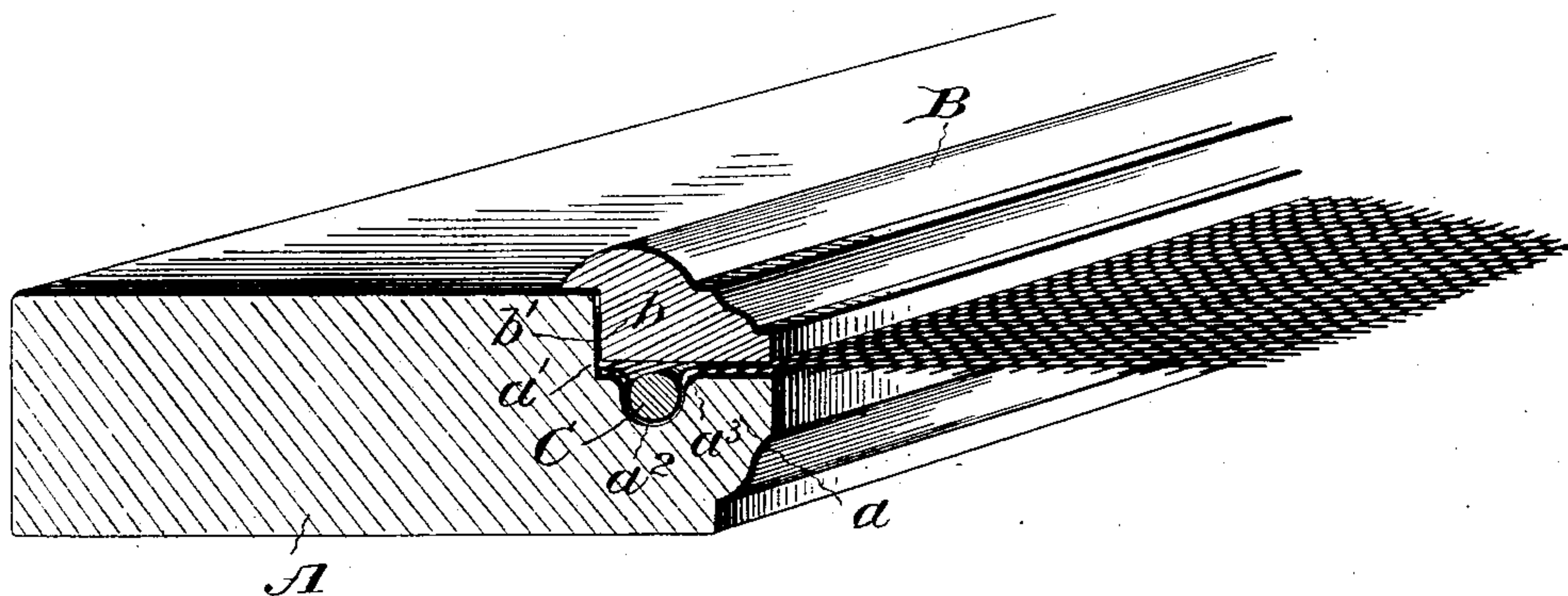
PATENTED JUNE 9, 1903.

E. T. BURROWES.  
SCREEN.

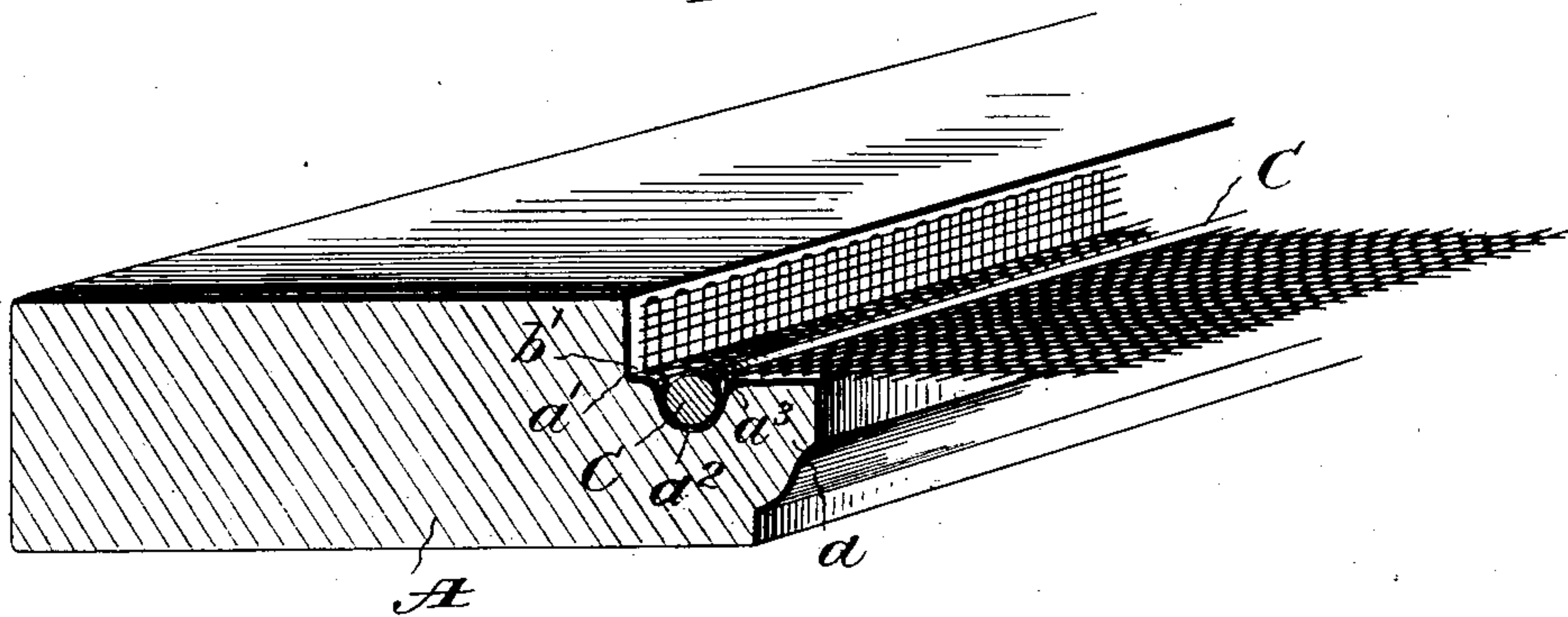
APPLICATION FILED MAR. 20, 1903.

NO MODEL.

*Fig. 1.*



*Fig. 2.*



*Fig. 3.*

Witnesses:  
Jas. E. Hutchinson  
Calvin V. Milans

Inventor:  
Edward T. Burrowes  
By *Thos. W. Milans*  
Atty's.



## UNITED STATES PATENT OFFICE.

EDWARD T. BURROWES, OF PORTLAND, MAINE.

## SCREEN.

SPECIFICATION forming part of Letters Patent No. 730,230, dated June 9, 1903.

Application filed March 20, 1903. Serial No. 148,764. (No model.)

*To all whom it may concern:*

Be it known that I, EDWARD T. BURROWES, a citizen of the United States, residing at Portland, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Screens, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in screens, more particularly that type in which a metallic screen is secured to a wooden frame for utilization in windows, doors, and the like; and the same has for its object the perfecting of the interlocking instrumentalities between the edges of the metallic screen and the supporting-frame.

With this object in view the invention contemplates the provision of a frame provided with a groove in one of its surfaces and a locking-strip fitting said groove and clamping the edge of the metallic screen therein, said edge of the screen extending around the inner surface of the locking-strip to increase its holding efficiency; and the invention still further embraces the provision of an angular portion in the frame adjacent to the above-mentioned groove, into which a portion of the metallic screen fits and is engaged by a piece of molding having a correspondingly angular portion, thereby affording in connection with the locking-strip and its groove what I will term a "double" lock for the edge of the screen.

Novel details in the construction and arrangement of the several parts of the screen will be apparent from the detailed description hereinafter when read in connection with the accompanying drawings, forming part hereof, and wherein a preferable embodiment of the invention is illustrated for the sake of facilitating a clear understanding of the invention. It is, however, to be understood that the invention is not to be limited in the specific embodiment described except in so far as any features of the same may be included in the appended claims, because it is obvious that slight changes and alterations may be made without in the least departing from the spirit of the invention.

In the drawings, Figure 1 is a perspective view of a section of the supporting-frame of a screen, showing the manner of securing the

edge of the screen material thereto. Fig. 2 is a similar view with the molding detached, and Fig. 3 is a detail sectional view.

Referring more specifically to the drawings, wherein like reference characters refer to corresponding parts in the several views, A designates a portion of a frame, preferably of wood, which may be understood as being the surrounding frame of a window-screen or screen-door. This frame is provided with an inwardly-extending flange *a*, the meeting of the upper surface of the flange and the main body of the frame forming an abrupt angle *a'*. The upper surface of the flange is provided at a point intermediate its edges with a longitudinally-disposed groove *a*<sup>2</sup>, preferably curved transversely, and the edges of the flange merging into the walls of the groove are slightly rounded, as at *a*<sup>3</sup>.

B is a piece of molding finished on its exposed surface to present a pleasing appearance and having a flat inner surface adapted to overlie the flange *a* of the frame and the groove therein, the inner corners of said molding being of angular formation, as at *b*, corresponding to the angle *a'*.

C is a securing-strip, preferably circular in cross-section and of a curvature approximately that of the transverse contour of the groove *a*<sup>2</sup>. This strip is of approximately the same diameter as the groove and is forced thereinto so as to be held by frictional engagement for purposes to be now pointed out.

The structural features of the frame having been described, the application of the edge of the screen material thereto will be readily understood. The metal screen is drawn taut across the frame with an ample portion of the edge of the same overlying the supporting-frame. The securing-strip C is then rolled into the groove *a*<sup>2</sup>, forcing before it the metal screen, and the strip being of wood or metal either the same or the material of the flange surrounding the groove is compressed, whereby there is sufficient friction created to firmly secure the screen to the frame. It will be seen that by this arrangement the edge of the screen extends completely around the securing-strip. The free portion of said edge is thereupon bent into the angle *a'*, whereupon the piece of molding B is firmly secured in place, thereby locking said free edge



at the corner  $b'$  thereof. By this arrangement a double lock is provided, from which it is practically impossible to tear the edge of the screen. The corners  $a^3$  being rounded, as stated, permits the screen to conform to the shape of the groove and extend outwardly therefrom without bending the material upon too sharp an angle, thereby obviating any danger of breaking the wires of the screen.

While I am aware that I am not the first to secure a screen to a supporting-frame through the medium of a groove and a strip fitting the same, the edge of the screen being clamped between one side only of the strip and the wall of the groove, I have, however, found that such prior constructions possess many objections, and the construction herein has been devised to overcome such objections and is a decided advance in the art.

Having thus described the invention, what is claimed as new, and desired to be secured by Letters Patent, is—

1. In combination with a frame provided with a flange having a longitudinal groove and an angular portion adjacent to said groove, a screen arranged with its edge fitting and passing through said groove and conforming to the angle of said angular portion, a locking-strip fitting said groove over the screen, and a molding overlying the flange and its groove and having an angular portion conforming to the angular portion of the frame and locking the inner portion of the edge of the screen therein.

2. In combination with a frame provided with a flange having a longitudinal groove and an angular portion adjacent to said groove, a screen arranged with its edge fitting and passing through said groove and conforming to the angle of said angular portion, and means for securing the edge of the screen in said groove and in said angle portion.

3. In combination with a frame provided with a flange having a longitudinal groove and an angular portion adjacent to said

groove, a screen arranged with its edge fitting and passing through said groove and conforming to the angle of said angular portion, the edges of the flange adjacent to the groove therein being rounded, a locking-strip fitting said groove over the screen, and a molding overlying the flange and its groove and having an angular portion conforming to the angular portion of the frame, and locking the inner portion of the edge of the screen therein.

4. In combination with a frame provided with a flange having a longitudinal groove and an angular portion adjacent to said groove, said groove being curved transversely, a screen arranged with its edge fitting and passing through said groove and conforming to the angle of said angular portion, a locking-strip approximately circular in cross-section fitting said groove over the screen, and a molding overlying the flange and its groove and having an angular portion conforming to the angle portion of the frame and locking the inner portion of the edge of the screen therein.

5. In combination with a frame provided with a flange having a longitudinal groove and an angular portion adjacent to said groove, said groove being curved transversely and the edges of the flange adjacent to said groove being rounded, a screen arranged with its edge fitting and passing through said groove and conforming to the angle of said angular portion, a locking-strip fitting said groove over the screen, and a molding overlying the flange and its groove and having an angular portion conforming to the angular portion of the frame and locking the inner portion of the edge of the screen therein.

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

EDWARD T. BURROWES.

Witnesses:

FRANK L. RICKER,  
STEPHEN W. CARLE.