

(No Model.)

J. W. BOUGHTON.
INSECT SCREEN.

No. 415,018.

Patented Nov. 12, 1889.

Fig. 1.

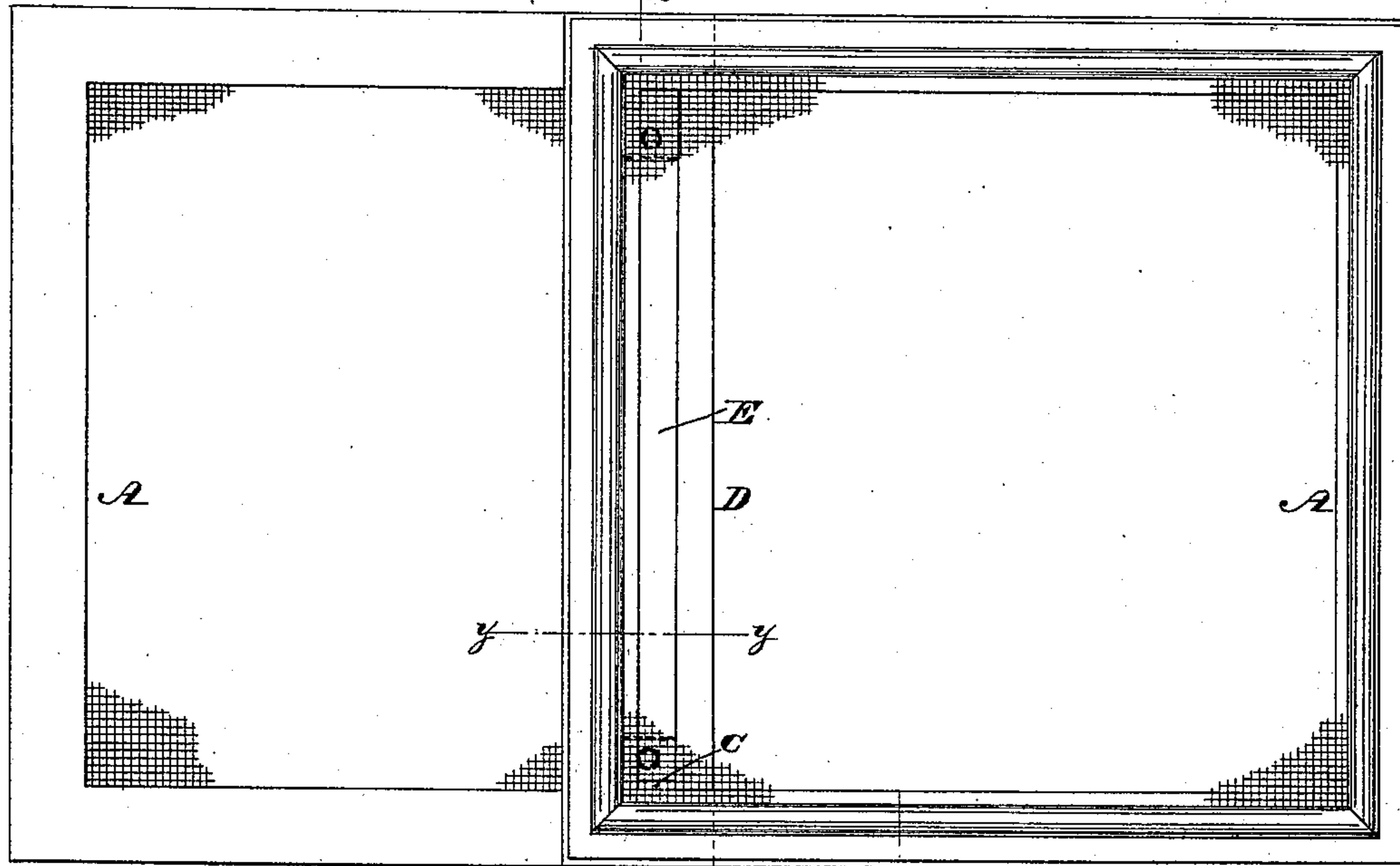


Fig. 2.

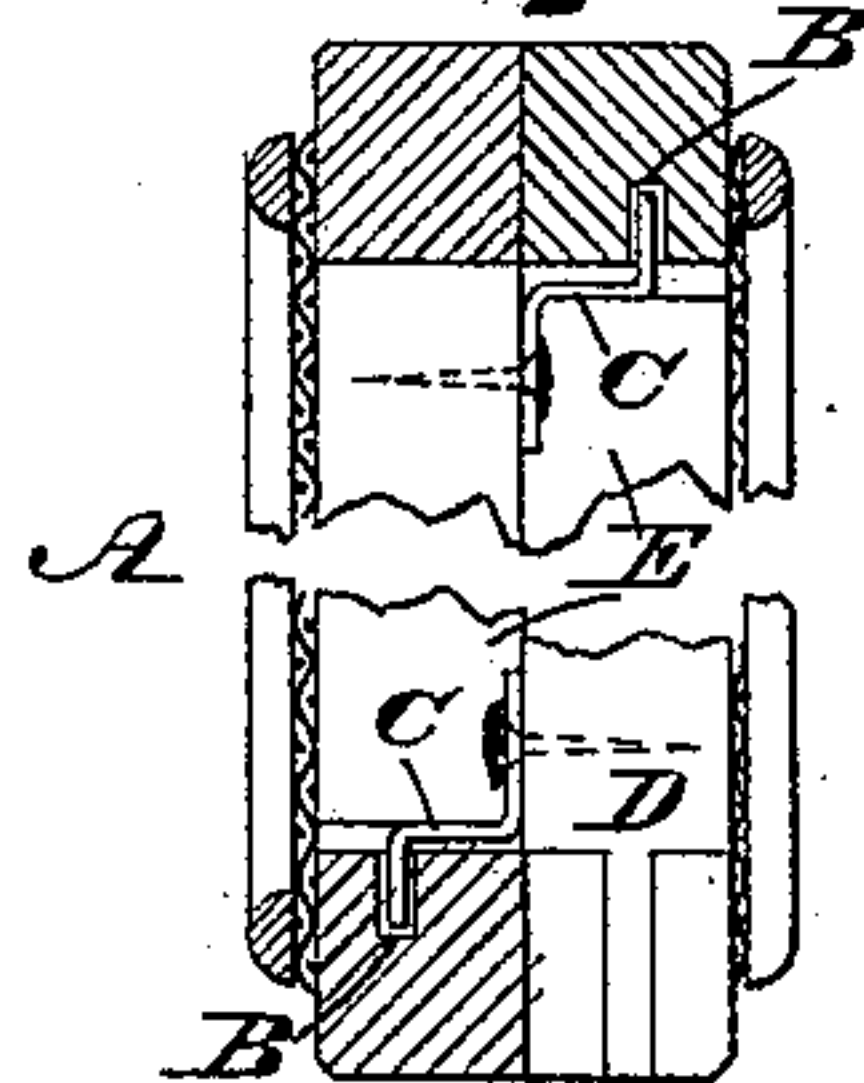
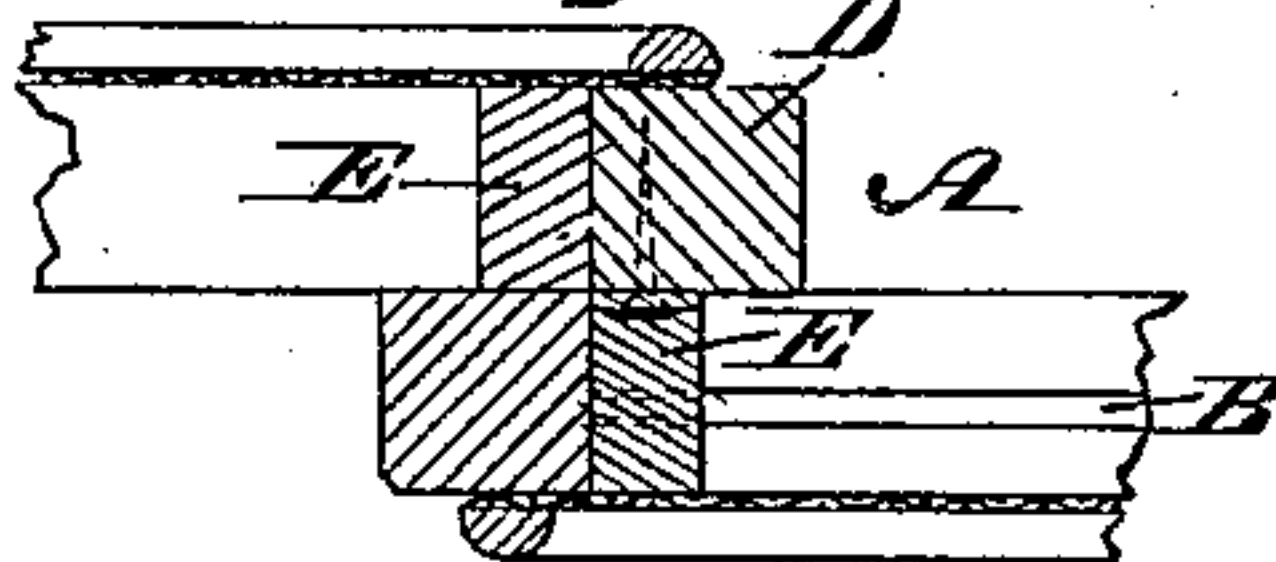


Fig. 3.



WITNESSES:

A. P. Grant,
L. Douville

INVENTOR
John W. Boughton
BY John A. Diederheim
ATTORNEY.

UNITED STATES PATENT OFFICE.

JOHN W. BOUGHTON, OF PHILADELPHIA, PENNSYLVANIA.

INSECT-SCREEN.

SPECIFICATION forming part of Letters Patent No. 415,018, dated November 12, 1889.

Application filed July 15, 1886. Serial No. 208,102. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. BOUGHTON, a citizen of the United States, residing in the city and county of Philadelphia, State of Pennsylvania, have invented a new and useful Improvement in Insect-Screens, which improvement is fully set forth in the following specification and accompanying drawings, in which—

10 Figure 1 represents a side elevation of an insect-screen embodying my invention, part of the gauze or netting being removed. Fig. 2 represents a section thereof in line *x x*, Fig. 1. Fig. 3 represents a horizontal section of a
15 portion in line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of an insect-screen provided with tongues and grooves for connecting and guiding the frames thereof, as
20 will be hereinafter fully set forth.

Referring to the drawings, A represents the frames of the screen, which, excepting the features of my invention applied thereto, are
25 of usual construction.

On the inner sides of the top and bottom bars of the frame, or sides which face each other, are grooves B, which extend in the longitudinal direction of the frames and receive the tongues C. The tongues are made
30 of pieces of metal bent into double-L form, one end or limb of each of which is secured to the upright end bar D of one of the frames and the other end thereof freely entering the
35 groove B of the other frame. By securing the end of the tongue to the outer face of the upright end bar D, as shown in the drawings, a better fastening can be made than if the same is secured to the inner face of the bars,
40 and the bent portion forms a guide for the horizontal bars, so as to aid in retaining the same in proper position during the adjustment thereof. Again, owing to the double-L
45 form of the tongues, the vertical bars are firmly connected with the horizontal bars, the inner limbs of the tongues being secured to the vertical bars, as has been stated, the said vertical bars affording increased room for the attachment of the tongues, so that the latter
50 are firmly retained in position.

I am aware that it is not new to employ L-shaped tongues for connecting the horizontal bars of a screen, each of said tongues being secured at one end to the inner face of one horizontal bar and having its bent end enter
55 a groove in the contiguous horizontal bar; but my construction differs from such in that I make the tongues of double-L shape and utilize the comparatively broad and long face of the vertical bar for fastening the same
60 thereto, whereby the tongues are most firmly held in position, and the two sets of bars—viz, horizontal and vertical—are braced one with the other; hence I have an improvement in the art.

To the frames, at or near the inner vertical bars D thereof, are secured bars E, which serve to conceal the main portions of the
65 tongues and abut against the bars D when the screen is opened to full extent, thus acting as a stop, and preventing separation of the frames as well as strain on the tongues when they abut against the bars D.

I am aware that it is not new to construct an adjustable window-screen having each of its
75 frames provided with a tongue or tongues of double-L shape adapted to embrace the rail or rails of the other frame; neither is it new to provide a frame with a tongue having a limb working in a groove of the adjacent
80 frame; but I am not aware that the construction herein described and claimed, wherein a tongue shaped as shown is secured to the inner face of the inner stile, either below the top rail or above the lower rail, and having
85 its other end limb working in a groove on the inner edge of the rail, so that the body of the tongue is in contact with the edges and sides of the rail, is old.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. An adjustable window-screen consisting of two frames with netting thereon, each frame having double-L-shaped tongues, as
95 shown herein, secured to the inner stiles thereof, and the top rail of one frame and the lower rail of the other frame having horizontal grooves on the inner edge, in which the one limb of the said tongues works, said parts
100

being combined substantially as and for the purpose set forth.

2. An insect-screen formed of the frames A, one of which has a groove B in the inner side
5 of its top bar and the other a groove on the inner side of its bottom bar, double-L-shape metal tongues C, each having one of its ends inserted in one of said grooves and the other

end secured to one of the frames A, and vertical stop-bars E at or near the inner end to bars D of the frame, all of said parts being combined substantially as described.

JOHN W. BOUGHTON.

Witnesses:

JOHN WIEDERSHEIM,
JAS. F. KELLY.