No. 730,809. PATENTED JUNE 9, 1903.

A. E. WALTER.

FLY SCREEN.

APPLICATION FILED JAN. 10, 1903.

NO MODEL.

Fig. 5.

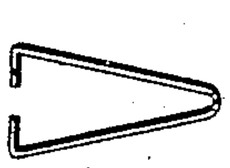


Fig. 4.

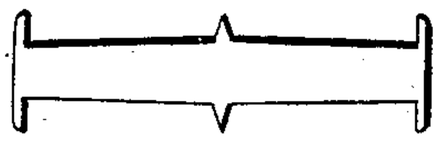


Fig. 3.

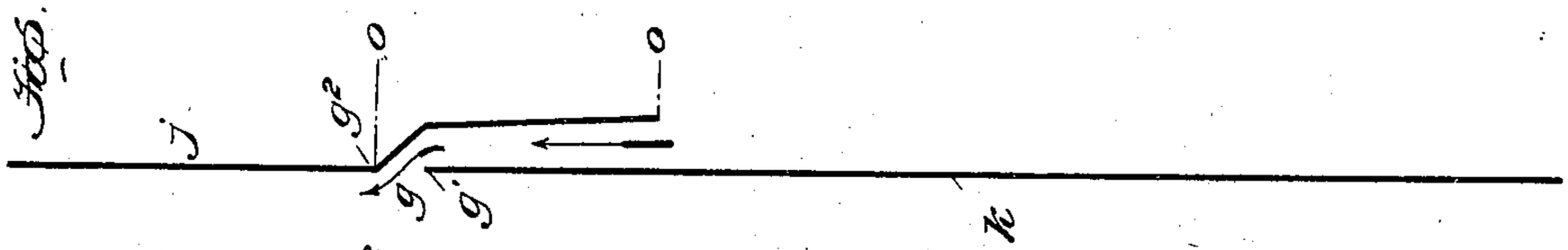


Fig. 2.

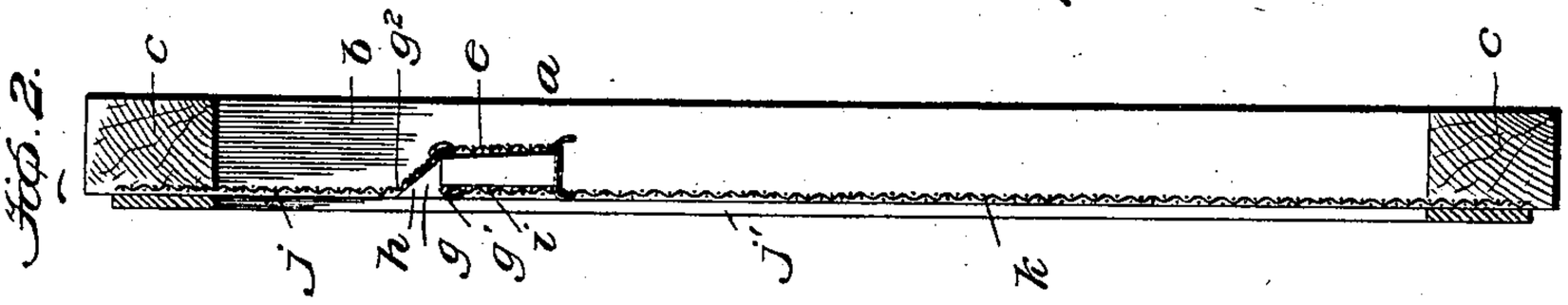
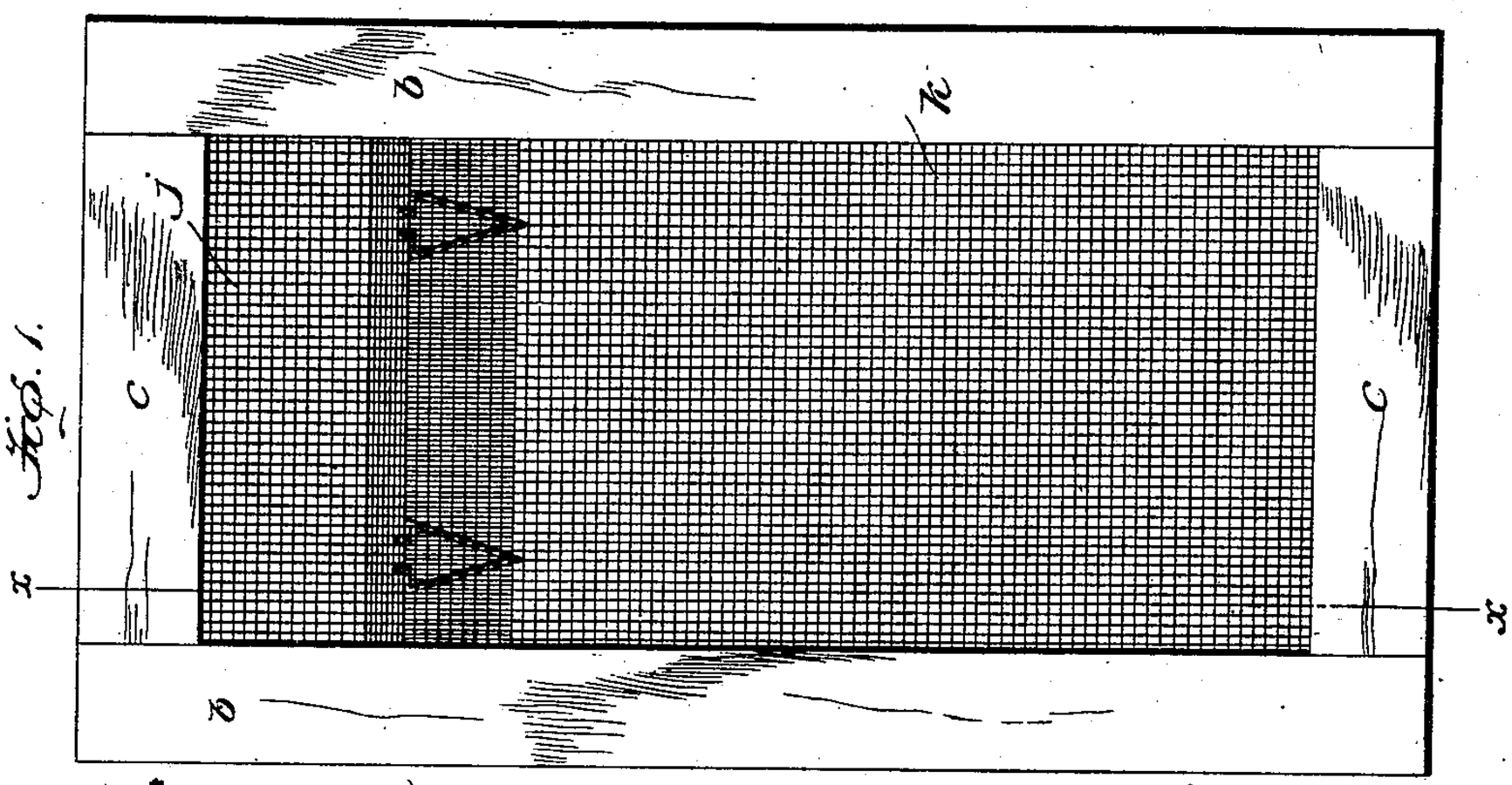


Fig. 1.



Witnesses

Watts T. Estabrook

Inventor

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by John A. Coons

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No. 730,809. Patented June 9, 1903.

UNITED STATES PATENT OFFICE.

ADOLPH EARNEST WALTER, OF MONROEVILLE, OHIO.

FLY-SCREEN.

SPECIFICATION forming part of Letters Patent No. 730,809, dated June 9, 1903.

Application filed January 10, 1903. Serial No. 138,483. (No model.)

To all whom it may concern:

Be it known that I, ADOLPH EARNEST WALTER, a citizen of the United States of America, and a resident of Monroeville, in the county of Huron and State of Ohio, have invented certain new and useful Improvements in Fly-Screens, of which the following is a specification.

My invention relates to improvements in window and door screens which are constructed of two or more sections of wire-netting secured to a frame in such a manner as to leave the sections of the netting overlapping each other. It will be noted by reference to the drawings that the upper section of the netting is secured to the frame on a plane with the lower section. The downwardly-projecting end of the upper section is turned inwardly on an incline and carried behind the upper end of the lower section, leaving an opening between the upper end of the lower section and the inclined portion of the upper section.

The object of my improvements is to construct a screen door, window, or the like with suitable openings provided therein, whereby flies and other insects can find their way out through the openings without difficulty, yet at the same time making it difficult for them to return through the openings or exits from which they emerged.

Another object of my improvement is to provide a suitable brace to keep the upper and lower sections of the netting apart without interfering materially with the height or obstructing the opening.

I attain these and other objects by means of the construction and combination of parts illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of a screen-door as it appears viewed from the inside of the room. Fig. 2 is a vertical section taken on the line $x\ x$ of Fig. 1, showing the method of securing the sections of the wire-netting to the frame. Fig. 3 is a diagrammatic view of the wire-netting, showing the relative position of the upper and lower sections as they appear when attached to the frame. Fig. 4 is a top plan view of the brace as it appears blanked out preparatory to its being formed in proper shape. Fig. 5 is an edge view of the brace as it appears ready to be inserted between the lapping portions of the netting.

Similar letters of reference refer to similar parts throughout the several views.

The frame a is composed of stiles b and a suitable number of cross-pieces or rails c. One or more notches e are cut in the stiles at right angles with their length and in alinement with each other. The upper section j of the wire-netting is attached to the top rail and stiles in the ordinary way. The lower end of the upper section between the line $o\ o$ is formed to fit the notches in the stiles, leaving the ends of the upper and lower sections overlapping each other, as shown in Fig. 3, which provides an opening g between the end g' of the lower section and the first bend g^2 of the upper section, thereby providing a means of exit for flies or other insects. The end of the upper section is secured to the frame by the blocks h, which are made to correspond with the notches in the stiles. The lower section of the netting is secured to the stiles and rails forming the frame in such a manner as to leave the upper end i projecting over the notched portions of the stiles on each side thereof. The projecting portion is kept on a plane with the surface of the stiles by the block h, to which it is attached. Cleats j' are used to fasten both sections of the wire-netting to the frame and retain the block in place in the notches. A fly or other insect will under ordinary circumstances light upon the plane surface k of the lower section and find its way out in the direction indicated by the arrow without difficulty by crawling up the surface of the lower portion of the upper section, it being a well-known and well-recognized as well as easily-proven fact that flies and other insects will almost invariably exhibit a tendency to crawl upwardly, and rarely do they crawl head downwardly. For this reason it is difficult for them to enter the building through the same opening by reason of the relative positions of the upper and lower sections, which form the opening, the outer surface of the door or window presenting a plane surface and broken only by the opening, which is of such a width as will per-

mit the flies or other insects to walk over the openings instead of returning through the opening from which they emerged.

To keep the ends of the wire-netting apart, I construct a novel brace, which is preferably made of sheet metal. They are blanked out, leaving projections extending therefrom. They are then formed into the shape shown in Fig. 5. The projections pass through the meshes in the wire-netting and are turned at right angles therewith, securely fastening the brace to the netting and keeping the overlapping ends an equal distance apart, thereby maintaining uniformity in the width of the opening.

It is obvious that any number of separate and distinct sections of wire-netting can be used, varying the number of openings, without deviating from the principle involved in my invention.

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

A screen comprising a suitable frame, a plurality of mesh-sections secured to the frame, the free edges of the sections overlapping and spaced apart from each other and a brace received between the free overlapping edges of the sections, the brace comprising a bent body portion which tapers from the middle toward each end, oppositely-extending tongues projecting laterally from the middle of the body portion at the bend therein and from each end thereof, the body portion being bent into substantially triangular form to constitute the brace.

Signed at Monroeville, Ohio, this 17th day of December, 1902.

ADOLPH EARNEST WALTER.

Witnesses:

EDITH CLINE,

H. A. THOMAS.