March 18, 1924. 1,487,335

H. JAEGER

SCREEN

Filed Sept. 29, 1921

Fig. 1.

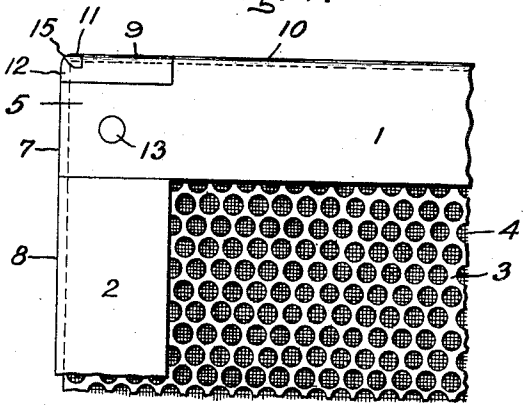



Fig. 2.

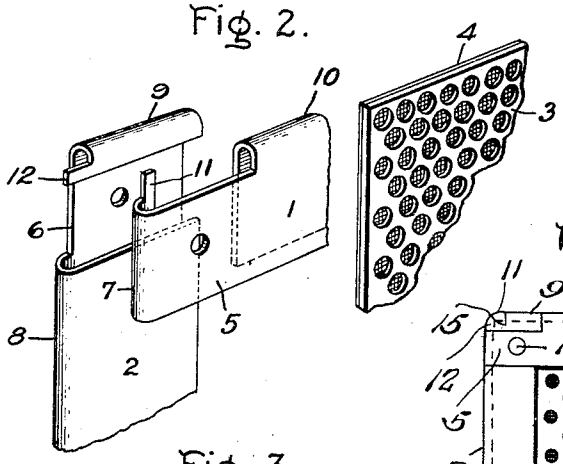



Fig. 5.

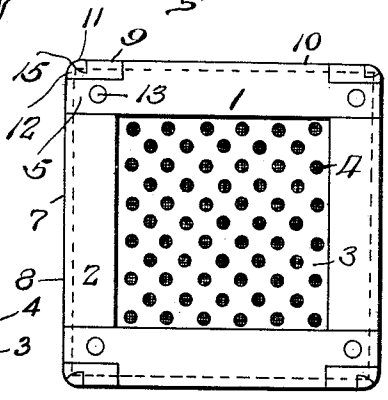



Fig. 3.

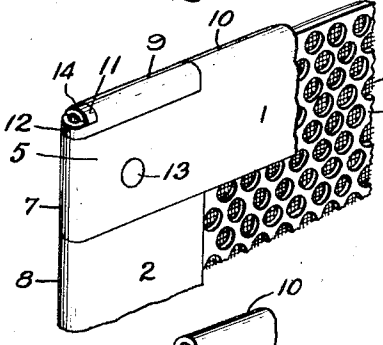
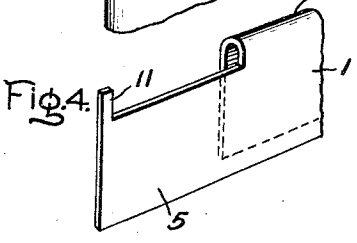



Fig. 4.




Inventor:
Hugo Jaeger,
by Albert G. Davis
His Attorney.

Patented Mar. 18, 1924. 1,487,335

# UNITED STATES PATENT OFFICE.

HUGO JAEGER, OF SCHENECTADY, NEW YORK, ASSIGNOR TO GENERAL ELECTRIC COMPANY, A CORPORATION OF NEW YORK.

## SCREEN.

Application filed September 29, 1921. Serial No. 504,134.

*To all whom it may concern:*

Be it known that I, HUGO JAEGER, a citizen of the United States, residing at Schenectady, in the county of Schenectady, State of New York, have invented certain new and useful Improvements in Screens, of which the following is a specification.

One of the objects of my invention is to provide a simple construction for screen frames whereby the side members of the frames may be securely fastened together at the corners.

A further object of my invention is to provide a corner construction for screen frames which will be strong and which will have no portions which are thicker than the side members or which project beyond the opposite planes of the side members.

The novel features which I believe to be characteristic of my invention are set forth with particularity in the appended claims. My invention itself, however, both as to its organization and the manner in which it is carried into effect will best be understood by reference to the following description taken in connection with the accompanying drawings in which Fig. 1 is an elevation of one corner of a completed screen; Fig. 2 is a perspective of the separate members making up one corner of a screen; Fig. 3 is a perspective of one corner of a screen with the parts assembled; Fig. 4 is a perspective of one end of a frame member illustrating one step in the process of manufacture, and Fig. 5 is an elevation of a complete screen.

As indicated in the drawings, a screen constructed in accordance with my invention comprises U-shaped side members 1 and 2 which embrace the edges of a perforated sheet 3. In the case illustrated where a fine screen of rigid construction is desired the perforated sheet 3 is supplemented by a fine mesh screen 4. It will of course be understood that either a perforated sheet or a woven screen may be used separately and in the description and claims which follow I employ the term perforated sheet or similar phraseology to include either of these constructions as equivalents.

In constructing a screen the curved portion and one of the side portions of each end of the U-shaped members is cut away, as indicated in Fig. 4. In assembling the screen members the remaining end portion 5 of member 1 is fitted into the space formerly occupied by the cut away portion of member 2, and the remaining end portion 6 of member 2 is fitted into the space formerly occupied by the cut away portion of member 1. The end of the remaining portion 5 of member 1 is bent, either before or after the parts are assembled, to form a curved portion 7, which, when the parts are assembled, forms a continuation of the curved portion 8 of member 2. Similarly, the end of the remaining portion 6 of member 2 is bent to form a curved portion 9 which forms a continuation of the curved portion 10 of member 1. The small projecting portion 11 of member 1 is then bent over, as indicated in Fig. 3, to form a continuation of the curved portion 9 of member 2 and the curved portion 10 of member 1. Similarly, the small projecting portion 12 of member 2 is bent over to form a continuation of the curved portion 7 of member 1 and the curved portion 8 of member 2.

By the construction described the two adjacent side members are securely and rigidly locked together. Corresponding sides of adjacent side members lie in the same plane and all of the material at the corner of the screen is disposed within the two parallel planes of opposite sides of the frame.

While the interlocking arrangement of the side members at the corners is sufficient to hold them in place, they may, if desired, be additionally secured by a rivet 13 or in any other convenient manner. In order to eliminate the raw edges at 14, as indicated in Fig. 3, these edges may be stamped or hammered to form a well rounded corner, as indicated at 15 in Fig. 1.

What I claim as new and desire to secure by Letters Patent of the United States, is:—

1. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having similar portions at each end cut away, and the remaining end portions of adjacent members at each corner of the screen being interlocked.

2. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having similar portions at each end cut away, and the remaining end portion of adjacent members at each corner of the screen being interlocked in such a way that corresponding sides of ad-

jacent U-shaped members lie in parallel planes.

3. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having similar portions at each end cut away, and the remaining end portion of adjacent members at each corner of the screen being interlocked in such a way that corresponding sides of adjacent U-shaped members lie in parallel planes, and all of the remaining end portion of one member is disposed in such a way as to form a continuation of a portion of the adjacent member.

4. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having similar portions at each end cut away, and the remaining end portion of adjacent members at each corner of the screen being interlocked to form a continuation of the channel in each of the adjacent U-shaped members.

5. A frame member for a screen comprising a U-shaped member having at each end one of its sides and the curved portion cut away and the end of the remaining said portion bent to form a curved portion extending at an angle to the curved portion of the U-shaped member.

6. A frame member for a screen comprising a U-shaped member having at each end one of its sides and the curved portion cut away and the end of the remaining said portion bent to form a curved portion extending at a right angle to the curved portion of the U-shaped member.

7. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having at each end one of its sides and the curved portion cut away and the remaining end portions of adjacent members at each corner of the screen being interlocked.

8. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having at each end one of its sides and the curved portion cut away and the remaining end portions of adjacent members at each corner of the screen being interlocked in such a way that corresponding sides of adjacent U-shaped members lie in parallel planes.

9. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having at each end one of its sides and the curved portion cut away and the remaining end portions of adjacent members at each corner of the screen being interlocked in such a way that corresponding sides of adjacent U-shaped members lie in parallel planes, and all of the remaining end portion of one member is disposed in such a way as to form a continuation of a portion of the adjacent member.

10. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having at each end one of its sides and the curved portion cut away and the remaining end portions of adjacent members at each corner of the screen being interlocked to form a continuation of the channel in each of the adjacent U-shaped members.

11. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet, each of said U-shaped members having at each end one of its sides and the curved portion cut away, the remaining end portions of each member being disposed in the cutaway space of the adjacent member.

12. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet each of said U-shaped members having at each end one of its sides and the curved portion cut away, the remaining end portions of each member being disposed in the cutaway space of the adjacent member in such a way that corresponding sides of adjacent U-shaped members lie in parallel planes.

13. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet each of said U-shaped members having at each end one of its sides and the curved portion cut away, the remaining end portions of each member being disposed in the cutaway space of the adjacent member to form a continuation of the channel in each of the adjacent U-shaped members.

14. A screen comprising a sheet of perforated material and U-shaped members embracing the edges of said sheet each of said U-shaped members having at each end one of its sides and the curved portion cut away, the remaining end portions of each member being disposed in the cutaway space of the adjacent member and the ends of the remaining end portion of each member being bent to form a continuation of the curved portion of the adjacent member.

In witness whereof, I have hereunto set my hand this 28th day of September, 1921.

HUGO JAEGER.