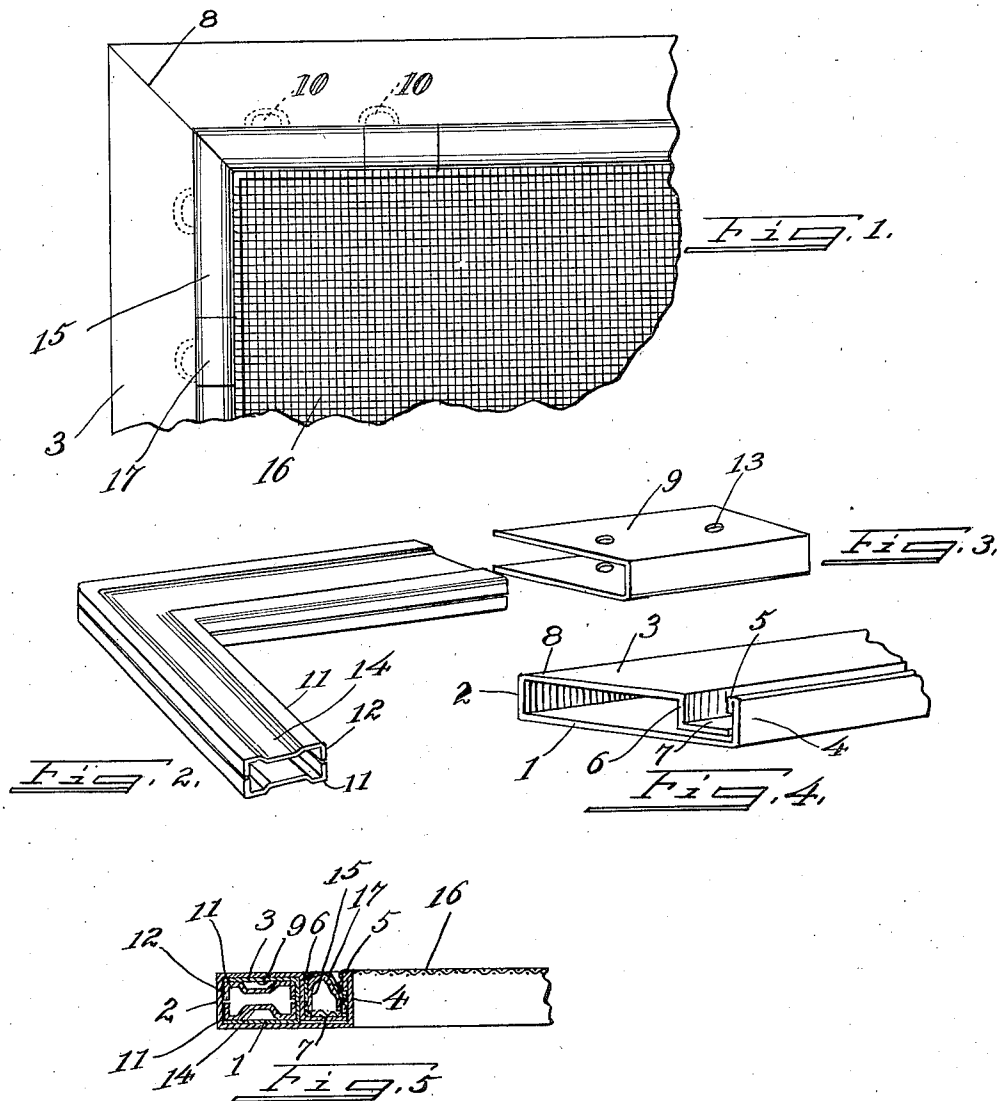


Dec. 19, 1922.

1,439,167

H. HIGGIN.
REWIREABLE SCREEN.
FILED OCT. 14, 1920.



INVENTOR:

Henry Higgin

BY Allen Allen

ATTORNEYS

UNITED STATES PATENT OFFICE.

HENRY HIGGIN, OF NEWPORT, KENTUCKY, ASSIGNOR TO THE HIGGIN MANUFACTURING COMPANY, OF NEWPORT, KENTUCKY, A CORPORATION OF WEST VIRGINIA.

REWIREABLE SCREEN.

Application filed October 14, 1920. Serial No. 416,864.

To all whom it may concern:

Be it known that I, HENRY HIGGIN, of Newport, in the county of Campbell and State of Kentucky, have invented certain new and useful Improvements in Rewireable Screens, of which the following is a full, clear, and exact description, reference being had to the drawings forming part of this specification.

It is the object of my invention to make a strong and simple structure of the above character, without excessive welding, and capable of taking throughout a baked enamel of high quality. Among other things I provide a folded metal frame for the screen which is held together without excessive spot welding, and this welding is done only at the corners.

The above object and other advantages to be noted I accomplish by that certain construction and arrangement of parts to be hereinafter more specifically pointed out and claimed.

In the drawings,
Figure 1 is a detail corner elevation of a screen made according to my invention.

Figure 2 is a perspective view of a corner iron assembly.

Figure 3 is a perspective of one of the corner re-enforcing pieces.

Figure 4 is a perspective view of one end of a frame piece cut ready for use.

Figure 5 is a detail section taken through a screen illustrating the method of retaining the screen wire.

The screen frame pieces are made of fairly heavy sheet metal bent into special form, so as to have a base 1, an outer end 2, and an inner wall 3. The metal of the base is bent up at 4, and preferably beaded at 5, to form an outer channel wall, and the metal of the inner wall is bent down at 6 until it laps the base, after which it is turned outwardly for a short distance along the base, as at 7.

The lip 7 is nowhere secured to the base, either by welding or soldering, thereby saving expense in labor cost and permitting (as against a soldered product) of the use of high quality enamel, which when baked on at high temperature will last as long as the metal frame itself.

The frame pieces are cut at the ends, as at 8, to form a half corner, and into each corner end is inserted a re-enforcing piece 9. The pieces 9 consist of two sides and a base,

and are set into the cut-away ends of the frame pieces so that the base lies toward the channel.

When the said re-enforcing pieces are set into the frame pieces they are preferably spot welded as at 10, 10, two welds being entirely sufficient. I have found that when welded or otherwise secured in place these re-enforcing pieces taken together with the conformation of the frame pieces generally will result in the formation of a substantially rigid, non-weaving frame piece.

In assembling the screen frames, they are set together at the corners and corner braces 11, 11 driven into the corner of each two adjacent ends. The preferred form of corner brace comprises two oppositely curved angle pieces having inturned flanges 12, which are set together prior to driving them home into the frame pieces.

If it is desired to use rivets instead of spot welds at the corners, the frame pieces and corner re-enforcements can be shipped in lengths, and cut and assembled to size on the job. As illustrated in Figure 3, the re-enforcing pieces can be riveted through punched holes 13, and the rivet heads will be cleared by the concavity 14 in the corner braces.

A spline 15 of any desired form is used to hold the screen wire 16 in place in the channels of the frames, as shown in Figure 5, in which the spline is held in place by a metal strip 17 driven into place after the splines are set.

It is at once apparent that the structure above described is simple to manufacture, and I have found screens so made to be very strong and substantially non-weaving. It is not necessary that the abutting flange and the base of the frame pieces should be secured together, as rigidity at the corners is all that I have found necessary.

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

1. In a device of the character described the combination of folded metal frame pieces formed by return bending of a sheet of metal, and lapping but not securing it to the base of said return bend, with a channel along the inner edge thereof, and re-enforcing pieces for the corners of said frame pieces having a base to be set at the lapped but unsecured portion of the folded structure, and means for securing said re-enforc-

ing pieces immovably in the frame pieces for the purpose described.

2. In a rewirable metal screen a frame piece comprising a hollow body formed by return bending of a sheet of metal, and lapping but not securing it to the base of the said return bend, and a channel along the inner edges thereof, and a re-enforcing piece having a base and two sides, said sides being secured fast to the base and top at least of the said return bend and the base faced toward the lapped but unsecured portion.

3. In a rewirable metal screen, a frame

piece folded from metal to form a base, an outer wall, an inner wall, a return bend to the base and a lapping flange, said flange being unsecured to the base, and the base bent to form an outer channel wall in opposition to the wall formed by said return bend, and a corner re-enforcing piece formed with a base and side walls, at least, said base being set toward the said return bend, and the side walls secured fast to the base and inner wall of the frame piece.

HENRY HIGGIN.