Nov. 18, 1930. T. MERRYWEATHER 1,782,147

METAL ARCH MEMBER FOR OPENINGS

Filed July 18, 1929

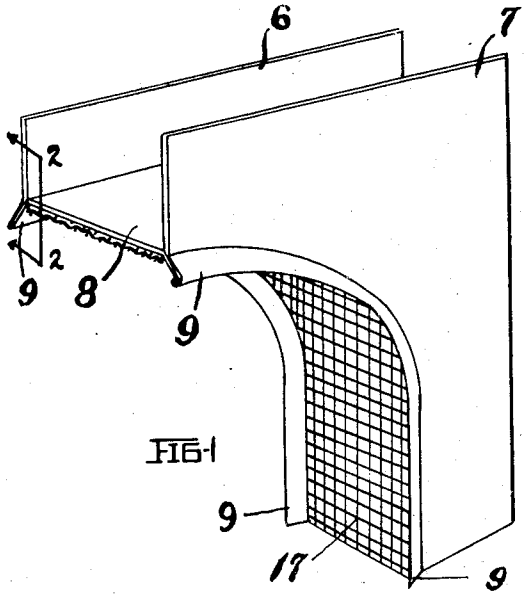


FIG-1

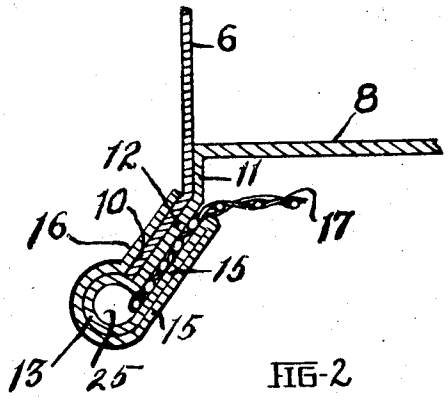


FIG-2

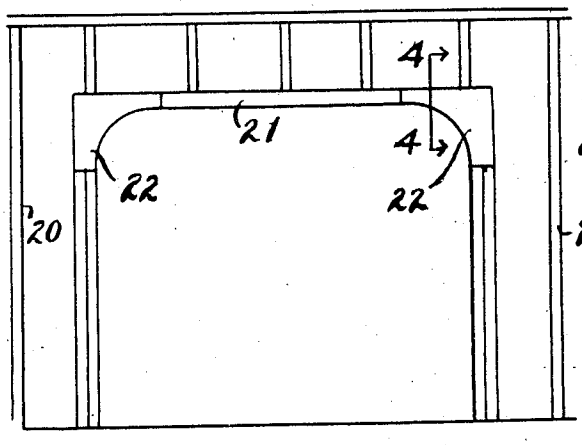


FIG-3

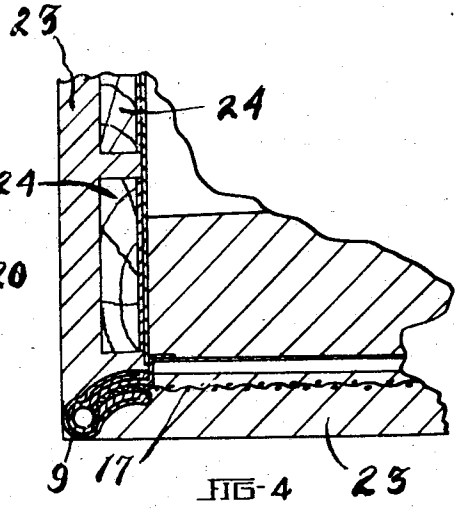


FIG-4

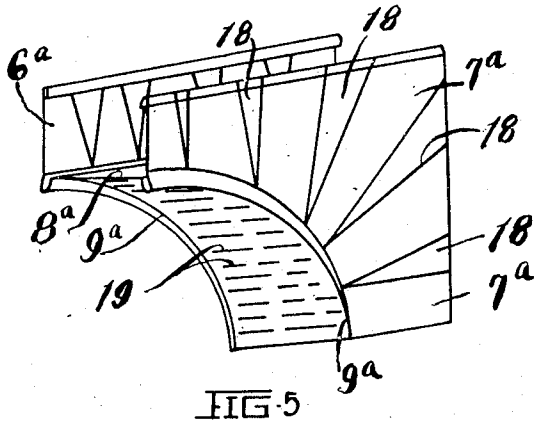


FIG-5

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UNITED STATES PATENT OFFICE

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METAL ARCH MEMBER FOR OPENINGS

Application filed July 18, 1929. Serial No. 379,106.

This invention relates to new and novel improvements in arch corner members and while intended for use generally wherever it may be advantageously employed, it is particularly adapted for use in constructing arch door-ways and other openings in which connection it will be hereinafter illustrated and described.

Objects of the invention are to provide a box-like arcuate corner member composed of sheet metal which may be quickly positioned in the frame of a square opening to form a structure which when plastered will have a symmetrical arched opening.

Other objects are to provide an arcuate corner member which may be placed in position by inexperienced workmen and which will provide a stiff rigid sub-structure at a very low cost.

A further object is to provide a corner arched member to which plaster will readily adhere and which is provided with rigid corner-bead grounds whereby a well proportioned arch may be accurately formed.

The above objects are accomplished and additional ends are attained by the novel construction, combination and arrangement of parts hereinafter described and illustrated in the accompanying drawing wherein I have shown a preferred form of the invention, it being understood that the invention is capable of various adaptations and that changes and modifications may be made or resort had to substitutions which come within the scope of the claims hereunto appended.

In the drawings like characters of reference are employed to designate like parts as the same may appear in any of the several views and in which:—

Figure 1 is a perspective view of an arch corner member constructed in accordance with this invention,

Figure 2 is a sectional view taken as indicated by the lines 2—2 of Figure 1, showing a corner bead constructed in accordance with this invention,

Figure 3 is an elevational view showing the frame-work of a partition having an opening in which corner members constructed in accordance with this invention are used.

Figure 4 is a cross sectional view of a portion of a corner member constructed in accordance with this invention, also showing in section the studding and the lath and plaster, the same taken approximately as shown by the lines 4—4 of Figure 3.

Figure 5 is a modification of the invention showing an arch member formed of one piece of sheet metal with portions thereof reticulated to provide a surface to which plaster will readily adhere.

Proceeding now to a detailed description of the invention with reference to the particular adaptation thereof disclosed in the drawing, the numerals 6 and 7 are used to denote the opposite side walls of a corner member constructed in accordance with this invention. The numeral 8 denotes an arcuate connecting member which holds the members 6 and 7 in parallel spaced relation. The side members 6 and 7 are each joined to the inner member 8 by a corner bead 9 which forms a ground for plastering on each lateral side of the members 6 and 7 and on the wall of the opening.

In Figures 1 and 2 I have shown side members 6 and 7 which are bent outwardly along the arcuate edge thereof to form a marginal flange portion 10. The arcuate wall 8 is stamped or otherwise provided on each lateral side thereof with a right angle extension 11 which extends in parallel relation to the side walls 6 and 7. The wall 11 diverges outwardly to form a marginal portion 12 which terminates in a tubular loop 13. The wall 8 extends from the loop 13 in parallel relation to the portion 12 to form a fold 14 and is again folded upon itself to form a layer 15 which extends around the tubular portion 13 and terminates in a portion 16 which is disposed in spaced relation to the portion 12. The flange 10 on each of the side walls 6 and 7 is received between the portions 16 and 12, thus firmly holding the members in assembled relation. A sheet 17 of screen wire or other reticulated material is positioned in spaced relation to the wall 8 with its opposite edges received between the portions 12 and 14 of the corner bead 9.

In the modification of the invention shown

in Figure 5, the side walls 6^a and 7^a are provided with a plurality of cuts or openings 18 and the inner wall 8^a is provided with slots or openings 19 to form a surface to which plaster will readily adhere. The arcuate wall 8^a and the side member 6^a and 7^a are folded along the edge of the opening to form the corner beads 9^a.

In use, the studdings 20 and the header plate 21 are first constructed to form a squared opening. An arched corner member 22 such as is shown in Figure 1 is positioned on each upper corner of the opening. As shown in Figure 4, the lath employed in covering each side of the partition are extended over the side walls 6 and 7 to the corner bead ground 9. When the partition is plastered, the plaster 23 is placed on the lath 24 to a depth even with the corner bead 9 on both lateral sides of the partition. The plastering 23 on the wall of the opening is likewise even with the corner bead 9, thus forming a well proportioned opening having a strong corner bead 9. A ground or corner bead similar to the bead 9 may be used along the straight surfaces, of the opening and may be secured in alinement therewith by means of the pin placed in the opening 25 of the tubular member 13.

In structures where metal lath are employed on each side of the partition or other wall, the walls 6, 7 and 8 may be reticulated to provide a firm hold for the plaster.

It will thus be seen that I have provided a simple, inexpensive corner member which may be quickly and conveniently positioned in a squared opening by unskilled workmen to form a well proportioned arch.

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

1. In a device for forming an arched plastering base for the construction of plastered openings, parallelly disposed side walls of sheet material, each side wall having an inwardly arched edge and a correspondingly arched wall connecting said side walls, said side walls and end walls joining in flanges forming plastering grounds.

2. In a corner member for arched openings, parallelly disposed side walls of sheet material, each side wall having an inwardly arched edge, an arcuate wall connecting said side walls along said edges and corner bead flanges extending along the lines of connection.

3. In a corner member for forming arched openings, parallelly disposed side walls of sheet material, each side wall having an inwardly arched edge, an arcuate wall, folded seams joining said arcuate wall to said side walls, said seams forming corner beads.

4. In a corner member for forming arched openings, two side walls of sheet material, each wall provided with an inwardly arched edge, an outwardly projecting flange extending along each of said edges, means to hold said walls in parallel spaced relation and reticulated material extending between said flanges.

5. In a corner member for forming arched openings, side walls of sheet material, each having an inwardly curved edge, said edges folded to provide corner bead plastering grounds and reticulated material extending between said grounds.

6. In a corner member for forming arched openings, side walls of sheet metal, each having an inwardly curved edge, an arched wall connecting said side walls, a folded seam along the line of juncture between said arched wall and said side walls, said seams forming corner bead plastering grounds.

7. In a corner member for constructing arched openings, side walls of sheet metal, each having an inwardly curved edge, an arched wall connecting said side walls in spaced parallel relation, a folded seam along the line of juncture between said arched wall and side walls, said seams forming corner bead plastering grounds and reticulated material spaced outwardly from said arched wall, said reticulated material extending between said grounds.

8. In a plastering base for forming plastered openings; spaced, parallel side members of sheet material, a jamb member of like material connecting said members along like edges thereof, a flange along the lines of juncture between each side member and said jamb member, said flanges forming plastering grounds.

9. In a plastering base for forming plastered openings; spaced, parallel side members of sheet material, a jamb member of like material connecting said side members along the like edges thereof, a flange projecting outwardly along the line of juncture between each side wall and said jamb member, each flange disposed at an angle to the jamb member and the adjacent side member, said flanges forming plastering grounds for the walls in which the opening is located and for the jamb surface of the opening.

In testimony whereof I have hereunto set my hand.

THOMAS MERRYWEATHER.