Jan. 2, 1923. 1,440,615

G. R. MEYERCORD.

JOINT OF METAL SHEATHED CONSTRUCTION MATERIAL AND METHOD OF MAKING THE SAME.

FILED MAY 20, 1921.

Fig. 1.

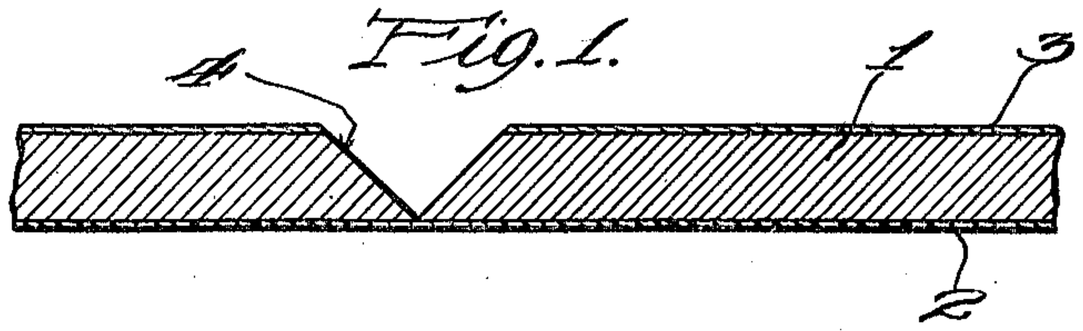


Fig. 2.

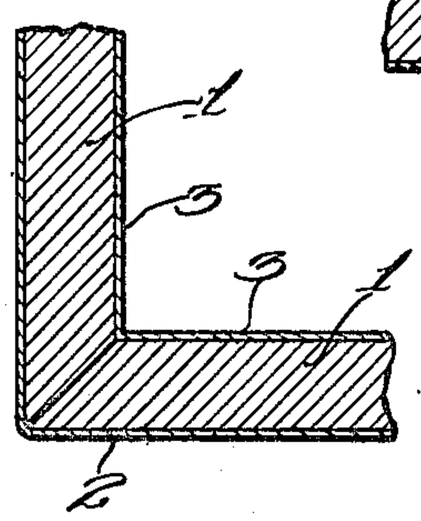


Fig. 5.

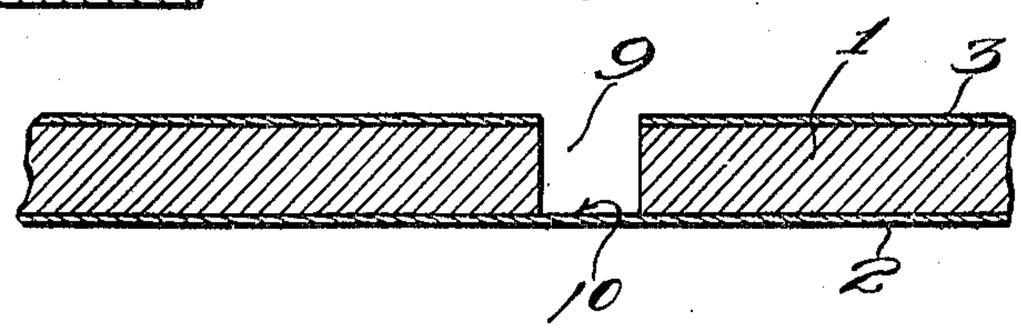


Fig. 6.

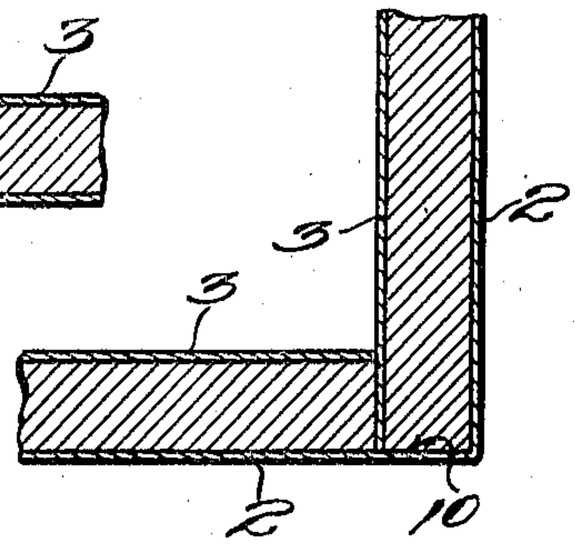


Fig. 3.

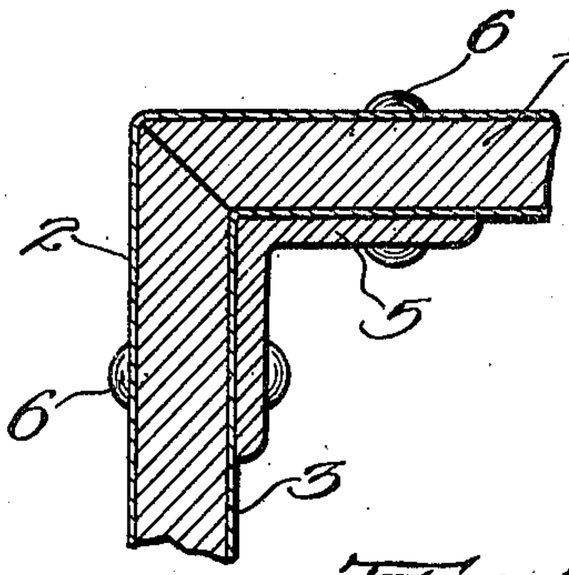


Fig. 4

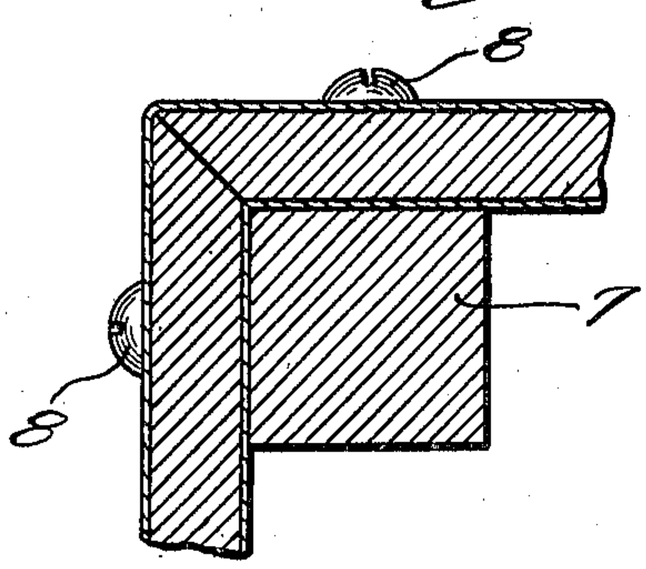
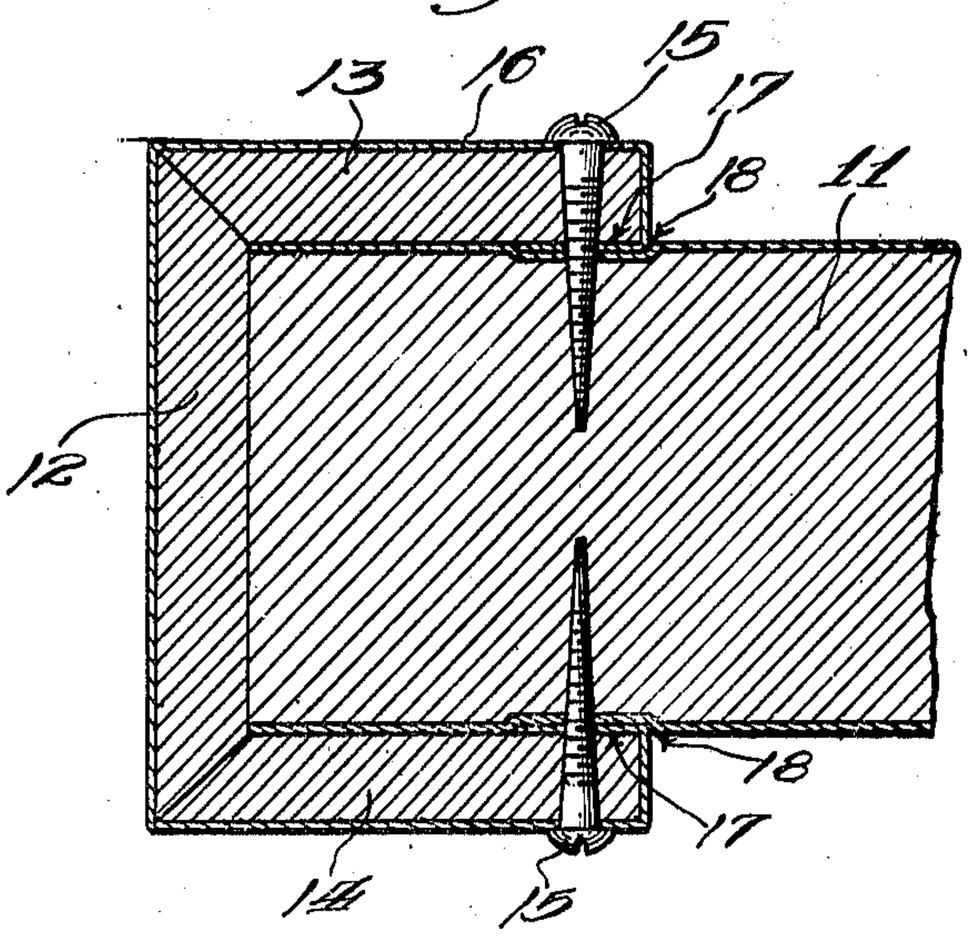


Fig. 7.



WITNESS:
Stephen A. Kebora

INVENTOR:
George R. Meyercord,
by Chamberlain & Brendemuehl
Attys.

Patented Jan. 2, 1923. 1,440,615

UNITED STATES PATENT OFFICE.

GEORGE R. MEYERCORD, OF CHICAGO, ILLINOIS, ASSIGNOR TO HASKELITE MANUFACTURING CORPORATION, A CORPORATION OF NEW YORK.

JOINT OF METAL-SHEATHED CONSTRUCTION MATERIAL AND METHOD OF MAKING THE SAME.

Application filed May 20, 1921. Serial No. 471,123.

To all whom it may concern:

Be it known that I, GEORGE R. MEYERCORD, a citizen of the United States, residing at Chicago, county of Cook, State of Illinois, have invented a certain new and useful Improvement in Joints of Metal-Sheathed Construction Materials and Methods of Making the Same, and declare the following to be a full, clear, and exact description of the same, such as will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

My invention relates to the art of metal-sheathed boards or sheets and particularly to the shaping of flat sheets to produce corners or joints and it has for its object to produce a simple and novel construction and method whereby a corner or joint may be formed without any interruption of the continuity of the material in passing from one of the faces of a wall to the corresponding face of another wall arranged at an angle thereto.

The various features of novelty whereby my invention is characterized will hereinafter be pointed out with particularity in the claims; but, for a full understanding of my invention and of its object and advantages, reference may be had to the following detailed description taken in connection with the accompanying drawing, wherein:

Figure 1 is a section through a metal-sheathed board which has been prepared to form a corner or joint;

Fig. 2 is a view similar to Fig. 1 showing the board bent to form a corner;

Fig. 3 is a view similar to Fig. 2 illustrating a means for reinforcing the corner;

Fig. 4 is a view similar to Figs. 2 and 3 illustrating a modified form of reinforcement;

Fig. 5 is a view similar to Fig. 1 illustrating a different mode of shaping the material preparatory to making a corner or joint;

Fig. 6 is a view similar to Fig. 2, showing a corner or joint made out of the material as it appears in Fig. 5; and

Fig. 7 is a horizontal section through a wall at an opening, such as a door or window opening, there being a casing assembled upon the wall.

Referring to the first four figures of the drawing, 1 represents a core of wood or other comparatively light non-metallic material, consisting of a single layer or built up of any desired number of layers and having any desired thickness to the two flat faces of which are glued thin sheets of metal, 2 and 3. At a point where a corner is to be formed in a structure made out of this material, which may for the sake of brevity be called a metal-sheathed board, I cut a groove, 4, extending inwardly from one face thereof to the metal on the other face. If a right angled corner is desired, the size of the groove may be caused to lie at an angle of forty-five degrees to the plane of the board so that when the board is bent along a line following the bottom of the trough, the two sections thereof may be brought at right angles to each other as shown in Fig. 2; thus producing two walls at right angles to each other without causing any break in the continuity of the metal forming the outer faces of the two walls.

If desired, the corner may be reinforced by means of an angle iron such as indicated at 5 in Fig. 3; the flanges of this angle iron being riveted to the two walls by means of suitable rivets, 6.

In Fig. 4 I have shown an arrangement wherein the corner is reinforced by means of a wooden post, 7, which is fastened in place by means of screws, 8, passing inwardly through the two walls and into the post. It will be seen that by using the method just outlined, any desired angle at the corner may be obtained, by making the cross sectional contour of the groove such that the sides thereof will engage with each other when the board is bent so as to bring the sections at the desired angle relatively to each other.

In Figs. 5 and 6 I have shown a somewhat different way of carrying out my invention; the groove, 9, being square in cross section that is, having parallel side walls spaced apart a distance equal to its depth; the metal sheathing, 2, being left undisturbed as in the arrangement heretofore described. In forming the corner one of the sections into which the groove divides the board is swung about the adjacent lower corner of the groove so as to bring the cut end thereof against the strip, 10, of the metal sheathing which forms the bottom of the groove, while

the inner sheathing, 3, comes into engagement with the cut end of the opposite section, as illustrated in Fig. 6. In this form of my invention, as well as in the other, there is no break in the continuity of the exterior sheathing layer at the corner.

In Fig. 7 there is illustrated a use to which my invention may be put. 11 represents a wall or panel which, itself, may be metal-sheathed. It is encased at one edge in a casing made up of a board sheathed on its outer face and shaped and bent so as to have a U-shaped cross sectional contour comprising a part, 12, lying against the edge of the wall or panel and other sections, 13 and 14, overlapping the marginal portions of the wall or panel adjacent to said edge. The casing is fastened in place by means of screws, 15, or other suitable fastening means passing through the members 13 and 14 and into the wall or panel. This construction, just described, may be utilized to form a casing for a window or door opening in a wall in the form of a metal-sheathed board or other form. The sheathing layer, 16, is preferably continued beyond the free edges of the board out of which the casing is made so that it may be bent around these free edges and be brought to the inner sides thereof as indicated at 17; thus leaving no raw edge to the metal at any point. Furthermore, if the wall or panel, 11, is metal sheathed, as illustrated, sealed joints may be obtained by placing a little solder at the angles, 18, between the casing and the wall.

While I have named only a single use to which my invention is applicable, it will of course be understood that the field of use is practically unlimited. Furthermore, while I have shown only two specific ways in which a joint may be formed, I do not desire to be limited to these two ways. In other words, I desire to cover all forms and arrangements which come within the terms employed in the definitions of my invention constituting the appended claims.

I claim:

1. The method of forming a corner between two walls of metal-sheathed boards arranged at an angle to each other which consists in cutting in one face of such a board a groove whose bottom terminates at the metal sheathing on the opposite face, and then bending the board along a line extending lengthwise of the groove.

2. A preformed metal-sheathed board, consisting of a thick rigid wooden member and a thin metal sheathing glued thereto, said wooden member having a straight groove extending entirely across the same and entirely through the same so as to permit the board to be bent by bending only the metal sheathing.

3. A preformed metal-sheathed board having in one side thereof a deep straight groove extending across said side and having the bottom thereof formed by the metal sheathing on the opposite side so as to permit the board to be bent by bending only the metal sheathing.

In testimony whereof, I sign this specification.

GEORGE R. MEYERCORD.