

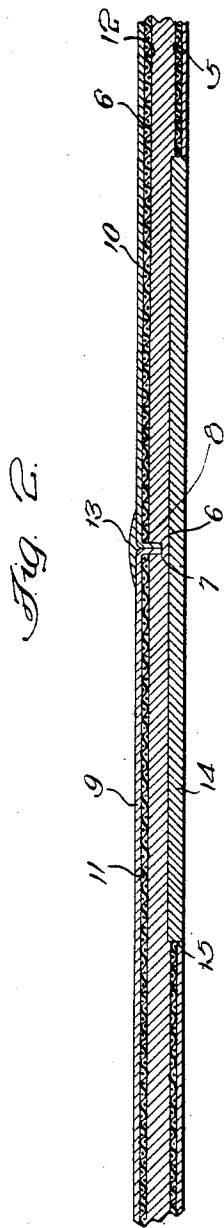
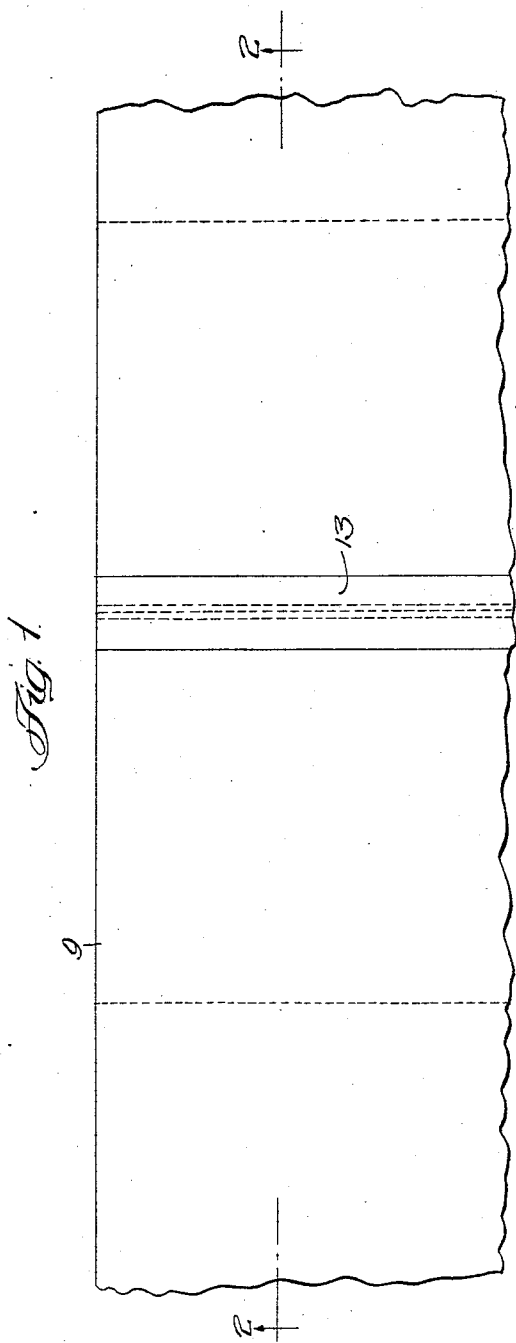
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JOINT FOR LAMINATED PANELS

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UNITED STATES PATENT OFFICE

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JOINT FOR LAMINATED PANELS

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This invention relates to joints for laminated panels.

An object of the invention is to provide a laminated panel comprising a body portion or core of fibrous material or the like, having a veneer of sheet metal consisting of a plurality of sheets of material with their meeting edges bent and disposed in abutting relation and the bent portions accommodated in a recess in the panel, together with a steel inlay in the opposite surface of the panel disposed to compensate for weakness and which serves to brace the joint and panel and maintain the alignment throughout.

Other and further objects of the invention will more clearly appear from the description and claims hereinafter following.

In the drawings, Fig. 1 is a fragmentary top plan view of a panel construction embodying my invention. And Fig. 2 is a fragmentary transverse vertical sectional view of the panel construction corresponding substantially to the line 2—2 of Fig. 1.

As shown in the drawings, the body portion of the panel preferably consists of a plurality of layers of plywood 5 which may be of any suitable area, and which are usually permanently bonded together, and obtainable commercially. Along one broad face of the body portion 5, there extends a groove 6, said groove being adapted to accommodate the turned ends 7 and 8, the end or angular portion 7 being formed integrally with a metallic sheet 9, and the turned or angular portion 8 being formed integrally with the metallic sheet 10, the metallic sheets providing a continuous metallic veneer bonded to the broad face of the body portion 5. Preferably interposed between the broad faces of the metallic veneer and the core are sheets of fabric 11 and 12, such as canton flannel or other fabric having a pile or nap, which compensates for the different rates of expansion and contraction of the core and metallic veneer when the same are secured together by suitable bonding material such as glue. The crevice formed on the upper surface of the veneer provided by the metallic sheets 9 and 10 is adapted to be closed by solder, as indicated at 13.

In order to reinforce the panel thus formed, and to compensate for the grooving of the core portion, an inlay 14 of relatively heavy sheet material is provided in the opposite surface of the panel, so as to span or bridge the joint provided at the meeting edges of the metallic sheets 9 and 10. The inlay 14 is accommodated in a recess 15 formed in the core or body portion of the panel, so that the outer surface of the inlay is disposed flush with the remaining surface of the body 5, bonding material being interposed between the inner surface of the inlay and the adjacent portion of the body member. In the construction thus provided, the opposite broad faces of the panel are smooth and plane throughout, and a joint of the character described enables the use of relatively small sheets of metal in covering a large expanse of the core portion, without in any way weakening, but rather strengthening, the panel at the point where the joint between the metallic sheets is made. The accommodation of the angular portion of the metallic sheets within the groove prevents the same being pulled apart, and also permits the sheets to lie in a flat plane, the use of solder in the crevice finishing the surface of the material so that it is continuously flat and unmarred in appearance. The opposite side of the panel also is in no way marred, and the inlay forms a bridge or beam spanning the weakened portion in which the joint is made.

While I have herein shown and described what I now consider the preferred manner of carrying out my invention, the same is merely illustrative, and I contemplate all changes and modifications that come within the scope of the claims appended hereto.

I claim:

1. In a unitary laminated panel construction, the combination with a core or body portion; of a plurality of metallic sheets on one side of said core having angular portions at their meeting edges and accommodated in a cut-out provided in said core; and a plate forming an inlay in the surface of the core opposite the cut-out portion for bridging the latter, the meeting edges of said metallic sheets and the outer surface of said inlay be-

ing arranged flush with the opposite planes of said panel.

2. In a unitary laminated panel construction, the combination with a core or body portion; of a plurality of metallic sheets on one face of said core having inturned angular portions at their meeting edges in abutting relation and accommodated in a cut-out groove provided in the face of said core; a metal plate forming an inlay embedded in the surface of the core opposite the cut-out portion for bridging the latter, the abutting angular portions of said metallic sheets and the outer surface of said inlay being arranged flush with the opposite planes of said panel; and solder closing the crevice at the abutting edges of said metallic sheets.

In witness that I claim the foregoing I have hereunto subscribed my name this 4th day of October, 1929.

GEORGE K. LEWIS.

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