

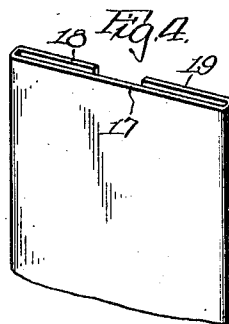
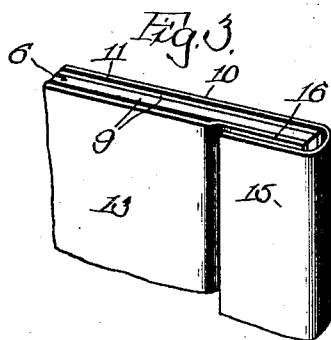
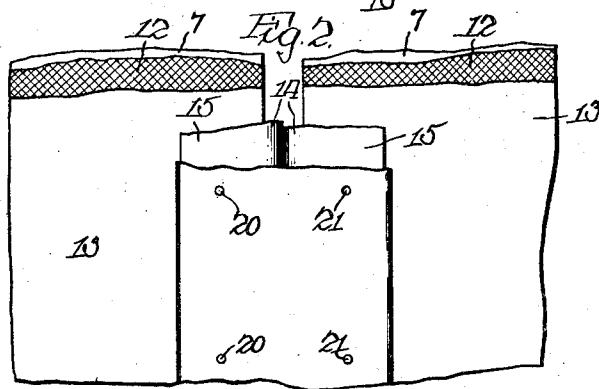
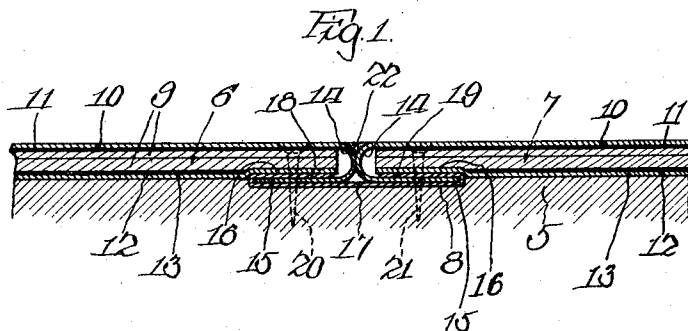
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CONNECTION FOR VENEERED PANELS

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CONNECTION FOR VENEERED PANELS

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This invention relates to connections for veneered panels.

An object of the invention is to provide means by which laminated veneered panels 5 may be arranged edge to edge and connected together in such manner as to provide a strong and neat joint therebetween, and wherein the connecting means are confined to one side of the plane defined by the panels, 10 and wherein the panels may be applied to a supporting structure having a cut-out portion for accommodating the connecting means for the panels and provide a support which further strengthens the joint.

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

In the drawings forming part of this specification, Figure 1 is a vertical sectional view 20 through fragments of a plurality of panels and a supporting wall therefor, showing the invention in connection therewith. Figure 2 is a fragmentary top plan view of the invention, parts of the same being broken 25 away to expose the construction thereof. Figure 3 is a fragmentary perspective view of one of the panels showing the means by which it is adapted to be connected to another panel. And Figure 4 is a connecting 30 member which co-operates with the means on both panels to secure them together.

As shown in the drawings, 5 represents a supporting wall to which a plurality of panels indicated at 6 and 7 are adapted to be 35 attached. The supporting wall 5 is provided with a cut-out portion or groove 8 adapted for the reception of projecting parts of the joint between the panels 6 and 7 as hereinafter referred to.

The panel 6 comprises a plurality of layers 40 of wood indicated at 9, said layers being glued together in such manner as to form what is generally known as ply wood. An outer layer or veneer 10 is provided which 45 consists of a thin sheet of steel, and interposed between the veneer 10 and the layers 9 of the ply wood is a sheet of fabric 11, the layers 9, 10 and 11 being glued together in a manner to provide a bond wherein the 50 fabric operates to permit the different rates

of expansion of the steel sheet and the ply wood, in a manner similar to that disclosed in re-issue patent, R. W. Burnett, No. 14,349, dated April 16, 1917. The inner surface of the panel 6 is also provided with a sheet 55 of fabric 12 and a steel veneer 13 in the same manner above described. The panel 7 is of exactly the same character as the panel 6 described in detail, and the invention has for its object the connection of two panels such 60 as those shown at 6 and 7 along their edges by an arrangement wherein portions of the steel veneer of each panel are inter-locked to connect the panels in edge to edge relation, attention being called to the fact that 65 due to the utilization of the fabric 11 between the steel veneers and the panels, any tendency of the joint hereinafter described, to be pulled apart, is avoided.

The connection between the panels 6 and 70 7 includes an integrally formed curved portion 14 formed on the veneer 10 adjacent the edge of the panel 6, said curved portion being provided with an extension 15 which is 75 reversely bent so as to over-lie an inwardly disposed off-set 16 in the steel veneer 13, the extension 15 being disposed in spaced relation with respect to the off-set 16 in the sheet 13. The panel 7 is of exactly the same construction as the panel 6 excepting for its 80 opposite disposition and similar reference characters will be applied to corresponding parts of both panels 6 and 7.

A connecting or locking member is provided which comprises a web portion 17, and 85 integral flanges 18 and 19, the flange 18 being disposed between the off-set 16 and the extension 15 of the panel 6, while the flange 19 is interposed between the extension 15 and off-set 16 of the panel 7. 90

The thicknesses of the flanges 18, extensions 15, and web 17, of the connecting means, provide a seam which is confined to one side 95 of the panels 6 and 7, and said seam is of such size as to fit nicely into the groove or cut-out portion 8 in the support 5 and preferably securing screws 20 and 21 are extended through the various plies of material at the edges of the panels, thus locking the same 100 in position, and securing the panels to the

support 5, and due to the fact that the panels lie flat against the face of the support 5, there is no tendency of the panels to swing about the connection, being braced by reason of the disposition of the seam in the cut-out 8 whereby all portions of the structure bear equally against the support 5. In order to seal the joint, solder indicated at 22, is applied to the small trough which is present due to the curvature of the portions 14—14 and when the solder is in place, it renders the outer surface of the panels 6 and 7 smooth and unbroken, and due to the presence of the fabric 11 which counter-acts warping, and the means by which the structure is braced against the support 5, the joint is rendered strong with no likelihood of breaking the solder connection.

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

I claim:

1. In a structure of the character described, the combination with a plurality of panels arranged edge to edge, each of said panels being provided with a metallic veneer on its opposite faces, the veneer on one of said faces being off-set inwardly, and the veneer on the opposite face of each panel being curved between the edges of the panels from one side to the other and reversely so as to overhang said off-sets; and a locking member having portions interposed between said off-sets and said reversely disposed extensions.

2. In a structure of the character described, the combination with a plurality of panels arranged edge to edge, each of said panels being provided with a metallic veneer on its opposite faces, the veneer on one of said faces being off-set inwardly, and the veneer on the opposite face of each panel being curved between the edges of the panels and reversely so as to overhang said off-sets; a locking member having portions interposed between said off-sets and said reversely disposed extensions; and securing elements extending through the edges of said panels and said extensions and said locking member.

3. In a structure of the character described, the combination with a plurality of flat panels disposed edge to edge, each of said panels having a sheet metal veneer permanently affixed to one surface through the interposition of bonding material between the veneer and the panel throughout the extent of each, each of said panels having its veneer projecting beyond the adjacent edges of said panels and extending between said edges to the opposite sides of said panels, said extensions at the opposite sides of said panel being secured together against separation and thereby main-

taining the panels themselves in predetermined connected condition.

4. In a structure of the character described, the combination with a plurality of panels, each formed of laminations permanently bonded together to form a unitary panel structure, one of said laminations being of metal to strengthen the panel, said panels being adapted to be utilized each as a complete unit; and means for securing said panels together along adjacent edges thereof, said means being confined to one set of adjacent edges of said panels and consisting of extensions formed upon the metallic lamination of each panel and an element co-operating with said extensions to connect the same, whereby said panels proper, each as an entirety, are secured together by said means.

5. In a structure of the character described, the combination with a plurality of panels each consisting of laminations permanently bonded together to form a unitary structure, one lamination of each panel being of metal and said panels being each complete as a separate unit, the laminations of each panel except the metal one being of fibrous material having a different rate of expansion and contraction than the metallic lamination, said fibrous lamination and metallic lamination of each panel having fabric interposed therebetween whereby the different rates of expansion and contraction are compensated for, said metallic laminations adjacent one set of edges of said panels being extended and co-operating with a locking member for securing said extensions together whereby, by reason of the connection of said extensions, said panels are secured together each as an entirety and distortion of the joint thus formed prevented by the presence of said fabric interposed between the fibrous and metallic laminations.

6. In a structure of the character described, the combination with a plurality of panels, each formed of laminations permanently bonded together to form a unitary panel structure, one of said laminations being of metal to strengthen the panel, said panels being adapted to be utilized each as a complete unit; and means for securing said panels together along adjacent edges thereof, said means being confined to one set of adjacent edges of said panels and including extensions formed upon the metallic lamination of each panel, said extensions being secured together and maintaining the panels in connected relation.

In witness that I claim the foregoing I have hereunto subscribed my name this 14th day of April, 1927.

JOSEPH LEVINE.