May 17, 1932. F. W. HUMPHNER 1,858,957

VENEER PANEL AND METHOD OF FORMING

Filed Oct. 10, 1931

Fig. 1.

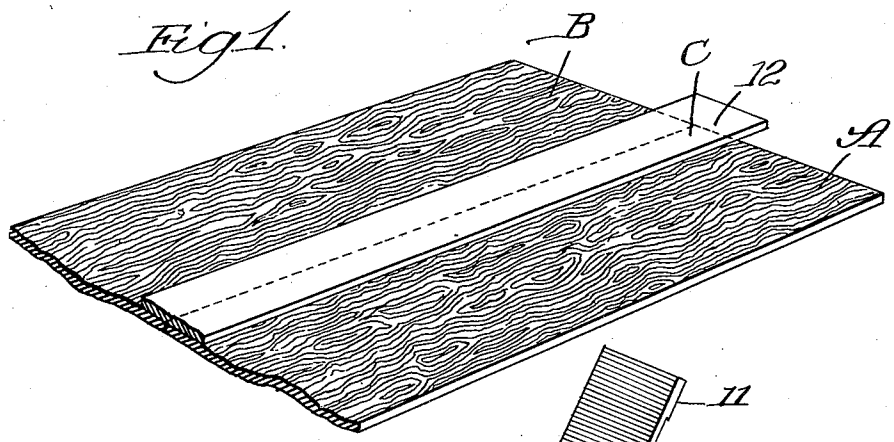


Fig. 2.

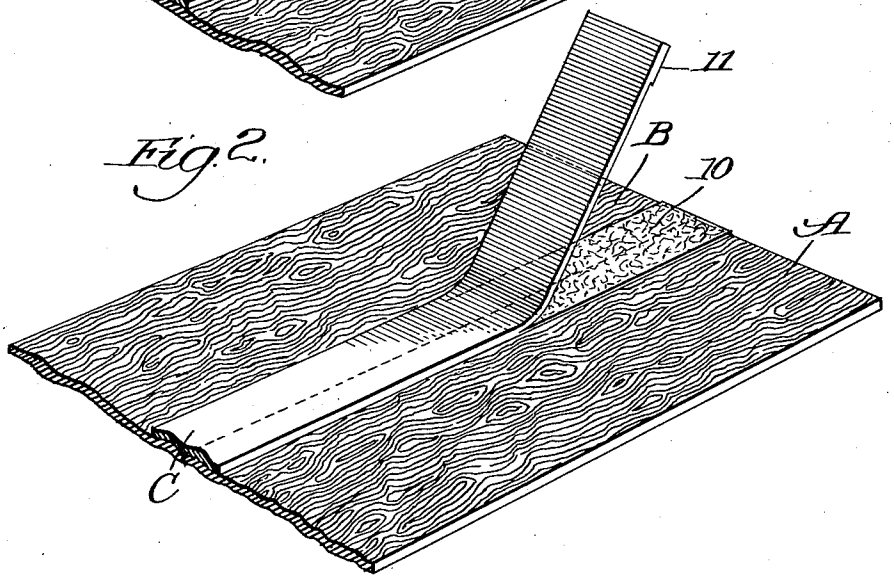
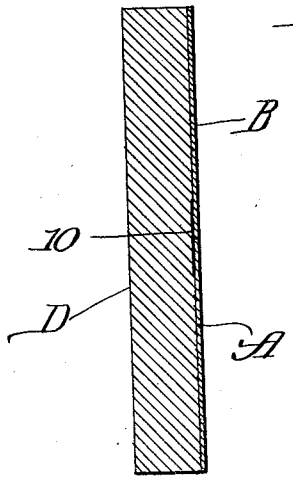


Fig. 3.



Inventor:
Ferdinand W. Humphner,
By Dyrenforth, Lee, Chritton & Wiles,
Attys.

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UNITED STATES PATENT OFFICE

FERDINAND W. HUMPHNER, OF OAK PARK, ILLINOIS, ASSIGNOR TO MID-STATES GUMMED PAPER CO., OF CHICAGO, ILLINOIS, A CORPORATION OF ILLINOIS

VENEER PANEL AND METHOD OF FORMING

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This invention relates particularly to veneer panels and to a method of forming such panels.

One of the objects of the invention is to provide a veneer panel of sturdy and inexpensive construction which may be applied to a surface D with little effort and which, when laid in position, presents a smooth and even exterior. Another object is to provide a panel formed of unusually thin sheets of veneer which are united in such a manner as to securely bind the adjacent edges of the sheets to a surface, the exterior of the panel being smooth and even. A further object is to provide a method of forming panels which may be subjected to considerable handling, as during shipment, and of applying the panels in such a manner as to avoid unevenness in the finished panel and to avoid the necessity of treating the exterior thereof. This invention conserves materials and eliminates waste, also, reduces time in the manufacture of veneered articles. Other objects and advantages will appear as the specification proceeds.

The invention is fully described in the following specification and shown in the accompanying drawings in which—

Fig. 1 is a broken perspective view of a panel embodying my invention; Fig. 2, a similar perspective view, showing, however, the union strip partially divided; and Fig. 3, a transverse sectional view.

In the illustration given, A and B designate respectively a pair of veneer sheets; and C designates a union strip which overlaps the adjacent edges of the veneer sheets and unites them.

The veneer sheets A and B may be of any suitable form and of any suitable material. In the illustration given, they are formed of wood and preferably they comprise very thin sheets of wood. It is practical to employ sheets of veneer substantially thinner than has previously been employed. Veneer sheets can be used down to 1/120th of an inch in thickness by my method, where previously 1/20th of an inch was employed.

The union strip C may be formed of any suitable fibrous and splitable material. I prefer to employ a strip of paper having suitable fibers for uniting the sheets of veneer and which also may be split to leave a minor portion of the paper strip secured to the sheets A and B. Paper having short fiber, of close formation and partially sized has been found to be satisfactory. When the strip is glued to the veneer sheets, it has been found that the glue penetrates a short distance into the strip; then when the paper is divided or split, the larger portion, say about two-thirds, of the strip is removed. The remaining thin web 10 is sufficient to hold the panels A and B securely together, particularly during the operation of applying the panel to a surface D.

The free or exposed surface of the web 10 is formed of loose fibers which readily absorb glue and which may be compressed into small compass. The removed portion 11 of the union strips C may be discarded. As shown more clearly in Figs. 1 and 2, the strip C is provided with a tab extension or free end 12.

Heretofore, in forming veneer panels, it has been the practice to apply strips of paper to the outer adjacent edge portions of the sheets and the sheets thus united are glued to the desired surface. The paper strip on the outer or exposed surface of the panel is then removed by sanding, the sanding operation being carried out by a sand belt, sanding machine or the like. In this operation, it is necessary to remove not only the paper but also the portions of paper fiber and glue which have penetrated into the veneer sheets. Accordingly, it has been the practice to remove a considerable portion of the veneer sheets not only at the lines of union but also over the entire surface, in order to present a smooth and even exterior. This has necessitated the use of panels of substantial thickness.

According to my method, it is practicable to employ thinner veneer sheets than have previously been used in the construction of panels; and the sanding operation above described is dispensed with.

The veneer sheets A and B, united as illustrated in Fig. 1, may be subjected to the

rough handling encountered in shipment without damage, the union strip C being sufficiently thick to withstand the stress and strain imposed by such usage. When the veneer sheets are ready to be applied to the desired surface, in the practice of my improved method, the tab or free end 12 of strip C is grasped and the upper portion 11 removed. This leaves the thin web 10 with its exposed loose fibers uniting the veener sheets. The web 10 is sufficiently strong to hold the sheets A and B together while they are being applied to a surface. A layer of glue is applied to the rear sides of the sheets A and B and to the web 10 and the panel is then placed in position against the desired surface. Under compression, the fibers of strip 10 are compressed so that the thickness of the web 10 after application equals substantially the thickness of the glue layer which units the veneer sheets directly to the desired surface. It has been found that more glue is required to bond the veneer to a surface than to bond the fibrous web 10. After the panel has been placed in position, the exterior of the panel is smooth and even, no bulge occurring at the line of union of the veneer sheets.

It will be observed that with my improved panel and method of forming and applying it, that sheets of relatively thin cross-section may be employed, that the sanding operations formerly used are dispensed with, and that the exterior or finished side of the veneer sheets are not marred in any way so as to require treatment, the adjacent edges of the sheets being held firmly together and their union to a desired surface reinforced by the fibrous web 10. The web 10 is not splitable and the glue which cements it to surface D readily penetrates the fibers and meets the glue which bonds strip 10 to the sheets A and B. The thickness of the web 10 and the pressable character of its fibers permits it to be used on the inner side against surface D without deforming the exterior of the panel.

The foregoing detailed description has been given for clearness of understanding only and no unnecessary limitations should be understood therefrom, but the appended claims should be construed as broadly as permissible in view of the prior art.

I claim:

1. A veneer panel comprising at least two sheets of veneer united edgewise by a strip of split paper overlapping and bonded to adjacent edges of the sheets.

2. A veneer panel comprising at least two sheets of veneer united edgewise by a strip of split paper overlapping and bonded to adjacent edge portions of the rear sides of the sheets, the split side of the paper strip being exposed.

3. A veneer panel comprising at least a pair of sheets of veneer united edgewise by a strip of splitable paper overlapping and bonded to adjacent edge portions of the sheets, said strip having a free tab portion extending beyond the edges of said sheet.

4. The method of applying veneer panels to a surface comprising uniting a plurality of veneer sheets by splitable paper strips, said strips overlapping and being bonded to adjacent edge portions of the sheet, tearing away the outer portion of the paper strips, and bonding the papered side of said sheets to said surface.

5. The method of applying veneer panels to a surface comprising uniting a plurality of veneer sheets edgewise by bonding to the adjacent rear edge portions thereof a splitable paper web, tearing away the outer portion of the paper web, and securing the veneer sheets to a surface so that the split paper web lies between the surface and the veneer sheets.

FERDINAND W. HUMPHNER.