A. JAMINET.

REINFORCED WOOD PANEL.

APPLICATION FILED NOV. 16, 1912.

1,084,276.

Patented Jan. 13, 1914.

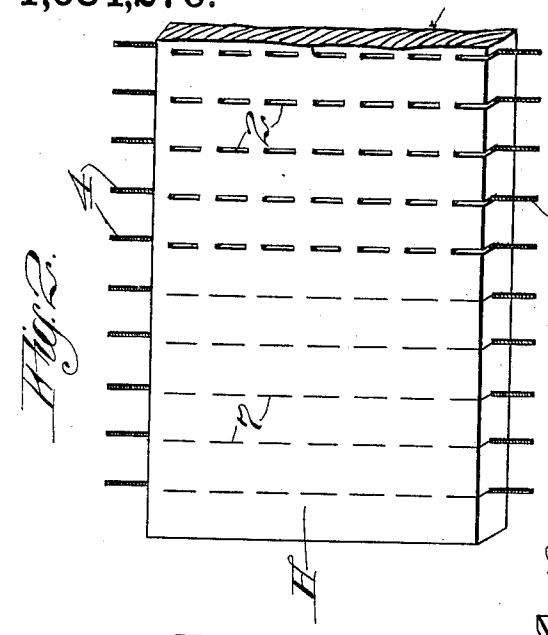


Fig. 2.

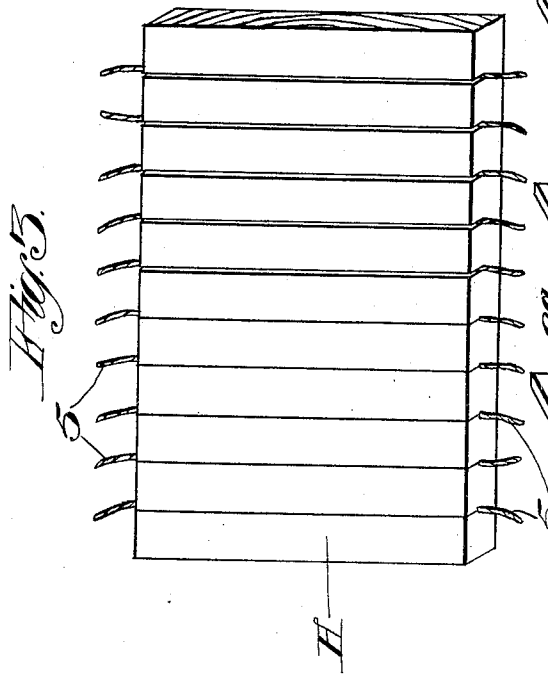


Fig. 3.

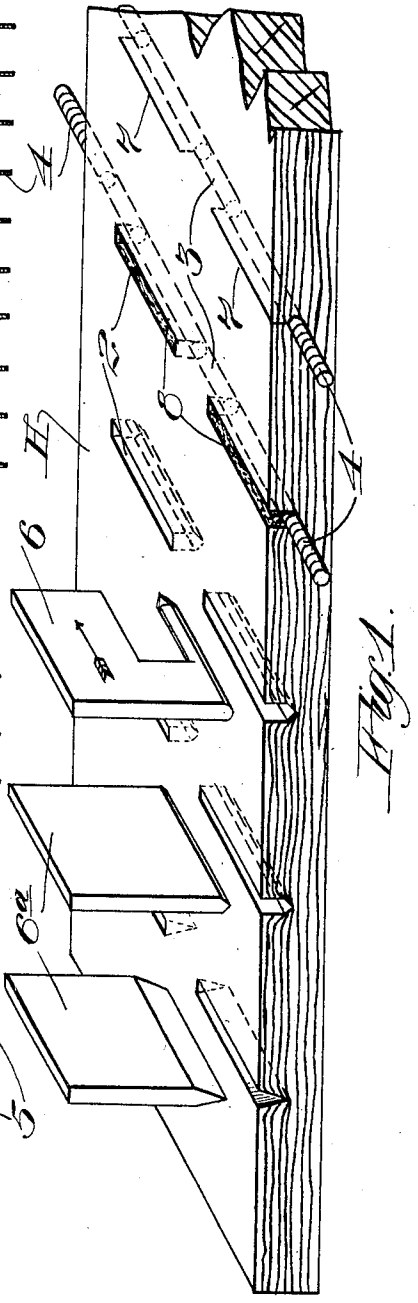


Fig. 1.

WITNESSES:

Thos. Eastberg.

R. S. Berry.

INVENTOR

August Jaminet.

BY G. H. Strong

his ATTORNEY.

COLUMBIA PLANOGRAPH CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

AUGUST JAMINET, OF SAN FRANCISCO, CALIFORNIA.

REINFORCED WOOD PANEL.

1,084,276. Specification of Letters Patent. Patented Jan. 13, 1914.

Application filed November 16, 1912. Serial No. 731,749.

To all whom it may concern:

Be it known that I, AUGUST JAMINET, a subject of the Duchess of Luxemborg, residing in the city and county of San Francisco and State of California, have invented new and useful Improvements in Reinforced Wood Panels, of which the following is a specification.

This invention relates to a reinforced wooden panel.

The object of the present invention is to provide a suitable reinforcing means which may be embedded and secured in the body of a panel for the purpose of preventing warping or splitting of same.

A further object of the invention is generally to improve the art of wood reinforcing so as to increase its utility and durability.

The invention consists of the parts and the construction and combination of parts as hereinafter more fully described and claimed, having reference to the accompanying drawings, in which—

Figure 1 is a perspective view of a panel and tools employed for the formation of the grooves in which the reinforcing material is placed. Fig. 2 is a perspective view of a panel showing the pockets and the reinforcing material in position before and after the expansion of the pockets into normal position. Fig. 3 is a similar view showing the formation of the grooves for the reception of the reinforcing material.

The object of the present invention is to embed in the body of a wooden panel a suitable reinforcing means which will prevent warping or splitting of same when exposed to heat or moisture caused by climatic or other conditions.

The embedding of the reinforcing material in the body of a panel is accomplished in the following manner: A indicates the panel and 2 a series of pockets or grooves formed in the back of the panel; the depth of these pockets or grooves being approximately half the thickness of the panel. The lower portions of the pockets 2 are connected with perforations or passages 3. The reinforcing material placed in these pockets may consist of a threaded wire 4, a twisted wire, a wooden dowel, or a flexible reinforcing means, as a cord 5, shown in Fig. 3. A reinforcing material of this nature is forced through the panel by being passed through the pockets or grooves 2 and connecting passages 3, and is secured in the panel with the object in view of preventing splitting or warping of same. The means or method for securing the reinforcing material will later be described.

The pockets or grooves 2 are preferably cut by a chisel-shaped or similar tool. The tool or tools 6^a employed in forming the pockets may be mounted upon a roller or similar well known device in such a position that the panel, when being passed under the roller, will be acted upon by the tools to form the pockets. The connecting passages between the pockets 2 may be produced by suitable means, as by a drill or a tool indicated at 6, Fig. 1, which may be mounted on a reciprocating member. Tools for this kind when entering crosswise of the grain in the wood, will first cut the fiber of the wood and then spread the fibers apart or compress them endwise by the bevel of the tool being forced into the wood. A groove or pocket thus produced will close itself again on the application of water, as shown at 7, Fig. 1. The small fibers of the wood expanding, due to moisture, will come back in their former place or position sufficiently to grip or secure the reinforcing material placed in the grooves, and will also tend to close that part of the pocket or groove extending above the reinforcing material. By referring to Fig. 3, it will be seen that the same results may be obtained by forming one continuous groove across the face of the panel; the groove being formed by the same method as formerly described.

By employing the reinforcing material here shown and securing it by expanding the wood, the panel becomes absolutely impervious to weather conditions, as both moisture and heat will tend to more securely grip the reinforcing material. I also wish it understood that a series of panels may be secured together by passing the reinforcing material, as the threaded wire 4, through a whole series of panels, thus eliminating the necessity of joining the panels by other means, this producing a reinforced wooden partition with transverse metallic threaded or twisted wires embedded in same. The embedding of a twine or fibrous material, indicated at 5, in the panel is only desirable where the material is to be re-cut and fitted for different purposes.

A panel reinforce as here shown can be built in different thicknesses and will thus

not occupy more space than laminated panels heretofore used. The reinforcing materials embedded in the wood are such as experience and judgment of the manufacturer may dictate.

I wish it understood that various changes and minor details of construction may be resorted to within the scope of the appended claims and that I do not wish to limit myself to the specific construction here shown.

Having thus described my invention, what I claim and desire to secure by Letters Patent, is—

1. The method of introducing a reinforcing strand into a wood panel which consists in severing the fibers transversely on the line of the proposed reinforcement without removing material and crowding back the ends of said fibers to form a groove to receive the reinforcement, introducing the latter into said groove and permitting the expansion back of the crowded fibers to close the wood onto and retain the reinforcing strand.

2. A reinforced structure comprising a wood panel, a series of pockets in one side of the panel having the sides spread apart or compressed endwise of the grain, inclosed passages connecting said pockets, and a reinforcing material extended through said pockets and communicating passages, the sides of said pockets being expanded to grip the reinforcing material.

In testimony whereof I have hereunto set my hand in the presence of two subscribing witnesses.

AUGUST JAMINET.

Witnesses:
JOHN H. HERRING,
W. W. HEALEY.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."