March 12, 1940. B. WICH 2,192,949

FURNITURE CONSTRUCTION

Filed April 21, 1938

Fig. 1.

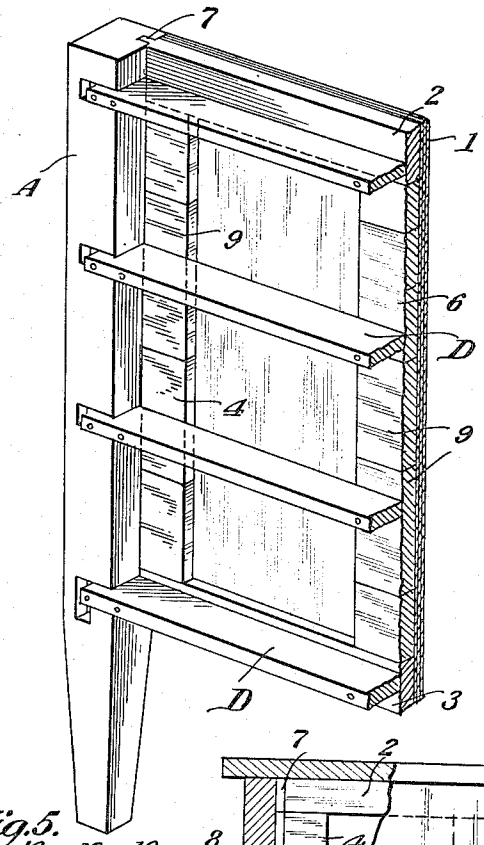


Fig. 3.

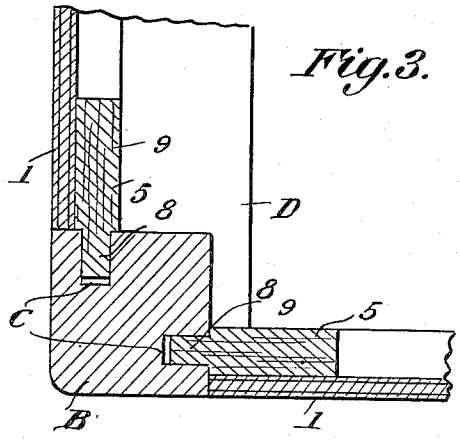


Fig. 4.

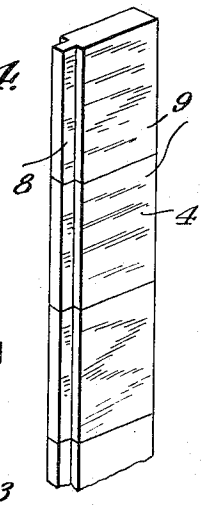


Fig. 2.

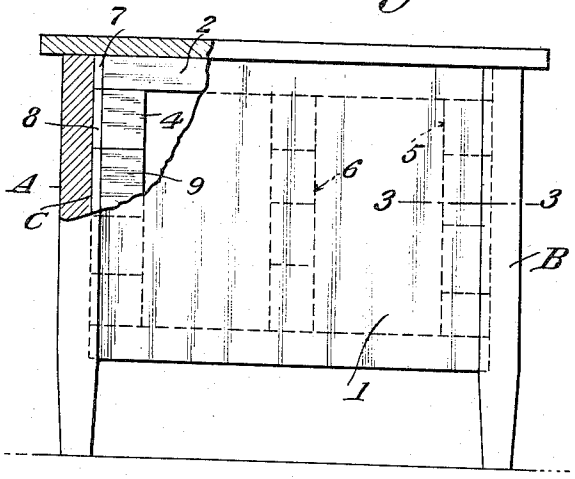
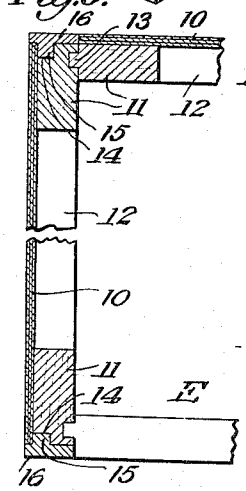


Fig. 5.



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FURNITURE CONSTRUCTION

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Application April 21, 1938, Serial No. 203,420

3 Claims. (Cl. 45—6)

This invention relates to furniture, and its general object is to improve the construction of panel furniture, such as desks and the like, in a manner so that the panels are not only materially reinforced, and the rigidity of the furniture increased accordingly, but the panels are disposed flush with the outer faces of the leg members, thereby adding to the appearance of the furniture, as well as rendering the walls thereof easy to clean and polish, due to the elimination of interior corners.

A further object is to provide a reinforced laminated or ply wood panel, with the reinforcing means thereof in the form of a frame glued or otherwise suitably secured to the panel about the outline thereof and along its vertical center, with tongues on the outer or side members of the reinforcing means and secured in the usual grooves in the leg members, which receive the ends of the panels in furniture now in general use, and the reinforcing members may also be made from ply wood, particularly the side members, but are preferably made of soft wood, with the grain extending horizontally thereof when the panels are in use.

Another object is to provide a panel with reinforcing means therefor, that includes a central member that also acts as supporting means for drawer guides or runs.

A still further object is to provide a reinforced panel that is simple in construction, easy to apply, and extremely efficient in use and service.

This invention also consists in certain other features of construction and in the combination and arrangement of the several parts, to be hereinafter fully described, illustrated in the accompanying drawing and specifically pointed out in the appended claims.

In describing the invention in detail, reference will be had to the accompanying drawing wherein like characters denote like or corresponding parts throughout the several views, and in which:

Figure 1 is a perspective view with parts in section and illustrates a panel construction, in accordance with the present invention.

Figure 2 is a side view of a desk, illustrating my panel construction in the make-up thereof and with parts broken away.

Figure 3 is a sectional view taken approximately on line 3—3 of Figure 2, looking in the direction of the arrows.

Figure 4 is a detail view of one of the side reinforcing members.

Figure 5 is a fragmentary sectional view of a modified form of panel construction.

Referring to the drawing in detail, it will be noted that I have illustrated my reinforcing panels as being used in the construction of a flat top desk, but they can be used in the construction of any type of panel furniture, such as cabinets, buffets, serving tables, dressers, bureaus, etc., and the front and rear corner or leg members of the desk shown are indicated respectively by the letters A and B. The corner or leg members are of the usual construction, in that they have vertical grooves C extending longitudinally thereof, and which are used in the conventional furniture construction to receive the ends of panels, but the grooves are not for that purpose in the present construction. The legs are also mortised or recessed to receive the ends of drawer separating strips, not shown, and the drawer guides or runs D are aligned with the recesses, in the usual manner, and as clearly shown in Figure 1.

The reinforced panel which forms the subject matter of the present invention includes a panel member 1 that is shown as being laminated or made from ply wood, for strength, as will be apparent, and secured to the rear face thereof as by glue or other suitable securing means, is a reinforcing frame that includes horizontal upper and lower strip members 2 and 3, vertical side strip members 4 and 5, and a vertical central strip member 6.

The upper, lower and side strip members follow the outline of the panel 1 for disposal flush with the outer edges thereof, but the ends of the upper and lower strip members, as well as the outer sides of the side strip members have tongues 7 and 8 respectively, formed thereon, and which are mounted and adhesively secured in the grooves C of the leg members, as clearly shown in Figures 2 and 3, the tongues being arranged so that the outer face of the panel is flush with the outer face of the leg members, as best shown in Figure 3.

It is essential that the horizontal upper and lower strip members 2 and 3 be made into a single unit, but the side and central strip members are made from a plurality of rectangular blocks 9, as best shown in Figures 1 and 4, glued or otherwise secured in end to end contact, and the blocks may be of any length, providing the vertical strip members are of the proper length for fitting association between the horizontal strip members, as the vertical strip members are glued or otherwise secured at their ends to the confronting portions of the horizontal strip members.

Each of the blocks 9 as well as the horizontal strip members are preferably made from solid, soft wood, with the grain extending horizontally thereof when the frame is in applied position, as best shown in Figure 1. However, the vertical strip members may be made from ply wood and into a single unit, instead of the blocks 9, but it has been found in practice that by providing the vertical strip members made from soft wood blocks glued together, with the grain arranged as above set forth, such brings about the desired result, due to the rigidity of said strip members, as it will be obvious that they possess very little flexibility and will not bend as readily as one piece strip members, with the grain running longitudinally thereof.

The frame not only reinforces the panel, to materially increase the rigidity of the furniture, as will be apparent, but the central strip member 6 provides additional supporting means for the drawer guides or runs D, which are secured thereto and the other strip members and also to the leg members, by glue and nails, as shown.

While I have illustrated in Figures 1 to 4 inclusive my reinforced panels as being used with legged furniture, such as a flat top desk, the panels can be used with furniture that have no legs or the type in which the walls thereof extend for the entire height of the furniture, or from the top to the floor surface, and such furniture can be constructed with my reinforced panels in the manner as shown in Figure 5.

In Figure 5 the side and rear walls of the desk include panels 10 and which have glued or otherwise secured to their inner faces about the outline thereof, reinforcing frames which also include vertical side strip members 11 and horizontal upper and lower strip members 12. In this form, the side strip members and the ends of the horizontal strip members of the rear panel may be secured to the side strip members and ends of the horizontal strip members of the side panels, by adhesively secured tongue and groove connections 13, and the side strip members of the side panels as well as the ends of the horizontal strip members thereof may be recessed as at 14 for receiving tongues 15 of corner strips 16, which have the panels disposed flush with the faces thereof, as shown. The front portions of the strips for the side panels are recessed to receive the tongues of division rails or strips E for the drawers of the desk, as will be apparent.

Central reinforcing strip members, not shown, may also be used with the panel construction of the form of Figure 5, and while the reinforcing strip members are shown in Figure 5, as being secured together, the corner members 16 may be of a size to have the strip members secured thereto, in the same manner as the legs A and B of the form of Figures 1 to 4 inclusive.

While it has been stated that the panels are laminated or made from ply wood, it will be obvious that they can be made from any material suitable for the purpose. Again, it might be mentioned that even though the disposal of the panels flush with the outer faces of the leg and corner members is of extreme importance, the panels can be disposed inwardly or outwardly with respect to the edges of the outer faces.

It is thought from the foregoing description that the advantages and novel features of the invention will be readily apparent.

It is to be understood that changes may be made in the construction and in the combination and arrangement of the several parts, provided that such changes fall within the scope of the appended claims.

What I claim is:

1. A panel construction for furniture including corner members, said construction comprising a panel, a reinforcing frame including upper, lower and side members fixed to the inner face of the panel about the outer edges thereof and to the corner members of the furniture in a manner for disposing the panel flush with the outer faces of the corner members, said upper and lower members being made from a single strip of wood with the grain extending longitudinally thereof and the side members being made from blocks of wood fixed together in end to end engagement and the grain of the blocks extending transversely thereof.

2. A panel construction for furniture including grooved corner members, said construction comprising a ply wood panel, a reinforcing frame for said panel and including upper, lower and side members fixed to the inner face of the panel about the outer edges thereof, tongues formed on the ends of the upper and lower members and the outer sides of the side members, said tongues being fixed in the grooves and the tongues and grooves being arranged for disposing the panel flush with the outer faces of the corner members, a central member included in the frame and having its ends fixed to the upper and lower members, and said central and side members being formed from a plurality of blocks of wood secured together in end to end engagement.

3. A panel construction for furniture, comprising a panel, a reinforcing frame including upper, lower and side members fixed to the inner face of the panel about the outer edges to follow the outline thereof, said upper and lower members being made from a single strip of wood with the grain extending longitudinally thereof, and the side members being made from rectangular blocks of wood fixed together in end to end engagement with the grain of the blocks extending transversely thereof.

BERNARD WICH.