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FURNITURE CONSTRUCTION

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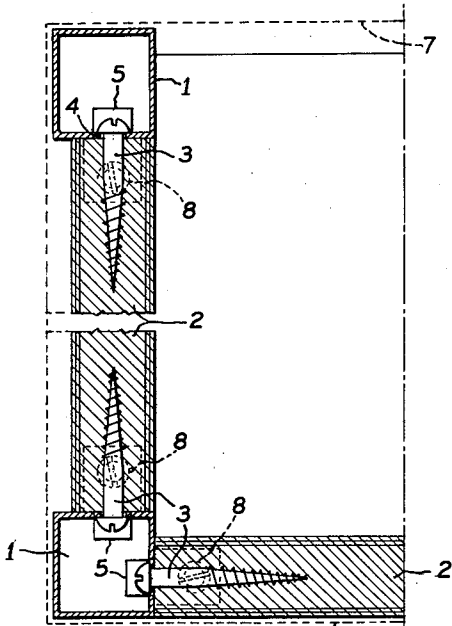


FIG. 1

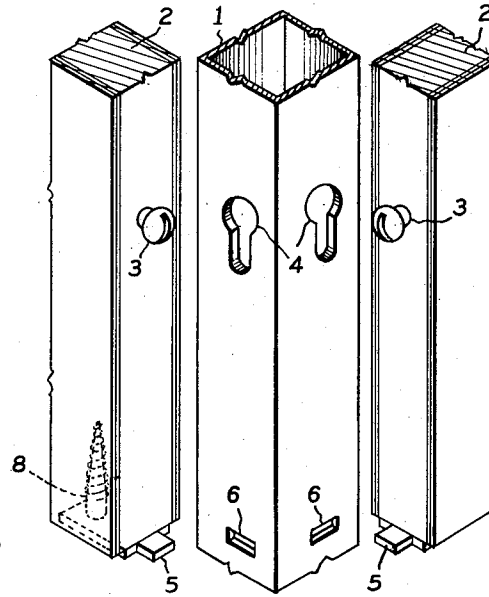
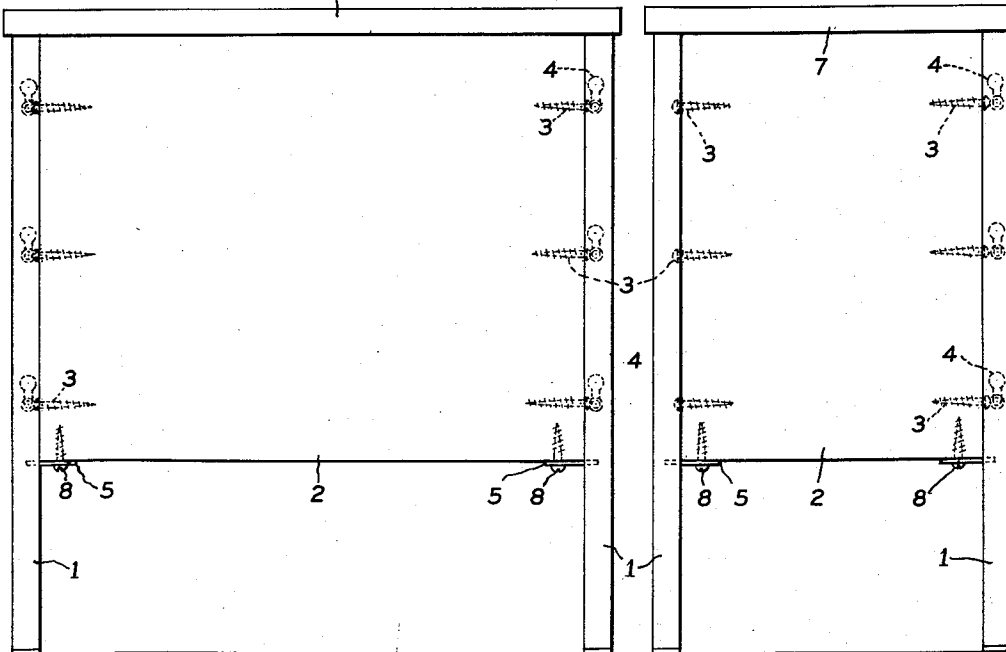


FIG. 2

FIG. 3

FIG. 4



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FURNITURE CONSTRUCTION

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1 Claim. (Cl. 312—257)

This invention relates to articles of furniture known in the industry as free standing case goods.

The principal object of this invention is the provision of a furniture construction wherein it is possible to quickly assemble and equally as quickly to disassemble the major component parts of such furniture construction, namely, the side panels (which also includes front and back panels) and the corner posts.

Briefly stated, this construction involves the use of a plurality of side panels and a plurality of corner posts, a plurality of headed fastening members secured to said side panels and a plurality of keyhole slots formed in said corner posts for engagement with said fastening members.

An important feature of this invention is the fact that it is ideally suited to assembling wooden side panels with metal corner posts. The headed fastening members may simply be a plurality of wood screws driven into the side edges of the wooden side panels. The metal posts are tubular in cross-section and the keyhole slots are formed in their side walls, preferably in at least two side walls adjacent each other. The heads of the screws are accommodated within said tubes and the shanks of said screws are accommodated by said keyhole slots.

Another important feature is the locking element which prevents disengagement of the wooden side panels from the metal corner posts. This locking element is simply a bar which is secured to the bottom edge or edges of one or more of said wooden side panels and transverse slots are formed in the tubular metal corner posts to receive said locking bars.

An important advantage of this invention is its flexibility or versatility in that it may readily be adapted to many forms and articles of furniture. For example, it may be applied to desks, bureaus, bookcases, china closets, chests of drawers, and other cabinet constructions.

Still another important advantage of this invention is the fact that the several parts made in accordance therewith may be interchangeably used in various articles of furniture. For example, corner posts made in accordance with this invention may be used without change for desks and bureaus, vanities and other articles of furniture of generally like size. By the same token, side panels made in accordance with this invention may be embodied in any of these last named articles of furniture or in any other articles of furniture of corresponding size. In short, both the corner posts and the side panels are completely interchangeable within the limitations imposed by size requirements.

The invention is illustrated in the accompanying drawing, in which:

Fig. 1 is a fragmentary horizontal section through an article of furniture embodying the features of this invention, showing two corner posts and two side panels.

Fig. 2 is a fragmentary, perspective, exploded view of three components of the article of furniture shown in Fig. 1, namely, one corner post and two side panels.

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Fig. 3 is a front view of the article of furniture shown in Fig. 1.

Fig. 4 is a side view of said article of furniture.

Referring now to the drawing, it will be observed that a typical article of furniture made in accordance with this invention is provided with a plurality of corner posts 1 and a plurality of side panels 2. The corner posts are made of metal and are tubular and preferably rectangular in cross-section as the drawing clearly shows. The side panels are made of wood, preferably of relatively heavy plywood with suitable veneering, appropriate to the particular article of furniture under construction. For example, a panel with walnut veneer may be suitable for one type of furniture but not for another, while teak veneer might be more appropriate for a particular type of furniture than for another type. However, the several panels would nonetheless be interchangeable in the sense that they might be used without change in more than one form of furniture.

The type of wood which may be used is purely a matter of preference and does not affect the essential principles of the invention. The corner posts may also be made of any suitable metal, preferably 16 gauge cold rolled steel tubing, or brass tubing or extruded aluminum. It is possible by the extrusion process to provide the corner posts with longitudinally extending formations, such as ribs or grooves, to enhance their appearance and at the same time to provide adequate structural strength. The corner posts may, of course, be suitably finished to harmonize or contrast with the finish of the side panels.

It will now be observed that fastening elements 3 are secured to the side edges of side panels 2. Since these side panels are made, preferably, of wood, the most suitable fastening elements for the purposes of this invention are screws, since they may be driven directly into the side panels by conventional means.

It will now be noted that the head of these screws is not driven into direct abutment with the side edge of the panels. Instead, it is spaced therefrom to the extent of the thickness of the walls of the tubular corner posts. The reason for this will shortly become apparent.

Each tubular corner post is provided on at least one side wall with at least one keyhole-shaped slot 4. Preferably, of course, two such keyhole-shaped slots are formed in each of two side walls of each tubular corner post. The particular side walls in which these keyhole-shaped slots are formed should be adjacent walls as Fig. 2 clearly shows. There should be as many screws 3 as there are keyhole-shaped slots 4. Each screw 3 is engageable with a corresponding keyhole-shaped slot 4. The head of the screw passes through the larger end of such keyhole-shaped slot, namely, the upper end, but it cannot pass through the smaller end thereof which is the lower end. Consequently, it is possible to assemble the side panels to the corner posts by interengaging their respective screws and keyhole-shaped slots.

To prevent accidental disengagement of said screws from said keyhole-shaped slots and thereby preventing disengagement of the side panels from the corner posts, locking means are provided. Said locking means comprises at least one locking bar 5 which is secured to the bottom of at least one side panel 2, and at least one transverse slot 6 formed in at least one corner post. Preferably, each wall of each corner post in which keyhole-shaped slots are provided should also have one transverse slot 6 formed therein. Also, there should be as many locking bars 5 as there are transverse slots 6.

Locking bars 5 are attached to the side panels after the side panels are secured to the corner posts. A simple method of attaching these locking bars is by means of screws 8. The locking bars engage transverse slots

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6 and prevent vertical movement of the side panels relative to the corner posts. In this way disengagement of screws 3 from keyhole-shaped slots 4 is prevented.

The article of furniture shown in the drawing is provided with a top wall 7 which is attached by conventional means and forms no part of the present invention. The type of furniture shown possesses four corner posts and three side panels, one of which may be deemed either the front or back panel of said furniture. This is purely illustrative and should not be construed as limiting the invention in any way whatsoever.

The foregoing is illustrative of a preferred form of this invention and will be modified, as desired, within the broad principles of the invention and the broad scope of the claim.

I claim:

An article of furniture having a plurality of side panels and a plurality of tubular corner posts, keyhole slots formed in said posts and headed fastening members secured to said panels, said fastening members being in detachable engagement with said keyhole slots to secure the panels to the posts, said tubular corner posts being metal tubes which are substantially rectangular

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in cross-section, said keyhole slots being formed in at least two adjacent walls of each said metal tube to accommodate the screws of at least two said wooden side panels disposed at right angles to each other, said tubular metal corner posts being provided with transverse slots formed in the same side walls in which the keyhole slots are formed, said transverse slots being located adjacent the bottom edges of said wooden side panels, and locking bars being detachably secured to said bottom edges of said wooden side panels and being in engagement with said transverse slots to prevent disengagement of said wooden side panels from said tubular metal corner posts.

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