MOLDING AND CABINET CONSTRUCTION

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References Cited

UNITED STATES PATENTS

197,968 12/1877 Drake .................................... 27/10
517,521 4/1894 Hemel ..................................... 52/753
792,979 6/1905 Fluhm .................................... 52/753
2,082,431 1/1937 Tripp .................................... 403/267
2,143,034 1/1939 Sakier .................................... 52/717
2,663,916 12/1953 Milliker .................................. 49/487
3,239,891 3/1966 Gardner .................................. 52/62 R
3,379,483 4/1968 Oldford .................................. 312/257 R

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ABSTRACT

The cabinet construction of the present invention utilizes a key hole method of joining panel members and a plastic molding for the exposed edges. The plastic molding is designed to snap on or slide onto the key hole tongues of the cabinet panel edges. The molding is such a size and construction to permit section blanks of a panel to be removed and the perimeter of the blank to be covered with the molding which thereby permits it to be utilized as a door or a decorative panel without any loss of material. In the preferred embodiment, the molding consists of a rear flat surface designed to interface with the back of the panel and a front and top surface designed to provide a decorative finish and to overlap the interface of the panel key hole tongue and surface.

5 Claims, 3 Drawing Figures
BACKGROUND OF THE INVENTION

1. Field of the Invention
The present invention relates to cabinet assemblies and other furniture and more particularly, to an economic cabinet design with molding.

2. Description of the Prior Art
The cabinet making art has gradually over the years relied to a greater extent upon cabinet construction that can be shipped in an unassembled or do-it-yourself manner. In addition, cabinets have been provided so that the component parts can interlock with each other with a minimal use of conventional fastening components such as nails, screws, glue, doweling, etc. Generally, these prefabricated cabinet assemblies eliminate the large volume requirements in conventional assembly transportation and storage and provide a rapid and easy assembly at their ultimate destination. Examples of such furniture are numerous and include bookcases, desks, chests of drawers, kitchen cabinets, bathroom cabinets, etc.


Recently, wood panels have been formed from granular or small wood pieces that are pressed together with appropriate adhesives to form sheets of wood. This form of panel sheeting is highly advantageous in terms of cost and surface quality for cabinet making; however, the fiber nature of the board presents irregular surfaces when machined that are particularly prone to chip or present an undecorative appearance. Attempts have been made to fill the irregular edge surfaces by caulking and other methods but this is relatively expensive and frequently inadequate in providing an acceptable decorative surface.

Whenever doors or decorative panels are required in cabinets, it has been necessary to require extra sheets of wood panels to provide these members.

SUMMARY OF THE INVENTION

The present invention provides a cabinet assembly that can utilize a wood panel such as a pressed fiber board sheet of wood with a minimum of wastage. The panels of the cabinet assembly utilize a key hole tongue end for connection with appropriate grooves in a special molding strip configuration. A molding strip is provided that can be slid or snapped onto the perimeter of a panel member or a cut out blank of the panel to provide both a decorative and a utilitarian function. The molding presents a pleasing surface and protects the fiber board from further chipping while in addition permits the use of cut out blanks for features such as doors and the like without any wastage of material. The molding provides a decorative surface on the top and front and a flat surface on the rear to provide a continual interfacing plane with a panel or cut out blank surface.

The features of the present invention which are believed to be novel are set forth with particularity in the appended claims. The present invention, both as to its organization and manner of operation, together with further objects and advantages thereof, may best be understood by reference to the following description,
3,837,721 3 doors 12 and decorative panels 10 added to these panels without resorting to additional sheets of material.

It has generally been necessary to have the door member or decorative panel cut from an additional sheet of material to permit an overlapping over the entire sheet as in the case of the decorative panel 10 or over the opening in the panel in the case of the door 12. In the present invention, the door 12 can be cut directly from the front panel 6 and with the addition of molding strips 14 having 45 degree angular ends 13 it is possible to effectively enlarge the cut blank door to permit its use as a door on the same panel member from which it is cut. Likewise, a decorative panel 10 with appropriate molding 14 can also be produced from the same upper panel member 7 without resorting to an additional sheet of material.

As can be easily understood, this also permits an easy packaging of the cabinet assembly in a compact form by simply cutting the blank door 12 or decorative panel 10 and letting it remain within the panel sheet from which it is cut.

As can be readily understood by those familiar with cutting out component parts in cabinet assemblies, the cutting of a door or decorative panel from a sheet of material, especially fiber board, will produce both jagged edges and a gap of approximately one eighth of an inch or more about the perimeter of the resulting blank and panel. As a result, it has been necessary to cut one panel member to act as a frame for a door or for a decorative panel and then to return to a second panel member to cut a slightly larger door blank to achieve the desired decorative effect required in modern cabinet assemblies.

The molding strips 14 of the present invention remove this wastage and permits the same panel sheet to provide either the decorative panel or the appropriate door with the simple addition of the molding 14 to the cut out blank. As can be seen in FIGS. 1 and 2, the molding 14 is positioned about the entire perimeter of the door blank 12 with the decorative contour surface 22 on the outside and the door blank 12 can be attached to appropriate hinges 28 to complete the assembly. Likewise, the decorative panel 10 will have the molding 14 positioned about its entire perimeter and the decorative panel 10 is then permanently attached over the cut blank opening in the upper panel member 7.

The particular offsetting of the key hole tongue 16 and its bulbous head 20 provides the step shoulder 18 that permits the molding 14 to be securely fastened. This offset connecting configuration with the rear surface of the molding in the same plane as the rear panel face is particularly adapted to the fitting of the blanks such as the door 12 and the decorative panel 10 in a flush manner with the face or surface of the respective panels 6 and 7. The overlapping lip 24 of the molding 14 insures that the ornamental feature of the door 12 or the decorative paneling 10 will not be marred by any discontinuities along the interface between the sloping edge 23 of the base of the key hole tongue 16 and the surface of the panel member.

As seen in FIG. 3, the connecting configuration between the peripheral edge and the molding 14 can be modified from that shown in FIG. 2 to have a somewhat diamond cross sectional shape. Other configurations are possible within the scope of the invention.

As disclosed in FIG. 1, a cabinet is provided for use in a bathroom or kitchen adapted to receive a sink member 38 across its top. However, it should be realized that this is for illustrative purposes only and various forms of cabinet assembly can benefit from the present invention. Accordingly, craftsmen skilled in the art are capable of modifications within the purview of the present invention and the present invention should be measured solely from the following claims.

What is claimed is:

1. A cabinet assembly for shipping in a knock down form and for assembly without conventional fastening components, comprising:

   a plurality of panel members adapted to be interconnected together to form a cabinet; at least one panel member having a blank portion removed from the panel to leave a blank hole in the panel member, the panel member forming a framework in the cabinet assembly for removably coacting with the blank portion, the blank portion having a peripheral edge formed into a locking tongue configuration with an enlarged head portion, the locking tongue configuration having an offset position relative to the center line of the blank portion to provide an enlarged peripheral surface on one adjacent side of the head portion relative to the other side; a flexible elongated molding member having a snap lock groove complementary to the locking tongue configuration is mounted on the peripheral edge of the blank portion to form a member having a total surface area beyond the initial blank hole area of the cabinet framework, the molding member having a pair of relatively parallel and resilient leg portions to permit the snap lock movement, one leg portion of the molding member is longer than the other leg portion and extends beyond the interface of the connecting edge of the blank and its adjacent surface whereby the interface will be overlapped by the leg portion, the shorter leg portion of the molding member abuts against the enlarged peripheral surface adjacent the head portion and has a corresponding complementary surface configuration for contacting the peripheral surface of the blank portion, the shorter leg portion having an outside surface lying in a plane approximately parallel to a plane containing the surface of the blank portion and means for attaching the member to the cabinet framework for removably overlapping and closing the blank hole of the cabinet framework.

2. A cabinet assembly as in claim 1 further comprising a second blank portion removed from one of the panel members, the second blank portion having its entire peripheral edge formed into the same locking tongue connecting configuration of the first blank portion; a second molding member having a complementary connecting configuration is positioned on the peripheral edge of the second blank to extend the total surface area beyond the second blank hole area, and means for fastening the second blank portion and second molding member over the second blank area whereby a decorative panel is formed on the panel member.

3. A cabinet assembly as in claim 1 wherein at least one edge of another panel member has a connecting configuration with a shoulder portion and a second molding member including a pair of relatively parallel leg portions is mounted by a snap action on the panel.
edge, one leg portion being longer than the other and adapted to extend beyond the interface of the connecting edge of the blank and its surface while the other leg portion has a complementary shoulder configuration which abuts against the edge shoulder portion.

4. A cabinet assembly as in claim 1 wherein the entire peripheral edge of the blank has a dovetail tongue configuration and the molding member has a complementary groove of a dovetail tongue configuration and is positioned entirely around the peripheral edge of the blank.

5. A cabinet assembly as in claim 1 wherein the entire peripheral edge of the blank has a cross sectional diamond-like shape and the molding member has a complementary groove of a cross sectional diamond-like shape.

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