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## 3,063,768 CABINET FRONT UNIT

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2 Claims. (Cl. 312-111)

The present invention generally relates to cabinet structures and more particularly such cabinet structures that 10 are found in kitchen areas and the like including wall cabinets and base cabinets or any combination thereof and more particularly, the present invention relates to a cabinet front unit in the form of a manufactured article that is quite versatile in use so that such front units may 15 ticular invention is the provision of the cabinet front unit be employed in conjunction with wall or base cabinets or any combination of units.

The primary object of the present invention is to provide a cabinet front unit that is manufactured in order to provide a proper fitting front unit which is quite neat 20 in appearance and accurate in construction, the front unit being reversible to provide either a left hand or a right hand unit.

Another feature of the present invention is to provide a cabinet front unit incorporating dowels or some other 25 method of alignment whereby the cabinet front unit may be disposed in proper aligned relation in an accurate manner so that all of the cabinet fronts will be accurately lined up and the cabinet front units are so orientated that any combination of 30 inch high front units, 24 inch 30 high front units, 15 inch high front units may be employed and still retain a true and proper alignment.

Yet another feature of the present invention is to provide a cabinet front unit which may be quite easily "end plated." In other words, when an open or exposed end 35 edge is reached, it is only necessary to take 1/8 inch material and cut a slot in each frame on both sides so that regardless of which frame might end up at an exposed end, the end plating is relatively simple and will also 40 maintain true alignment at the exposed end.

Still another feature of the present invention is the soffit disposed above the cabinets which uses a special molding. The mold can be attached to the top of the cabinet and a 1/8 inch or 1/4 inch piece of plywood slipped 45into the slot and tacked to the top of any type of material thus eliminating the necessity of building up a frame or plating which is the normal procedure.

In the conventional method of building cabinets such as kitchen cabinets, they are normally manufactured as 50 units and such units are either built on the job or are shop made cabinets. A number of builders find that shop built cabinets are desirable since they can control the over-all dimensions thus rendering installation easier. In view of the problem which has existed for many years 55 in the building industry, the present invention forms a simple solution to this problem in that a manufactured front unit is provided which can easily be applied to the cabinet box on the job thus providing a unit which appears to be a manufactured unit while still giving the 60 builder the flexibility of installation which they desire. Specifically, the cabinet front and drawers, in base cabinets, are the major parts of the cabinet and the front units of the present invention provide a completed unit that may be assembled in any assortment of sizes to 65 arrive at the arrangement desired.

Another factor entering into the production of complete manufactured units is the shipping cost. Inasmuch as hollow boxes are being shipped, the volume to weight ratio requires a relatively high freight rate. By pro-70 ducing only the front unit, the package is considerably smaller and is easier to handle and store. The fact that

the construction may be used both for walls and base cabinets is a new concept and would reduce inventory by approximately 50%. The alignment of the front units, accomplished by dowels or any other suitable alignment means provides vital alignment control which is important to maintain proper alignment thus maintaining the over-all appearance of the kitchen cabinet assembly. Also, there are no rights or lefts on the single door units since the units are simply reversed to provide either a right hand or left hand opening. The alignment holes which receive the alignment dowels are arranged so that the different standard sizes of cabinet front units may be aligned with each other.

Still another factor which is important in this parwhich is quite simple in construction, easy to use, effective for its particular purposes and generally inexpensive to manufacture.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a part hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a cabinet installation in a kitchen illustrating both wall cabinets and base cabinets employing the concepts of the present invention; FIGURE 2 is an enlarged perspective view of one form

of cabinet front unit illustrating double door structure; FIGURE 3 is a detailed sectional view taken substan-

tially upon a plane passing along section line 3-3 of FIGURE 1 illustrating the details of construction of the wall cabinet including the soffit;

FIGURE 4 is a detailed sectional view taken substantially upon a plane passing along section line 4-4 of FIGURE 1 illustrating the details of construction of the base cabinet formed with the front unit of the present invention:

FIGURE 5 is a detailed sectional view taken substantially upon a plane passing along section line 5-5 of FIGURE 1 illustrating further details of the structure;

FIGURE 6 is a detailed sectional view taken substantially upon a plane passing along section line 6-6 of FIGURE 1 illustrating further structural details of the cabinet structure; and

FIGURE 7 is a detailed sectional view taken substantially upon a plane passing along section line 7-7 of FIGURE 1 illustrating the juncture between adjacent cabinet fronts in the base cabinet.

Referring now specifically to the drawings, the numeral 10 generally designates the cabinet front units of the present invention which may be of the single door type as illustrated in FIGURE 1 or of the double door type illustrated in FIGURE 2 and generally designated by the numeral 12. The single door units include a single door 14 while the double door units 12 include two doors 16 and 18.

For purposes of illustration, the double door unit of FIGURE  $\hat{2}$  will be specifically described and this unit includes an open frame generally designated by the numeral 20 and including a top rail 22, a bottom rail 24 and side rails 26. The rails 22, 24 and 26 are rigidly interconnected by any suitable means for providing an open framework.

Pivotally attached to the side edges of the frame 20 are the doors 16 and 18 or the single door in the event of the single door unit. The manner of attachment includes a substantially L-shaped bracket 28 at each upper and lower corner of the frame with the bracket 28 being pivotally attached by pivot pin 30 to a hinge plate 32 attached to the door by virtue of a recess 34 being formed in the top edge and also the bottom edge of the door. The hinge plate 32 is provided with a lug 36 attached to the door thus hingedly attaching the doors to the frame. In this particular construction, the orientation of the hinge pin 30 is such that when the door is opened, the hinge axis is at the outermost corner of the door whereby the front units may be disposed in abutting relation with the doors opening without interference with each other. The hinge brackets 28 and 36 may be adjustably attached to the respective elements by virtue of slotted holes for receiving screw threaded fasteners or the like thereby providing accurate orientation of the door or doors in relation to the frame.

The doors 14, 16 and 18 may be either 30 inches in 15 height, 24 inches in height or 15 inches in height or any other suitable height required or desired. In base cabinets, the door front units may have a drawer such as is designated by the numeral 38 or a plurality of drawers 38. In any event, the frame unit remains the same and 20 the edges of the side rails 26 is provided with holes or sockets 40 for receiving dowel pins 42 for maintaining the front units in exact and accurate alignment with each other.

FIGURE 3 illustrates the construction of the top por-25 tion of a front unit and its association with the soffit panel 44 which extends from a top rail 46 attached to the cabinet front unit frame and the top 48 of the cabinet. This is accomplished by simply providing a  $\frac{1}{5}$  inch or a  $\frac{1}{4}$  inch soffit panel inserted into the groove 50 in the 30 member 46. The member 46 terminates flush with the doors 14, 16 or 18.

In the base unit, the front unit is disposed below the counter top 52 in an obvious manner and attached to the support elements 54 for the counter top and the base 35 cabinet is also provided with a bottom 56 and a downwardly extending filler 58 extending to the floor 60 in the usual manner.

FIGURE 5 illustrates the manner in which the front unit is specifically adapted for end filling, that is connecting the cabinet assembly to an edge wall. This involves the use of the dowels 42 extending into the side frame rail 26 and also into a socket in an end filler plate or board 62 which extends to an abuts a wall surface 64 arranged perpendicular to the cabinet frame.

FIGURE 6 illustrates an end plate detail in which a <sup>1</sup>/<sub>8</sub> inch finish panel 66 is provided and is disposed in a groove 68 formed in the side rail 26. When this end edge is exposed, conventional furniture plugs 70 are inserted into the sockets normally receiving the dowels.

FIGURE 7 illustrates an intermediate filler structure in which two frame rails 26 are connected by virtue of an intermediate filler member 72 which extends outwardly to have the outer edge flush with the outer surface of the doors or drawers. An elongated dowel 42 is inserted through the intermediate member 72 as well as into the side rails 26 thus orientating the intermediate filler member in proper orientation in relation to the doors and drawers. This will provide a certain amount of spacing between the doors, or between the doors and 60 drawers and between the cabinet units thus enabling the units to be more nearly adapted to the particular size requirements either by using or omitting the intermediate fillers such as is illustrated in FIGURE 7.

A corner filler is also provided when the two cabinet <sup>65</sup> fronts are to be orientated in perpendicular relation. This will be somewhat in the nature of the orientation illustrated in FIGURE 5 except that the plate **62** will be orientated perpendicular to another plate **62** extending outwardly therefrom in perpendicular relation to the door front unit. In other words, by assembling two plates **62** in perpendicular relation, they may be doweled to the frame unit as illustrated in FIGURE 5 so that the frame units or front units may be orientated perpendicularly to 75

each other with there being provided a finished inside corner.

The various components may be constructed of any suitable material normally employed in cabinet structure and the various front units may be of any suitable size and the arrangement of the dowel holes is such that the dowels may be employed with various sizes of doors with the holes thereof being matched. Also, the front units may be reversed or merely inverted for use as a right or left hand door unit and the dowels or any other suitable alignment mechanism of the concealed nature will maintain the front units in accurate orientation during the installation thereby providing a highly attractive and neat installation.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A prefabricated cabinet front unit for installation with a plurality of similar cabinet front units of different sizes comprising a generally rectangular frame member defining an open area, closure means movable in relation to the frame member for closing the open area, and a plurality of longitudinally spaced sockets in the outer edge of each side rail of the frame member, said sockets being arranged in predetermined spaced relation whereby smaller frame members of smaller front units may be disposed alongside thereof with the sockets in the side rails of the two frame members being in matching registry with each other for receiving an interconnecting dowel thereby providing connection between the front units of different sizes, said sockets being arranged with at least two sockets in any one-half length of the side rail, and said sockets being arranged so as to enable 40 the reversal of any of the front units.

2. A cabinet assembly for use in a kitchen or the like comprising a plurality of front units of varying sizes arranged in side by side relation to each other, a side filler disposed between the end front units and an adjacent wall, each front unit including a rectangular frame having 45closure means engaged therewith, the side rails of each of the frames having sockets formed therein in which the sockets are equally spaced from each other and equally spaced from the end edges of the side rails for registry with each other, dowels interconnecting the reg-50 istered sockets of adjacent side rails, said filler being in the same vertical plane as the side rails and having sockets registered with sockets on an adjacent side rail, dowels interconnecting the filler and adjacent front unit by extending into the sockets in the side rail of the frame and into the sockets in the filler, a spacer between certain adjacent side rails, said spacer having sockets therein receiving dowels for securing the spacer in between the side rails, the free edge of the spacer being generally coincident with the outer surface of the closure means thereby forming a continuous and neat installed cabinet assembly.

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