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Schreiber

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[54] **KITCHEN CABINETS**

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[52] **U.S. Cl.** ..... **312/257 R,** 312/245, 312/263

[51] **Int. Cl.** **A47f 5/08**

[58] **Field of Search** ..... 312/245, 257 R, 257 SR, 312/263, 264; 211/126

[56] **References Cited**

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[57] **ABSTRACT**

The back frame of a knock-down kitchen cabinet is provided with a horizontal abutment surface beneath which an edge of the top or working surface is inserted when positioned on the upper edges of the side panels and front frame. In a preferred form the abutment surface is the upper surface of a groove dimensioned to receive an edge of the top surface, the groove extending longitudinally of an upper, horizontal cross member of the back frame.

6 Claims, 2 Drawing Figures

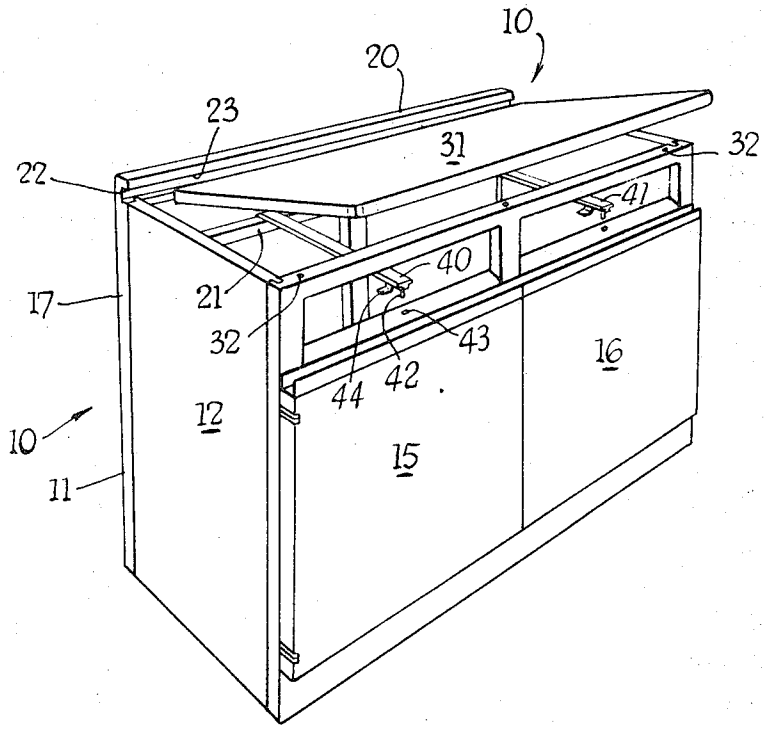

FIG. 1

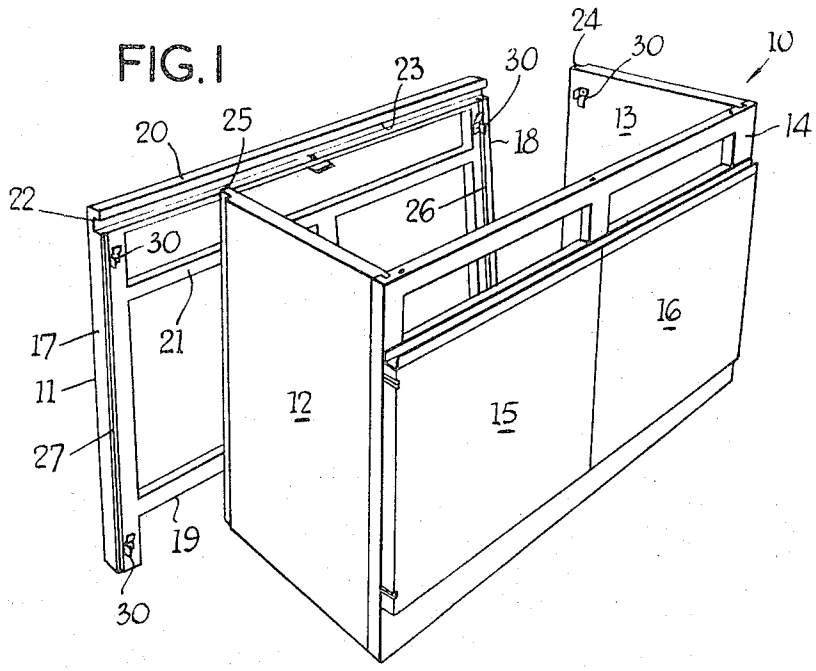
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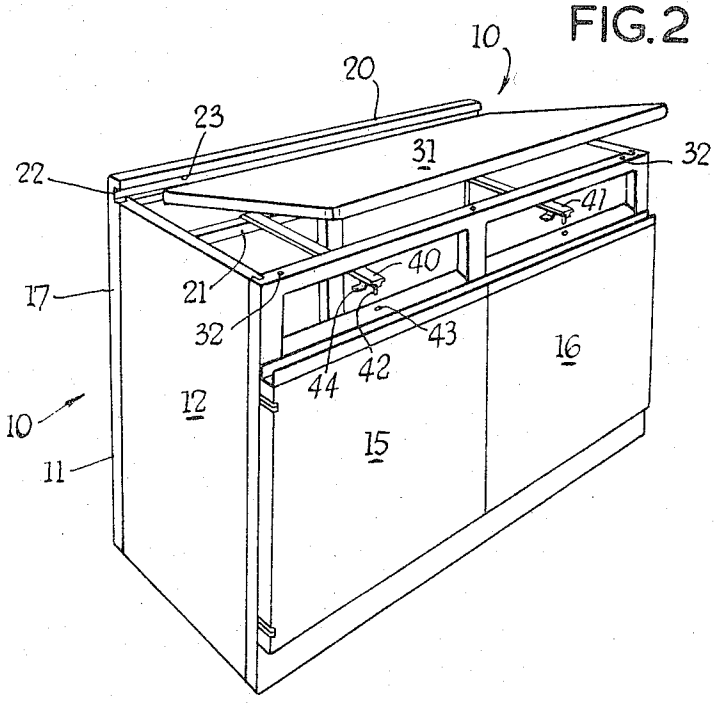
FIG. 2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KITCHEN CABINETS

FIELD OF THE INVENTION

The present invention relates to kitchen cabinets of knock-down construction of the type comprising at least one working surface panel in combination with storage cupboards, drawers or sink units.

BACKGROUND OF THE INVENTION

Knock-down kitchen cabinets in which the side panels are assembled on a back frame and a front frame with the aid of snap fasteners or slide fasteners are well known.

THE PROBLEM

This known type of cabinet eliminates the need for screws in the assembly of the side panels to the front and back frame but hitherto it has always been necessary to provide a screw fixing for the top panel constituting the working surface in order to ensure a secure mounting of the top panel on the cabinet.

OBJECTS OF THE INVENTION

It is an object of the present invention to provide a cabinet which is a complete knock-down unit in that it eliminates the necessity for any screw fixings and in that the top panel is demountable and can be assembled without the need to use any tools such as a screwdriver or spanner.

SUMMARY OF THE INVENTION

According to the present invention there is provided a knock-down cabinet having four walls at least two of which have co-planar upper edges, a top panel located on said co-planar edges, and a forwardly extending horizontal abutment surface on one of said walls closely fitting over said top panel.

The abutment surface may be the upper internal surface of a horizontal groove formed in a back frame constituting one of said walls, the groove extending longitudinally of a horizontal upper cross member of the back frame, or alternatively the abutment surface may comprise the undersurface of a horizontally elongated lip on the back frame extending forwardly therefrom over the top panel.

The top panel and said upper edges of the walls of the cabinet on which the top panel is located are preferably provided with interengaging snap fastening members at positions spaced horizontally from said abutment surface so as to further secure the top panel in position on the walls of the cabinet.

Perferably two of said walls are front frame and a back frame which both include top and bottom members and intermediate said top and bottom members a horizontal, intermediate member, there being further provided a plurality of rails formed at their ends with means for engaging the respective intermediate members so as to extend therebetween.

Said rails may be guide runners for a drawer or drawers inserted in the assembled cabinet below the top surface.

Said engaging means of at least one of said intermediate members preferably comprises a slot or groove in said intermediate member, and each rail preferably has a turnbutton engageable in an associated slot or groove, each intermediate member preferably has a dowel hole and each rail preferably has a dowel pin locatable in an associated one of said dowel holes correctly to locate the ends of the rails for engagement of the associated slots or grooves by the turnbuttons.

A preferred form of the present invention will now be descirbed with reference to the accompanying drawings, in which:

BRIEF DESCRIPTION OF DRAWINGS

FIG. 1 is a perspective view of a cabinet according to the present invention in a partly assembled condition, and

FIG. 2 is a perspective view of the cabinet shown in FIG. 1 showing the top panel in the process of assembly.

DETAILED DESCRIPTION OF DRAWINGS

In the drawings, a floor standing caninet is indicated generally at **10** which comprises a back frame **11**, two side panels **12** and **13** and a front frame **14** which together form the four walls of the cabinet. The front frame **14** carries hinged doors **15** and **16** and the side panels **12** and **13** are mounted on the rear face of the front frame **14** by conventional snap fasteners or sliding fasteners.

The back frame **11** comprises vertical side members **17** and **18**, a lower cross-member **19**, an intermediate cross-member **21** and an upper cross-member **20**. The upper cross-member **20** is formed with a horizontally extending groove **23**, the upper horizontal face of which forms an abutment surface **22**.

In order to attach the side panels **12** and **13** and the associated front frame **14** to the back frame **11**, tongues **24** and **25** on the side panels **12** and **13**, respectively, are located in vertical grooves **26** and **27** in the upright members **17** and **18**, respectively, and the side panels are then slid downwardly relative to the back frame so that fastening members **30** on the back frame **11** and on the side panels **12** and **13** (that on the panel **12** not being visible in the drawings) interengage to mount the side panels on the back frame **11**.

When the side panels are attached to the back frame it will be seen that the groove **23** in the back frame is positioned above the side panels so that the bottom face of the groove is flush with the upper edge of the side panels and the abutment surface **22** is spaced above the upper edges of the side panels **12** and **13**.

A top panel **31** is then slotted into the groove **23** so that it is securely retained in the groove **23** under the abutment surface **22** and rests on the bottom face of the groove **23** and the co-planar upper edges of the side panels **12** and **13** and the upper edge of the front frame **14**.

The undersurface of the top panel **31** and the upper edges of the side panels **12** and **13** and the front frame **14** are provided with snap fastening element **32** which interengage when the top panel is pressed downwardly onto the side panels and the front frame securely to mount the top panel thereon.

In order to support two drawers, not shown, rail members **40** and **41** are provided as guides and supports for the drawers. Each rail member **40** and **41** extends between the intermediate cross-member **21** of the back frame **11** and the front frame **14** and is provided with projecting dowels **42** which locate and engage in mating holes **43** provided in the cross member **21** and the front frame **14** which are accurately positioned during manufacture. Accidental dislodgement

of the rails **40** and **41** is prevented by a turnbutton **44** on the underside of the front end of each rail which is turned to engage in a suitably shaped and positioned groove (not shown) in the front frame **14.** Similar turnbuttons can also be provided at the rear end of both rails **40** and **41** if required.

The rail members **40** and **41** are preferably assembled before the top panel and they thus locate the central area of the front and back frames to provide a rigid structure before the top panel is fitted in position.

It will be seen that the manner of attaching the top panel **31** to the remainder of the cabinet **10** enables the cabinet to be completely assembled without the use of any screw fittings and without the use of any tool such as a screwdriver or spanner. The cabinet **10** can thus be assembled by an unskilled person with the minimum of time and difficulty and in a manner which ensures accurate positioning of the top surface on the remainder of the cabinet.

I claim:

1. A knock-down cabinet comprising: a front frame;
a back frame;
a pair of side panels;
means for each of said front frame, back frame and side panels for providing cooperative engagement between the adjacent ones thereof when assembled as the four walls of a cabinet with the upper edges of said front frame and said side panels being co-planar;
a top panel;
said back frame having a horizontally disposed groove formed on a surface thereof facing inside the cabinet, said groove being spaced slightly below the upper edge of said back frame, with the upper internal surface of said groove providing a horizontal abutment surface along substantially the entire length of said back frame for the upper surface of the rear postion of said top panel when said top panel is positioned on the co-planar upper edges of said side panels and said front frame with the rear edge of said top panel being received in said horizontally disposed groove, and with the lower internal surface of said groove being substantially co-planar with the upper edges of said assembled front frame and side panels; and
a plurality of interengaging snap fastening members disposed on the lower surface of said top panel and on the co-planar upper edges of said front frame and said side panels,
thereby providing a cabinet which may be completely assembled or disassembled without the use of any tools while ensuring the secure mounting of the top panel thereon.

2. A cabinet as claimed in claim **1,** wherein said front frame and said back frame each have top and bottom members and a horizontal intermediate member disposed therebetween, and further comprising at least one rail disposed between the respective intermediate members of said front frame and said back frame so as to extend therebetween and having means at its ends for engaging the respective intermediate members.

3. A knock-down cabinet comprising:
a front frame;
a back frame;
a pair of side panels;
means on each of said front frame, back frame and side panels for providing cooperative engagement between the adjacent ones thereof when assembled as the four walls of a cabinet with the upper edges of said front frame and said side panels being co-planar;
a top panel;
said back frame having a horizontally disposed elongated lip formed on a surface thereof facing inside the cabinet, the lower surface of said lip providing a horizontal abutment surface along substantially the entire length of said back frame for the upper surface of the rear postion of said top panel when said top panel is positioned on the co-planar upper edges of said side panels and said front frame with the rear edge of said top panel being received below said horizontally disposed lip; and
a plurality of interengaging snap fastening members disposed on the lower surface of said top panel and on the co-planar upper edges of said front frame and said side panels;
thereby providing a cabinet which may be completely assembled or dissasembled without the use of any tools while ensuring the secure mounting of the top panel thereon.

4. A cabinet as claimed in claim **1,** wherein the groove extends longitudinally of a horizontal upper cross-member of the back frame.

5. A cabinet as claimed in claim **2** wherein the cabinet further comprises at least one drawer for which said at least one rail is a guide runner.

6. A cabinet as claimed in claim **5** wherein said engaging means of at least one of said intermediate members comprises a slot or groove in said intermediate member, wherein each rail has a turnbutton engageable in an associated one of said slots or grooves, wherein each intermediate member has a dowel hole and each rail has a dowel pin locatable in an associated dowel hole correctly to locate the ends of the rails for engagement of the associated slots or grooves by the turnbuttons.

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