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3,001,844

CABINET STRUCTURE

Filed May 27, 1959

Fig. 1

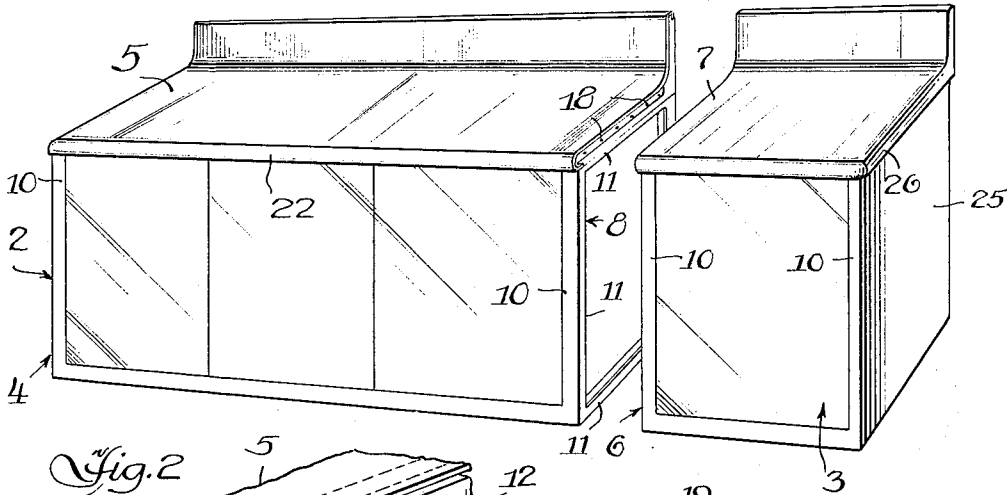


Fig. 2

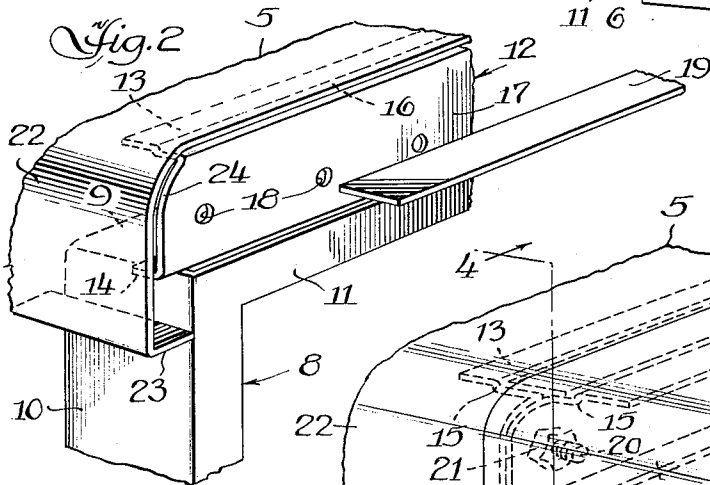


Fig. 3

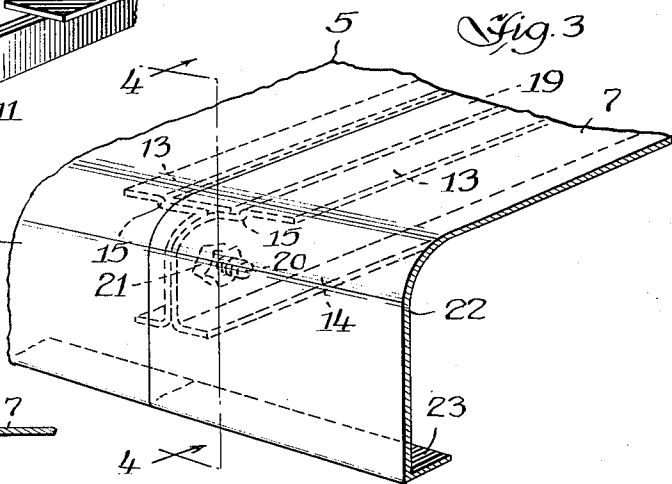


Fig. 4

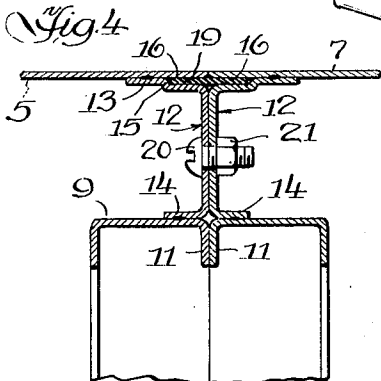
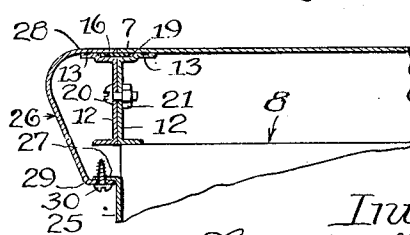


Fig. 5



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CABINET STRUCTURE

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This invention relates to cabinet structure, and is particularly concerned with a floating joint for holding adjacent cabinets of the same height together.

In cabinet installations having a plurality of similar cabinets arranged in side by side relationship it is very desirable to have the top surfaces of the cabinets appear as a single continuous surface. The continuous surface has a neat appearance and is easier to keep clean. In food service establishments cracks between adjacent cabinets that are not kept clean often serve as a breeding place for germs, and may have deleterious effects on the health of customers eating at such places.

In accordance with the present invention, a channel member has one flange welded to the underside of the top plate of each cabinet adjacent each end thereof. The flange is offset downwardly to provide a shallow recess extending inwardly from the end of the cabinet just below the top plate. The web of the channel member is substantially flush with the end panel of the cabinet and is provided with one or more apertures adapted to be aligned with corresponding apertures in the channel members of other cabinets. The channel members of adjacent cabinets are bolted together. The other flange of the channel member is welded to the top of the cabinet base.

When two cabinets are to be assembled in side by side relationship, a flat rigid strip, preferably metal, having a width approximately twice the width of the recess is pushed into the recess under the top plate of one of the cabinets. Approximately half of the width of the strip projects outwardly from the end of the cabinet. The other cabinet is then pushed against the first cabinet so that the flat strip is positioned in the recess under the top plates of both cabinets. The flat strip levels the tops of the cabinets, and the legs are then adjusted to hold the cabinets level. Bolts or screws may then be inserted through the aligned apertures of the adjacent channel members to provide additional rigidity for the structure.

The outer ends of the top surface of the cabinets are preferably straight, so that a hair line crack is formed at the meeting edges of two adjoining cabinets. When the installation is in a hospital or similar institution the cracks may be soldered to make them germ proof.

The method of assembly speeds up the installation of a plurality of cabinets. All of the welding is done in the factory, and the only work required at the installation is the insertion of the strip, pushing the cabinets into side by side relationship, bolting the flanges together and adjusting the legs of the cabinet bases.

Each cabinet is provided with recesses open at each end so that another cabinet may be positioned adjacent either end. A curved end trim member is secured to the outer end of the cabinets at each end of an installation to provide an attractive appearance. The underside of the end trim member is constructed similar to the underside of the end of the cabinet, so that the same strip that fits between two adjacent cabinets also fits between one edge of a cabinet and an end trim member applied thereto.

The structure by means of which the above-mentioned and other advantages of the invention may be attained will be fully described in the following specification, taken in conjunction with the accompanying drawing, showing a preferred illustrative embodiment of the invention, in which:

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FIGURE 1 is a perspective view showing two cabinets prior to assembly into side by side relationship;

FIG. 2 is a fragmentary enlarged perspective view of the end of one cabinet with the flat rigid strip in disassociated relationship;

FIG. 3 is a fragmentary enlarged perspective view showing the finished joint between the adjacent ends of the top surfaces of two adjoining cabinets, the cabinet bases being omitted to clarify the illustration;

FIG. 4 is a cross sectional view, taken along the line 4-4 of FIG. 3, but showing part of the end panel of each cabinet base; and

FIG. 5 is a fragmentary cross sectional view showing an end trim member secured to one end of a cabinet.

Referring to the drawings, the reference numerals 2 and 3 indicate two cabinets adapted to be assembled into side by side relationship in accordance with the present invention. Cabinet 2 has a base 4 and a top plate 5, and cabinet 3 has a base 6 and a top plate 7. Each base is constructed in accordance with its intended use, but the bases may be considered identical for the purpose of describing the invention. Each base has two end panels 8 each of which comprises a top member 9, and upstanding front member 10, and flanges 11 at the outer end of the base. The cabinet bases are of equal height, and top plates 5 and 7 are substantially coplanar.

Each top plate is secured to the base by a channel 12 having its upper flange 13 welded to the underside of the top plate and its lower flange 14 welded to top member 9 of the cabinet base. Flange 13 is offset, as indicated at 15, to provide a shallow recess 16 between flange 13 and the underside of the top plate of the cabinet. Recess 16 is open at the outer end of the cabinet. Flanges 13 and 14 are integral with a web 17 that is substantially parallel to flanges 11 of end panel 8 but is spaced inwardly thereof a very short distance, say, for example, $\frac{1}{32}$ of an inch. Web 17 is provided with a plurality of apertures 18 adapted to be aligned with corresponding apertures in the adjacent web of the adjoining cabinet when two cabinets are in side by side relationship.

A flat rigid strip 19, preferably of metal, is inserted into recess 16 of one cabinet when two cabinets are to be assembled into side by side relationship. The width of strip 19 is approximately twice the depth of recess 16, and half of it projects beyond the end of the cabinet. The second cabinet is then pushed into place with recess 16 of the second cabinet fitting over the projecting edge of strip 19. The webs 17 are spaced inwardly of the ends of the cabinets so that they cannot interfere with the abutment of the adjacent ends of top plates 5 and 7 which fit together as close as possible to form a very fine joint. Bolts or screws 20 are then threaded into nuts 21 to tighten webs 17 together.

Nuts 21 are preferably permanently secured to web 17 in registration with the apertures to facilitate securing the bolts or screws in place. The slight separation of webs 17 enables the adjoining ends of two top plates 5 and 7 to be pulled together tightly to make a joint having a hair line crack between the ends of the top plates. In addition to reinforcing the joint between adjacent top plates, strip 19 holds top plates 5 and 7 in coplanar relationship. Each cabinet is provided with adjustable legs (not shown) to level the cabinets so that no undue strain is imposed on the strips or top plates.

Top plates 5 and 7 each extend forwardly of upstanding front member 10 and are curved downwardly, as indicated at 22, to provide a neat and attractive front trim. The lower end of each top plate terminates in a rearwardly directed flange 23 that abuts the front of the cabinet base. The front end of channel 12 extends forwardly of the cabinet base and is curved to conform to the curva-

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ture 22, as indicated at 24. The front end of channel 12 abuts the curved portion of top panels 5 and 7 to reinforce them.

The exposed end of each cabinet forming an end of an installation is provided with an end panel 25 and end trim 26 to provide a neat appearance for each end of the installation. As shown in FIG. 5, end panel 25 terminates at its upper end in an outwardly directed horizontal flange 27 in a plane slightly above the plane of flange 23. Trim 26 is curved to conform to the curvature 22 and has an upper edge portion 28 adapted to abut the outer end of top plate 7. The upper edge portion 28 of trim 26 is welded to flange 13 of a channel 12 that is bolted to an adjacent channel 12. The end trim is provided at its lower edge with a flange 29 that fits directly below flange 27 and is secured thereto by a screw or bolt 30. A flat, rigid strip 19 is mounted in the recess adjacent the underside of the top edge portion of end trim 26 in the same manner as in the recesses on the undersurface of top plates 5 and 7.

Although I have described a preferred embodiment of the invention in considerable detail, it will be understood that the description thereof is intended to be illustrative, rather than restrictive, as many details may be modified or changed without departing from the spirit or scope of the invention. Accordingly, I do not desire to be restricted to the exact structure described.

I claim:

1. A cabinet assembly comprising a plurality of cabinets assembled in side by side relationship, each of said cabinets having a cabinet base, a top plate spaced above said base, said top plate having a front edge portion curved downwardly in forwardly spaced relationship to the front edge portion of said base to completely conceal the top of said base, and a supporting member permanently secured to said base and said top plate at each end of each of said cabinets, said supporting members extending forwardly of said cabinet base to support said downwardly curved portion of said top plate, each of said supporting members having a recess, the recesses in adjoining supporting members being in registration, and a flat rigid strip inserted into said registering recesses to reinforce the joint between two adjacent top plates.

2. A cabinet assembly comprising a plurality of cabinets assembled in side by side relationship, each of said cabinets having a cabinet base, a top plate spaced above said base, said top plate having a front edge portion curved downwardly forwardly of said base to form a smooth continuous surface completely concealing the top

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of said base, and a channel member having one flange permanently secured to said cabinet base and a second flange permanently secured to the underside of said top plate, each of said second flanges being offset downwardly adjacent the end of its cabinet to provide a recess parallel to and below the top plate secured thereto, the recesses of adjoining cabinets being in registration, and a flat rigid strip inserted into each pair of registering recesses to hold the adjacent edges of adjoining top plates in coplanar relationship.

3. A cabinet comprising a base, a top plate spaced above said base, a supporting member permanently secured to said base and said top plate, a recess in said supporting member, an end trim member, a second supporting member secured to the underside of the upper edge portion of said end trim member, said second supporting member having a recess aligned with said first mentioned recess, a flat rigid strip positioned in said recesses to hold the upper edge portion of said end trim member in coplanar relationship with said top plate, fastening means securing said supporting members together to hold the upper edge portion of said end trim member in abutting relationship to the adjacent edge of said top plate, and separate fastening means securing the lower edge portion of said end trim member to one end of said base.

4. A cabinet comprising a base, a top plate spaced above said base, a supporting member interposed between said base and said top plate, a recess in said supporting member, an end trim member, a second supporting member secured to the underside of the upper edge portion of said end trim member, said second supporting member having a recess aligned with said first mentioned recess, a flat rigid strip positioned in said recesses to hold the upper edge portion of said end trim member in coplanar relationship with said top plate, an end panel secured to the end of said base adjacent said first supporting member, said end panel having an outwardly extending flange at its upper edge below said supporting members, said end trim member having a flange extending inwardly at its lower edge, fastening means securing said flanges together, and fastening means securing said supporting members together to hold the upper edge portion of said end trim member in abutting relationship to the adjacent edge of said top plate.

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