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CABINET LEG CONSTRUCTION

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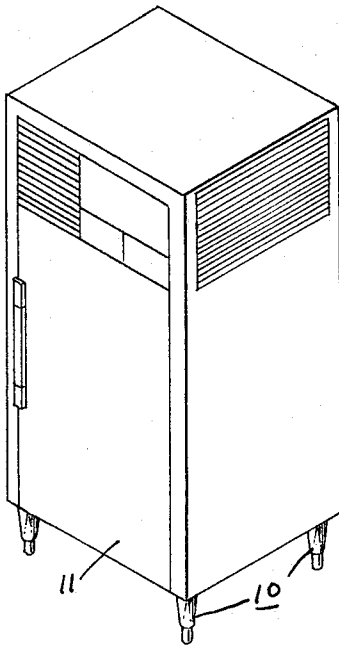


Fig. 1

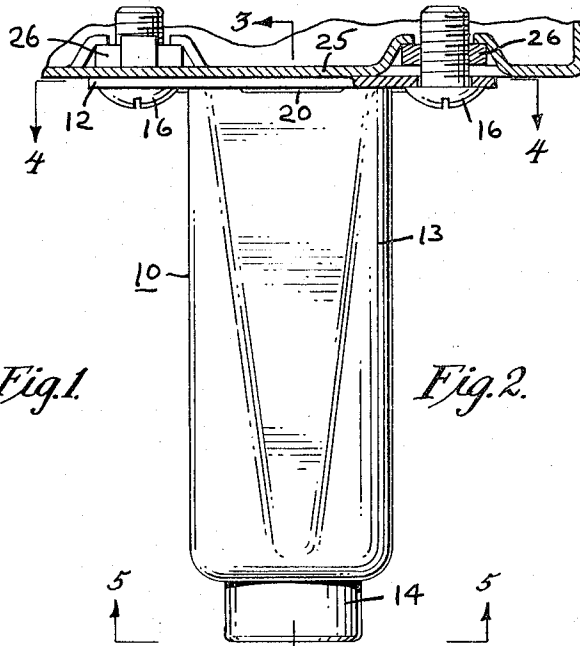


Fig. 2

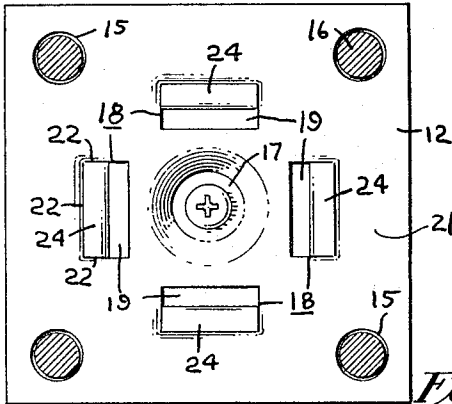


Fig. 4

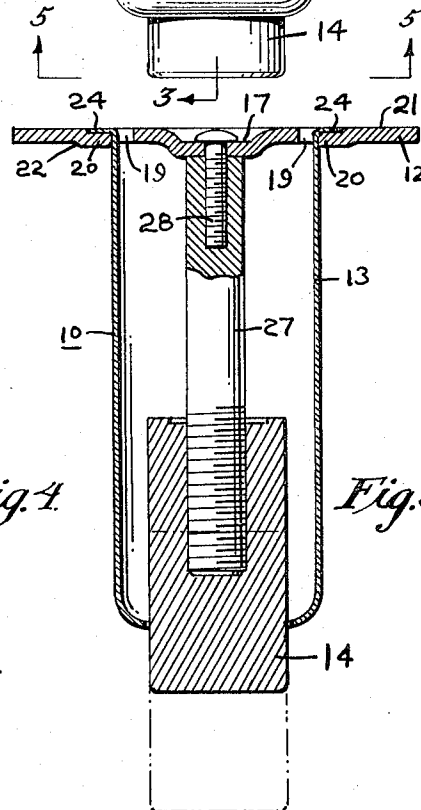


Fig. 5

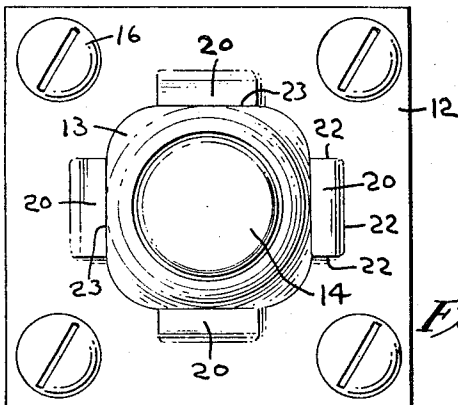


Fig. 5

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CABINET LEG CONSTRUCTION

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1 Claim. (Cl. 248—188.4)

ABSTRACT OF THE DISCLOSURE

A leg axially adjustable in length for supporting relatively heavy structures, such as refrigerator cabinets and the like, upon the floor, the top end of the leg having a flat mounting plate the upper surface of which is free of protuberances to facilitate flush securement of the plate to the flat bottom surface of the leg-supported structure. The leg and mounting are so interfitted as to prevent lateral shifting movement therebetween due to lateral stresses tending to tear the leg from the structure thereby. The relatively adjustable parts of the leg present a substantially smooth unbroken external surface to obviate recesses in which dirt may be collected.

This invention relates generally to support leg constructions, and more particularly relates to cabinet legs intended for flush mounting on the bottom surface of a cabinet. The cabinet structure shown for illustrative purposes in the drawings may typically be a refrigerating or warming cabinet, and as illustrated, the novel structure is shown in the form of a levelling or adjustable height leg.

While, of course, cabinet legs are not themselves new, various problems have been in the past experienced with different designs of legs, encompassing for example inadequate strength in the leg or leg mounting with the application of heavy lateral stresses tending to tear off the leg at its point of securement with the cabinet. Strength can be provided by the utilization of special conformations of the cabinet bottom and the use of buttresses and weldments for leg anchoring, but these devices are generally unsightly or expensive in production. In some cases the resultant support structure includes openings and recesses which collect dirt and might therefore be unsuitable for use on food handling or storage equipment. Accordingly, it is a primary object of our invention to provide a novel cabinet leg construction of simple yet exceedingly strong configuration which may be quickly and easily secured to or removed from the underside of a cabinet which it is intended to support.

Another object of our invention is to provide a novel cabinet leg as aforesaid of such configuration that the upper end of the support leg fits flush against the flat bottom surface of a cabinet to which it is to be secured, the leg having a substantially smooth unbroken exterior surface characterized by the absence of any dirt collecting recesses.

The foregoing and other objects of our invention will become clear from a reading of the following specification in conjunction with examination of the appended drawings, wherein:

FIGURE 1 is a perspective view of a cabinet supported by the leg construction according to the invention, three of such legs being visible;

FIGURE 2 is a side elevational view of the leg according to the invention showing the bolt securement of the leg to a fragment of the underpart of the cabinet, one portion of the leg mounting structure being shown in vertical section;

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FIGURE 3 is a vertical central longitudinal section through the leg according to the invention as would be seen when viewed along the line 3—3 of FIGURE 2; and

FIGURES 4 and 5 are respectively the top and bottom plan views of the leg construction according to the invention as would be seen when viewed respectively along the lines 4—4 and 5—5 of FIGURE 2.

In the several figures, like elements are denoted by like reference characters.

Briefly the novel leg construction includes a top mounting plate to which is rigidly tab secured a fixed length hollow leg, which in the illustrated case is also provided with a cylindrical pad extending partly into and partly out of the hollow leg and adjustable longitudinally thereof along a central support post fixedly secured to the mounting plate.

Referring now to the figures, the novel leg construction according to the invention is designated generally as 10 and is shown in FIGURE 1 as secured to the bottom surface of a cabinet 11. The leg includes the square mounting plate 12, the hollow leg 13 and the cylindrical adjusting pad 14 shiftable longitudinally within limits into and out of the hollow leg 13 through the open bottom of the latter. The mounting plate 12 is provided at its four outer corners with mounting holes 15 punched therethrough to pass the shanks of the mounting bolts 16, downwardly offset central recess 17, and four leg anchoring knock-outs 18, each of which includes a rectangular open punch-out 19 and an immediately adjacent downwardly offset generally rectangular ledge 20, each of the four punch-outs 19 lying along the inside of a different leg of a square while the adjacent ledges 20 lie along the outside of the square. Each downwardly offset ledge 20 is substantially coextensive in length with and disposed immediately radially outward from its associated open punch-out 19. The downward offset of each ledge 20 from the upper surface 21 of the mounting plate 12 is less than the thickness of the mounting plate so that the three bounding sides 22 of the ledge 20 are closed surfaces continuously joining the ledge 20 with the mounting plate 12.

As best seen from FIGURES 1, 2 and 5, the hollow leg 13 is substantially square in cross section at its upper end and transforms smoothly into a circular cross section at its lower end. As best seen from FIGURES 2, 3 and 5, the size of the square defining the outside surface of the hollow leg 13 at the upper end is precisely the same as the square formed by extending to intersections the inner edges 23 of the downwardly offset ledges 20, so that the leg 13 seats against the underside of the mounting plate 12 precisely within the confines of the ledges 20 which thereby prevent relative lateral shifting movement between the leg and the mounting plate. Extended longitudinally of the hollow leg 13 as a continuation thereof from each of the four upper edges of the leg forming the square upper end shape is a rectangular locking tab 24. Each of the tabs 24 is placed so as to be projectable upward through one of the rectangular open punch-outs 19 in the mounting plate 12 and is of a width substantially equal to but not greater than the width of the punch-out 19 through which it is projected. Each such tab 24 is turned laterally outward and downward against the upper surface of the immediately adjacent downwardly offset rectangular ledge 20, the thickness of the tab 24 being no greater than the dimension of the downward offset of the ledge 20 so that the upper surfaces of the tabs 24 do not extend above the plane of the upper surface of the mounting plate 12.

From the showing of FIGURE 2 illustrating the securement of the mounting plate 12 flush against the underside of the cabinet bottom 25 by threading of the mount-

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ing bolts 16 into the captive nuts 26 it is apparent that the locking tabs 24 of the hollow leg 13 are clamped between the plate 12 and the cabinet bottom 25 and cannot be unfolded and pulled downward through the mounting plate punch-out apertures 19 by any force exerted laterally against the leg 13. This feature imparts tremendous strength to the leg 13 and prevents the tear-out problems which so often occur with the conventional types of leg structures. As best seen from FIGURE 3, the adjusting pad 14 is threadedly engaged on a central longitudinally extending mounting post 27 which latter is secured at its upper end to the underside of the mounting plate 12 by means of a bolt 28, the head of the bolt 28 being seated in the central recess 17 of the mounting plate so that no part of it extends above the mounting plate upper surface.

Having now described our invention in connection with a particularly illustrated embodiment thereof it will be appreciated that modifications and variations thereof may now occur from time to time to those persons normally skilled in the art without departing from the essential scope or spirit of our invention, and accordingly it is intended to claim the same broadly as well as specifically as indicated by the appended claim.

What is claimed to be new and useful is:

1. A leg construction for securement flush against the flat undersurface of a structure to be supported, comprising in combination, a mounting plate and a support leg secured to and depending therefrom, said support leg having an upper and a lower end, said upper end being provided about its periphery with a plurality of locking tabs extending upward therefrom, said mounting plate

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having a generally planar upper surface and being provided with an aperture therethrough for each of said plurality of leg locking tabs so that the upper end of said leg may be seated against the underside of said mounting plate with said leg locking tabs projected upward through said apertures, and said mounting plate upper surface being downwardly offset to provide immediately adjacent to each of said apertures a ledge of proper shape to have pressed downward and receive thereinto the leg locking tab projected through the adjacent aperture, the downward offset of each such ledge being substantially equal to the thickness of the material of said leg locking tab so that said tab does not extend above the plane of said mounting plate upper surface, said leg being hollow and open at its lower end and said mounting plate upper surface being centrally downwardly offset, a central support post extending longitudinally within said leg, said support post being immovably fixedly secured at its upper end to said mounting plate by means of a fastener projected downward through the said central downward offset of the mounting plate, and an adjustable leveling pad threadedly engaged upon the lower end of said support post, said leveling pad extending outward through the open bottom of said leg and being shiftable longitudinally of said leg by screw action on said support post.

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