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STORAGE CABINET

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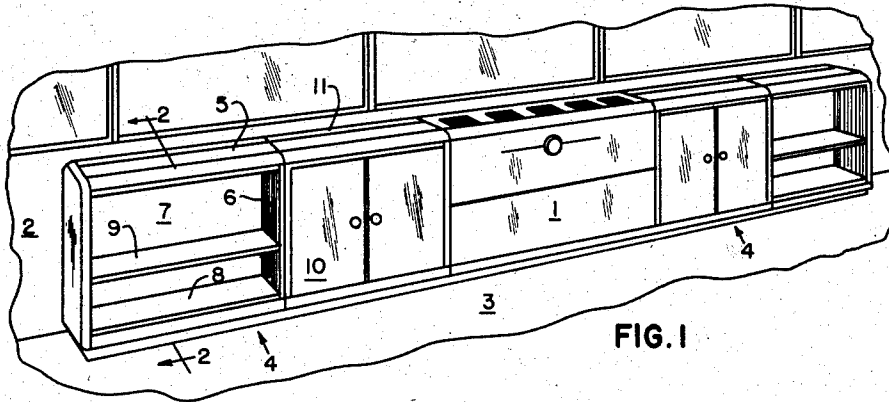


FIG. 1

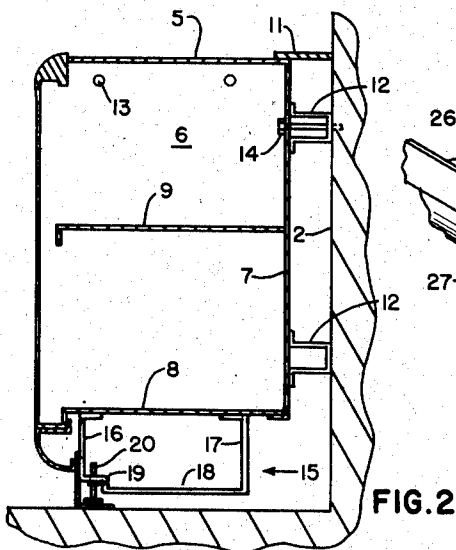


FIG. 2

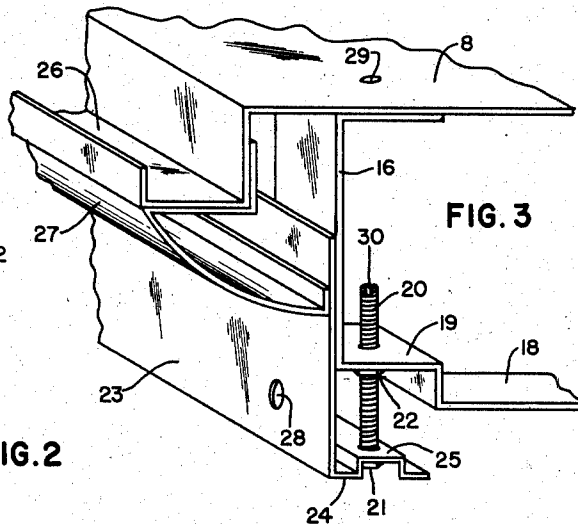


FIG. 3

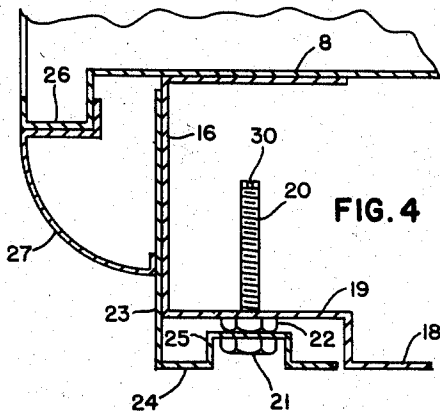


FIG. 4

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1

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STORAGE CABINET

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9 Claims. (Cl. 312—253)

This invention relates to storage cabinets designed to be positioned with the rear side thereof adjacent to a vertical wall, and with the bottom side provided with adjustable means for supporting the cabinet from a floor.

A number of cabinets of the type contemplated by the present invention are frequently arranged to flank one or both ends of a floor mounted heating-ventilating unit, these cabinets serving for storage of miscellaneous items. The appearance presented by such an ensemble is relatively more pleasing if the cabinets are generally level and aligned than if they are somewhat askew with respect to each other. Since the floor which supports the ensemble frequently has an irregular surface, it is desirable to provide means for supporting the cabinets whereby they may be leveled and aligned with the unit and each other regardless of irregularities in the surface of the floor.

The principal object of my invention is to provide a cabinet having an improved arrangement for supporting the cabinet from the floor.

Another object is the provision of a support arrangement which may be adjusted to support the cabinet in aligned relationship with adjacent flanking cabinets or units.

A further object is to provide a cabinet having an adjustable kick plate which may be positioned to hide the support arrangement, and cover the slot-like opening formed between the floor and bottom of the cabinet when the cabinet is supported at any height within the range of the adjustable support means.

A still further object is to provide a support arrangement which is readily accessible so that it may be adjusted to raise or lower the cabinet after it has been set in place adjacent a vertical wall.

In accordance with my invention, I provide a cabinet with leg means which carry extensible-retractible members adjustable in a vertical direction to support the cabinet at the proper height from the floor. The leg means cooperate with a forwardly spaced member in the form of a molding to define a space for receiving a kickplate which may also be adjusted vertically, the leg means and molding member frictionally engaging opposed surfaces of the kickplate. The kickplate is provided with a rearwardly directed flange along its lower edge, this flange being provided with an opening to accommodate each of the extensible-retractible members. Enlarged lower ends on the extensible-retractible members operate to: prevent the kickplate from being disengaged from the leg means; hold the kickplate in a retracted position which facilitates handling; and, serve as a base to distribute the weight carried by said extensible-retractible members over a sufficient area of the floor.

Additional features in accordance with my invention comprise: providing means on the upper end of each extensible-retractible member to facilitate adjustment thereof after the cabinet has been set in place; forming the flange on the kickplate into a bridge-like shape which permits the lower ends of the extensible-retractible members to be nested therein; and, providing an offset at the

2

bottom end of the leg means whereby the kickplate flange and enlarged lower ends of the extensible-retractible members may be nested therein.

An embodiment of the invention is illustrated in the accompanying drawing wherein:

Figure 1 is a perspective view of a typical installation of cabinets and a heating-ventilating unit in aligned relationship;

Figure 2 is a vertical sectional view taken along the line 2—2 of Figure 1;

Figure 3 is a fragmentary isometric view of a lower front end of a cabinet with the end wall deleted for clarity, and showing the details of the adjustable support arrangement and kickplate; and

Figure 4 is a fragmentary vertical section showing the support member and kickplate in retracted position for shipment and handling.

Referring to the drawing, a heating-ventilating unit 1 is positioned with its rear side against a vertical room wall 2, and its bottom side supported from the floor 3. A pair of utility or storage cabinets 4 are shown flanking the unit 1 at each of its opposite ends, the top and front of each cabinet being aligned with the top and front of the unit and adjacent cabinets. Each cabinet includes a top 5, an end panel 6 on each end, a rear panel 7, and a bottom panel 8, these panels cooperating to form a forwardly open chamber which may be utilized for storage of miscellaneous items. If desired, horizontal shelves 9 and front doors 10 may be provided.

It is desirable with certain types of heating-ventilating units to provide a relatively open space behind and below the storage chamber of the cabinet. This open space may serve: as a confined passageway for air recirculated from the room to the unit by providing openings in the filler piece 11 which covers the top of the open space behind the cabinet; as a space to run pipes which carry the heating medium; or, as a passageway to convey discharge air from the unit to the room.

The spacing between the rear panel 7 and vertical wall 2 (Figure 2) is maintained by spacers, in the form of forwardly open U-shaped members 12, which are secured to the rear surface of the rear panel 7, preferably one spacer adjacent each corner of the panel. Since adjacent flanking cabinets are usually secured to each other by bolting adjacent end panels 6 together through holes 13 in the end panels, it is not mandatory that each cabinet be secured to the vertical wall. To increase the over-all stability of the ensemble however, it is sometimes preferable that the cabinets be secured to the wall by means of suitable fasteners 14 which pass through the rear panel 7, the bight of member 12, and into the wall.

Minimum spacing of the bottom panel 8 from the floor 3 is provided by a generally U-shaped runner 15 which is secured to the bottom of panel 8 at or near each end of the cabinet. The U-shaped runner comprises: a vertical front leg 16 secured at its flanged upper-end to bottom panel 8; a vertical rear leg 17 secured at its flanged upper-end to a more rearward point on panel 8; and a horizontal bight 18 which connects the lower ends of legs 16 and 17, the forward portion of the bight 18 being upwardly offset relative to the remainder of the bight. The offset portion is designated 19.

The offset 19 carries a bolt 20 (Figure 3) which has its axis disposed vertically. The bolt 20 is arranged with its head 21 at the lower end. The hole in the offset which accommodates the bolt may be provided with threads complementary to the bolt threads, or in a preferred embodiment, a separate nut 22 is secured to the lower surface of the offset to increase the rigidity of the connection. Thus, the bolt 20 may be rotated in one direction to move it downwardly relative to the front leg 16, and rotated in the opposite direction to move it upwardly rela-

tive to leg 16. In its lowered position it serves as an extension of front leg 16, and in its upper position it operates to retract the kickplate which will now be described.

The kickplate, which is generally L-shaped in cross-section, has a vertical portion 23 extending from end to end of the cabinet in front of legs 16 to cover the open space beneath the cabinet proper and between the legs, and has a horizontal portion 24 directed rearwardly from the lower edge of the vertical portion. The horizontal portion is shown as a single, continuous flange which extends for the entire length of the kickplate, but it is to be understood that it may be in the form of two separate tab-like flanges, each of which extends beneath an offset 19. The flange is provided with a hole located in registering alignment with each hole in the offset 19 so that each hole in the flange accommodates one of the bolts 20. The diameter of the holes is greater than the bolt diameter so that the flange may be moved upwardly or downwardly without binding on the bolts.

The flange 24 is formed to include an upwardly-offset bridge 25, the amount of offset being equal to or greater than the thickness of bolt head 21. With this arrangement the bridge straddles the bolt head when the flange is moved downwardly to its lowermost position, thus assuring that the kickplate lower edge will rest on the floor. It will be apparent that the offset bridge 25 may be in the form of an embossed offset or the like located to receive the bolt head rather than in the form of an offset along the entire length of the flange. It will be noted that the bolt head 21 also functions to prevent the kick plate from being disengaged from the cabinet during handling.

The means for maintaining the vertical portion 23 in slidable engagement with the front legs will now be described. The bottom panel 3 projects forwardly beyond the front legs 16 and is formed into a trough 26 which extends along the lower front of the cabinet. This trough functions, when front doors 10 are used, as a lower track therefor. The underside of this trough has secured thereto a shaped molding 27 which also extends along the entire length of the cabinet. The portion of the molding which is arcuate in cross-section depends downwardly and rearwardly so that its unsecured lower rear edge abuts and frictionally engages the front face of the kick plate. The kick plate, which is unsecured except for frictional engagement on its front and rear face, is thus pinched between the legs 16 and molding 27. Several holes or indentations 28 are provided in the lower front face of the kick plate to serve as points for hooking the kick plate with a screw driver or the like for purposes of shifting it.

To facilitate turning the bolts 20 after the cabinet has been set against the vertical wall, the bottom panel 3 and flanged upper-ends of leg 16 may be provided with a hole 29 which permits access with the screw driver to the slotted upper end 30 of the bolt.

Some advantages of the present invention are believed to be more readily apparent by describing the relative positions of the adjustable components before packaging for shipment and their adjustment during installation.

The kick plate and bolts are adjusted, before packaging the cabinet, to their upper or retracted position relative to the runners 15 (Figure 4). Thus a flat bottom is presented by the bights 18 and the cabinets may be stored in relatively stable vertical stacks. The retracted position of the kick plate and bolts also substantially eliminates the possibility that these parts will punch holes in the shipping carton if rough handling occurs during transportation.

While the heating unit may, like the cabinets, be provided with an adjustable support structure, the unit is usually constructed with a specified vertical dimension such as 32 inches, and the cabinets, in accordance with my invention, with a lesser vertical dimension, such as 31 inches, this latter dimension being measured from the bottom side of the runner bight 18 to the top of panel 5.

Assuming such dimensions, after the heating unit 1 is installed, the bolts 20 of the flanking cabinets are moved downwardly about one inch from their retracted position. These cabinets are then set in position on the floor with the spacers 12 against the wall 2, and the abutting end panels 6 secured to the ends of the unit 1 by bolts which extend through the holes 13. The final alignment of the cabinets is then made by adjusting the bolts 20 upwardly or downwardly by turning the bolts with a wrench which may be inserted below the kick plate or, as an alternative, with a screw driver inserted through hole 29. It will be appreciated that during this operation, the kick plate has remained in its retracted or upper position, thus permitting manipulation of a wrench below the forward portion of the cabinet.

After the foregoing adjustment is made, the kick plate may be moved downwardly until its lower edge rests on the floor. If increased stability of the cabinet is desired, the fasteners 14 may be used to secure the rear panel 7 to the vertical wall 2 although, as will be appreciated, the locations of the center of gravity of the cabinet relative to the supporting bolts 20 will tend to maintain the rear of the cabinet against the wall.

Having described one embodiment of my invention, I claim:

1. A cabinet comprising: a housing; leg means secured to the bottom of said housing, said leg means carrying extensible-retractible members adjustable, relatively to said leg means, in a vertical direction; a kick plate extending along the front of said leg means; and means spaced forwardly from said leg means and contacting the front face of said kick plate to hold it in vertically slidable engagement between said leg means and said contacting means.

2. A cabinet as specified in claim 1 including: flange means directed rearwardly from the lower edge of said kick plate, said flange means being provided with openings sufficiently large to accommodate adjustment in a vertical direction of said extensible-retractible members without binding on said openings in said flange means; and said extensible-retractible members include enlarged lower ends thereon to limit movement of said flange means in a downward direction.

3. A cabinet as specified in claim 2 wherein: said flange means includes an upwardly offset bridge adapted to accommodate and straddle said enlarged lower ends when said kick plate is lowered relatively to said extensible-retractible members.

4. A cabinet as specified in claim 1 wherein: said leg means is in the form of a pair of upwardly-open, U-shaped members disposed in a front to rear direction.

5. A cabinet as specified in claim 4 including: flange means directed rearwardly from the lower edge of said kick plate, said flange means being provided with openings sufficiently large to accommodate adjustment in a vertical direction of said extensible-retractible members without binding on said openings in said flange means; and said extensible-retractible members include enlarged lower ends thereon to limit movement of said flange means in a downward direction.

6. A cabinet as specified in claim 5 wherein: said flange means includes an upwardly offset bridge adapted to accommodate and straddle said enlarged lower ends when said kick plate is lowered relatively to said extensible-retractible member.

7. A cabinet as specified in claim 6 wherein: said U-shaped member includes an upwardly-offset portion in the bight thereof, said offset portion being positioned to receive said bridge in nesting relationship when said kick plate is in fully retracted position.

8. A cabinet as specified in claim 2 wherein: said extensible-retractible member is in the form of a bolt having an upper end adapted to receive a tool for rotating the bolt; and an access opening, in substantial vertical

5

alignment with the axis of said bolt, is provided in said housing panel above said bolt.

9. A cabinet comprising: a housing; leg means underlying said housing and secured thereto; vertically adjustable extensible-retractable members carried by the forward portion of said leg means, said members including enlarged lower ends; a kick-plate including a vertical face extending along the front of said leg means; flange means directed rearwardly from the lower edge of said kick-plate, said flange means being provided with openings of a size sufficiently large to accommodate adjustment in a vertical direction of said extensible-retractable

6

members without permitting said enlarged lower ends to pass therethrough; and means spaced forwardly from the front of said leg means to accommodate said vertical face of said kick-plate therebetween for movement thereof in a vertical direction.

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