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F. W. GEIER

3,479,103

WALL FURNITURE CABINET UNIT

Filed Oct. 2, 1967

2 Sheets-Sheet 1

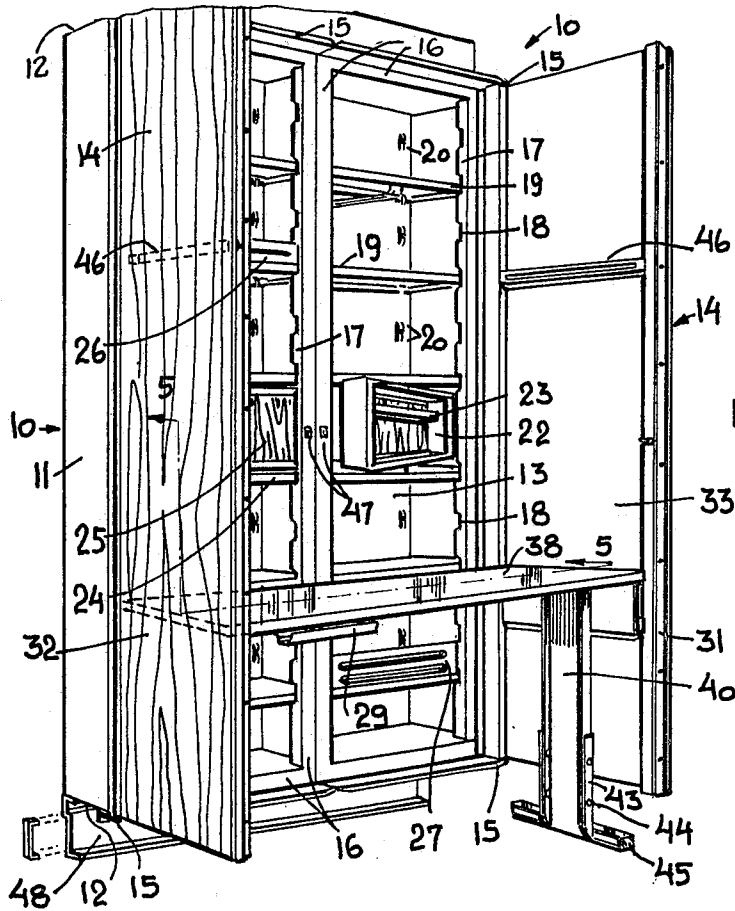


FIG. 1

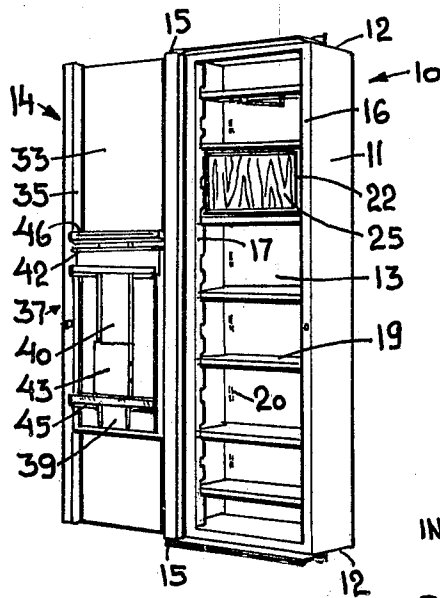


FIG. 2

INVENTOR:

FRANK W. GEIER

By:

CHURCH AND ROGERS
PATENT AGENTS

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F. W. GEIER

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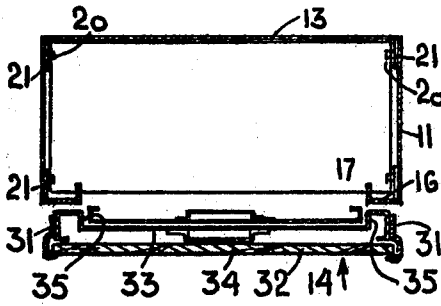


FIG. 4

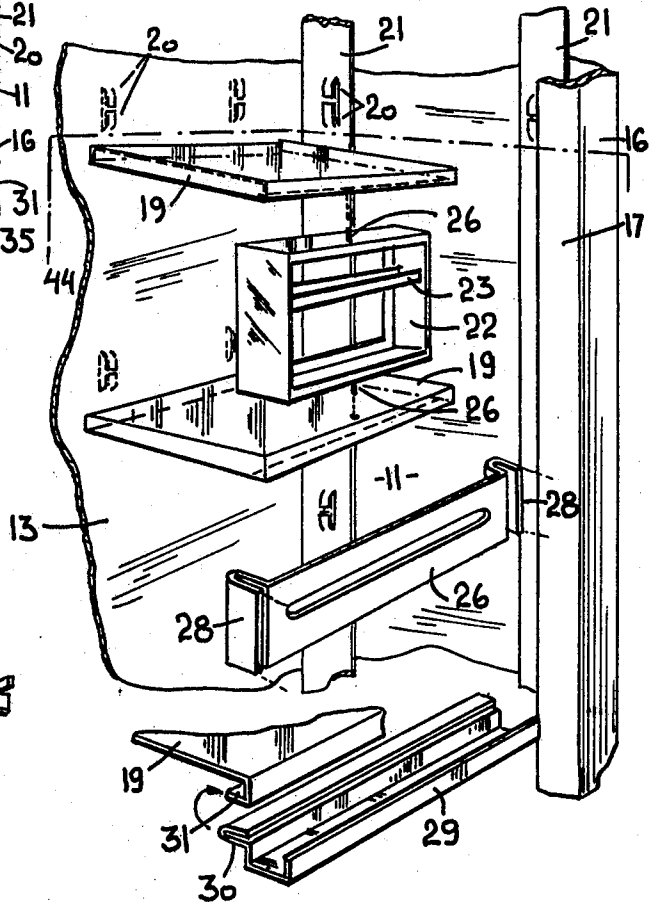


FIG. 3

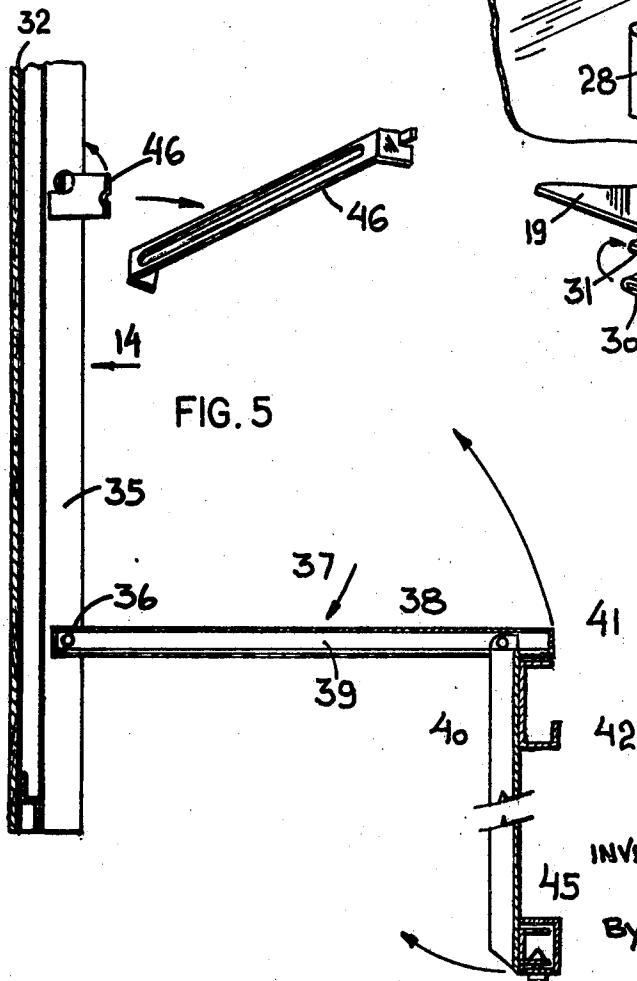


FIG. 5

INVENTOR:

FRANK W. GEIER

By:

CHUREH AND ROGERS
PATENT AGENTS

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3,479,103

WALL FURNITURE CABINET UNIT

Frank W. Geier, Vineland Station, Ontario, Canada

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8 Claims

ABSTRACT OF THE DISCLOSURE

A wall furniture cabinet unit comprises a vertically-extending elongated modular cabinet, with a front opening door and movable shelves, so arranged that the units are usable with either end up depending on the direction the door is to open; the front panel of the door is exchangeable for flexibility of decoration; the rear of the door is recessed and a modular, adjustable table unit can be stored in the recess with the door closed; the table unit can accommodate uneven floors when employed; special accessories provide storage for small items and effective drawer storage.

BACKGROUND OF THE INVENTION

The present invention is concerned with improvements in or relating to wall furniture units.

It is an object of the present invention to provide a new wall furniture unit.

It is a specific object to provide a modular wall furniture unit incorporating a storable table unit.

SUMMARY OF THE INVENTION

In accordance with the invention there is provided a wall furniture unit comprising a vertically elongated cabinet having a front door pivoted thereto adjacent one vertical edge thereof, and means for removably mounting shelves therein symmetrically disposed from both ends thereof so that corresponding shelves in adjacent inverted units are level with one another.

DESCRIPTION OF THE DRAWINGS

FIGURE 1 is a perspective view of two separate furniture wall units mounted side by side, one of the units comprising a desk shown in operative position,

FIGURE 2 is a similar view of a single unit comprising a desk shown in stored position,

FIGURE 3 is an exploded view to a larger scale to illustrate the manner in which component parts of the unit are fitted therein and also showing a different shelf mounting arrangement,

FIGURE 4 is a horizontal plane cross-section of a unit taken on the line 4—4 of FIGURE 3, with the door closed, and showing a desk unit in storage position, and

FIGURE 5 is a vertical plane cross-section taken on the line 5—5 of FIGURE 1.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

FIGURE 1 illustrates generally the manner in which two wall furniture cabinet units 10 in accordance with this invention may be used in cooperation with one another. It will become apparent however from the description which follows that the units may be used individually, or in any combination greater than two. The particular embodiments described herein are formed by bending, punching, welding etc. from thin sheet metal, but it will be apparent to those skilled in the art that

they can instead be fabricated from other materials, such as wood, plastics, highly compressed resin/paper combinations, or any combination of such materials.

Each cabinet unit of the invention is of vertically-elongated rectangular elevation and plan and comprises two long narrow side walls 11, two short end walls 12, a back wall 13 and a door indicated generally by the reference 14, the door being pivoted about a vertical hinge axis extending along one edge of the unit between two hinges 15 fixed respectively to the top and bottom of the unit. The side and end walls are of generally similar cross-section, comprising respective side webs 16 extending inwards perpendicular to the walls and respective returned webs 17 which extend inwards parallel to their respective side walls.

The returned webs 17 are each provided with a plurality of spaced notches 18 constituting forwardly-disposed means for mounting replaceable shelves 19 within the unit. Rearwardly-disposed shelf mounting means cooperating with the forwardly disposed means are in this embodiment constituted by pairs of oppositely directed lugs 20 on the rear wall 13. Two spaced sets of pairs of these lugs may be struck out from the wall 13, as shown in solid lines, or alternatively two members 21 are fixed to each side wall 11 and are each provided with a single centrally-disposed set of lug pairs, as shown in FIGURES 3 and 4. In the arrangement shown in FIGURES 1 each shelf 19 has a downwardly-extending edge and is mounted in the unit by engaging its front edge in the required pair of cooperating slots 18; the shelf rear edge is then swung downward to engage it in the upwardly directed lugs 20. With the arrangement of FIGURE 3 the shelf is swiftly engaged in the appropriate upwardly directed lugs.

A unit 22 for the reception of small articles and/or toilet accessories consists of a rectangular box open at one of its two largest sides and provided if desired with an internal shelf 23. The closed largest face is provided with angle members 24 comprising means for retaining a decorative panel 25 thereon. Coaxial pivot pins 26 are fixed to two of the longer narrow sides and are pivotally engaged in cooperating apertures in two immediately vertically adjacent shelves 19 so that the unit can be rotated between an operative position, shown to the right in FIGURE 1, in which the open side is to the front and access is readily obtained to its interior, and a stored position, shown to the left in FIGURE 1, in which the decorative panel 25 is to the front.

Other accessory devices for use with the unit comprise a shallow front guard rail 26 and a deep guard rail 27, each having a central portion which extends the width of the shelf, and U-shaped portions 28 at their ends that snugly embrace the respective returned web 17. In general the shallow guard rail serves to retain small items and papers on its associated shelf, while the deep bar effectively forms the equivalent of a drawer in which items of clothing etc. can be stacked. A narrow tray member 29 also has a U-shaped portion 30 that will snugly embrace a returned web 31 of each shelf 19 to hold the tray to the shelf, or to a table to be described below.

Referring especially to FIGURES 1 and 4, it will be seen that each door has retaining members 31 fastened adjacent its front face, the members constituting means for removably retaining a replaceable decorative front panel 32 thereon, so that the panel can be changed at will to provide the required decor. The rear face of the door is constituted by a sheet 33 which is stiffened by a channel

34 fastened thereto, and is recessed as deeply as possible to have recess side walls 35, as is most clearly seen in FIGURE 4; this recess extends substantially the same width as the distance between the returned webs 17 and permits the shelves to accommodate with the door closed items that project somewhat forwardly beyond the shelves.

A rod 36 is mounted in apertures punched in the side walls 35 and extends between them to constitute a pivot thereto for a desk or a table 37. The table top comprises a top sheet 38 having a wide channel member 39 fastened to its underside for added rigidity. A leg 40 is also of channel section and is pivoted to the channel member 39 by a rod 41. It will be seen that the table 37 is movable between an operative position illustrated in FIGURES 1 and 5 and a stored position shown in FIGURES 2 and 4, in which it is stored in the said door recess. The channel 40 is of a size slightly wider than the member 39, so that it nests over the member 39 in the stored position. A pencil etc. retaining tray 42 is fastened to the upper end of the leg so that it remains vertical at all times. As is illustrated only in FIGURE 1, the lower part 43 of the leg is separate from the upper part and the two parts telescope together for adjustment of the leg length, being fastened together when finally adjusted, for example, by screws 44. A foot member 45 comprising a decorative cap mounted on a channel is fixed to the leg by means which permit it to be tilted in the plane of the leg. The above-described leg adjustments permit the ready adaptation of the unit to situations where the floor is not even and flat, for example ships cabins. The table is retained in its stored position by a U-shaped member 46 having its arms pivoted about coaxial axes to the inside walls 35 of the door recess, so that it is tiltable in the direction of the arrow (FIGURE 5) to engage it with and disengage it from the table.

It is a particular feature of units in accordance with the invention that they are completely invertible, and that the shelves, table and other accessories are equally usable with both orientations thereof. Thus, by simple inversion a unit with a right-hand opening door becomes a unit with left-hand opening door, and vice versa. The lock 47 for fastening the door is placed exactly half-way along the length of the unit, so that its height from the floor remains the same upon inversion. The location of the fastening means 18 and 20 for the shelves is also completely symmetrical from top to bottom, so that shelves in adjacent inverted units appear at the same level. To the same end the door is provided with at least two sets of apertures for the reception alternatively of the table pivot, and preferably has a vertical spaced series thereof; the unused upper set may be employed to retain another of the U-shaped members 46 that serves, for example, as a tie bar or a towel rack.

It is a further feature of this particular embodiment that with the two doors of the two adjacent opposite hand units parallel to one another, the free end of the table 37 just fits within the recess of the other door so that a "private study" area is obtained. Such an arrangement is particularly useful in a study work location in that closely-spaced combined work/study areas can be provided having a maximum of privacy. The units are supported from the floor by any suitable means, such as a strut 48 and are also fastened to the walls.

In a particular preferred embodiment each unit is about 80 inches long, 20 inches wide, 10 inches deep without the door, and about 11¾ inches deep with the door closed.

It will now be seen that I have provided a new wall furniture unit that is particularly simple in design and yet is readily adaptable to an endless variety of practical and decorative arrangements. For example, in addition to the arrangements shown two units may be spaced apart with a bed and/or bookshelves between them and even supported thereby. A single unit with desk or table can provide a complete study or sewing centre and yet will occupy a negligible amount of space when closed. A num-

ber of the units may together comprise a free-standing wall, and they may also be used back-to-back for this purpose.

What I claim is:

1. An invertible wall furniture unit comprising a vertically elongated cabinet, a front door pivoted to the cabinet adjacent one vertical edge thereof, means for removably mounting shelves in the cabinet that are effective for mounting the shelves whether the unit is upright or inverted, an elongated table top, spaced means for pivotally mounting one end of the table top alternatively with the cabinet upright or inverted to the front door inner face, each means pivotally mounting the table top for movement about one end thereof between an operative horizontal position and a stored vertical position in which it extends vertically upward from the respective pivotal mounting means and is accommodated against the said front door inner face, spaced means for mounting retaining means alternatively with the cabinet upright or inverted, each retaining means engaging the other upper end of the table top in the said stored position to retain the table top against the said front door inner face, and a table leg pivotally mounted on the said table top adjacent the said other upper end thereof for movement between an operative vertical table top supporting position corresponding the said operative horizontal table top position and a stored position corresponding to the stored position of the table top and in which it is suspended by the table top parallel thereto.

2. The invention as claimed in claim 1, wherein the said elongated table top has at least one recess in the underbase thereof and the table leg in the said stored position thereof is accommodated in the said at least one recess.

3. The invention as claimed in claim 2, wherein the said table top comprises a flat top sheet and a reinforcing channel member having its base fastened to the underside of the said top sheet and its side walls extending from said underside, and the said leg member comprises another channel member having its side walls pivoted to the said side walls of the table channel member and nestable thereover in the said stored position.

4. The invention as claimed in claim 1, wherein said means for removably mounting shelves within the cabinet are symmetrically disposed from both ends thereof so that corresponding shelves in two adjacent units, one of which is upright and one of which is inverted, are level with one another.

5. The invention as claimed in claim 1, wherein each front door inner face has a longitudinally extending recess therein in which the table top is accommodated when in its said stored vertical position, and the horizontal length of the table top is such that with two units in side-by-side contact with one another, one upright and one inverted to have oppositely opening doors that can be disposed parallel to one another with their inner face recesses facing one another, the table top of one door extends into the corresponding front door inner face recess of the parallel door.

6. The invention as claimed in claim 1, and comprising retaining means for the door symmetrically disposed from both ends thereof.

7. The invention as claimed in claim 1, wherein the means for removably mounting each shelf therein comprise forwardly disposed notch means in which the front edge of the shelf is engaged and rearwardly disposed upwardly-extending lug means in which a downwardly-extending edge of the shelf is engaged, each upwardly-extending lug means having associated therewith a downwardly-extending lug means that becomes upwardly extending by inversion of the cabinet.

8. The invention as claimed in claim 1, wherein the said leg comprises two portions mounted to be movable relative to one another and connectable to one another to

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determine the length of the leg, and a foot member angularly adjustable in the plane of the leg member.

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