

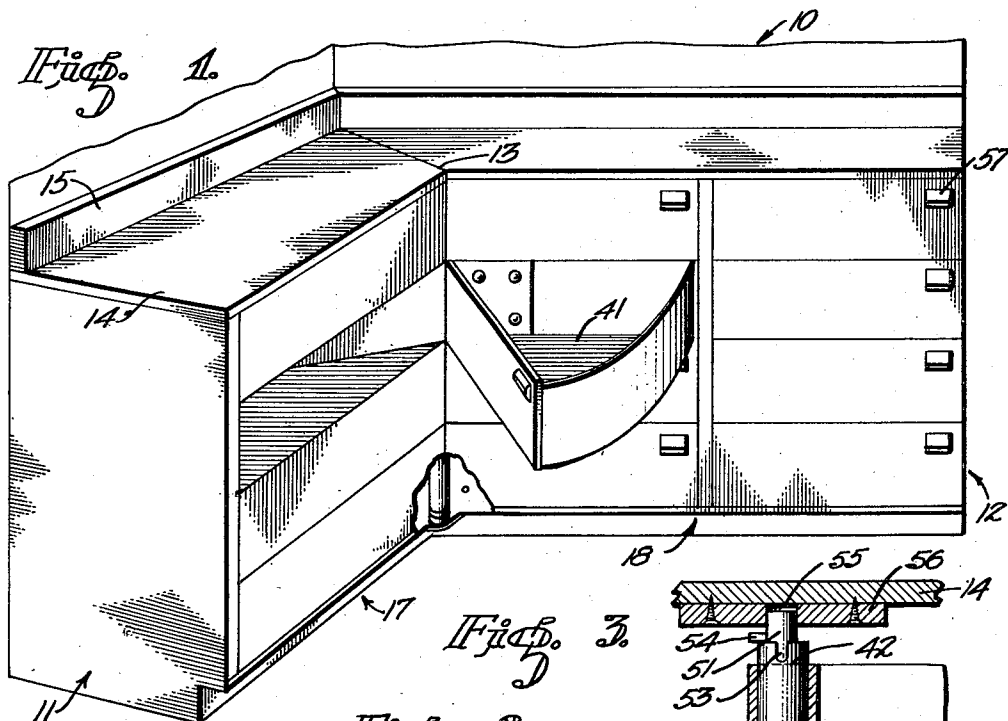
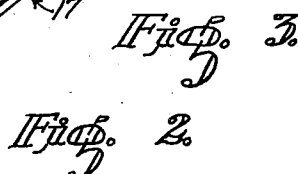
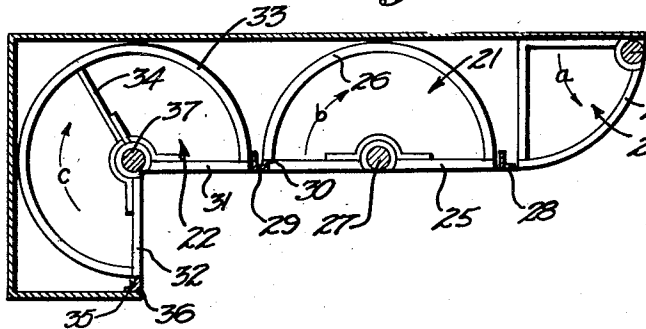
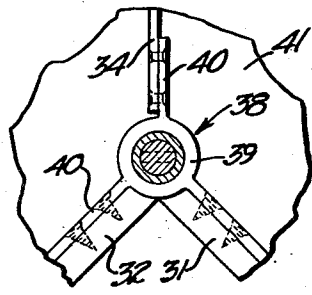
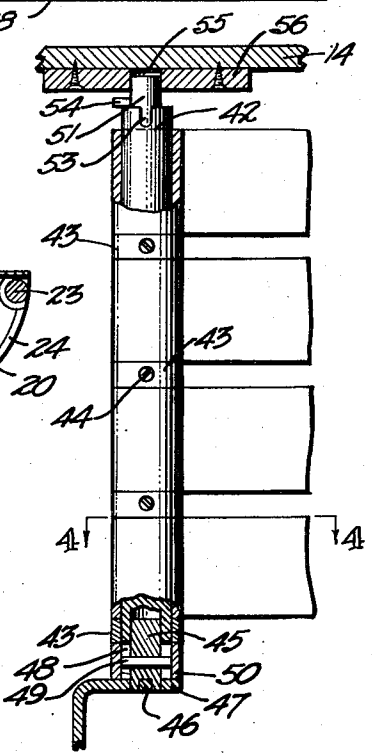
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CABINET SHELF CONSTRUCTION

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CABINET SHELF CONSTRUCTION

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2 Claims. (Cl. 312-152)

This invention relates to cabinet work and particularly pertains to cabinet shelf construction.

In the construction of cabinets, such as kitchen cabinets which extend along the wall and around a corner, it is impractical to build the cabinet with sets of drawers adjacent the corner since the drawers would pull outwardly in the paths of each other and would prevent them from being conveniently opened. It is also evident that the drawer space would be limited to the width of the drawer opening.

It is the principal object of this invention to utilize all of the available storage space adjacent to the adjoining corner of cabinet sections, and in order to accomplish this result in the present instance the invention embodies a swinging drawer structure mounted upon a vertical axis at the corner intersection at the front of the cabinet and supporting a composite drawer occupying the space which would normally be occupied by adjacent drawers in the two cabinet sections. It being a further object of the present invention to increase the capacity of the drawer structure, whereby all of the unused space directly in the corner between the drawer sections would be utilized for storage space. It is a further object of the present invention to provide a device of the character here disclosed in which the bank of drawers may be assembled and may be positioned removably within the corner section of a cabinet. It is also a further object of the present invention to provide a horizontal swinging drawer or shelf structure mounted either in the corner of a cabinet or along a side thereof, and which structure is so designed as to be accessible completely without the objection in sliding drawers that they may be withdrawn too far when fully opened.

The present invention contemplates the provision of a cabinet comprising two sections extending along adjacent walls and joining at the corner thereof, and in which contiguous space an assembled bank of drawers or shelving may be removably installed and may conveniently swing to opened and closed positions, it being also contemplated that such shelf units may be installed along other wall sections.

The invention is illustrated by way of example in the accompanying drawing, in which:

Figure 1 is a view in perspective, showing an embodiment of my invention with a drawer unit partially opened.

Fig. 2 is a view in plan showing the assembled construction and indicates various applications of the invention.

Fig. 3 is a fragmentary view in vertical section showing the pivotal mounting.

Fig. 4 is an enlarged fragmentary view showing the shelf connection as seen on the line 4-4 of Fig. 3.

Referring more particularly to the drawing, 10 indicates a cabinet structure such as a chest of drawers extending along the wall of a kitchen, and here shown as comprising sections 11 and 12. These sections are disposed in adjoining relation to each other, as indicated at 13. The sections as here shown include a counter or drain-board 14, having a molding 15 at the rear thereof, and front faces 17 and 18.

In the usual construction of cabinets or sets of drawers of the type here shown the front sections 17 and 18 are formed with the usual rectangular openings made by the frame of the cabinet structure and each of which openings receives a separate drawer. These openings are so designed as to permit the drawers to slide in and out. In the present instance the drawers are not designed for sliding movement but are pivoted for a horizontal swinging movement, and thus do not require the separate drawer frame sections. It is desirable to provide the drawers so that they fit with their front faces in a common vertical plane and will present a flat face extending from the drain-board 14 down to the front frame sections 17 and 18.

Referring more particularly to Fig. 2 of the drawing it will be seen that at least three types of drawer structures may be built utilizing the construction of the present invention. The structures are generally indicated at 20, 21 and 22. The drawer structure 20 is mounted on a vertical pivot 23 and has an arcuate front face 24. This section of the drawer is in the shape of a quadrant. This drawer section may swing out at the end of a cabinet in the direction of the arrow *a*.

The drawer section 21 is semi-circular, having a front wall 25 and a semi-circular rear wall 26. These drawers are mounted upon a vertical axis 27, the construction of which will be hereinafter disclosed. Attention is directed to the fact that a vertically disposed angle-bar 28 is positioned between the drawer sections 20 and 21 and that both drawers may swing on their pivots while clearing the angle member 28. An angle member 29 is disposed on the opposite side of the drawer 21 from the member 28. A recessed portion 30 in the front panel 25 of the drawer receives a lip of this angle and limits swinging movement of the drawer toward the left. The

drawer is free, however, to rotate around its axis 27 in the direction of the arrow b.

The drawer structure shown at 22 is particularly designed to seat in the corner of a cabinet or set of drawers and it has front panels 31 and 32 which are disposed at 90 degrees to each other to form the corner and an arcuate back wall 33 which represents three-quarters of a circle. If desired, the space may be sub-divided by radially extending partition walls 34. The panel 32 has a stop 35 which engages the lip of a vertical channel member 36 and limits the outer swinging movement of the panel 32. The drawer, however, is free to swing in the direction of the arrow c around a pivot structure 37.

One of the main features of novelty of the present invention is the manner in which the drawers are individually constructed and mounted. The drawers may be made of sheet metal or wood and the details of construction are more particularly described with relation to the drawer structure 22 and its pivotal mounting 37. Each of the drawers is formed with a central spider 38 having a cylindrical hub 39 and a plurality of radial arms 40. The front radial arms 40 receive the front panels 31 and 32 of the drawer and provide the corner structure of the cabinet. The remaining radial arm carries the partition member 34. A floor 41 completes the drawer. This floor may be secured to the various panels 31, 32 and 34 and to the wall member 33. As previously stated, the wall member 33 may be formed of wood or of sheet metal, and when formed of sheet metal the upper edge thereof may be provided with a circular bead for reinforcing the same. The various drawer structures thus formed and assembled are mounted upon a pivot post 42.

The pivot post 42 is detachably secured in position within the cabinet. The post carries a plurality of spacer collars 43 which are secured in position by set screws 44. The collars support the various hubs 39 of the spiders 38. The lower end of the post 42 is formed with a pin 45 which slides vertically within the lower end of the post and has a transverse slot at its lower end to engage a key 46 carried by a lower supporting bracket 47. This prevents rotation of the pin 45. The lower end of the post 42 is also provided with a pair of vertical slots 48 which receive a transverse pin 49 extending through the vertical pin 45. Thus the pin structure 45 may slide vertically with relation to the post 42 without rotating relative thereto. A spacing collar 50 rests upon the lower bracket 47 and is interposed between the lower bracket and the lowermost collar 43 on the post 42. This spacing collar embraces the portion of the post 42 which carries the vertical slots 48. The collar is provided to space the set of drawers with relation to the lower edge of the members 17 and 18 over which they swing. It will be understood that collars of various width may be used, and that in addition shims may be interposed between the parts to give proper adjustment.

The upper end of the post 42 is detachably secured beneath the drain-board 14 or table surface by a vertically moving pin 51 which slides within the upper end of the tubular post 42. This post is fitted with an open ended slot 53 to receive a laterally extending pin 54 mounted upon the member 51 and to permit this pin to move downwardly into the slot 53 and the upper end of the member 51 to clear the socket 55 within which it is fitted. The socket 55 is formed

in a face plate 56 which is fastened on the under face of the drain-board 14. It will be seen that a space the width of a collar 43 occurs between adjacent drawers and that the facing members 31 and 32 are of a sufficient vertical width along one of their edges to cover this space and to cause the entire drawer structure to present a smooth plane surface when all of the drawers are closed, as shown in Fig. 1 of the drawing.

To facilitate in opening the drawers a handle or grip member 57 is set into the face of the front element of the drawer.

In operation of the present invention the shelf structures are selected as required for the particular space in which they are to be placed, after which an entire set of shelves is assembled on a post 42, as shown in Fig. 3 of the drawing. The lower end of the pin 45 is then seated within the notches in the lower supporting bracket 47 and in engagement with the element 46. The upper element 51 is then lifted into the socket 55 and rotated until the pin 54 rests upon the upper shoulder of the member 42. The entire set of drawers will thus be completely assembled and pivotally supported in position. If the drawers do not swing exactly plumb the lower spacing member 50 may be adjusted and shims may be placed under it. While in this assembled position it will be evident that the drawers may be rotated upon their vertical pivotal axes and they will swing from a concealed position within the cabinet or the like to a position of accessibility.

It will thus be seen by the construction here disclosed, a simple and effective drawer structure and mounting is provided for use in cabinets permitting an assembled set of drawers to be instantly positioned within the cabinet in an operative condition and to be individually operated as here shown, while utilizing a maximum amount of cabinet space and particularly while providing a maximum amount of storage space around the intersecting corner portion of two counters or drain-boards.

While I have shown the preferred form of my invention as now known to me, it will be understood that various changes may be made in combination, construction and arrangement of parts by those skilled in the art, without departing from the spirit of my invention as claimed.

Having thus described my invention, what I claim and desire to secure by Letters Patent is:

1. In combination with a cabinet or the like which extends along contiguous side walls and in the corner formed thereby, an upper and a lower supporting bracket, a standard at the forward edge of the cabinet and substantially on the line of the corner intersection, a plurality of drawers mounted to swing independently on the axis of said standard, said drawers having outer circumferential walls concentric with the axis of the standard, and radial walls adapted to coincide with the planes of the front of the cabinet when the drawer is closed, a plurality of spacer collars between adjacent drawers, and means detachably securing said standard in its operative position with its relation to the cabinet, said means comprising a pair of vertical pins positioned within sockets at each end of the standard, the lower of said pins being vertically movable and having a transverse slot normally engaging a key in the lower supporting bracket, the upper of said pins being adapted to be moved vertically to clear the upper bracket whereby the drawers and the standard may be removed from their operative position.

2. In combination with a cabinet or the like which extends along contiguous side walls and in the corner formed thereby, a standard at the forward edge of the cabinet and substantially on the line of the corner intersection, a plurality of drawers mounted to swing on the axis of said standard, said drawers having outer circumferential walls concentric with the axis of the standard, and radial walls adapted to coincide with the planes of the front of the cabinet when the drawers are closed, spacing collars mounted between adjacent drawers, means detachably securing said standard in its operative position with relation to the cabinet, upper and lower supporting brackets between which said standard is mounted, said detachable securing means comprising a pair of vertical pins mounted within sockets at either end of said standard, the

lower pin being vertically movable and having a transverse slot which engages a key in the lower supporting bracket, the upper of said vertical pins adapted for vertical movement with relation to the standard, a laterally extending pin mounted upon the upper vertical pin, a slot within the upper end of the standard to accommodate said laterally extending pin, said laterally extending pin normally resting upon the upper end of said standard when the drawer and standard are in their operative position, said slot accommodating the laterally extending pin when said pin is moved vertically to allow the pin to clear its upper bracket whereby the standard and its drawers may be removed from their operative position.

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