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VERTICALLY ALIGNABLE STRUCTURAL ASSEMBLY
AND WALL HANGER THEREFOR
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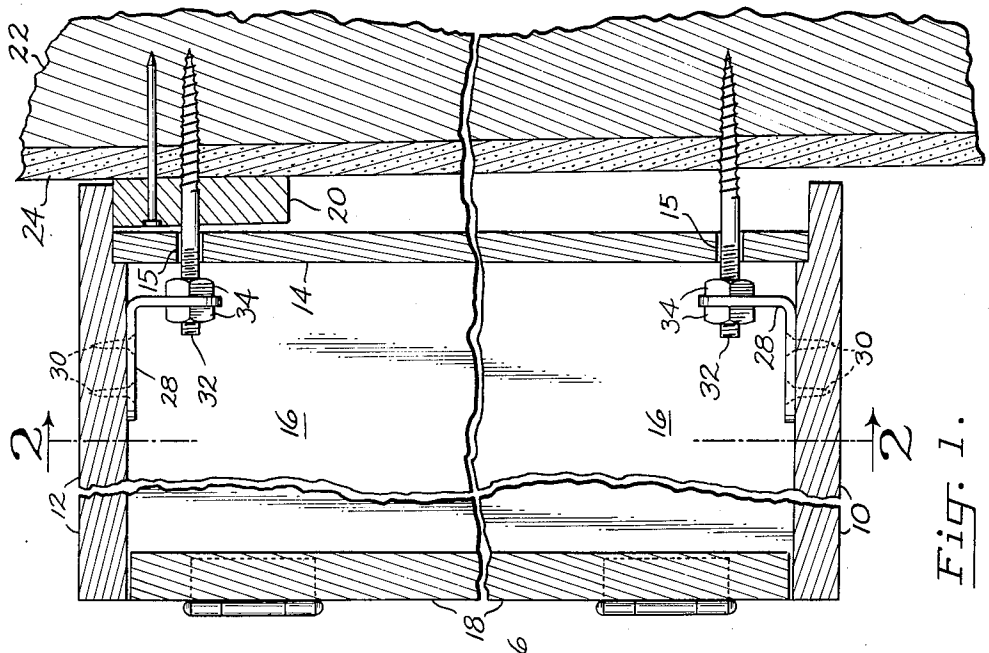


Fig. 1.

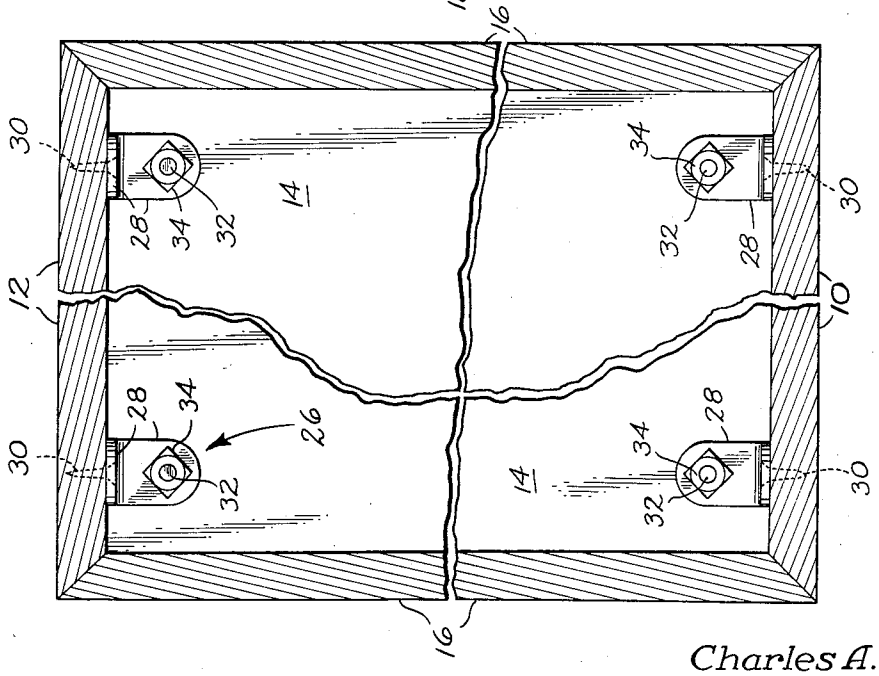


Fig. 2.

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VERTICALLY ALIGNABLE STRUCTURAL ASSEMBLY AND WALL HANGER THEREFOR

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This invention relates to vertically alignable structural assemblies, particularly cabinet or shelf assemblies of the class designed for hanging from a wall.

It is difficult to maintain wall-mounted cabinets and shelves in a vertical plane since the walls on which they are hung are prone to shift position as they warp and settle. The problem is particularly acute where the structural units are mounted independently side by side and it is necessary to maintain their faces flush with each other. In such a case, even a slight shifting of the wall causes conspicuous misalignment of the units.

Accordingly it is the general object of the present invention to provide a cabinet, shelf, or other structural assembly which can be hung from a wall and maintained in a precise position of vertical adjustment at all times, irrespective of shifting of position of the wall.

It is another important object of this invention to provide a wall hanger for use in such a structural assembly, which hanger may be employed for wall-mounting a variety of structural units, and which may be adjusted with facility during the service life of the unit as required to maintain it in a strictly vertical position.

The manner in which the foregoing and other objects of this invention are accomplished will be apparent from the accompanying specification and claims considered together with the drawings, wherein:

FIG. 1 is a foreshortened, transverse, sectional view taken through a cabinet assembly and illustrating the manner of adjustably securing the same to a wall; and

FIG. 2 is a foreshortened, longitudinal, sectional view taken along line 2—2 of FIG. 1 and further illustrating the herein described structural assembly.

Generally stated, the structural assembly of my invention comprises a cabinet, shelf, or other structural unit adapted for hanging from a wall and including a vertically arranged frame. Vertically spaced hangers are fastened to the frame and connected to the wall. Each hanger includes means for independent adjustment in a plane substantially laterally of the plane of the wall. This makes possible adjustment of the unit to a precisely vertical position even though the plane of the wall departs from vertical.

Considering the foregoing in greater detail and with particular reference to the drawings:

The embodiment of the invention illustrated in the drawings includes a cabinet as exemplary of the structural assemblies of the invention. The cabinet preferably is made strong and rigid by any suitable means, as by the inclusion of bulkheads, and the use of splined or dove-tailed joints.

Thus the cabinet may comprise a floor 10, a ceiling 12, a back 14 having vertically spaced perforations 15, side walls 16, and hinged front doors 18.

The ceiling piece 12 preferably is provided with a rearwardly extending, overhanging lip or projection which seats upon and bears against the upper surface of a horizontally extending block 20. The latter is nailed or otherwise secured to the wall and its upper surface provides a pivotal bearing point for the cabinet, supporting a substantial proportion of its weight.

The wall upon which the cabinet is hung may be of conventional construction. It includes studs 22, covered with plaster or a selected wallboard 24.

The cabinet is hung on the wall by means of hangers indicated generally at 26. Preferably at least four such hangers are employed, arranged in vertically spaced pairs at each end of the cabinet.

Each hanger comprises an angular bracket 28, preferably formed from a bar of rigid metal. One end of the bracket is fastened by means of screws 30 or otherwise to the ceiling of the cabinet. The other end is provided with an opening for the reception of a connector or spur member 32 which preferably is an elongated screw of sufficient length to penetrate opening 15 in the back wall 14, support block 20, wallboard 24, and stud 22. Openings 15 are of enlarged diameter relative to the spur members 32 for freely receiving the latter. The shank or outer end of spur member 32 is threaded and is adjustably secured to bracket 28 by means of lock nuts 34.

When installing the herein described cabinet, horizontal support block 20 first is nailed to the wall in the selected location. Hangers 26 are secured in vertical pairs to the floors and ceilings of the cabinet.

Threaded spurs 32 are fastened to the studs, preferably penetrating support block 20. The cabinet then is hung on the spurs and lock nuts 34 adjusted until it is precisely vertical and aligned with its companion cabinets. Then if studs 22 shift their position so that the cabinet is thrown out of vertical alignment, it may be restored quickly to proper position by adjustment of the lock nuts.

It is to be understood that the form of my invention herein shown and described is to be taken as a preferred example of the same and that various changes in the shape, size and arrangement of parts may be resorted to without departing from the spirit of my invention or the scope of the subjoined claims.

Having thus described my invention, I claim:

1. A vertically alignable structural assembly adapted for hanging from a supporting wall, comprising a vertically arranged frame member having a pair of vertically spaced, horizontally directed openings therethrough, vertically spaced elongated connectors adapted to be secured to a wall in a horizontal position and each having a threaded end portion, the connectors being freely received in the frame member openings for horizontal adjustment of the frame member on each of the connectors, thereby enabling adjustment of the structural unit to a precise angular position relative to a supporting wall as required to compensate for shifting of wall position, bracket members secured to the structural unit and having openings freely receiving the threaded end portions of the connectors, and lock nuts mounted adjustably on the threaded end portions of the connectors for securing the bracket members in adjusted position longitudinally on the connectors.

2. The structural assembly of claim 1 including a support member adapted to be secured to a wall in horizontal relation, a top frame member on the assembly having a portion projecting rearwardly beyond the vertically arranged frame member, the projecting portion of the top wall pivotally bearing against the upper surface of the support member for supporting the assembly on a wall.

3. The structural assembly of claim 1 including a bottom frame member and wherein each of the bracket members comprises a right angle metal bar, one segment of the bars being fastened to respective top and bottom frame members and the other segment of the bars having said openings for the free reception of the threaded ends of the connectors.

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