July 13, 1965 S. M. WARGO 3,194,362

PARTITION STRUCTURES

Filed Feb. 5, 1962

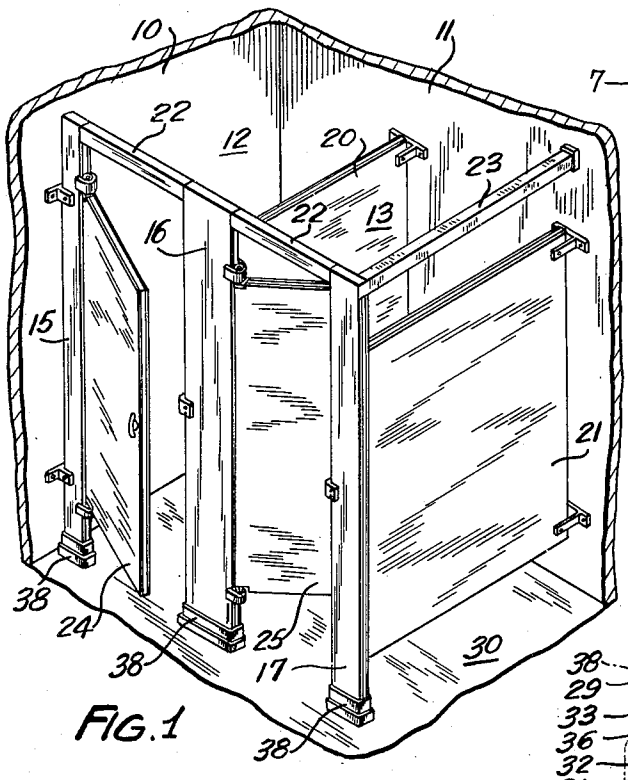


FIG. 1

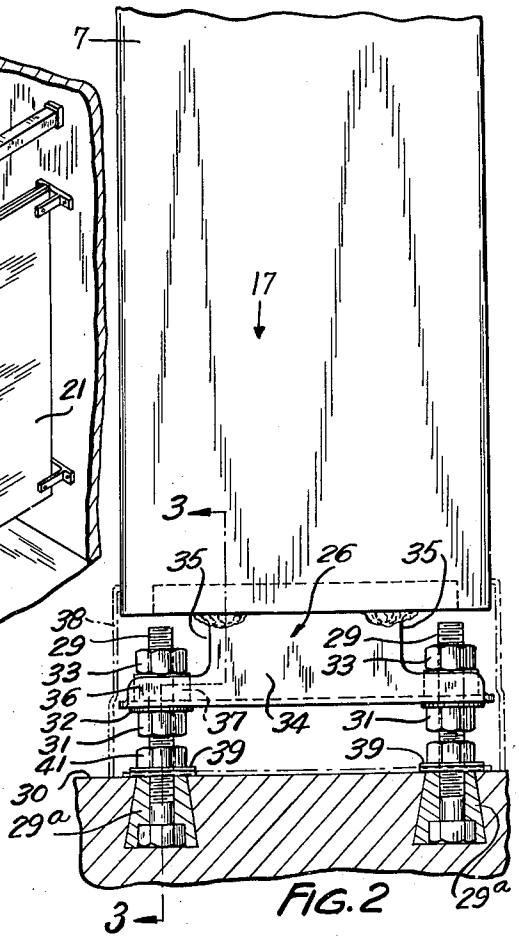


FIG. 2

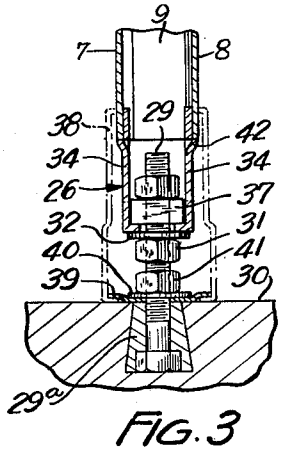


FIG. 3

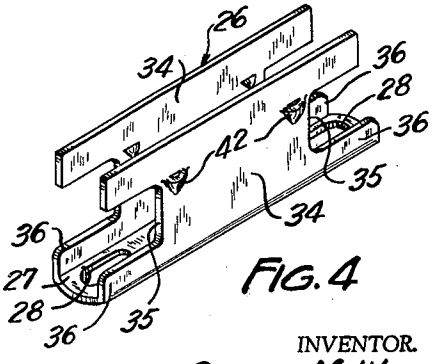


FIG. 4

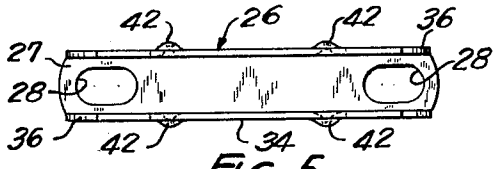


FIG. 5

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PARTITION STRUCTURES

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The present invention relates to partition or space divider structures, and more particularly, to means for securing partitions or space dividers to supporting surfaces such as floors, ceilings and walls.

One of the principal objects of the present invention is the provision of a novel and improved partition or space divider structural member which may be secured to a supporting surface simply and conveniently.

Another of the principal objects of the invention is the provision of a novel and improved partition or space divider structural member which is simple in design, particularly the mounting portion thereof, and which may be manufactured economically.

Another of the principal objects of the present invention is the provision of a novel and improved mounting means for supporting a partition or space divider structural member in an upright position.

A further object of the present invention is a novel and improved base assembly for a partition or space divider structural member which permits the adjustment of the structure for leveling or other purposes simply and conveniently.

The invention resides in certain constructions and combinations and arrangements of parts and further objects and advantages of the invention will be apparent to those skilled in the art to which it relates from the following description of the preferred embodiment described with reference to the accompanying drawing forming a part of this specification and in which,

FIG. 1 is a perspective view of a partition arrangement embodying the present invention;

FIG. 2 is a fragmentary enlarged view in front elevation of the bottom part of one of the partition structures with the bottom cover shown in phantom lines illustrating the floor mounting assembly;

FIG. 3 is a sectional view taken along line 3—3 of FIG. 2 with the bottom cover shown in phantom lines;

FIG. 4 is a perspective view of the U-shaped frame member of the floor mounting assembly; and

FIG. 5 is a plan view of the frame member.

The partitions or space divider structures of the present invention may be of various types for use in many different locations including hospital cubicles and toilet, shower and dressing rooms. The invention is particularly applicable to partition arrangements in which the space dividers or partitions are self-sustaining or substantially self-sustaining.

Referring to the drawing, a partition arrangement embodying the present invention is shown in FIGURE 1 as being located in the corner of a room having permanent walls 10 and 11. The arrangement comprises two individual cubicles 12 and 13 formed by pilasters 15, 16 and 17 floor mounted along a line perpendicular to wall 10 and defining door openings into the cubicles. Side walls 20 and 21 extending from the pilasters 16 and 17, respectively, to the wall 11 provide side walls for the individual cubicles. The pilasters are connected at their upper ends by sheet metal head rails 22. A rail 23 also extends from the upper end of pilaster 17 to the wall 11 of the room. The cubicles 12 and 13 are provided with doors 24 and 25, respectively, hinged to the left-hand pilaster defining the door opening into each clubicle.

The partition members including the pilasters 15, 16 and 17, the side walls 20 and 21 and the doors 24 and 25 are generally formed of two opposed, spaced metal sheets 7 and 8 connected together by marginal flanges 9 along and substantially coextensive with their ends and side edges except for the pilasters which have open bottoms.

To the bottom part of each of the pilasters 15, 16 and 17 is secured a metal frame member 26 for fastening the pilasters to the floor of the room. The metal frame member is U-shaped in cross section and is generally fabricated from sheet metal. The bottom portion 27 of the frame member has openings 28 therein to receive the ends of threaded studs or bolts 29. The studs are anchored in the floor 30 with suitable anchors 29*a* and extend upwardly through the openings 28 of the frame member 26. As shown in FIGURES 4 and 5, the openings 28 may be elongated slots to allow for variations in the distance between the studs 29.

The studs 29 have nuts 31 and washers 32 disposed thereon to support the bottom portion 27 of the frame member 26 when the pilaster and the frame member are positioned above the studs 29 with the ends of the studs passing through the openings 28 in the frame member. By adjusting the position of the nuts 31 on the studs 29, that is, changing the distance between the nuts 31 and the floor surface 30, leveling or other adjustment of the pilaster may be accomplished.

The frame member 26 is secured to the studs 29 by nuts 33 disposed on the upper parts of the studs which extend through openings 28 of the frame member. To facilitate the tightening of nuts 33, vertical flanges 34 of frame member 26 have portions 35 of reduced length. Advantageously, the vertical flanges 34 have a portion 36 of full length adjacent to the bottom portion 27 to strengthen the ends of the frame member in the vicinity of the openings 28. When upwardly extending full length portion 36 is present, spacers 37 may be provided on studs 29 between the nuts 33 and the bottom portion 27 of the frame member. Such spacers 37 aid in positioning the nuts 33 adjacent to the cut-out portions in the vertical flanges of the frame member 26. The thickness of the spacers 37 may be varied depending on the size of the shoulder on portion 36 so as to provide proper positioning of the nuts 33 when they are tightened against the spacers.

The upper end portions of the vertical flanges may be of reduced length or more advantageously, full length as shown in the drawing. These upper portions of the flanges are preferably disposed within the space between the metal sheets forming the partition and in telescoping relation therewith. End portions of full length provide maximum contact area between the sheets and the frame member.

After the partition has been secured to the floor by the tightening of nuts 33 on the studs 29, the bottom of each pilaster and the frame member secured thereto may be covered with a decorative shoe or cover 38. The shoe may be slid over the pilaster down into place and secured against the floor. As shown in FIGS. 2 and 3 the shoe 28 is held against the floor by clips 39 which are maintained in position with washers 40 and nuts 41 carried by studs 29.

The metal frame member 26 may be secured to the bottom of the pilaster by any suitable arrangement such as welding, bolting, etc. To facilitate positioning of the frame member on the bottom part of the pilaster, areas of the vertical flanges 34 of the frame member may be deformed to form projections 42 which can engage the bottom edge of the pilaster.

From the foreging description, it is apparent that the present invention provides novel and improved partition or space divider structures and provides a novel and improved assembly for holding and securing partitions

or dividers in an upright position tightly against a floor or other base surface. Also, the present invention provides a novel floor mounting assembly which eliminates the necessity of cutting or deforming the bottom of the partition to secure the partition to the floor or base surface.

While the preferred form of the invention has been described in considerable detail, it will be apparent that the invention is not limited to the constructions shown or the uses referred to, and it is my intention to cover all adaptations, modifications and changes which come within the practice of those skilled in the art to which the invention relates and the scope of the appended claims.

Having described my invention, I claim:

1. In a partition structure, a metal frame member comprising a bottom portion and vertical flanges extending upwardly therefrom and secured to said partition, said bottom portion having a plurality of openings therein for receiving upwardly extending studs anchored in a supporting surface, said vertical flanges having portions of reduced length to facilitate the positioning and adjustment of fastening elements disposed on said upwardly extending studs.

2. In a partition structure, two opposed, spaced metal sheets, side flanges connecting said sheets, a U-shaped metal frame member secured to the said sheets comprising a bottom portion and vertical flanges extending upwardly therefrom and secured to said sheets, said bottom portion having a plurality of openings therein for receiving upwardly extending studs anchored in a supporting surface, said vertical flanges having portions of reduced length to facilitate the positioning and adjustment of fastening elements disposed on said upwardly extending studs.

3. A partition structure comprising two opposed, spaced metal sheets, side flanges connecting said sheets, a U-shaped metal frame member secured to the bottom of said sheets and having a bottom portion and vertical flanges extending upwardly therefrom toward said sheets, said bottom portion having a plurality of openings therein and said vertical flanges having portions of reduced length, a plurality of studs anchored in a supporting surface and extending upwardly through the openings in the bottom portion of said frame member, fastening elements disposed on said studs above and below said openings to hold and secure said partition structure to said supporting surface.

4. A partition structure comprising two opposed, spaced metal sheets, side flanges connecting said sheets, a U-shaped metal frame member secured to the bottom of said sheets and having a bottom portion and vertical flanges extending upwardly therefrom into the space between said sheets and in telescoping relation therewith, said bottom portion having a plurality of openings therein and said vertical flanges having cut-out portions extending inwardly from the ends thereof, a plurality of threaded studs anchored in a supporting surface and extending upwardly through the openings in the bottom portion of said frame member, nuts disposed on said studs above and below said openings to hold and secure said partition structure to said supporting surface with the nuts above said openings being positioned adjacent to said cut-out portions.

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