

July 18, 1961

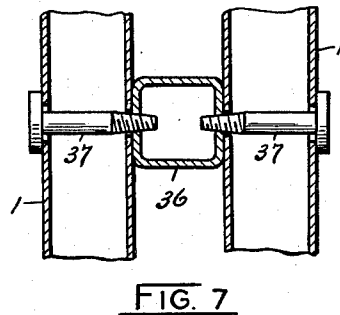
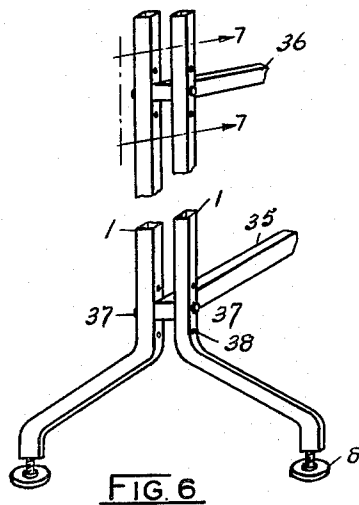
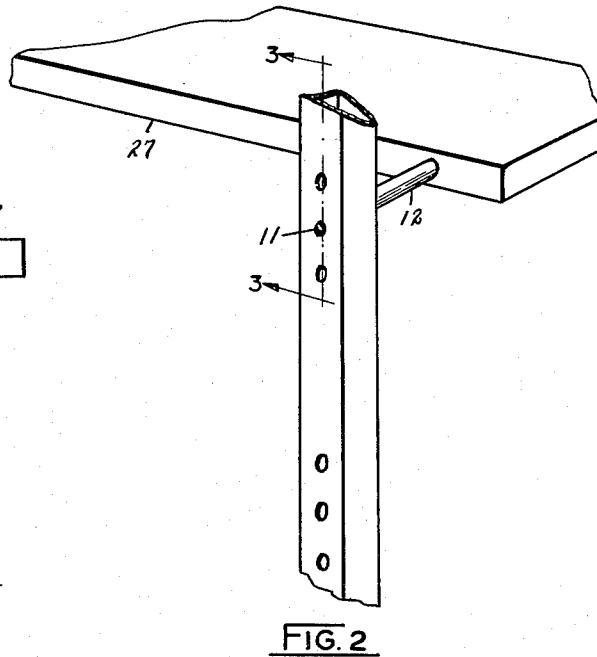
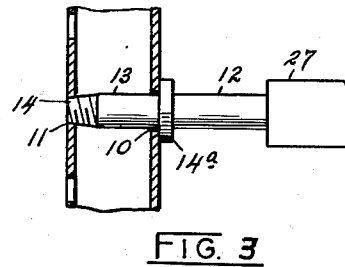
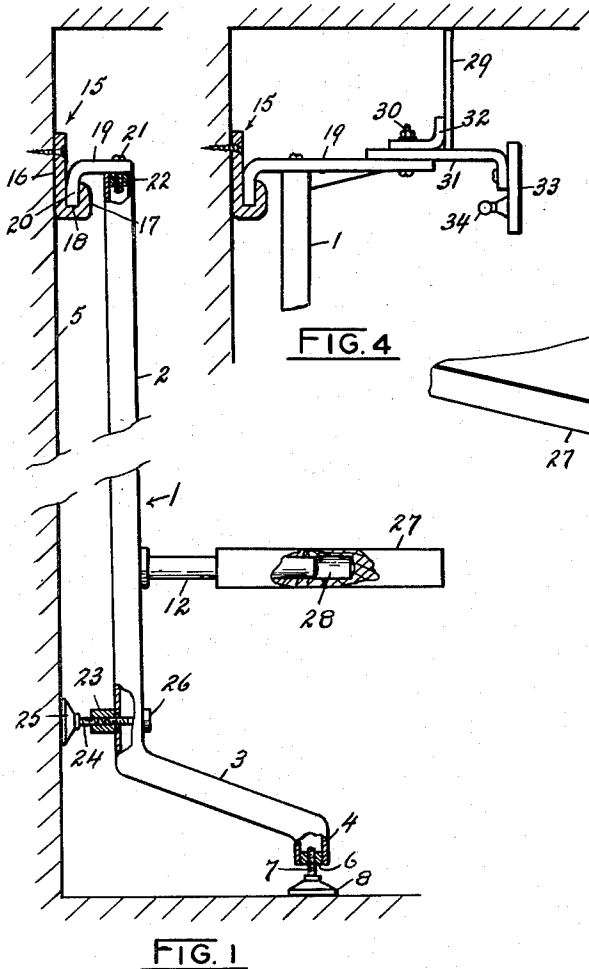
HOWARD WING

2,992,743

SUPPORTS FOR DISPLAY FIXTURES AND THE LIKE

Filed Dec. 4, 1959

2 Sheets-Sheet 1



INVENTOR,
HOWARD WING
Imrie & Smiley
ATTORNEYS

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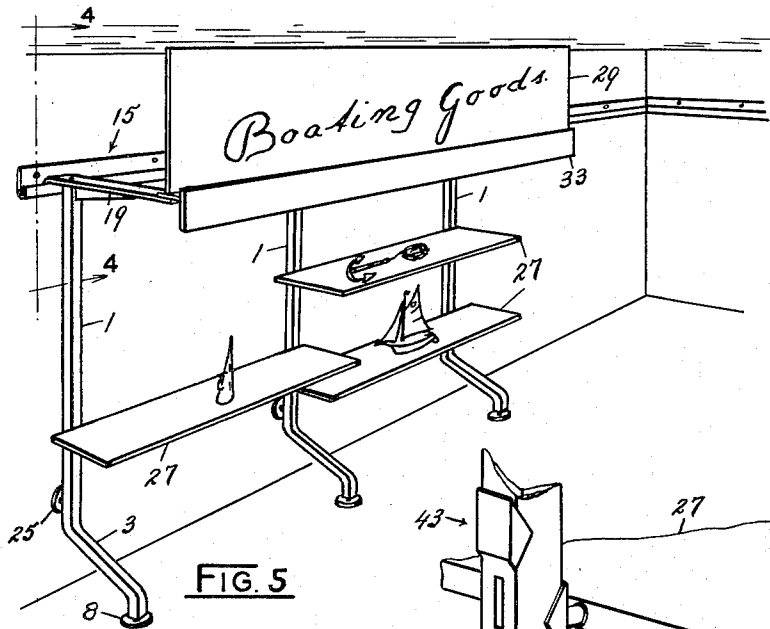


FIG. 5

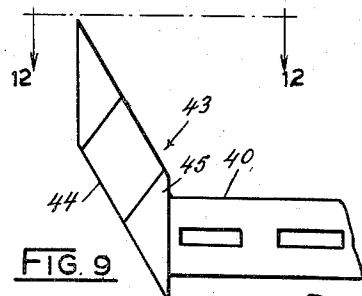


FIG. 9

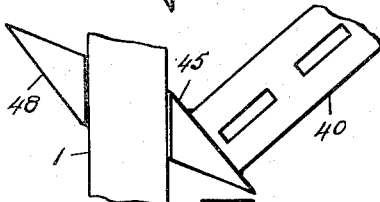


FIG. 10

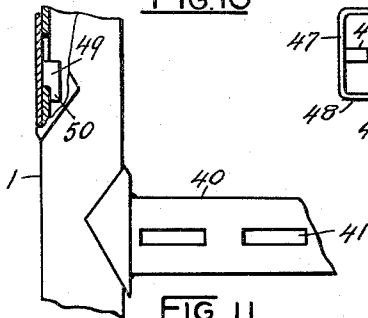


FIG. 11

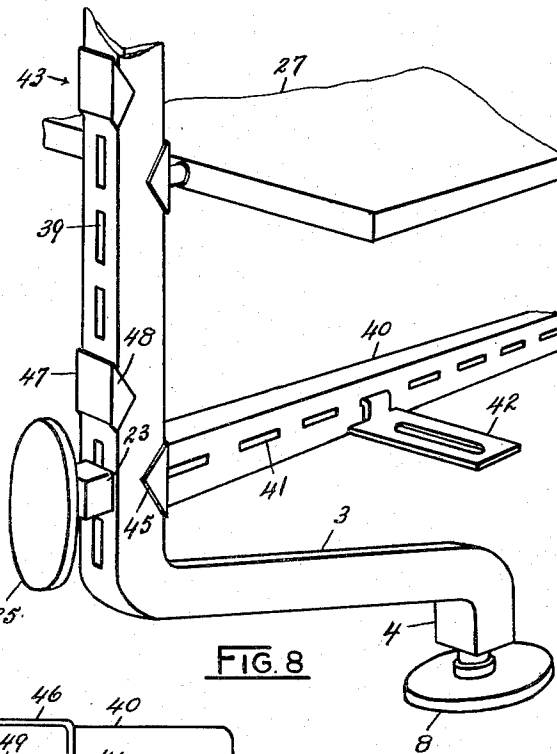


FIG. 8

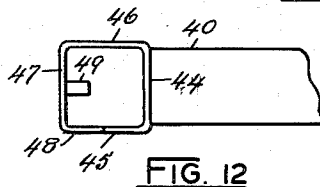


FIG. 12

INVENTOR,
HOWARD WING
Insler & Smiley
ATTORNEYS

1

2,992,743

SUPPORTS FOR DISPLAY FIXTURES AND THE LIKE

Howard Wing, 606 Avenue Road, Toronto, Ontario, Canada

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7 Claims. (Cl. 211-90)

The invention relates to improvements in supports for display fixtures and the like, as described in the present specification and shown in the accompanying drawings that form a part of the same.

One of the main objects of the invention is to provide a basic upright structural unit which can be firmly associated with a wall without the use of nails, screws, or other attaching means and which either singly, or in combination with other similar units, can be used to support display fixtures, shelving, or other devices, such, for instance, as for the display of articles of wearing apparel, or other types of wares.

Another important object of the invention is to compensate for unevenness in floor structures by the provision of simple and effective means for lining up the top ends of all upright units disposed along a wall so that shelves, connecting brackets, or other devices lying between and supported by adjacent uprights will lie in a true horizontal plane.

Another important object of the invention is to provide a basic upright structural unit wherein the weight of the shelving, display brackets and the contents thereof will act to stabilize the unit.

An important feature of the invention resides in the fact that all openings adapted to receive cooperating parts of clamps used to removably attach the fixtures to the upright are located in the rear of the upright in opposition to the wall and so are not noticeable from the front or sides of the upright.

Another important feature of the invention resides in the clamp used to detachably secure a shelf, or display fixture to the upright structural unit or units, such clamp being so formed as to produce a binding effect on the upright and being interlockingly secured thereto by a simple key part entering a slot, or opening, in the rear surface of the upright.

And generally, the objects of the invention are to provide a simple, attractive and inexpensive structural unit so supported that it can be moved along a wall to any desired location without any adjustment of parts having to be made and, further, which in combination with other similar units can be used to provide supporting means over any desired extent of wall surface, with all of such units aligned horizontally regardless of unevenness in the floor structure.

With the above and other objects in view the invention consists in the novel features of construction, arrangements and combination of parts set out in the present specification and more particularly pointed out in the claims for novelty following.

In describing the invention reference will be made to the accompanying drawings in which:

FIGURE 1 is a side elevation of an upright structural unit embodying my invention associated with a wall, the levelling frieze being vertically sectioned and other parts being broken away and sectioned.

FIGURE 2 is a rear fragmentary perspective view of a structural unit and shelf.

FIGURE 3 is a vertical section taken on the line 3-3 of FIGURE 2.

FIGURE 4 is an upper end elevation of a structural unit having an advertising panel incorporated therewith.

FIGURE 5 is a perspective view of one interior corner of a room, showing the levelling frieze arranged along

2

both walls, with a display assembly arranged along one wall.

FIGURE 6 is a perspective view, foreshortened, showing two basic structural units arranged back-to-back with shelf supports providing the means to hold said units erect.

FIGURE 7 is a vertical section taken on the line 7-7 of FIGURE 6.

FIGURE 8 is a fragmentary rear perspective view, on an enlarged scale, of the lower portion of a structural unit of slightly modified form, with a shelf and a shelf support attached thereto.

FIGURE 9 is a fragmentary perspective view of a clamp of the type shown in FIGURE 8.

FIGURE 10 shows the clamp of FIGURE 9 in process of being applied to an upright.

FIGURE 11 is a fragmentary side elevation showing the clamp of FIGURE 8 in holding condition, part of the clamp being in section and the upright being broken away to show the clamp key locked to the upright.

FIGURE 12 is a plan view of FIGURE 11.

Like numerals of reference indicate corresponding parts in the various figures.

Referring to the drawings, 1 denotes generally my improved basic structural unit which is made of a length of tubular material herein shown as being of square cross section but which may be of any desired cross section. This length of tubular material is bent to provide an elongated straight upper body portion 2, a laterally extending inclined part 3 and a short leg part 4 having its longitudinal axis paralleling that of the body 2. The straight body part 2 comprises the greater portion of the length of the tube and in practice it is adapted to assume a vertical position backed by and spaced from a wall 5 or other perpendicular surface and constitutes, usually with other similar elements, the means for supporting brackets or other display devices.

The leg 4 is fitted with an apertured plug 6, which may be a conventional nut, the opening through which is threaded to receive an exteriorly threaded bolt 7 which projects from a flat-bottomed foot 8.

The straight body part 2 of each upright element is provided at intervals along its length with horizontally aligned apertures 10 and 11 through its front and rear walls respectively for the reception of the ends of self-supporting rods 12. The apertures 10 through the front side of the upright 1 are of smooth bore to receive the cylindrical parts 13 of the rods 12 and the apertures through the rear walls of the upright area are of lesser diameter than the apertures 10 and are threaded to threadingly receive the ends of the rods 12, which are reduced and threaded, as at 14 to enter said threaded openings 11. A collar 14a is provided on each rod 12 to bear against the upright 1 to limit the inward movement of said rod.

In order that the correspondingly positioned vertically spaced apertures of associated upright elements 1 used in the erection of a display assembly, or assemblies, within a room may be set and maintained in true horizontal alignment regardless of irregularities in the floor surface of the room and thus assure all shelves of the device of each row of devices lying in the same horizontal plane, the elements 1 are suspended from a supporting frieze 15 which is attached along the wall or walls of the room in a true horizontal plane.

The frieze 15 consists of a band 16 of metal, or other suitable material, secured to the wall surface by nails, screws, or other suitable fastening means and having its lower marginal part 17 turned upwardly along its full length to provide a longitudinal groove 18 throughout the length of the frieze. As a means for suspending the upright elements 1 of the display assembly from the

3

frieze, I provide from the top end of each said upright element a laterally extending sheetmetal arm 19 having a downwardly turned marginal part 20 which is adapted to extend downwardly in a sliding fit within the groove 18 in the frieze and rest on the bottom of said groove. The horizontal arms 19 are shown herein as being attached to the top ends of the respective uprights 1 by means of threaded bolts 21 extending therethrough and threading into nuts 22 fixed in the open top ends of said uprights 1.

It will thus be seen that as the upright structural elements are suspended from the frieze 15 and as the frieze extends along the wall in a true horizontal plane, the apertures in the various horizontal rows of apertures through the uprights 1 which receive the shelf and supporting rods 12 will be in true horizontal alignment regardless of irregularities in the floor surface.

When the upright structural elements 1 have been suspended from the frieze 15 the feet 8 can be brought into close engagement with the floor surface by simply turning the threaded bolts 7 in the required direction.

As means for holding the lower ends of the upright elements 1 spaced from the wall 5 in accordance with the spacing of the top ends from the wall and for adjusting said spacing, there is provided on the rear face of each upright element near the lower end of its straight body portion 2 a fixed block 23 which is bored horizontally in alignment with apertured openings through the upright and a threaded bolt 24 extends through the upright and threads through the nut 23 and is provided on its end rearwardly of the upright with a flat-faced head 25 adapted to be moved into engagement with the wall surface by turning the bolt, which at its other end is provided with a head 26 to facilitate turning.

A shelf 27 or any desired number of shelves, depending on the number of apertures 10 and 11 with which the upright elements which are combined to provide a display assembly, is provided and may be supported by rods 12 which are inserted in the horizontally aligned apertures of two upright elements 1, the shelf, or shelves being provided with openings 28 in their edges properly spaced in accordance with the spacing of the rods extending from the adjacent uprights. This cooperative engagement of shelves and supporting rods permits a fast erection and removal of the shelves without the use of tools of any kind and it also permits the desired spacing of the shelves laterally in respect to the uprights.

It will thus be obvious that to erect a display assembly comprising two uprights and a single shelf, it is only necessary to hang the uprights on the horizontal frieze with adjacent uprights in the desired positions along the wall and to then adjust the screw 24 in relation to the wall 5 to cause the uprights to assume true vertical positions. The floor engaging members 8 are then adjusted to proper positions to engage the floor, thus the uprights are held secure in relation to the wall and all apertures in adjacent uprights intended to be on the same horizontal plane will be in true alignment. The rods 12 are then set in appropriately aligned relation in the uprights and a shelf is then set in position on the horizontally aligned rods simply by moving it edgewise towards the rod 12 so that the rods will enter the openings in the edge of the shelf. Thus any required number of shelves may be provided in relatively aligned or staggered relation to each other.

In FIGURES 4 and 5 a modified structure is shown whereby an advertising panel 29 is provided. This is accomplished by extending forwardly the arms 19 and removably attaching thereto by fasteners 30 endwise extensions 31 to support the said panel 29, which latter preferably has rear brackets 32 welded thereto and having angle parts secured by fasteners 30. The extensions 31 may project beyond the panel 29 and carry a downwardly extending plate 33 to rear side of which an electric lamp 34, or lamps, may be attached to shed light upwardly to illuminate the face of the panel 29.

4

In FIGURES 6 and 7 an alternate form of assembly is shown in which at least 4 basic structural upright elements 1 are used, arranged in two pairs, spaced apart according to the required length of assembly, each pair consisting of two upright elements placed back-to-back and spaced by hollow connecting bars 35 and 36 extending lengthwise between the pairs of upright units. The bars 35 and 36 are preferably located near the top and bottom ends of the body parts 2 of the upright elements and they are fastened to the elements of the pairs of elements by fastening pins 37 which extend through the elements at opposite sides and screw into the corresponding sidewalls of the portions of the bars therebetween.

The upright elements 1 are preferably provided with a number of aligned apertures 38 arranged vertically near the top and bottom ends of the body 2 to permit selective positioning of the said bars.

In the modification shown in FIGURES 6 and 7, said vertical adjustment of the upright units 1 as may be necessary, due to irregularities in the floor, to ensure true horizontal positioning of the shelves, or other article-supporting means is provided through adjustment of the feet 8.

In FIGURES 8 to 12 a further modification of the invention is shown wherein each upright structural unit 1 is provided throughout the vertical extent of its straight body with spaced vertically-elongated slots 39 and tubular connections 40 adapted to connect adjacent uprights of an assembly are provided with slots 41 which are elongated lengthwise of said bars.

In the modification illustrated in FIGURES 8 to 12, the tubular cross-member 40 is adapted to extend between adjacent upright elements 1 to serve as a support between such elements for article-holding devices 42 and is shown as being for removable attachment at each end to the adjacent upright element by means of clamping devices 43. Each such clamping device 43 consists of a sheet-metal body part 44 connected to and obliquely arranged across the end of a cross-member 40, said body part having a pointed end part 45 bent to extend around onto and closely engage one side of the upright element 1, and having its other end bent to extend over the corresponding side of the upright, as at 46, and over the rear face of the upright as at 47 and having its marginal end part 48 pointed and bent to closely engage the side of the upright element on which the other end 45 of the clamp body is located, but somewhat offset in respect to said end 45. The portion 47 of the clamp member 43 has a key 49 projecting inwardly at right angles to its surface and having a finger 50 adapted to enter the underlying slot 39 and engage the lower end edge of said slot to hold the clamp secure.

The present invention provides a very convenient, attractive and economical means for displaying wares. The method of hanging the upright members on a continuous frieze pre-set to a true horizontal plane assures all horizontal parts, such as shelves, remaining level and, furthermore, simplifies reduction and enlargement of display assemblies which can be effected quickly and without the use of tools.

While I have shown and described herein the present preferred arrangements and combinations of parts for carrying out my said invention, these are capable of variation and modification. I, therefore, do not wish to be limited to the precise details of construction and arrangement set out herein but desire to avail myself of such variations and modifications as come within the scope of the appended claims.

What I claim is:

1. In a support for display fixtures and the like, in combination, a hollow upright adapted to detachably receive an article to be supported, a horizontally disposed leveling frieze mountable on a wall, means on said upright and slidably engaging said frieze for suspending said upright in spaced relation to said wall for sliding movement

5

therealong, said upright comprising a straight upper body having a lower part inclined downwards in a direction away from said wall, said inclined part terminating in a vertical leg, a foot adjustable vertically in said leg into ground engagement, and adjustable means carried by the body of said upright movable into engagement with the wall to hold said upright vertical.

2. A support for display fixtures and the like according to claim 1, wherein said leveling frieze comprises an elongated rigid band adapted to be secured in a true horizontal plane along a wall, said band having its lower marginal part turned away from the wall and upwardly to provide an upwardly opening groove throughout its lengthwise extent.

3. In a support for display fixtures and the like, in combination, a hollow upright adapted to detachably receive an article to be supported, an arm extending laterally from the top end of said upright having its outer marginal part turned downwards parallel to said upright, a leveling frieze comprising a rigid member secured along a wall in a true horizontal plane, said member having an upwardly opening groove remote from said wall to slidably receive said downwardly turned marginal part of said arm whereby to support said upright and allow lateral movement thereof along the wall on a true horizontal plane, said upright having a lower part inclined downwards in a direction away from said wall and terminating in a relatively short leg, a foot adjustably connected to said leg for ground engagement, adjustable means for holding said upright to a vertical position spaced from the wall, and means for detachably securing article supporting devices to said upright at selected points therealong.

4. A support for display fixtures and the like, according to claim 3, wherein the body of said upright includes front and rear walls and wherein said front and rear walls are provided with vertically spaced apertures aligned horizontally, the apertures through the rear walls being of lesser diameter than through the front walls and being threaded.

6

5. A support for display fixtures and the like, according to claim 3, characterised by article carrying rods having their one ends adapted to be projected through selected openings in the front wall of an upright and threaded into the threaded opening in the rear wall of the upright.

6. A support for display fixtures and the like, according to claim 3, wherein said arm extending laterally from the top end of said upright is extended beyond said upright in a direction away from the supporting frieze and carries an upright panel adaptable as an advertising medium.

7. In a display fixture assembly, a leveling frieze comprising a track extending along a wall on a true horizontal plane, a plurality of uprights suspended from said track in spaced relation to each other and movable along said track, said uprights having vertically spaced apertures therethrough in a direction at right angles to the wall, shelf supporting rods having their one ends detachably engaged in said openings in said uprights, shelves having openings in their one edges to receive portions of said rods which project from said uprights whereby to provide article holding means and to space adjacent uprights, said uprights being inclined away from said wall near their lower ends and turned downwards to provide relatively short vertical legs, feet having threaded stems entering said legs and adjustable vertically to ground engagement, and adjustable means to regulate the spacing of the lower ends of said uprights in respect to the wall.

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