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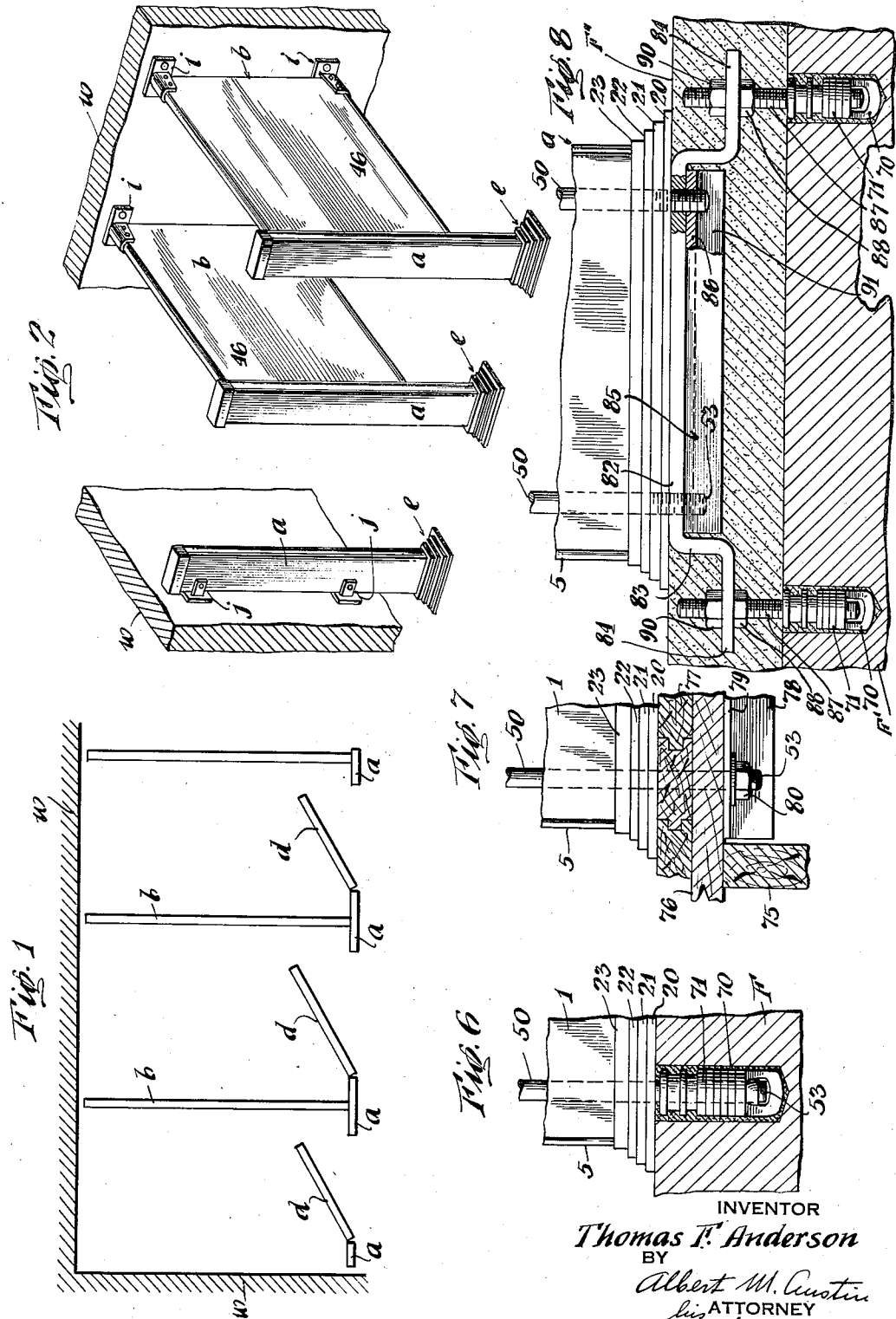
T. F. ANDERSON

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CUBICLE ASSEMBLY

Original Filed Dec. 19, 1938

2 Sheets-Sheet 1



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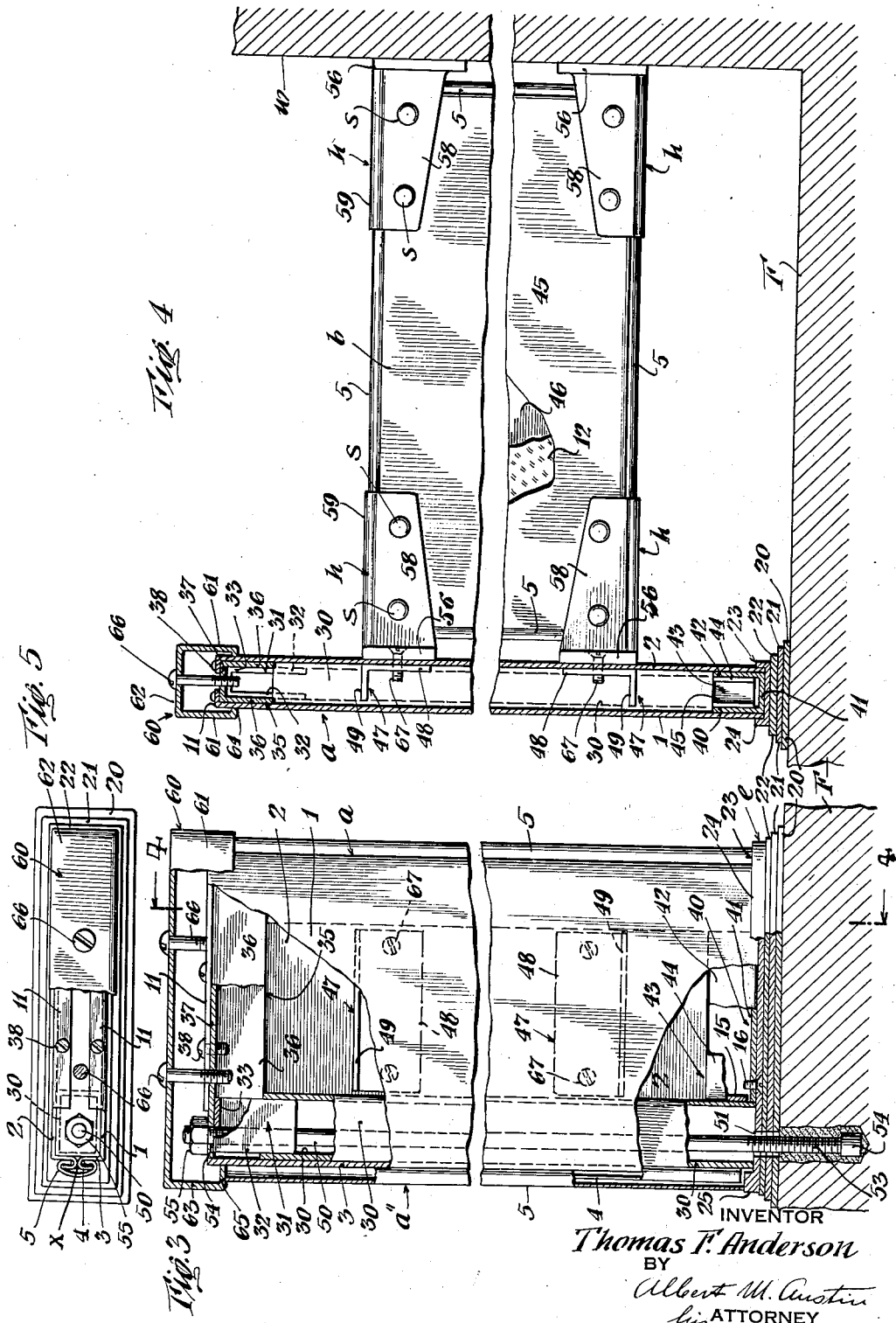
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UNITED STATES PATENT OFFICE

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CUBICLE ASSEMBLY

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246,634. Divided and this application March
18, 1941, Serial No. 383,919

6 Claims. (Cl. 139—34)

This invention relates to an improved cubicle assembly, and more particularly to a cubicle assembly providing one or more separate compartments for individual use. This application is a division of my copending application Serial No. 246,634, filed December 19, 1938, Patent No. 2,240,482.

In accordance with my invention, a cubicle assembly is provided which comprises a plurality of spaced uprights which form both the supporting framework and the front wall panels of the cubicle assembly. The supporting uprights are placed adjacent the building walls and at the corner and between door openings of the cubicle assembly so as to provide convenient door openings therebetween into which a door may be swingably mounted. The uprights are characterized by the fact that they present smooth and flush wall surfaces on both sides thereof, which are free from dirt-collecting cavities and projections. The supporting uprights may also contain sound-deadening insulation so that the partition uprights transmit little or no sound when struck. The lower end of each upright seats within an attractive floor base and the upright itself is held in rigid erect position by means of concealed tie rods contained within the upright, which are adjustably secured to the building floor in such a manner that no reinforcing framing around the cubicle assembly is necessary.

Partition panels divide the assembly into separate cubicles. The partition panels also present flush wall surfaces and may be held in suspended position between the supporting uprights and the building wall by suitable supporting brackets.

My improved cubicle assembly may be made of such size as the use to which it is to be put requires and may be constructed and assembled to provide convenient and attractive toilet cubicles, telephone booths, shower stalls, dressing rooms, hospital cubicles and privacy booths for use in business, financial and professional establishments.

Among the features and advantages of my improved cubicle assembly is the provision of structural parts which present substantially flush wall surfaces which are highly sanitary and can be easily cleaned and maintained. The assembly is constructed of relatively few parts and substantially entirely of sheet metal and sheet metal strips and can therefore be economically constructed with a minimum of labor and material, and when thus constructed can be quickly erected in the location where it is to reside without re-

quiring special fitting. The cubicle assembly can easily be taken down, stored in a minimum of space, and re-erected in another location substantially without damage to the building and without requiring refitting of the parts.

The supporting uprights and partition panels can be given any desired color and finish, either in contrast to or in harmony with the floor bases and supporting brackets which may be economically made as one piece castings suitably plated with chromium, nickel, or other plating finish, or if desired they may be merely painted or lacquered. The cubicle assembly when erected offers a minimum of obstruction to cleaning and washing of the building floors and walls, and the flush compartments of the cubicle assembly may also be easily washed and cleaned. The construction as a whole is unusually attractive in appearance and can be advantageously used in financial, business and professional establishments where appearance is important.

Other objects, features and advantages of the present invention will in part be pointed out and in part become apparent in connection with the following detailed description of certain illustrative forms of construction, reference being had to the accompanying drawings, wherein

Fig. 1 is a horizontal floor plan view of the cubicle assembly as it would appear when assembled along two building walls;

Fig. 2 is a perspective view of a cubicle assembly;

Fig. 3 is a side elevational view of the supporting upright, certain parts being broken away to more clearly illustrate certain structural details thereof;

Fig. 4 is a vertical cross-sectional view of the supporting upright, with a dividing panel associated therewith, this view being taken along line 4—4 of Fig. 3;

Fig. 5 is a top plan view of the supporting upright, certain parts being broken away to more clearly illustrate certain structural details;

Fig. 6 is a fragmentary view of the supporting upright illustrating one means that may be employed for securing the same to a concrete floor;

Fig. 7 is a fragmentary view of the means that may be employed for securing the supporting upright to a wood floor; and

Fig. 8 is a fragmentary view of the supporting upright showing further means that may be employed for securing the same to a concrete or composition floor.

Similar reference characters refer to similar

parts throughout the several views of the drawings and the specification.

Referring to the drawings, a plurality of spaced supporting uprights *a* are provided defining door openings therebetween. Partition panels *b* extend between the supporting uprights *a* and the interior wall of the building, to define individual cubicles or compartments. These partition panels are secured to the supporting uprights *a* by suitable angle members *h* and to the wall *w* by suitable wall brackets *i*. The lower end of each supporting upright sets within a floor base or shoe *e*, which is secured in the floor of the building. Doors *d* are mounted in the door openings defined by the partition uprights. The supporting upright which is adjacent the building wall, as shown in Fig. 2, may be secured to the wall by suitable brackets *j*. The structural parts of my improved cubicle assembly are made substantially entirely of sheet steel so formed and constructed as to present a highly attractive appearance, substantially free from dirt collecting cavities and projections. The cubicle assembly can be easily cleaned and maintained, can be erected substantially without disfiguration of the building walls, is substantially soundproof and fireproof, can be economically constructed and assembled, and it may be assembled and disassembled and moved to other locations with ease and facility.

The cubicle is free of any lateral bracing or head rail and combines means for rigidly and fixedly securing the same to the floor. Each supporting upright *a* comprises two spaced wall forming sheets 1 and 2 having insulating material therebetween and having their adjacent vertical edges turned inwardly as at 3 and outwardly as at 4, the sheets being welded together by externally applied welds *x*. The outturned portions 4 firmly retain, as shown in Fig. 5, an edging strip 5 which telescopes thereover. The lower ends of the facing sheets 1 and 2 rest upon a base member which may comprise a plurality of shim plates 20, 21, 22 superimposed one upon the other, the plates being of varying size and which may be suitably secured together. The lowermost plate 20 rests upon the floor *F*, which may be concrete, tile, stone, wood or other material. Any desired number of supporting plates or shims may be used and they may be shaped in any desired decorative design. A shoe plate 23 rests upon the topmost plate 22, the shoe plate 23 being provided with side flanges 24 and end flanges 25 shaped to conform to the contour of the facing sheets 1 and 2.

Positioned within and between the facing sheets 1 and 2 are two or more tubes 30, which may be of rectangular configuration, which rest upon and seat within the shoe 23 and extend vertically up to the upper end of the facing sheets 1 and 2. Each tube 30 may be suitably secured, as by welding, to the facing sheets 1 and 2, and may be of such size and dimension as to receive and contain a tie rod 50. The lower end of the supporting upright is further secured to the base plate by means of a channel-shaped section 40 having side wall flanges 42 seating against and welded to the inside face of the adjacent facing sheets 1 and 2 and a connecting web portion 41 which seats against the shoe member 23. The reinforcing channel 40 may be fixedly secured to the shoe 23 by means of screws 16. The lower end of the supporting upright may be further braced and stiffened by a pair of channel shaped members 43 positioned within the channel mem-

ber 40 at each end thereof. Each channel shaped member 43 is provided with side flanges 44 welded to flanges 42 of the stiffening bracket 40, and a web portion 15 welded to the adjacent face of the reinforcing tube 30.

At the upper end of the supporting upright a channel bracket 35 may be positioned, whose side flanges 36 are welded to the inside face of the facing sheets 1 and 2 and whose web portion 37 extends over the upper end of the reinforcing tubes 30. A channel shaped bracket 31 may be telescoped into the upper end of each of the tubes 30, each bracket being provided with flanges 32 welded to the inside face of the adjacent walls of the reinforcing tube 30. The web portion 33 of the channel bracket 31 provides a support for the web portion 37 of the channel shaped stiffening bracket 35.

Each tie rod 50 projects through the upper and lower ends of the reinforcing tube 30, the lower end of the tie rod extending through an aperture 51 provided in the base plates 20, 21, 22 and the shoe 23, which plates and shoe may be secured together as by welding. The lower end of each tie rod 50 may be threaded so as to screw into an expansion nut 52 which is embedded within the floor *F*. The expansion nut 52 is embedded into the floor prior to erection of the supporting upright. The upper end of the tie rod 50 extends through a corresponding aperture 54 provided in the web portion 33 of the channel bracket 31 and the web portion 37 of the channel bracket 35, the upper end of the tie rod 50 being threaded to receive a nut 55. It will be appreciated that when the lower ends of the tie rod 50 are firmly secured to their respective expansion nuts 52 embedded in the floor, the supporting upright may be clamped into fixed rigid position by tightening up on the nuts 55.

The upper end of the panel sheets 1 and 2 may be provided with inturned flanges 11, through which screws 38 may be inserted to firmly secure the panel sheets to the web portion 37 of the channel bracket 35.

The upper end of the supporting upright may be given a finished appearance by providing a channel shaped cap member 60, which is sufficient size to telescope over the upper end of the supporting upright, as illustrated in Figs. 3 and 4. The cap member 60 comprises side flange portions 61 having inturned portions 64 which abut against the outside face of the adjacent facing sheets 1 and 2, and end flange portions 63 having inturned portions 65 abutting against the vertical edges of the facing sheets 1 and 2. The inturned portions 65 of the cap member 60 normally seat against the upper ends of the adjacent edging strips 5. Cap member 60 may be secured in position by threaded screws 66 which extend through the web portion 62 thereof and are screwed into threaded apertures provided in the web portion 37 of the channel bracket 35.

The dividing panel *b* extending between the wall *w* and the supporting upright, may be formed from spaced panel sheets 45 and 46 having insulating material 12 therebetween, the upper edge, lower edge and side edges of the facing sheets being turned inwardly, welded together, and covered by an edging strip 5, providing an edge construction similar to the edge construction of the uprights as shown in Fig. 5. Saddle shaped securing brackets *h* may be provided for securing the dividing panel *b* to the wall *w* and to the upright. The stiffening bracket *h* is provided with outwardly flared wing

portions 56 which seat against the inside surface of the facing sheet 2 of the supporting upright *a*. The leg portion 48 of bracket 47 seats against the inside face of the facing sheet and is preferably welded thereto. Metal screws 67 extend through the wing portions 56 of the connecting bracket and are screwed into tapped holes provided in the facing sheet 2 and the adjacent leg portion 48 of the stiffening bracket. The stiffening bracket is provided with a saddle portion lying at right angles to and secured to the wing portions 56, the saddle portion comprising downwardly extending leg portions 58 between which the upper end of the partition panel *b* telescopes. The leg portions 58 are connected by web portion 59 which extends over the upper horizontal edge of partition panel *b*. The web portion 59 is given a decorative rounded contour, and the end of the edging strip 5 may be arranged to abut the end of the web portion 59 of the connecting bracket *h*. The leg portions 58 may be connected to the partition panel *b* extending therebetween by one or more head screws and cap nuts *s*.

A pair of angle iron brackets 47 may be positioned between the facing sheets 1 and 2 of the supporting upright to reinforce the construction. The angle members 47 are provided with a leg portion 48 welded to the inside face of the facing sheet 2 and an intumed stiffing leg 47'. Metal screws 67 extending through the wings 66 of the saddle brackets *h*, are screwed into the vertical leg 48 of the reinforcing angle member.

This cubicle construction provides a strong and sturdy construction free of any lateral braces or head rails. The construction is such that the vertical supporting uprights are rigidly and stiffly held and secured to the floor of the building by means of the tie rods 50. A highly serviceable and permanent construction is thus provided.

There is shown in Fig. 6 a fragmentary view of modified means for securing the lower ends of the tie rods 50 to a concrete floor *F*. In this construction, an expansion shield 71 is inserted within a hole 70 provided in the concrete floor, to which the lower end 53 of the tie rod 50 is fixedly secured.

In Fig. 7, another means is illustrated for securing the tie rods to a wood floor, comprising wood joists 75, primary flooring 76, and the secondary finished flooring 77, upon which finished flooring shim plates 20, 21, 22 and the shoe member 23 are supported. In this construction, an angle member is secured to the underside of the primary flooring 76, which angle has a downwardly extending leg portion 78 and a horizontal leg portion 79 having a hole therein through which the lower end 53 of the tie rod 50 projects. A nut 80 threaded on the lower end 53 of the tie rod firmly secures the lower end of the tie rod in position.

In Fig. 8 there is shown a further modified floor securing means, in which holes 70 are provided in the cinder concrete base floor *F'* within which expansion shields 71 are positioned. Stud bolts 87 secured to each expansion shield 71 extends upwardly above the cinder concrete base floor *F'*. The supporting upright *a* positioned within the shoe member 23 resting upon the shim plates 20, 21, 22, is provided with tie rods 50 having the lower ends 53 thereof extending through a suitable aperture provided in a floor clamp 82 embedded within the surface flooring *F'*. The floor clamp 82 is provided with down-

wardly extending legs 83 and outwardly extending foot portions 84 at each end thereof. The threaded stud 87 extends through an aperture provided in the foot portion 84 and is secured thereto by lock nuts 88 and 90. A channel shaped stiffening member 85 having flange portions 91 and a web portion 86 seats against the floor clamp 82, the web portion 86 being provided with threaded holes which receive the threaded ends 53 of the tie rods 50. It is understood that the expansion shields 71 are first positioned on and secured to the cinder block base floor *F'* and that the floor clamp 82 is placed in position before the surface floor *F''*, which is generally concrete or cement or other suitable composition, is poured.

It is now seen that a cubicle assembly has been provided in which the usual supporting posts and connecting wall panels have been combined into a flush supporting upright which has all the strength and rigidity required and which, furthermore, may be insulated to deaden sound. The supporting uprights may be fixedly secured to the floor by an attractive floor shoe into which the lower end of the supporting upright telescopes. Head rails may be eliminated since the floor shoe and the rod securing device are so constructed and connected to the supporting upright that further support for the supporting upright is not needed. The partition panels which divide the space into separate cubicles are also so constructed as to present flush wall surfaces which are sanitary, can be easily cleaned, and which may be provided with sound-deadening insulation. The vertical and horizontal edges of both the supporting upright and the partition panel may be provided with edging strips which give these members an attractive finished appearance and which permit low cost assembly thereof. The partition panels may be connected to the supporting uprights and the building wall by suitable brackets which give strength and rigidity to the construction.

My improved cubicle assembly can be made and fabricated at the plant from a minimum of parts and at relatively low cost, and can be quickly assembled and erected in the building where it is to be located. My cubicle assembly can also be quickly taken down, moved to and erected in another location quickly and expeditiously and without damage thereto since only a relatively few screws hold the entire assembly together. My improved cubicle assembly is admirably adapted for use as toilet stalls, shower stalls, dressing rooms, telephone booths, hospital cubicles, and privacy booths in business, financial and professional establishments where privacy is desired.

While certain novel features of the invention have been disclosed herein, and are pointed out in the annexed claims, it will be understood that various omissions, substitutions and changes may be made by those skilled in the art without departing from the spirit of the invention.

What is claimed is:

1. In a partition assembly, an upright member forming a combination structural support and wall panel, said upright member comprising a pair of spaced substantially flush panel sheets secured together in fixed spaced relationship, a tube secured to and positioned between said sheets, a tie rod extending through said tube, means for securing said rod to the building floor, and take-up means associated with said tie rod

for fixedly and rigidly securing said upright member thereto.

2. In a partition assembly, an upright member forming a combination structural support and wall panel, said upright member comprising a pair of spaced substantially flush panel sheets secured together in fixed spaced relationship, a floor shoe receiving the lower end of said upright member, a pair of sturdy tie rods extending through said upright member, a plate member having the ends thereof buried below the floor surface and secured to the building floor, means for fixedly securing the lower ends of said tie rods to said plate member, take-up means associated with the upper ends of said tie rods for retaining said upright member in fixed rigid position, and an enclosing cap member telescoped over the upper end of said upright member.

3. In a partition assembly, an upright member forming a combination structural support and wall panel, said upright member comprising a pair of spaced substantially flush panel sheets secured together in fixed spaced relationship, a pair of spaced tubes secured to and positioned between said sheets, a tie rod extending through each of said tubes, a floor shoe having a socket receiving the lower end of said upright member, and means associated with said tie rods for fixedly and rigidly securing said upright member to the building floor.

4. In a partition assembly, an upright member forming a combination structural support and wall panel, said upright member comprising a pair of spaced substantially flush panel sheets secured together in fixed spaced relationship, spaced tubes secured to and positioned between said sheets, a tie rod extending through each of said tubes, means for securing said tie rods to the building floor, take-up means associated with the upper end of each of said tie rods for fixedly and rigidly securing said upright member thereto, and a removable cap member at the upper end of

said upright concealing said take-up means therein.

5. In a partition assembly, an upright member forming a combination structural support and wall panel, said upright member comprising a pair of spaced substantially flush panel sheets secured together in fixed spaced relationship, a floor shoe receiving the lower end of said upright member, a pair of spaced tubes secured to and positioned between said sheets, a pair of sturdy tie rods extending through said tubes and projecting through the upper end thereof, means for fixedly securing the lower ends of said tie rods to the floor, take-up means associated with the upper ends of said tie rods for retaining said upright member in fixed rigid position, and an enclosing cap member telescoped over the upper end of said upright member and concealing said take-up means therein.

6. In a partition assembly, an upright member forming a combination structural support and wall panel, said upright member comprising a pair of spaced substantially flush panel sheets secured together in fixed spaced relationship, a floor shoe having a socket for receiving the lower end of said upright member, a plurality of sturdy tie rods extending through said upright member and having the lower ends thereof projecting through said floor shoe, means for fixedly securing the lower ends of said tie rods to the floor, a tie plate secured to the upper ends of said panel sheets having openings therein through which the upper ends of said tie rods extend, take-up means associated with the upper ends of said tie rods for retaining said upright member in fixed rigid position, a cap member telescoping over the upper end of said upright member concealing said take-up means therein, and means for releasably securing said cap member to said upright.

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