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Variable Angle Partition Holder

Field of the Invention

- 5 This invention relates to partitions, in particular to a variable angle partition holder for a shower screen.

Background of the Invention

- 10 Shower screens are well established consumer items installed in bathrooms to confine water coming from a shower to within an enclosed shower area. The actual shape of this shower area to be enclosed will vary from bathroom to bathroom, being triangular, rectangular, or other regular or irregular polygonal shapes either for aesthetic reasons or due to the shape and size constraints of
15 the given bathroom. The area is often defined on two or three sides by bathroom walls and on the remaining side or sides by the shower screen.

- Shower screens normally come with swing doors or sliding doors, and often comprise additional wall panels for large or odd-shaped areas. For swing doors,
20 there is typically a frame to which one upright edge of the door panel is connected and about which the door pivots. This frame and door are traditionally designed for mounting orthogonally with an adjacent wall panel of the shower screen, or orthogonally directly onto the bathroom wall.

- 25 For rectangular shower areas, conventional orthogonal mountings are straightforward to install. For odd-shaped areas, it is usually necessary to install a shower screen wall panel in the desired angle first before the traditional swing door can be mounted rectilinearly on the angled wall panel. Odd-shaped shower areas therefore usually require additional material and labour when
30 installing a leaf-door shower screen, due to the additional angled wall panel.



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It is therefore an aim of the present invention that it allows odd-shaped shower areas to be constructed without excessive extra work.

Summary of the Invention

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According to one aspect of the present invention, there is provided a variable angle partition holder comprising: a housing; an angle adjustor piece for mounting in said housing; and a shaft adapted to retain a partition and for rotatably mounting in said housing through said an angle adjustor piece; wherein

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said shaft and said angle adjustor piece are relatively rotatable and can achieve at least a first predetermined relative configuration; and said angle adjustor piece is fixedly mountable in said housing at one of a plurality of rotational angles relative thereto;

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whereby the relative angle at which said angle adjustor piece and said housing engage each other determines the relative angle between the housing and said shaft when said shaft and angle adjustor piece are in said first configuration.

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The holder preferably further comprises at least one recess on one of said angle adjustor piece and said housing and at least one corresponding protrusion on the other one of said angle adjustor piece and said housing to determine the relative angle therebetween when said angle adjustor piece is mounted in said housing. Said at least one protrusion is preferably adapted to fit slidingly into said at least one recess during mounting.

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Said angle adjustor piece usefully may include a circular flange, and said at least one recess is at least one notch located on said flange.

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Said housing preferably includes a cavity for receiving said angle adjustor piece, said protrusion being a rib located in said cavity.

When said shaft and said angle adjustor piece engage each other in positions other than said first predetermined relative configuration, there is ideally produced a tendency on said shaft to rotate to said first predetermined relative configuration.

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Said shaft and said angle adjustor piece usefully engage each other by means of first complementary v-shaped formations thereon, which define said first predetermined relative configuration. Such first complementary v-shaped formations may provide said tendency on said shaft.

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Said shaft and said angle adjustor piece may further engage each other by means of second complementary v-shaped formations thereon, which define a second predetermined relative configuration rotatably different from said first predetermined relative configuration.

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When said shaft and said angle adjustor piece engage each other in said second predetermined relative configuration, said tendency is preferably not produced or is insufficient to be effective.

20 Said first predetermined relative configuration usefully may define a closed position of a partition in said holder, whilst said second predetermined relative configuration defines an open position.

According to another aspect of the present invention, there is provided a shower partition comprising a variable angle partition holder as above, with a shower door retained in said shaft, said shower door may be pivotable between said first configuration being a closed position, and an open position.

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According to again another aspect of the present invention, there is provided a method of installing a partition using a variable angle partition holder as above, said method comprising the steps of: a. determining an angle at which said partition is desired to be positioned with respect to said housing; and b. fixedly

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mounting said angle adjustor piece in said housing at a rotational position corresponding to said determined angle.

Step b may comprise: i. creating a further recess at a suitable location on said
5 angle adjustor piece; and ii. fitting said further recess over said at least one protrusion of said housing.

Thus the invention is able to provide a variable partition holder for a shower
screen having a swing door. The holder comprises a shaft which retains the
10 door, an angle adjustor piece and a housing. The shaft and the angle adjustor
piece are adapted to engage each other rotatably. The angle adjustor piece and
the housing are adapted to engage each other at a relative angle such that
when they are engaged, the door is positioned at an angle (between about 180°
and 45°) with respect to the housing. The relative angle at which the angle
15 adjustor piece and the housing engage each other can be altered, thereby
altering the angle at which the door is positioned with respect to the housing.

Brief Description of the Drawings

20 The present invention will be further described by way of non-limitative example
with reference to the accompanying drawings, in which:-

Figure 1 shows an exploded assembly view of a variable angle partition holder
positioned to retain a partition in a closed position at 180° with respect to a
25 housing.

Figure 2a shows a perspective view of a swivel portion and an angle adjustor
piece engaged in a closed position.

30 Figure 2b shows a perspective view of a swivel portion and an angle adjustor
piece engaged in a mid-open position.

Figure 2c shows a perspective view of a swivel portion and an angle adjustor piece engaged in a fully open position.

Figure 3 shows a top plan view of an angle adjustor piece and a housing as shown in Figure 1.

Figure 4 shows an exploded assembly view of a variable partition holder positioned to retain a partition in a closed position at 135° with respect to a housing.

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Figure 5 shows a top plan view of an angle adjustor piece and a housing as shown in Figure 4.

Figure 6 shows a top plan view of a variable partition holder installed in a bathroom to partition an odd-shaped area

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Description of the Invention

An exploded assembly view of a variable partition holder 10 depicting a preferred embodiment of the present invention is shown in Figure 1. There is a generally cylindrical shaft 12 having a top end 14, a bottom end 16 and a slot 17 along its length for retaining a partition, such as a door panel (not shown in the drawings). A top swivel portion 18 is attached to the top end 14 of the shaft 12, and a bottom swivel portion 20 is attached to the bottom end 16 of the shaft 12. There is also a wall mounted frame 22 having a top end 24 and a bottom end 26. Protrusions of a top housing 28 fit into the top end 24 and protrusions of a bottom housing 30 fit into the bottom end 26 of the frame 22. An angle adjustor piece 32 fits into a cavity 34 in the top surface of the bottom housing 30.

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The underside 36 of the bottom swivel portion 20 fits onto the top surface 38 of the angle adjustor piece 32. The top swivel portion 18 fits into a cavity in the top housing 28.

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In this way, the top and bottom housings 28,30 join the shaft 12 to the frame 22. The frame 22 itself is elongate with two parallel sides, between which extends an orthogonal rear face and a concave front face. The shaft 12 fits into the concave front face, having approximately the same curvature. However, the top and bottom housings 28, 30 hold the shaft 12 and concave front face slightly apart. Moreover, the top swivel portion 18 is rotatable within the top housing 28 and the bottom swivel portion 20 is rotatable on the angle adjustor piece 32. Thus the shaft 12 can rotate against the frame 22.

For mounting, the frame 22 slots into an elongate wall jamb 40. This has a slot running down its length, matching the sides and rear face of the frame 22. Its outer side surfaces are curved for aesthetic reasons and its rear face is flat, allowing it to be drilled through and attached to a wall by means of screws at the time of installation. The rear face of the frame 22 also has a slot down its length. Primarily, this allows the frame 22 to be reversed in the wall jamb 40, with a fixed panel being inserted into that slot. It also makes allowances for screw heads when the frame is inserted for the pivoting door.

A cover strip 41 down the length of one of the curved outer side surfaces of the elongate wall jamb 40 is removable, giving access to the outer surface of the inner slot of the wall jamb 40. Holes can be drilled through this and the mounted frame 22 at intervals and the frame 22 and the wall jamb 40 are secured to each other by means of rivets. These rivets are hidden from view by the cover strip 41 which snap fits in place. For a symmetrical look, the external curvature of the cover strip 41 is congruent with the curved outer side surface of the wall jamb 40. Even so, because the strip 41 is still visible, this side of the frame will be the one on the inside of the shower. A top dressing piece 42 snap fits over the top of the wall jamb 40 and the frame 22 for a clean finish.

In this preferred embodiment of the invention, the cavity 34 in the bottom housing 30 is generally cylindrical, with a circular cross section and a flat base.

The angle adjustor piece 32 is generally cylindrical with an outwardly extending circular flange 44 around its base. The diameter of the circular flange 44 is only slightly smaller than that of the bottom housing cavity 34 to provide a sliding fit into the cavity 34, until the circular flange 44 sits on the cavity base.

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The cylindrical bottom housing cavity 34 has one projecting rib 48 extending a short distance inwards from the interior wall. The rib 48 is located centrally, diametrically opposite the protrusions 46, which extend into the bottom end 26 of the frame 22. This rib 48 has a rectangular cross-section and extends vertically
10 from the base of the cavity 34 only a short distance of at least the depth of the circular flange 44 (although it could extend further, even up to the full height of the interior wall of the cavity 34 with other configurations).

A rectangular notch 50 is located on the circular flange 44 of the angle adjustor
15 piece 32. This notch 50 corresponds in length and width to the rib 48 and is adapted to engage the rib 48 in a sliding fit. Once this happens, the angle adjustor piece 32 is thereby prevented from rotating within the bottom housing 30.

20 The sides of the angle adjustor piece 32 are generally cylindrical but its top surface 38 is not flat. As can be seen in Figures 2a, 2b and 2c, a large symmetrical v-shaped depression 54 is formed in the top surface 38 of the angle adjustor piece 32. The nadir of the large v-shaped depression 54 is positioned diametrically opposite (i.e 180° from) the notch 50. In addition, at each upper
25 end of the two sides of depression 54 there is a smaller v-shaped depression 56. The nadirs of these are at 90° and 270° from the notch 50. All three v-shaped depressions 54, 56 have the same wall angles, but the smaller ones 56 are very much shallower than the large one 54. Just beyond each smaller v-shaped depressions 56, the top surface 38 is flat briefly followed by a vertical
30 stopper surface 58, which is topped by an arcuate horizontal surface which connects the two stopper surfaces 58. Finally, a cylindrical hole runs down through the centre of the angle adjustor piece 32.

Bottom swivel portion 20 has a protrusion 66 on its top surface that is shaped to fit into the bottom end 16 of the shaft 12. This protrusion 66 includes a rectangular cut-in portion 68 adapted to match the slot 17. This protrusion 66 sits atop a flat surface (which thereby supports the underside of any panel in the slot 17). From this depends a cylindrical skirt portion (which may even be frusto-conical). On the inside, the skirt portion is recessed from below, with the interior shaped as shown in Figures 2a – 2c (where the skirt has been removed for illustrative purposes).

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On the underside 36 of the bottom swivel portion 20 there is a large v-shaped protrusion 60 for engaging with the top surface 38 of the angle adjustor piece 32. The apex 64 of the protrusion 60 is 180° around from the rectangular cut-in portion 68. The protrusion 60 is the same shape and general size as the large v-shaped depression 54 of the angle adjustor piece 32. Along the sloping surfaces of protrusion 60, rectangular steps 62 are cut away on each side of the apex 64. Finally, there is a central cylindrical protrusion extending down from the underside 36 of the bottom swivel portion 20. This fits into the corresponding cylindrical hole in the angle adjustor piece 32.

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When the apex 64 of the protrusion 60 sits in the nadir of the large v-shaped depression 54 (as in Figure 2a), the underside of the flat surface of the bottom swivel portion 20 sits atop the arcuate horizontal surface of the angle adjustor piece 32. In this position the angle adjustor piece 32 is at its lowest level and most stable position relative to the bottom swivel portion 20. This is the “closed” position.

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The positions, sizes and shapes of these steps 62 are such that when the apex 64 of v-shaped protrusion 60 sits in one of the smaller v-shaped depressions 56 (as in Figure 2c), a vertical surface of one of the steps 62 abuts the vertical stopper surface 58 next to that smaller v-shaped depression 56, whilst a horizontal surface of the same step abuts the arcuate horizontal surface

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immediately above that stopper surface 58. The bottom swivel portion 20 is prevented from rotating further than the smaller v-shaped protrusion 60 by the vertical stopper surface 58 acting against the rectangular step 62. This is the “open” position, where the angle adjustor piece 32 is 90° around from its position in the “closed” position. The “open” position is also a stable position, although not as stable as the “closed” position, as the depth of the v is not as great. It is almost the highest level of the angle adjustor piece 32 relative to the bottom swivel portion 20. It can be observed that the v-shaped formations 56, 60 allow the bottom swivel portion 20 to rotate to two “open” positions, one on each side of the closed position.

Figure 2b shows the apex 64 of the v-shaped protrusion 60 mid-way along one of the two sloping walls of the large v-shaped depression 54. This is not a stable position, and the tendency, under gravity will be for the apex 64 to slide down this sloping wall to the nadir of depression 54. This will rotate the bottom swivel portion 20 and thereby the shaft 12 and any door panel in slot 17.

The v-shaped depressions 56, 58 and the v-shaped protrusion 60 all have the same angle of slope in order to allow a smooth and well supported rotational sliding motion to be achieved when the bottom swivel portion 20 actuates against the angle adjustor piece 32. It can also be seen that, as the bottom swivel portion 20 moves from the closed position of Figure 2a to the fully opened position of Figure 2c, it rises with respect to the angle adjustor piece 32. Since the shaft 12 is attached to the bottom swivel portion 20, the shaft 12 and any partition attached to it also rise when the bottom swivel portion 20 is moved from the closed position to the open position.

as is mentioned above, the rectangular cut-in 68 is located diametrically opposite the apex 64 on the underside 36 of the bottom swivel portion 20. When the shaft 12 is fitted over the bottom swivel portion 20, in the closed position as shown in Figure 2c, the slot 17 will therefore be located in line with

the notch 50 on the circular flange 44 of the angle adjustor piece 32, such that any partition, when inserted into the slot 17, will also be in line with the notch 50.

In Figure 3, the angle adjustor piece 32 is inserted into the bottom housing 30 such that the notch 50 is fitted over the rib 48. In this position, the angle adjustor piece 32 is prevented from rotating while it is within the bottom housing 30. At this setting, a partition fitted into the slot 17 has a closed position of 180° with respect to the bottom housing 30 as shown by the closed arrow A. The open positions B, C are respectively at 90° and 270° with respect to the bottom housing 30.

It should be noted that the top swivel portion 18 is not pushed right up against the top housing 28. Instead a clearance is provided to accommodate the rise of the shaft 17 and swivel portions 18, 20 when the swivel portion 20 is rotated against the angle adjustor piece 32. Instead, the top swivel portion 18 and top housing 28 are positioned to allow smooth rotation and translation of the top swivel portion 18 within the top housing 28.

As can be seen, it is the position of the notch 50 on the circular rim 44 that determines the angle of the closed and open positions of the variable partition holder 10 relative to the frame 22 of the present invention. The circular flange 44 of the angle adjustor piece 32 has markings 52 scored onto its top surface. These markings 52 are spaced apart from each other and from the notch 50 at intervals of 45°, and serve as guide lines for other notches of the same width as notch 50 to be cut in the flange 44. Cutting a notch at another location on the flange 44 and fitting it over the rib 48 immediately changes the angle of the closed and open positions.

Figure 4 shows the holder 10 of the present invention set at another angle compared with Figures 1 and 3. As shown in Figure 4, another notch 70 has been cut into the circular flange 44. The angle adjustor piece 32 has been rotated and notch 70 fitted over the rib 48 when the angle adjustor piece 32 was

inserted into the bottom housing 30, as shown in Figure 5. In this instance, the angle adjustor piece 32 has been rotated 45° compared to the setting of Figures 1 and 3, and is prevented from further rotation within the bottom housing 30 by way of the interaction between rib 48 and notch 70. The bottom swivel portion 20 and the angle adjustor piece 32 will still interact in the same way as that shown in Figures 2a, 2b and 2c. However, the effect will be different. A partition fitted into the slot 17 will now have a closed position at 225° with respect to the bottom housing 30 as shown by the closed arrow A'. The open position B' will now be at 135° with respect to the bottom housing 30 instead.

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Although markings 52 have been made at 45°, 90°, -45° and -90° with respect to the notch 50 in the preferred embodiment, any markings between -90° to 90° with respect to the notch 50 are possible. Additionally, the notch does not need to be made at a marked position, but can be made at any angle within that range (or possibly beyond it in other embodiments).

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The ability to make a notch at any suitable location on the circular flange 44 of the angle adjustor piece 32, in order to fit over the rib 48 of the bottom housing 30, allows the partition holder 10 of the present invention to be adjusted so that the position of the closed door can be set at any desired angle relative to the frame 22 and jamb 40, according to the available or desired geometry of the room. The present invention therefore allows a swing-door shower screen to be more quickly and economically installed in an odd-shaped bathroom where non-orthogonal angles are desired, by removing the need to have an additional angled wall panel onto which to mount the swing door. The door support itself can now be mounted orthogonally onto a wall or orthogonal wall panel, but arranged such that, when closed, it can be at an angle other than 180° with respect to the mounting wall, as shown in Figure 6.

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In this instance, the door support 10 is to be mounted directly onto the wall at an external corner 80. The door jamb 40 is therefore mounted in position first. A panel 82 is also mounted on another wall 84 to receive the free end of the

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swinging door 86. The first step in adjusting the door support to ensure a correct fit is to establish the correct angle at which to set the variable partition holder 10. By fitting everything into the jamb 40 (including the door panel in the shaft slot 17) in a dry run, appropriate measurements can be taken. Here the
5 necessary angle is found to be 48° , for example, when it had been intended to be 45° . The fact that the fitting is inaccurate, as frequently occurs, is unimportant. When the angle has been determined, whatever it is, a suitable notch is cut at the correct location on the circular flange 44 of the angle adjustor piece 32. The angle adjustor piece 32 is then inserted into the cavity 34 of the
10 bottom housing 30 such that the notch is fitted over the rib 48. The bottom housing 30 is then fitted into the frame 22 and screwed together. The bottom swivel portion 20 and the top swivel portion 18 are fitted into the respective ends of the shaft 12. The shaft 12 with the inserted swivel portions 18, 20 are placed over the angle adjustor piece 32 such that the bottom swivel portion 20 engages
15 the angle adjustor piece 32 and the shaft 17 engages the frame 22. The top housing 28 is then fitted into the frame 22 and screwed together, with the top swivel portion 18 inserted into the cavity in the top housing 28. The frame 22 is then slid into the slot of the wall jamb 40. Finally, the top dressing piece 42 is fitted onto the wall jamb 40 and the top housing 28. Thus the shower screen is
20 fitted with relative ease behind and between the wash basin 88 and lavatory 90.

In the preferred embodiment of the present invention, the shaft 12, the door frame 22 and the wall jamb 30 are metallic extrusions, while the remaining parts are made of plastics materials. More specifically, swivel portion 20 and the
25 angle adjustor piece 32 are made of a plastics material having high wear resistance and a low coefficient of friction. In particular, the circular flange 44 on the angle adjustor piece 32 is made of a plastics material that can be cut by a portable hand tool in order for a suitable notch to be cut at the time of installation.

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While only one embodiment of the present invention has been described and illustrated, it is to be understood that many changes, modifications and

variations could be made to the present invention without departing from the scope of the invention.

5 The number of pre-cut notches on the circular flange 44 can be increased, and the spacing between the notches varied to provide a wider range of possible installation angles to suit different bathroom shapes. For example, there could be a plurality of notches evenly spaced apart at, for example, 45°, 30°, 20°, 15°, 10°, 6°, 5°, 4°, 3°, 2° or 1° all around the circular flange 44, effectively creating a cog. Even the number of ribs 42 can be increased, to provide better resistance
10 against rotation of the angle adjustor piece 32 within the bottom housing 30, so long as their spacing is analogous with the spacing of the notches and there are a sufficient number of notches to accommodate the number of ribs. If the flange is notched or toothed to the extent of becoming a cog, then the recessed could be similarly toothed.

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The angle adjustor piece 32 can also take on other shapes than earlier described, in so far as it has rotational symmetry and the recess 40 in the bottom housing 30 is accordingly shaped to receive it in a sliding fit. For example, the angle adjustor piece 32 could be shaped as a toothed gear, or a
20 regular polygon such as a hexagon or a pentagon. Such configurations will allow the angle to be changed by a simple rotation of the angle adjustor piece 32 before it is inserted into the housing 30, without having to make cut any notches at the time of installation. However, the number of available angles to choose from will be limited when compared to the preferred embodiment where a notch
25 can be cut at any desired position.

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In another embodiment, there is no flange at the base of the angle adjustor piece 32 (or elsewhere along its length). Instead, any notch or notches are provided in the walls of the angle adjustor piece 32.

In another alternative embodiment, the swivel portion 20, the angle adjustor piece 32 and the bottom housing 30 can also be located at the top end 14 of the

shaft 12. This requires adaptations made to accommodate the translation of the shaft 12 when the swivel portion 20 rotates against the angle adjustor piece 32. For example, one option would be to invert the structure and provide a spring or the like between the inverted top swivel portion 18 and inverted top housing 28, pushing the shaft upwards. Alternatively, other arrangements than the v-shaped depressions 54, 56 and protrusion 60 could be provided for allowing rotation of the swivel portion against the angle adjustor piece.

The mode of attachment of a partition such as a door panel to the shaft 12 also need not be limited to the slot 17 as described. Alternative means such as bolts or rivets may be used.

It is even possible to do away with the door frame 22 and wall jamb 40 entirely if the top and bottom housings 28, 30 are directly secured onto the mounting wall. The shaft 12 will then not need a circular cross-section for rotating against a door frame. Water sealing in such a case can be achieved by use of a flexible vertical sill to close the gap between the wall and the shaft 12.

As can be appreciated from the above description, the present invention need not be confined for use in a shower screen having a swing door. The variable partition holder can be used for doors in other rooms and areas of a building. It can also be used to hold or arrange other forms of moveable partitions, such as those used in office cubicles. It can even be used to hold partitions not intended to be opened on a regular basis.

Claims

1. A variable angle partition holder comprising:
a housing;
5 an angle adjustor piece for mounting in said housing; and
a shaft adapted to retain a partition and for rotatably mounting in
said housing through said an angle adjustor piece; wherein
said shaft and said angle adjustor piece are relatively
rotatable and can achieve at least a first predetermined relative
10 configuration; and
said angle adjustor piece is fixedly mountable in said housing at
one of a plurality of rotational angles relative thereto;
whereby the relative angle at which said angle adjustor piece and
said housing engage each other determines the relative angle between
15 the housing and said shaft when said shaft and angle adjustor piece are
in said first configuration.
2. The holder of claim 1 further comprising at least one recess on one
of said angle adjustor piece and said housing and at least one
20 corresponding protrusion on the other one of said angle adjustor piece
and said housing to determine the relative angle therebetween when said
angle adjustor piece is mounted in said housing.
3. The holder of claim 2, wherein said at least one protrusion is
25 adapted to slidingly fit into said at least one recess during mounting.
4. The holder of claim 2 or 3, wherein said angle adjustor piece
includes a flange, and said at least one recess is at least one notch
located on said flange.
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5. The holder of claim 4, wherein said at least one notch has a
rectangular cross-section.

6. The holder of claim 4 or 5, wherein said flange is circular.
7. The holder of any one of claims 4 to 6, wherein said flange
5 includes score lines spaced apart at intervals of 45° on a top surface of said flange.
8. The holder of any one of claims 2 to 7, wherein said housing
10 includes a cavity for receiving said angle adjustor piece, said protrusion being a rib located in said cavity.
9. The holder of claim 8, wherein said rib has a rectangular cross section.
- 15 10. The holder of claim 8 or , wherein said cavity is a cylindrical cavity.
11. The holder of any one of claims 8 to 10, wherein said cavity is
provided in a lower housing portion of said housing for supporting the
lower end of said shaft.
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12. The holder of any one of the preceding claims further comprising a
second cavity in an upper housing portion of said housing for supporting
the upper end of said shaft.
- 25 13. The holder of any one of the preceding claims wherein said
housing comprises a wall mountable frame.
14. The holder of claims 11 to 13, wherein said upper housing portion
is attachable to an upper end of said frame and said lower housing
portion is attachable to a lower end of said frame.
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15. The holder of any one of the preceding claims, wherein when said shaft and said angle adjustor piece engage each other in positions other than said first predetermined relative configuration, there is produced a tendency on said shaft to rotate to said first predetermined relative configuration.
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16. The holder of any one of the preceding claims, wherein said shaft and said angle adjustor piece engage each other by means of first complementary v-shaped formations thereon, which define said first predetermined relative configuration.
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17. The holder of claims 15 and 16, wherein first complementary v-shaped formations provide said tendency on said shaft.
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18. The holder of claim 16 or 17, wherein said shaft and said angle adjustor piece further engage each other by means of second complementary v-shaped formations thereon, which define a second predetermined relative configuration rotatably different from said first predetermined relative configuration.
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19. The holder of claim 18 when dependent on at least claim 15, wherein when said shaft and said angle adjustor piece engage each other in said second predetermined relative configuration, said tendency is not produced or is insufficient to be effective.
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20. The holder of claim 18 or 19, wherein said second predetermined relative configuration defines an open position of a partition in said holder.
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21. The holder of any one of the preceding claims, wherein said first predetermined relative configuration defines a closed position of a partition in said holder.

22. The holder of any one of the preceding claims wherein said shaft comprises a lengthwise slot to retain a door panel.
- 5 23. A variable angle partition holder constructed and arranged to operate substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.
- 10 24. A shower partition comprising a variable angle partition holder according to any one of the preceding claims with a shower door retained in said shaft.
- 15 25. A shower partition according to claim 24, wherein said shower door is pivotable between said first configuration being a closed position, and an open position.
- 20 26. A shower partition constructed and arranged to operate substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.
- 25 27. A method of installing a partition using the variable angle partition holder of any one of claims 1 to 23, said method comprising the steps of:
a. determining an angle at which said partition is desired to be positioned with respect to said housing; and
b. fixedly mounting said angle adjustor piece in said housing at a rotational position corresponding to said determined angle.
- 30 28. The method of claim 27 when dependent on at least claim 2, wherein step b comprises:
i. creating a further recess at a suitable location on said angle adjustor piece; and

ii. fitting said further recess over said at least one protrusion of said housing.

29. The method of claim 28 when dependent on at least claim 4,
5 wherein said step of creating a further recess comprises cutting a notch in said flange of said angle adjustor piece.

30. The method of any one of claims 26 to 28, wherein said partition is
10 a shower door.

31. A method of installing a shower door substantially as hereinbefore
described with reference to and as illustrated in the accompanying
drawings.