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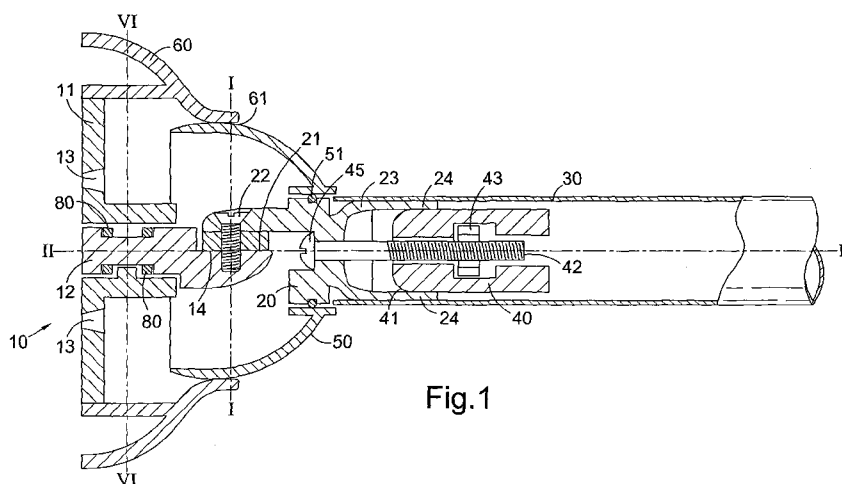


Fig.1

(57) Abstract: There is disclosed a mounting for a shower curtain rod (30), the mounting comprising: a first part (10) comprising a bracket (11) for mounting to a wall and a bearing section (12), which is rotatably mounted with respect to the bracket about a first axis (II-II) which is substantially horizontal in use, a second part (20), for engaging the shower curtain rod (30), mounted so that it can rotate with respect to the first part (10) about a second axis (I-I) which is at an angle to the first axis and substantially vertical in use. Also, the shower curtain rod (30) comprises a socket for receiving a projection of the other of the second part (20), the projection having at least two friction surfaces (24) for engaging the inner wall of the socket, a wedge or cam (40) being provided for urging the friction surfaces into contact with the inside of the socket.



## MOUNTING FOR A SHOWER CURTAIN ROD

The present invention relates to a mounting for a shower curtain rod.

5        Rods for suspending shower curtains are very well known. They provide a support on which a shower curtain can be hung by various types of slider, to allow this to be slid open for use or closed for storage.

10        WO 2009/042233 discloses a mounting for a shower curtain rod in which the rod is curved. The rod is supported at each end by a mounting. The curvature of the rod allows the shower curtain to be mounted in such a way that, in a first position, it extends further outwards in the shower compartment than the two mountings, allowing for a greater space to be contained within the shower curtain. Further, the shower rod is rotatably mounted at the mountings so that it can be rotated from the first position to  
15        a second position in which it bows in, thereby reducing the space by which the shower curtain projects away from the shower compartment, thereby increasing available space in other parts of the bathroom in which the shower is located. In order to allow the pivots to be kept clean and to maintain a good appearance, a ball-shaped cover is provided on the shower curtain rod which engages in a circular opening in a mounting  
20        cover. When it is desired to rotate the shower curtain rod from the first position to the second position, the engagement of the ball-shaped cover in the circular opening allows rotation of the two cover components with respect to one another.

25        This design is successful and adaptable. However, it is found that the configuration of the parts is such that the angle at which the curtain rod enters the mounting, with respect to the axis of rotation at the mounting, is fixed.

30        US 6263523 provides a shower enclosure system in which a swivel mounting is provided. The swivel mounting has a socket for receiving a shower curtain rod and is rotatably mounted, via a bearing defined by a truncated oblate spheroid which allows a variable angle of entry of the curtain rod into the mounting. A bearing defined by a truncated prolate spheroid is illustrated. The outer surface of the mounting corresponds to an outer surface of the bearing.

The present inventors have realised that it is desirable to provide a mounting for a shower curtain rod which can accept shower curtain rods entering the mounting at a wide variety of angles and which also allows the shower curtain rod to adopt a first, outwardly bowed position and a second, inwardly bowed position. .

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The inventors have further realised that this can be achieved by providing two bearings, a first one allowing rotation about an axis which is substantially vertical in use, to accommodate variations in angle of entry of the shower curtain rod, and a second one allowing rotation about an axis which is substantially horizontal in use, to permit movement between a first, outwardly bowed position and a second, inwardly bowed position.

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Accordingly, in a first aspect, the present invention provides a mounting for a shower curtain rod, the mounting comprising:

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a first part, comprising a bracket for mounting to a wall and a bearing section, which is rotatably mounted with respect to the bracket about a first axis which is substantially horizontal in use,

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a second part, for engaging a shower curtain rod, mounted so that it can rotate with respect to the first part about a second axis which is at an angle to the first axis and substantially vertical in use.

Preferred and optional aspects of the present invention will be described further below.

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The present invention may be used with any design of shower curtain rod, which may also be referred to as a shower curtain rail. The rod or rail may have any suitable cross-sectional shape or form.

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The shower curtain rod may comprise a single integral unit or a plurality of rod units joined together.

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It may comprise a smoothly curving structure. It may comprise sections of different curvature. It may comprise at least one straight section. It may comprise a plurality of straight or curved sections joined together by curved sections, angled sections or the like. It may comprise rod sections that are movable with respect to one another, such as telescoping sections.

The bracket, for mounting to a wall, may be fixable to a wall by any suitable means, for example by any or all of adhesive, mechanical fixings such as screws, by a suction mounting or any other suitable means. Preferably, when the bracket is mounted to a wall, it is substantially immovable, being itself not rotatable with respect to the wall.

The bearing section is preferably rotatably mounted with respect to the bracket by a first bearing. The first bearing may be of any suitable configuration. Preferably, the first bearing comprises an annular part on one of the bracket and the bearing part and a projection on the either of the bracket and the bearing part, which is received in the annular part. The projection is preferably of circular section. The axis of the annular part corresponds to the first axis. This configuration has the advantage that it is not possible to separate the bracket and the bearing section by lifting the shower curtain rod in use. The bracket and bearing section may only be separated along the first axis and this can be prevented from occurring accidentally in use by an axial stop or by the position of the curtain rod itself between two walls.

The axial stop may be formed on or in one of both of the annular part and the circular section projection. Preferably, the axial stop comprises a first surface on the bracket, extending in a plane substantially normal to the first axis, and a second surface on the bearing section, also extending in a plane substantially normal to the first axis, the first and second surfaces being configured to abut and prevent axial movement of the bracket and bearing section.

The axial stop may comprise an inward projection from the annular wall of the annular part which is engageable with a reduced diameter section of the projection, the axial stop being engageable with a circumferentially extending surface adjacent the reduced diameter portion. Alternatively, it may comprise an outward projection from the projection which is engageable with an increased diameter section of the annular part, the axial stop being engageable with a circumferentially extending surface adjacent the increased diameter portion.

A cut-away portion may be provided in the respective circumferentially extending surface, through which the inward or outward projection can pass. This allows insertion of the bearing section into the bracket. If the cut-away portion is small compared to the

extent of the circumferentially extending surface, the risk of accidental separation of the bearing section and the bracket is correspondingly small.

5 Preferably, the projection is of diameter which is smaller than the maximum dimension of the bracket in a direction parallel to the wall, in use. Preferably, it is of diameter no more than 0.5 of this dimension, more preferably no more than a third and most preferably no more than a quarter. This gives a strong, neat structure that resists jamming.

10 Preferably, when the projection or the annular part is formed on the bracket, it extends away from the wall, in use, by no less than 5cm, more preferably by no less than 10cm.

Preferably, the annular part is formed on the bracket. It can be an integral formation with the bracket, which allows a strong, rigid structure.

15 The depth of insertion of the projection into the annular part may be variable, to allow variations in the distance by which bearing part is spaced from a wall in use. A fixing may be provided for fixing the annular position of the projection with respect to the annular part.

20 Preferably, an angular stop structure is provided on each of the bracket and the bearing section to limit the angular movement of the bearing section with respect to the bracket in one direction of rotation. Preferably, a second angular stop structure is provided on each of the bracket and the bearing section to limit the angular movement of the bearing section with respect to the bracket in the opposite direction of rotation.

25 In this way, the mounting of the present invention may allow a curved shower curtain rod to be moved between a first position in which it projects outwardly (defined by engagement of a first stop surface on each of the bracket and the bearing section) and a second position, in which the shower curtain rod projects inwardly (defined by engagement of a second bearing surface on each of the bearing section and the bracket), simply by rotating the shower curtain rod about an axis which is substantially horizontal, in a manner similar to that described in WO 2009/042233. The angular stop may be the same, or part of the same formation as, the axial stop.

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Preferably, a stop structure is provided which is defined at least in part by a first angular stop surface, an axial stop surface and a second angular stop surface.

5 The bearing section is preferably rotatably mounted with respect to the second part by a second bearing.

The second bearing may be of any suitable form. It may comprise a first bearing surface formed on the bearing section and a second bearing surface formed on the second part.

10 The first and second bearing surfaces may be of any suitable configuration for engaging one another. For example, they may comprise corresponding plane bearing surfaces. Either or both may comprise or be engageable with a pivot pin. There may be a pivot screw. There may be a bushing formed around a pivot pin or pivot screw, to provide strength. The first part, the second part or both of them may comprise a  
15 plurality of corresponding second bearing surfaces. The skilled person will be able to determine a suitable configuration of second bearing surface or surfaces to provide the necessary strength of support for the shower curtain and shower curtain rod to be mounted.

20 In a preferred embodiment, the first bearing surface and the second bearing surface each comprise plane bearing surfaces which, in use, extend substantially horizontally in contact with one another, the first and second parts being pivotally mounted with respect to one another by a pivot pin or pivot screw whose axis corresponds to the second axis and is substantially vertical in use.

25 The first bearing and the second bearing are preferably separate from one another. The first bearing is preferably configured so that it is closer to a wall to which the bracket is mounted in use than the second bearing. This is found to give good clearance for movement of the shower curtain rod with respect to the mounting in use.

30 The second part is engageable with a shower curtain rod. Any suitable structure may be provided for joining the shower curtain rod to the second part. Preferably, the shower curtain rod is releasably engaged with the second part. In this way, the shower curtain rod can be disengaged with the second part to change configuration, if desired.

However, the fixing between the shower curtain rod and the second part is preferably strong, to provide a good support.

For example, the shower curtain rod may be received in a socket in the second part. Preferably, the socket has an internal profile corresponding to the external profile of the shower curtain rod. Equivalently, the shower curtain rod might define a socket into which a projection of the second part is receivable. Fixing means, for example in the form of screws, may be provided for fixing the rod and the second part with respect to one another.

In a preferred embodiment, one of the shower curtain rod and the second part comprises a socket for receiving a corresponding projection of the other of the shower curtain rod and the second part, the projection having at least two friction surfaces for engaging the inner wall of the corresponding socket, a wedge or cam being provided for urging the friction surfaces into contact with the inside of the socket.

This is considered inventive in its own right, and in a second aspect, the present invention provides a shower curtain rod assembly, comprising a bracket for mounting to a wall and a shower curtain rod, one of the shower curtain rod and the bracket comprising a socket for receiving a corresponding projection of the other of the shower curtain rod and the bracket, the projection having at least two friction surfaces for engaging the inner wall of the corresponding socket, a wedge or cam being provided for urging the friction surfaces into contact with the inside of the socket.

The following comments apply to both aspects of the invention. The projection may be integral with the second part or may be fixed to it, for example, by a screw or bolt. The friction surfaces suitably comprise a plurality of resiliently mounted fingers. Preferably, there are at least three fingers and more preferably, at least four. Preferably, the friction surfaces can be engaged by the wedge body. The wedge body may be operated to drive the friction surfaces against the socket by a drive, for example by a screw engaging a screw thread. The screw thread may be formed in a nut which is fixed with respect to the wedge body.

The depth along the axis of the curtain rod to which it engages the second part may be variable. This provides a way of adjusting the total length of the assembly of curtain rod and mounting. For example, the projection and the socket may engage at variable

positions. The socket or projection may be of a sufficient length, for example at least 5cm, more preferably at least 10cm, to allow secure engagement at a variety of different positions of engagement.

5 Preferably, the bracket of the second aspect of the invention is rotatably mounted with respect to a bearing section. The bearing section is preferably as described above in relation to the first aspect of the invention. Preferably, it is rotatably engaged with a second part as described above.

10 Preferably, the screw is substantially coaxial with the axis of the shower curtain rod. Preferably, the screw is mounted in the second part. In this way, it can be mounted so that it is out of sight in normal use.

15 A cover may be provided for aesthetic reasons and for improving cleaning of the mounting.

Preferably, the cover comprises a first pivot cover. Preferably, there is a second pivot cover, comprising an opening, the first pivot cover being rotatably mounted within the opening of the second pivot cover. Preferably, the first pivot cover is defined by a body  
20 of rotation, the axis of rotation of which is coincident with the second axis. In this way, the cover need not restrain movement of the first and second parts with respect to one another.

The first cover part is preferably separate from the first and second bearings. In this  
25 way, the first and second bearings can be designed optimally for strength of mounting and ease of construction. The external, aesthetic, readily cleanable surface is provided by the first pivot cover.

The first pivot cover is preferably received within an opening of the second pivot cover.  
30 Preferably, the opening of the second pivot cover forms a snug fit with the surface of the first pivot cover which is defined by the body of rotation. For example, if the first cover part is defined by a cylinder, the opening is suitably configured as a section of the surface of a cylinder.

The opening of the second cover part is suitably configured to give a desired range of angular adjustment. For example, it may allow the first part to be mounted with respect to the second part by an angle in the range 10°-180°, more preferably 20°-120°.

5 In a preferred embodiment, the first pivot cover is defined by at least a section of the surface of a sphere, prolate spheroid or oblate spheroid. Preferably, the opening in the second cover part is a circular opening. Preferably, the plane of the circular opening is substantially vertical in use, to accommodate the maximum range of angular adjustment.

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Preferably, the first cover part is mounted on the shower curtain rod or on the second part. Preferably, the second cover part is mounted on the first part, or on a section of wall adjacent to the first part. Preferably, the first cover part and/or the second cover part is releasably fixable to whichever part it is mounted on, to allow disassembly of the components.

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The cover may comprise a projection extending in the direction of the shower curtain rod. The projection may be attached to or integral with the first cover part. The projection may extend over the part of the shower curtain rod adjacent the mounting.

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The projection may cover the part where the shower curtain rod is connected to the second part. In this way, a smooth aesthetically pleasing exterior may be provided. Where the position of the end of the shower curtain rod with respect to the second part is variable, a step may be formed and the projection can cover this step.

25

Seals may be provided where parts of the present invention engage. The seals may comprise rubber or foam material. For example, annular seals may be provided between any or all of the bearing section and the bracket, the second part and the shower curtain rod and the friction member and the shower curtain rod. Such seals can also increase the tightness of grip between these parts.

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The first part, second part, first cover part and second cover part may be made of any suitable material, for example, synthetic material such as thermoplastic or composite material, suitably injection moulded thermoplastic material. Alternatively, each may be formed of metal, for example cast metal. These parts may be formed of the same or

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different materials.

A curtain rod assembly according to the present invention may be supplied complete or in kit form. A curtain rod assembly according to the present invention may comprise:

- at least one mounting according to the invention,
- 5 at least one curtain rod, engageable with the mounting,
- optionally, at least one of the mounting for engaging the other end of the curtain rod, which may or may not be according to the invention,
- optionally, other straight, curved and/or jointed shower curtain rod sections,
- optionally, at least one other support for the shower curtain rod, for example a
- 10 suspension bar, for engaging a wall or ceiling.

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

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Figure 1 is a sketch cross-sectional view of a first embodiment of a mounting for a shower curtain rod, according to the first and second aspects of the invention, engaged with a shower curtain rod section.

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Figure 2 is a sketch isometric view showing angular adjustment of the mounting of Figure 1.

Figure 3 is a sketch isometric view of a wedge for use in the mounting of Figure 1.

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Figure 4 is a sketch isometric view, from beneath, of a second part, comprising a second bearing surface, for use in Figure 1.

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Figure 5 is a sketch isometric view of a bearing section of a first part for use in Figure 1.

Figure 6 is a sketch cross section normal to axis II-II along line VI-VI in Figure 1.

Figure 7 is a sketch isometric view of a bracket of the first part of Figure 1.

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Figure 8 is a sketch isometric view of a friction member for use in the mounting of Figure 1.

5 Figure 9 is a sketch plan view of a shower curtain rod mounted using mountings according to the invention.

Figure 10 is a sketch plan view of a shower curtain rod mounted using mountings according to the invention, having two positions.

10 Figure 11 is a sketch cross-sectional view of a second embodiment of a mounting for a shower curtain rod, according to the first and second aspects of the invention, engaged with a shower curtain rod section.

15 Figure 12 is a sketch view of a shower curtain rail assembly incorporating a mounting according to the present invention.

#### Detailed Description of the Drawings

20 Figure 1 shows a sketch cross-sectional view through a mounting according to the first and second aspects of the invention for a shower curtain rod, engaged with a shower curtain rod section.

The mounting comprises a first part 10, comprising a bracket 11 and a bearing section 12. In use, the bracket 11 is fixed to a wall, for example by screws which pass through screw holes 13 formed in the bracket. The bearing section is rotatably mounted with respect to the bracket, by a first bearing which will be described further below, about a first axis II-II.

The first part 10 is rotatably engaged with a second part 20 about a second axis I-I which, in use, is substantially vertical (being substantially parallel to the wall).

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The bearing section 12 comprises a first plane bearing surface 14 which, in use, is substantially horizontal and the second part 20 comprises a second, plane bearing surface 21 which, in use, is also substantially horizontal and moves over the first plane bearing surface 14. The bearing surfaces are linked by and rotatable about a pivot pin

22 which is coincident with the axis I-I and which extends through holes formed in the bearing section 12 and the second part 20.

5 The second part 20 is linked to the shower curtain rod 30, according to the second aspect of the invention, by having a friction member 23 having fingers 24 (see Figure 4). The fingers 24 are urged into frictional engagement with the inside of the shower curtain rod 30 by a wedge 40 which has external, inclined surfaces 41 which engage the fingers 24 and push them outwards when the wedge is drawn to the left-hand side of Figure 1. The wedge is drawn to the left-hand side of Figure 1 by rotation of a screw  
10 42 which engages in a nut 43 which is held within an aperture 44 of the wedge 40. It can be seen that the head 45 of the screw 42 engages inside the second part 20 and the screw 42 extends along the axis II-II of the shower curtain rod 30 at its end. As the shower curtain rod 30 may be curved, the axis II-II is the instantaneous tangential axis at the end of shower curtain rod 30.

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A first cover part 50 is provided, the external surface of which corresponds substantially to a hemisphere with a central aperture through which the first part 20 engages the shower curtain rod 30. The first cover part 50 is fixed to the second part 20 by a screw (not shown) and a seal 51 to resist ingress of moisture is provided between them.  
20 The first cover part 50 engages in an opening 61 of generally circular plan which is formed in a second cover part 60. The second cover part 60 is designed to engage the wall and can be fixed to the bracket 11 by screws (not shown).

Together, the first cover part 50 and the second cover part 60 provide a smooth,  
25 contoured surface which is aesthetically pleasing and easy to clean. Inside, the pivot pin 22 is located which allows rotation of the second part 20 with respect to the first part 10, so that the angle at which the shower curtain rod 30 meets the mounting and hence the wall is freely variable about the axis I-I. The axis I-I is coincident with a body of rotation which defines at least part of the surface of the first cover part 50. In this  
30 case, the body of rotation is a sphere and is generated by part of the circumference of a circle. It should be noted that the centre of the sphere which defines part of the surface of the first cover part 50 is coincident with the point where the axis I-I intercepts the axis II-II.

In this way, however the shower curtain rod is configured, the first cover part 50, which moves with the shower curtain rod 30 is always smoothly and sealingly engaged in the opening 61 of the second cover part 60 so that no gap appears. This enhances the aesthetic appearance of the design and resists ingress of moisture to the pivot section which is formed between the bearing section 12 and the second part 20.

Figure 2 shows how the angle of the shower curtain rod section 30 can be changed over a wide variety of angles and positions (30°, 30"), due to the movement of the first cover part 50 inside the opening 61 of the second cover part 60.

Figure 3 shows a sketch isometric view (not to scale) of the wedge 40, showing the aperture 44 in which the hexagonal nut 43 is held captive in such a way that it cannot rotate. In this way, when the screw or bolt 42 is rotated, the wedge is caused to move axially along the axis of the screw.

Figure 4 is a sketch isometric view, from below, of the second part 20. The hole through which the contoured pivot pin 22 extends can be seen. Also, the hole 25 which receives the head 45 of the screw or bolt 42 can be seen. For ease of construction, a slot of dimensions slightly larger than the head 45 of the screw 42 is formed in the underside of the bearing surface 21. During assembly, the screw is fed along the slot 26 until its head 45 comes to rest adjacent the end of the hole 25 whereupon it can engage the wedge. Then the slot 26 can be closed by a block member 27 which is configured so that it exactly fills the width and depth of the slot 26 and which includes a hole 28 through which the pivot pin 22 passes. The second part 20 has a friction member 23, comprising four resilient fingers 24 which are urged outwards by the wedge 40 to engage the inside of the shower curtain rod 30 to increase the friction therebetween so that the shower curtain rod is securely held on the second part 20.

Figure 5 is a sketch isometric view, not to scale, of the bearing section 12.

Figure 6 is a sketch cross section normal to axis II-II along line VI-VI in Figure 1.

Figure 7 is a sketch isometric view of the bracket 11. The bracket 11 includes an aperture 15 whose internal diameter corresponds to the external diameter of the bearing section 12. The aperture 15 and the external surface of the bearing section together define the first bearing. It can be seen that the bearing section 12 comprises a reduced diameter portion 16 and a flange 17 at the left-hand-most end. On the inside of the aperture 15 there is an axial and angular stop member 18. The axial stop surface of this stop member 18 can be seen, shown cross hatched in Figure 7. The flange 17 defines a circumferentially extending surface which engages with this axial stop surface to resist axial separation of the bearing section 12 and the bracket 11.

The flange 17 is provided with a recess 19 which passes over the stop member 18 in assembly allowing the bearing member 12 to be passed through to the end of the aperture 15. The bearing member 12 can then be rotated into its operative position in which the slot 19 does not line up with the stop member 18 so that the bearing section 12 is prevented from separating in the direction of axis II-II from the bracket 11. A further stop member 18' is provided projecting from a surface of the reduced diameter section 16 of the bearing section 12. In use, this will come to rest adjacent a stop surface of the stop member 18 when the bearing section 12 is in position in the aperture 15, as shown in Figure 6. When the shower curtain rod is engaged with the mounting, rotation of the mounting about axis II-II is resisted by engagement of the respective stop members 18 and 18'. However, rotation (against the gravitational weight of the shower curtain rod) in a direction tending to separate the stop surface 18' and the stop member 18 is allowed. The bearing section 12 can then be rotated by about 180° until a further stop surface 18'' formed in the reduced diameter section contacts the other side of the stop member 18 bringing the bearing section 12 to a stop in a position about 180° with respect to the position in which it engaged the other stop surface of the stop member. In this way, the curtain rod can be provided with two configurations, one in which it bows outwards and one in which it bows inwards.

Figure 8 is a sketch isometric view, not to scale, of a friction fixing 80. This comprises an almost complete section of circular arc which is designed to fit snugly around the reduced diameter section 16, with two friction members either side of the stop 18'. This engages the inside of the aperture 15, to provide a strong engagement between the bracket 11 and the bearing section 12.

In normal use, the shower curtain rod will be mounted at the opposite end by a similar mounting, or by any other suitable design of mounting.

5 The mounting at the other end of the shower curtain rod will have an axis III-III which is suitably at an angle to the axis II-II. The present invention allows a wide variety of angles between these two axes to be accommodated.

10 For example, as shown in Figure 9, a curved curtain rod section 74 of a fixed radius of curvature is shown engaged between a first wall 71 and two different positions of a second wall 72, 73. The wall position 73 is closer to the wall 71 than the wall position 72.

15 In order to adapt the curtain rod 74 to wall position 73, the rod 74 will have to be cut to a shorter chord length. As a result, as can be seen in Figure 9, it will subtend a smaller section of arc and the angle  $\alpha_2$  that it makes to the plane of the wall at position 73 is larger than the angle  $\alpha_1$  which it made with the wall at position 72. The mounting according to the present invention can easily accommodate these changes in angle.

20 Figure 10 shows how a curtain rod 74 mounted to wall positions 71 and 72 by mountings according to the invention can be rotated about the axis II-II to adopt a first position in which it bows outwards and second position (indicated 74') in which it bows inwards.

25 Figure 11 is a sketch cross-sectional view of a second embodiment of a mounting for a shower curtain rod, according to the first and second aspects of the invention, engaged with a shower curtain rod section. It is in many respects the same as figure 1 and parts which are the same are given the same reference numerals and the description is the same as set out above.

30 However, the second part has been adapted so that it has a friction member 80. The friction member 80 has the same design of central bore in which a bolt 83 (which is longer than bolt 42 but otherwise of the same design) extends. The friction member 80 has the same design of fingers 24 which are forced outwards by the wedge 40 in the same way as figure 1. However, the friction member 80 is longer than the friction member 23. The position along the axis II-II at which the end 82 of the rod 30 comes

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to rest can be freely varied to allow adjustment of the total length of the combination of rod 30 and the mounting. The gap 84 between the outside of the friction member 80 and the end 82 of the rod 30 is covered by a cylindrical projection 81 which is integral with the first cover part 50, so that no gap is visible from the outside.

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The mounting of the present invention is capable of a wide variety of applications, for a wide variety of different shower encloses. Figure 12 is sketch view showing the components with which the present invention may be combined to provide a shower curtain rail assembly.

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The shower curtain rail assembly shown includes in succession, from the left hand end:

a mounting according to the invention 90

a short, straight section 91 of shower curtain rail

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a 90° bend 92

a longer straight section of shower curtain rail 93

a tee-junction 94, for intermediate support of the weight of the shower curtain rail assembly

a short, curved section of shower curtain rail 97,

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a longer curved section of shower curtain rail 98,

a hinged joint 99

a conventional bracket 100.

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The tee-junction 94 is shown engaging a straight section of rod which is fixed to a conventional bracket for engaging in this case the ceiling. The conventional bracket includes, as is well known, a first bracket part 96 which is to be screwed to the ceiling and a cover 95 which covers the first bracket part 96 for aesthetic appearance. The rod section is suitably fixed by a screw (not shown) to the bracket part 96. The bracket 100 may be of similar construction.

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The present invention has been described above by way of example only and modifications can be made within the invention. The invention also extends to any

individual features described or implicit herein or any combination of any such features or any generalisation of any such features or any such combination.

**CLAIMS:**

1. A mounting for a shower curtain rod, the mounting comprising:
  - 5 a first part, comprising a bracket for mounting to a wall and a bearing section, which is rotatably mounted with respect to the bracket about a first axis which is substantially horizontal in use,  
a second part, for engaging a shower curtain rod, mounted so that it can rotate with respect to the first part about a second axis which is at an angle to the first axis  
10 and substantially vertical in use.
  2. A mounting for a shower curtain rod according to claim 1, wherein the bearing section is rotatably mounted with respect to the bracket by a first bearing.
  - 15 3. A mounting for a shower curtain rod according to claim 2, wherein the first bearing comprises an annular part on one of the bracket and the bearing part and a projection on the either of the bracket and the bearing part, which is received in the annular part.
  - 20 4. A mounting for a shower curtain rod according to claim 3, wherein separation of the bracket and the bearing section along the first axis is prevented by an axial stop.
  - 25 5. A mounting for a shower curtain rod according to claim 4, wherein the axial stop comprises a first surface on the bracket, extending in a plane substantially normal to the first axis, and a second surface on the bearing section, also extending in a plane substantially normal to the first axis, the first and second surfaces being configured to abut and prevent axial movement of the bracket and bearing section.
  - 30 6. A mounting for a shower curtain rod according to claim 4 or 5, wherein the axial stop comprises an inward projection from the annular wall of the annular part which is engageable with a reduced diameter section of the projection, the axial stop being engageable with a circumferentially extending surface adjacent the  
35 reduced diameter portion.

- 5 7. A mounting for a shower curtain rod according to claim 4 or 5, wherein the axial stop comprises an outward projection from the projection which is engageable with an increased diameter section of the annular part, the axial stop being engageable with a circumferentially extending surface adjacent the increased diameter portion.
- 10 8. A mounting for a shower curtain rod according to claim 6 or 7, wherein a cut-away portion is provided in the respective circumferentially extending surface, through which the inward or outward projection can pass.
- 15 9. A mounting for a shower curtain rod according to any of claims 3 to 8, wherein the projection is of diameter which is smaller than the maximum dimension of the bracket in a direction parallel to the wall, in use.
- 20 10. A mounting for a shower curtain rod according to any of claims 3 to 9, wherein the annular part is formed on the bracket.
- 25 11. A mounting for a shower curtain rod according to any of claims 1 to 10, wherein an angular stop structure is provided on each of the bracket and the bearing section to limit the angular movement of the bearing section with respect to the bracket in one direction of rotation.
- 30 12. A mounting for a shower curtain rod according to claim 11, wherein a second angular stop structure is provided on each of the bracket and the bearing section to limit the angular movement of the bearing section with respect to the bracket in the opposite direction of rotation.
- 35 13. A mounting for a shower curtain rod according to claim 12, wherein the angular stop is the same, or part of the same formation as, the axial stop of any of claims 4 to 8.
14. A mounting according to any preceding claim, wherein the bearing section is rotatably mounted with respect to the second part by a second bearing.

15. A mounting according to any preceding claim, combined with a shower curtain rod, wherein one of the shower curtain rod and the second part comprises a socket for receiving a corresponding projection of the other of the shower curtain rod and the second part, the projection having at least two friction surfaces for engaging the inner wall of the corresponding socket, a wedge or cam being provided for urging the friction surfaces into contact with the inside of the socket.
16. A mounting according to claim 15, wherein the friction surfaces comprise a plurality of resiliently mounted fingers.
17. A mounting according to claim 15 or 16, wherein the depth along the axis of the curtain rod to which it engages the second part is variable.
18. A mounting according to any preceding claim, further comprising a cover.
19. A mounting according to claim 18, wherein the cover comprises a first pivot cover and a second pivot cover, comprising an opening, the first pivot cover being rotatably mounted within the opening of the second pivot cover.
20. A mounting according to claim 19, wherein the first pivot cover is defined by a body of rotation, the axis of rotation of which is coincident with the second axis.
21. A mounting according to claim 19 or 20 when dependent on claim 2 and 14, wherein the first cover part is separate from the first and second bearings.
22. A mounting according to any of claims 19 to 21, wherein the first pivot cover is defined by at least a section of the surface of a sphere, prolate spheroid or oblate spheroid.
23. A mounting according to any of claims 19 to 22, wherein the opening in the second cover part is a circular opening.
24. A mounting according to claim 23, wherein the plane of the circular opening is substantially vertical in use.

25. A mounting according to any of claims 18 to 24, wherein the cover comprises a projection extending in the direction of the shower curtain rod.
- 5      26. A mounting according to claim 25, wherein the projection covers the part where the shower curtain rod is connected to the second part.
27. A shower curtain rod assembly comprising at least one mounting according to any preceding claim and a shower curtain rod.
- 10      28. A shower curtain rod assembly, comprising a bracket for mounting to a wall and a shower curtain rod, one of the shower curtain rod and the bracket comprising a socket for receiving a corresponding projection of the other of the shower curtain rod and the bracket, the projection having at least two friction surfaces for engaging the inner wall of the corresponding socket, a wedge or cam being provided for urging the friction surfaces into contact with the inside of the socket.
- 15      29. A mounting for a shower curtain rod, substantially as herein described with reference to the accompanying drawings.
- 20      30. A shower curtain rod assembly substantially as herein described with reference to the accompanying drawings.

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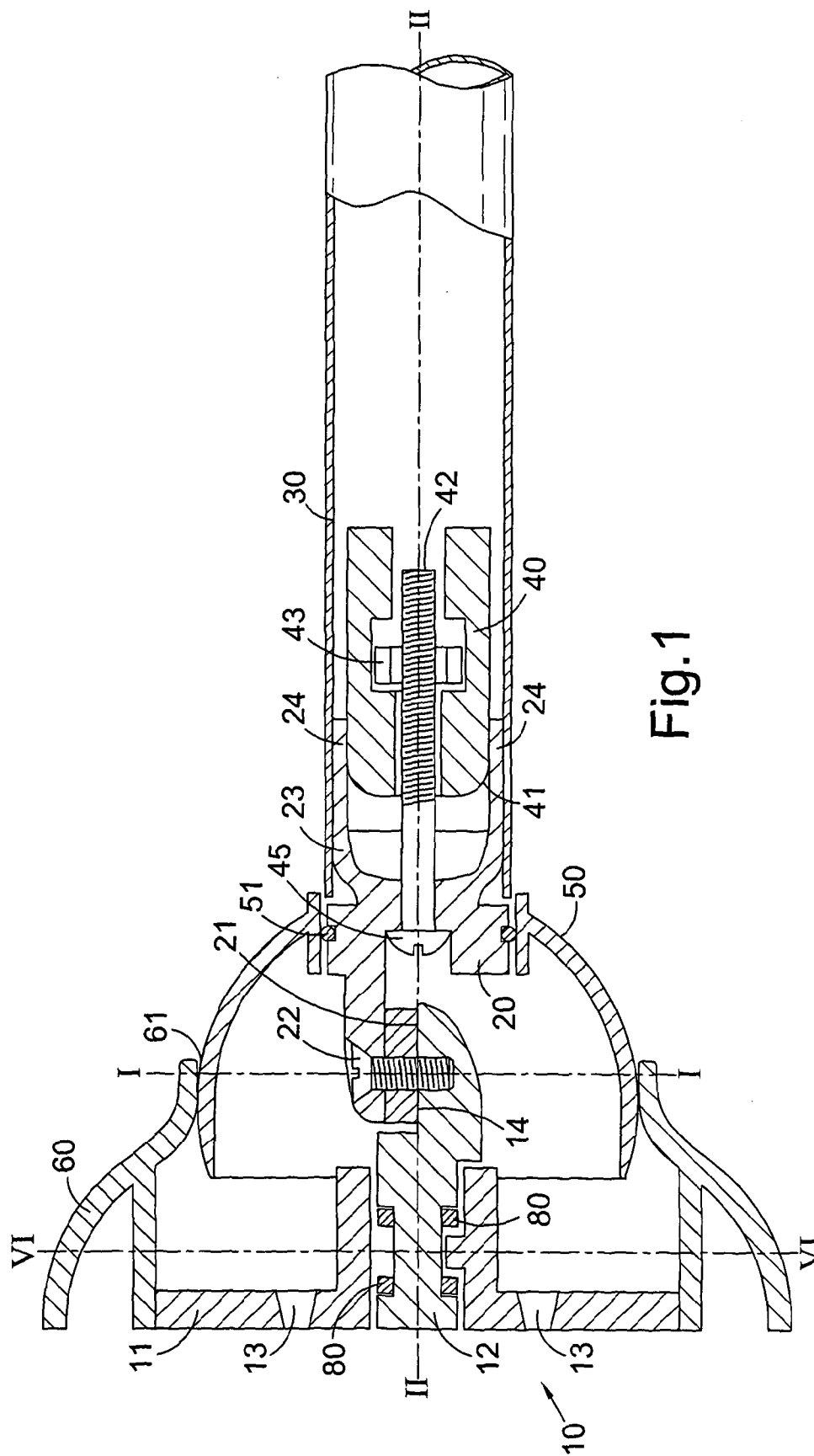


Fig. 1

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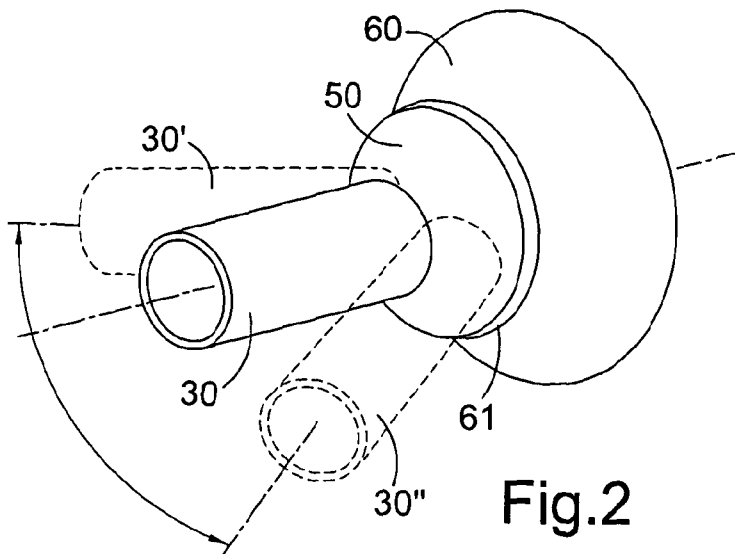


Fig.2

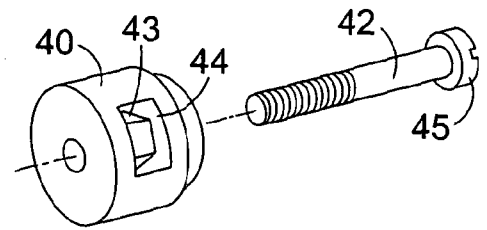


Fig.3

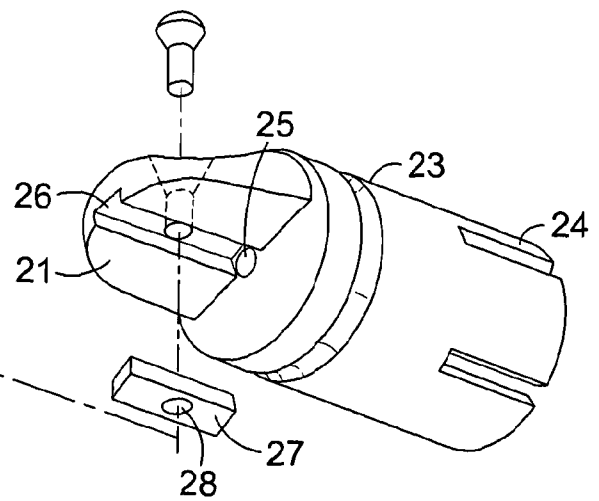


Fig.4

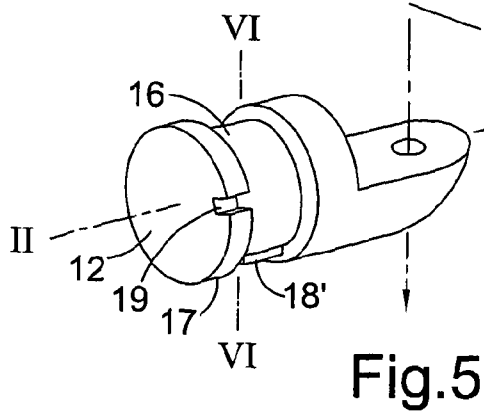


Fig.5

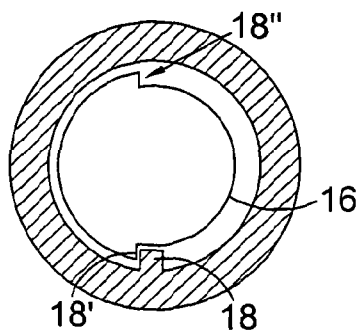


Fig.6

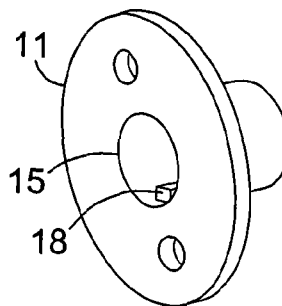


Fig.7

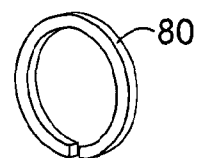


Fig.8

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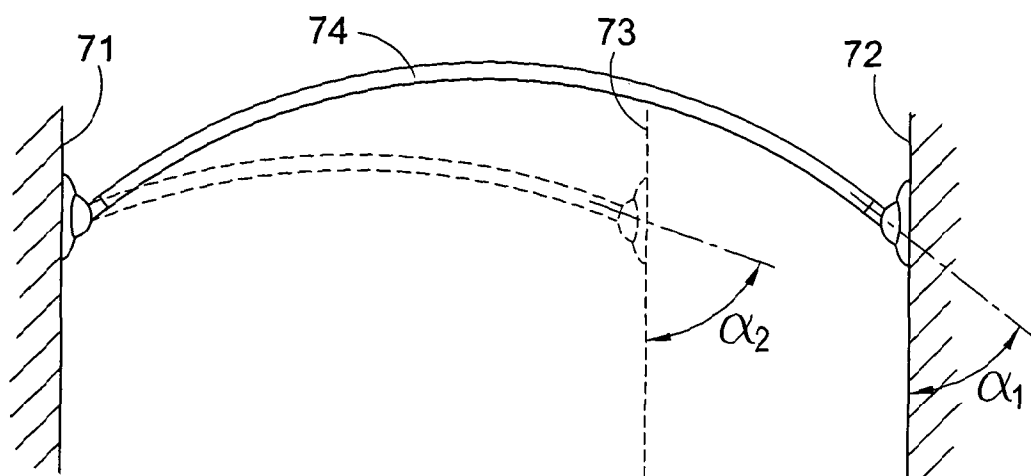


Fig.9

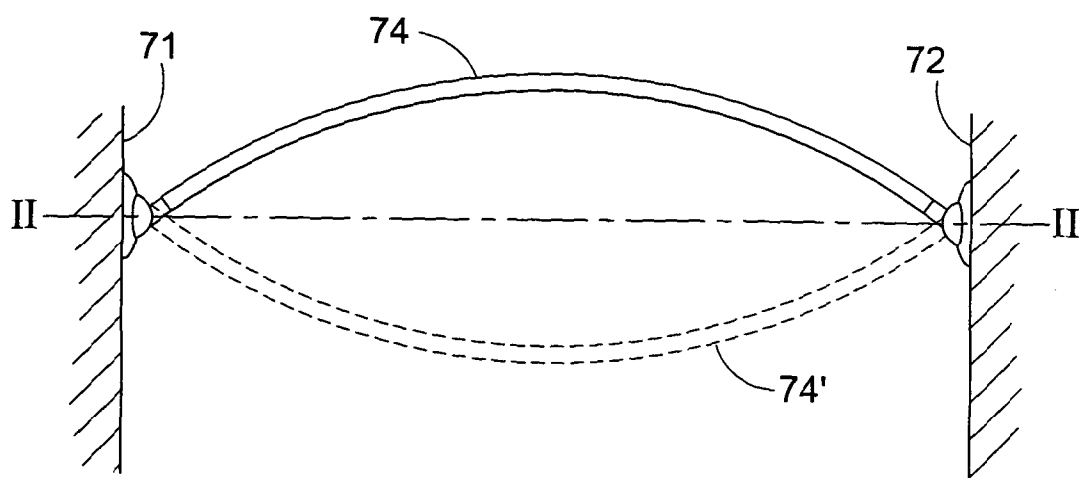


Fig.10

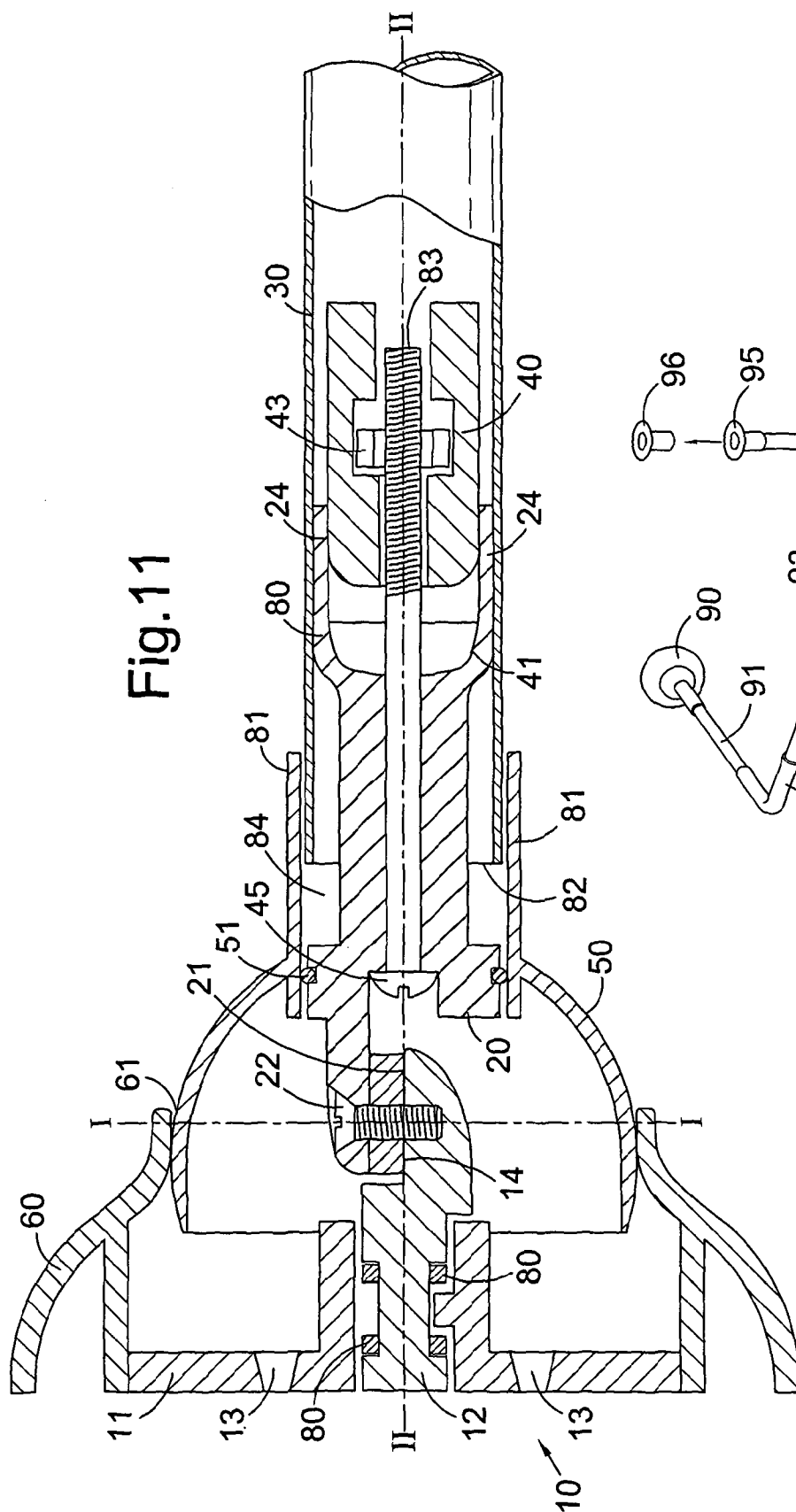


Fig.11

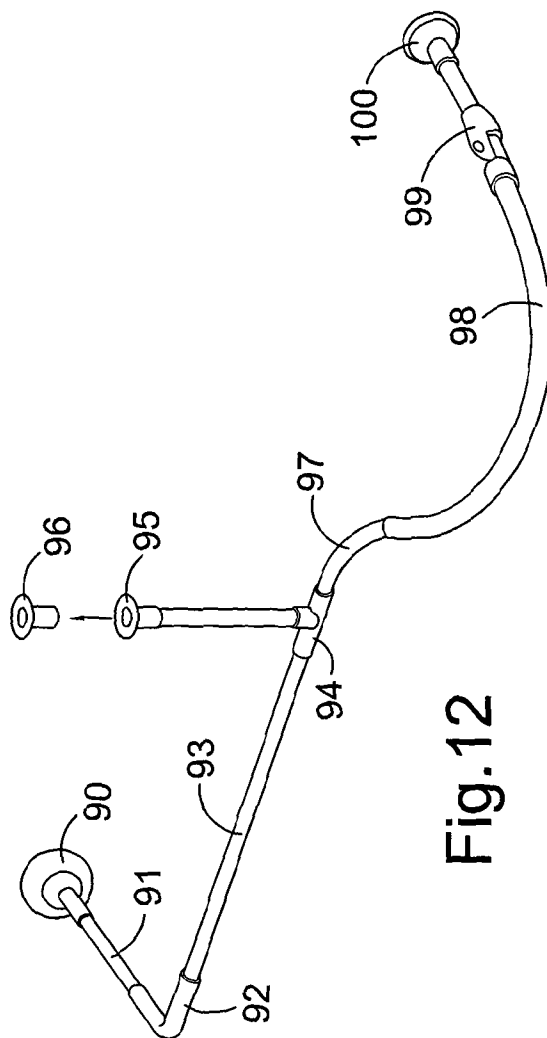


Fig.12