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(54) Title: A CONTAINER HOLDER AND CLAMP ARRANGEMENT

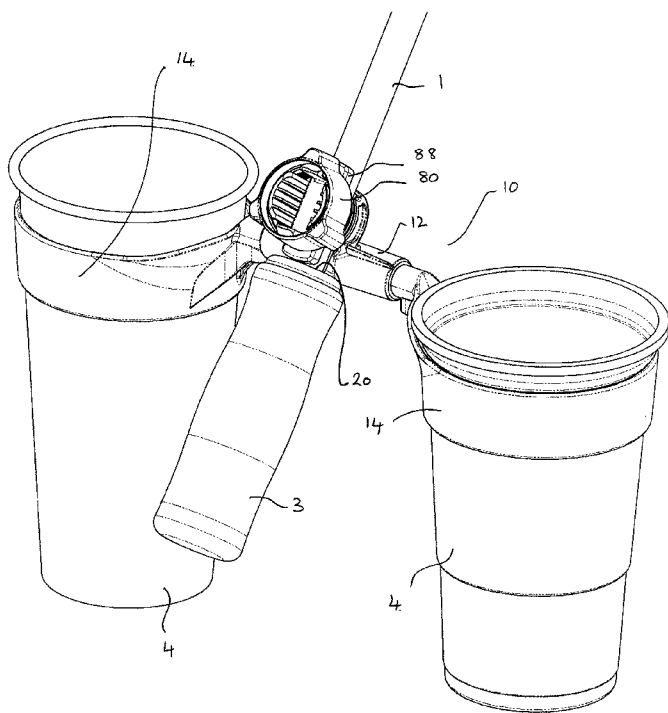


FIG 2

(57) Abstract: The present invention provides a container
holder comprising a boss portion (12); one or more contain-
er receiving portions (14) mounted to said boss portion (12),
characterised by a clamp (16) for securing said boss portion
(14) to a further article (1) and by the one or more container
receiving portions (14) being pivotally connected to said
boss portion (12). Such an arrangement may be secured to,
for example, an umbrella and may carry beverage containers
such as beakers or glasses in portions (14).





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A CONTAINER HOLDER AND CLAMP ARRANGEMENT

INTRODUCTION

The present invention relates to a container holder and relates particularly but not
5 exclusively to a container holder suitable for holding one or more beverage containers or
other such similar article whilst being attached to a further object. The invention also relates
to a clamp arrangement. Aspects of the present invention relate to a clamping arrangement
which are independent of the container holder and may be used separately on other items.

BACKGROUND

10 It is well known to provide beverage container holders which are attached to other articles
such as to allow a user to have easy access to the beverage as and when desired.
Examples of such holders include those used on bicycles for holding water bottles securely
to the frame of the bicycle whilst allowing the user to remove it and replace it as and when
desired.

15 Whilst the above-mentioned arrangements provide adequate solutions to the problem within
their own limited area of use, it has been found that they do not lend themselves to use on
anything other than the specific further articles they were designed to work with. Accordingly,
there exists a requirement for an improved container holder arrangement and the present
invention aims to provide such an arrangement. In addition, the problem of having easy
20 access can sometimes relate to the difficulty in positioning the item in question and, in that
regard, a clamping arrangement may be required.

STATEMENT OF INVENTION

In accordance with the above desire, there is provided a container holder comprising: a boss
portion; one or more container receiving portions mounted to said boss portion, having a
25 clamp for securing said boss portion to a further article and by the one or more container
receiving portions being pivotally connected to said boss, wherein said container receiving
portions and said boss portion include a male engagement portion and a female
engagement portion into which said male engagement portion is engaged and in that said
male engagement portion comprises a sprung bayonet fitting having sprung engagement
30 members and said female engagement portion comprises an aperture having therein an
engagement land for engagement with said sprung engagement members once inserted
within said aperture.

In one arrangement said boss portion comprises a handle.

Advantageously, said clamp comprises an adjustable clamp.

Preferably, said boss portion further includes a support surface on a bottom surface thereof for engagement with an upper surface of a further object.

- 5 Advantageously, said support surface comprises an arcuate surface having a central opening therein for receiving said further object.

The arrangement may include multiple interchangeable container receiving portions each being able to receive a different shaped container.

- 10 Preferably, said engagement land further comprises a tapered portion at an outer side of said aperture for causing said sprung engagement members to be forced to a retracted position as they are advanced into said aperture and an engagement surface) for engagement with a corresponding engagement surface on said engagement member when fully inserted such as to prevent inadvertent removal of the male portion from said female portion.

- 15 Advantageously, one or other or both of said engagement surfaces comprise tapered engagement surfaces (thereby to facilitate removal of said container receiving portions from said boss.

- 20 Preferably, said female engagement portion comprises a circular aperture extending along a generally horizontal axis Y and including an inner generally circular surface and said male portion includes a tubular portion of generally circular cross-sectional form for engagement with said generally circular surface when inserted within said aperture such as to allow said male portion to rotate within said female portion.

Advantageously, said boss portion includes an axially extending location feature extending generally along axis Y.

- 25 Conveniently, said axially extending location feature comprises an axially extending recess.

Preferably, said axially extending location feature further includes side members having mutually confronting inner surfaces.

- 30 Preferably, there is also provided a clamp comprising an outer surface and a threaded portion on said outer surface and a locking member comprising a threaded member having an inner thread portion for engagement with said threaded portion on said outer surface, and wherein said locking member includes a first surface on an inner side and a second

surface on an outer side and a clamping member engageable with said first surface on a first side and with a further object on a second side.

Advantageously, the clamp includes a resilient surface on the second side of the clamping member.

5 Preferably, the arrangement includes a boss portion and further including two side members extending from said boss portion and having said outer surfaces on outer sides thereof and including spaced apart mutually confronting inner surface and said clamping member lies between said confronting surfaces and includes side surfaces confronting said inner surfaces.

10 Advantageously, said clamping member includes one or more axially extending resilient extensions and one or more radially extending projections provided on said one or more resilient extensions.

Preferably, said locking member includes a third surface on a side thereof remote from the clamping member and wherein said third surface is in sliding engagement with one or more
15 of said one or more radially extending projections.

Advantageously, said locking member includes a recess on a side remote from the clamping member and wherein said third surface is within said recess.

Preferably the arrangement includes an axially aligned groove on clamping member and between said mutually confronting inner surfaces.

20 Advantageously, said locking member includes an aperture extending between the first side thereof and said second side thereof and wherein said one or more axially extending resilient extensions extend through said aperture.

Preferably, the arrangement includes two container receiving portions on opposite sides of said boss portion.

25 In one use, said one or more container receiving portions may comprise a drinking receptacle receiving portions and include an inner aperture for receiving said drink receptacle.

Advantageously, said inner aperture comprises a tapered aperture.

Preferably, said one or more container receiving portions include a hinge member for
30 allowing said portions to be pivotable between stowed and deployed positions.

In a preferred arrangement said container receiving portions include first bearing surfaces and said boss includes corresponding second bearing surfaces for engagement with said first bearing surfaces.

5 Advantageously, said first bearing surface comprises a plurality of circumferentially extending rib portions. Such ribs may be of low friction material.

The present invention also provides clamp comprising an outer surface and a threaded portion on said outer surface and a locking member comprising a threaded member having an inner thread portion for engagement with said threaded portion on said outer surface and wherein said locking member includes a first surface on an inner side and a second surface
10 on an outer side and a clamping member engageable with said first surface on a first side 90 and with a further object on a second side.

Advantageously, the clamp includes a resilient surface on the second side of the clamping member.

15 Preferably, the clamp including a boss portion and further including two side members extending from said boss portion and having said outer surfaces on outer sides thereof and including spaced apart mutually confronting inner surfaces and said clamping member lies between said confronting surfaces and includes side surfaces confronting said inner surfaces.

20 Advantageously, said clamping member includes one or more axially extending resilient extensions and one or more radially extending projections provided on said one or more resilient extensions.

Preferably, said locking member includes a third surface on a side thereof remote from the clamping member and wherein said third surface is in sliding engagement with one or more of said one or more radially extending projections.

25 Advantageously, said locking member includes a recess on a side remote from the clamping member and wherein said third surface is within said recess.

Preferably the clamp includes an axially aligned groove on clamping member and between said mutually confronting inner surfaces.

30 Advantageously, said clamping member includes an aperture extending between the first side thereof and said second side thereof and wherein said one or more axially extending resilient extensions extend through said aperture.

Those skilled in the art will appreciate that a different combination of features described herein may be used in different circumstances. In a particular example, it will be appreciated that the clamp arrangement may be used on other items. Still further, the person skilled in the art will also appreciate that the boss of claim 1 may be replaced by a handle portion or
5 may be formed as or of a handle portion.

The present invention will now be more particularly described by way of example only with reference to and as illustrated in the accompanying drawings from which individual features may be selected without reference or dependence upon other features illustrated in the same or other drawings:

10 Figure 1, is a general view of one aspect of the present invention when positioned on an umbrella;

Figure 2 is a detailed isometric view of a two holder unit applied to an umbrella,

Figure 3, is a back elevation view of the arrangement of figure 2,

Figure 4 is an exploded isometric view of the arrangement of figures 2 and 3,

15 Figure 5 is a cross-sectional view of the arrangement of figure 4;

Figure 6 is a cross-sectional view of an assembled arrangement of that shown in figure 5;

Figure 7 is a cross-sectional view of one arrangement shown positioned and engaged with the handle of, for example, a golfing umbrella;

Figure 8 is a vertical elevation of a single holder unit, as shown in figure 1;

20 Figure 9 is an isometric view of the arrangement of figures 1 and 8;

Figure 10 is an exploded view of the arrangement of figure 9;

Figure 11 is a view of a folding arrangement applied to a handle of, for example, an umbrella, and

Figure 12 is a cross-sectional view of the arrangement of figure 11.

25 GENERAL FEATURES

Referring now to the drawings in general but particularly to figures 1 to 3, a container holder 10 includes a boss portion 12 and a container receiving portion 14 which is mounted to said boss portion 12 in a pivotal manner to be described in detail later herein. A clamping arrangement 16 is provided to secure the holder 10 to another object. In the arrangement of

figure 1, the holder 10 is secured to the stem 1 of an umbrella 2 but it will be appreciated that the holder 10 may be secured to other articles such as rods, bars, walking sticks and the like, none of which are shown in the drawings. The stem 1 is, therefore, representative of any other article to which the holder 10 may be secured. Also shown in figure 1 is a handle 3 and a container 4 in the form of, for example, a drinks container. The handle itself 3 may comprise a portion of the boss 12 or it may comprise a separate handle 3, such as that of an umbrella 2. When the handle 3 comprises a separate component the boss may be provided with a support surface 12b on a bottom surface 18 for engagement with an upper surface 20 of a handle 3. In the arrangements of figures 3 and 4, the support surface may be curved around a central axis X and extend in an arcuate manner such as to wrap around any stem 1 to which it is secured whilst also presenting a greater amount of contact area for the support surface 16 to engage with any handle 3 onto which it may be placed. Such an arrangement is described in more detail later herein but it will be appreciated that any such arrangement will provide a central opening 20 for receiving said stem 1 or other such article.

The present invention may be implemented in a number of ways with single or multiple container receiving portions 14 and may be provided as a separate or integrated solution. Figure 1 and 8 illustrate arrangements with a single receiving portion 14 whilst figures 2 to 7 illustrate arrangements with two receiving portions 14. Other multiples of receiving portions are also clearly possible and those skilled in the art will appreciate how to implement them should that prove desirable. One of the advantages of a double arrangement resides in the possibility of placing them opposite each other at opposite ends of a boss 12 such that any weight placed therein is at least partially balanced by weight on the opposite side. The single arrangements of figures 1 and 7 provides a solution suitable for carrying, for example, a single beverage container 4 which may be placed on an opposite side of the stem 1 to that facing a user and, to some extent, this arrangement will help reduce stress transferred to the users wrist. An integrated solution is shown in figures 11 and 12 in which the boss 12 is formed as part of a handle 3 or the boss 12 is extended to form a handle portion 3. Such an arrangement has the advantage that it may be incorporated into an umbrella or walking stick, for example, as a direct replacement for the standard handle normally associated with such products. Each of the receiving portions 14 may comprise different shaped portions.

PIVOT

Reference is now made more particularly to figures 4 to 7 and 9 to 10 which illustrate one preferred form of pivotal arrangement which has been found to be particularly beneficial to the present holder 10. In this arrangement, the pivotal relationship between the receiving portion 14 and the boss 12 is established through rotatable male and female engagement

portions 24 and 26 provided on the receiving portion(s) 14 and the boss 12 respectively. Those skilled in the art will appreciate that other forms of pivotal arrangements are also possible and include but are not limited to nut and bolt arrangements. In the preferred arrangement, the male portion 24 comprises a sprung bayonet fitting 28 having a sprung engagement member 30 whilst the female engagement portion 26 comprises an aperture 32 for receiving the male engagement portion 24 and which is provided with an engagement land 34 for engagement with the a corresponding bayonet engagement land 36 once inserted therein. Such arrangements are shown in detail in figures 5 and 6 and from which it will also be appreciated that the female engagement land 34 may be provided with tapered or sloped portion 38 at an outer side 40 thereof which reduces the cross-sectional diameter D of the aperture the further into said aperture one extends. This sloped portion 38 is also provided with an engagement surface 42 on an inner end 44 thereof which forms a returning surface effectively increasing the aperture diameter D and providing an engagement surface surface 46 onto which, in operation, a corresponding male engagement surface 48 of the male portion 24 may engage. In operation, insertion of the male portion 24 into aperture 32 causes the sprung member 30 to flex inwardly and retract to a retracted position as the bayonet fitting 28 engage with tapered portion 38 and then causes said sprung member 30 to flex outwardly as the bayonet fitting 28 passes thereover such as to allowing the sprung member 30 to expand once the male member 24 is sufficiently inserted. This will allow the male and female engagement surfaces 46, 48 to engage with each other. In one arrangement the male and female engagement surfaces extend substantially perpendicular to longitudinal axis Y, thus preventing removal of the receiving portion 14 unless excessive force is applied sufficient to overcome the resistance applied through the interaction of the engagement surfaces 46, 48. In an alternative arrangement, one or more or both of the engagement surfaces are angled at an angle θ relative to axis Y such as to provide a sloping or tapered surface over which the engagement surfaces may slide on the application of sufficient axial force to the receiving portion to overcome any resistance to motion and sufficient to flex the sprung members 30 inwardly in the reverse manner to that applied during insertion thereof. The exact angular relationship required will depend upon the degree of resistance required and can be altered accordingly but those skilled in the art will appreciate that sufficient an angle θ should be used as is required to prevent inadvertent removal of the receiving portion 14 whilst in use. The cross-sectional form of the aperture 32 and the male portion 24 are preferably circular and sized accordingly to allow the male portion 24 to be easily inserted into the aperture itself 32. The aperture 32 is preferably formed as a tubular member having a circular aperture and extending along a generally horizontal axis Y and including an inner generally circular surface 50 for engagement with a portion of the male portion 24. Preferably, the male portion 24 comprises a tubular portion 52

forming a bearing surface 54 of generally circular cross-sectional form for engagement with said generally circular surface 50 when inserted within said aperture 34. It will be appreciated that circular arrangements will allow for the rotation of the receiving portion 14 relative to the boss 12. This rotation may be enhanced by the provision of a low-friction material 56 on the bearing surface 54. Alternatively or in addition, the tubular portion 52 may comprise a plurality of discrete circumferentially extending rings 58, each of which engage with the female engagement surface 50. The provision of the rings 58 will result in less contact area between the male and female portions which will reduce friction and facilitate smoother operation.

Reference is now made more particularly to figures 2 to 7 which illustrate most but not all the features of the present invention and from which it will be appreciated that each of the single and multiple container arrangements include a number of common features such as the location and clamping arrangement which we will now discuss in more detail. Whilst the location and clamping arrangement may comprise any one of a number of arrangements the detailed arrangement of this application has been found to be particularly useful. The present arrangement comprises a number of components which allow the clamp 16 to be placed around any one of a number of pre-existing stems 1 of different shapes and sizes whilst also allowing the clamp to be securely fastened relative thereto. In particular, the clamp 16 includes an axially extending location feature 60 extending in a generally vertical direction along axis X in figure 4, for example, which, in operation, engages with a generally axially extending portion 1 of the further object itself. In a preferred arrangement the location feature 60 comprises an axially extending recess or grooved portion best seen in figure 4. Such a groove or recess is preferably tapered such as to allow the further article to be accommodated regardless of size as smaller articles will sit deeper within the groove whilst larger articles will sit higher in the groove. In addition, odd shaped articles and circular articles 1 may be accommodated by having surfaces thereof abut up against different portions of the tapered recess. This item in itself provides the boss 12 with an enhanced location and higher degree of security of location once the boss 12 is placed against the further article 1. The location feature 60 may be used in combination with the bottom surface 18 of the boss to enhance still further the security of location as the bottom surface can locate relative to, for example, the upper surface 20 of a handle 3 of the umbrella (see fig 1 and 7) whilst the location feature 60 locates against the stem 1 of the umbrella (for example). Load from anything placed in the receiving portions 14 is transferred to the handle 3 whilst the vertical security of the boss and receiving portions is enhanced by the interaction between the location feature 60 and stem 1. This arrangement may on its own provide sufficient location for many applications but may be enhanced by further features which we

will discuss now. These further features include side members 62, 64 extending from the boss portion 12 on either side of the location feature 60 which also include mutually confronting surfaces 66, 68. These surfaces 66, 68 act to confront any further article 1 inserted therebetween and may engage therewith if so desired so as to enhance still further lateral stability of the boss 12 relative to the further article 1. A still further degree of security may be provided by the addition of a securing member 70 in the form of, for example, an adjustable securing member shown generally at 72. A preferred arrangement includes threaded portions 74 on outer surfaces 76, 78 of the side members 62, 64 and a nut or locking member 80 having an inner threaded portion 82 on an inner surface and being shaped and positioned to engage with said threaded portion 74 as and when desired. The nut or locking member 80 further includes a first surface 84 on an inner side 84a and a second surface 86 on an outer side 86a. A clamping member 88 may also be provided and is engageable with said first surface 84 on a first side 90 and with said further article 1 on a second side 92. Preferably, the first side 90 includes a resilient surface or insert 94 made from, for example, rubber or plastics material which is sufficiently resilient to conform when pushed into engagement with said other article 1. This conforming will allow the insert to increase the surface area of contact and, thus, the clamping effect. In addition, if the insert is made of a high friction material or provided with an otherwise high-grip surface this will enhance still further the clamping effect and also resist rotation of the boss 12 relative to the further article. The clamping member 88 may also include axially aligned grooves 88g which help with the clamping effect.

In a preferred arrangement the clamping member 88 comprises a non-rotatable clamping member 88 and such an arrangement may be provided by securing said clamping member 88 to the locking member 80 and using the side members 62, 64 to prevent rotation. Figure 10 illustrates the arrangement in more detail and from which it will be appreciated that edges 95, 97 of the clamping member 88 will engage with inner surfaces 66, 68 as the clamping member moves further into the gap 22 between the side members 62, 64 and the engagement prevents rotation. Whilst a number of securing arrangements are possible, it has been found that the provision of one or more circumferentially extending surface projections 96, 98 on the clamping member 88 which engage with a third surface 100 on the locking member 80 (which may be the same as the second surface) such as to retain the clamping member 88 relative to the locking member 80 will suffice. Preferably, the locking member 80 comprises a central aperture 102 and said third surface 100 comprises a circumferentially extending surface 103 on a side remote from said clamping member 88. Said locking member 80 preferably includes a recess 104 on an outer surface 106 thereof within which said third surface may be located. The clamping member 88 may include one or

more axially extending resilient extensions 108, 110 upon which said projections 96, 98 are positioned such as to form bayonet fittings. In operation, the resilient extensions 108, 110 are flexed inwardly such as to allow the projections 96, 98 to pass through aperture 102 and then spring outwardly to engage with third surface 100. In operation, rotation of the clamping member 88 is prevented from rotation by interaction of its outer edges 95, 97 with the confronting surfaces 66, 68 between which it is situated, whilst motion towards and away from the further article 1 is as a result of movement of the clamping member 88 to which it is secured. In effect, the clamping member 88 is secured to move with clamping member 88.

Operation of the above-discussed arrangement requires the simple insertion of the other article (stem 1) between confronting surfaces 66, 68 such that it engages with location feature 60 before engaging locking member 80 onto threaded portions 74 and tightening down said locking member 80 such as to cause the clamping member 88 to engage with the other article 1 and push it into secure engagement with the location feature before tightening the locking member 80 to secure the boss 12 relative to the other article 1. It will be appreciated that the suitable selection of materials for such a clamping arrangement may help enhance the clamping effect and that such materials may include plastics such as polyethelene.

Reference is now made to the drawings in general in order to discuss the shape and structure of the container receiving portions in more detail. It will be appreciated that these portions may be used to secure any one of a number of articles and may be shaped accordingly. One example of a suitable article comprises a drink container such as, for example, a beer glass or a cup shown schematically at 4. Such articles can include tapered outer surfaces and this feature may be taken advantage of in the present invention by providing an inner aperture 114 for receiving said articles. In addition, the inner aperture 114 may be tapered by providing sidewalls 116 tapering inwardly and downwardly such as to accommodate containers of different sizes. Further modification of the receiving portions 14 to secure other articles such as wine glasses, articles of food such as ice-creams and the like are possible. A hinged arrangement is shown in figure 11 and 12 in which a hinge 116 is provided in one or more of the receiving portions 14 which allows the arrangement to pivotally move between a retracted position (LHS of fig 11) and a deployed position (fig 12).

A single receiving portion arrangement is shown in figures 9 and 10 and in which the same features of location and locking are used. Reference to the above description is therefore solicited in respect of the description thereof as all components remain the same with the exception of the boss 12 which extends in just one direction away from the nut 80.

Figures 11 and 12 also illustrate an arrangement in which the boss 12 is incorporated in a handle 3 or is provided with an extension which forms a handle. Such arrangements do not require the nut and clamp arrangement as discussed above but may incorporate the male and female portions 24, 26 and all the components associated therewith such as to allow for pivotal motion.

In operation, the projections 96, 98 are each placed around the further object, such as stem 1, before the clamping member 88 is placed therebetween by sliding nut 80 onto the threaded portions 74 and then advancing it down the thread such as to place the clamping member 88 in contact with the further article 1. Further tightening of the nut will result in the clamping effect being enhanced and the boss 12 being retained relative to the further member. The reader will appreciate that the clamping member 88 is retained between the projections 96, 98 but the nut 80 rotates freely around the clamping member 88 as it is rotated on the threaded portions.

It will be appreciated that individual items described above may be used on their own or in combination with other items shown in the drawings or described in the description and that items mentioned in the same passage as each other or the same drawing as each other need not be used in combination with each other. In addition, the expression "means" may be replaced by actuator or system or device as may be desirable. In addition, any reference to "comprising" or "consisting" is not intended to be limiting in any way whatsoever and the reader should interpret the description and claims accordingly. Furthermore, although the invention has been described in terms of preferred embodiments as set forth above, it should be understood that these embodiments are illustrative only. Those skilled in the art will be able to make modifications and alternatives in view of the disclosure which are contemplated as falling within the scope of the appended claims. For example, those skilled in the art will appreciate that a different combination of features described herein may be used in different circumstances. In a particular example, it will be appreciated that the clamp arrangement may be used on other items. Still further, the person skilled in the art will also appreciate that the boss of claim 1 may be replaced by a handle portion or may be formed as or of a handle portion.

CLAIMS

1. A container holder comprising:

a boss portion;

5 one or more container receiving portions mounted to said boss portion, having a clamp for securing said boss portion to a further article and by the one or more container receiving portions being pivotally connected to said boss, wherein said container receiving portions and said boss portion include a male engagement portion and a female engagement portion into which said male engagement portion is engaged and in that said male engagement portion comprises a sprung bayonet fitting having sprung
10 engagement members and said female engagement portion comprises an aperture having therein an engagement land for engagement with said sprung engagement members once inserted within said aperture.

2. A container holder as claimed in claim 1 characterised in that said boss portion comprises a handle.

3. A container holder as claimed in claim 1, characterised in that said clamp comprises an adjustable clamp.

4. A holder as claimed in claim 1 or 2, characterised in that said boss portion further includes a support surface on a bottom surface thereof for engagement with an upper surface of a further object.

5. A holder as claimed in claim 4, characterised in that said support surface comprises an arcuate surface having a central opening therein for receiving said further object.

6. A container holder as claimed in any one of claims 1 to 5, characterised by having multiple interchangeable container receiving portions each being able to receive a different shaped container.

7. A holder as claimed in any one of claims 1 to 6, characterised in that said engagement land further comprises a tapered portion at an outer side of said aperture for causing said sprung engagement members to be forced to a retracted position as they are advanced into said aperture and an engagement surface for engagement with a corresponding engagement surface on said engagement member when fully inserted
35 such as to prevent inadvertent removal of the male portion from said female portion.

8. A holder as claimed in claim 7, characterised in that one or other or both of said engagement surfaces comprise tapered engagement surfaces.

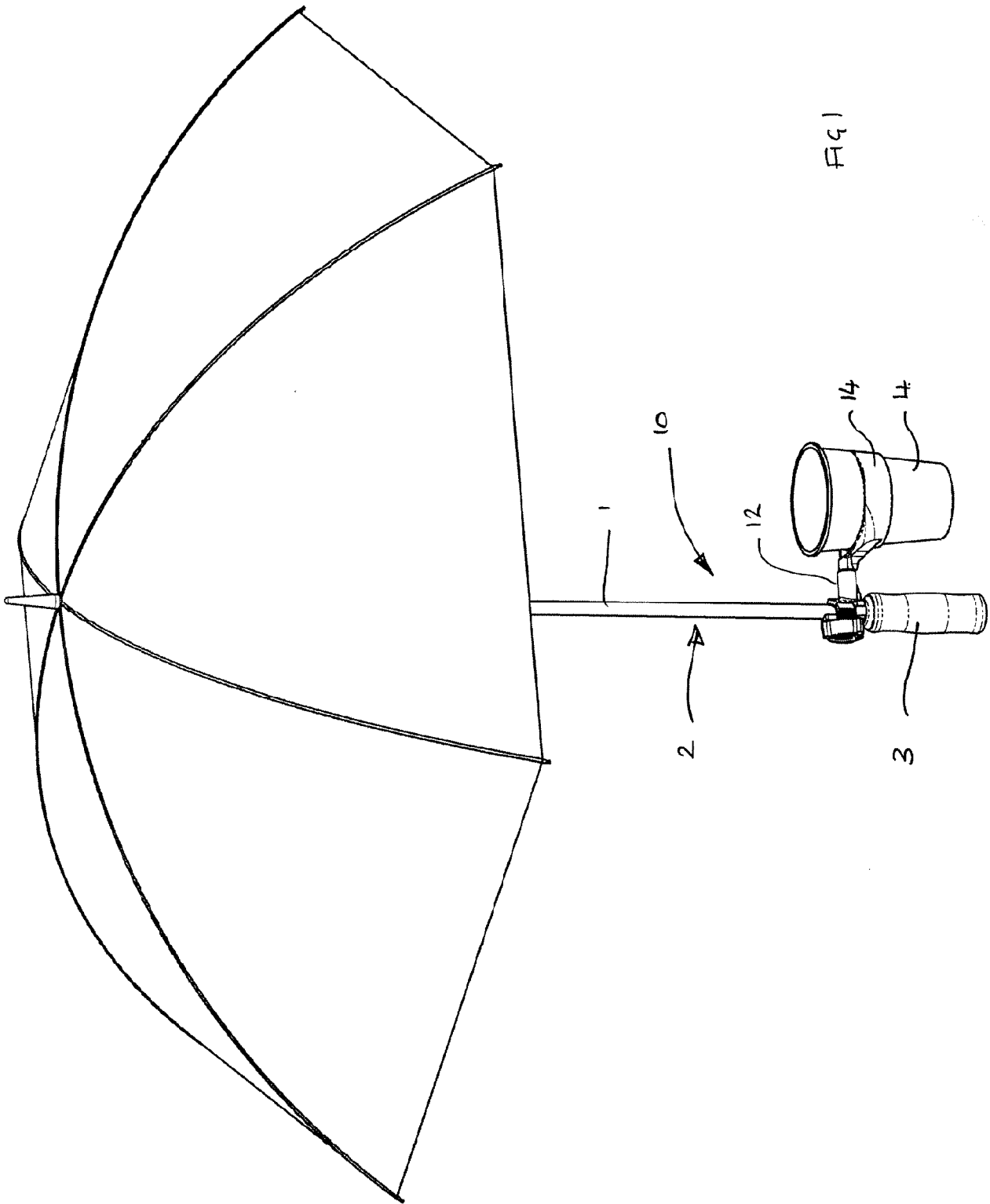
9. A holder as claimed in claim 7 or claim 8, characterised in that said female engagement portion comprises a circular aperture extending along a generally horizontal axis Y and including an inner generally circular surface and said male portion includes a tubular portion of generally circular cross-sectional form for engagement with said generally circular surface when inserted within said aperture such as to allow said male portion to rotate within said female portion.

10. A holder as claimed in any one of claims 1 to 9, characterised in that said boss portion includes an axially extending location feature extending generally along axis Y.
- 5 11. A holder as claimed in claim 10, characterised in that said axially extending location feature comprises an axially extending recess.
12. A holder as claimed in claim 11, characterised in that said axially extending location feature further includes side members having mutually confronting inner surfaces.
- 10 13. A holder as claimed in any one of claims 1 to 12 and including a clamp 16 comprising an outer surface 76, 78 and a threaded portion 74 on said outer surface 76, 78 and a locking member 80 comprising a threaded member having an inner thread portion 82 for engagement with said threaded portion 74 on said outer surface 76, 78 and wherein said locking member 80 includes a first surface 84 on an inner side and a second surface 86
15 on an outer side and a clamping member 88 engageable with said first surface 84 on a first side 90 and with a further object on a second side 92.
14. A holder as claimed in claim 13 and including a resilient surface on the second side 92 of the clamping member 88.
20
15. A holder as claimed in claim 13 or 14, and including a boss portion 12 and further including two side members 62, 64 extending from said boss portion 12 and having said outer surfaces 76, 78 on outer sides thereof and including spaced apart mutually confronting inner surfaces 66, 68 and said clamping member 88 lies between said
25 confronting surfaces and includes side surfaces 95, 97 confronting said inner surfaces 66, 68.
16. A holder as claimed in any one of claims 13 to 15 and wherein said clamping member 88 includes one or more axially extending resilient extensions 108, 110 and one or more
30 radially extending projections 96, 98 provided on said one or more resilient extensions 108, 110.
17. A holder as claimed in any one of claims 13 to 16 and wherein said locking member 80 includes a third surface 100 on a side thereof remote from the clamping member 88 and
35 wherein said third surface 100 is in sliding engagement with one or more of said one or more radially extending projections 96, 98.
18. A holder as claimed in claim 17 and wherein said locking member 80 includes a recess
40 104 on a side remote from the clamping member 88 and wherein said third surface 100 is within said recess.

19. A holder as claimed in any one of claims 15 to 18 and including an axially aligned groove 88g on clamping member 88 and between said mutually confronting inner surfaces 66, 68.
- 5 20. A holder as claimed in any one of claims 13 to 19, wherein said locking member 80 includes an aperture 102 extending between the first side thereof and said second side thereof and wherein said one or more axially extending resilient extensions 108, 110 extend through said aperture 104.
- 10 21. A holder as claimed in any one of claims 1 to 20, characterised by two container receiving portions on opposite sides of said boss portion.
22. A holder as claimed in any one of claims 1 to 21, characterised in that said one or more container receiving portions comprise a drinking receptacle receiving portions and include an inner aperture for receiving said drink receptacle.
- 15 23. A holder as claimed in claim 22, characterised in that said inner aperture comprises a tapered aperture.
- 20 24. A holder as claimed in any one of claims 1 to 23, characterised in that said one or more container receiving portions include a hinge member (for allowing said portions to be pivotable between stowed and deployed positions).
- 25 25. A holder as claimed in any one of claims 1 to 24, characterised in that said container receiving portions include first bearing surfaces and said boss includes corresponding second bearing surfaces for engagement with said first bearing surfaces.
- 30 26. A holder as claimed in claim 25, characterised in that said first bearing surface comprises a plurality of circumferentially extending rib portions of low friction material.
- 35 27. A clamp 16 comprising an outer surface 76, 78 and a threaded portion 74 on said outer surface 76, 78 and a locking member 80 comprising a threaded member having an inner thread portion 82 for engagement with said threaded portion 74 on said outer surface 76, 78 and wherein said locking member 80 includes a first surface 84 on an inner side and a second surface 86 on an outer side and a clamping member 88 engageable with said first surface 84 on a first side 90 and with a further object on a second side 92.
- 40 28. A clamp 16 as claimed in claim 27 and including a resilient surface on the second side 92 of the clamping member 88.
29. A clamp 16 as claimed in claim 27, and including a boss portion 12 and further including two side members 62, 64 extending from said boss portion 12 and having said outer

surfaces 76, 78 on outer sides thereof and including spaced apart mutually confronting inner surfaces 66, 68 and said clamping member 88 lies between said confronting surfaces and includes side surfaces 95, 97 confronting said inner surfaces 66, 68.

- 5 30. A clamping member 16 as claimed in claim 27 wherein said clamping member 88 includes one or more axially extending resilient extensions 108, 110 and one or more radially extending projections 96, 98 provided on said one or more resilient extensions 108, 110.
- 10 31. A clamp 16 as claimed in any one of claims 27 to 30 and wherein said locking member 80 includes a third surface 100 on a side thereof remote from the clamping member 88 and wherein said third surface 100 is in sliding engagement with one or more of said one or more radially extending projections 96, 98.
- 15 32. A clamp 16 as claimed in claim 31 wherein said locking member 80 includes a recess 104 on a side remote from the clamping member 88 and wherein said third surface 100 is within said recess.
- 20 33. A clamp 16 as claimed in any one of claims 29 to 32 and including an axially aligned groove 88g on clamping member 88 and between said mutually confronting inner surfaces 66, 68.
- 25 34. A clamp 16 as claimed in any one of claims 27 to 33, wherein said locking member 80 includes an aperture 102 extending between the first side thereof and said second side thereof and wherein said one or more axially extending resilient extensions 108, 110 extend through said aperture 104.



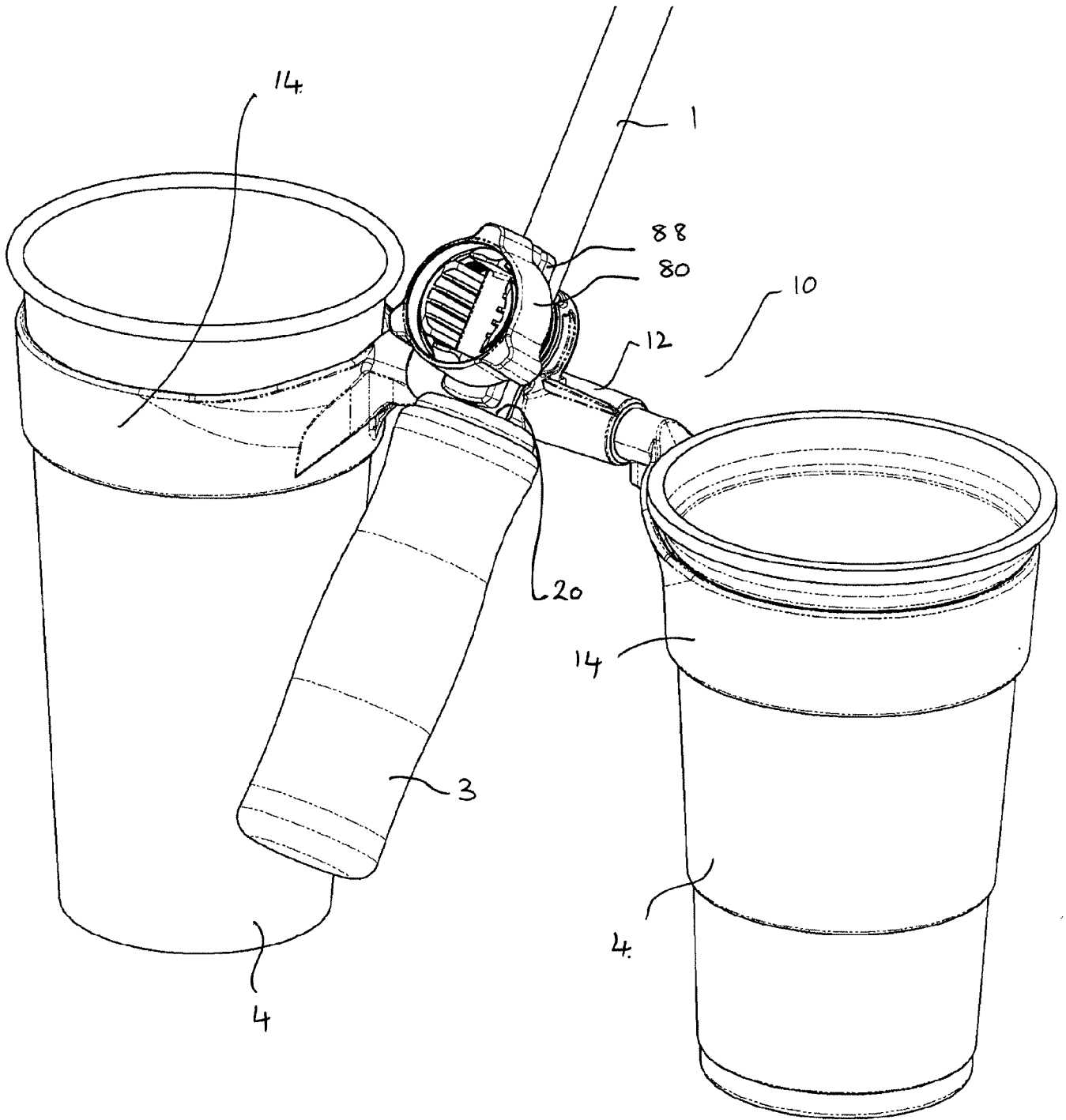
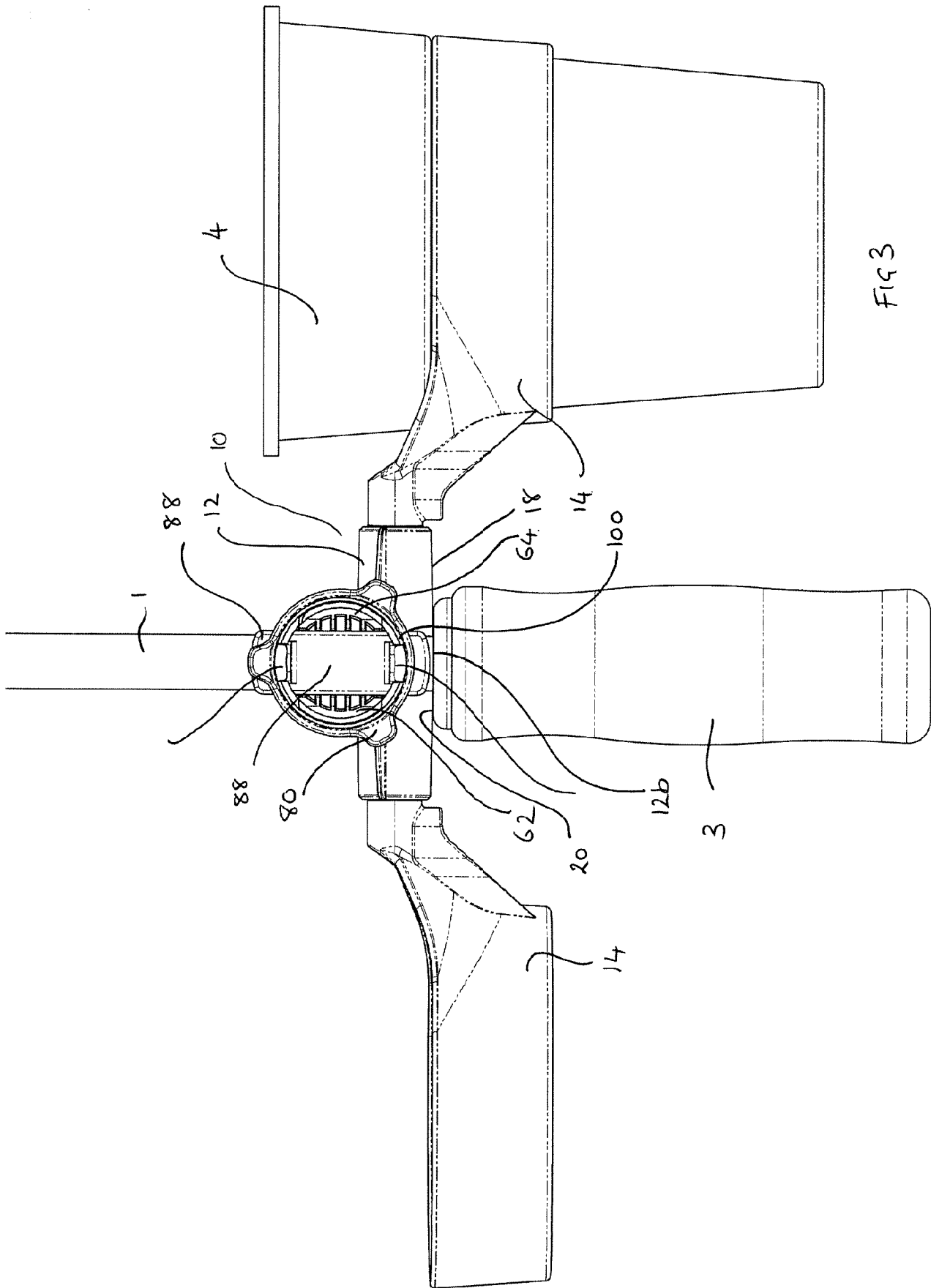


FIG 2



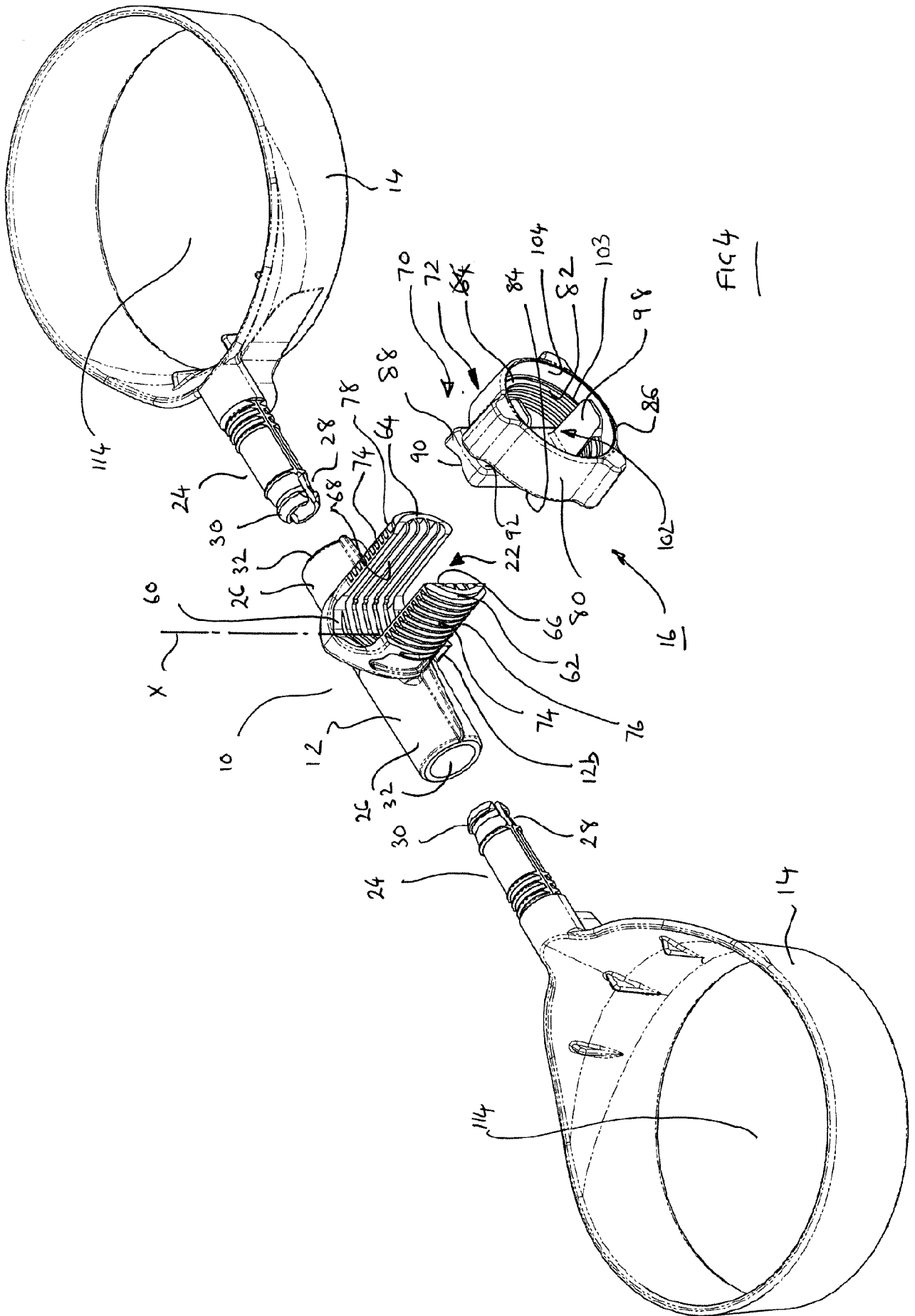
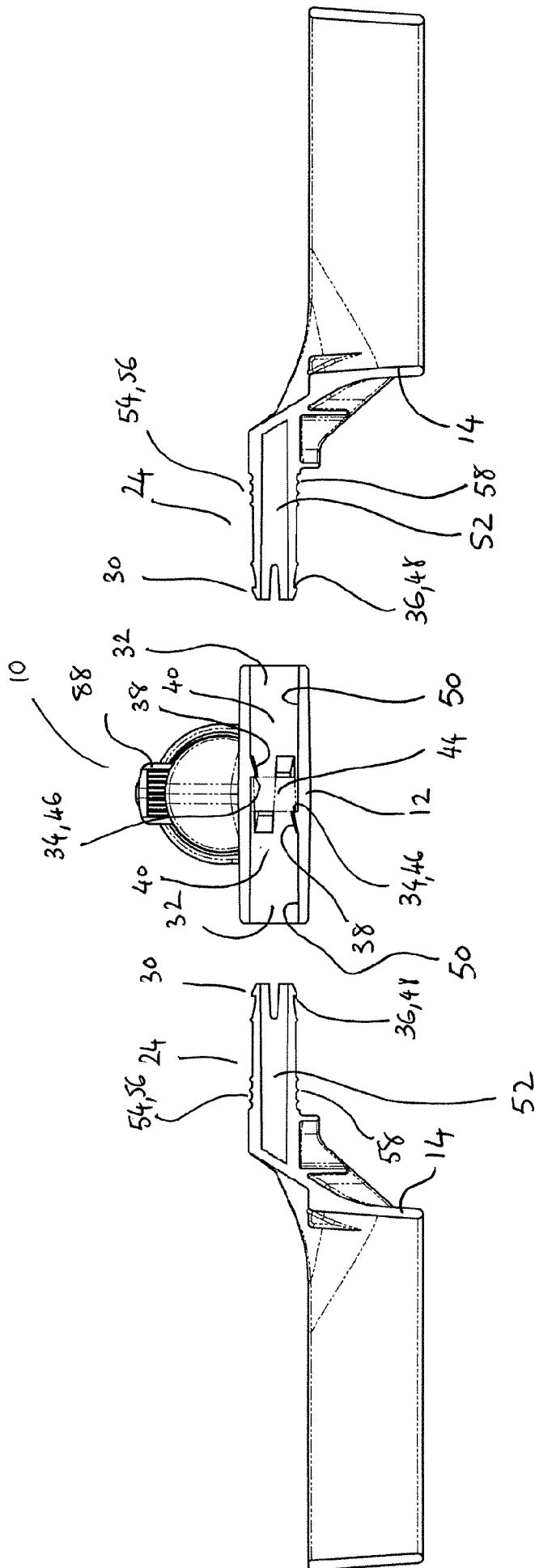


FIG 4



FIGS

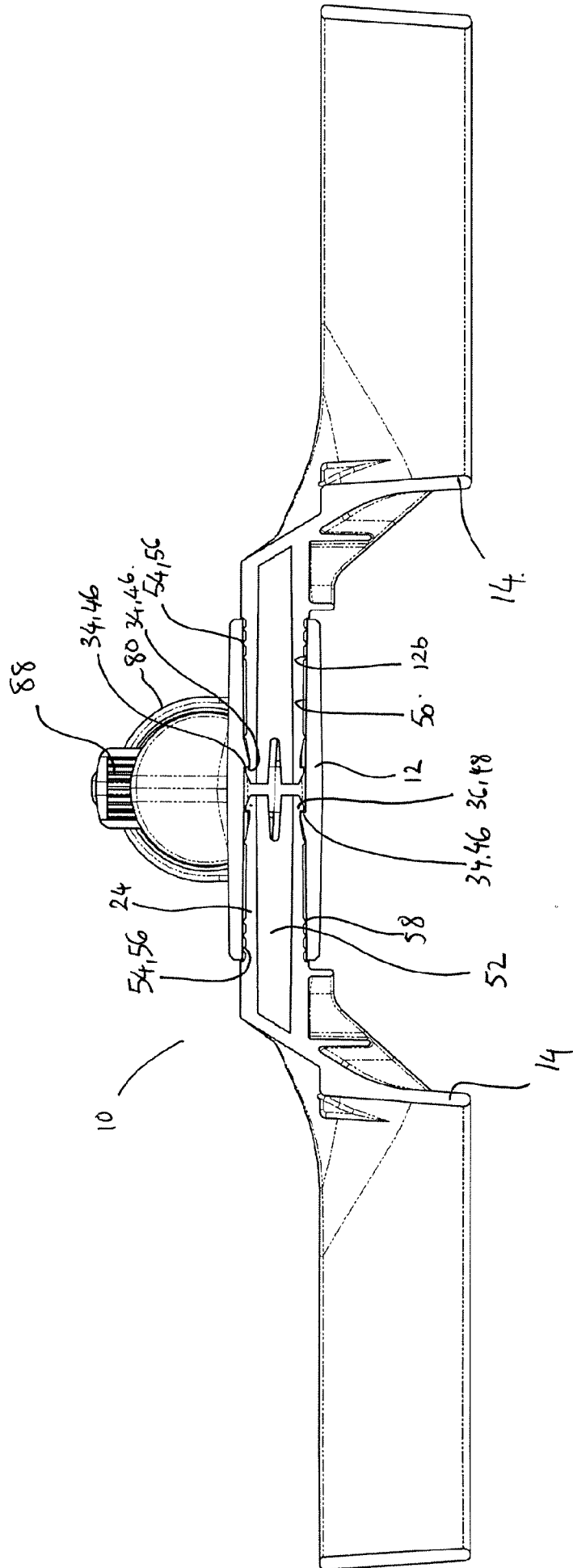
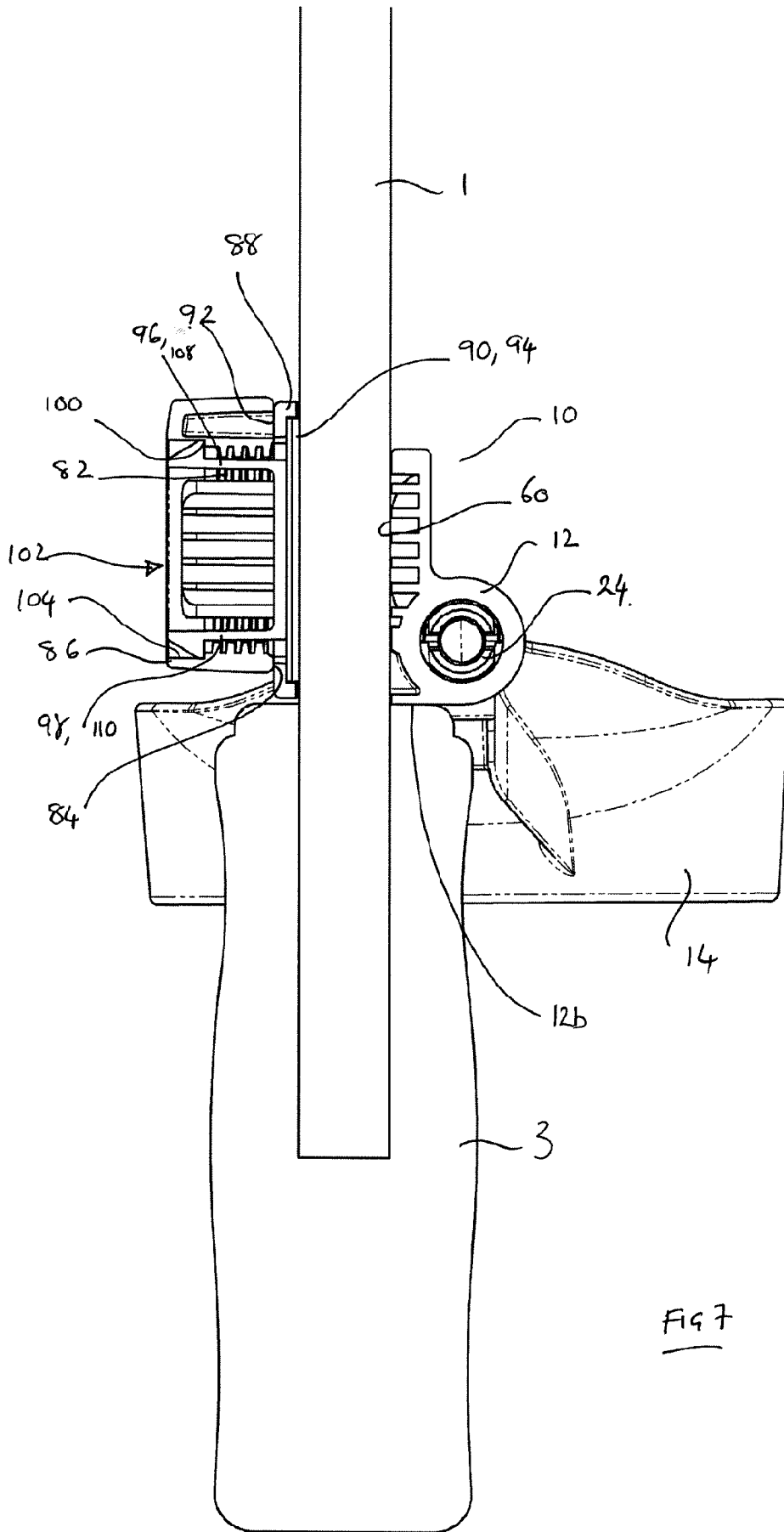


FIG. 6.



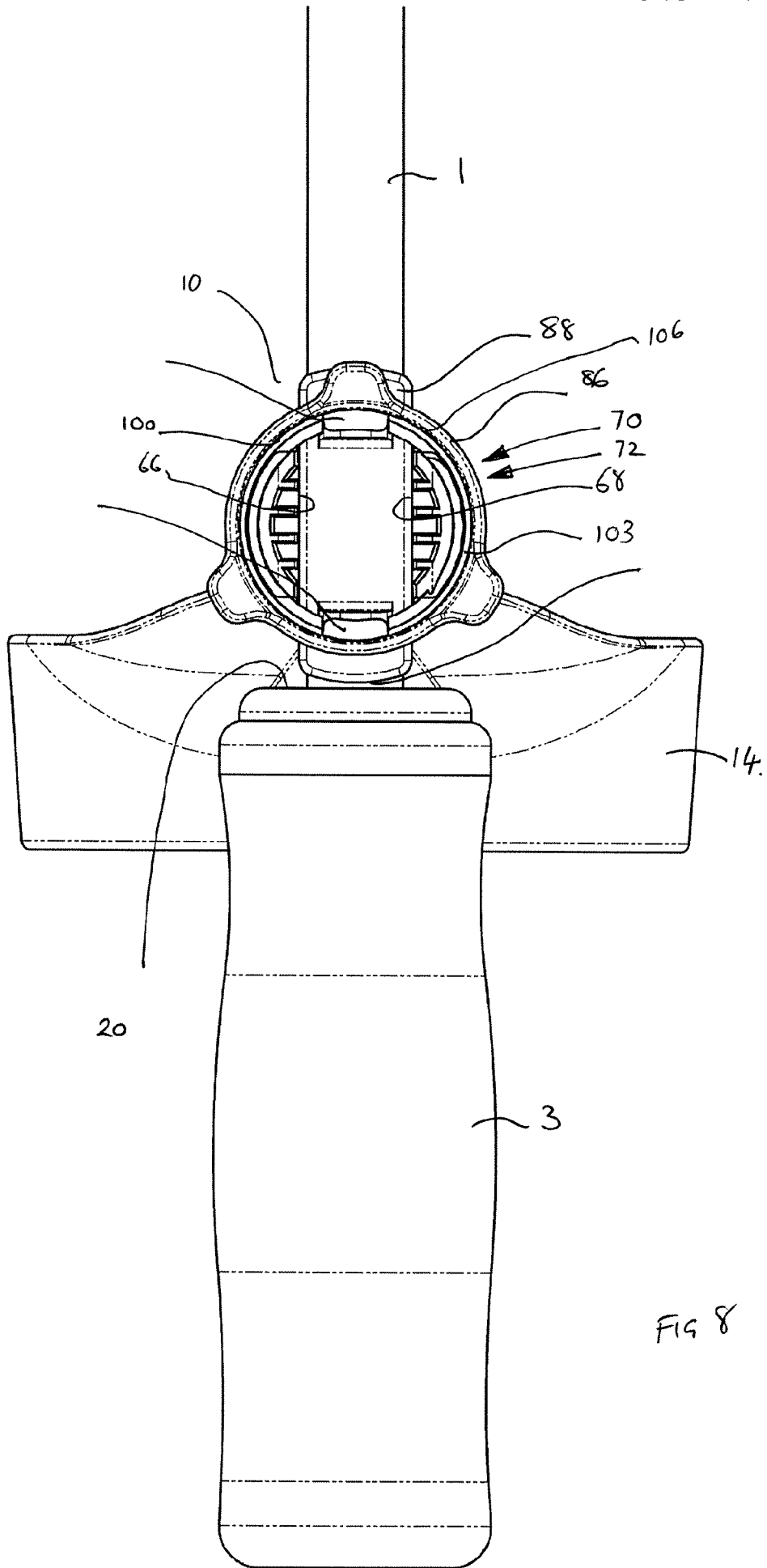


FIG 8

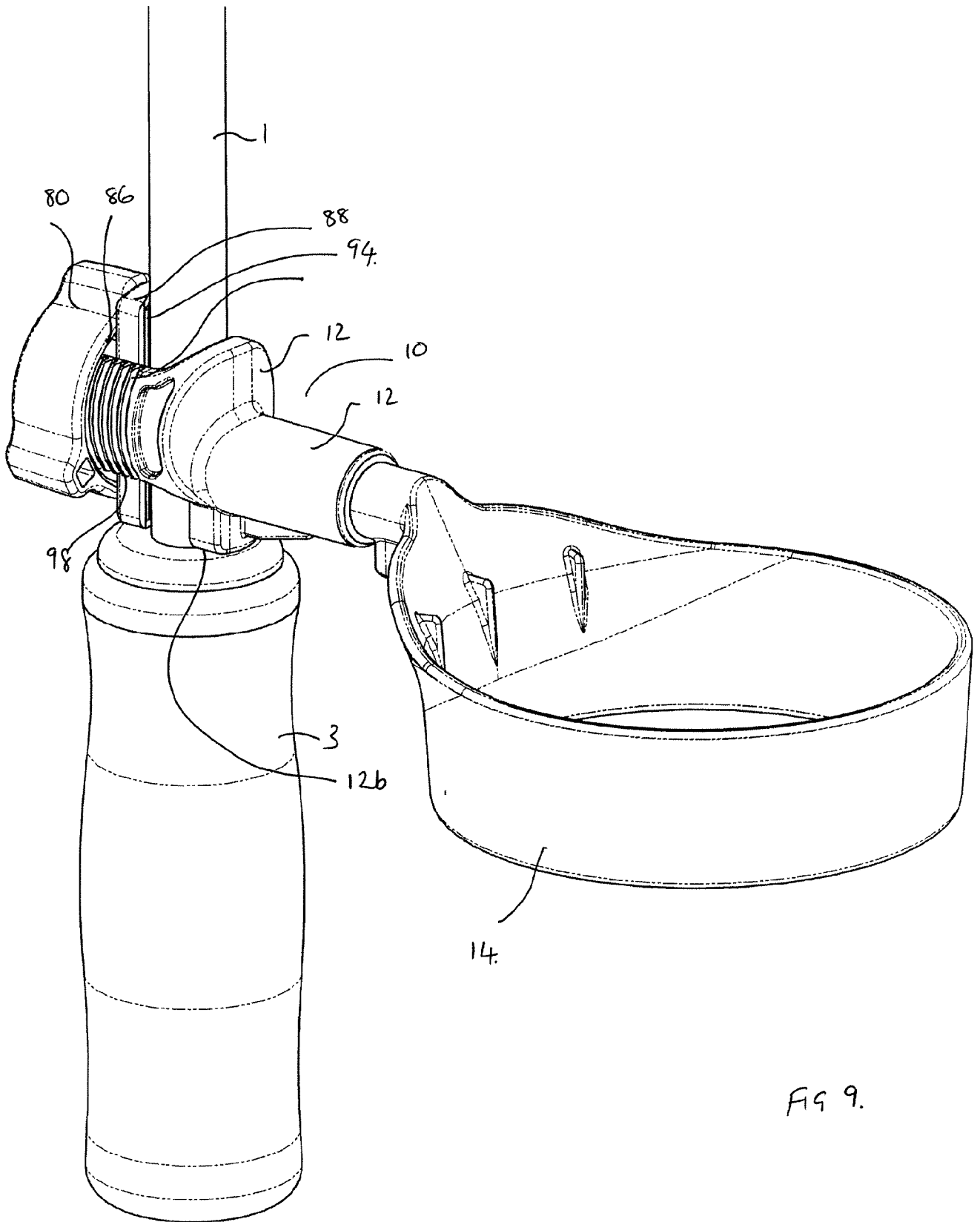
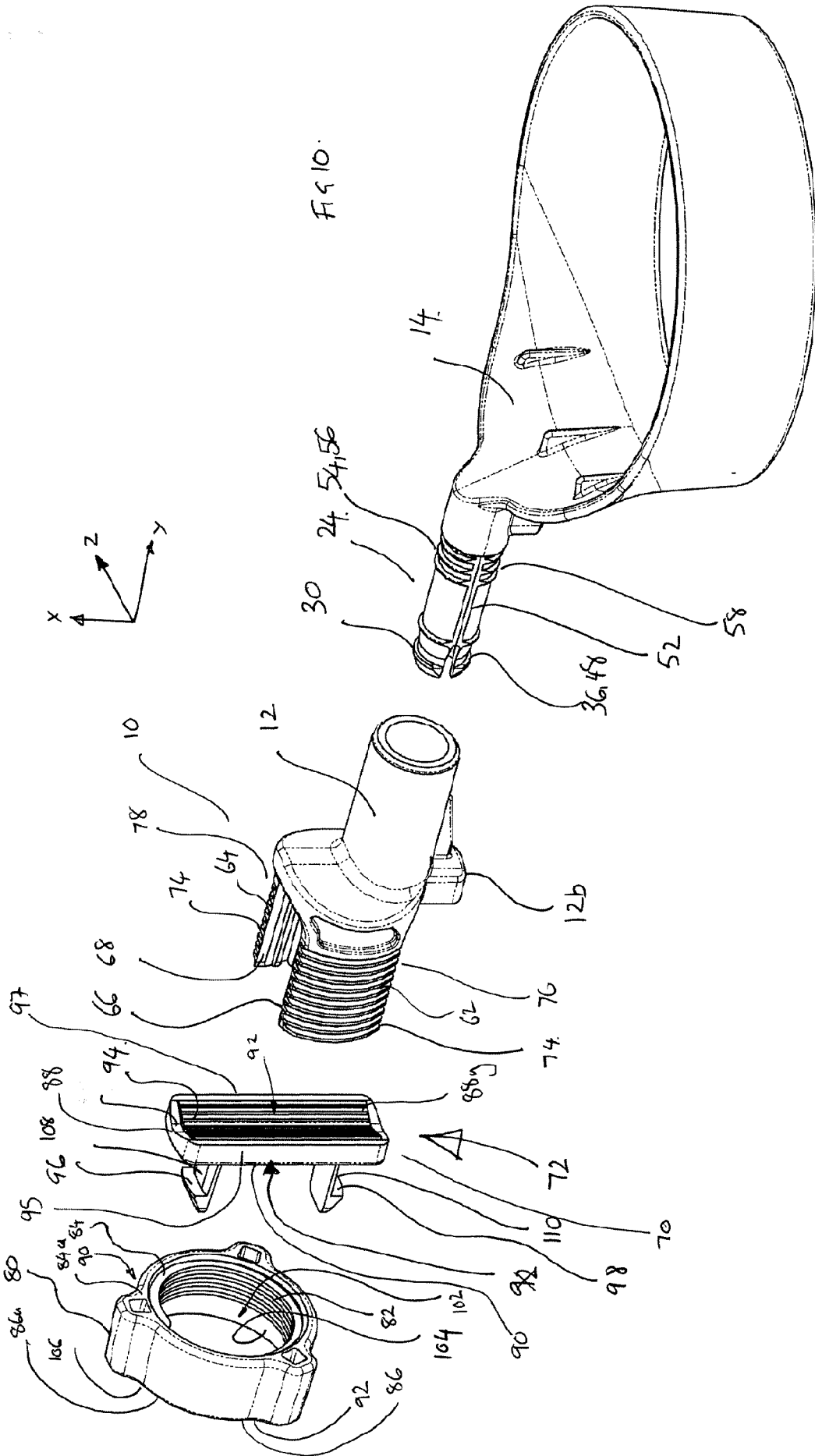


FIG 9.



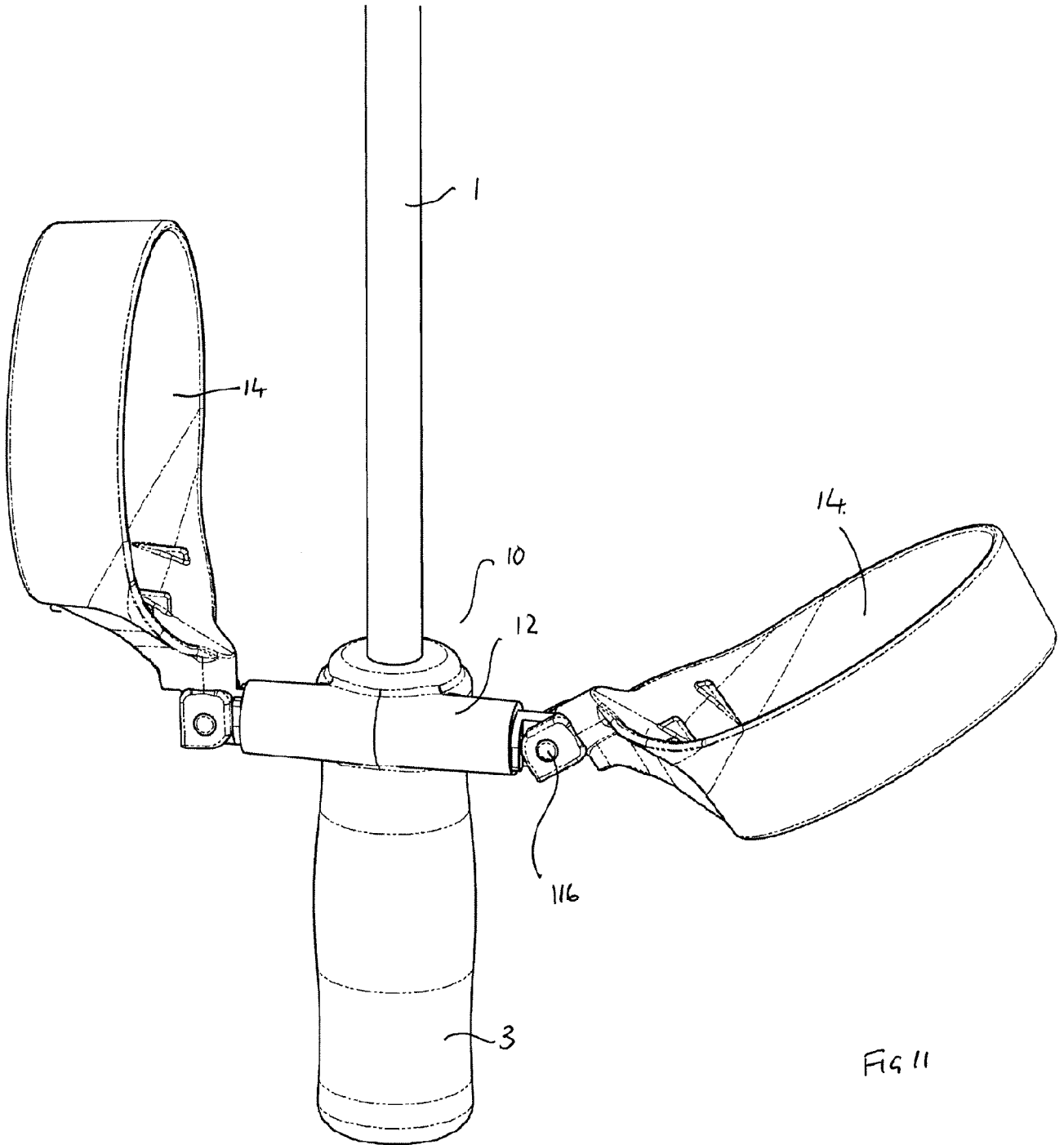


FIG 11

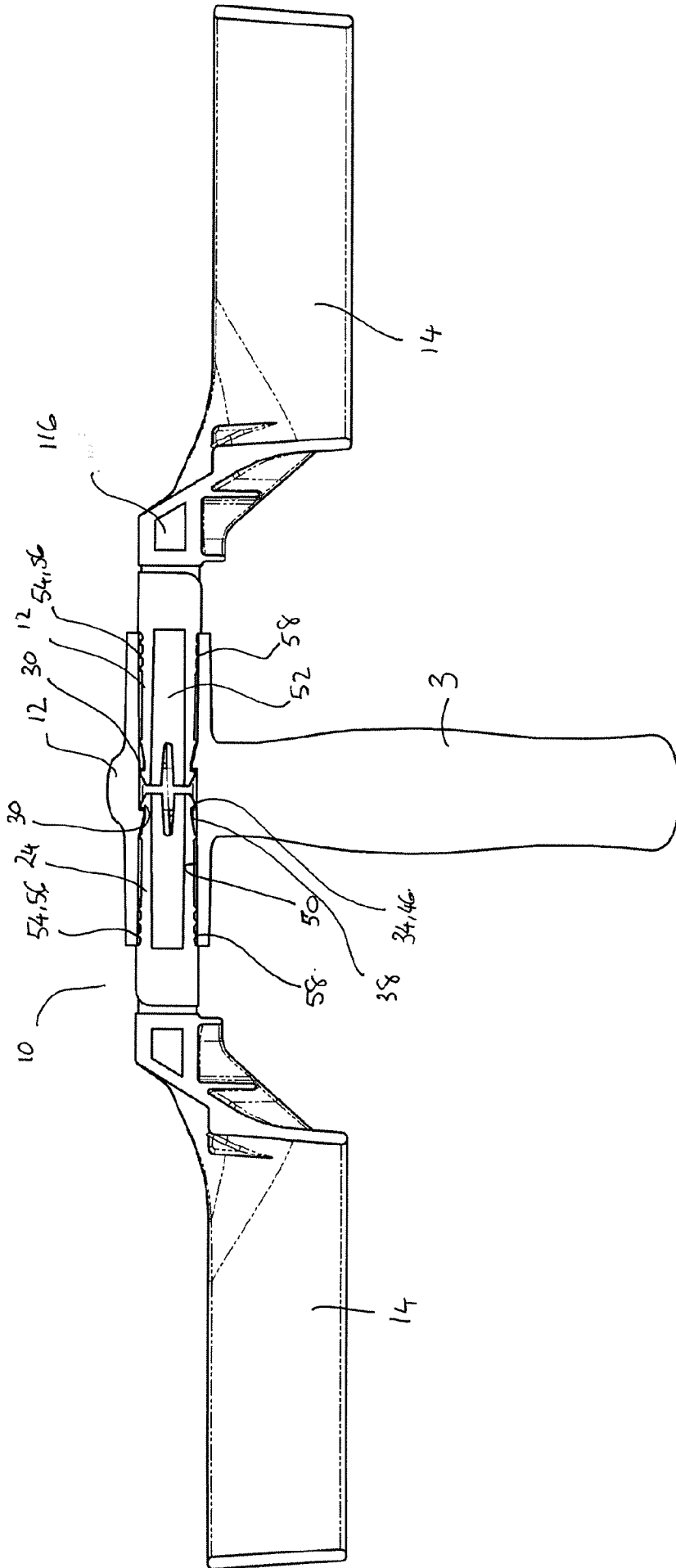


Fig 12