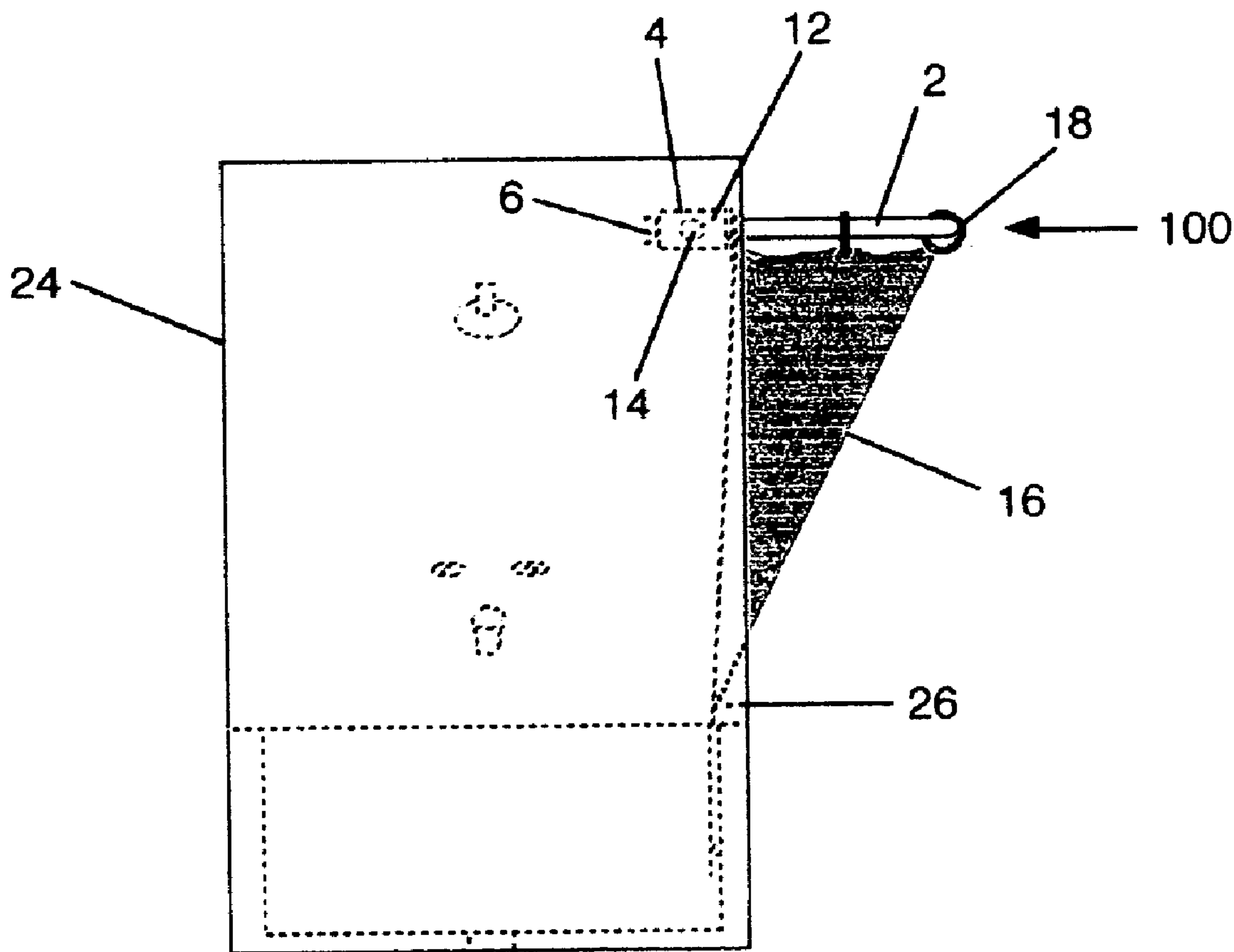




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(54) Titre : ENSEMBLE D'EXTENSION ESCAMOTABLE POUR DOUCHE
 (54) Title: RETRACTABLE SHOWER EXPANDER ASSEMBLY



(57) Abrégé/Abstract:

A retractable shower expander assembly for a shower stall or tub enclosure having an access opening includes a shower expander rod, two expander ports and a tension rod. The shower expander rod is formed with right angles on each end and is selectively

(57) **Abrégé(suite)/Abstract(continued):**

adjustable in the middle to fit various access opening widths. The retractable shower expander assembly, being portable, is held in place by means of an adjustable tension rod, that, when enjoined inside the cavities of the two expander ports, holds the retractable shower expander assembly horizontally and fixedly in use against the two end walls of a shower stall or tub enclosure at the top of the access opening. A shower curtain is attached to the shower expander rod by hooks or rings that can slide along the shower expander rod to selectively close or open the access opening of a shower stall or tub enclosure. When outwardly force is applied to the shower expander rod the two right-angle ends extend or telescope through the apertures in the center of the expander ports and move the shower expander rod with the attached shower curtain outwardly away from the access opening to provide the maximum amount of increased area inside the shower stall or tub enclosure. When inwardly force is applied to the shower expander rod the opposite retracting or telescoping effect moves the shower curtain toward the access opening and returns it to a straight hanging position within the shower stall or tub enclosure access opening to be more aesthetically pleasing and conserve space in the bathroom.

ABSTRACT

A retractable shower expander assembly for a shower stall or tub enclosure having an access opening includes a shower expander rod, two expander ports and a tension rod. The shower expander rod is formed with right angles on each end and is selectively adjustable in the middle to fit various access opening widths. The retractable shower expander assembly, being portable, is held in place by means of an adjustable tension rod, that, when enjoined inside the cavities of the two expander ports, holds the retractable shower expander assembly horizontally and fixedly in use against the two end walls of a shower stall or tub enclosure at the top of the access opening. A shower curtain is attached to the shower expander rod by hooks or rings that can slide along the shower expander rod to selectively close or open the access opening of a shower stall or tub enclosure. When outwardly force is applied to the shower expander rod the two right-angle ends extend or telescope through the apertures in the center of the expander ports and move the shower expander rod with the attached shower curtain outwardly away from the access opening to provide the maximum amount of increased area inside the shower stall or tub enclosure. When inwardly force is applied to the shower expander rod the opposite retracting or telescoping effect moves the shower curtain toward the access opening and returns it to a straight hanging position within the shower stall or tub enclosure access opening to be more aesthetically pleasing and conserve space in the bathroom.

32 Claims, 8 Drawing Sheets

RETRACTABLE SHOWER EXPANDER ASSEMBLY

This application claims priority of Provisional Patent Application Ser. No. 60/616,330 filed on Oct. 6, 2004.

FIELD OF THE INVENTION

The present invention relates to shower compartments, shower stalls, or tub enclosures and more specifically relates to a retractable shower expander assembly to both expand the shower curtain and increase the usable interior area of shower compartments, stalls, or tub enclosures and then retract the shower curtain to conserve space outside of the shower compartment, shower stall, or tub enclosure and be more aesthetically pleasing when not in use.

BACKGROUND OF THE INVENTION

Since the invention of the bathtub, and more particularly the apparatus used for holding a shower curtain to cover and protect the bathing area from water leakage, little has changed to increase the amount of space needed to shower and thereby improve the comfort level for the user. Various attempts in the past have been made, such as the curved shower rod, that permanently extends the shower curtain outside of the access opening. That device is used in some hotels for the convenience of the guests. However, that invention has limitations for use in the home as it takes away usable space from the bathroom outside of the shower stall or tub enclosure and can be less aesthetically pleasing. This severely limits the practical appeal and broader application for that invention. Yet another drawback is that the curved shower rod requires that it be permanently mounted or affixed to the shower stall or tub enclosure walls. In many homes this application may prove difficult or not feasible to retrofit. Further, the curved shower rod is limited in the amount of increased shower area that it can provide.

A standard size tub having a shower stall or tub enclosure, and having a shower curtain to cover the access opening is very limited in size and comfort, as is the case in most homes over twenty or thirty years old. The demand for larger size accommodations for bathing is relatively new in homes today, and therefore most older homes and even many of the newer ones that still employ a standard size tub or shower area would benefit greatly from increased area in the shower stall or tub enclosure. A small shower stall or tub enclosure with a typical tension bar and shower curtain severely limits the movement of the users upper torso and impedes their forward and backward movement within the shower area because of the nature of the shower environment which causes the shower curtain to billow in or attach itself to the

users body when it is wet. This lack of usable area inside of a shower and the limitations of the tub and shower due to their size greatly detracts from the comfort level of the user.

Also, with persons having disabilities, or the elderly, the small shower environment is even more limiting in comfort and scope of use while showering. For many, getting into a small shower stall or tub enclosure and then positioning and repositioning oneself inside while showering is problematic and extremely difficult for many in this state, as tub seats, hand rails and other equipment are usually necessary in the tub or shower environment to assist the handicapped or the elderly. These items tend to come into contact with the shower curtain when wet from the shower environment and the shower curtain will either stick to the equipment or to the user.

However, it can be very impractical to alleviate this situation, either because of the small size of the existing bathroom or that it is cost prohibitive to remodel or enlarge a small tub or shower enclosure in many of these cases. It is the intent of the present invention to particularly address the many disadvantages and drawbacks of a typical small shower stall or tub enclosure and provide relief in the form of increasing the usable space inside the shower stall or tub enclosure.

SUMMARY OF THE INVENTION

The present invention provides a retractable shower expander assembly that is portable and can be retrofitted to an existing shower curtain and tension bar or provided as a complete assembly in combination with a shower curtain and a tension bar. The retractable shower expander assembly projects the shower curtain outwardly with a pushing force through the access opening of the shower stall or tub enclosure having a tub or base pan and selectively maintains that position during the use of the shower so as to effect an increase of usable space within the shower stall or tub enclosure by at least 50% or more. When retracted the shower curtain is pushed inwardly to conserve space in the bathroom and to be more aesthetically pleasing when hanging straight in the access opening and not in use.

In one aspect of the invention, the retractable shower expander assembly includes a shower expander rod to which a shower curtain is attached by hooks. The shower expander rod is joined at the two right-angle ends in a telescoping manner through the apertures of the two expander ports. The expander ports are fixedly and usably held in place against the two end walls of the shower stall or tub enclosure by a tension rod.

In another aspect of the invention the telescoping and retracting means of the two right-angle ends of

the shower expander rod can be sleeves that recess inside of each other and compact together inside of the expander ports so as not to extend into the shower area.

The present invention may include another variation on the telescoping and retracting process of the shower expander rod. The two expander ports each having a roller assembly insert with oval rollers on spacers, housed inside each of the two expander ports and corresponding to the oval shape of the shower expander rod having two right-angle ends, would serve as a guide and support through which the oval shower expander rod ends telescope or retract while in use.

In yet another aspect, the retractable shower expander assembly may include a means of permanently mounting or affixing two roller bracket assemblies to the opposing end walls directly outside of the shower stall or tub enclosure near the top. The roller bracket assemblies herein are similar in function to the aforementioned expander ports having oval rollers, and also having an oval shower expander rod, but different in design. In this configuration there would be no need for the tension rod, as the roller bracket assemblies would not require tension or outwardly force to hold them in place. Instead, the roller bracket assemblies would be held in place by screws or other fasteners on the outside walls of the shower stall or tub enclosure. The shower expander rod would remain in the same usable area and position, and function in the same telescoping and retractable manner as the other retractable shower expander assembly embodiments, as stated supra, within the access opening of the shower stall or tub enclosure.

Other applications of the present invention will become readily apparent to those skilled in the art when contemplating the following description of the best or preferred mode in conjunction with the accompanying drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

The descriptions herein makes reference to the accompanying drawings wherein like reference numerals refer to like parts in the several views throughout, and wherein:

FIG. 1 is an elevational side view of a shower stall or tub enclosure having the retractable shower expander assembly according to the present invention in the retracted or closed position with a shower curtain;

FIG. 2 is an elevational side view of a shower stall or tub enclosure having the retractable shower expander assembly according to the present invention in the expanded or operable position with a shower curtain;

FIG. 3 shows a perspective view of the preferred embodiment of the retractable shower expander assembly in the retracted or closed position;

FIG. 4 shows a perspective view of the preferred embodiment of the retractable shower expander assembly in the expanded or operable position;

FIG. 5 shows a schematic top view of the preferred embodiment of the retractable shower expander assembly in a shower stall or tub enclosure in the expanded or operable position;

FIG. 6 shows a schematic view of an enlarged portion of the retractable shower expander assembly of **FIG. 4** with a shower curtain attached;

FIG. 7 shows a perspective view of the second embodiment of the retractable shower expander assembly in the retracted position;

FIG. 8 shows a perspective view of the second embodiment of the retractable shower expander assembly in the expanded or operable position;

FIG. 9 shows a schematic view of the third embodiment of the retractable shower expander assembly on an end wall of the shower stall or tub enclosure;

FIG. 10 shows a schematic top and front view of the third embodiment of the retractable shower expander assembly of the roller assembly insert;

FIG. 11 shows a schematic end view of the third embodiment of the retractable shower expander assembly of the expander port assembly having the shower expander rod in position;

FIG. 12 shows a perspective top view of the third embodiment of the retractable shower expander assembly of the expander port;

FIG. 13 shows a perspective end view of the third embodiment of the retractable shower expander assembly of the expander port;

FIG. 14 shows a perspective side view of the third embodiment of the retractable shower expander assembly of the expander port;

FIG. 15 shows a schematic view of the fourth embodiment of the retractable shower expander assembly on an end wall of the shower stall or tub enclosure;

FIG. 16 shows a schematic view of the fourth embodiment of the retractable shower expander assembly;

FIG. 17 shows a schematic view of the fourth embodiment of the retractable shower expander assembly of a roller bracket assembly; and

FIG. 18 shows a schematic view of the fourth embodiment of the retractable shower expander assembly of a cover for the roller bracket assembly of the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

A typical shower stall or tub enclosure **24** is rectangular or square in configuration, having three walls surrounding a tub or base pan and an access opening **26** for the ingress and egress of the user. A tension rod **14** extends the width of the access opening **26** near the top and is held in place against the two end walls of the shower stall or tub enclosure **24** by tension or outward force. The tension rod **14**, as is commonly well known, is typical of those used in many homes for holding a shower curtain **16** stationary between the access opening **26** of a shower stall or tub enclosure **24** for the purpose of showering or bathing and keeping the water within the tub or base pan area. The tension rod **14** has two straight lengths, a smaller one that nests, or recesses, inside of a larger one, with a spring or other mechanism inside one of the two hollow lengths, so as to make the tension rod **14** adjustable in use to accommodate various sizes of shower stall or tub enclosure **26** access opening **24** widths. The two ends of the tension rod **14** each have a rubber covering so as to grip the two end walls of a shower stall or tub enclosure **24** and hold the tension rod **14** as it is being tensioned or adjusted outward and while secured in position. A shower curtain **16** is connected to the tension rod **14** by hooks or rings **18** that can slide along the length of the tension rod **14** to selectively close and open the access opening **26**.

The retractable shower expander assembly **100** of the present invention is portable and includes; a shower expander rod **2** that is selectively adjustable to accommodate various shower stall or tub enclosure **24** access opening **26** widths, two expander ports **4**, having through apertures for holding, telescoping, and retracting the shower expander rod **2** through the access opening **26** of a shower stall or tub enclosure **24**, a spring-loaded ball bearing assembly **28** recessed within each of the two expander ports **4** for selectively positioning the shower expander rod **2** to a desired extension or stop, a means for gripping and adhering the two expander ports **4** against the shower stall or tub enclosure **24** walls, and an adjustable tension rod **14** to hold the retractable shower expander assembly **100** fixedly and usably in place within the access opening **26** by means of outwardly tension or force against the two opposing walls of the shower stall or tub enclosure **24** and parallel to the edge of the tub or base pan.

It is the intent of the present invention to distinguish the use of the tension rod **14** more clearly as it applies to the retractable shower expander assembly **100**. The tension rod **14** is not used herein in the

typical manner for which it was designed, that of holding a shower curtain **16** in place, as stated supra. Instead, the tension rod **14** is included as part of the present invention, singularly, for the purpose of holding the retractable shower expander assembly **100** fixedly and usably in place between the access opening **26** of a shower stall or tub enclosure **24** by means of outward tension or force.

The shower expander rod **2** of the present invention is used instead to hold the shower curtain **16** and also to move the shower curtain **16** in a telescoping and retracting manner. It has a preferable diameter of one-inch and can be made of pvc, plastic, stainless steel, or other suitable material. The shower expander rod **2** is divided into three parts that are hollow. The middle straight length is smaller in diameter and connects the two larger ends of the shower expander rod **2** together. It is permanently affixed inside one end of the larger diameter shower expander rod **2** and movable inside the other end of the shower expander rod.**2** In this manner the shower expander rod **2** is able to slide and be adjustable in length to accommodate various sizes of shower stall or tub enclosure **24** access opening **26** widths. When the shower expander rod **2** is fitted to the desired width of an access opening **26**, a ring **8** or other similar device locks the shower expander rod ends together as one piece or unit. End caps **6** cover the open ends on each side of the hollow shower expander rod.**2** A shower curtain **16** is connected to the shower expander rod **2** by hooks or rings **18** that can slide along the length of the shower expander rod **2** to selectively close and open the access opening.**26**

The two right-angle ends of the shower expander rod **2** are interconnectively and usably engaged within the two expander ports.**4** Each of the two expander ports **4** are of a preferable size of three and one-half inches in length, two inches wide, and two inches deep. They can be made of the same material as the shower expander rod **2**, and each has a through aperture **42** corresponding to the diameter of the shower expander rod **2** so as to allow for the right-angle ends of the shower expander rod **2** to slide within the apertures **42**, and are thusly engaged for the purpose of moving the shower expander rod **2** outwardly and inwardly in a telescoping manner. The expander ports **4** each have a smaller through aperture with parallel walls perpendicular to the first aperture **42** on an adjoining planar surface, having a smaller diameter opening at the bottom of the aperture and screw threads at the top of the aperture so as to contain a spring-loaded ball bearing assembly **28** that is held in place at the top of the aperture by a screw or other similar means and retained inside by the smaller diameter of the aperture at the bottom or opposing end of the spring-loaded ball bearing assembly **28** so that the end of the ball

bearing extends partially beyond the end of the smaller diameter aperture on the inside of the expander port 4 and the remainder is retained inside the aperture. In this manner only the end of the ball bearing engages a select planar surface or indentation 28a on each of the right-angle ends of the shower expander rod. 2 When the ball bearing rests in this indentation 28a the spring exerts downward pressure on the ball bearing and together this acts as a positive stop for the outward movement of the shower expander rod 2 and a means to hold it in place to a preferable extended distance of eight inches away from the access opening 26 of the shower stall or tub enclosure.24 When the shower expander rod 2 is retracted, the tension effect of the ball bearing is overcome and it retracts back inside of the smaller aperture with the spring being compressed upward.

On the same planar surface of each of the expander ports 4 as the ball bearing assemblies 28, and centered between both ends, is a recessed round cavity 32 slightly larger than the end of the tension rod 14 and deep enough to retain the ends securely. Within each round cavity 32 is a riveted 38 washer 36 that rotates freely when useably engaged with the tension rod 2 ends. On the opposite planar side of each expander port 4 from the round cavity 32 is a gripper 12 or end cover made of rubber or other suitable material for giving better adhesion to the expander ports 4 when the retractable shower expander assembly 100 is pressed against the end walls of the shower stall or tub enclosure 24 to hold the retractable shower expander assembly in place.100

When the retractable shower expander assembly 100 is being installed the tension rod 14 ends that hold the expander ports 4 in place are, first, inserted inside each of the round cavities 32 of the expander ports.4 When the tension rod 14 is rotated and tensioned outwardly the washers 36 inside the expander ports 4 rotate with the ends of the tension rod 14 so as not to displace the expander ports 4 out of position. As the expander ports 4 are pressed more firmly against the walls of the shower stall or tub enclosure 24 by means of the tension rod 14, the rubber grippers or backing 12 on the opposite planar surface of the expander ports 4 are compressed, and in this manner provide better adhesion. The retractable shower expander assembly 100 is thus held securely in place near the top of the access opening 26 of the shower stall or tub enclosure 24, horizontal and parallel to the tub or base pan.

To operate the retractable shower expander assembly 100 the user pushes the shower expander rod 2 away from the access opening 26 of the shower stall or tub enclosure.24 This action telescopes or extends the shower expander rod 2 with the attached shower curtain 16 outwardly away from the access

opening **26** through the apertures **42** in the expander ports **4** for the purpose of providing the maximum amount of increased area inside the shower stall or tub enclosure.**24** As shown in FIG. 2 the retractable shower expander assembly **100** extends this newly created usable shower area both horizontally and vertically the entire length of the access opening **26**, angularly, and in a manner whereby; the top portion of the shower curtain **16** that is fixedly attached by hooks or rings **18** to the shower expander rod **2** is projected outward where more space is needed to increase the comfort level of the users torso and arms, and is held in place at the bottom by means of magnets or suction cups on the inside of the tub or base pan, where less space is required for the comfort level of the users legs and feet. As shown in FIG. 1, when inwardly force is applied by the user to the shower expander rod **2** the retractable shower expander assembly **100** retracts and the telescoping ends of the shower expander rod **2** extend back through the expander ports **4** into the shower area and the shower curtain **16** hangs straight down through the access opening.**26** In this position the retracted shower curtain is more aesthetically pleasing and conserves bathroom space.

FIG. 7 and 8 shows a second embodiment **99** for telescoping the two right-angle ends of the shower expander rod **44** within the two expander ports.**22** The telescoping effect of the two right-angle ends of the shower expander rod **44** differs from the preferred embodiment of the retractable shower expander assembly **100** of the present invention in that this action is herein accomplished with sleeves that are connectively attached at the ends when extended so as to be kept rigid, and then nest or telescope one inside another as the shower expander rod **44** is retracted, for the purposes of compacting or retaining the telescoping ends of the shower expander rod **44** within the expander ports.**22** In this manner the right-angle ends of the shower expander rod **44** do not extend beyond the inside edge of the expander ports into the shower area as they do in the preferred embodiment of the retractable shower expander assembly **100**, but instead are housed within the expander ports.**22** This alternate embodiment requires adaptations of the expander ports **22** to accommodate the increased diameter of the two right-angle ends of the shower expander rod **44** and an alternate means for stopping and selectively retaining the shower expander rod **44** at a preferred outward extended distance from the access opening **26** of the shower stall or tub enclosure.**24**

FIG. 9, 10, 11, 12, 13, and 14 shows a third embodiment **98** of the retractable shower expander assembly.**100** As stated supra, there are two expander ports **7** held fixedly in place against the opposing

end walls of the shower stall or tub enclosure by a tension bar 14, the ends of which are contained within the round cavities 32 on each of the expander ports.7 In this embodiment 98 the expander ports 7 are wider with a through rectangular aperture 31, having an open side that faces the shower wall. Inside the rectangular expander ports 7, and on each of the opposing planar surfaces perpendicular to the open planar side that faces the shower wall are opposing slots 33 to accommodate a roller assembly insert 9 fixedly in place. Said roller assembly insert 9, has two oval rollers 21 riveted 23 to a plate 17 with spacers 19 between the rollers 21 and the plate 17, and set a given distance apart so as to support, contain, and guide the two oval ends of the oval shower expander rod 1 in a telescoping and retracting manner in the centers of the expander ports.7 A cap 3 on each end of the oval shower expander rod 1 provides a positive outwardly stop and maintains the oval shower expander rod 1 at a set distance away from the access opening 26 of the shower stall or tub enclosure. 24 Another method of retention, to halt the shower expander rod 1 at a set distance from the access opening 26, is to narrow the ends of the oval shower expander rod.1 When outwardly force is exerted on the shower expander rod 1 the rollers 21 within the expander ports 7 engage the narrowing inner walls of the ends of the oval shower expander rod1 and stop the outwardly movement of the oval shower expander rod 1 by means of friction against the rollers 21, thus maintaining the oval shower expander rod 1 at a set extended position, preferably eight inches outward from the access opening 26. When inwardly force is exerted against the oval shower expander rod 1 the rollers 21 are freed from the friction of the narrowing inner walls of the oval ends of the shower expander rod 1 and the oval shower expander rod 1 can be telescoped or retracted inwardly.

FIG. 15, 16, 17, and 18 shows a fourth embodiment 97 of the retractable shower expander assembly. 100 This embodiment 97 eliminates the need for a tension bar 14 to hold the retractable shower expander assembly 100 of the preferred embodiment against the end walls of the shower stall or tub enclosure 24 by tension or force. In this embodiment 97 there are two wall mounted roller bracket assemblies 50 with oval rollers 21 and spacers.19 The rollers 21 and spacers 19 have through apertures by which they are attached to the roller brackets 5, having adjoining apertures, by rivets 23 or other means of fastening. The roller bracket assemblies 50 are permanently affixed to the outer walls 30 of the shower stall or tub enclosure 24 on either side near the top of the access opening 26 by means of screws 25 or other fasteners disposed through holes 10 in the roller bracket assembly 50 ends and into the outer walls.30 The two roller bracket assemblies 50, being fixedly attached to the walls 30, have a

planar surface that projects outwardly at a right-angle from the wall 30 a prescribed distance, so as to extend beyond the edge of the tile or protective covering on the inside of the shower stall or tub enclosure.24 An adjoining planar surface with the attached rollers 21 protrudes at a right-angle inwardly and through the access opening 26 near the top so that the roller bracket assembly 50 end to which the rollers 21 are affixed is offset and parallel to the tile or other protective covering on the inside of the shower stall or tub enclosure.24 The two oval rollers 21 holding each shower expander rod 1 end usably in position have spacers 19 between them and the roller bracket 5 and the two rollers 21 are set a given distance apart on each of the roller brackets 5 so as jointly to support the oval shower expander rod 1 and maintain it at a set space away from the walls 30 on both ends. In this manner the retractable shower expander assembly 100 of this embodiment 97 herein can telescope and retract freely, as stated supra with all of the other embodiments, through the access opening 26 as it glides over the rollers.21

The retractable shower expander assembly 100 of the present invention creates an increased shower space which is alternately expandable or retractable and adaptable so as to fit various size shower stalls or tub enclosures 24 within homes or dwellings. In the telescoped or operable position the retractable shower expander assembly 100 will effectively increase the usable area inside the shower stall or tub enclosure 24 by fifty percent or more. And when in the retracted position or not in use the retractable shower expander assembly 100 conserves bathroom space outside of the shower stall or tub enclosure 24 and is aesthetically pleasing. The retractable shower expander assembly 100 of the present invention can be retrofitted to the existing tension rod 14 or shower curtain 16 or be provided as a complete assembly that includes a tension rod 14 and a shower curtain.16 The retractable shower expander assembly 100 is portable, except in the aspect of FIG. 15, 16, 17, and 18 when the retractable shower expander assembly 100, of the embodiment 97, is permanently mounted to the bathroom walls 30 by roller bracket assemblies 50, the tension rod 14 is not required as part of the retractable shower expander assembly 100 of this embodiment 97.

Although the invention has been described in the context of what is perceived to be the most practical and preferred embodiment, it should be understood that these embodiments shall not limit other disclosures, but, on the contrary, the invention is intended to include various modifications and other arrangements that are equivalent within the scope and spirit of the appended claims, and which scope thereof is to be accorded the broadest interpretation permitted under the law, so as to encompass all such

modifications and equivalent structures. Further, while the retractable shower expander assembly **100** is described with reference to a shower stall or tub enclosure **24** within a home or dwelling, it should be understood that the retractable shower expander assembly **100** of the present invention can also be used in a recreational vehicle, boat, or other environments where applicable.

What is claimed is:

- 1. A retractable shower expander assembly for a shower stall or tub enclosure having three walls and an access opening for the ingress and egress of the user as the fourth wall and comprising;
a shower expander rod having one straight side with two ends formed at right angles; and
two expander ports, with through apertures, one each affixed at opposite ends of a shower expander rod; and
a tension rod; and
a shower curtain located in the access opening, attached to the shower expander rod by rings or hooks.**
- 2. The retractable shower expander assembly of claim 1 whereby the shower area is expanded by means of a pushing force, outwardly, on the shower expander rod through the access opening of the shower stall or tub enclosure.**
- 3. The retractable shower expander assembly of claim 1 comprising a means for selectively adjusting and maintaining the length of the shower expander rod so as to fit various sizes of access openings within the shower stall or tub enclosure.**
- 4. The retractable shower expander assembly of claim 1 comprising a means for selectively maintaining the shower expander rod at a set distance outward from the access opening when the retractable shower expander assembly is in the expanded or operable position.**
- 5. The retractable shower expander assembly of claim 4 wherein the selective means for maintaining the shower expander rod at a set distance outward from the access opening is the right-angle ends of the shower expander rod extended through the apertures of the expander ports.**
- 6. The retractable shower expander assembly of claim 5 wherein the shower expander rod is formed with right-angles at both ends for telescoping and retracting the ends of the shower expander rod through the apertures of the two expander ports, parallel to the end shower walls, by means of a pushing force.**
- 7. The retractable shower expander assembly of claim 6 further wherein the selective means for maintaining the shower expander rod at a set distance outward from the access opening includes a spring-loaded ball bearing assembly set within each expander port and engaging a planar surface on each right-angle end of the shower expander rod when the shower expander rod is telescoped outwardly.**
- 8. The retractable shower expander assembly of claim 7 comprising a means for selectively retracting the shower expander rod and overcoming the spring-loaded ball bearing assembly by a pushing force on**

the shower expander rod in an inwardly manner toward the access opening.

9. The retractable shower expander assembly of claim 2 comprising a retaining stop for the outward movement of the shower expander rod.

10. The retractable shower assembly of claim 9 wherein the retaining stop for the outward movement of the shower expander rod is a cap or cover at each end of the shower expander rod.

11. The retractable shower expander assembly of claim 1 comprising two expander ports having through apertures usably corresponding to the diameter of the shower expander rod and for the purpose of holding and transporting the shower expander rod in a telescoping and retracting manner at the right-angle ends.

12. The retractable shower expander assembly of claim 11 comprising a means for gripping or holding the two expander ports against the end walls of the shower stall or tub enclosure.

13. The retractable shower expander assembly of claim 12 wherein the means for gripping or holding the two expander ports against the end walls of a shower stall or tub enclosure includes a removably adjustable tension rod with rubber or other similar material covering the ends of the tension rod.

14. The retractable shower expander assembly of claim 12 further comprising means for securing the two expander ports against the shower wall ends by tension or outward force from the tension rod.

15. The retractable shower expander assembly of claim 12 further wherein the means for gripping or holding the expander ports against the shower stall or tub enclosure walls includes a rubber backing or other similar material adhered to one side of the expander ports that is in contact with the shower walls.

16. The retractable shower expander assembly of claim 13 wherein the removable attachment means for the tension rod includes corresponding round cavities within the expander ports so as to contain the ends of the tension rod.

17. The retractable shower expander assembly of claim 16 further wherein the ends of the tension rod within the cavities of the expander ports are able to tension or adjust outwardly on rotatable flat washers so as to secure but not displace the expander ports out of position.

18. The retractable shower expander assembly of claim 1 comprising an alternate method of telescoping and retracting the shower expander rod ends by means of sleeves that are connectively attached and that telescope and become rigid when expanded and alternately retract and nest one inside of another so as not to extend into the shower area.

19. The retractable shower expander assembly of claim **18** wherein the alternate method of telescoping and retracting the shower expander rod ends includes expander ports which are enlarged so as to accommodate the increased diameter of the sleeves.

20. The retractable shower expander assembly of claim **18** wherein there is an alternate means of selectively stopping and maintaining the shower expander rod ends at a set distance within the expander ports when the shower expander rod is in the expanded position.

21. A retractable shower expander assembly for a shower stall or tub enclosure having three walls and an access opening for the ingress and egress of the user as the fourth wall and comprising:

a shower expander rod, having an oval shape with one straight side and two ends formed at right angles; and

two expander ports affixed at opposite ends of an oval shower expander rod; and

a tension rod; and

a shower curtain.

22. The retractable shower expander assembly of claim **21** comprising a shower expander rod that is hollow and having an oval shape, with slots on the two right angle ends of the oval shower expander rod facing outward.

23. The retractable shower expander assembly of claim **22** having an alternate means of selectively adjusting and maintaining the length of the oval shower expander rod so as to fit various sizes of access openings within the shower stall or tub enclosure.

24. The retractable shower expander assembly of claim **21** comprising an alternate expander port assembly having a through rectangular aperture or cavity and open on one end facing the shower stall or tub enclosure.

25. The retractable shower expander assembly of claim **24** wherein the two planar surfaces facing each other inside the expander port cavity have opposing slots for the purpose of fixedly holding in place a roller assembly insert near the center of the expander port.

26. The retractable shower expander assembly of claim **24** further wherein a roller assembly insert is comprised of a rectangular plate on which there are two oval rollers and spacers riveted together through apertures in the rectangular plates and spaced apart so that the oval rollers may communicate with the oval insides of the right-angle ends of the shower expander rod. The outward facing slots on the telescoping

ends of the oval shower expander rod glide over the spacers, so that the rollers may serve as guides to contain the oval shower expander rod and keep it from touching the shower wall, and for the purpose of supporting, telescoping, and retracting the shower expander rod through the expander ports.

27. The retractable shower expander assembly of claim **24** comprising a gripper or backing made of rubber or other similar material that is affixed to the two smaller planar surfaces on opposite sides of the rectangular cavity housing the roller plate assembly and which are in contact with the shower walls so as to more securely hold the expander ports against the shower walls.

28. The retractable shower expander assembly of claim **27** wherein the means for gripping or holding the two expander ports against the end walls of a shower stall or tub enclosure includes a removably adjustable tension rod with rubber or other similar material covering the ends of the tension rod and communicating with a round cavity and rotatable washer within each expander port.

29. A retractable shower expander assembly for a shower stall or tub enclosure having three walls and an access opening for the ingress and egress of the user as the fourth wall and comprising:

a shower expander rod, having an oval shape with one straight side and two ends formed at right angles;
and

two expander ports, herein called roller bracket assemblies; and

a shower curtain.

30. The retractable shower expander assembly of claim **29** wherein the roller bracket assemblies are permanently affixed outside of the shower stall or tub enclosure on the bathroom walls and hold the retractable shower expander assembly useably in place in the access opening of the shower stall or tub enclosure.

31. The retractable shower expander assembly of claim **30** further wherein the roller bracket assemblies consists first of brackets that are formed with holes so as to permanently mount the brackets on the walls outside of the shower stall or tub by means of screws or other fasteners and decorative covers so as to conceal the heads of the screws or fasteners. The bracket is bent or configured outwardly at a right angle so as to extend past the tile or other protective covering on the inside of the shower area and then again bent or configured inwardly so as to be offset and project through the access opening, parallel to the shower wall. There are two oval rollers and spacers riveted together through apertures in the roller brackets and spaced apart so that the oval rollers may communicate with the oval insides of the right-angle

ends of the shower expander rod. The outward facing slots on the telescoping ends of the oval shower expander rod glide over the spacers, so that the rollers may serve as guides to contain the oval shower expander rod and keep it from touching the shower wall, and for the purpose of supporting, expanding, and retracting the shower expander rod through the roller bracket assemblies.

32. The retractable shower expander assembly of claim **31** further wherein the permanent means in which the roller bracket assemblies are mounted or affixed on the walls outside of the shower stall or tub enclosure does not require that a tension rod be included as part of the retractable shower expander assembly.

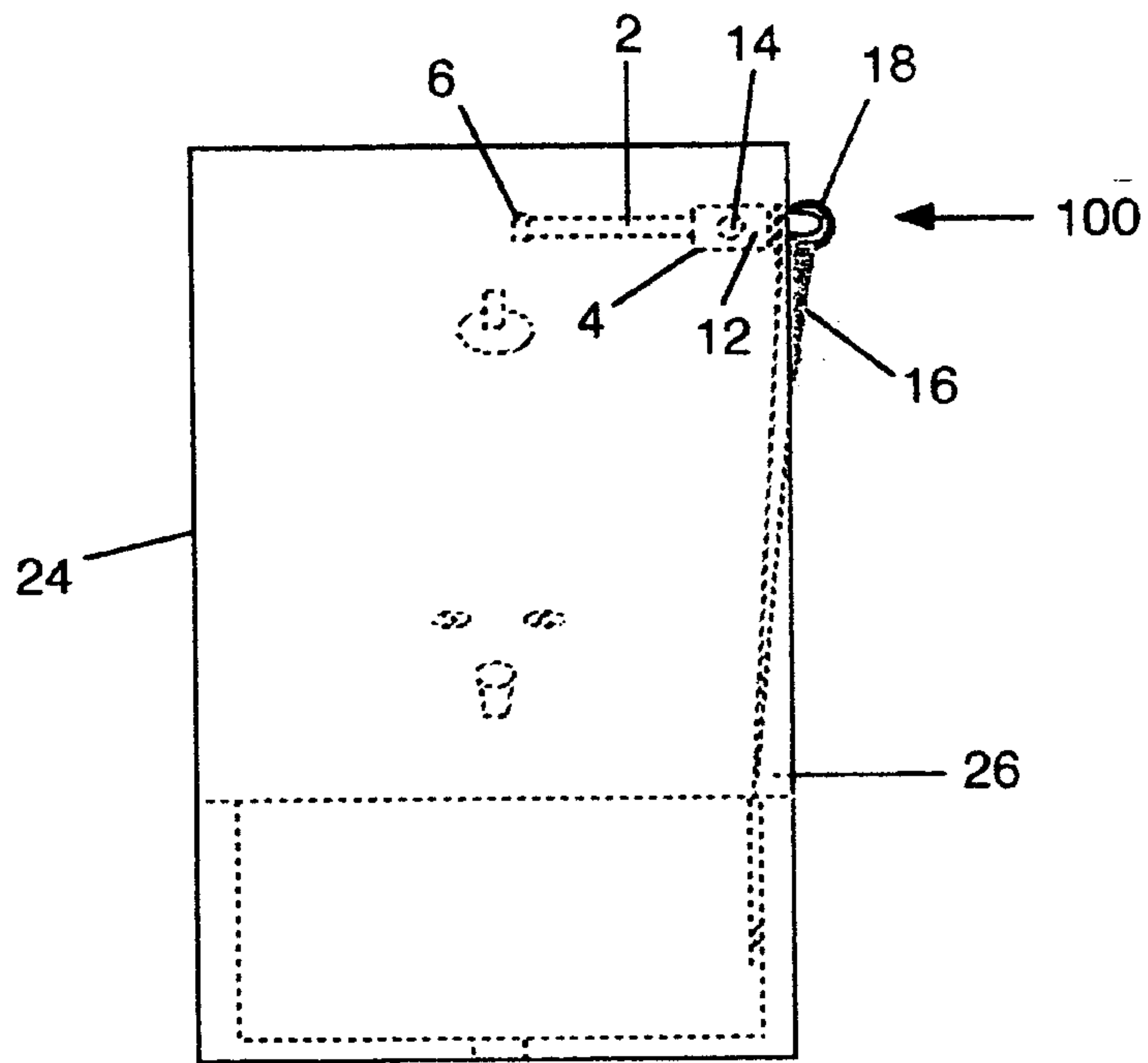


FIG. 1

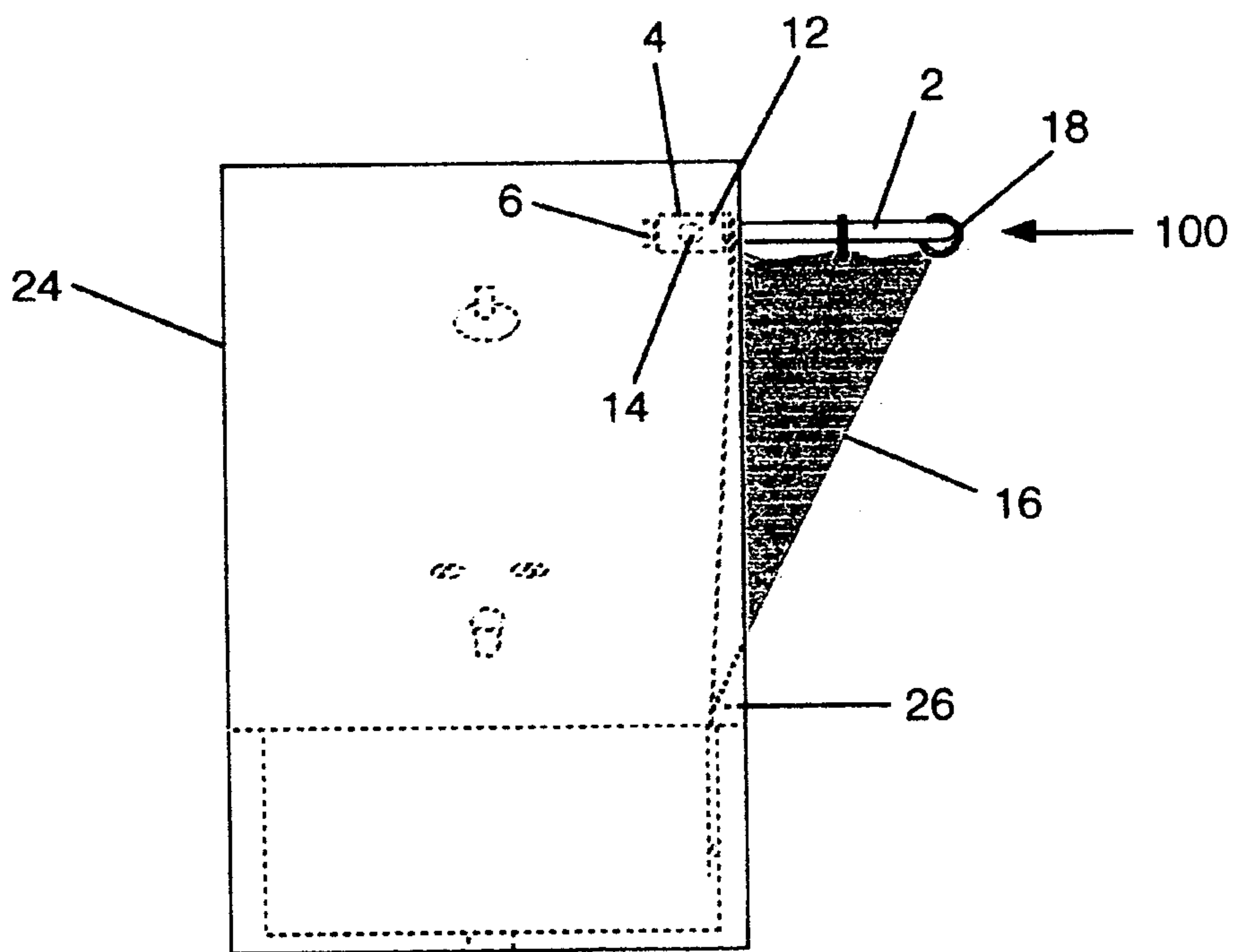


FIG. 2

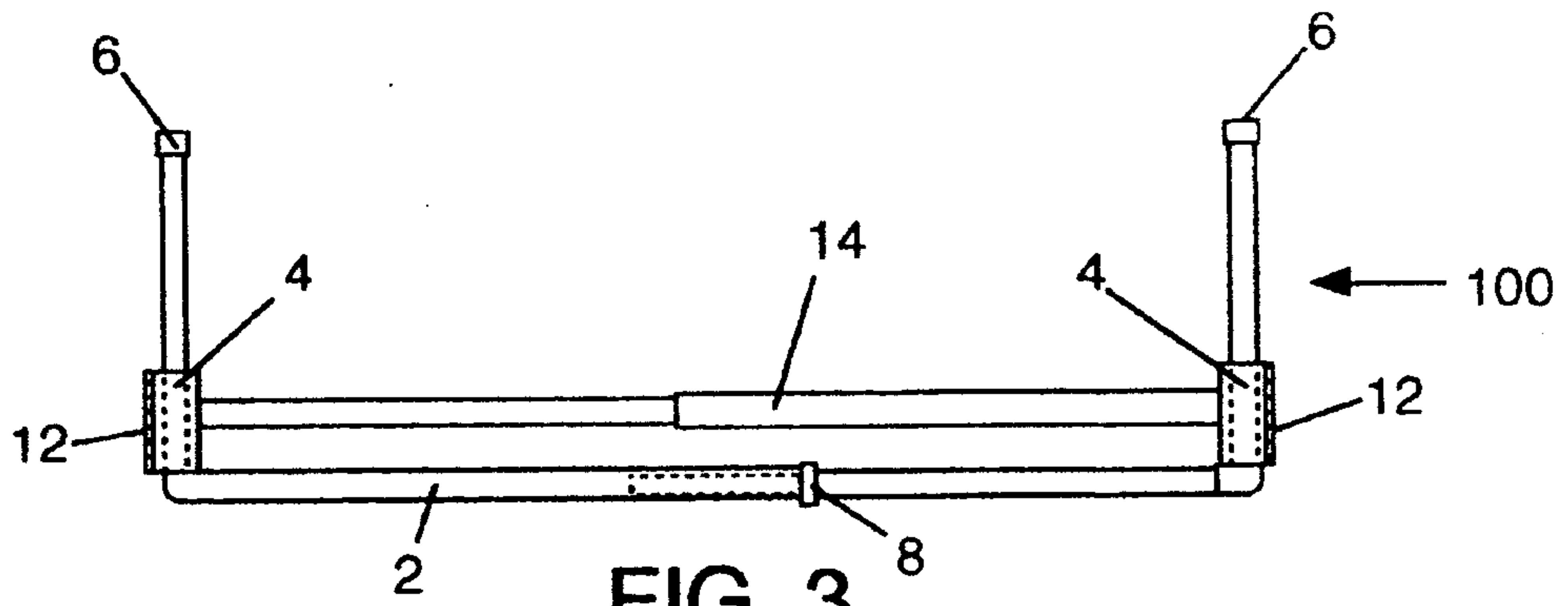


FIG. 3

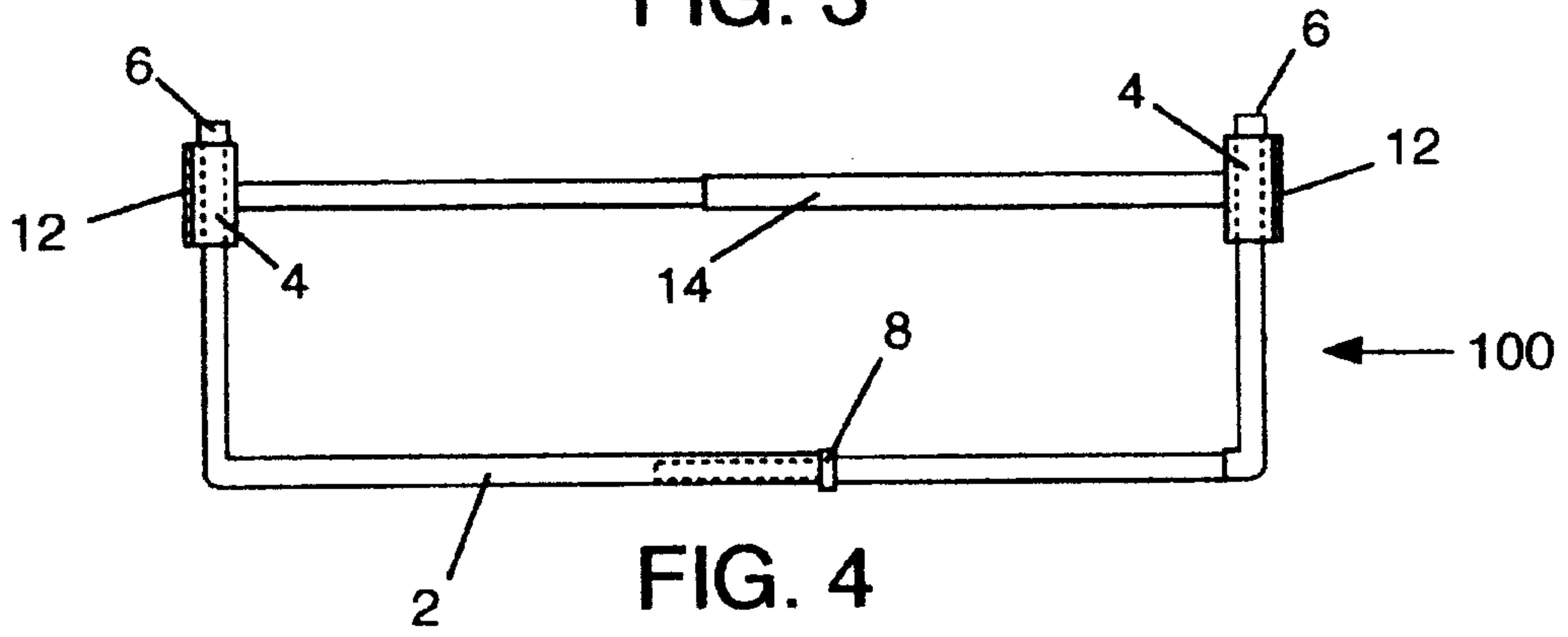


FIG. 4

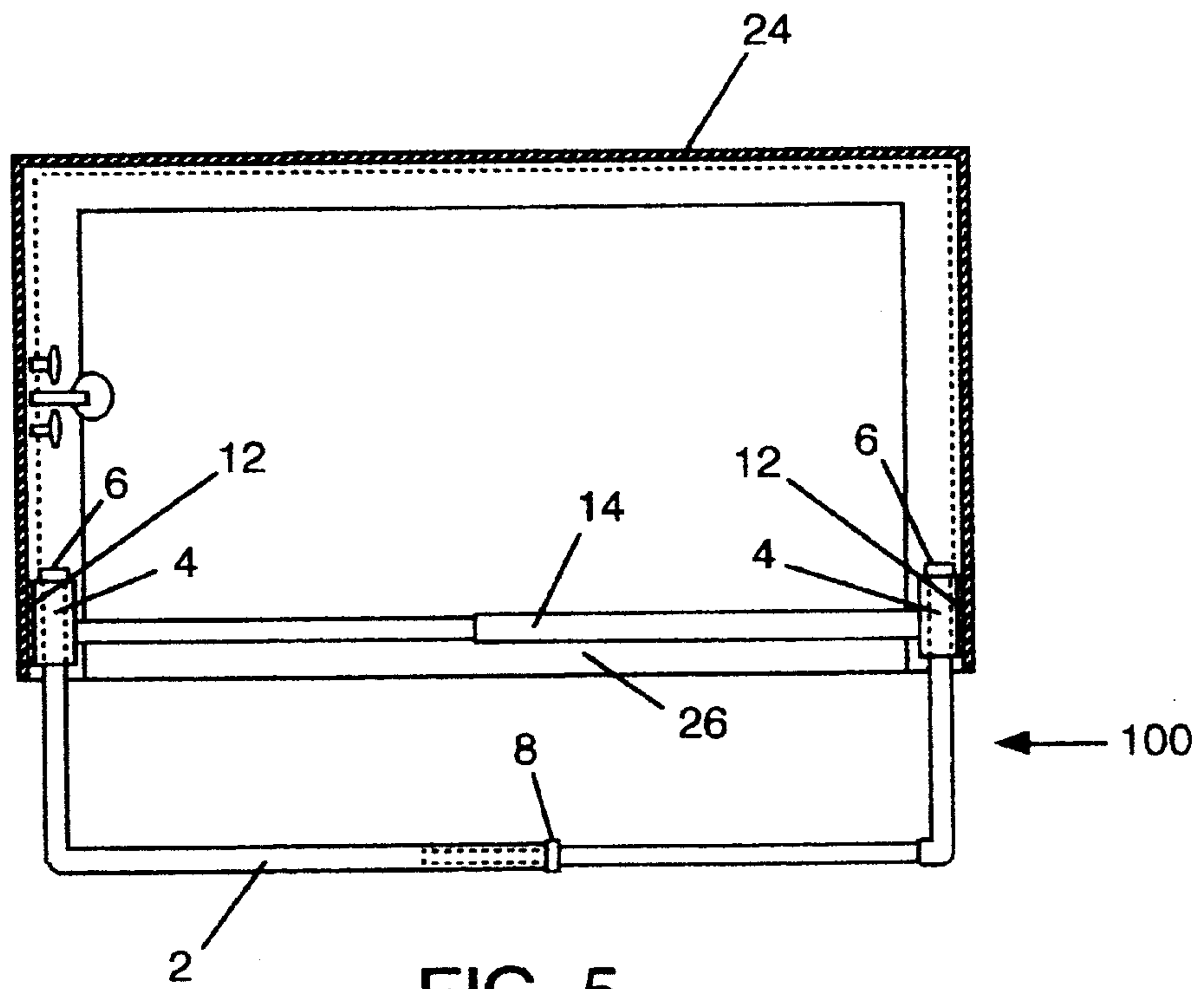


FIG. 5

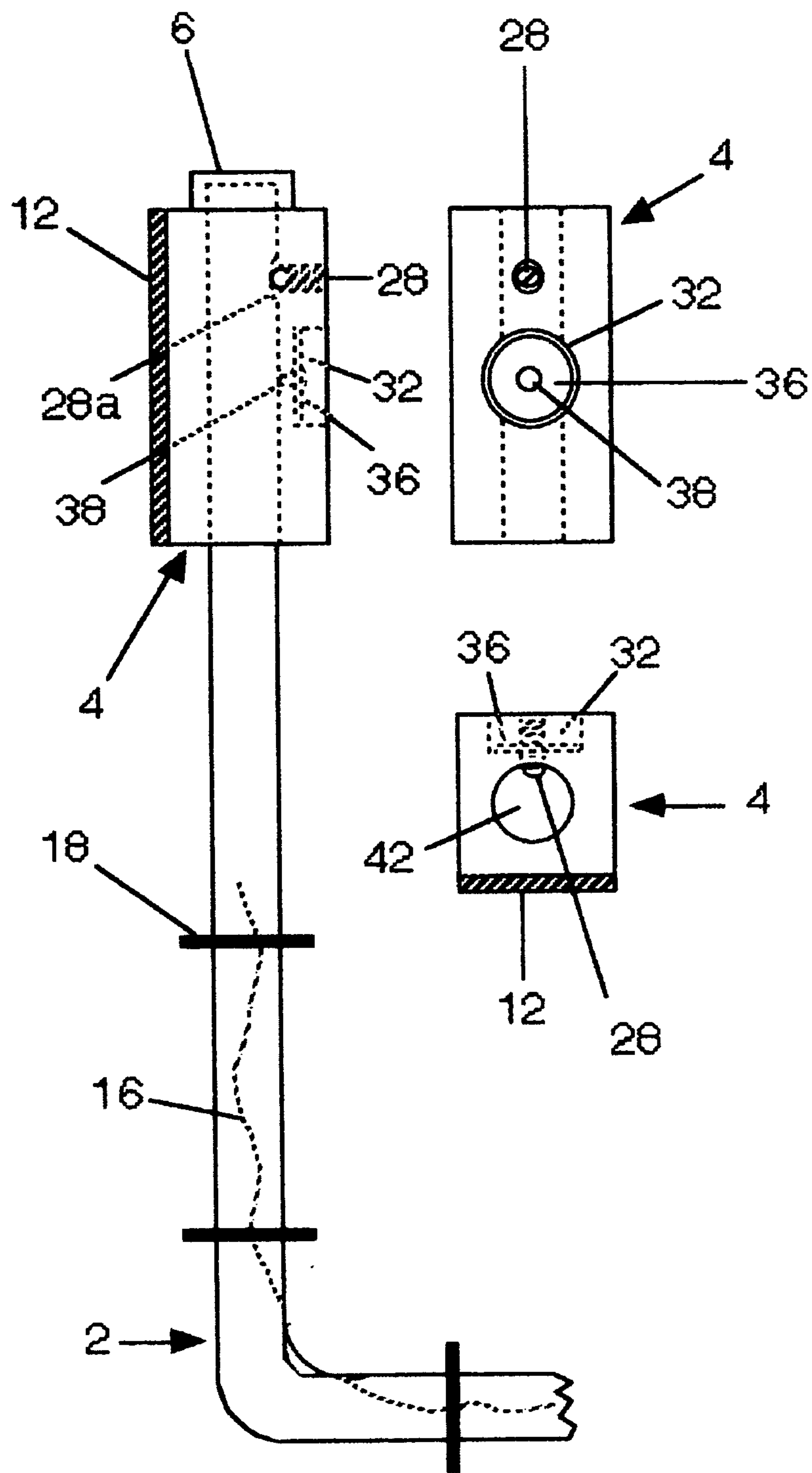


FIG. 6

FIG. 7

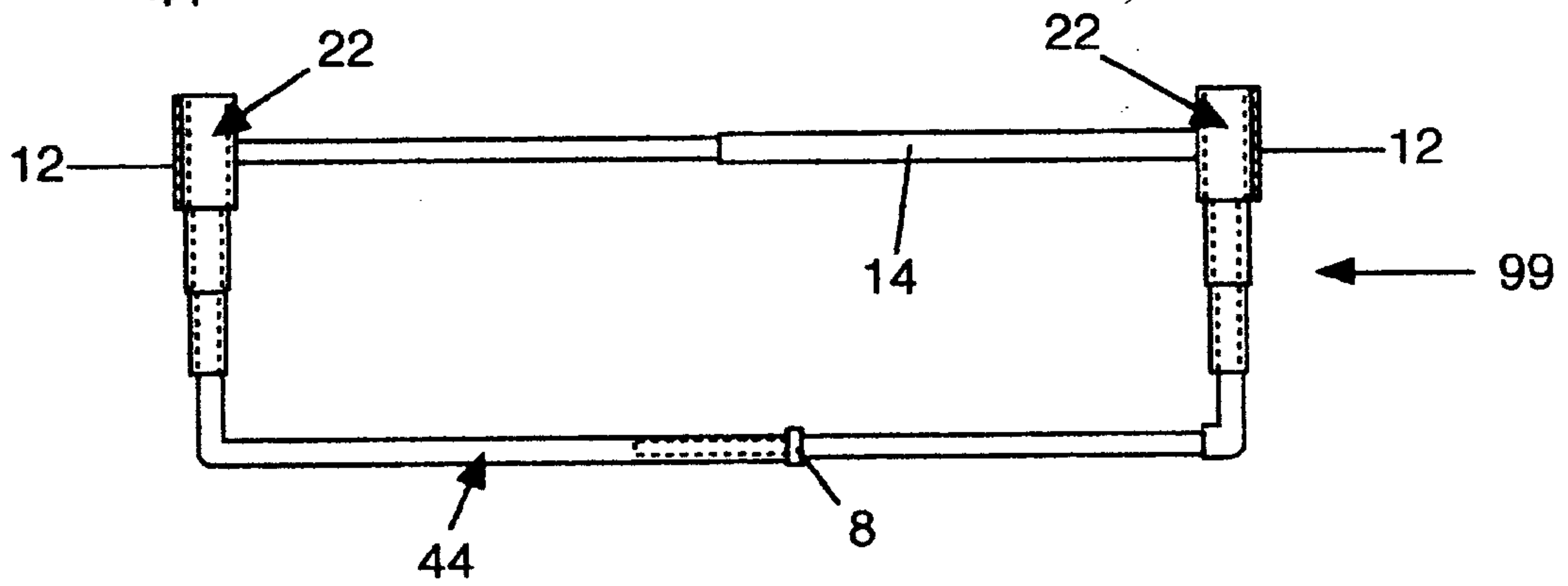
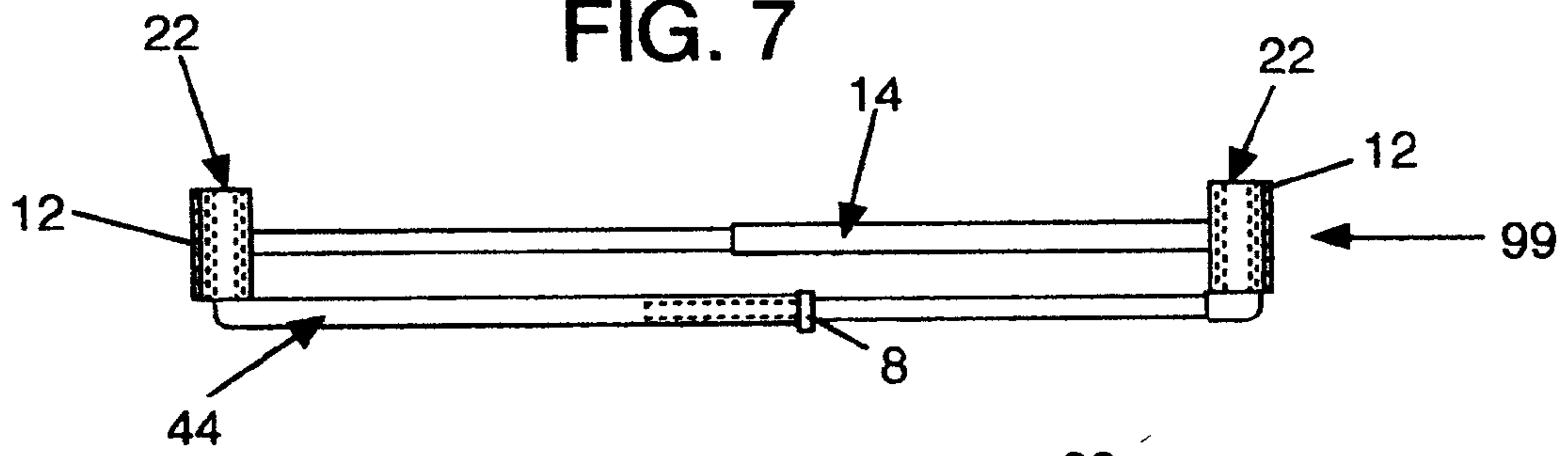
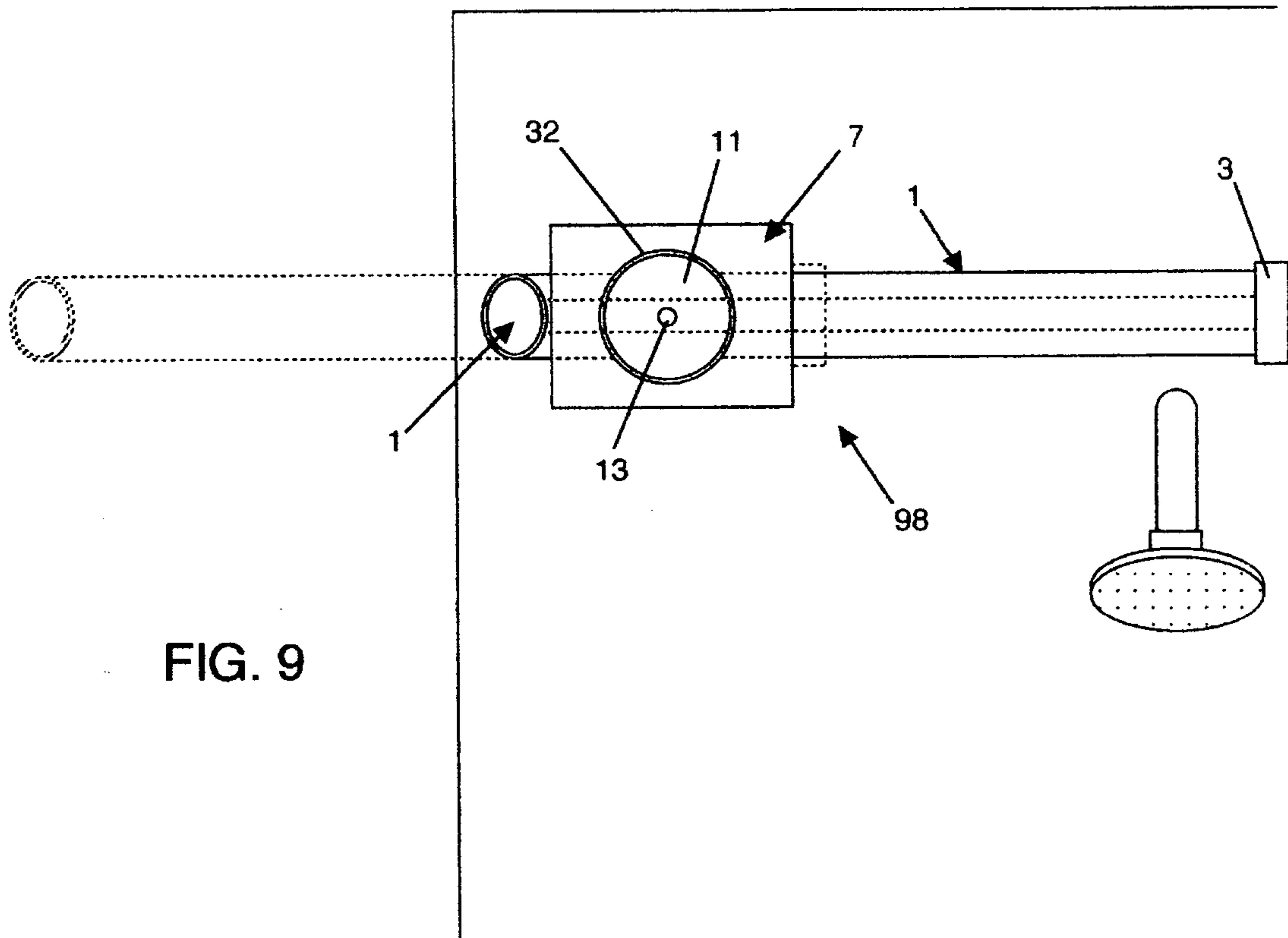


FIG. 8



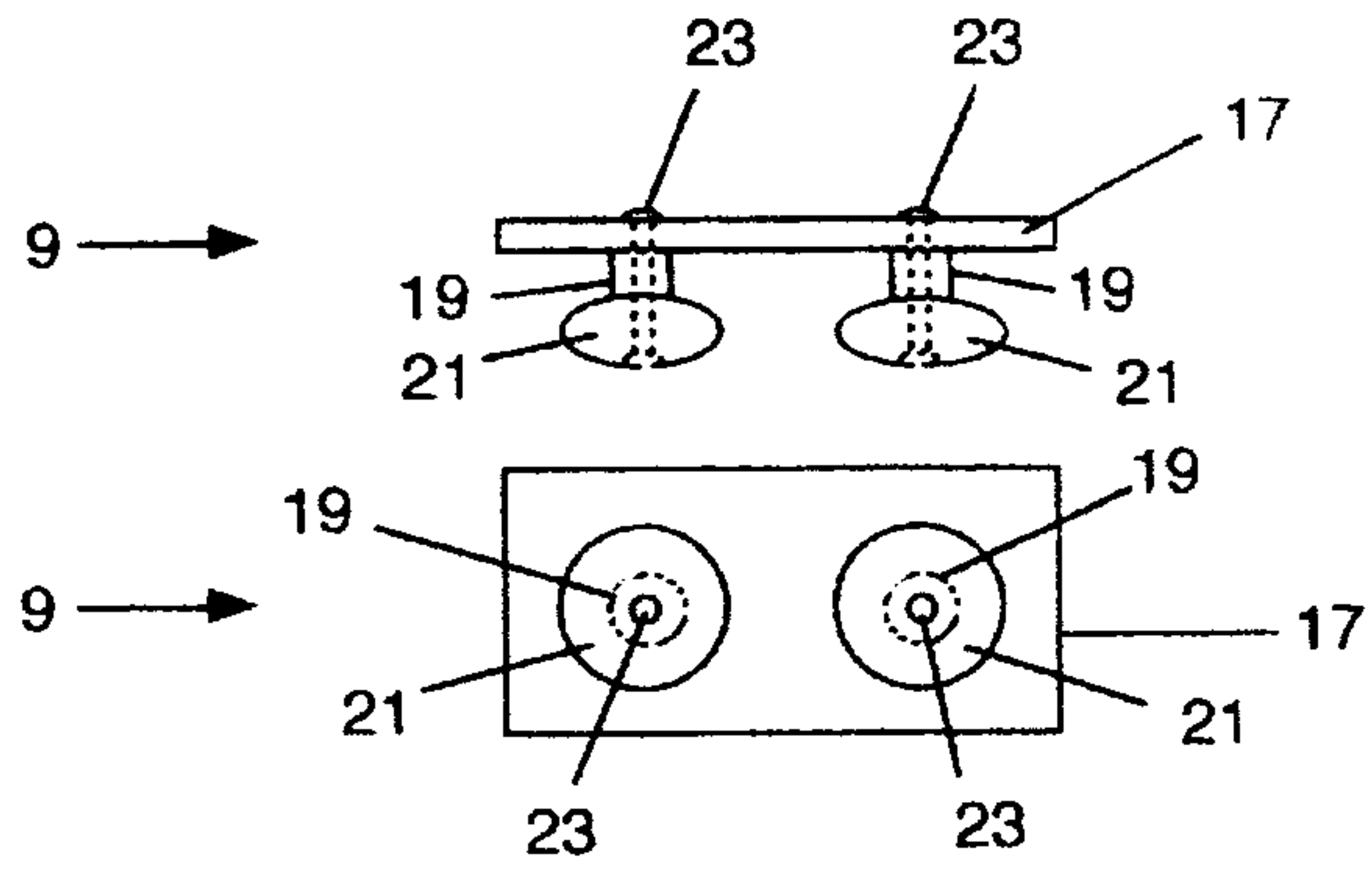


FIG. 10

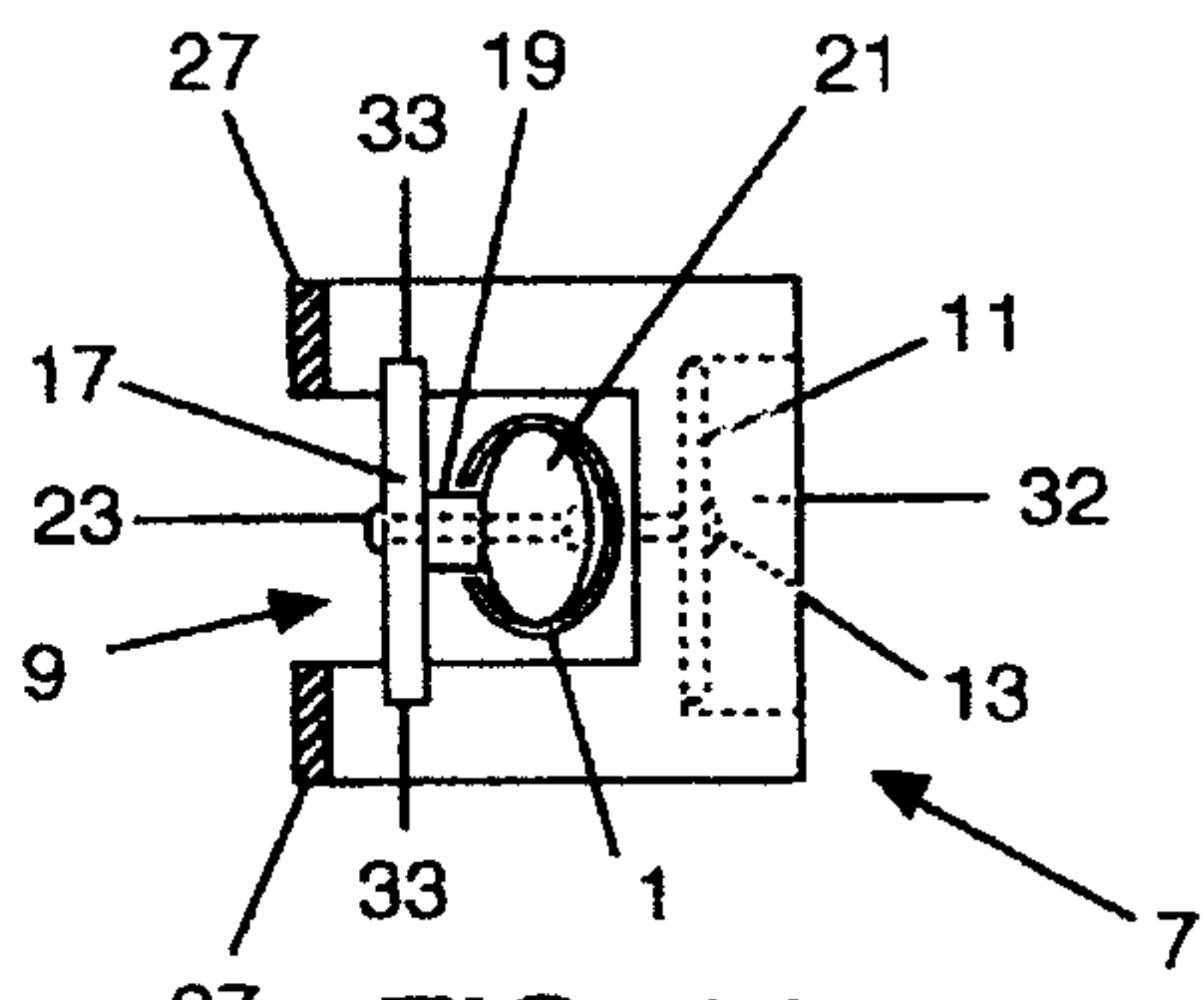


FIG. 11

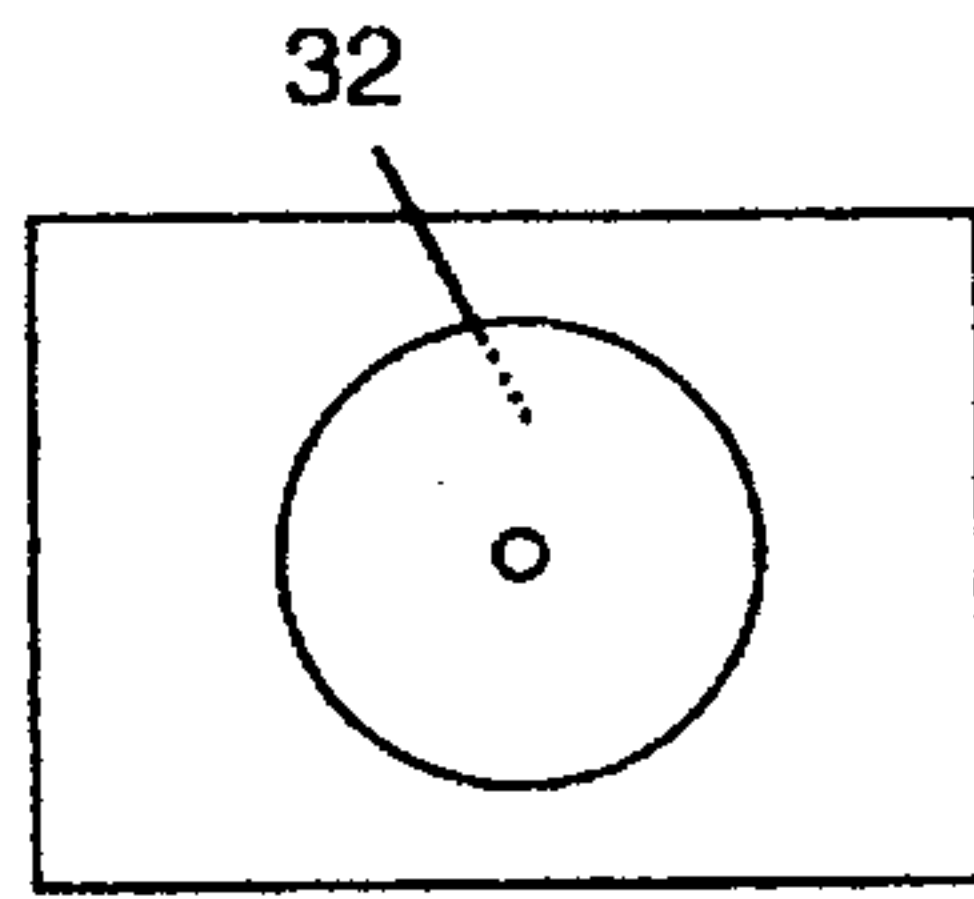


FIG. 12

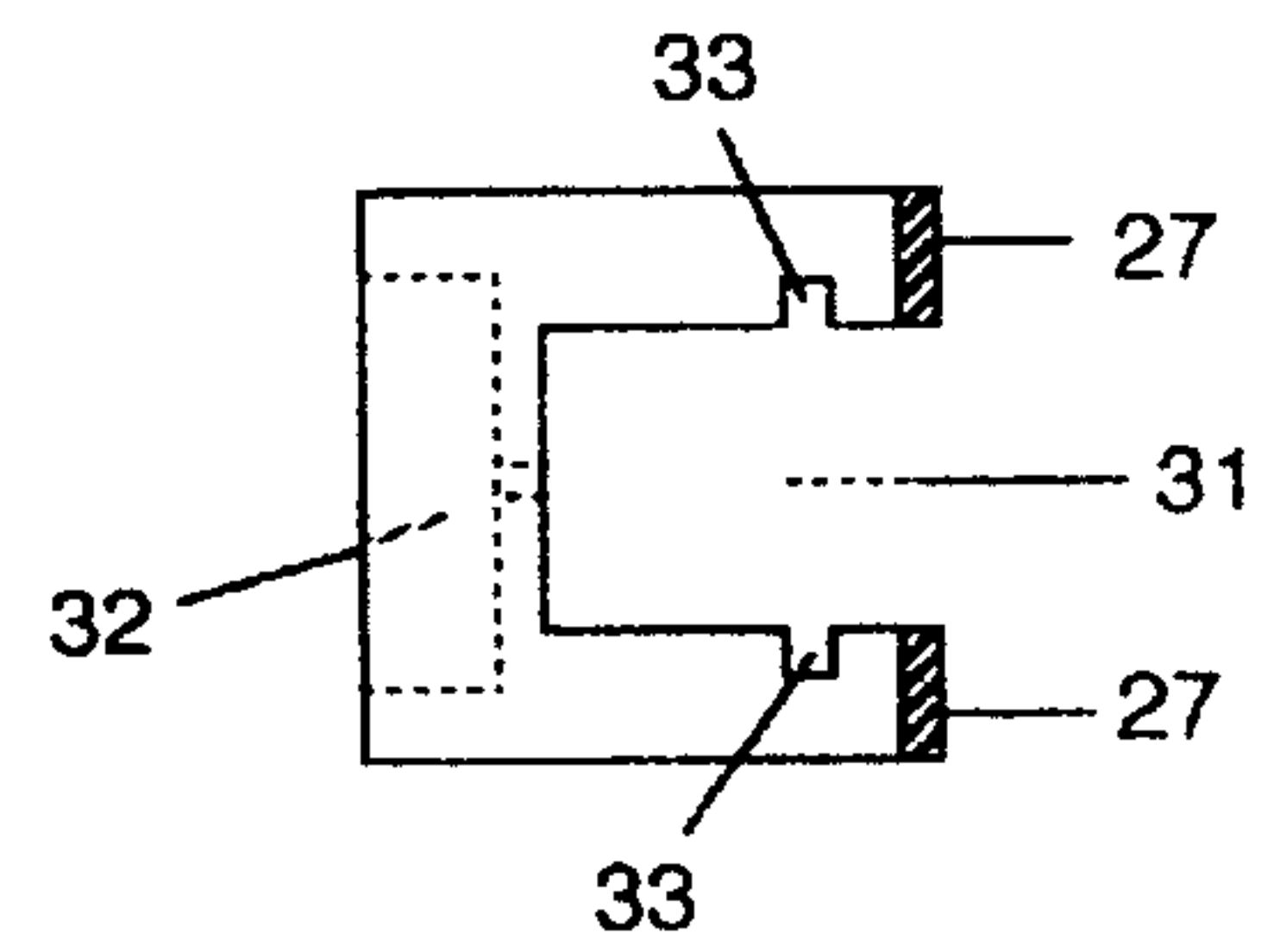


FIG. 13

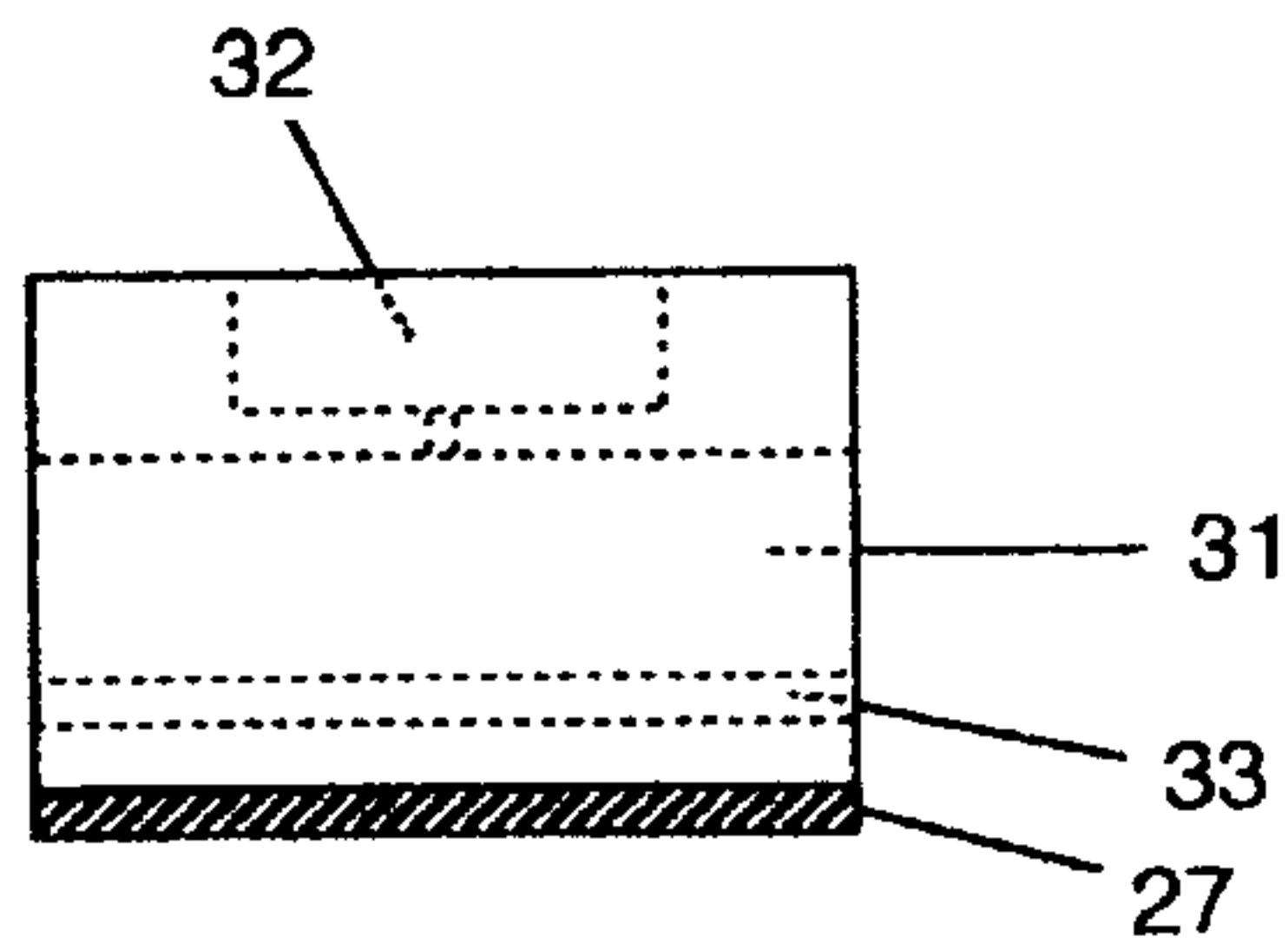
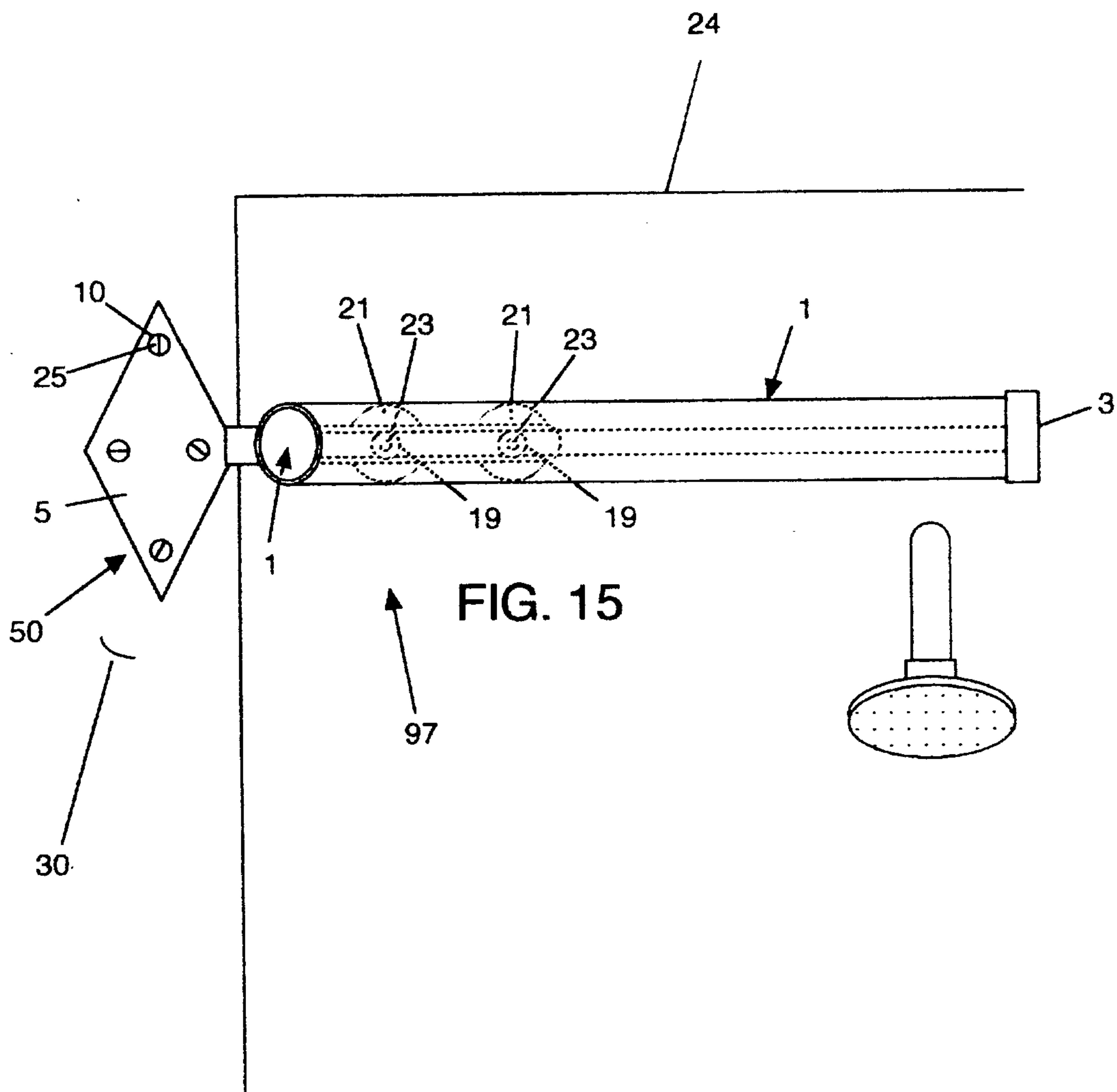


FIG. 14



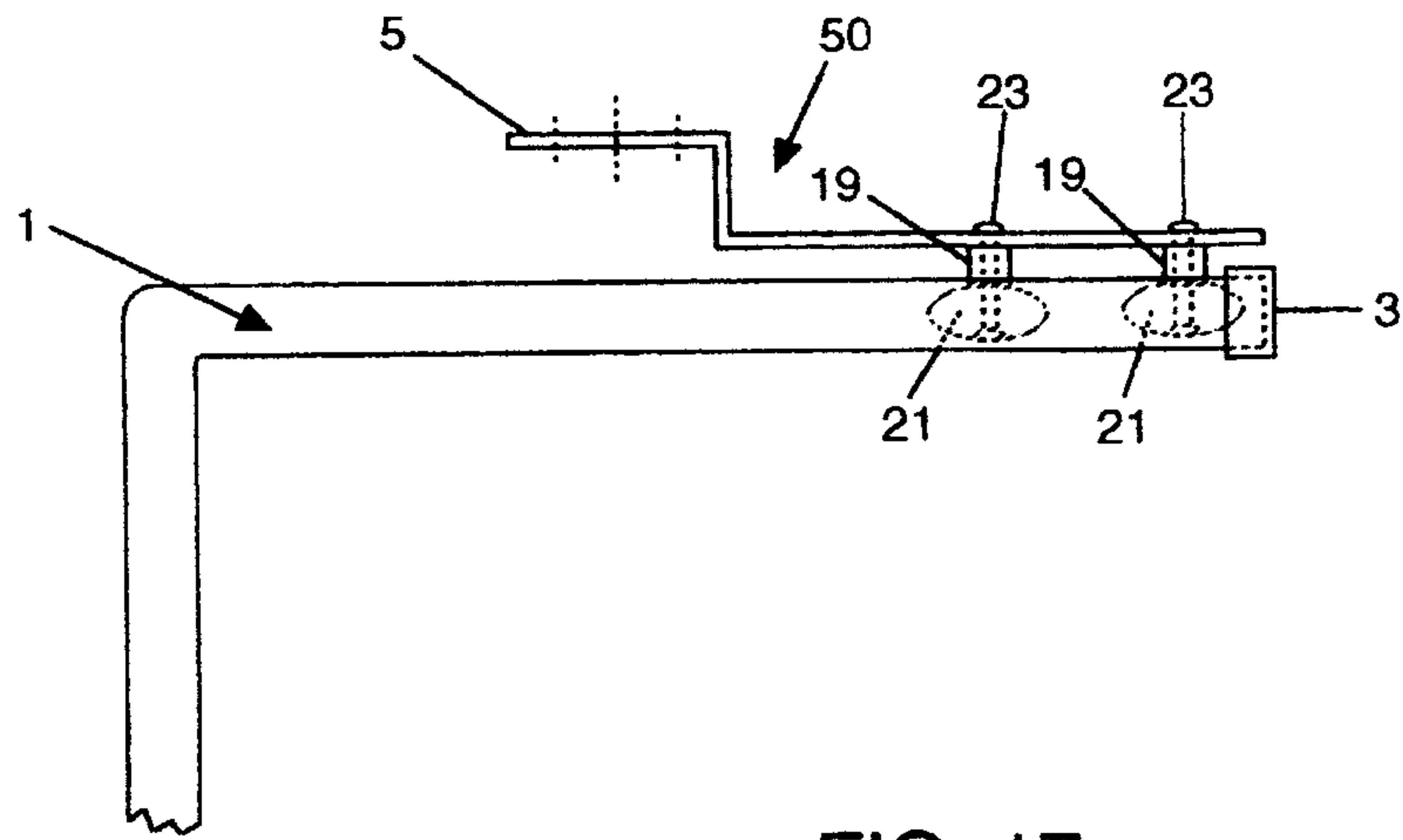


FIG. 17

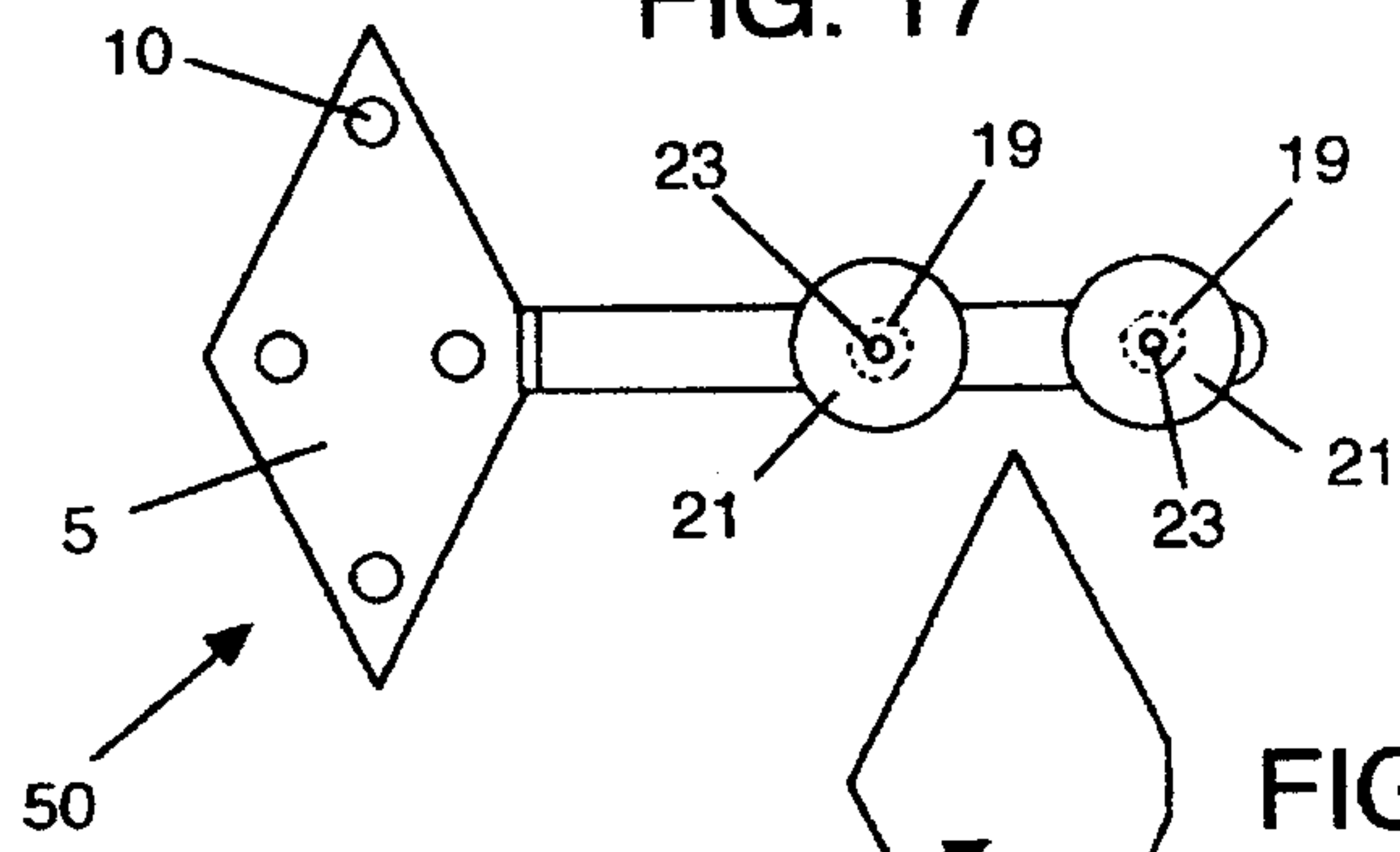


FIG. 18

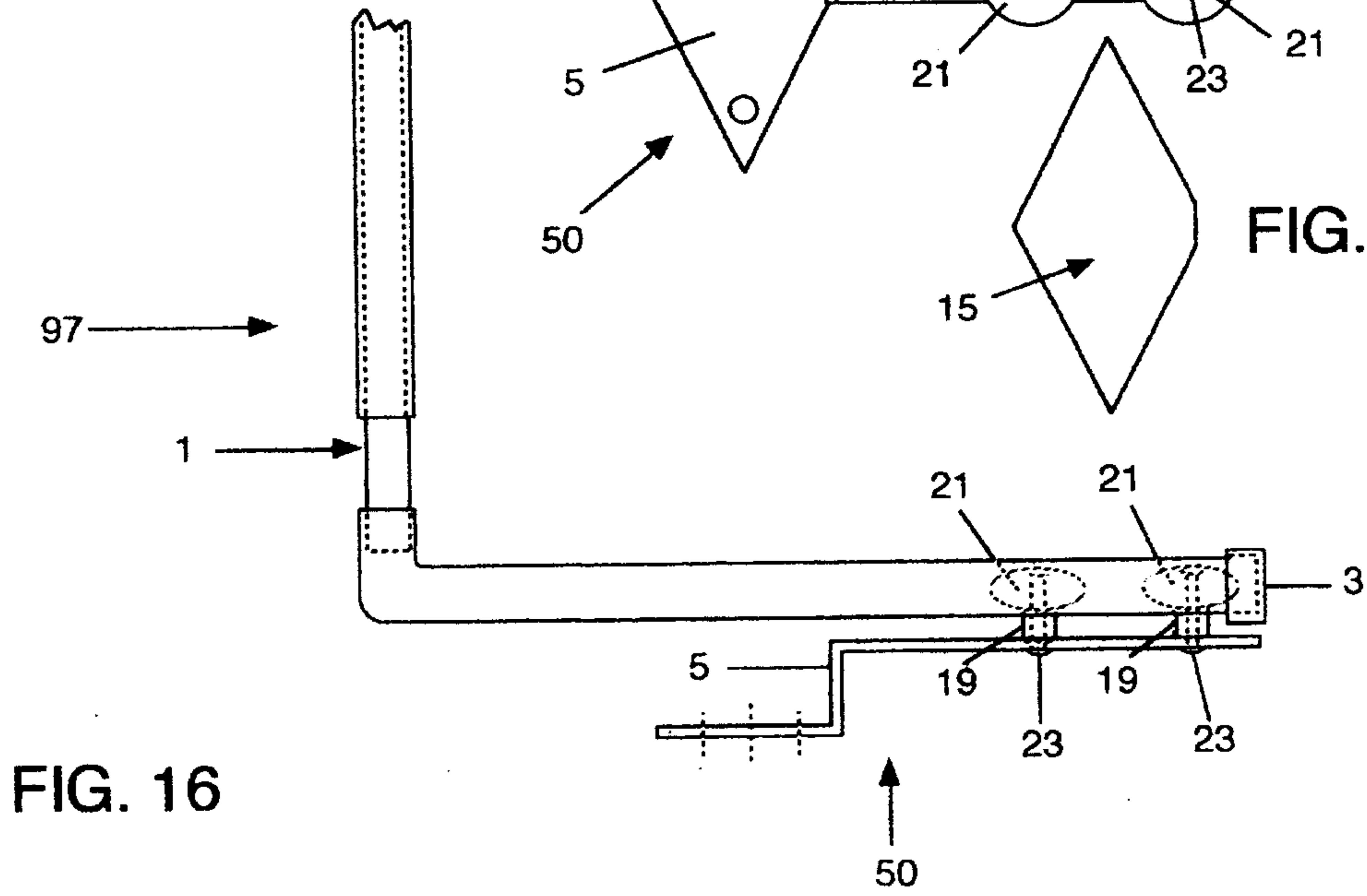


FIG. 16

