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(54) **SWIVEL GATED BATH RING**

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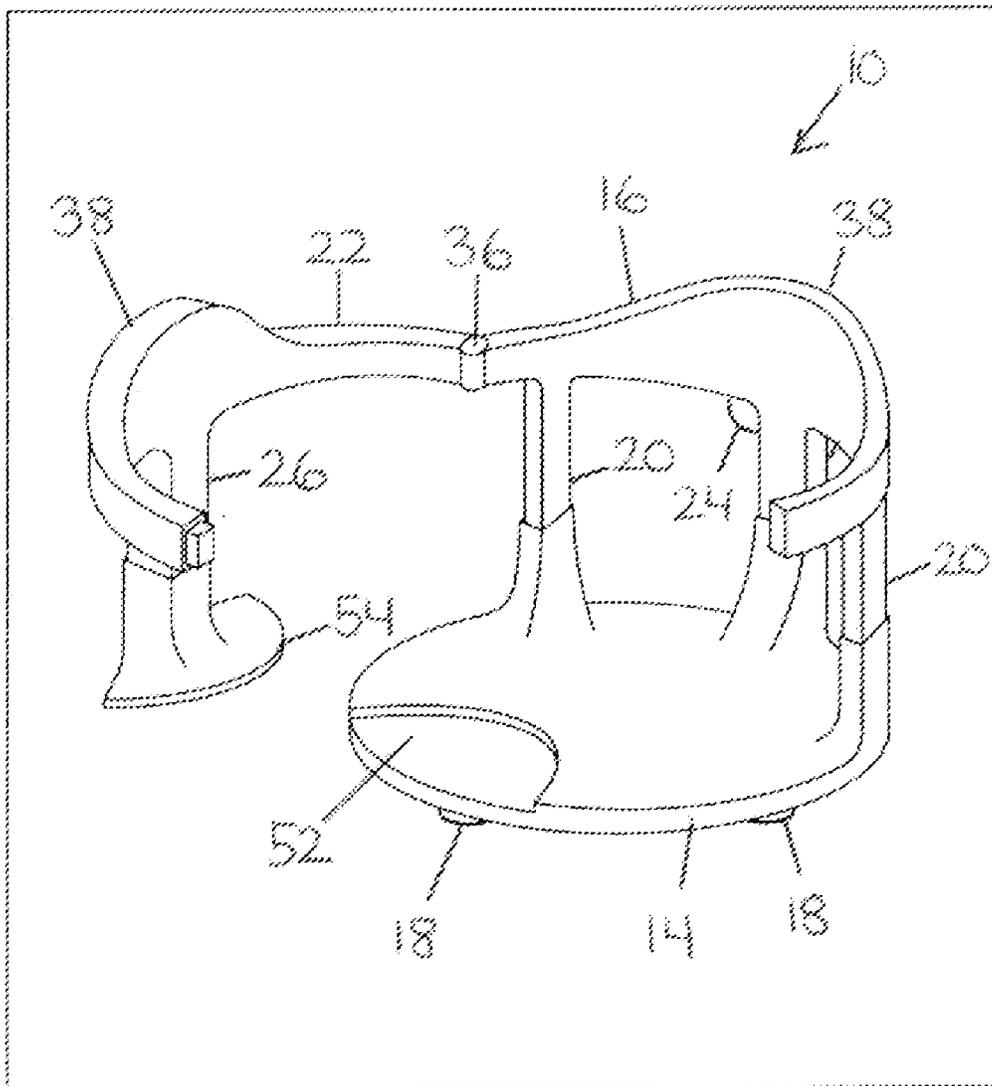
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(57) **ABSTRACT**

An assistive bath ring which is easily adjustable or expandable to accommodate needs of a growing child or a special need's child or adult is provided. The assistive bath ring comprises an essentially cylindrical shaped framework having a circular solid base with the base having an underside and a top side. A circularly shaped arm rail ring attached to the base by a plurality of height adjusting telescoping leg components with the arm rail ring having a front and a rear. A hinge in the circular shaped arm rail ring creates a gate to allow the circularly shaped arm rail ring to open and close. A swivel mechanism releasably secures to the underside of the base. The telescoping leg components comprise four leg components. Three leg components are attached to the top side of the base and one leg component is attached to the gate or all four leg components are attached to the top side of the base.



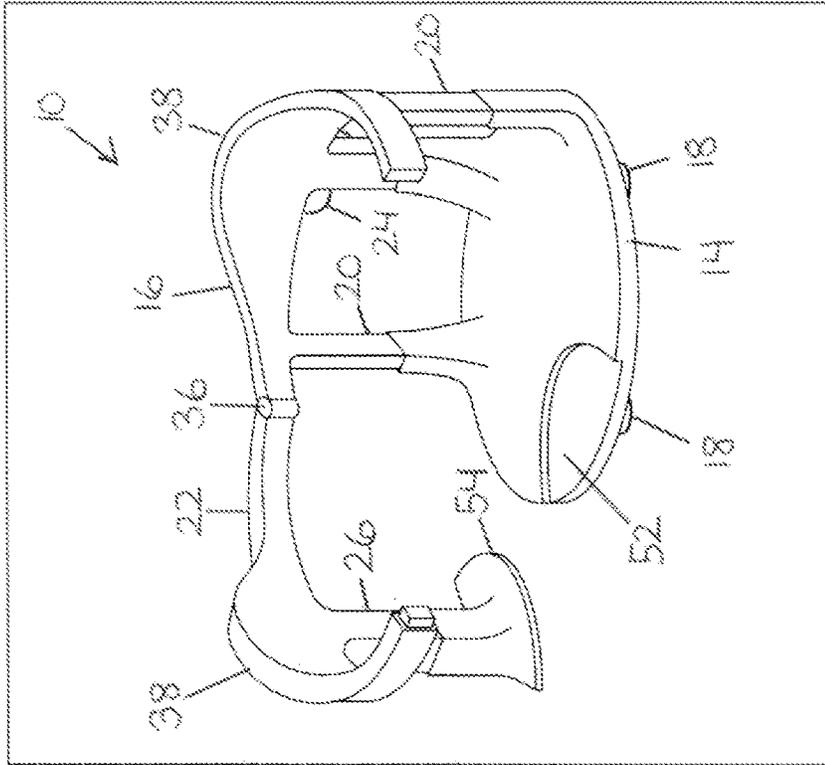


Fig. 2

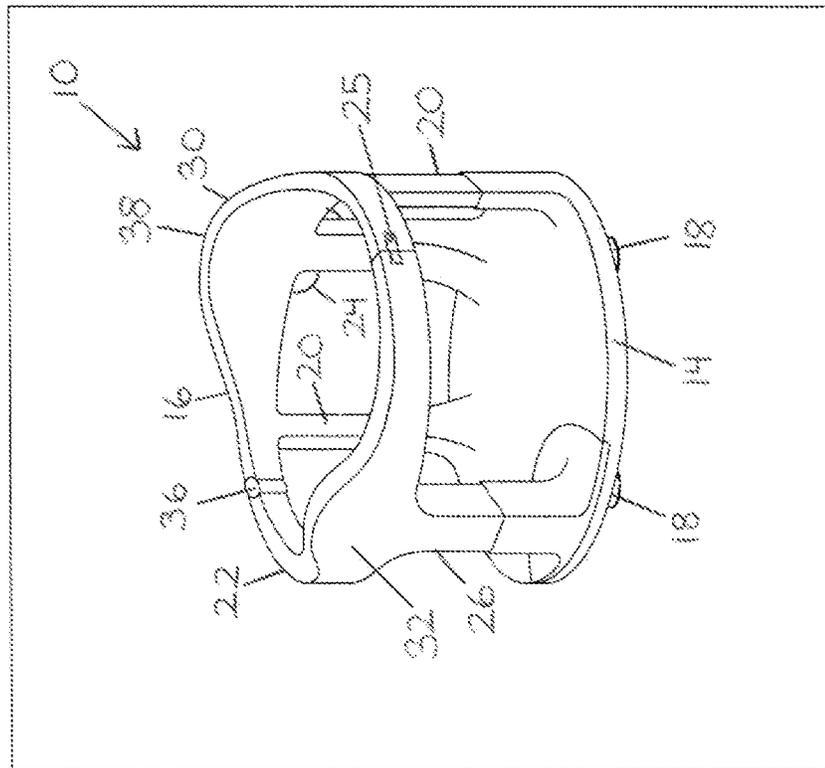


Fig. 1

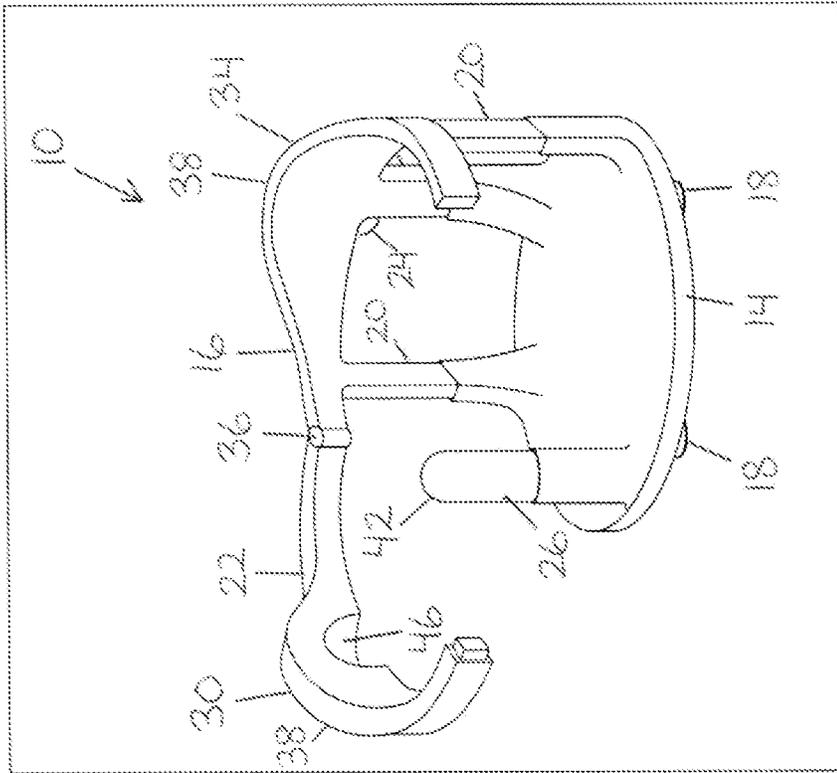


Fig. 3

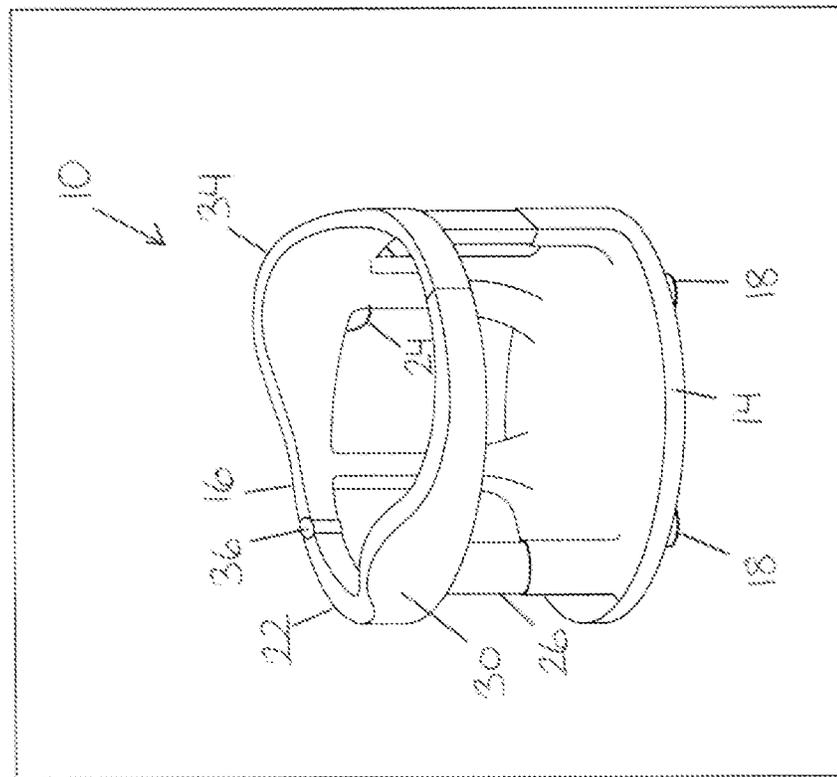


Fig. 4

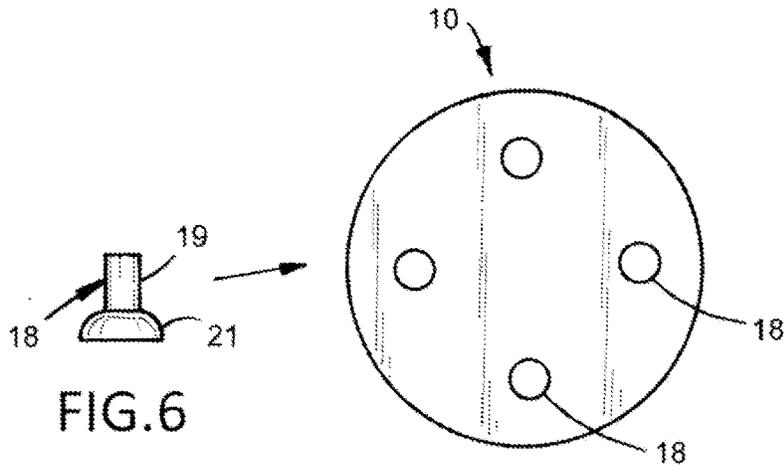


FIG.6

FIG.5

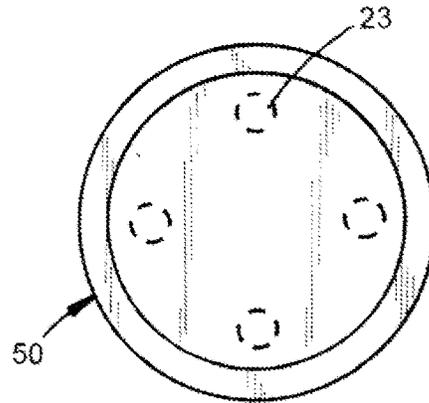


FIG.8

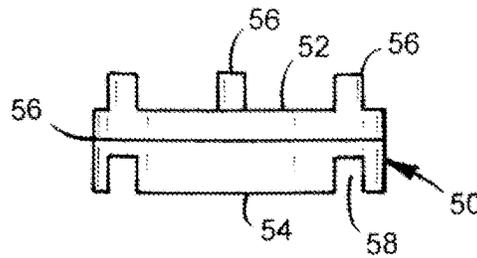


FIG.7

SWIVEL GATED BATH RING

FIELD OF THE INVENTION

[0001] The present invention pertains to the field of bathtubs, and more specifically to the field of safety accessories in bathing children providing an assistive bath ring which capable of swiveling and is easily adjustable or expandable to accommodate needs of a growing child or a special need's child.

BACKGROUND OF THE INVENTION

[0002] For infants and small children, bath time often is associated with free spirited play as splashing in the water and blowing soap bubbles as a fun way to get clean before heading off to bed. Typically, parents bathe their infants in a household bath tub, filling the tub with several inches of water and then holding their child with one arm while they wash the child's body with their other arm and hand. Maintaining a secure grip on a wiggly infant or toddler during bath time sometimes is challenging especially since soap, shampoos and other hygiene products tend to be very viscous and slippery in texture. For a parent or caregiver, maintaining a careful and steady grip on a child while simultaneously attempting to perform simple tasks, such as washing a child's hair or body, is awkward at best. This problem is particularly prevalent for those people who have large garden style bathtubs or old fashioned basin tubs as the tub's placement low to the ground coupled with height of the side walls of the tub make maintaining a firm grip on the child a nearly impossible task, particularly when attempting to gently wash the child's body. If a parent fails to maintain a firm hold on their child, a potential result is that the child slips under water or falls over and bumps their head on the sides or base of the tub; both occurrences are extremely dangerous scenarios.

[0003] To ensure a child's safety when bathing an infant, many parents utilize a baby bath ring which is a vertical and circular shaped support structure inside of which the child comfortably sits. The open style of the baby bath ring's framework supports the child in a comfortable, upright position. Typically, these frameworks are constructed so the child can rest their arms on the top of the framework while a vertical support bar extends between the child's legs to facilitate the child in comfortably sitting upright while preventing the child from sliding below the surface of the water. Perhaps one drawback associated with these devices is difficulty in removing the child from the device after the bath. Another drawback is that children outgrow them fairly quickly. Most baby bath rings accommodate children up to fourteen to sixteen months in age. For children who are larger than average or are simply unable to sit upright unassisted past the targeted age range of these devices, standard baby bath rings are simply too small to accommodate these children. This is especially true for children with special needs who, because of mental or physical disabilities, are unable to sit upright on their own. Assisting a child into or out of a bath ring that is too small to accommodate their build is extremely difficult and causes strain and injury to both the child and their caregiver. As such, bathing a child with special needs or who is otherwise too large to utilize a traditional baby bath ring is a challenging endeavor.

[0004] The prior art has put forth several designs for safety accessories in bathing children. Among these are:

[0005] U.S. Pat. No. 5,687,433 to Michael S. Garner, Craig S. Scherer and Michael C. Thuma describes a bath seat usable in a tub for infants and small children that includes a seat portion with a curved back support mounted thereto. The base includes at least one deformable tub gripping element for removably affixing the seat to a bath tub. The seat includes first and second spaced apart, elongated members which are attached to regions of the back support and extend therefrom. A removable tray is adapted to slidably engage the elongated members. A releasable latch, carried in part on the tray and in part on at least one of the elongated members, locks the tray to the one elongated member in one of a plurality of linearly displaced positions. The seat includes a strut extending between the base and the tray to lockingly engage and support the tray. The strut prevents a child from slipping under the tray and maintains the child in the seat during the bath.

[0006] U.S. Pat. No. 5,010,606 to Michael S. Bernstein, David W. Crossley and Michael I. Lerner describes a simple circular bath seat which provides back support and is positionable rotationally in a bath tub where a person bathing a child is enabled to reposition the child and secure the relative position of the seat in order to more easily bath the child.

[0007] None of these prior art references describe the present invention.

SUMMARY OF THE INVENTION

[0008] It is an object of the present invention to provide an assistive bath ring which is capable of swiveling and easily adjustable or expandable to accommodate needs of a growing child or a special need's child.

[0009] The present invention is an assistive bath ring which is easily adjustable or expandable to accommodate needs of a growing child or a special need's child or adult. The assistive bath ring comprises an essentially cylindrically shaped framework having a circular solid base with the base having an underside and a top side. A circularly shaped arm rail ring is attached to the base by a plurality of height adjusting telescoping leg components with the arm rail ring having a front and a rear. A hinge in the circular shaped arm rail ring creates a gate to allow the circularly shaped arm rail ring to open and close. A swivel mechanism releasably secures to the underside of the base. The telescoping leg components comprise four leg components. Three leg components are attached to the top side of the base and one leg component is attached to the gate.

[0010] In addition, the present invention includes a method for accommodating needs of a growing child or a special need's child or adult. The method comprises providing an essentially cylindrically shaped framework having a circular solid base with the base having an underside and a top side, attaching a circularly shaped arm rail ring to the base by a plurality of height adjusting telescoping leg components with the arm rail ring having a front and a rear, creating a gate with a hinge in the circular shaped arm rail ring, allowing the circularly shaped arm rail ring to open and close, securing a swivel mechanism to the underside of the base, providing four telescoping leg components, and attaching all four leg components to the top side of the base or attaching three leg components to the top side of the base and one leg component to the gate.

[0011] The present invention further includes an assistive bath ring which is easily adjustable or expandable to accommodate needs of a growing child or a special need's child or adult. The assistive bath ring comprises an essentially cylindrical shaped framework having a circular solid base with the base having an underside and a top side. A circularly shaped arm rail ring is attached to the base by a plurality of height adjusting telescoping leg components with the arm rail ring having a front and a rear. A hinge in the circular shaped arm rail ring creates a gate to allow the circularly shaped arm rail ring to open and close. A swivel mechanism releasably secures to the underside of the base. The telescoping leg components comprise four leg components, and all four leg components are attached to the top side of the base. The four leg components are spaced evenly near the perimeter of the circular base and an indentation in the gate securely receives a rounded top section of a leg component.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 is a top down perspective view illustrating one embodiment of the gated bath ring, constructed in accordance with the present invention, with telescoping legs, showing the gated bath ring in the closed position. This embodiment has the post mounted to the gate and is designed to be opened at the back.

[0013] FIG. 2 is a top down perspective view illustrating the embodiment of the gated bath ring of FIG. 1, constructed in accordance with the present invention, in the open position.

[0014] FIG. 3 is a top down perspective view illustrating an alternative embodiment of the gated bath ring, constructed in accordance with the present invention, with telescoping legs, showing the gated bath ring in the closed position. This embodiment has the post mounted to the seat and is designed to open at the front.

[0015] FIG. 4 is a top down perspective view illustrating the embodiment of the gated bath ring of FIG. 3, constructed in accordance with the present invention, in the open position.

[0016] FIG. 5 is a bottom plan view illustrating the gated bath ring, constructed in accordance with the present invention, with removable suction cups releasably secured to the bottom of the gated bath ring.

[0017] FIG. 6 is an elevational side view illustrating a suction cup of the gated bath ring, constructed in accordance with the present invention.

[0018] FIG. 7 is an elevational side view illustrating a swivel mechanism of the gated bath ring, constructed in accordance with the present invention, with the swivel mechanism releasably securable to the gated bath ring.

[0019] FIG. 8 is a bottom plan view illustrating the swivel mechanism of the gated bath ring, constructed in accordance with the present invention, releasably secured to the gated bath ring.

DETAILED DESCRIPTION OF THE INVENTION

[0020] The present invention, hereinafter referred to as a Gated Bath Ring, indicated generally at 10, is an assistive baby bath ring comprising adjustable components that accommodate older or larger children. Ideal for use with any able bodied infant or toddler who is too large for a traditional bath ring, the Gated Bath Ring 10 of the present invention

is well suited for use with children who suffer various developmental disabilities that compromise their ability to sit upright unassisted in the bath tub. The Gated Bath Ring 10 is a specially designed bath ring which is easily expandable to accommodate the needs of the growing or special needs child. The Gated Bath Ring 10 comprises an integrated safety gate incorporated into the ring which enables the child to enter and exit the ring from the side of the device, as opposed to requiring the caregiver to lower or lift the child into or out of the center of the unit.

[0021] Please refer to the Figures. As with traditional bath rings, the Gated Bath Ring 10 of the present invention is manufactured primarily of heavy duty, water resistant plastic material and contains coated metal components. The Gated Bath Ring 10, similar in mechanical style and basic function to traditional bath rings, is comprised of a cylindrical shaped framework. The base 14 of the Gated Bath Ring 10 contains a solid platform on which the child sits, while the top of the present invention is comprised of a circularly shaped ring 16 like arm rail that provides support and stability to the child seated within it.

[0022] The Gated Bath Ring 10 of the present invention further includes a multiplicity of heavy duty suction cups 18 removably positioned appropriately on the underside of the base, providing further stability and structural integrity to the present invention during use. In a preferred embodiment, each suction cup 18 includes a leg 19 extending from a suction portion 21. Each leg 19 of the suction cup 18 extends into a base aperture 23 formed in the underside of the base 14. Each leg 19 of the suction cup 18 can be releasably secured within the base aperture 23 by friction or other mechanical means. When inserted into the base aperture 23, the suction portion 21 of the suction cup 18 is positioned beyond the base 14 to interact with a surface upon which the Gated Bath Ring 10 rests.

[0023] The Gated Bath Ring 10 of the present invention further includes a swivel mechanism 50 releasably securable to the base 14 allowing the base 14, to rotate completely around the swivel mechanism 50. In a preferred embodiment, the swivel mechanism 50 includes an upper swivel section 52 rotatably connected to a lower swivel section 54 by a swivel device 56. The swivel device 56 allows the upper swivel section 52 to rotate completely around the lower swivel section 54 greater than 360°.

[0024] The upper swivel portion 52 of the swivel mechanism 50 of the Gated Bath Ring 10 of the present invention includes a plurality of posts 56. Preferably, the number of posts 56 are aligned with and equal to the number of base apertures 23 formed in the base 14. The posts 56 are releasably receivable within the base apertures 23 upon removing of the suction cups 18 therefrom. The lower swivel section 54 includes a plurality of suction cup apertures 58 formed therein for releasably receiving the leg 19 of the suction cup 18 by friction or other means. In operation, the suction cups 18 are removed from the base apertures 23, the posts 56 of the upper swivel section 52 are positioned within the base apertures 23, and the suction cups 18 are mounted within the suction cup apertures 58 formed in the lower swivel section 54.

[0025] Measuring the same diameter or larger in diameter than traditional bath rings, the Gated Bath Ring 10 of the present invention includes telescoping leg components 20 that enable the user to adjust the height of the ring in accordance to the size of the child. The four vertical support

leg components **20** that connect the upper ring **22** to the base platform **14** are telescoping, enabling the user to raise or lower the ring as necessary, simply by expanding or contracting the legs. Simple interlocking fasteners or a comparable locking mechanism **24** are incorporated into the construction of these support legs, enabling the user to securely lock in the Gated Bath Ring **10** at a designated height. The back and two side support legs **20** connect at the top and bottom to the upper ring and base of the Gated Bath Ring **10**. The front vertical post **26** connects at the base of the seat and its top rounded section **42** rests against an indentation **46** in the closed gate arm.

[0026] In the embodiment shown in FIGS. 1 and 2, the post **26** of the Gated Bath Ring **10** of the present invention is mounted to the upper ring **22**, which functions as the gate **32**, and is designed for the child to be seated facing front **30**. The gate **32** is closed after the child is seated and the gate **32** is closed behind the seated child. Also in this embodiment, the base **14** comprises indentation **52**, for securely receiving the expanded base **54** at the bottom of the post **26**, when the gate **32** is in the closed position.

[0027] In the embodiment shown in FIGS. 3 and 4, the post **26** of the Gated Bath Ring **10** of the present invention is mounted to the base **14**, and the child faces the front **30**, with the post **26** situated between the legs of the child. The back of the child rests against the rear **34**. Also, in this embodiment, the terminus **42** of the post **26** is round or ball shaped to prevent injury to the child. The terminus **42** fits into the recess **46** when the gate **30** is closed.

[0028] Both embodiments of the Gated Bath Ring **10** of the present invention comprise structurally incorporated into the upper ring **22** of the gate **32** is a swivel pinch-free knuckle joint **36** hinged access panel that enables the user to open or close the ring to facilitate access to the child. A simple safety lock **25** secures the gate **32** in a closed position during use. The Gated Bath Ring **10** is manufactured in a variety of whimsical colors to appeal to children. Both embodiments also comprise a raised portions **38** at the front **30** and the rear **32, 34** of the ring **22** to facilitate support of the child.

[0029] Application and use of the Gated Bath Ring **10** of the present invention is very simple and straight forward. The user installs the Gated Bath Ring **10** within their bath tub. Positioning the Gated Bath Ring **10** so the base rests atop the bottom of the tub, the user presses firmly to adhere the suction cups **10**, located on the underside of the present invention or the lower section of the swivel mechanism **50**, to the tub and thus secure it in place. The user raises or lowers the telescoping support arms in accordance to the height of their child, allowing the child to access the ring like arm rail at a comfortable level. After filling the tub to a safe level with warm water, the user simply opens the gate and assists their child into the Gated Bath Ring **10**. The child sits on the circular platform with one of the vertical support arms positioned between their legs to prevent the child from slipping downwards as they take their bath. Propped up and stabilized with the Gated Bath Ring **10**, the child enjoys their bath as usual with the parent or caregiver assisting the child in washing their hair or performing other hygiene rituals. After use, the tub is drained of water and the Gated Bath Ring **10** is removed from the tub and stored away until again needed.

[0030] A cleverly constructed bath ring that is fully adjustable, the Gated Bath Ring **10** of the present invention is

utilized by typical children from about six months of age, as well as those who are older than sixteen-eighteen months of age, yet are unable to sit comfortably upright on their own. Providing reliable stability and support to children who are unable to sit upright in a bath tub, yet are too large for a traditional bath ring, the Gated Bath Ring **10** ensures that bath time is a safe and comfortable activity for the child. Fully adjustable, the Gated Bath Ring **10** is easily raised or lowered to accommodate the height of the child. This advantage will prove especially useful in households where more than one child is present as the device is easily adjusted to accommodate individual children. Durably constructed, the Gated Bath Ring **10** will withstand repeated use with ease.

[0031] Although this invention has been described with respect to specific embodiments, it is not intended to be limited thereto and various modifications which will become apparent to the person of ordinary skill in the art are intended to fall within the spirit and scope of the invention as described herein taken in conjunction with the accompanying drawings and the appended claims. For example, older individuals with specific disabilities might benefit from a larger version of the Gated Bath Ring **10**.

1. An assistive bath ring which is easily adjustable or expandable to accommodate needs of a growing child or a special need's child or adult, comprising:

an essentially cylindrically shaped framework having a circular solid base, the base having an underside and a top side:

a circularly shaped arm rail ring attached to the base by a plurality of height adjusting telescoping leg components, the arm rail ring having a front and a rear;

a hinge in the circular shaped arm rail ring creating a gate to allow the circularly shaped arm rail ring to open and close; and

a swivel mechanism releasably securable to the underside of the base;

wherein the telescoping leg components comprise four leg components; and

wherein three leg components are attached to the top side of the base and one leg component is attached to the gate.

2. The assistive bath ring of claim 1 wherein the swivel mechanism has an upper swivel section rotatably connected to a lower swivel section by a swivel device, the upper swivel section rotatable completely around the lower swivel section.

3. The assistive bath ring of claim 2 and further comprising:

a plurality of base apertures formed in the underside of the base;

wherein the upper swivel portion has a plurality of posts, the posts are aligned with and equal to the number of base apertures formed in the base; and

wherein the posts are releasably receivable within the apertures.

4. The assistive bath ring of claim 3 and further comprising:

a plurality of swivel apertures formed in the lower swivel section of the swivel device;

a plurality of suction cups, each suction cup having a leg and a suction portion, each leg at least partially receivable within one of the swivel apertures.

5. The assistive bath ring of claim 4 wherein the leg of the suction cup is releasably secured within the swivel aperture by friction.

6. The assistive bath ring of claim 1 and further comprising:

an indentation in the top side of the base to securely receive an expanded base at the bottom of the leg component attached to the gate when the gate is in the closed position.

7. The assistive bath ring of claim 1, wherein the telescoping leg component further comprises:

an interlocking securing means to enable a user to adjust the height of the leg and secure the height of the leg in place.

8. The assistive bath ring of claim 1, wherein the hinge is a swivel pinch-free knuckle joint.

9. The assistive bath ring of claim 1 and further comprising:

a safety lock to securely close the hinged ring during use.

10. The assistive bath ring of claim 1 wherein the circular shaped ring further comprises raised portions at the front of the ring and the rear of the ring to facilitate support of a user.

11. A method for accommodating needs of a growing child or a special need's child or adult, the method comprising:

providing an essentially cylindrically shaped framework having a circular solid base, the base having an underside and a top side;

attaching a circularly shaped arm rail ring to the base by a plurality of height adjusting telescoping leg components, the arm rail ring having a front and a rear;

creating a gate with a hinge in the circular shaped arm rail ring;

allowing the circularly shaped arm rail ring to open and close;

securing a swivel mechanism to the underside of the base; providing four telescoping leg components; and

attaching all four leg components to the top side of the base or attaching three leg components to the top side of the base and one leg component to the gate.

12. An assistive bath ring which is easily adjustable or expandable to accommodate needs of a growing child or a special need's child or adult, comprising:

an essentially cylindrically shaped framework having a circular solid base, the base having an underside and a top side;

a circularly shaped arm rail ring attached to the base by a plurality of height adjusting telescoping leg components, the arm rail ring having a front and a rear;

a hinge in the circular shaped arm rail ring creating a gate to allow the circularly shaped arm rail ring to open and close; and

a swivel mechanism releasably securable to the underside of the base;

wherein the telescoping leg components comprise four leg components, and all four leg components are attached to the top side of the base;

wherein the four leg components are spaced evenly near the perimeter of the circular base; and

wherein an indentation in the gate securely receives a rounded top section of a leg component.

13. The assistive bath ring of claim 14 wherein the swivel mechanism has an upper swivel section rotatably connected to a lower swivel section by a swivel device, the upper swivel section rotatable completely around the lower swivel section.

14. The assistive bath ring of claim 15 and further comprising:

a plurality of base apertures formed in the underside of the base;

wherein the upper swivel portion has a plurality of posts, the posts are aligned with and equal to the number of base apertures formed in the base; and

wherein the posts are releasably receivable within the apertures.

15. The assistive bath ring of claim 16 and further comprising:

a plurality of swivel apertures formed in the lower swivel section of the swivel device;

a plurality of suction cups, each suction cup having a leg and a suction portion, each leg at least partially receivable within one of the swivel apertures.

16. The assistive bath ring of claim 15 wherein the leg of the suction cup is releasably secured within the swivel aperture by friction.

17. The assistive bath ring of claim 12 wherein the telescoping leg component further comprises:

an interlocking securing means to enable a user to adjust the height of the leg and secure the height of the leg in place.

18. The assistive bath ring of claim 12 wherein the hinge is a swivel pinch-free knuckle joint.

19. The assistive bath ring of claim 12 and further comprising:

a safety lock to securely close the hinged ring during use.

20. The assistive bath ring of claim 12 wherein the circular shaped ring further comprises raised portions at the front of the ring and the rear of the ring to facilitate support of a user.

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