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Auxiliary support bar for bathtub and bathtub having the same

Abstract

An auxiliary support bar for a bathtub includes: a first bar having opposite ends that are detachably connectable to two sidewalls of the bathtub; and a second bar having a top end that is connected to the first bar. The first bar and the second bar are shaped and sized to form at least one through hole with a bottom of the bathtub for the legs of a baby to pass through.

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Background/Summary

CROSS REFERENCE TO RELATED APPLICATIONS

(1) This application claims priority to Chinese Patent Application No. CN 202520176229.4, filed Jan. 26, 2025, which is hereby incorporated by reference herein as if set forth in its entirety.

TECHNICAL FIELD

(2) The present disclosure generally relates to bathtubs, and in particular relates to a foldable baby bath support device.

BACKGROUND

(3) For most families, especially those with children, a bathtub is necessary because conventional bathtubs in bathrooms are too large for children. When bathing young children in a bathtub, it is necessary to keep them in a sitting position, which often requires an adult to hold the child with one hand, leaving only one hand free to wash the child. This can be quite inconvenient

Description

BRIEF DESCRIPTION OF DRAWINGS

(1) Many aspects of the present embodiments can be better understood with reference to the following drawings. The components in the drawings are not necessarily drawn to scale, the emphasis instead being placed upon clearly illustrating the principles of the present embodiments. Moreover, in the drawings, all the views are schematic, and like reference numerals designate corresponding parts throughout the several views.

(2) FIG. **1** is a schematic isometric view of a bathtub assembly according to one embodiment.

(3) FIG. **2** is a schematic isometric view of an auxiliar support bar according to one embodiment.

(4) FIG. **3** is schematic isometric exploded view of the auxiliary support bar according to one embodiment.

(5) FIG. **4** is an enlarged view of a portion A of FIG. **3**.

DETAILED DESCRIPTION

(6) The disclosure is illustrated by way of example and not by way of limitation in the figures of the accompanying drawings, in which like reference numerals indicate similar elements. It should be noted that references to “an” or “one” embodiment in this disclosure are not necessarily to the

same embodiment, and such references can mean “at least one” embodiment.
(7) Although the features and elements of the present disclosure are described as embodiments in particular combinations, each feature or element can be used alone or in other various combinations within the principles of the present disclosure to the full extent indicated by the broad general meaning of the terms in which the appended claims are expressed.
(8) Referring to FIGS. **1-4**, in one embodiment, a bathtub assembly **100** includes a bathtub **10** and an auxiliary support bar **20** that is detachably connectable to the bathtub **10**. For young children, in order to ensure their sitting posture during bathing, the auxiliary support bar **20** can be connected to the bathtub **10**. At this time, the auxiliary support bar **20** and the bottom and side walls of the bathtub **10** form a space that can just accommodate the young child. In this way, the young child can lean against a side wall of the bathtub **10** and be restricted by the auxiliary support bar **20**, so that the young child can maintain a sitting posture. When not in use, the auxiliary support bar **20** can be removed from the bathtub **10**, especially for a bathtub that can be folded in half. That is, after removing the auxiliary support bar **20**, the bathtub can be folded in half, so that the required storage space can be reduced.
(9) With the above configuration, by connecting the auxiliary support bar **20** to the bathtub **10**, a space just large enough to accommodate a child can be formed using the auxiliary support bar **20** and the bottom and side walls of the bathtub **10**, so that the child can maintain a sitting position during bathing.
(10) In one embodiment, the auxiliary support bar **20** includes a first bar **30** and a second bar **40**. The first bar **30** has two connecting portions **31** at opposite ends, and the connecting portions **31** are to detachably connect the first bar **30** to the two sidewalls **11** of the bathtub **10**. The top end **401** of the second bar **40** is connected to the first bar **30**, and the first bar **30** and the second bar **40** are configured to form one or two through holes **50** with the bottom **12** of the bathtub **10** for the two legs of the child to pass through.
(11) In one embodiment, the first bar **30** and the second bar **40** are generally T-shaped as a whole, that is, the first bar **30** is approximately perpendicular to the second bar **40**.
(12) In one embodiment, the first bar **30** includes a body **32**, and the two connecting portions **31** are formed at opposite ends of the body **32**. Each connecting portion is an arc-shaped wall formed with a groove **33**, and the groove **33** is shaped and sized to allow the connecting portion **31** to be snapped onto the top end **110** of the sidewall **11** of the bathtub **10**. In this embodiment, the top ends **110** of the sidewalls **11** of the bathtub **10** are arc-shaped, and the shape of the grooves **33** are shaped and sized to fit the top ends **110** of the sidewall **11**, which is close to a semicircle. With such a structure, the top ends **110** of the sidewalls **11** of the bathtub **10** can be just accommodated in the grooves **33**. In addition, the arc-shaped wall forming the groove **33** is a thin wall, so that the arc-shaped wall can be slightly deformed. In this way, after the connecting portions **31** are connected to the sidewall **11** of the bathtub **10**, the arc-shaped walls are supported by the top ends **110** of the sidewall **11** and slightly deformed, so that the connecting portions **31** can be firmly fixed to the top ends **110** of the sidewall **11** of the bathtub **10**.
(13) In one embodiment, the two connecting portions **31** are respectively connected to the two opposite sidewalls **11** of the bathtub **10**, so that the first bar **30** extends from one sidewall **11** of the bathtub **10** to the other sidewall **11** opposite to the sidewall **11**. At this time, as shown in FIG. **1**, the auxiliary support bar **20**, together with the bottom and sidewalls of the bathtub **10**, form a small space to restrict the movement of the young child. The young child will be restricted by the auxiliary support bar **20** and the sidewalls of the bathtub **10** and will not fall over and cause danger.
(14) It is understandable that the means of detachably connecting the first bar **30** to the bathtub **10** is not limited to the above embodiment, and a suitable connection means can be selected from conventional connection techniques according to actual needs.
(15) In one embodiment, the body **32** includes an intermediate connecting member **34** and two connecting bars **35** connected to the left and right ends **3401** of the intermediate connecting

member **34**, and the two connecting portions **31** and the connecting bars **35** are integrally formed (for example, by injection molding).
(16) In one embodiment, the left and right ends **3401** of the intermediate connecting member **34** are both open ends, and the ends of the connecting bars **35** opposite to the connecting portions **31** are received in the left and right ends of the intermediate connecting member **34**, and then connected together by fasteners. In one embodiment, each fastener **36** includes a body **361** and a hook **362** extending from the end of the body **361**. The left and right ends **3401** of the intermediate connecting member **34** are both provided with through holes **341**, and the ends of the connecting bars **35** opposite to the connecting portions **31** are provided with a receiving hole **351**. After the ends of the connecting bars **35** opposite to the connecting portions **31** are received in the left and right ends **3401** of the intermediate connecting member **34**, the through holes **341** are aligned with the receiving holes **351**, and a user can insert the fasteners **36** into the receiving hole **351***s* after passing through the through holes **341** until the hooks **362** hook one end of each receiving hole **351**. In this way, the connecting bars **35** are detachably connected to the intermediate connecting member **34**.
(17) In one embodiment, the top end **401** of the second bar **40** is detachably connected to a bottom of the intermediate connecting member **34**. Specifically, the intermediate connecting member **34** is roughly T-shaped, having hollow left and right transverse member **342** and a vertical member **343** substantially perpendicularly connected to the transverse member **342**. The vertical member **343** is hollow, and a through hole **344** is provided in its surface. A cantilever elastic tab **345** is formed in the through hole **344**, and a protrusion **346** is formed on the free end of the elastic tab **345**. A receiving chamber **41** is defined in the top end **401** of the second bar **40**, and a through hole **42** is formed on the sidewall of the receiving chamber **41**. The bottom of the intermediate connecting member **34** (i.e., the vertical member **343**) is received in the receiving chamber **41**, and the protrusion **346** is received in the through hole **42**, so that the second bar **40** is detachably connected to the intermediate connecting member **34**.
(18) With the above-mentioned structure, the first bar **30** itself and the first bar **30** and the second bar **40** can be conveniently assembled together and can be easily disassembled when necessary.
(19) The foregoing description, for purpose of explanation, has been described with reference to specific embodiments. However, the illustrative discussions above are not intended to be exhaustive or to limit the invention to the precise forms disclosed. Many modifications and variations are possible in view of the above teachings. The embodiments were chosen and described in order to best explain the principles of the invention and its practical applications, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated.

Claims

1. An auxiliary support bar for a bathtub comprising: a first bar having opposite ends that are detachably connectable to two sidewalls of the bathtub; and a second bar having a top end that is connected to the first bar, wherein the first bar and the second bar are configured to form at least one through hole with a bottom of the bathtub for legs of a baby to pass through; wherein the first bar comprises a body and two connecting portions arranged at opposite ends of the body, and each of the connecting portions is an arc-shaped wall defining a groove, and the grooves are configured to allow the connecting portions to be engaged with top ends of the sidewalls of the bathtub; wherein the body comprises an intermediate connecting member and two connecting bars connected to a left end and a right end of the intermediate connecting member, and the two connecting bars and the connecting portions are integrally formed; wherein the top end of the second bar is detachably connected to the intermediate connecting member; wherein the top end of the second bar defines a receiving chamber having a sidewall that defines a through hole, the

intermediate member comprises a vertical member that comprises an elastic tab, the elastic tab comprises a protrusion, the vertical member is received in the receiving chamber, the protrusion is received in the through hole of the sidewall of the receiving chamber, thereby detachably connecting the second bar to the intermediate member.

2. A bathtub assembly comprising: a bathtub having two sidewalls; and an auxiliary support bar comprising: a first bar having opposite ends that are detachably connectable to the two sidewalls of the bathtub; and a second bar having a top end that is connected to the first bar, wherein the first bar and the second bar are configured to form at least one through hole with a bottom of the bathtub for legs of a baby to pass through; wherein the top end of the second bar defines a receiving chamber having a sidewall that defines a through hole, the first bar comprises a vertical member that comprises an elastic tab, the elastic tab comprises a protrusion, the vertical member is received in the receiving chamber, the protrusion is received in the through hole of the sidewall of the receiving chamber, thereby detachably connecting the second bar to the first bar.

3. The bathtub assembly of claim 2, wherein the first bar comprises a body and two connecting portions arranged at opposite ends of the body, and each of the connecting portions is an arc-shaped wall defining a groove, and the grooves are configured to allow the connecting portions to be engaged with top ends of the sidewalls of the bathtub.

4. The bathtub assembly of claim 3, wherein the body comprises an intermediate connecting member and two connecting bars connected to a left end and a right end of the intermediate connecting member, and the two connecting bars and the connecting portions are integrally formed.

5. The bathtub assembly of claim 4, wherein the top end of the second bar is detachably connected to the intermediate connecting member, and the intermediate connecting member comprises the vertical member.

6. A bathtub assembly comprising: a bathtub having two sidewalls; and an auxiliary support bar comprising: a first bar having opposite ends that are detachably connectable to the two sidewalls of the bathtub; and a second bar having a top end that is connected to the first bar, wherein the first bar and the second bar are configured to form at least one through hole with a bottom of the bathtub for legs of a baby to pass through; wherein the top end of the second bar defines a receiving chamber, the first bar comprises a vertical member, the vertical member is received in the receiving chamber, the vertical member is detachably connected to a sidewall of the receiving chamber in a snap-fit manner, thereby detachably connecting the second bar to the first bar.