



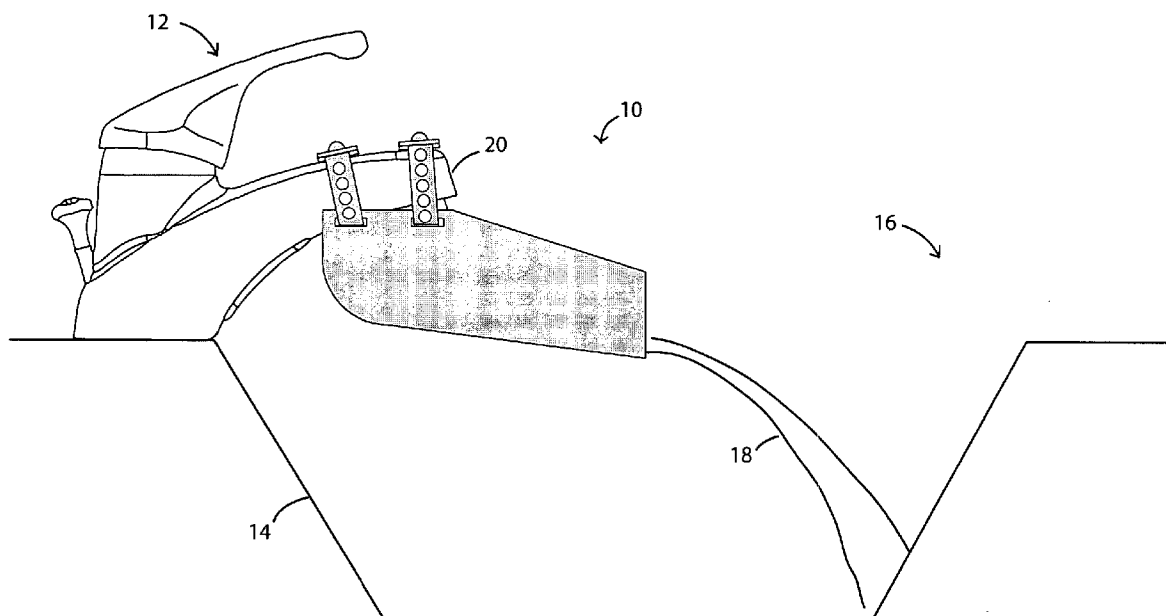
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(19) **United States**(12) **Patent Application Publication** (10) **Pub. No.: US 2007/0175531 A1****Daniels**(43) **Pub. Date:****Aug. 2, 2007**(54) **WATER SPOUT EXTENDER FOR A SINK****Publication Classification**(76) Inventor: **Dorothy Daniels**, Darien, IL (US)(51) **Int. Cl.**
E03C 1/04 (2006.01)(52) **U.S. Cl.** **137/801**

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(57) **ABSTRACT**

An apparatus is provided for use by a child or disabled person in a sink with a faucet. The apparatus includes the faucet that controls water delivered to the sink through a water spout and a water transfer conduit that is attached to and wholly supported by the water spout, said water transfer conduit catching water falling from the water spout and laterally delivering the water to an area adjacent a user side of the sink.

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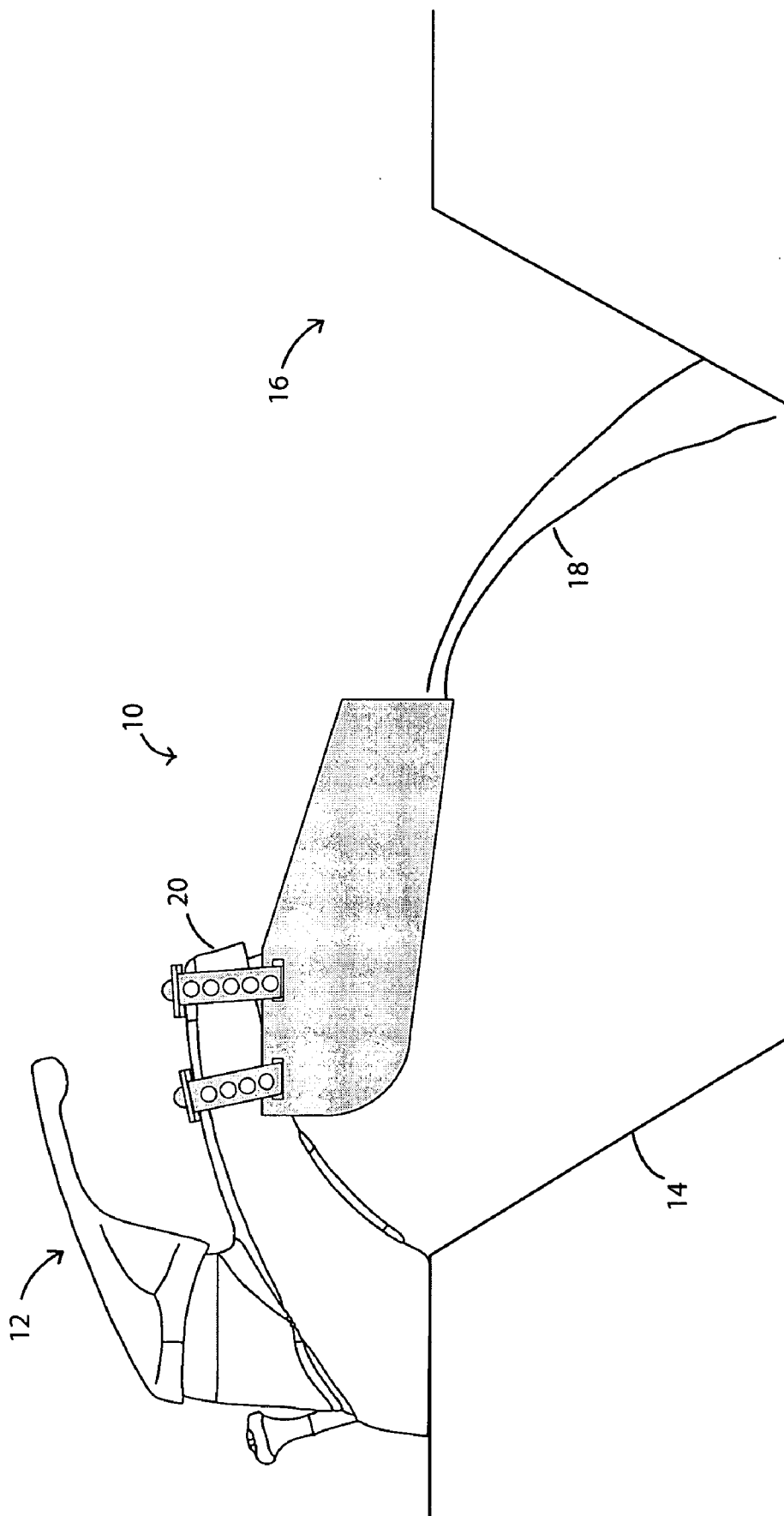


FIG. 1

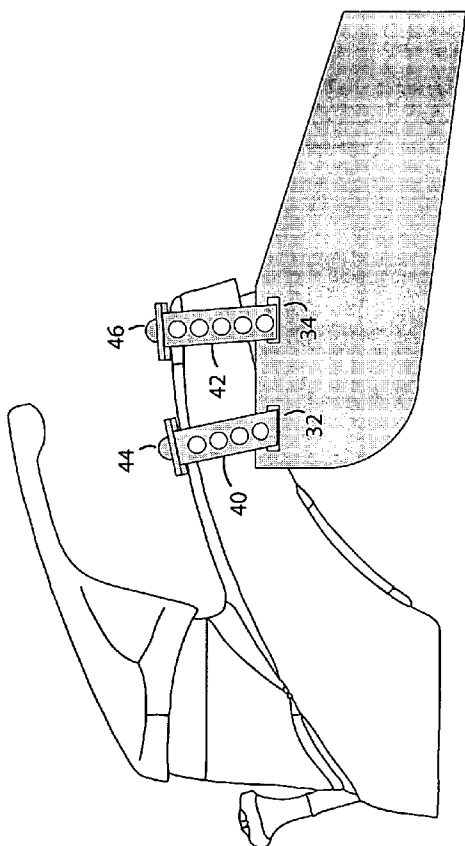


FIG. 2a

SIDE VIEW - FAUCET EXTENDER ATTACHED TO SINGLE HANDLE FAUCET

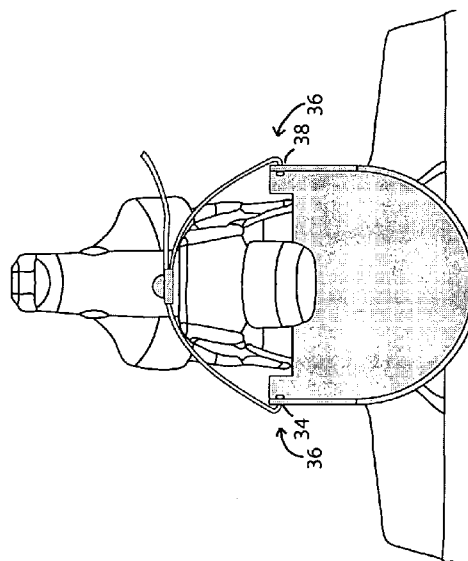


FIG. 2b

FRONT VIEW - FAUCET EXTENDER ATTACHED TO SINGLE HANDLE FAUCET

FAUCET EXTENDER NO FLANGE

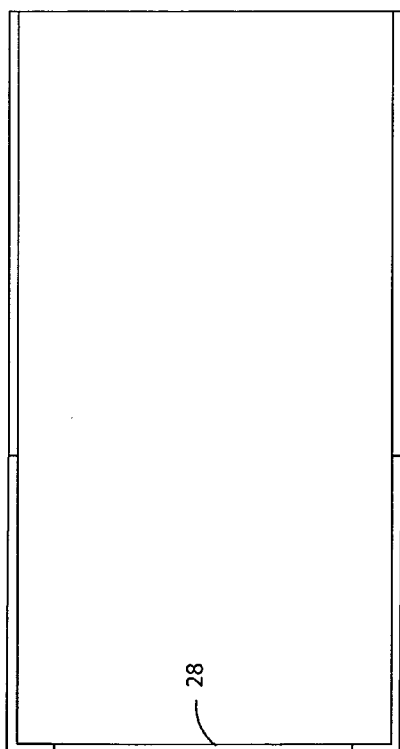


FIG. 3a - TOP VIEW

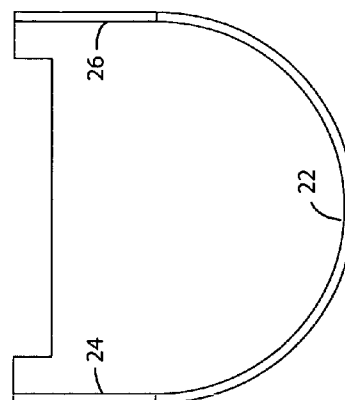


FIG 3c - FRONT VIEW

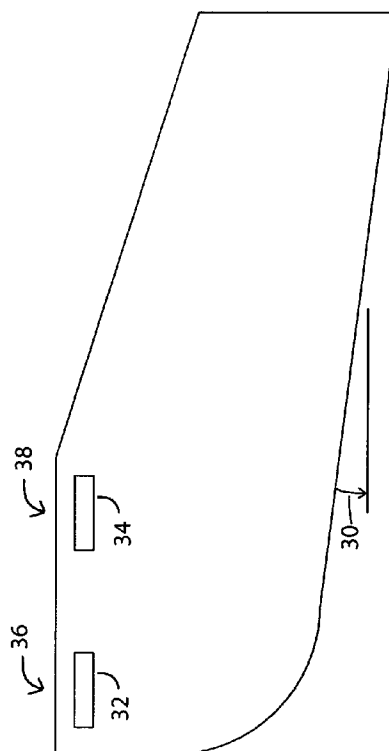


FIG 3b - SIDE VIEW

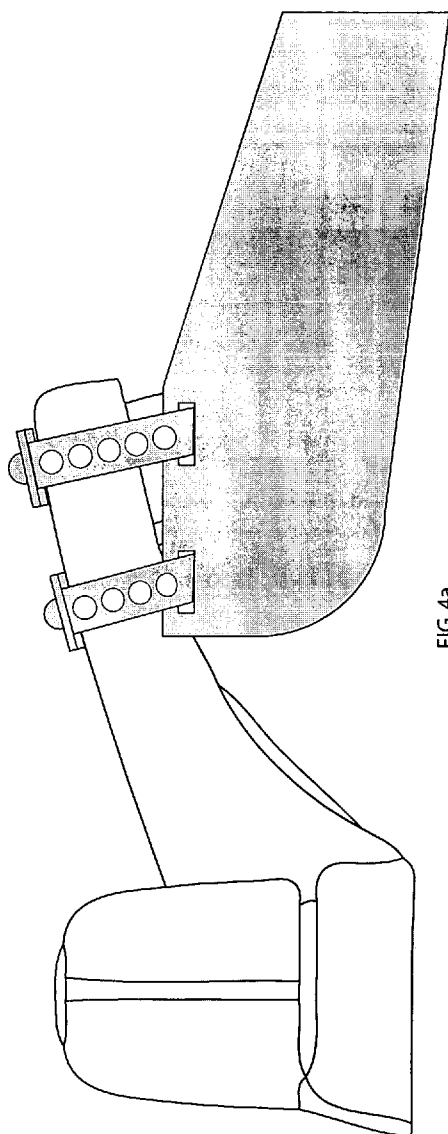


FIG. 4a

SIDE VIEW - FAUCET EXTENDER ATTACHED TO TWO HANDLE FAUCET

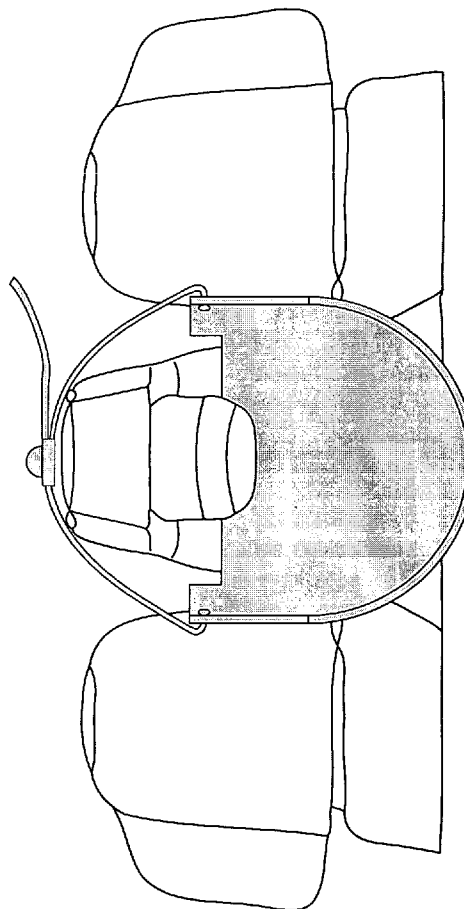


FIG. 4b

FRONT VIEW - FAUCET EXTENDER ATTACHED TO TWO HANDLE FAUCET

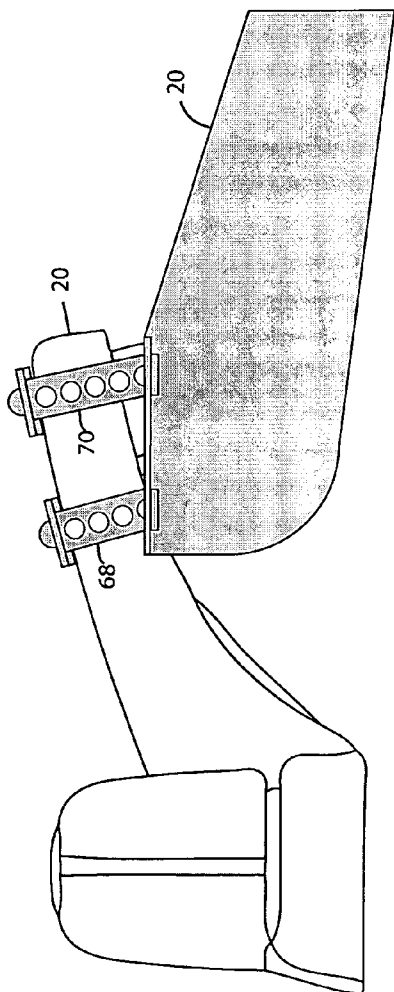


FIG. 5a

SIDE VIEW - FAUCET EXTENDER WITH FLANGE ATTACHED TO TWO HANDLE FAUCET

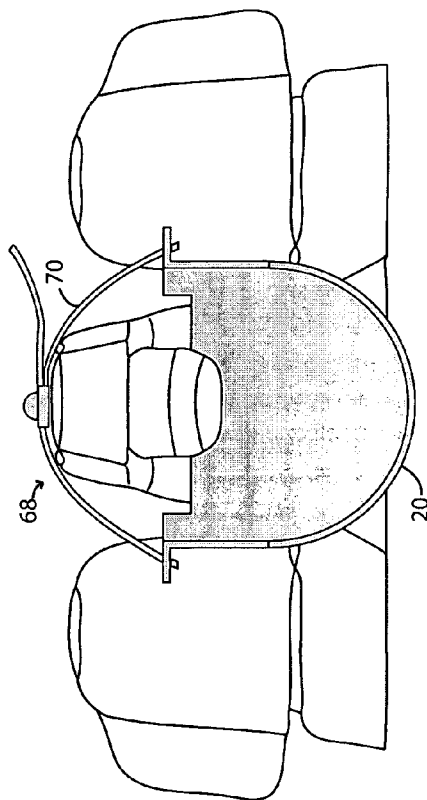


FIG. 5b

FRONT VIEW - FAUCET EXTENDER WITH FLANGE ATTACHED TO TWO HANDLE FAUCET

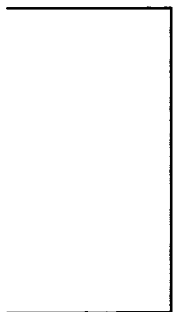


FIG. 7

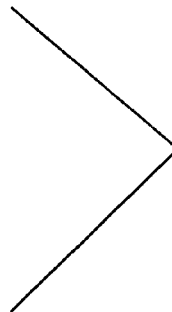


FIG. 8

FAUCET EXTENDER WITH FLANGE

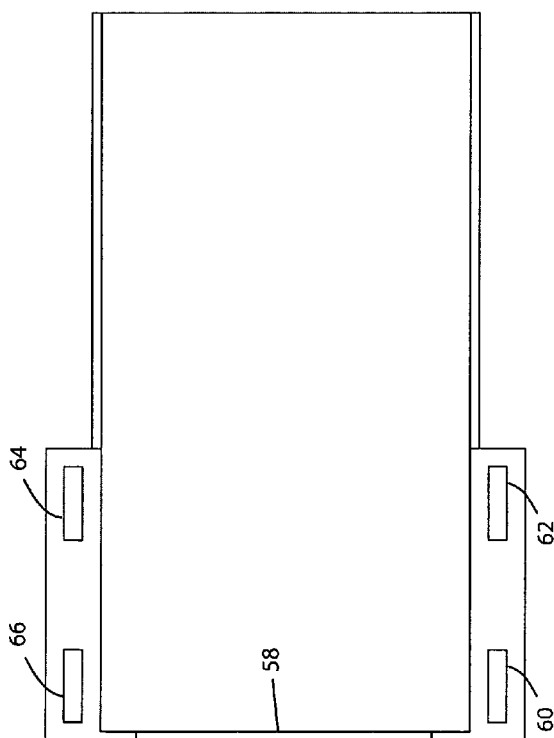


FIG. 6a

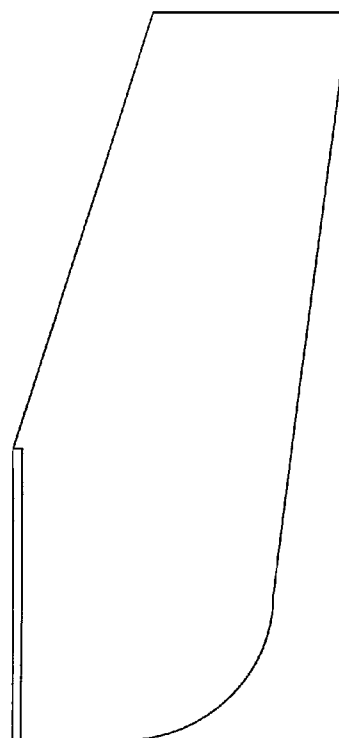


FIG. 6b

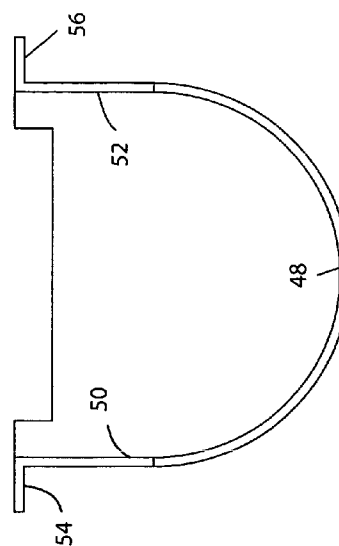


FIG. 6c

WATER SPOUT EXTENDER FOR A SINK**FIELD OF THE INVENTION**

[0001] The field of the invention relates to devices that facilitate hand-washing for small children or the disabled.

BACKGROUND OF THE INVENTION

[0002] Residential sinks are constructed for the ease of use by the buyer. Such sinks are usually supported by a cabinet of a height and depth that is convenient for the average adult. In most instances the cabinet is located along a wall.

[0003] The faucet is typically located along a back of the sink along the wall. The faucet is usually provided with one or more control handles for the control of water flow and a water spout that extends upwards over the sink for the discharge of water.

[0004] Often the water spout is relatively short and does not extend very far into a basin of the sink. The reason for the shortness of the spout is to maximize the area and utility of the sink and to minimize splash. The water spout of the faucet is typically directed outwards to direct water towards the user and to allow any unused water to fall towards a center of the sink.

[0005] While faucets have been optimized for the average user, sinks are often not particularly easy to use by a small child or disabled person to use. Accordingly, a need exists for a means for simplifying the use of sinks by small children and the disabled.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] FIG. 1 depicts a faucet extender shown in a context of use in accordance with an illustrated embodiment of the invention;

[0007] FIGS. 2a-b show side and front views of the faucet of FIG. 1;

[0008] FIGS. 3a-c show top, side and end view of the faucet extender of FIG. 1;

[0009] FIGS. 4a-b show an alternate embodiment of the faucet and extender of FIG. 1;

[0010] FIGS. 5a-b show the extender of FIG. 1 under an alternate embodiment;

[0011] FIGS. 6a-c show top, side and end views of the extender of FIGS. 5a-b;

[0012] FIG. 7 shows an alternate embodiment of the extender of FIG. 1; and

[0013] FIG. 8 shows an alternate embodiment of the extender of FIG. 1.

SUMMARY

[0014] According to one of the teachings of the present invention, an apparatus is provided for use by a child or disabled person in a sink with a faucet that controls water delivered to the sink through a water spout. The apparatus includes a water transfer conduit that is attached to and wholly supported by the water spout, said water transfer conduit catching water falling from the water spout and laterally delivering the water to an area adjacent a user side of the sink.

[0015] According to another teaching of the present invention, there is provided in a water conduit for use with a faucet wherein the water transfer conduit further comprises an open channel having a bottom and opposing elevated sides that extend from the spout to the user side.

[0016] According to still another teaching of the present invention, there is provided in a water conduit for use with a faucet wherein the bottom and sides further comprise a V-shaped cross-section.

[0017] According to still another teaching of the present invention, there is provided in a water conduit for use with a faucet wherein the bottom and sides further comprise a circular cross-section.

[0018] According to still another teaching of the present invention, there is provided in a water conduit for use with a faucet wherein the water transfer conduit further comprises a water backflow barrier that connects to the bottom and opposing sides on a spout end of the water transfer conduit.

[0019] According to still another teaching of the present invention, there is provided in a water conduit for use with a faucet wherein water transfer conduit further comprises a downward incline from the spout to the user side.

[0020] According to still another teaching of the present invention, there is provided in a water conduit for use with a faucet further comprising a strap with opposing ends of the strap connected to opposing sides of the water transfer conduit at a location proximate a distal end of the spout and where the strap extends over the spout.

[0021] According to still another teaching of the present invention, there is provided in a water conduit for use with a faucet further comprising first and second straps with opposing ends of each strap connecting to the opposing sides of the water transfer conduit, said first strap located at a facet end of the water spout and said second strap located proximate a distal end of the spout, with the first and second straps extending over the spout.

DETAILED DESCRIPTION OF AN ILLUSTRATED EMBODIMENT

[0022] FIG. 1 shows a faucet extender (water transfer conduit) 10, in a context of user, generally in accordance with an illustrated embodiment of the invention. Under the illustrated embodiment, the extender 10 attaches to and is fully supported by the faucet 12. The extender 10 functions to catch water falling from the faucet 12 and to deliver the water 18 to a user's side 16 of the sink 14.

[0023] The extender 10 allows small children (with arms too short to reach the spout 20) to have full access to the water 18 without help from an adult for any of a number of necessary tasks (e.g., hand washing, teeth brushing, etc.). The extender also has utility for disabled persons (i.e., people in wheelchairs) who cannot easily reach the faucet side of the sink.

[0024] FIGS. 2a-b show top and side view of the faucet 12 and extender 10 of FIG. 1. FIGS. 3a-c show top, side and end view of the extender 10 of FIGS. 1 and 2.

[0025] As may be noted from FIG. 3c, the extender 10 may generally have a hemispherical cross section that includes a bottom 22 and a top 24. The bottom 22 is

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sidewalls **24**, **26**. A water backflow barrier **28** may be provided on the faucet end of the extender **10** that connects the bottom **22** and sidewalls **24**, **26** and that prevents water from flowing backwards, towards the faucet.

[0026] The bottom **22** may be angled downwards by an appropriate angle **30**. The angle **30** may be selected to provide a relatively rapid flow without splashing.

[0027] The tops of the sides **24**, **26** may also be angled downward. The downward angle in this regard may be selected simply for aesthetics.

[0028] Also included along the sides **24**, **26** near the faucet end of the extender **10** may be a number of slotted openings **32**, **34**, **36**, **38**. Attached to these openings may be a first and a second strap **40**, **42**.

[0029] The straps **40**, **42** may extend over a top of the spout **20**. The straps **40**, **42** may be adjustable using a set of screws **44**, **46** to accommodate different size spouts **20** and to allow for easy removal of the extender **10**. The front strap **42** may be adjusted to increase or decrease the angle **30** of the extender **10**.

[0030] In another embodiment, only a first strap **42** is used to attach and support the extender **10** from the spout **20**. In this embodiment, the strap **42** attaches to the top of the spout **20**. Since most of the weight of the extender **10** is towards the right (i.e., on the user side **16**), the discharge end of the extender **10** would tend to tilt downward causing the backflow barrier **28** to abut a bottom side of the spout **20** resulting in a stable mounting arrangement.

[0031] FIGS. **4a-b** show front and side views of the extender **10** with a double handle faucet. As may be noted from FIGS. **4a-b**, the extender **10** may be used with any of a number of different faucet configurations.

[0032] FIGS. **5a-b** shows the extender **10** of FIG. **1** under an alternate embodiment (now labeled **20**). FIGS. **6a-c** show top, side and end views of the extender of FIGS. **5a-b**.

[0033] The extender **20** of FIGS. **6a-c** includes a bottom **48** and upright opposing sides **50**, **52** and a backflow barrier **58** that are similar to previous embodiments. However, the extender **20** also includes a set of flanges **54**, **56**.

[0034] The flanges **54**, **56** are provided with a set of elongated slots **60**, **62**, **64**, **66**. As with previous embodiments, opposing ends of a pair of straps **68**, **70** may be attached to the slots **60**, **62**, **64**, **66**. The straps **68**, **70**, in turn may be used to attach the extender **20** to the spout **20**.

[0035] FIGS. **7** and **9** show additional cross-sections that may be used for the extenders **10**, **20**. As shown in FIG. **7**, the cross-section of the bottoms **22**, **48** may be rectangular. Alternatively, the cross-sections may be triangular as shown in FIG. **9**.

[0036] It should be noted that the extender **10**, **20** is specifically intended to operate at atmospheric pressure and not at the pressure of the faucet or at any pressure above atmospheric pressure. This is because the gentle flow of water from the slightly inclined extender **10**, **20** prevents splashing and encourages children to practice good hygiene.

[0037] A specific embodiment of a faucet extender has been described for the purpose of illustrating the manner in which the invention is made and used. It should be under-

stood that the implementation of other variations and modifications of the invention and its various aspects will be apparent to one skilled in the art, and that the invention is not limited by the specific embodiments described. Therefore, it is contemplated to cover the present invention and any and all modifications, variations, or equivalents that fall within the true spirit and scope of the basic underlying principles disclosed and claimed herein.

1. An apparatus for use by a child or disabled person in a sink with a faucet that controls water delivered to the sink through a water spout, said apparatus comprising a water transfer conduit that is attached to and wholly supported by the water spout, said water transfer conduit catching water falling from the water spout and laterally delivering the water to an area adjacent a user side of the sink.

2. The apparatus as in claim 1 wherein the water transfer conduit further comprises an open channel having a bottom and opposing elevated sides that extend from the spout to the user side.

3. The apparatus as in claim 2 wherein the bottom and sides further comprise a V-shaped cross-section.

4. The apparatus as in claim 2 wherein the bottom and sides further comprise a circular cross-section.

5. The apparatus as in claim 2 wherein the water transfer conduit further comprises a water backflow barrier that connects to the bottom and opposing sides on a spout end of the water transfer conduit.

6. The apparatus as in claim 2 wherein water transfer conduit further comprises a downward incline from the spout to the user side.

7. The apparatus as in claim 2 further comprising a strap with opposing ends of the strap connected to opposing sides of the water transfer conduit at a location proximate a distal end of the spout and where the strap extends over the spout.

8. The apparatus as in claim 2 further comprising first and second straps with opposing ends of each strap connecting to the opposing sides of the water transfer conduit, said first strap located at a facet end of the water spout and said second strap located proximate a distal end of the spout, with the first and second straps extending over the spout.

9. In a sink with a faucet that controls water delivered to the sink through a water spout, the improvement residing in a water transfer conduit that is attached to and wholly supported by the water spout, said water transfer conduit catching water falling from the water spout and laterally delivering the water to an area adjacent a user side of the sink.

10. The apparatus as in claim 9 wherein the water transfer conduit further comprises an open channel having a bottom and opposing elevated sides that extend from the spout to the user side.

11. The apparatus as in claim 10 wherein the bottom and sides further comprise a V-shaped cross-section.

12. The apparatus as in claim 10 wherein the bottom and sides further comprise a circular cross-section.

13. The apparatus as in claim 10 wherein the water transfer conduit further comprises a water backflow barrier that connects to the bottom and opposing sides on a spout end of the water transfer conduit.

14. The apparatus as in claim 10 wherein water transfer conduit further comprises a downward incline from the spout to the user side.

15. The apparatus as in claim 10 further comprising a strap with opposing ends of the strap connected to opposing

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sides of the water transfer conduit at a location proximate a distal end of the spout and where the strap extends over the spout.

16. The apparatus as in claim 10 further comprising first and second straps with opposing ends of each strap con-

necting to the opposing sides of the water transfer conduit, said first strap located at a facet end of the water spout and said second strap located proximate a distal end of the spout, with the first and second straps extending over the spout.

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