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DISCHARGE DIRECTION CONTROL FOR A HYDRO-MASSAGE UNIT

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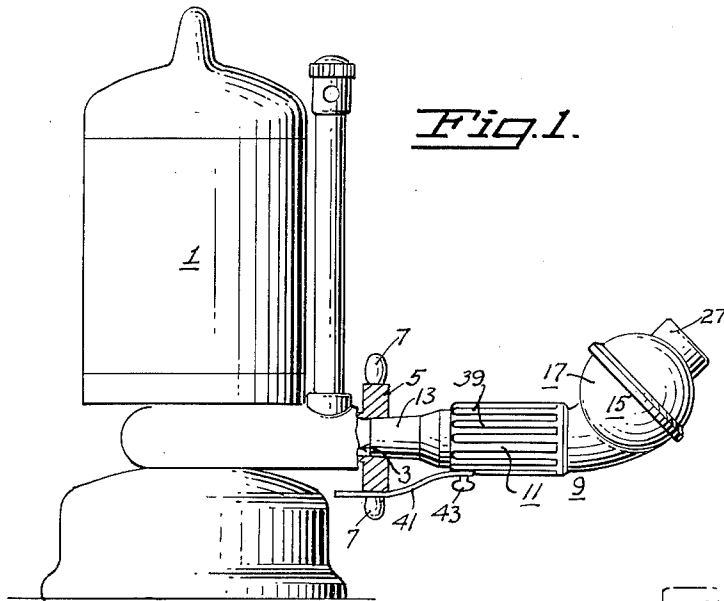


Fig. 1.

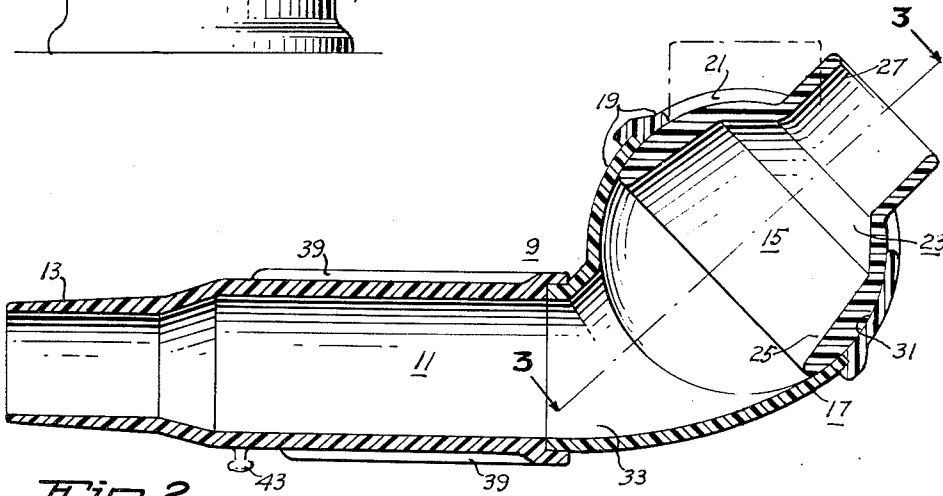


Fig. 2.

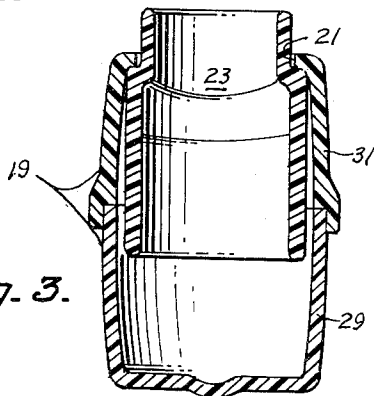


Fig. 3.

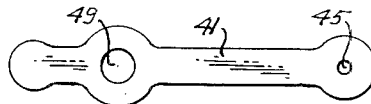


Fig. 4.

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**DISCHARGE DIRECTION CONTROL FOR A
HYDRO-MASSAGE UNIT**

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3 Claims. (Cl. 128-66)

My invention relates to hydro-massage apparatus and more particularly to a discharge direction control for a hydro-massage unit.

Among the objects of my invention are:

(1) To provide a novel and improved discharge direction control for a hydro-massage unit;

(2) To provide a novel and improved discharge direction control for a hydro-massage unit, which is of light weight and readily manipulated;

(3) To provide a novel and improved discharge direction control for a hydro-massage unit, which is structurally simple and economical to fabricate.

Additional objects of my invention will be brought out in the following description of a preferred embodiment of the same, taken in conjunction with the accompanying drawings, wherein:

FIG. 1 is a view in elevation of a hydro-massage unit with the discharge directional control of the present invention installed therein;

FIG. 2 is a longitudinal view in section through the discharge direction control of the present invention;

FIG. 3 is a view in section taken in the plane 3-3 of FIG. 2;

FIG. 4 is a view in plan of a restraining element employed in the present invention.

Referring to the drawings for details of my invention in its preferred form, the same is for application to a hydro-massage unit 1 having a substantially cylindrical discharge passageway 3, the discharge flow through which may be controlled by a hand wheel 5 formed with a plurality of peripheral spokes 7.

The discharge direction control 9 comprises a neck section 11 having one end 13 slightly tapered to provide a snug friction fit into the discharge passageway 3 of the hydro-massage unit, while at its other end, the neck section terminates in a directional nozzle head assembly 15 involving an enlarged substantially cylindrical housing 17 having a cylindrical wall 19 with an opening 21 therein.

A directional nozzle 23 having an enlarged end 25 and a discharge end 27, is rotatably anchored in the housing by enclosing the enlarged end 25 within the housing and permitting the discharge end 27 of the nozzle to extend through the housing opening 21 which is larger than the cross-section of the discharge end to permit angular movement of the directional nozzle.

The discharge directional control is preferably fabricated of plastic, in which case, the housing 17 may be fabricated of two interfitting half sections 29, 31, the one half section 29 having a tangential entrance passageway 33 adapted to interfit with the proximate end of the neck portion 11 and be affixed thereto.

The remaining half section 31, is provided with the opening 21 for the directional nozzle 23 and is affixed to the first half section following the positioning of the enlarged end of the directional nozzle within the first half section of the housing as previously described. The directional nozzle is thus capable of being angularly adjusted through an arc determined by the extent of the opening 21 through which the directional nozzle protrudes.

To facilitate the insertion of the tapered end of the neck portion into the discharge passageway of the hydro-massage unit, the neck portion is preferably provided with a plurality of longitudinal ribs 39 about the surface

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thereof to permit firm grasping with the fingers of the hand.

To thereafter restrain the discharge direction control from dislodgement when exposed to the pressure from the discharge of water from the hydro-massage unit there-through, a restraining element 41 is employed which forcibly holds the discharge direction control in its installed position on the hydro-massage unit. For this purpose, the neck portion 11 of the discharge directional control is formed with a teat or button 43 on the external surface thereof. The restraining element which is preferably formed of a strip of elastic material which is provided with a hole at one end adapted to snugly fit over the teat or button 45, while at another location on the restraining element, preferably spaced somewhat from the end, the restraining element is formed with a hole 49 sufficiently large to snugly receive one of the spokes 7 of the handwheel, the distance between the holes in the restraining strip being such as to necessitate a slight stretching thereof in order to anchor it at each end in the manner indicated.

The directional nozzle in the embodiment as described, is capable of angular adjustment in one plane, but the plane in which such nozzle is adjusted, may if desired, be altered either by angularly rotating the neck portion in the passageway of the hydro-massage unit or by angularly rotating the handwheel of the unit, which although normally utilized in controlling the rate of discharge, will not materially affect the rate of discharge within the small angular movement necessary for angularly adjusting the discharge directional control as a unit assembly.

From the foregoing description of my invention in its preferred form, it will be apparent that the same will fulfill all the objects of my invention, and while I have illustrated and described the same in its preferred form and in considerable detail, the invention, as illustrated and described, is subject to alteration and modification without departing from the underlying principles involved, and I accordingly do not desire to be limited in my protection to such details of construction as I have illustrated and described, except as may be necessitated by the appended claims.

I claim:

1. In combination, a hydro-massage unit having a substantially cylindrical discharge passageway and a spoked handwheel control for said passageway; a discharge direction control comprising a neck section having one end slightly tapered and adapted to provide a snug friction fit into said discharge passageway and a teat on the outer surface of said neck section and spaced from said end; a directional nozzle head assembly involving an enlarged housing having a wall with an opening therein and a directional nozzle having an enlarged end rotatably contained within said housing, and a discharge end extending through said housing opening, said opening being larger than the crosssection of said discharge end to permit angular movement of said directional nozzle, and means for positively urging said neck section toward maintaining such friction fit during application and use of said control with such hydro-massage unit, said means including a strip of elastic material under tension with one end anchored to said teat and the other end anchored to said spoked wheel.

2. A discharge direction control for a hydro-massage unit having a substantially cylindrical discharge passageway and a spoked handwheel control for said passageway, said discharge direction control comprising a neck section having one end adapted to provide a substantially water tight fit to said discharge passageway and a teat on the outer surface of said neck section and spaced from said end; a directional nozzle head assembly at its other

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end, said directional nozzle head assembly involving an enlarged substantially cylindrical housing having a cylindrical wall with an opening therein and a directional nozzle having an enlarged end rotatably contained within said housing, and a discharge end extending through said housing opening, said opening being larger than the cross-section of said discharge end to permit angular movement of said directional nozzle; and means for positively urging said neck portion toward such water tight fit with said discharge passageway during application and use of said discharge direction control with such hydro-massage unit, said means including a strip of elastic material having one end adapted to anchor to said teat and its other end adapted to anchor to a spoke on said handwheel, said strip of elastic material being of an effective length less than the distance between said teat and said spoked wheel in the assembled position of said discharge direction control, to require stretching of said strip to install the same.

3. A discharge direction control for a hydro-massage unit having a substantially cylindrical discharge passageway and a spoked handwheel control for said passageway, said discharge direction control comprising a neck section having one end slightly tapered to provide a snug friction fit into said discharge passage; a directional nozzle head assembly at its other end, said directional nozzle

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head assembly involving an enlarged substantially cylindrical housing having a cylindrical wall with an opening therein and a directional nozzle having an enlarged end rotatably contained within said housing, and a discharge end extending through said housing opening, said opening being larger than the cross-section of said discharge end to permit angular movement of said directional nozzle; and means for restraining said neck portion from dislodgement from said discharge passageway during use of said discharge direction control, said means comprising an external teat on said neck portion, and a strip of elastic material having a hole at one end to receive said teat and a hole at another location to receive a spoke of said handwheel, the spacing between said holes being such as to necessitate some stretching of said strip to install the same.

References Cited in the file of this patent

UNITED STATES PATENTS

1,982	Barrett	Feb. 18, 1841
245,007	Morse	Aug. 2, 1881
461,751	Goldman	Oct. 20, 1891

FOREIGN PATENTS

496,975	Great Britain	Dec. 9, 1938
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