March 3, 1936. C. E. BROWN 2,033,023

FOOT POWER BATH APPLIANCE

Filed June 20, 1935

Fig. 1.

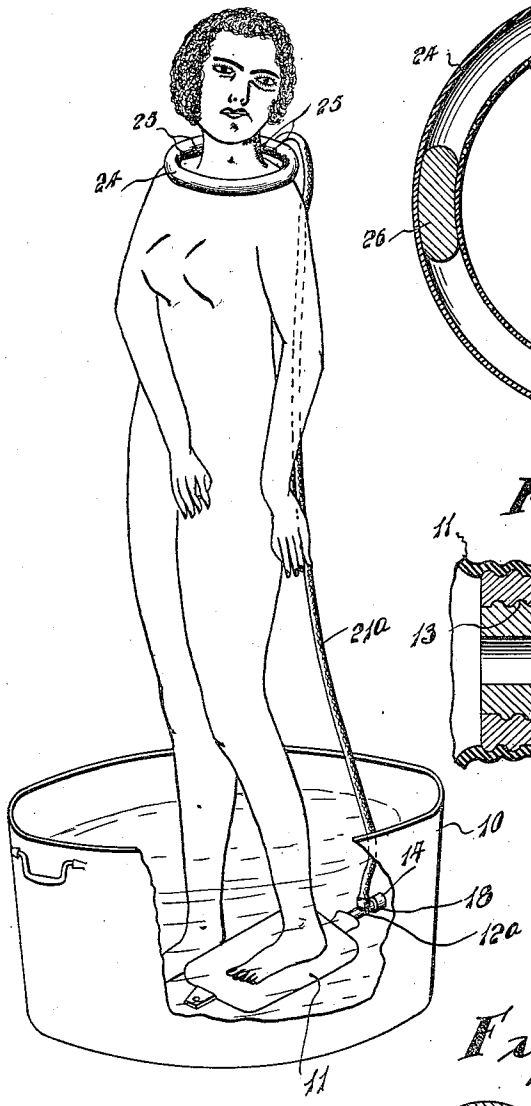


Fig. 2.

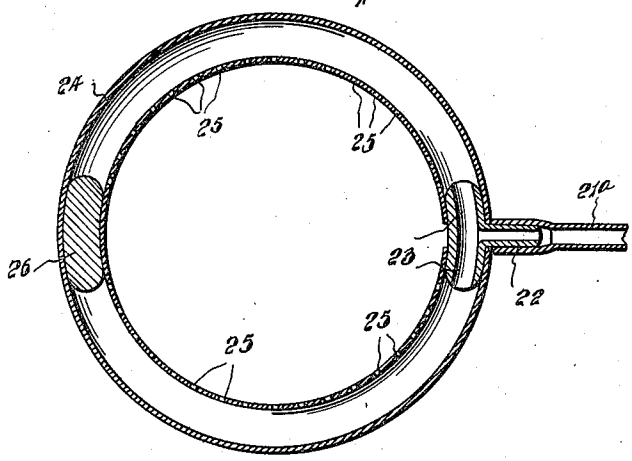


Fig. 3.

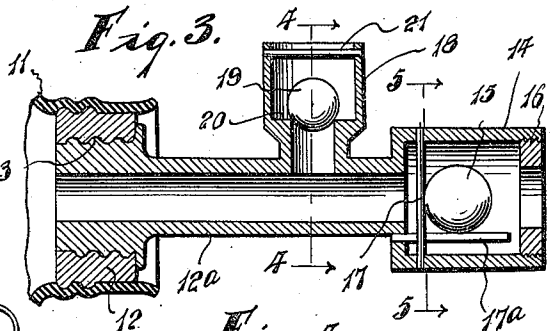


Fig. 4.

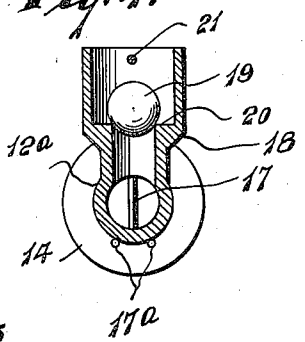
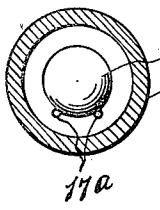


Fig. 5.



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FOOT POWER BATH APPLIANCE

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Application June 20, 1935, Serial No. 27,599

3 Claims. (Cl. 4—156)

This invention relates to an appliance operable by a foot of the bather, to produce a shower, especially when bathing in a washtub, thus avoiding the necessity of the bather unnecessarily twisting and distorting the body during the act of bathing.

It is particularly aimed to provide a construction also which leaves both hands free for the application of soap, rubbing, and massaging.

It is further aimed to provide such a construction which utilizes an element operable by the foot which may also serve as a hot water bag or fountain syringe, when hose pipe and nozzle are added, and to which a pipe is attachable by means of a two-way valve connection and which in turn leads to a spray ring disposed about the neck of the bather and if necessary, counterweighted to remain in effective position.

The more specific objects and advantages will become apparent from a consideration of the description following taken in connection with the accompanying drawing illustrating an operative embodiment.

In said drawing:—

Figure 1 is a view in perspective showing the device in use;

Figure 2 is a horizontal sectional view through the spray ring;

Figure 3 is an enlarged longitudinal sectional view through the valved connection employed,

Figure 4 is a vertical sectional view taken on the line 4—4 of Figure 3, and

Figure 5 is a sectional detail on the line 5—5 of Figure 3.

Referring specifically to the drawing wherein like reference characters designate like or similar parts, 10 designates a conventional washtub such as is still used in many homes not equipped with more modern bathing apparatus. It is an object of the invention to provide a means whereby a shower may be produced over the bather by foot power.

Resting on the bottom of the tub 10 is a water receptacle 11 of collapsible rubber construction, preferably having its upper and lower walls harder or reinforced over the side walls. Attached to the screw-threaded rings 12 at the entrance of said bag or receptable 11 a pipe connection 12^a is detachably screw-threaded at 13. Such pipe connection at one end 14 is adapted for communication with the interior of the tub 10 to receive water therethrough, being adapted to be closed at times by a ball valve 15 engageable against a removable annular seat or ring 16, to prevent the escape of water. The opening movement of valve 15 is limited by a pin 17, and 17^a designates spaced horizontal rods or pins to support valve 15 in position to engage in the opening in ring 16.

Said pipe 12^a has an outlet nipple 18 in which a ball valve 19 is disposed, engageable against a seat at 20, and held against opening displacement by a pin 21.

A flexible rubber or other tubing 21^a is dilated at one end and removably applied over the nipple 18. At the other end, such tube 21^a is dilated and applied over a nipple 22, which is hollow and of T-shape, the remaining branches 23 thereof, removably receiving the free ends of a soft rubber spray ring 24. Such ring 24, at the inner portion thereof as at 25 has various spray orifices. Such ring 24 also may be counterweighted as at 26, if desired, so that it will better remain in operative position.

In the operation of the device, the bag 11 expands as water rushes into the same within the tub 10, past the valve 15. The foot engaging the bag is alternately lowered and raised, to receive and expel water from the bag. When the water is received, the valve 19 remains closed while the valve 15 is opened. When the foot is depressed to expel the water, the valve 15 automatically closes while the valve 19 automatically opens, enabling the water to gradually rise through the pipe 21^a, into the ring 24 and escape through the orifices 25 to produce a spray.

In manufacturing the device, the valve 15 and end 14 are preferably much larger than the valve 19 and seat 20 to facilitate the intake of the water, and the capacity of the spray ring 24 is relatively great with respect to the supply of water so that there will be a continuous spray through the orifices 25, although at less pressure, even during the collapse of the bag 11, between pumping movements.

Particular attention is called to the fact that the bag 11 may be or serve as a hot water bag, and also as a fountain syringe, in the latter instance with the addition of the necessary hose and nozzle. Such bag 11 therefore is adapted to three different uses, namely as a shower bath device, according to the invention, and also as a hot water bag and fountain syringe as pointed out.

Various changes may be resorted to provided they fall within the spirit and scope of the invention.

What is claimed is:—

1. In a shower bath appliance, a tubular member provided with a threaded extremity to engage an internally threaded nozzle on a collapsible bag,

oppositely opening valves in said tubular member for ingress and egress of water into and from the bag, the valve controlling egress of the water being contained in a nipple on said tubular member adapted to be connected to a shower bath spray.

2. A shower bath device of the class described comprising a collapsible bag having an inlet provided with internal screw-threads, a pipe having screw-threads detachably engaging the first mentioned screw-threads, oppositely opening valves in said pipe to permit water to enter said bag and to be expelled through foot pressure on the bag, and a spray device connected to the pipe.

3. A shower bath device of the class described comprising a collapsible bag having an inlet provided with internal screw-threads, a pipe having screw-threads detachably engaging the first mentioned screw-threads, oppositely opening valves in said pipe to permit water to enter said bag and to be expelled through foot pressure on the bag, said pipe being open at both ends with one of said valves located adjacent one end thereof, a nipple on said pipe containing the other valve, and a spray device connected to the nipple.

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