United States Patent

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[45] Patented **Aug. 11, 1970**

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[54] **HYDROTHERAPEUTIC APPARATUS FOR A BATHTUB**
17 Claims, 19 Drawing Figs.

[52] **U.S. Cl.** **128/66**
[51] **Int. Cl.** **A61h 9/00**
[50] **Field of Search** 128/65, 66, 24.1; 4/178, 180

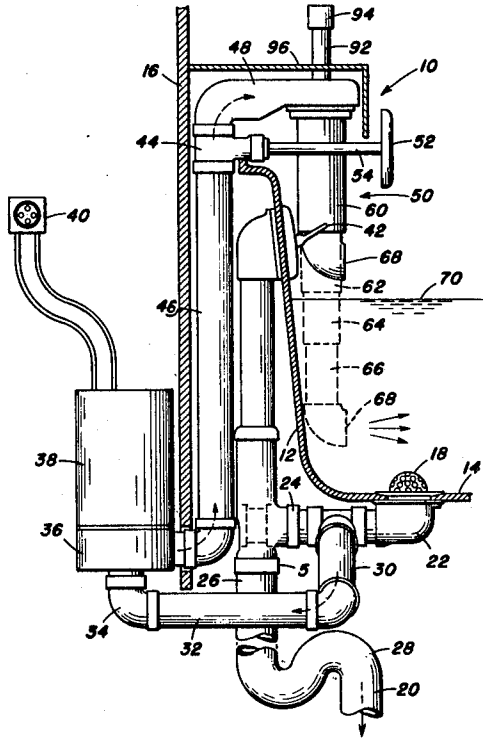
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Primary Examiner— L. W. Trapp
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ABSTRACT: A hydrotherapeutic apparatus for use with a bathtub and the like comprising a plurality of telescoping tubes having an outlet to provide a snorkel. The tubes are movable between an extended position and an elevated position, wherein the outlet is spaced above the water-line of the tub to provide an efficient device which may be raised easily to prevent clogging of the snorkel when the apparatus is not in use and to allow the entire space within the tub to be used for conventional bathing. The apparatus further includes a drain, conduit means connecting the snorkel with the drain, and a pump in the conduit means for withdrawing water from the bathtub and for ejecting it under pressure from the outlet. Air-regulating means are provided for varying the whirlpool action of the circulating water.



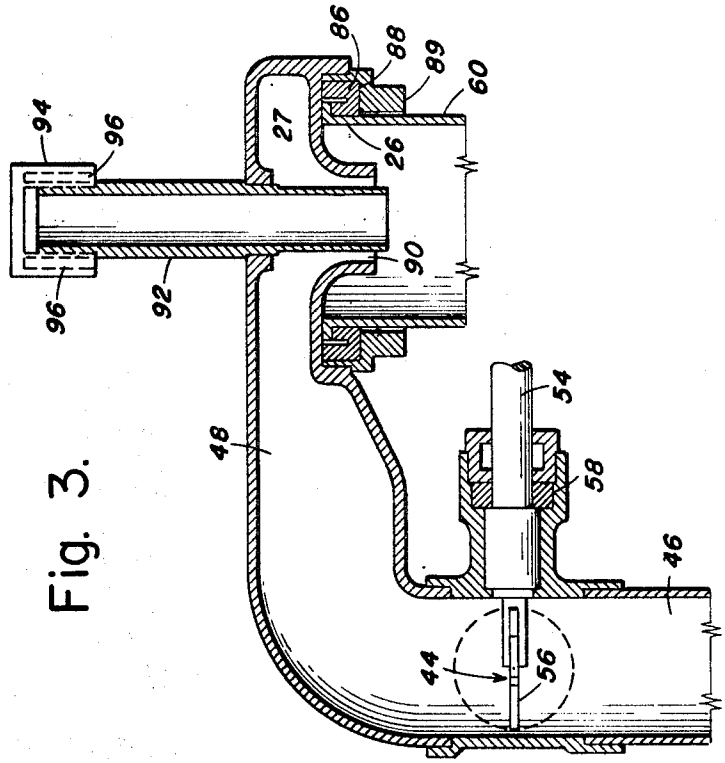


Fig. 3.

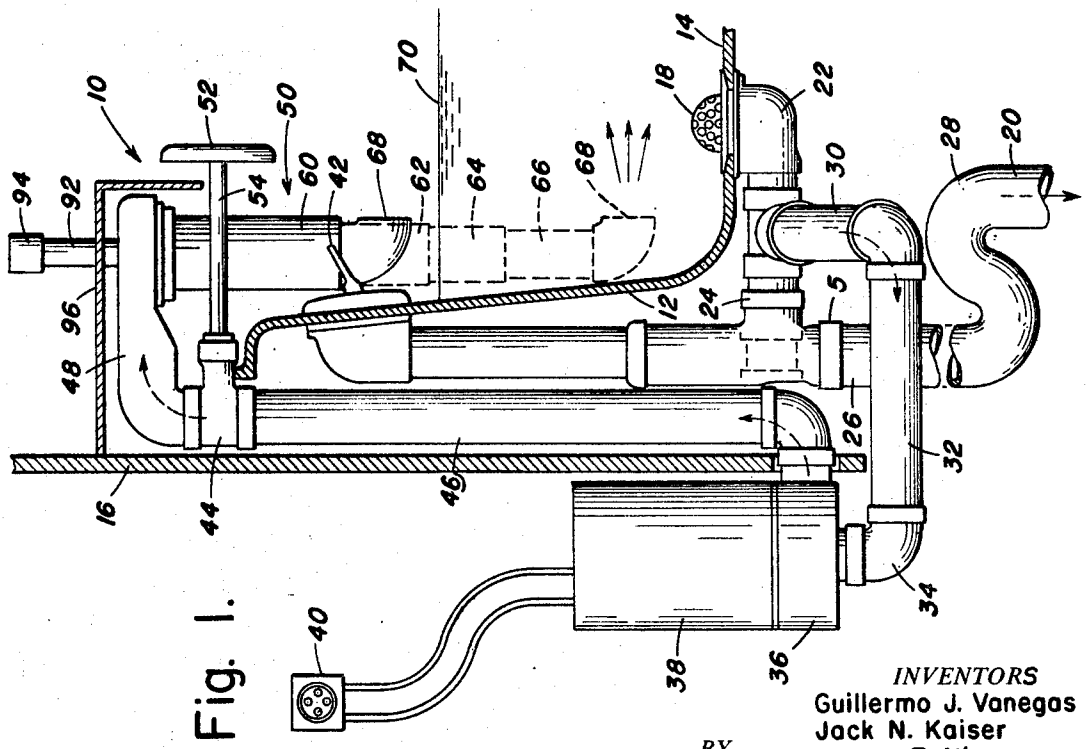


Fig. 1.

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Fig. 4.

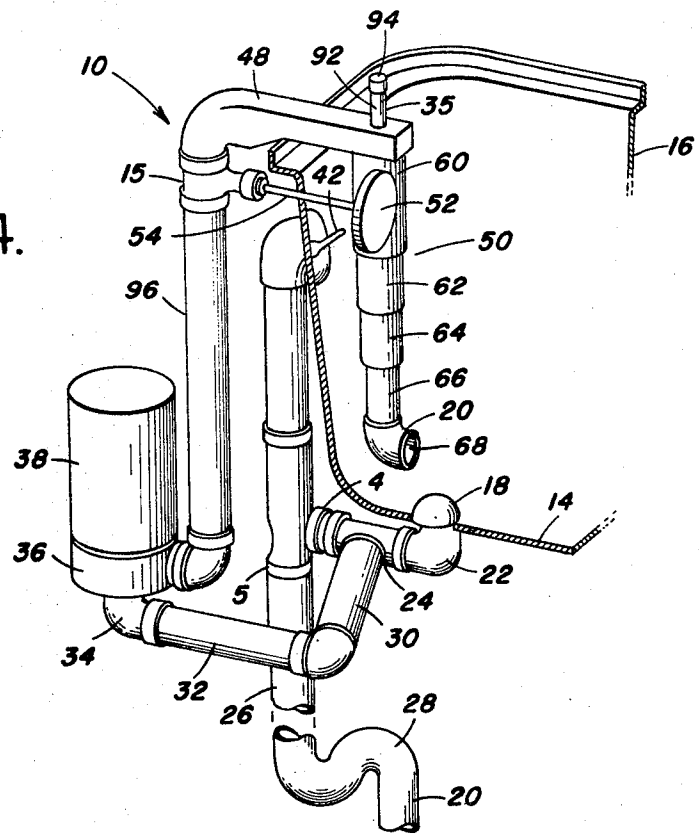
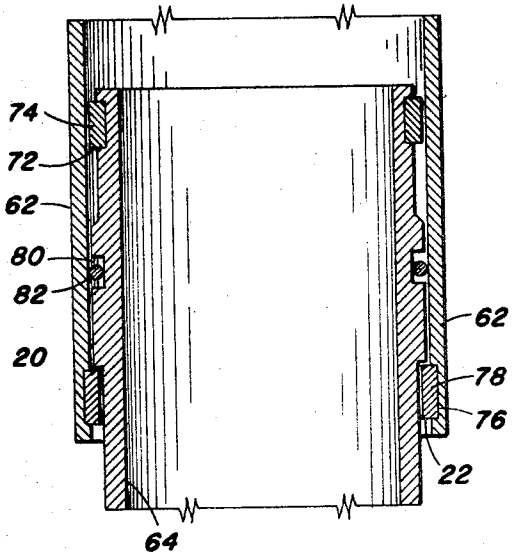


Fig. 2.



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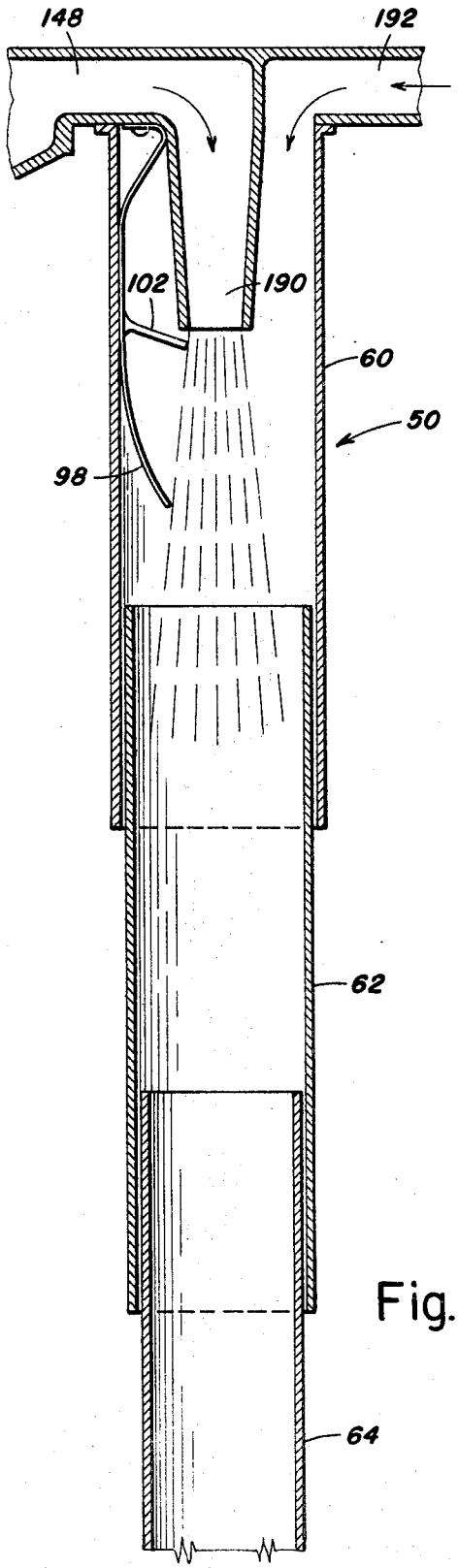


Fig. 5.

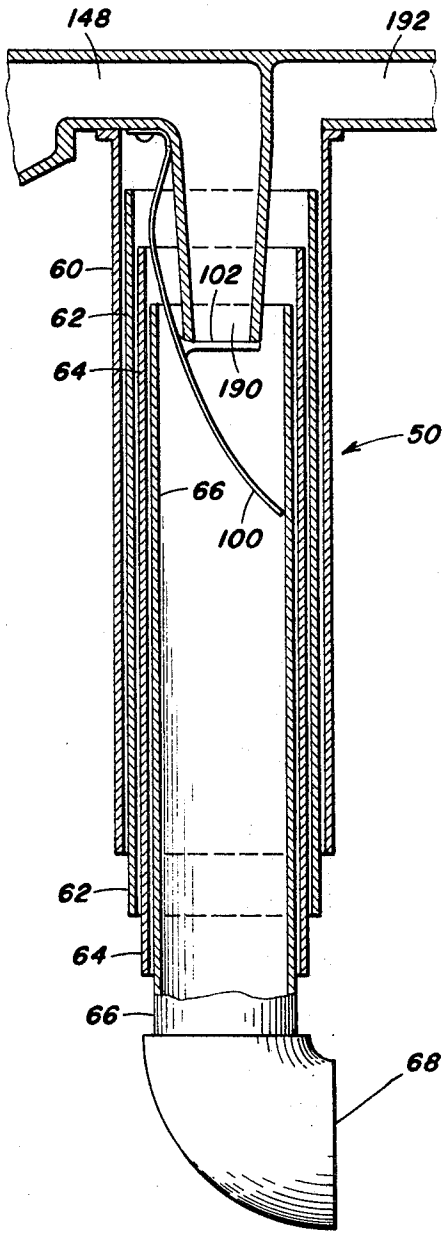


Fig. 6.

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Fig. 7.

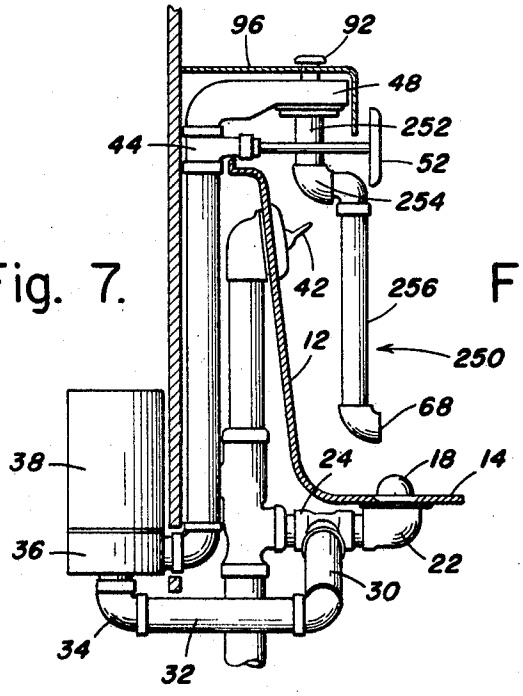


Fig. 8.

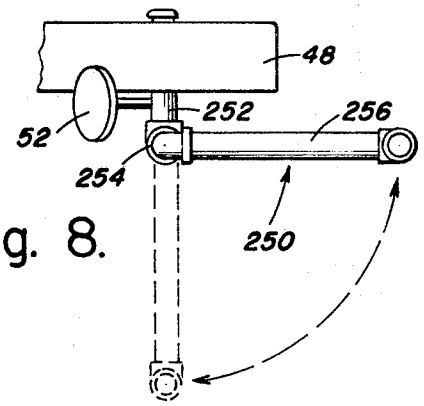


Fig. 9.

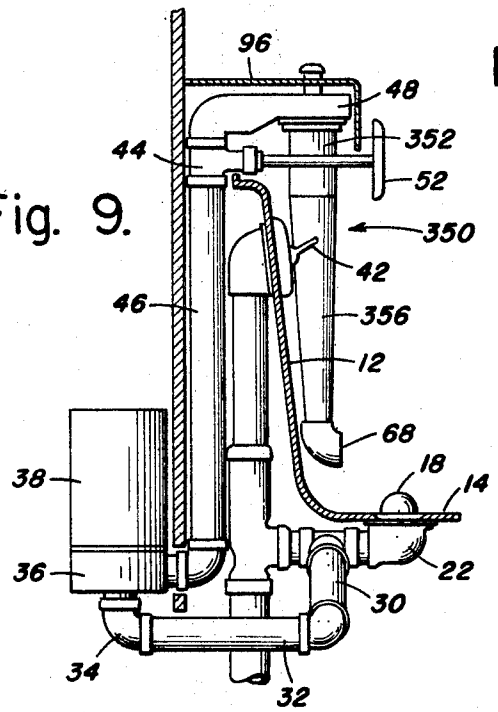
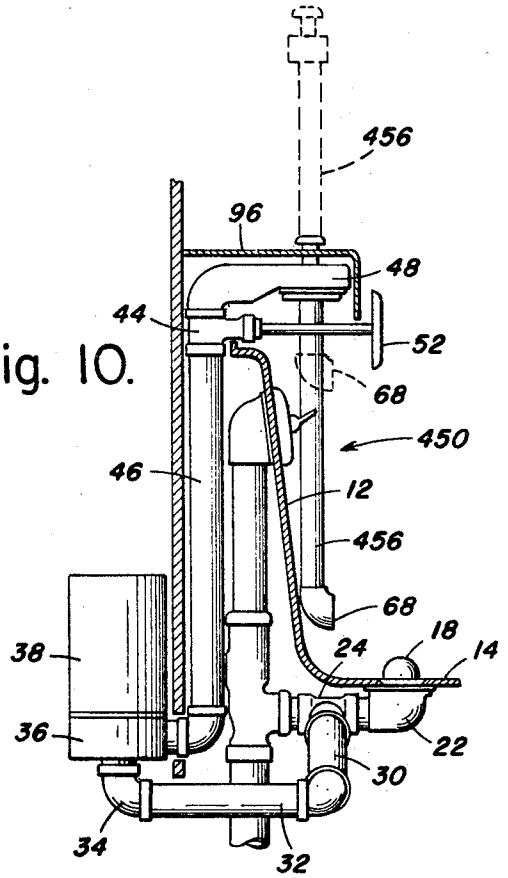


Fig. 10.



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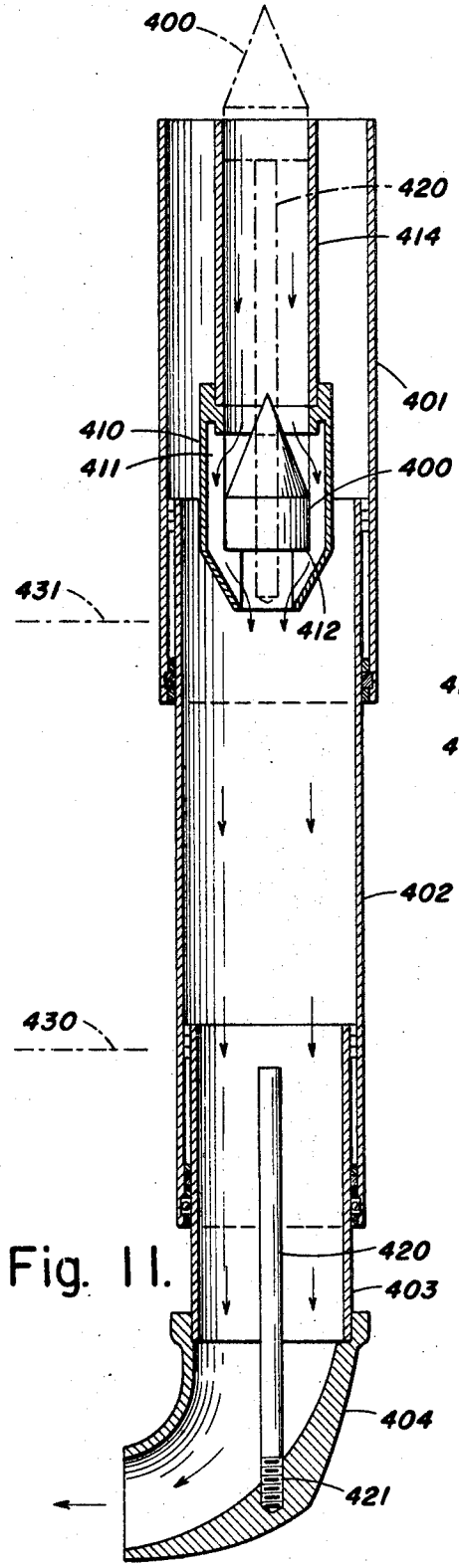


Fig. 11.

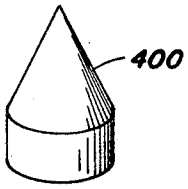


Fig. 11a.

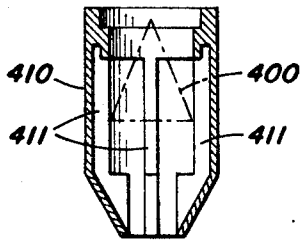


Fig. 11b.

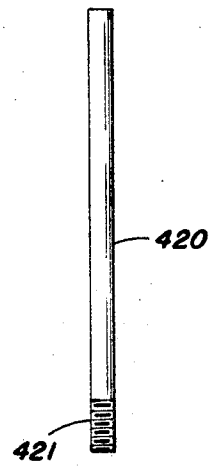


Fig. 11c.

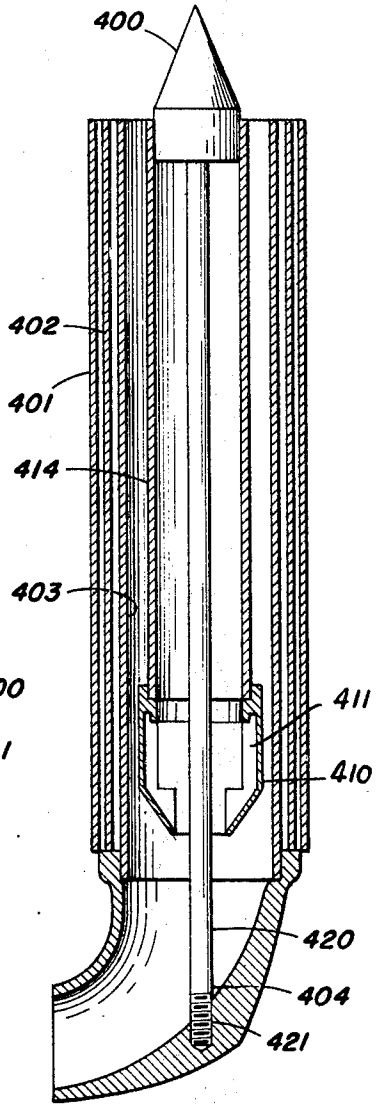


Fig. 11d.

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Fig. 12

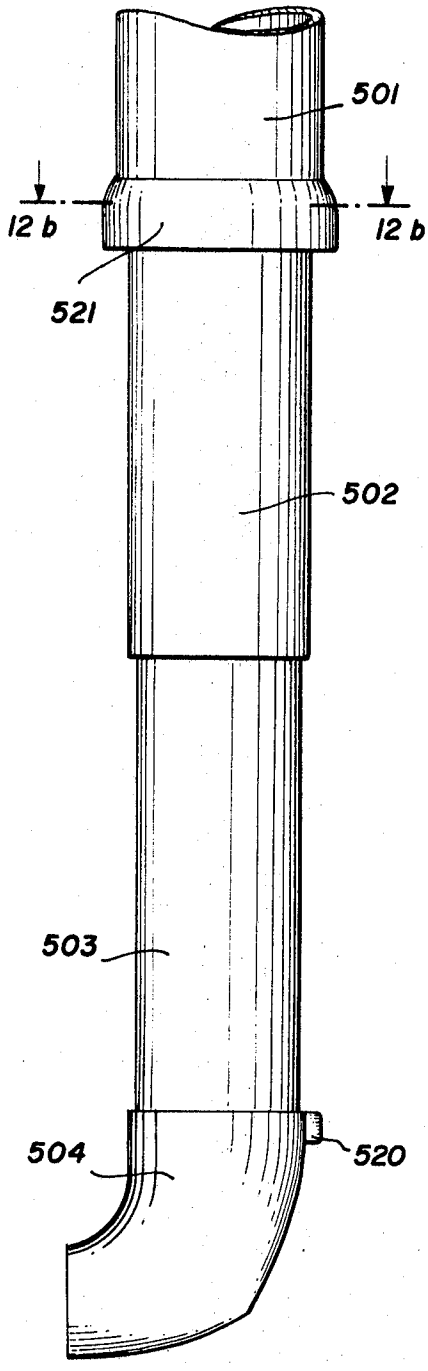


Fig. 12 b

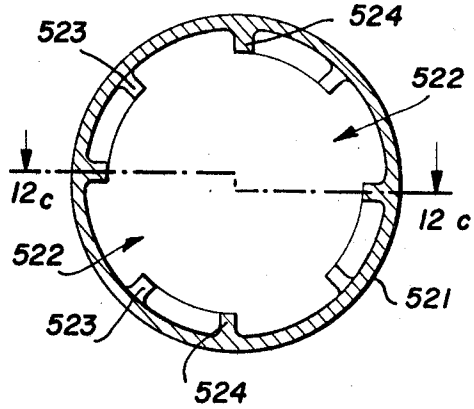


Fig. 12 c

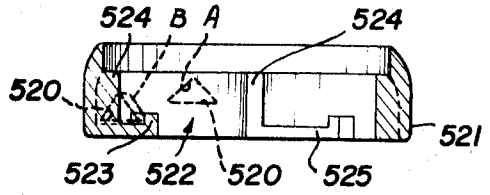
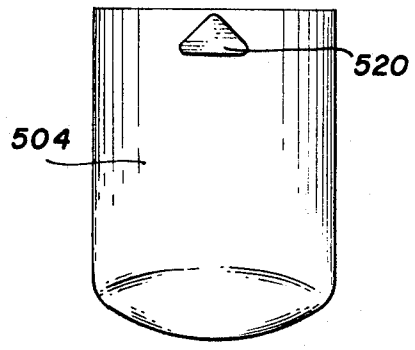


Fig. 12 a



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HYDROTHERAPEUTIC APPARATUS FOR A BATHTUB

This invention relates generally to a fluid circulating apparatus and, more particularly, pertains to hydrotherapeutic apparatus for use with a bathtub which produces a whirlpool bath.

A so-called whirlpool or therapeutic bath is normally used to produce a therapeutic massage for the treatment or relief of sore muscles, rheumatic or arthritic conditions, and the like. In conventional hydrotherapeutic devices which produce this type of action and, in particular, those devices which are used with plumbing fixtures such as a home bathtub, the bath water is recirculated through a delivery unit. The unit may be attached to the drain hole or installed in a special hole in the side of the tub wall. In both constructions a special bath drain is utilized which directs the water in the tub to a remote pump which discharges the water into the tub through the delivery unit. However, both of these constructions present problems.

In the former construction the unit occupies a great deal of space in the bathtub and creates a storage problem when it is removed. In the latter construction, the unit is permanently affixed to the tub wall and becomes submerged in the bath water when the apparatus is not in use. Thus, this type of unit accumulates dirt and scum, thereby necessitating its periodic cleaning at relatively short intervals of time.

A third type of construction utilizes a self-contained unit which is provided with a pump, a delivery spout and an air intake to produce the whirlpool action. However, this type of construction presents even greater problems than the above-described units because it takes up more space than the aforementioned units and it is substantially heavier. It similarly presents a storage problem when it is not in use. Accordingly, an object of this invention is to provide an apparatus for generating a whirlpool pattern in a bathtub which is compact, requires a minimum of space and provides a pressurized flow of water, and which is easily controlled, and is also reliable in operation.

Another object and feature of the present invention resides in the novel details of construction which provide an apparatus of the type described, wherein the usual bathtub drain is employed to feed water in the tub to a pump for ejecting the water from a snorkel under considerable pressure to create a whirlpool action.

A further object of the invention is to provide an air intake apparatus which employs control means to vary the volume of air introduced into the water to produce a desired whirlpool activity.

Another object resides in the provision of a snorkel arrangement comprising a plurality of telescoping tubes which are adapted to be positioned adjacent the bottom of the tub when the device is in use. The tubes are adapted to be elevated above the water-line when the device is not in use to prevent dirt and scum accumulation and allow the use of the full tub for conventional bathing.

In furtherance of the above objects, one embodiment of the device of the present invention comprises a plurality of telescoping tubes having a bottom outlet and providing a snorkel. The tubes are movable between an extended position and an elevated position wherein they are spaced above the water-line in an associated bathtub. Conduit means are provided to connect the bathtub drain with the snorkel. A pump is connected in the conduit means to draw water from the bathtub and through the drain and expel the water through the bottom outlet under pressure to provide a whirlpool pattern, thereby to provide a compact unit in which clogging of the snorkel outlet is substantially eliminated.

Other features and advantages of the present invention will become more apparent from a consideration of the following detailed description when taken in conjunction with the accompanying drawings, in which:

FIG. 1 is a front elevational view of a hydrotherapeutic apparatus constructed according to the present invention, illustrating the arrangement of the elements with regard to a conventional bathtub;

FIG. 2 is a vertical sectional view of two of the several telescoping tubes forming the snorkel;

FIG. 3 is a detailed sectional view illustrating the air and flow control portion of the present invention;

FIG. 4 is a perspective view of the apparatus shown in **FIG.** 1;

FIG. 5 is a detailed sectional view of a shut-off valve arrangement, shown in the open state and with the telescoping tubes extended;

FIG. 6 is a view similar to **FIG.** 5 showing the shutoff valve in the closed position;

FIG. 7 is a front elevational view of a modified embodiment of a hydrotherapeutic apparatus constructed in accordance with the present invention;

FIG. 8 is a front elevational view particularly illustrating a pivot connection of the snorkel;

FIG. 9 is a front elevational view of another modified embodiment of a therapeutic apparatus;

FIG. 10 is a front elevational view of a further modified embodiment of a hydrotherapeutic apparatus;

FIG. 11 is a vertical sectional view of a different form of shut-off valve arrangement which may be employed with the telescopic tube apparatus of this invention;

FIG. **11a** illustrates a perspective of the conical bullet or plug of the shut-off valve which may be used in the arrangement of **FIG.** 11;

FIG. 11b shows a vertical sectional view of the cage arrangement upon which the conical bullet form of **FIG.** 11a may rest; **FIG.** 11c shows a sectional view of the rod element which may be employed in the **FIG.** 11 assembly;

FIG. 11d illustrates the shut-off valve arrangement in its uppermost or contracted position; and

FIGS. 12, 12a, 12b and 12c illustrate schematically the components of a locking mechanism for the snorkel arrangement.

While this invention may have application to equipments of various types, it will be described with particular reference to a bathtub which is essentially of the conventional type.

Referring now to **FIGS.** 1 and 4, there is shown a hydrotherapeutic apparatus constructed in accordance with the present invention and designated generally by the reference numeral **10**. The apparatus **10** is adapted to be utilized in conjunction with a bathtub of conventional construction having an inner wall **12** which merges smoothly with the bottom wall **14** of the tub and an outer wall **16**. Water is allowed to enter the bathtub through a conventional faucet or the like (not shown) and is discharged from the bathtub through a drain **18**. As shown more particularly in **FIG.** 1, the drain is convex upwardly and is provided with a plurality of apertures through which the water may pass.

The drain **18** is connected through a plurality of pipes and fittings **22**, **24** and **26** and a trap **28** to a conventional drain line **20** which, in turn, may be connected to a sewer system. The elements described up to this point are, with the exception of the drain **18**, found in a conventional bathtub, and provide a means for the water to be drained from the bathtub proper through the elbow **22** and the pipes **24** and **26** and through the trap **28** and drainline **20** to the sewer system.

The basic components of the hydrotherapeutic whirlpool producing apparatus of the present invention include a conduit comprising a pipe **30**, which communicates with the pipe **24**, a pipe **32** and a pipe **34** which is connected to the intake of a pump **36**. The pump **36** is driven by a motor **38** which is actuated and controlled by a timer **40** of conventional design. The pipes **30**, **32** and **34** provide a path for the flow of water from the drain **18** to the inlet of the pump **36**.

The path of flow of the water from the bathtub to either the drain line **20** or the pump **36** is controlled by a toggle lever **42** which may be mounted on the wall **12** of the tub and is opera-

ble by the operator of the device. The lever 42 is movable between an upper position and a lower position and controls a valve (not shown) which is positioned between the pipes 24 and 26. Thus, when the lever 42 is moved to the upper position, the drain 18 will be closed to the pipe 26 and the trap 28 to prevent the discharge of water through the drain line 20 into the sewer system. However, when the lever 42 is moved to the lower position, the water in the bathtub will be allowed to pass through the drain 18 and the respective pipes 22, 24 and 26 and through the drain line 20 to the external sewer system. Hence, it will be obvious that, when the lever 42 is in the upper position, the water in the bathtub will be caused to flow through the pipes 22, 30, 32 and 34 to the pump 36, thereby to effect whirlpool action in the manner indicated below. On the other hand, when the lever is moved to the lower position, the water will be drained from the bathtub in the conventional manner.

Connected between the outlet of the pump 36 and the inlet of a flow control valve 44 is a pipe 46. Connected to the outlet side of the control valve 44 is a header 48 which connects to a plurality of telescoping tubes designated generally by the reference numeral 50. The flow control valve 44 may be of the conventional butterfly type which is controlled by a knob 52 through a shaft 54 in the conventional manner to regulate the flow of fluid through the valve. As shown more particularly in FIG. 3, the valve 44 includes a flap 56 which is inserted in a slot on the shaft 54 and is fastened with an appropriate screw or rivet. The shaft 54 is sealed by means of a packing washer 58 which produces a sufficient amount of friction on the shaft to hold the valve at a set position. The knob 52 may be graduated with markings to indicate full flow, half flow, or closed, or by other and finer markings, so that the user may adjust the desired amount of agitation.

The telescoping tubes or snorkel 50 are shown in the illustrated embodiment as including four sections respectively designated 60, 62, 64 and 66. However, it is to be noted that this is by way of illustration only and is not to be interpreted as being a limitation on the present invention. That is, the telescoping tubes 50 may contain more or less than the number of tubes shown. The lower tube 66 terminates in an outlet 68 which directs the fluid or water into the bathtub proper. The telescoping tubes 50 are adapted to be moved between an extended position as shown, for example, in FIG. 4 and in the dotted line position of FIG. 1 wherein the outlet is positioned adjacent the bottom wall 14 of the tub, and an elevated or retracted position wherein the outlet 68 is positioned above the normal water line of the bathtub, as indicated by an arrowhead 70 in FIG. 1.

FIG. 2, which shows the connection between the tubes 62 and 64, is illustrative of the connection between the plurality of tubes comprising the telescoping tubes 50. Thus, the upper end of the tube 64 is provided with an external groove 72 which receives a slide 74. The lower end of the tube 62 is provided with an internal groove 76 which receives the slide 78. The slides 74 and 78 are preferably of a low friction material, such as plastic, so that the tubes will easily slide relative to each other. Moreover, the slides 74 and 78 are positioned so that they will abut one another to limit the movement of the tubes 64 and 62 to prevent their separation.

Additionally, the tube 64 is provided with an external annular groove 80 which receives an O-ring 82 therein. The O-ring performs two functions. It provides a seal between the tubes 62 and 64 to prevent the leakage of water therebetween and it also serves to retain the tube 64 in a desired position by frictionally engaging the walls of the tubes 62 and 64.

The snorkel construction comprising the plurality of tubes 50 is fastened at its upper end to the header 48 by an arrangement which prevents damage to the structure of the plurality of telescoping tubes or snorkel 50 when the same is tilted or accidentally kicked or pushed as, for example, when the occupant is either entering or leaving the bathtub. As shown in FIG. 3, the arrangement includes an upper lip or radial flange 84 on the uppermost tube 60 which is supported on the inner leg of an annular resilient member or bumper 86 having substantially a U-shaped cross section. The member 86 is received in an annular seat or recess 88 in a nut 89 which is threaded on the header 48. The member 86 may be fabricated from rubber or the like. Normally, the member 86 biases the flange 84 against the header 48 and functions as a seal to prevent leakage of water. However, if the snorkel or plurality of telescoping tubes 50 is tilted, the leg of the member 86 supporting the flange 84 will flex slightly so as to absorb the shock and prevent damage to the tubes.

The whirlpool activity is mainly governed by the amount of air which is introduced into the fluid. Accordingly, FIG. 3 shows an air pipe 92 which vents to the atmosphere and which extends into the uppermost tube 60 of the snorkel or plurality of tubes 50. The water flowing through the header 48 exits through the circumferential opening 90 defined between the air pipe 92 and a portion of the header 48. Accordingly, the flow of water through the outlet 90 will draw air through the pipe 92 by venturi action so that the air will mix with the water passing through the snorkel to produce the whirlpool effect when the water exits through the snorkel outlet 68.

The volume of air traversing the pipe 92 is regulated by a control device which includes a cap 94 which threadedly engages the top of the pipe 92. The cap 94 includes circumferentially spaced vertical air passages 96 which provide a path for the flow of air from the atmosphere through these passages and between the top of the cap 94 and the pipe 92 and then through the pipe 92 to the stream of water. By rotating the cap 94, the space between the top of the cap and the tube 92 may be changed, thereby to regulate the flow of air entering the water stream.

In operation, the tubes or snorkel 50 may be moved to the lower position and the bathtub may be filled with water in the conventional manner until the outlet 68 of the snorkel is below the water-line, the maximum level of the water being indicated by the arrowhead 70. The lever 42 is moved to the upper position to prevent the flow of the water in the bathtub to the drain-line 20. The whirlpool action is initiated by setting the timer 40 for the interval of time that it is desired to operate the apparatus of the present invention. The pump 36 sucks water through the drain 18 and the conduit formed by the pipes 30, 32 and 34 into the pump. The fluid then exits from the pump 36 under pressure and flows through the conduit including the pipe 46, the valve 44 and the header 48 and through the snorkel and exits through the snorkel outlet 68 into the bathtub. The operation of the pump remains continuous as slong as the timer 40 maintains the motor 38 energized. Thus, water will be continuously drained through the drain 18 and will be forced under pressure through the outlet 68 to maintain the whirlpool action until the timing cycle is completed.

The flow of water and the whirlpool action may be adjusted to suit the desires of the occupant of the bathtub by respectively adjusting the valve 44 by means of the knob 52 and the amount of air to be mixed with the water by means of the cap 94. When the timer 40 has completed its cycle, the motor 38 will be deenergized so that the whirlpool action will cease.

When desired, the snorkel or plurality of tubes 50 may be moved to the retracted or elevated position, as shown in FIG. 1, whereby the snorkel outlet 68 is raised above the water-line 70. During the normal operation of the bathtub, the snorkel will be above the water-line 70, thereby to prevent the accumulation of dirt and scum about the outlet 68 and allow use of the entire tub for conventional bathing. Hence, the apparatus of the present invention will require a minimum of cleaning. It should also be noted that the elements comprising the invention are normally protected by a hood 96 so that only the outlet 68 and upper tube 60 projects below or beyond the hood.

It should also be noted that because of the shape of the drain 18, the drain cannot be blocked by the occupant of the bathtub so that, even if the occupant covers a portion of the drain with his foot, water will be drained through the uncovered portion, thereby to allow continuous operation of the apparatus.

After the operation of the whirlpool apparatus, the lever 42 may be moved to the lower position to allow the water to drain through the drain 18 to the drain line 20 in the normal manner.

Accordingly, a hydrotherapeutic apparatus has been disclosed which is simple and reliable in operation, which is compact and does not take up much room, and which may be moved above the water-line when it is not in use to prevent clogging of the apparatus.

A modified embodiment of the present invention is illustrated schematically in FIGS. 5and 6wherein the same reference numerals as in FIGS. 1- 4indicate similar or identical elements. It is to be understood that the apparatus of FIGS. 5and 6is substantially identical in every respect to the apparatus disclosed in FIGS. 1and 4, with the exception of the header 148 and the manner in which air is introduced into the water stream. Accordingly, as shown in FIG. 5, the header 148 terminates in a depending outlet 190. Air is introduced into the water stream by venturi action through an air pipe 192. The uppermost tube 60 in this arrangement includes a valve mechanism designated generally by the reference numeral 98 which is connected to the header 148 and which includes a curved section 100 and a projection 102. When the snorkel or plurality of tubes 50 is retracted to the elevated position, the upper edges of the respective nesting tubes engage the curved section 100 of the valve mechanism 98 to move the projection 102 into sealing engagement with the outlet 190. Hence, if the pump is accidentally or otherwise caused to operate after the snorkel has been elevated, substantially no water will be allowed to traverse the snorkel. It will be obvious that the embodiment of FIGS. 5and 6provide an automatic seal for the apparatus of the present invention.

A further modified embodiment of the present invention is illustrated in FIGS. 7 and 8, wherein the snorkel 250 induces a pipe 252 which is connected to the header 48 in the same manner as the snorkel 50 is connected to the header. Connected to the bottom of the pipe 252 is an elbow 254 which, in turn, is sealingly connected to a pipe 256 which is rotatable with respect to the elbow 254. The pipe 256 may be moved to the elevated position as shown by the solid line positions of FIG. 8, or it may be rotated to a lower position as indicated by the dashed-line position of FIG. 8, thereby to move the snorkel into its operating position. Accordingly, the embodiment of FIGS. 7and 8similarly includes a snorkel which may be elevated above the water-line when it is not in use to prevent clogging of the snorkel.

A further modified embodiment of the present invention is shown in FIG. 9wherein the snorkel 350 includes an upper section 352 which is connected to the header 48 in the manner indicated above, and a lower removable section 356 which includes the outlet 68. The removable section 356 may be connected to the section 352 by a bayonette or a screw thread joint or the like. Hence, when the apparatus is not in use, the portion 356 may be removed, thereby to prevent clogging of the same.

In the embodiment of FIG. 10, the snorkel 450 includes a vertical pipe 456 having an outlet 68 at the bottom thereof. The pipe 456 may be moved vertically through the header 48 in a known manner so that the outlet 68 may be lowered to the operating position shown by the solid line of FIG. 10or the pipe 456 may be moved to the elevated position shown by the dotted line position in FIG. 10, thereby to elevate the outlet 68 above the water-line.

The arrangement shown in FIGS. 11, 11a, 11b, 11c and 11d represents modifications of the arrangements previously shown and described in this application. Here a movable bullet 400, which has a cylindrical base and a conical configuration above its base may be moved from its lower position which allows water to flow through the telescoping tubes into the bathtub, to its upper position which interrupts the flow of water to the telescoping tubes. The telescoping tubes are designated 401, 402 and 403 and the lowermost tube, the elbow tube, is designated 404. The movable bullet 400 is normally positioned within a cage 410, which is held stationary. The cage 410 may have one or more ribs, such as 411. The bullet 400 rests on a base 412 of the cage 410. The cage 410 is affixed to a tube 414 which is mechanically coupled to the header 415. The arrangement also includes a rod 420. The bottom of the rod is threaded and meshes with a threaded portion of 421 of the elbow 404.

The cage 410, which is held affixed to the lower segment of the stationary tube 414, provides a space around the periphery of cage 410, that is, between bullet 400 when in its lowermost position and the ribs 411, which allows water traversing the tube 414 to enter the next segment of pipe 402. On the other hand, when the bullet 400 is in its uppermost position, as shown in FIG. 11, the bullet will provide a barrier against the flow of fluid through the tubes 414, 402, etc.

When the telescoping tubes 401, 402 and 403 are in their lowermost position, as shown in FIG. 11, water will flow through the header 415, through tube 414 and around the bullet 400, which is seated within the cage 410, then through tubes 402 and 403 and out through the opening of the elbow section 404 which leads to the bathtub. The bullet 400 is thus by-passed by the peripheral spaces provided by the ribs 411 within cage 410. Water will continue to flow over this path as long as the main valve (not shown) of the installation remains open, but the water will cease to flow when that main valve is closed.

However, if the elbow tube 404 is raised, raising with it tubes 403 and 402 to their uppermost position, the upper terminal of rod 420 will make contact with the bottom of the bullet 400 and move the bullet to its uppermost position as shown in FIG. 11d. If the main valve of the installation still remains open, the water will be substantially interrupted immediately after the bullet leaves its seat within the cage 410. The water will continue to remain interrupted throughout the travel of the bullet 400 to its uppermost position.

The diameter of the base of the bullet 400 is machined so as to be very closely equal to the internal diameter of the tube 414. This serves to reduce the flow of water beyond the base of the bullet 400 after it has been raised into tube 414, the flow being reduced to a very small or inconsequential amount. The water flow may then be completely stopped by turning off the main valve.

The main valve serves to interrupt the flow of water in the FIG. 11 arrangement. However, in an arrangement such as, for example, FIG. 1, which employs a timer 40 to limit the duration of the water flow to a predetermined time interval, the timer 40 will in effect serve as the equivalent of the main valve to completely stop the flow of water through the mechanism. The operation of the timer 40 will remove power from the motor 38 which drives the pump 36.

The horizontal lines 430 and 431, which are indicated in arbitrary positions in FIG. 11, determine the range of water levels in the bathtub between which the flow of water into the bathtub may be interrupted by moving the elbow section 404 upwardly. Thus, when the elbow section 404 reaches line 430, the water input to the bathtub will be stopped. The stoppage may be accomplished at any point between levels 430 and 431.

FIG. 12, 12a, 12b and 12c illustrate a mechanism to lock the discharge elbow, such as 404 of FIG. 11, in its uppermost position when the telescoped tubes are in their elevated position and the whirlpool apparatus is therefore not in use.

In FIG. 12, there are shown the elbow tube 504 and the telescoping tubes 501, 502 and 503 (which resemble and operate like the corresponding tubes 401, 402 and 403 of FIG. 11). The elbow tube 504 has an integral nose or protrusion 520. A stationary retainer mechanism 521, which is in the form of a collar and is supported by the stationary tube 501, is designed to lock the elbow tube 504 in its uppermost position after it has been raised to that position and the elbow tube 504 "twisted" so that its nose 520 will be gripped and held by the retainer mechanism 521. The retainer mechanism 521 may be soldered to tube 501.

The nose **520** is preferably triangular in shape as shown and can relatively easily enter the cavity of the retainer device **521** through any one of four slots **522** (see **FIG.** 12b). The triangular shape of nose **520** serves as a guide to align the nose **520** with one of the several slots **522**.

When the elbow tube **504** is raised to bring the nose **520** into a position A (see **FIG.** 12c) within one of the slots **522**, the elbow tube **504** can be turned, for example, clockwise to cause the nose **520** to pass over one of the short ribs **523** of the retainer mechanism. The nose **520** will be prevented from rotational motion beyond the nearby long rib **524**. The short rib **523** and the long rib **524** are separated by a horizontal flange **525** (see **FIG.** 12c). The nose **520** will come to rest on flange **525** in position B upon the release (of mechanical pressure) of the elbow tube **504**.

The two ribs **523** and **524** and the flanges **525** are contoured so as to lock the elbow tube **504** when the latter is to be held in its uppermost position. Both ribs act as barriers; the shorter rib serves merely as a minor barrier that can be cleared or passed merely by turning the elbow tube **504** in the appropriate direction, in one direction to engage and hold the nose **520** and in the opposite direction to disengage nose **520**.

While preferred embodiments of the invention have been shown and described herein, it will be obvious that numerous omissions, changes and additions may be made in such embodiments without departing from the spirit and the scope of the present invention as defined by the claims.

We claim:

1. A hydrotherapeutic apparatus for producing a flow of water in a bathtub and the like having a drain, the combination of a snorkel having a plurality of tubes which are extendable and retractable with respect to each other and an outlet adapted to extend into the bathtub for introducing water into the bathtub, pump means for withdrawing water from the bathtub through said drain and for ejecting water under pressure through said snorkel, and conduit means for connecting said drain with said pump means and said pump means with said snorkel, said conduit means including a header, and connecting means for sealingly connecting said snorkel with said header for relative movement with respect thereto.

2. A hydrotherapeutic apparatus as in Claim **1**, in which said snorkel comprises a plurality of telescoping tubes movable between an extended position and a retracted position, wherein the outlet is spaced above the water-line in the bathtub.

3. An apparatus as in Claim **1**, in which said connecting means terminates above the water-line in the bathtub and said snorkel is removably connected to said connecting means, whereby said snorkel may be removed when said apparatus is not in use.

4. An apparatus as in Claim **1**, and pivot means joining said snorkel to said connecting means, whereby said snorkel may be pivoted between an operative position in which the outlet is below the water level in the bathtub and an upper position in which said outlet is spaced above the water-line in the bathtub.

5. An apparatus as in Claim **1**, in which said snorkel is provided with a top radial flange, said connecting means including a nut threadedly engaging said header, and a resilient member compressed between said nut and said radial flange.

6. An apparatus as in Claim **5**, and an annular seat in said nut, said resilient member comprising an annular bumper having a substantially U-shaped cross section, said flange being supported by the inner leg of said bumper, whereby said snorkel is movable with respect to said header.

7. An apparatus for producing a pressurized flow of water in a bathtub and the like including a drain, the combination of plurality of coupled extendable and retractable telescoping tubes having an outlet to provide a snorkel, said plurality of tubes being movable between an extended position whereby the outlet is located adjacent the bottom of the bathtub and an elevated position wherein the outlet is spaced above the water-line in the tub, conduit means connecting said drain with said snorkel, and pump means connected in said conduit means for drawing water through said drain and ejecting the water through said snorkel outlet.

8. Apparatus as in Claim **7**, and valve means operated by said snorkel when said snorkel is in the elevated position to prevent the flow of water through said snorkel.

9. Apparatus as in Claim **7**, and sealing means between said plurality of tubes for preventing the flow of water between said plurality of tubes.

10. Apparatus as in Claim **9**, and slide means between said plurality of tubes for providing for the sliding movement of one tube relative to the adjacent tube and for limiting the travel of one tube relative to the adjacent tube.

11. Apparatus as in Claim **7**, in chich said conduit means includes manually operable valve to regulate the flow of water through said conduit means.

12. Apparatus for producing a whirlpool action in a bathtub and the like comprising a snorkel having extendable and retractable telescoping tubes wherein the outlet of the snorkel is movable between a lowered position and an elevated position above the bathtub, a pipe communicating with the atmosphere, a header coupling said pipe with said snorkel so that air may be sucked into said snorkel by venturi action.

13. Apparatus as in Claim **12**, and control means connected to said pipe for regulating the amount of air mixing with the water.

14. Apparatus as in Claim **13**, in which said control means comprises a cap threaded on the end of said pipe and vertical air passages in said cap, whereby the spacing between the top of said cap and said pipe may be varied to regulate the volume of air entering said pipe.

15. Apparatus as in Claim **12**, wherein said snorkel tube includes a vertical tube movable with respect to said header, whereby said snorkel tube may be raised relative to said header to elevate said outlet above the water-line in the bathtub.

16. Apparatus as in Claim **12**, and a drain connected to said bathtub, pump means connected between said drain and said header for drawing water out of the bathtub through said drain and for supplying water to said header under pressure.

17. Apparatus as in Claim **16**, wherein said drain comprises a convex upwardly member, and a plurality of apertures in said member.