United States Patent

Bryant

[15] **3,636,944**

[45] **Jan. 25, 1972**

[54] BUOYANT AIR-WATER MASSAGE DEVICE

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[22] Filed: **Jan. 29, 1970**

[21] Appl. No.: **6,726**

[52] **U.S. Cl.** **128/24.1,** 128/66, 4/180

[51] **Int. Cl.** **A61h 29/00**

[58] **Field of Search** 128/66, 24.1, 365, 366; 4/178, 4/180

[56] **References Cited**

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Attorney—Allen and Chromy

[57] **ABSTRACT**

A buoyant chair to be used in a swimming pool provided with plumbing having nozzles for directing air and water jets against the body of the person occupying the chair. The plumbing is connected to the pool water heater and a booster pump is provided in this connection to cause heated water to be circulated through the plumbing and nozzles. One or more air inlets is provided to the plumbing to supply air to be mixed with the water which mixture is released through the nozzles to provide a massaging action on the body of the person reclining in the chair.

7 Claims, 3 Drawing Figures

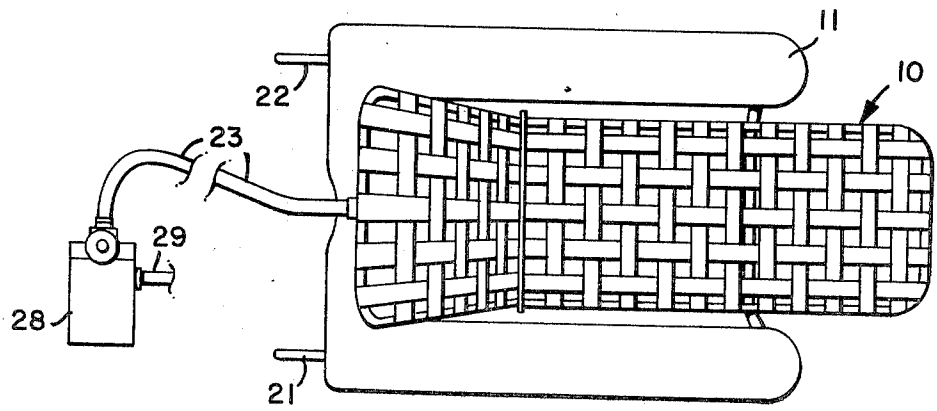


FIG. 1

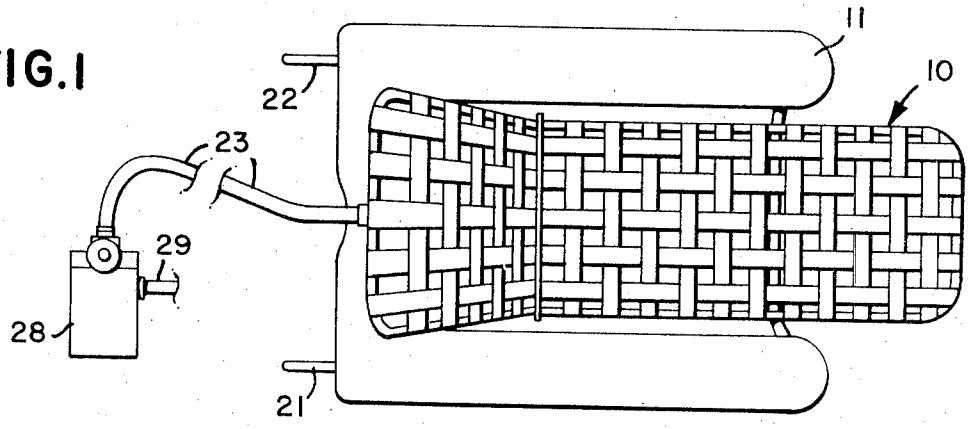


FIG. 2

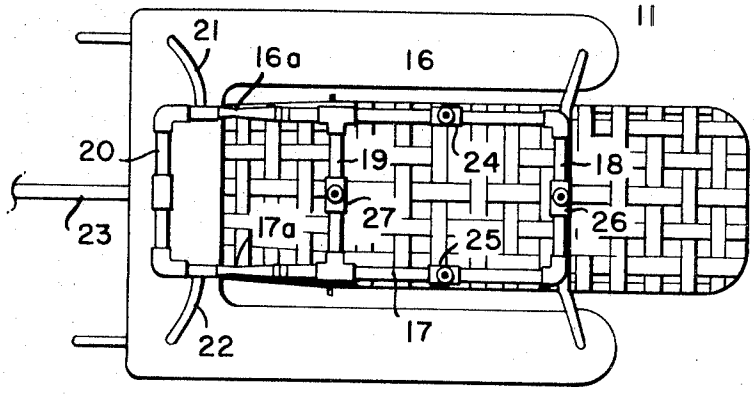
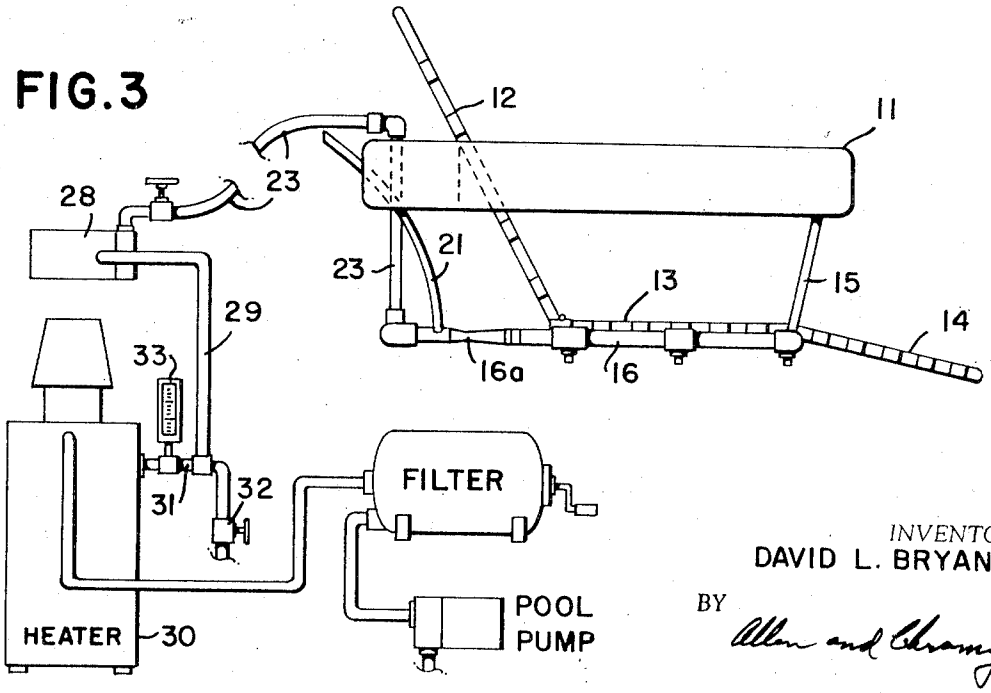


FIG. 3



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BUOYANT AIR-WATER MASSAGE DEVICE

DESCRIPTION OF THE INVENTION

This invention relates to a buoyant swimming pool chair provided with air and water jets for massaging the body of a person supported thereby in the swimming pool.

An object of this invention is to provide an improved hydropneumatic massaging device for buoyant swimming pool chairs.

Another object of this invention is to provide an improved hydropneumatic massaging device employing a plurality of air and warm water nozzles positioned underneath a buoyant swimming pool chair for directing air and water jets against the occupant of the chair.

Another object of this invention is to provide an improved hydropneumatic massaging device which is connected to the heated water supply of a swimming pool and which is provided with a booster pump for directing air and water jets against the body of the person occupying the buoyant chair in the swimming pool.

Still another object of this invention is to provide a buoyant swimming pool chair with a plurality of adjustable nozzles attached thereto for playing air and water jets upon the body of the person occupying the chair in the swimming pool, said nozzles being adjustable so that the air and water jets may be directed upon different parts of the body as selected by the person.

Other and further objects of this invention will be apparent to those skilled in the art to which it relates from the following specification, claims and drawing.

In accordance with this invention there is provided a buoyant swimming pool chair with a plurality of air and water nozzles supported around the body thereof so that a person while floating in the chair in the swimming pool may subject his body to massaging action produced by air and water jets from the nozzles of the device. These nozzles are attached to a pipe which is supported on the buoyant swimming pool chair and said pipe is connected by a flexible pipe or hose to a booster pump that is supplied with heated water from the swimming pool heating system. An air inlet tube is connected to this pipe and air is drawn into the warm water through this air tube so that the nozzles are supplied with a mixture of air and water. The air and water jets forced out of the nozzles may be played upon different parts of the body of the person supported in the chair and floating in the swimming pool.

Further details and features of this invention will be set forth in the following specification, claims and drawing in which, briefly:

FIG. 1 is a top view of the buoyant swimming pool char provided with a hydropneumatic massaging device connected to the heated water supply of the swimming pool;

FIG. 2 is a bottom view of the buoyant chair showing the plumbing attached thereto; and

FIG. 3 is a side view of the buoyant chair and the plumbing attached thereto which is shown connected to the water supply heater of the swimming pool.

Referring to the drawing in detail reference numeral 10 designates a chair which is adapted to be used in a swimming pool and which is provided with buoyant member 11 of generally U-shaped configuration made of material such as plastic foam or the like so that the chair will be buoyant when used in the swimming pool. The chair is provided with a back 12, a seat 13 and inclined leg support 14 which are made of interwoven straps of cloth, plastic or the like supported on a frame which is attached to the armrest portions of the buoyant member 11 by the member 15.

Pipes 16 and 17 are positioned below the seat portion 13 of the chair and parallel to the opposite sides thereof. Cross pipes 18, 19 and 20 are connected between the pipe 16 and 17. Cross pipe 18 is provided between the forward ends of the pipes 16 and 17 and is located at about the forward part of the seat portion 13 of the chair. Cross pipe 19 is provided at about the rear end of the seat portion 13 and cross pipe 20 is provided between the rear ends of the pipes 16 and 17.

Pipes 16 and 17 are provided with constricted portions 16*a* and 17*a*, respectively, and the air inlet tubes 21 and 22 are connected to these pipes 16 and 17, respectively, adjacent to the constricted portions 16*a* and 17*a*, respectively, so that air may be drawn into the pipes 16 and 17 through the air inlet tubes 21 and 22, respectively, as will be described hereinafter. The water inlet pipe 23 is connected substantially to the center of the cross pipe 20. Pipes 16 and 17 are provided with nozzles 24 and 25, respectively, and cross pipes 18 and 19 are provided with nozzles 26 and 27, respectively.

While only one nozzle is shown for each of these pipes, it is of course understood that several nozzles spaced by predetermined distances may be provided to each of these pipes if desired. The nozzles 24, 25, 26 and 27 are shown pointing downward, however, these nozzles may be provided with adjustable ball-and-socket joints so that they may direct the jets of air and water released therefrom at different angles. If desired, these nozzles may be turned upwardly so that they direct the streams against the occupant of the chair to provide vigorous massaging action.

The pipe 23 is preferably a flexible tube of plastic or like material and it is connected to the booster pump 28 which is connected by the hose or pipe 29 to the outlet pipe 31 of the heater 30. The outlet pipe 31 of the heater 30 supplies the heated water to the pool and when water is to be taken to the massage unit from the outlet pipe 31 through the tube or hose 29 and booster pump 28 to the chair the gate valve 32 is closed slowly while the temperature of the water indicated by the thermometer 33 is observed. When this temperature reaches approximately 130° F. then closing of the valve 32 is stopped so that some of the water runs from the outlet pipe 31 into the pool just fast enough to maintain this temperature as indicated by the thermometer 33.

Some of the heated water is drawn from the outlet pipe 31 through the hose or pipe 29 by the booster pump 28 and forced through the pipe 23 into the pipes 16, 17, 18 and 19, and out through the nozzles 24, 25, 26, and 27. As water is pumped into the pipes 16 and 17 through the constricted portions 16*a* and 17*a*, respectively, air is drawn into the water through the air inlet tubes 21 and 22 which open to the atmosphere above the buoyant member 11. This air is mixed with the water pumped through the pipes 16, 17, 18 and 19 and released together with heated water from the nozzles 24, 25, 26 and 27 to provide the desired massaging action to the person reclining in the chair.

While I have shown and described a preferred embodiment of the invention it will be apparent that the invention is capable of modification from the form shown so that the scope thereof should be limited only by the scope of the claims appended hereto.

I claim:

1. In a buoyant air-water massage device for use in a swimming pool, the combination comprising buoyant means, person-supporting means attached to said buoyant means and extending beneath said buoyant means supporting a person partially submerged in the water in a swimming pool, tubular means, means supporting said tubular means on said buoyant means beneath the person supported thereby, means supplying warm water to said tubular means, and tubular means having at least one nozzle connected thereto, means drawing air into said tubular means when said water supplied thereto flows out of said nozzle, said air being mixed with said water in said tubular means said nozzle being positioned beneath the person supported on said person-supporting means so that said air-water mixture leaving said tubular means through said nozzle provides massaging action to the person supported by said person-supporting means.

2. In a buoyant air-water massage device for use in a swimming pool, the combination as set forth in claim 1, further characterized in that said buoyant means is provided with a seat and said tubular means is supported beneath said seat, said seat having openings for exposing the person to said massaging action.

3. In a buoyant air-water massage device for use in a swimming pool, the combination as set forth in claim 1, further characterized in that said person-supporting means comprises a back and a seat and said tubular means is provided with additional nozzles under the front and rear of said seat, the body portions of said back and said seat being reticulated to expose the person to said massaging action.

4. In a buoyant air-water massage device for use in a swimming pool, the combination as set forth in claim 1, further characterized in that said means drawing air into said tubular means includes a tube connected to said tubular means, said tube having an open end supported by said buoyant means above the water level of the swimming pool.

5. In a buoyant air-water massage device for use in a swimming pool, the combination as set forth in claim 4, further characterized in that said tubular means is provided with a constricted portion adjacent to and downstream from the connection of said tube to said tubular means, said constricted portion assisting in the drawing of air through said tube into the water flowing to said nozzle.

6. In a buoyant air-water massage device for use in a swimming pool, the combination as set forth in claim 1, further characterized in that said water-supplying means comprises a water heater which is normally adapted to heat the water to the swimming pool and means to control the water temperature of the water supplied to said tubular means to be substantially higher than the temperature of the water in the swimming pool.

7. In a buoyant air-water massage device for use in a swimming pool, the combination as set forth in claim 1, further characterized in that said buoyant means comprises a U-shaped member of plastic foam having spaced arms which are adapted to serve as armrests for the person supported thereby, the base of said U-shaped member joining said arms having a hole receiving a pipe which is connected to said water-supplying means and which is also connected to said tubular means.

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