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Simon

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[54] **THERAPEUTIC EQUIPMENT**

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[52] **U.S. Cl.** **128/66,** 128/75

[51] **Int. Cl.** **A61h 9/00**

[58] **Field of Search** ..... 128/66, 68, 69, 75, 82.1; 272/71; 4/185 H, 185 L

[56] **References Cited**

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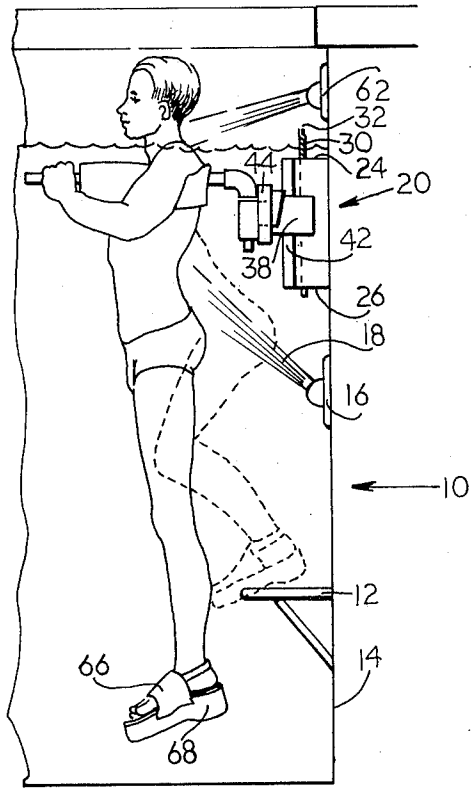
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[57] **ABSTRACT**

Therapeutic apparatus which consists of spaced apart swivable bars secured to the wall of a bath under the surface of the water, the bars each having a bolster to provide suspense support for an individual and jets of water are directed against selected parts of the spine.

4 Claims, 3 Drawing Figures



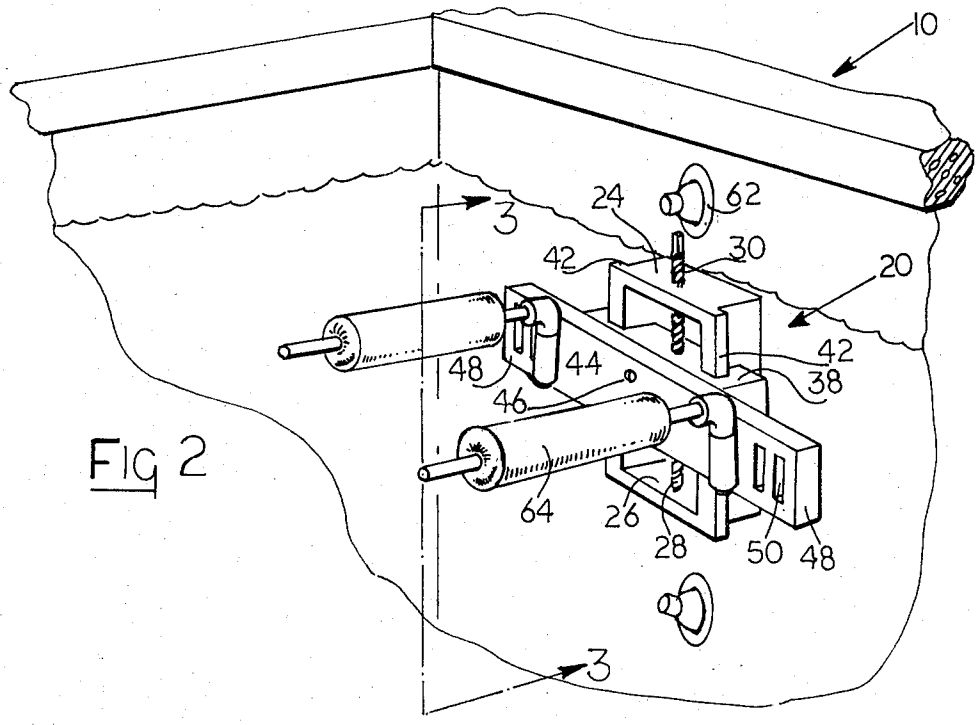


FIG 2

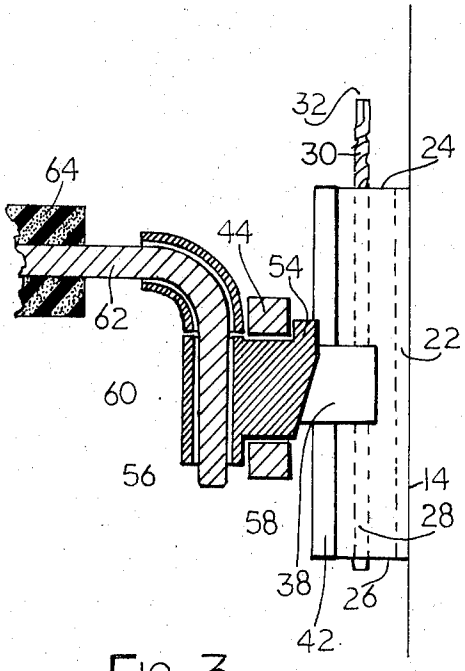


FIG 3

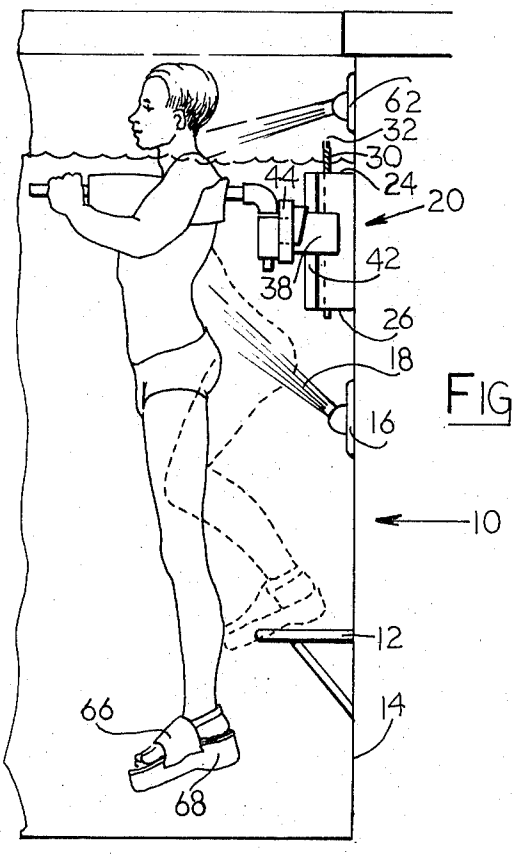


FIG 1

THERAPEUTIC EQUIPMENT

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates to therapeutic equipment and has particular relation to equipment which is usable under water to provide traction treatment for the spine of the user.

2. Prior Art

It is well established practice to apply jets of water at a pre-selected temperature to portions of the body in order to alleviate muscular ailments of widely differing nature. The jets of water may be directed through the atmosphere at the body but recently there has been greater emphasis on treatment which involves directing jets of water in a bath against the immersed portions of the body. A well known development is a bath in which the jets create a whirlpool effect.

It is known to apply traction to the spine with the object of alleviating painful conditions in that region of the body.

However, to the best of applicant's knowledge the concept of applying traction to the spine of a patient whose body is immersed in water is new. More particularly it is not known to provide apparatus which will permit the patient to vary at will the amount of traction applied to the spine while the body is immersed in water and especially when subjected to the action of jets of water.

It is an object of the invention to provide traction apparatus which is usable by an individual whose spine is immersed in water.

SUMMARY OF THE INVENTION

The invention consists in a pair of spaced apart swivable bars secured to the wall of a bath under the surface of the water which bars have each bolster means to provide support for an individual suspended thereon in the water by the arms. The individual has material of a greater density than water attached to the body to provide traction and preferably jets of water are applied to selected parts of the spine.

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be described in relation to the accompanying drawings in which:

FIG. 1 is an elevational view of the apparatus of the invention in use in a bath.

FIG. 2 is a perspective view of the apparatus illustrated in FIG. 1.

FIG. 3 is a sectional view taken on the lines 3—3 of FIG. 1.

DESCRIPTION OF A PREFERRED EMBODIMENT

In the description like numbers represent like parts. The body of the user of the apparatus of the invention is immersed in water contained in a bath generally denoted by the numeral **10** deep enough to ensure that the feet of the user of the apparatus will be above the bottom of the bath tank **10** when suspended. To enable the user to rest, a platform **12** is provided, this being secured to a wall **14** of the bath tank **10.**

Above the platform **12,** projecting from the wall **14,** below the surface of the bath **10,** is at least one ball type nozzle **16,** the angle of which is adjustable to change the direction of the stream **18** therefrom when directed against the spine of the user as illustrated in FIG. **1.**

Positioned above the nozzle **16** is a box generally denoted by the numeral **20,** the back **22** of which is secured to the wall **14.** The box **20** is preferably made of stainless steel. The upper and lower sides **24** and **26** of the box **20** are traversed by a threaded rod **28.** The upper end **30** of the rod **28** has a nut **32.**

The vertical sides **34** and **36** of the box **20** have guides **38** and **30** respectively which carry a slide **42.** The rod **28** traverses the slide **42** in threaded relation.

The middle portion of a cross arm **44** is secured by threaded bolts **46** to the slide **42.** The end portions **48** of the arm **44** extend sideways beyond the slide **42.** Each end portion **48** has the same plurality of vertical disposed spaced apart identical slots **50;** in FIG. **2** three such slots **50** are shown but the number is not critical.

Each slot **50** is sized to receive one of a pair of removable plates **52** the height of which is only slightly less than the height of a slot **50.** Each plate **52** has an upstanding abutment **54** which bears against the rear of the portion **48** of the arm **44** when the plate **52** is inserted in tilted manner and then moved to the vertical position into a selected slot **50** thus preventing withdrawal of the plate **52.**

An open-ended vertically disposed tube **56** is welded to each plate **52,** the lower end of each tube **56** being below the lower end of the attached plate **52.** When the plate **52** is inserted in a selected slot **50** the projecting lower end of the tube **56** bears against the adjacent portion **48** of the arm **44.**

Each tube **56** is adapted to receive in swivable relation one arm **58** of a right angle member **60,** the other arm **62** extending outwards horizontally in the bath **10.** A bolter **64** surrounds each arm **62.**

Above the surface of the bath tank **10** is another ball type nozzle **66** located in the wall **14.**

The use of the apparatus will be appreciated from the positions of the user depicted in FIG. **1.**

A slot **50** on each side of the middle portion of the cross arm **44** is selected to receive one of the plates **52,** the selection being such that the arms **62** are spaced apart a distance to suit the user, the bolsters **64** contacting the upper arms of the user when suspended in the bath **10.** The nozzles **16** and **66** are adjusted to provide jets of water against the spine of the user.

It has been found that the traction effect in the spine when the user suspends himself on the bolsters **64** as indicated is improved if weighted shoes **68** are worn, the soles **70** of which are formed of lead. Other weighting arrangements to counteract buoyancy can be employed.

What is claimed is:

1. Apparatus for applying traction to the spine of a user while immersed in water comprising in combination:

a. a bath tank capable of holding sufficient water to completely immerse a human body standing upright therein and having side and bottom walls thereon;

b. a pair of spaced apart support members extending outwardly from an upper side of one of said side walls of said bath tank;

c. individual bolster means on each support member to suspend said user by his arms in a substantially upright posture in said bath tank of water;

d. weight means attachable to the lower extremities of said user to decrease the effect of buoyancy of the water in said bath.

2. Apparatus according to claim **1,** wherein said support members are swivable on said wall.

3. Apparatus according to claim **1** wherein nozzle means are provided to direct jets of water against the spine of said user.

4. Apparatus according to claim **1,** having means to direct a jet of water from a wall of said bath tank upwardly through a tank of water and against the body of the said user.

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