Feb. 11, 1969 R. M. WARD 3,427,022

AQUATIC EXERCISING AID DEVICE

Filed Sept. 8, 1966

Fig. 1

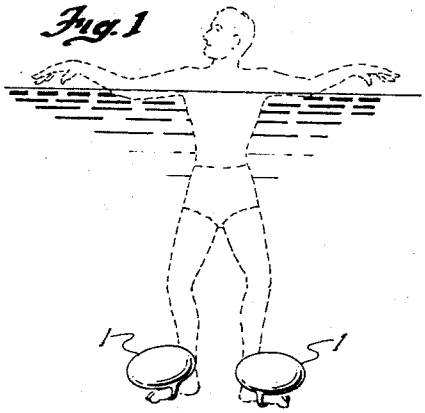
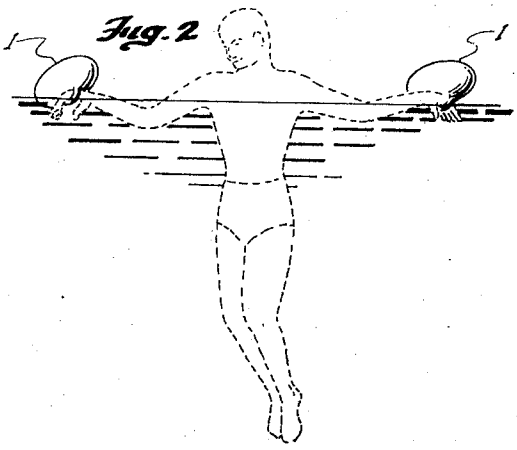


Fig. 2



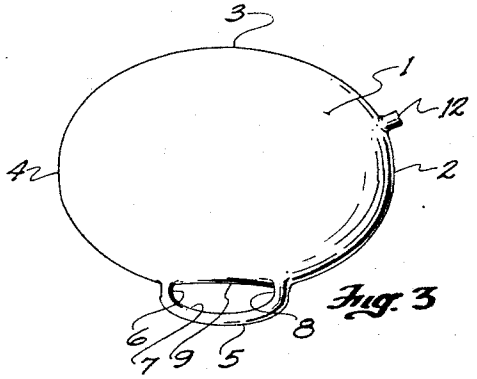


Fig. 3

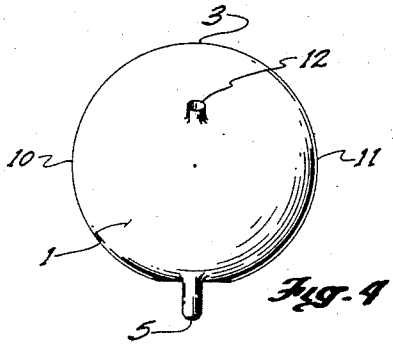


Fig. 4

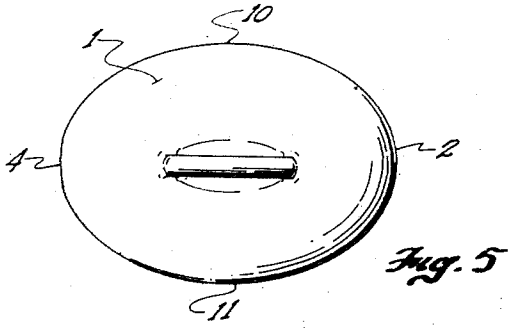


Fig. 5

INVENTOR.
RAYMOND M. WARD
BY Raymond M. Ward

United States Patent Office 3,427,022
Patented Feb. 11, 1969

3,427,022

AQUATIC EXERCISING AID DEVICE

Raymond M. Ward, 1278 Karesh Ave.,
Pomona, Calif. 91767

Filed Sept. 8, 1966, Ser. No. 584,297
U.S. Cl. 272—80 4 Claims
Int. Cl. A63b 31/00, 41/00

ABSTRACT OF THE DISCLOSURE

An aquatic exercising device including a pair of generally spherical hollow buoyant floats having valve means for introducing fluid thereinto and handle means depending therefrom for receiving portions of the body whereby the body portions are thereby buoyantly supported in water and exercising movements thereof are permitted while so floating.

This invention relates to a useful aquatic exercising aid device employed by persons while in water for the purpose of exercising their body muscles.

The primary object of the invention is to provide an aquatic exercising aid device that can be used with equal proficiency by men, women, and children regardless of their age or athletic ability; that will give them greater buoyancy and concurrently enable them to increase the resistance to movement through water, thus exerting greater pressures on their body muscles.

Another object of this invention is to provide a means, whereby the users in relying upon its buoyancy for support, will achieve a greater feeling of safety and self-confidence, thus permitting them to become fully relaxed so as to increase the effectiveness of their exercises.

Another object of the invention is to provide non-swimmers and certain types of handicapped persons an aquatic exercising aid device that they can use as effectively as accomplished swimmers; and when used as a physical training device, it has therapeutic value as an aid in restoring wasted muscles of the physically handicapped.

Another object of this invention is that its buoyancy can be readily adjusted by removing the screw cap and adding water so as to meet the buoyancy requirements of the weight of persons and conditions under which it is being used.

Another object of this invention is to enable the users to readily change the degree and center of their buoyancy by forcing the aquatic exercising aid device down into the water and by varying the position of the invention as held separately in each hand and/or placed separately on each foot in relationship to their bodies, thus increasing the number of body muscles being subjected to the exercises.

Still another object of this invention is to provide an economical aquatic exercising aid device constructed of non-corrosive material, without moving parts, that can be easily manufactured and readily adopted for use in water.

The invention contemplates an aquatic exercising aid device as described, wherein a floatable object is provided with an opening to permit the object to be grasped separately in each hand and/or placed separately around each foot. This invention also contemplates that such an aquatic exercising aid device may not only be used for exercising while in water, but it may also be used as a device for aquatic amusement such as games and other activities.

Other objects and advantages of this invention will be readily apparent by reference to the following detailed description taken in connection with the accompanying drawings.

Referring to the drawings:

FIGURE 1 illustrates in perspective view the use of this invention employing the feet.

FIGURE 2 illustrates in perspective view the use of this invention employing the hands.

FIGURE 3 is a side elevation view of this invention.

FIGURE 4 is an end elevation view of this invention.

FIGURE 5 is a bottom elevation view of this invention.

Similar reference numbers refer to similar parts throughout the several views of the drawings.

Referring now to the drawings in detail, there is generally indicated by the number **1**, one of the aquatic exercising aid devices of which are used in pairs each one identical to the other constructed so as to form a hollow air-tight object when sealed with cap at **12**; having an opening **6** through **9** of sufficient size and shape to permit the grasping of the object in areas **5** and **7** with either hand and of sufficient size and shape to permit the insertion of either foot so that point **7** is in contact with the arch of the foot and so that point **9** is in contact wih the instep of the foot in FIGURE 3.

Buoyancy is achieved because of the hollow construction features within the circumferences **4** to **3** to **2** to **9** to **4** in FIGURE 3 and within the circumferences **4** to **10** to **2** to **11** to **4** in FIGURE 5.

The aquatic exercising aid device may be constructed of suitable plastic, rubber, synthetic rubber, and other materials impervious to air of sufficient thickness to prevent the device from collapsing under the pressures of the water in which it is being used. The thickness of the material used may be increased to provide greater rigid strength and support where required.

An opening **12** in FIGURE 3 capable of being sealed against water is incorporated in the construction of this invention so as to permit the user to vary its degree of buoyancy by removing the seal and admitting the desired amount of water into the hollow object.

Since such openings are capable of being sealed by screw caps, plugs, and other means whether they protrude from the object, are flush with the object, or are recessed into the object are well known in the art of container sealing, the said sealed opening need not be described in detail herein.

To give an example of a preferable single aquatic exercising aid device, but not in the way of limitation, it has been found that the horizontal girth **4** to **2** to **4** in FIGURE 3 should be approximately 26 to 32 inches, wherein the vertical girth **9** to **3** to **9** in FIGURE 3 should be approximately 24 to 30 inches and that the circumference **4** to **10** to **2** to **11** to **4** in FIGURE 5 should be approximately 26 to 32 inches. Each of the aquatic exercising aid devices normally have a volume displacement of approximately 250 cubic inches or when used in pairs they have a combined volume displacement of approximately 500 cubic inches, thus providing exceptional buoyancy and permitting an extreme fluctuation in the degree of buoyancy depending upon the weight and requirements of the user.

Wherein this invention has been described as a hollow air-tight object capable of changing its degree of buoyancy by admission of water, it is also recognized that this flexibility of buoyancy may be obtained by solid construction using materials having different buoyant properties and also by varying the size of the device, therefore, this latter type of construction is embodied in this invention.

From the foregoing, it will now be seen that there is herein provided an aquatic exercising aid device which accomplish all the objects of this invention and others including practical health advantages, means of amusement, and commercial utility.

Although but a single embodiment of this invention has been illustrated and described herein, it is obvious that many changes and modifications may be made in the size, shape, detail, and arrangement of the various elements of the invention, all within the scope of the appended claims.

I claim:

1. An aquatic exercising device comprising a hollow generally spherically shaped buoyant rigid float, valve means positioned on the upper half of said spherical surface for introducing liquid into said float, handle means integrally formed on the bottom surface of said spherical float, said handle means extending and spaced said spherical surface and having an opening therethrough for receiving portions of the body whereby the user may insert each of said body portions in the said handle means of each of a pair of said floats and be buoyantly supported in water by said floats so that exercising movements of the body portions are permitted while so floating.

2. An aquatic exercising device according to claim 1 wherein said floats are generally oval shaped.

3. An aquatic exercising device according to claim 2 wherein said handle means depends and is spaced from said float, whereby the opening therein generally conforms to the contour of a body portion to facilitate insertion of said body portion therethrough and to permit firm grasping thereof.

4. An aquatic exercising device according to claim 3 wherein said handle means is tubular to enhance the buoyancy of said float.

References Cited

UNITED STATES PATENTS

2,163,795	6/1939	Merralls	9—8
3,220,729	11/1965	Whittington	46—91 XR
2,115,926	5/1938	Hatton	273—58.5

FOREIGN PATENTS

865,159	4/1961	Great Britain.

RICHARD C. PINKHAM, *Primary Examiner.*

WILLIAM R. BROWNE, *Assistant Examiner.*

U.S. Cl. X.R.

273—58; 46—91