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[54] **WATER VOLLEYBALL NET**

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[52] **U.S. Cl.** ..... **273/95 R**, 272/1 B

[51] **Int. Cl.** **A63b 71/00**

[58] **Field of Search** .....273/95 R, 1 R, 102 R; 272/1 B

[56] **References Cited**

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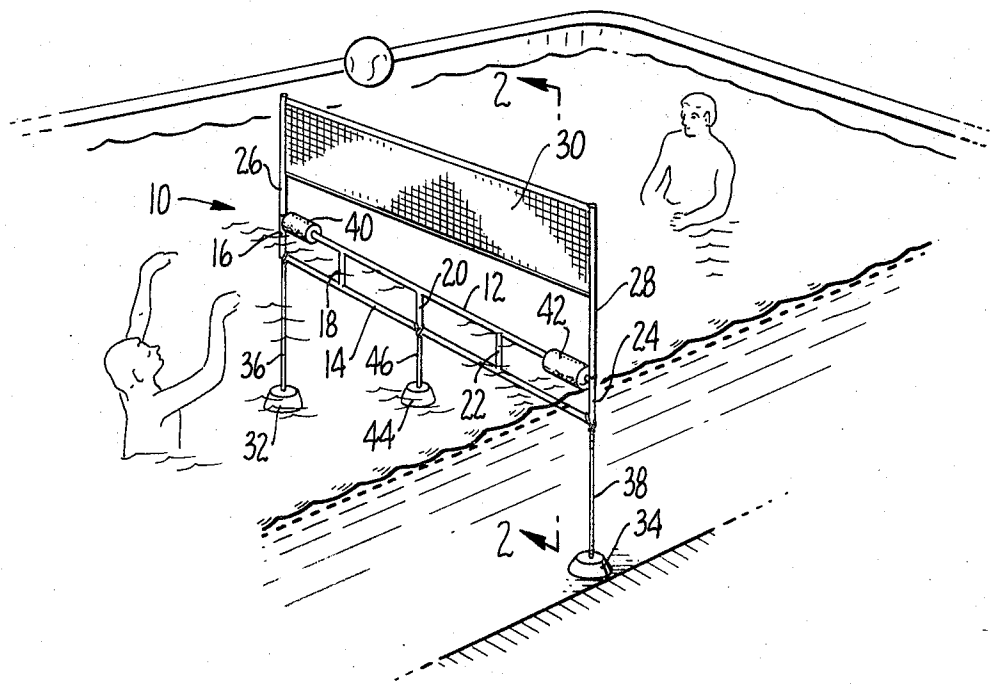
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[57] **ABSTRACT**

A water volleyball net has a rectangular frame having floats attached to an upper portion thereof, and a weight suspended from a lower portion thereof whereby any deflection of the rectangular frame from a vertical plane will produce a couple tending to return the frame to an upright position.

The frame has upwardly extending arms at each end thereof and a net suspended between the arms. The frame is anchored in the water by lines attached from the frame to the weights on the bottom of the pool.

7 Claims, 3 Drawing Figures



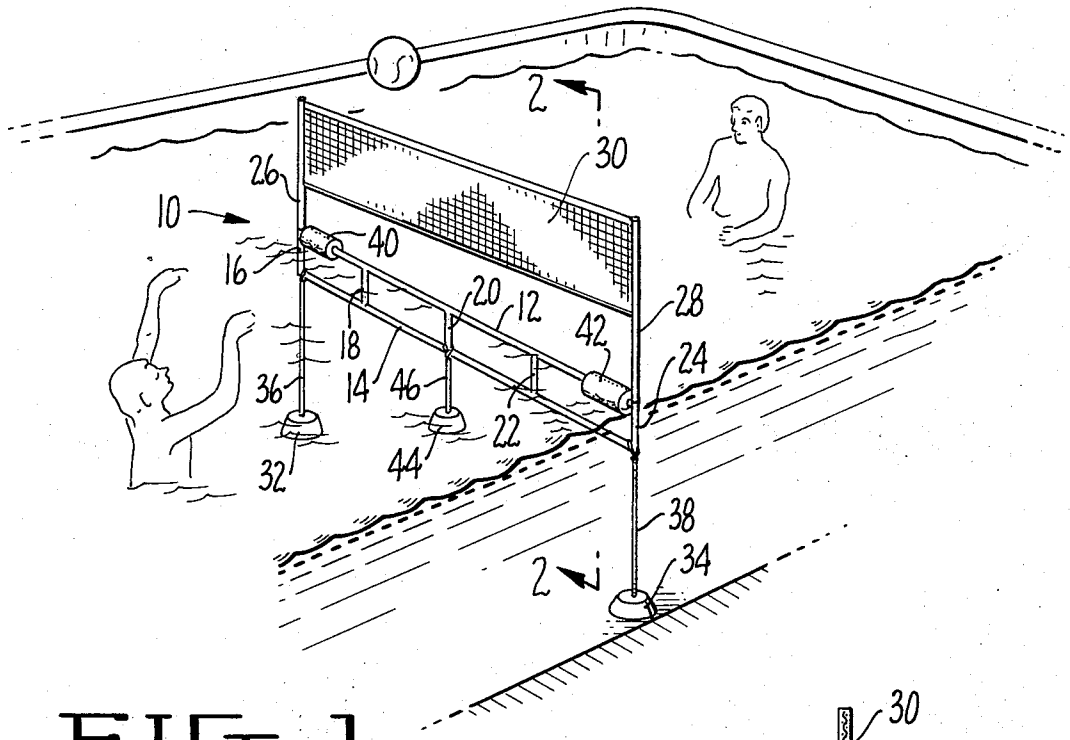


FIG. 1.

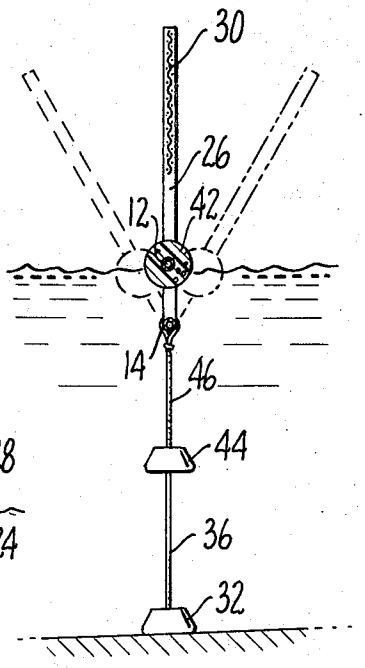


FIG. 2.

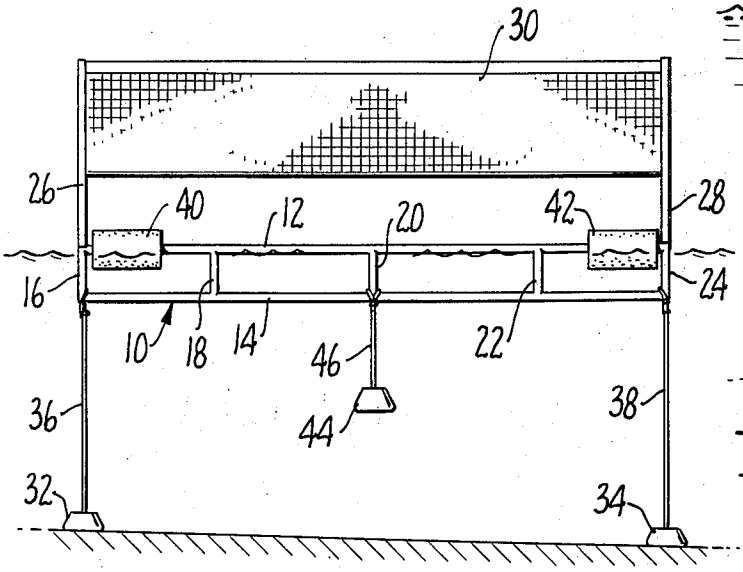


FIG. 3.

WATER VOLLEYBALL NET

BACKGROUND OF THE INVENTION

This invention relates to the field of amusement devices for use in swimming pools, more particularly to a frame for suspending a net used in water volleyball games. It is important in the playing of such games that the frame structure suspending the net remain in an upright position in spite of inadvertent interference by the players, or wave action of the water. In the past, efforts to provide a vertically stable net frame have included a structure which stands on the bottom of the swimming pool and extends upward therefrom above the surface of the water. Such structures are not easily adaptable to the sloping and irregular bottom surfaces found in most swimming pools for varying depth of the water. In addition, such structures present inflexible underwater hazards for the unwary player since supporting members extending away from the frame are required to brace the frame against tipping movements.

Other efforts to provide such a self-righting net frame have included floating structures which include members which extend along the top surface of the water and are provided with float means at their distal ends to likewise brace the structure against tipping moments. The obvious disadvantage of such structures is the hazard of having such members disposed at the surface of the water immediately adjacent the playing area. In addition, wave action on the leveraged floats causes the net support structure to bob continuously and, if upset, such structures are not self-righting.

BRIEF DESCRIPTION OF THE INVENTION

It is an object of the present invention to provide a water volleyball net support structure of a unitary planar configuration which has no auxiliary supporting members diverging therefrom toward the areas of play.

It is another object of the present invention to provide such a water volleyball net support structure which will return itself to a vertically upright position if disturbed therefrom.

Still another object of this invention is to provide such a net support structure which will adapt itself to irregularities in the bottom surface of the pool or water body in which it is employed.

Still another object of this invention is provide a water volleyball support structure which is of simple construction, inexpensive to produce, and easy to transport and erect.

The water volleyball net support structure of the present invention includes a rectangular frame having upwardly extending arms disposed at each end thereof, and a volleyball net suspended between the distal ends of the arms. The frame is provided with floats to keep it on the surface of the water, and anchors to keep it in position in the water.

A weight is suspended from the frame at a point below the floats, whereby any disturbance of the frame from a vertical plane will result in a couple tending to return the frame to a vertical plane.

The frame, the floats, the anchors and the suspended weight are all coplanar so that no members extends toward or into the playing area associated with the net.

BRIEF DESCRIPTION OF THE DRAWINGS

In the drawings:

FIG. 1 is a perspective view of the water volleyball net support structure of the present invention,

FIG. 2 is a sectional view of the water volleyball net taken on the plane designated by line 2—2 in FIG. 1, and

FIG. 3 is an elevational view of the water volleyball net of the present invention.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIG. 1, the water volleyball net support structure of the present invention includes a rectangular frame shown generally at **10** having a top member **12**, a bottom member **14** and vertical members **16, 18, 20, 22** and **24**, respectively. Extending upwardly from rectangular frame **10** at each end thereof are arms **26** and **28.** A net **30** is suspended between arms **26** and **28** at the distal ends thereof.

The rectangular frame is attached to anchors **32** and **34,** disposed directly beneath the ends of the frame, by flexible lines **36** and **38.** As shown in FIG. **2,** the flexible lines and anchors allow the volleyball net of the present invention to readily adapt itself to sloping or uneven bottom surfaces of the water body in which it is used. Floats **40** and **42** secured to the frame at either end of the member **12** buoyantly support the frame.

The weight **44** is suspended from the bottom member of the rectangular frame by a flexible line **46** connected to the frame at a level beneath the floats **40** and **42.** The line **46** may be of any length that will suspend weight **44** below rectangular frame **10** and above the bottom surface of the water body.

Referring to FIG. **2,** it will be appreciated that the entire water volleyball net structure including the rectangular frame, the upwardly extending arms, the net, the anchors, and the suspended weight, are disposed in a single plane, and these present no hazard to players on either side of the net. Initially, the forces on the net support comprise the weight of the structure and the weight suspended therefrom and the buoyancy of the floats disposed on the frame. These forces are disposed in the plane of the net support structure and are balanced to keep the structure on the surface of the water. If the support structure is disturbed from a vertical position, as indicated by the phantom lines, the suspended weight, and the buoyancy of the floats will result in a couple which will return the support structure to a vertical position. Accordingly, the water volleyball support structure of the present invention is vertically stable.

While a preferred embodiment of the invention has been illustrated and described, it should be understood that the invention is not intended to be limited to this embodiment but rather is defined by the accompanying claims.

I claim:

1. A water volleyball net structure comprising:

a. an elongated vertically disposed substantially planar frame having upwardly extending arms disposed at each end thereof and net means secured between said arms,

b. float means mounted on the frame intermediate the upper and lower extremities thereof for exert-

ing an upward force on the frame when in a body of water to support the frame on the water, and

c. weight means suspended from the frame below the float means for exerting a downward force on the frame at a point of suspension disposed at a point below the upward force exerted by the float means when in a body of water, whereby upon rotation of the frame from a vertical plane the float means and weight means are pulled toward one another as measured vertically and displaced from one another as measured horizontally so that the forces exerted by the float means and the weight means will provide a couple which will return the frame to a vertical plane.

2. The water volleyball net structure of claim **1** wherein the frame comprises an elongated top member, and an elongated bottom member is spaced parallel relationship with the top member, and at least one vertical member connecting the bottom member to the top member.

3. The combination of claim **2** wherein the float means is attached to the top member, and the weight means is attached to the bottom member.

4. The combination of claim **1** wherein the weight means comprises a weight suspended on a flexible line from the frame.

5. The combination of claim **1** further comprising anchor means for anchoring the frame in a body of water.

6. The combination of claim **5** wherein the anchor means comprises anchors adapted for being placed on the bottom surface of a body of water directly below the ends of the frame respectively, and flexible lines attaching the anchors to the ends of the frame.

7. A water volleyball net adapted for being disposed a preselected distance above the top surface of a body of water comprising an elongated frame defining a plane, spaced parallel arms extending from the frame and coplanar therewith, an elongated net having one end attached to one of the arms and the other end attached to the other of the arms, weight means secured to the frame, float means attached to the frame above and in vertically spaced relation to the weight means and the arms for providing buoyancy of the frame when disposed in a body of water whereby upon rotation of the frame from a vertical frame the float means and weight means are pulled toward one another as measured vertically and displaced from one another as measured horizontally so that the forces exerted by the float means and the weight means will provide a couple which will return the frame to a vertical plane, and anchor means attached to the frame for anchoring the frame in a body of water.

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