

July 24, 1951

C. R. BARNES
BUOYANT SUSTAINING SEAT
Filed Oct. 21, 1947

2,562,080

FIG. 1

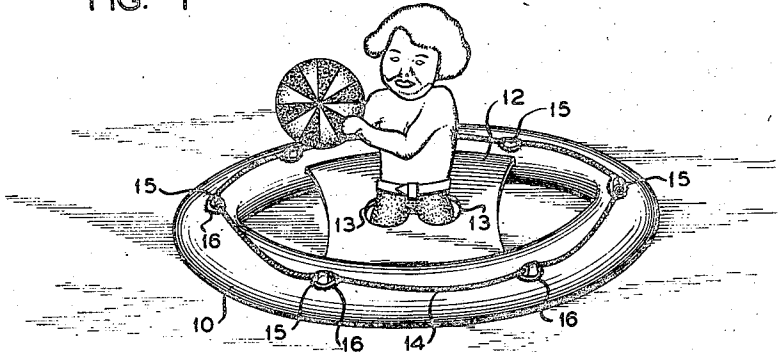


FIG. 2

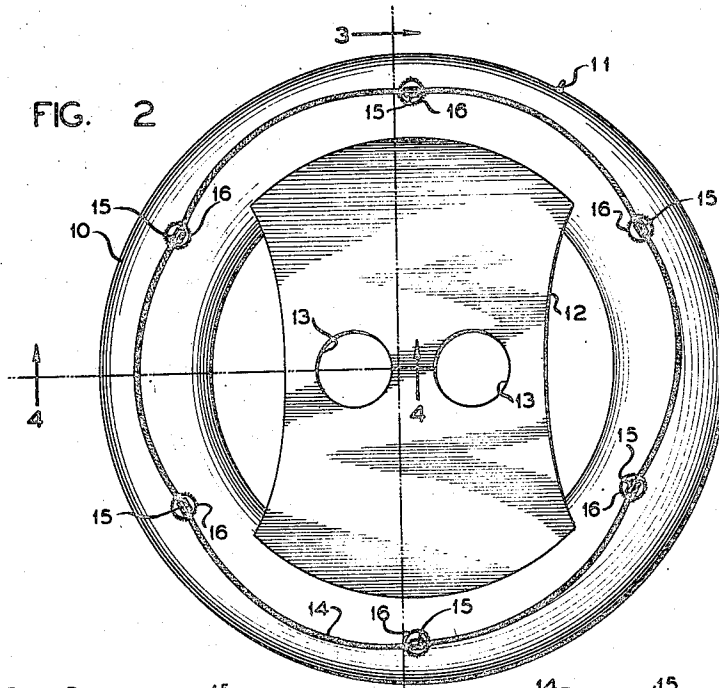


FIG. 3

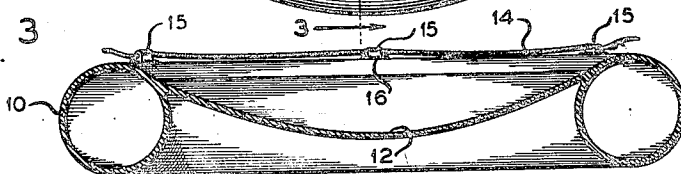
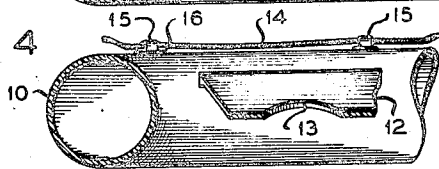


FIG. 4



INVENTOR.
CECIL R. BARNES

BY

Myatt Dowell
ATTORNEY

UNITED STATES PATENT OFFICE

2,562,080

BUOYANT SUSTAINING SEAT

Cecil R. Barnes, Lumberton, N. C., assignor of one-half to J. W. Coffey, Robeson County, N. C.

Application October 21, 1947, Serial No. 781,132

2 Claims. (Cl. 9-17.5)

1

This invention relates to aquatic devices and more particularly to a device for use primarily by children in the water for providing the necessary buoyancy to afford freedom from fear or in other words to give to the user a feeling of security in order that personality may be developed, beneficial exercise may be obtained and enjoyment or pleasure experienced.

Numerous types of devices for supporting weight, or devices having a specific gravity less than that of water have been provided. These, however, have been subject to various and sundry criticism, including their cost, complicated construction, bulkiness, instability, the constant danger of collapse, and the like.

It is an object of the present invention to provide a simple, inexpensive device, of unitary construction, which will be difficult to upset, and may be easily handled by child or adult.

Further objects and advantages of the invention will be apparent from the following description taken in conjunction with the accompanying drawings, wherein:

Fig. 1 is a perspective view illustrating one application of the invention and its use;

Fig. 2, a top plan view;

Fig. 3, a transverse section on the line 3-3 of Fig. 2; and

Fig. 4, a fragmentary section on the line 4-4 of Fig. 2.

The present invention is a simple, practical buoyant structure designed to afford pleasure as well as promote swimming and healthful exercise in the water and which, due to its construction and appearance, will eliminate fear in the mind of the user. The invention consists of an endless tube or tubular annulus with a cross web forming a saddle or body support with openings for receiving the legs of the user and with spaces at each side of the web for affording access to the water in which the device is supported. A lanyard or rope rail is disposed along the tube upon the top as shown, or otherwise.

With continued reference to the drawing, an endless pneumatic tube 10 is provided with a valve stem 11 for inlet and discharge of air, inflating gas or other lighter than air substance. A web or saddle 12 is disposed transversely across the tube 10 diametrically thereof from one side to the other. This web is formed integrally with the tube or separately therefrom and attached thereto permanently on the inner surface thereof intermediate the top and bottom surfaces by any desired means, as for example, by adhesive or vulcanizing means.

2

The web 12 at its ends is preferably of a width to provide substantial lineal contact or connection with the tube 10 for stability as well as for added strength. The web 12 is substantially narrower across its central portion than the internal diameter of the tube, thereby providing openings or unobstructed spaces one at each side thereof. Leg openings 13 are provided in the web 12 in order that the legs of the person using the device may project downwardly so that the body of the person is supported above the web. The catenary or arc of the web allows the center of gravity of the user to then be displaced below the water-line, thereby providing a safer water-vehicle which can be propelled easily through the water. The legs of the user extending downwardly in a walking position may contact the bottom in shallow water, and since the leg openings are centrally disposed the possibility of tipping is reduced. Also, it will be apparent that the device may be used in an inverted position.

In order that the device may be grasped easily as well as for other purposes, a lanyard or rope rail 14 is disposed around the surface of the device, being rotatably and slidably carried in a plurality of supports 15, each of which supports is provided with an enlarged base 16 providing a relatively large surface area attached to the tube 10. The base 16, like the web or saddle 12, may either be formed integrally with the tube or attached thereto in any desired manner as by vulcanizing or by adhesive.

With the device described, which can be deflated and folded compactly, a child may sit in the seat or saddle, as shown in Fig. 1, the leg holes being so placed that the weight of the child is carried centrally of the tube and below the water line so that the child is free to move about and play without tipping the device.

The device is so constructed that there is no danger of a knot becoming untied or a string breaking so that the seat can be detached from the tube. Possibility of chafing thereby causing deflation of the tube is eliminated. The rope rail is not merely a part of the seat but is a part of the tube and can be gripped from the outside, and also can be used to anchor the device or as a means to which small play objects, such as toy boats or the like, can be attached.

The device is susceptible of use by an adult by placing his legs through the openings one at each side of the web or saddle 12 and is particularly adaptable to be used in aquatic sports including a modified version of water polo, water soccer, jousting, or the like.

The device may easily be propelled by paddling in the water through the openings at each side of the seat or saddle and without danger of tipping or capsizing the device, the possibility of capsizing being always possible where paddling has to be done beyond the outer periphery of the tube, thereby disturbing the center of gravity.

It will be obvious to those skilled in the art that various changes may be made in the invention without departing from the spirit and scope thereof and therefore the invention is not limited by that which is shown in the drawings and described in the specification but only as indicated in the appended claims.

What is claimed is:

1. A propellable aquatic sustaining seat comprising a pneumatic annulus, valve means for controlling the admission and discharge of air into and from said annulus, a web loosely extending across said annulus and having its end portions integrally secured for a substantial lineal extent to said annulus between the upper and lower surfaces thereof, said web having an intermediate portion of a width less than the width of its end portions and also less than the internal diameter of said annulus and providing spaces at each side of the web within said annulus through which spaces paddling may be done for propelling the device in the water, said web having openings centrally thereof for receiving the legs of the user, supports spaced along said annulus having bases of relatively large diameters permanently attached to said annulus,

each support having an opening spaced slightly from its base, and a flexible hand rail in said openings.

2. A propellable aquatic sustaining seat comprising a pneumatic annulus, valve means for controlling the admission and discharge of air into and from said annulus, a web loosely extending across said annulus and having its end portions integrally secured for a substantial lineal extent to said annulus between the upper and lower surfaces thereof, said web having an intermediate portion of a width less than the width of its end portions and also less than the internal diameter of said annulus and providing spaces at each side of the web within said annulus through which spaces paddling may be done for propelling the device in the water, said web having openings centrally thereof for receiving the legs of the user.

CECIL R. BARNES.

REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

Number	Name	Date
1,297,665	Edmonds	Mar. 18, 1919
1,749,820	Johnson	Mar. 11, 1930
1,764,852	Phillips	June 17, 1930
2,207,025	Rison	July 9, 1940
2,390,199	Walsh	Dec. 4, 1945