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3,180,306 AQUATIC DEVICE Lucien L. Gouedy, 160 Grove St., Ponchatoula, La. Filed May 6, 1964, Ser. No. 365,435 10 Claims. (Cl. 115—23)

The present invention relates to an aquatic device, and more particularly, relates to an aquatic device for carrying a person substantially out of the water.

Small boat-like structures and/or swimming devices or 10 aids are well-known in the art and have taken a variety of forms. However, all of the prior art devices suffer from at least one of a plurality of disadvantages.

Certain prior art devices comprise merely a surface upon which to support the body and provide no propelling 15 means other than the operator's hands and arms. These devices are, of course, difficult to propel and control.

Other prior art devices strap the operator into position in or on the device, usually with the operator being partly submerged. These devices are extremely difficult to get 20 onto and off of and in case of trouble are dangerous and unsafe. In addition, such devices, particularly those in which the operator is partly submerged, are not operable in shallow water.

Other prior art devices have relatively complex propelling devices which utilize mechanical elements which are expensive and subject to breakage. These devices are not only expensive to manufacture, but are also expensive to repair.

It is therefore an object of the present invention to provide an aquatic device for carrying a person substantially out of the water which obviates the difficulties of the prior art, such as those indicated above.

It is another object of the present invention to provide an aquatic device which is extremely simple in construction, lacks complex mechanical elements, is inexpensive to construct, and is inexpensive to repair.

It is another object of the present invention to provide an aquatic device of extreme simplicity which is effective in carrying a person in deep or shallow water, safely. 40

It is another object of the present invention to provide an aquatic device which is easy to get on and off of, which which does not strap the operator into position, and which is safe.

It is another object of the present invention to provide 45 an aquatic vessel having a working platform on which objects, such as sea specimens or distressed swimmers, can be placed.

It is another object of the present invention to provide an aquatic device which is highly maneuverable.

It is another object of the present invention to provide an aquatic device which protects the operator's face from the water.

It is another object of the present invention to provide an aquatic device which permits freedom of the oper- 55 ator's hands and feet for use in the water.

It is another object of the present invention to provide an aquatic device which may be used as a toy, as a means for water transportation, as an aid to life-guards, as an aid to skin divers, as an exercise device, and for aquatic transportation of persons whose legs are incapacitated or partly incapacitated.

These and other objects and the nature and advantages of the present invention will be more apparent from the accompanying drawing wherein:

FIG. 1 comprises a plan view of an aquatic device in accordance with the present invention;

FIG. 2 comprises an elevation view of the aquatic device of FIG. 1; and

FIG. 3 is a rear-end elevation view of the aquatic device of FIGS. 1 and 2.

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The aquatic device of the present invention is shown generally at 10 and comprises a generally T-shaped body portion 12, wherein the leg 14 of the T-shape extends rearwardly for supporting the body of the person operating the aquatic device and the transverse head 16 of the T-shaped body portion is provided at the front end of the aquatic device. The body portion 12 is preferably provided with a relatively smooth flat upper surface 13 and a relatively rounded bottom surface 20 which tapers towards the base 22 of the T-shaped leg and also tapers towards the front edge 24 of the head 16.

The overall T-shape of the body portion is particularly advantageous in that this shape allows an operator free use of his hands and feet in the water, since the operator's body portion lies on a narrow stable platform. Since the operator is not strapped to the aquatic device, he can easily get on and off.

The flat upper surface 18' of the head 16 of the body portion 12 also affords a working platform which is useful for a variety of reasons. Thus in bottom exploration, sea specimens, rocks, etc. can be placed on the flat surface 18'. For use in life saving, the flat surface 18' permits a lifeguard to easily slide an unconscious person aboard from stern and push to a safe place.

The body portion 12 is formed of some type of flotation material to support the person operating the device. Thus, the body portion 12 is preferably formed of plywood and is hollow but may also be made of any other structural material such as aluminum, plastic, stainless steel, etc. If desired, the hollow shell of structural material which forms the body portion 12 may be filled with a lighter-than-water material such as cork or foam plastic 26. Polystyrene foam is the preferred lighter-than-water material, since it is both relatively inexpensive and inert. If desired, and in place of a structural material shell either hollow or filled with lighter-than-water material, the body portion 12 may be formed of molded, expanded flotation material which is reinforced either externally or internally.

The aquatic device 10 is provided with a propelling means 28 projecting longitudinally from each extremity 16' of the head 16 of the T-shaped body portion and towards the base 22 of the T-shaped body portion. Each such propelling means 28 comprises a frame member 30 rigidly attached to the extremity 16' of the head, a paddle wheel 32 rotationally mounted within the frame 30, and a crank handle 34 projecting through the frame 30 and rigidly mounted to the paddle wheel 32 for turning such paddle wheel within the frame 30. In each propelling means 28, the crank handle 34 projects from the paddle wheel inwardly towards the leg 14 of the T-shaped body portion 12 so that it may be easily operated by the person whose body is supported on the leg 14.

Each paddle wheel 32 may comprise any number of radially outwardly projecting paddles 32, but in the embodiment shown seven paddles are provided. In each case, however, the paddle 32 is essentially U-shaped as best seen in FIGS. 1 and 3. By providing U-shaped paddles, the aquatic device can be more easily controlled and propelled with little reduction in speed.

Preferably, the aquatic device 10 is also provided with a viewing means 36 in the leg 14 of the body portion 12 adjacent the head portion 16. The viewing means 36 comprises a well 38 which projects downwardly from the top 18 to the bottom 20 of the body portion 12 and, preferably, a window 40 at the bottom of the well 38 and contiguous with the bottom surface 20. Although a window 40 is preferred, it is not essential so long as the well 38 seals the interior of the body portion 12 from the water which will enter the bottom of the well 38. If a window 40 is used, it may be formed of glas or transparent plastic, such as polymethylmethacrylate. If de-

sired, a flexible hood 42 may be provided above the well 33. Such a hood 42 will serve to protect the head of the operator from the sun and waves and will also provide a sunshield to improve viewing through the window 49 by reducing reflections.

The viewing means 36 is particularly advantageous if used with a window 40 since the speed of the aquatic device 10 is increased when a window is used, and, in addition, viewing is improved which is particularly advantageous in skin diving and bottom exploration.

The aquatic device 10 may be provided with an anchor means 44 to anchor the device in a desired location. The anchor means 44 comprises a plate 46 mounted on the upper surface 18 of the T-shaped head 16 and projecting over the front edge of the head. The plate 46 is attached to the head 16 via a suitable attaching means such as screws 48. Mounted on the plate 46 is a spool 50 to which is attached a crank handle 52. The spool 50 is provided with a rope 54 formed of suitable material, such as nylon, which passes through a hole to the plate 46. Attached to the extreme end of the rope 54 is an anchor 56. In retracted position, as shown in FIG. 2, the upper part of the anchor projects through the hole in the plate 46.

The anchor means 44 is particularly useful when the device is used by a skindiver. In this manner the diver can travel above the surface to his desired location, stop, let down the anchor, investigate the bottom and return to the device in the same place as it was left. The device thus allows the divers to travel over the surface, which 30 conserves their air supply, and dive in places of their choice. If desired, the device could be towed from under water by the diver by use of the anchor rope.

Because the aquatic device maintains the operator above the surface, it may be operated in shallow water. 35 The device obtains additional maneuverability due to the positioning of the paddle wheels. Thus, the paddle wheels are spaced far apart relative to the narrow, stable center float which supports the body portion and the reversible paddle wheels permit the device to be completely turned around without moving in any positive direction in the water.

The curved bottom surface 20 of the aquatic device offers a minimum of water resistance and permits the device to be moved rapidly through the water. In addition, the curve or the taper at the bow 24 acts to lift the bow in choppy water and tends to break wavelets off from the operator's head and face. The hood 42 also serves to protect the operator's head and face.

It will be obvious to those skilled in the art that various changes may be made without departing from the spirit of the invention and therefore the invention is not limited to what is shown in the drawing and described in the specification, but only as indicated in the appended claims.

What is claimed is:

- 1. An aquatic device for carrying a person substantially out of the water comprising a generally T-shaped body portion for supporting a person substantially out of the water, said body portion being formed of a flotation material, and a propelling means projecting longitudinally from each extremity of the head of said T-shaped body portion back towards the base of said T, each said propelling means comprising a frame, a paddle wheel rotationally mounted in said frame, and a crank handle connected to said paddle wheel and projecting inwardly towards the leg of said T.
- 2. An aquatic device in accordance with claim 1 wherein said body portion is hollow.
- 3. An aquatic device in accordance with claim 1 wherein said body portion is filled with foam plastic.
- 4. An aquatic device in accordance with claim 1 wherein the upper surface of said body portion is essentially flat and the bottom surface is rounded to provide a taper towards said base and towards the front end of said head.
- 5. An aquatic device in accordance with claim 1 wherein each paddle of each said propelling means is essentially U-shaped.
- 6. An aquatic device in accordance with claim 1 further comprising anchor means mounted on the upper surface of said head and projecting over the edge of said head.
- 7. An aquatic device in accordance with claim 1 further comprising viewing means in said leg of said T-shaped body portion adjacent said head, said viewing means projecting through said leg to permit seeing beneath the surface of the water.
- 8. An aquatic device in accordance with claim 7 wherein said viewing means comprises a well in said leg and a window at the bottom of said well.
- 9. An aquatic device in accordance with claim 8 wherein said viewing means further comprises a hood above said well.
- 10. An aquatic device in accordance with claim 1 wherein the upper surface of said head provides a working platform.

References Cited by the Examiner UNITED STATES PATENTS

•	1,030,525 1,075,074 1,640,390 3,045,636 3,081,726	8/27 7/62	Myers 115—22.3 Uchtmann 115—22.3 Bacon 115—23 Thomas et al 115—23 Betts et al 114—66
	1,254,432	FO	REIGN PATENTS

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