May 3, 1966 T. PLANTS 3,249,084

WATER TRICYCLE

Filed Sept. 1, 1964

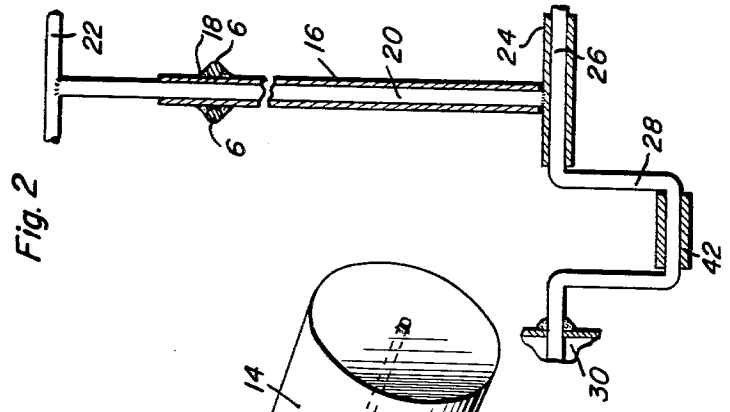


Fig. 2

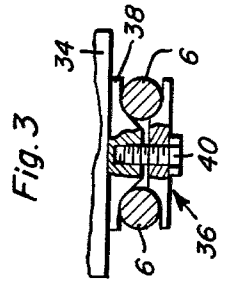


Fig. 3

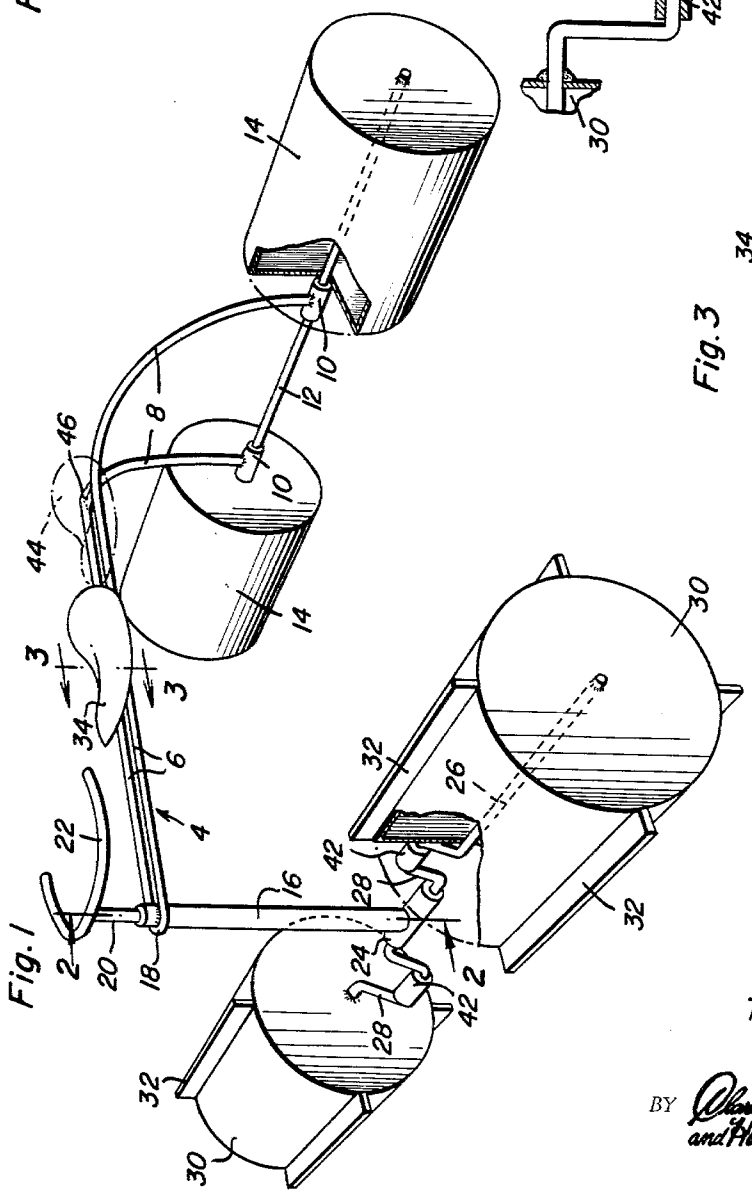


Fig. 1

Theodore Plants
INVENTOR.

BY Clarence A. O'Brien and Harvey B. Jackson
Attorneys

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WATER TRICYCLE

Theodore Plants, De Witt, Ark.
(Air Base Post Office, Newport, Ark.)

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This invention generally relates to water tricycles particularly although by no means necessarily, for small children and has for one of its important objects to provide, in a manner as hereinafter set forth, a vehicle of this character comprising unique tricycle type propulsion means.

Another highly important object of the invention is to provide a water tricycle of the aforementioned character which is safe and which, further, will develop a child's coordination and its sense of balance.

Still another important object of the present invention is to provide an occupant propelled water tricycle which may be used in shallow water and which is adapted to readily negotiate marsh grass, small obstructions, etc.

Another object is to provide a water tricycle of the character set forth comprising a seat which is longitudinally adjustable to accommodate children of various sizes.

Another object is to provide a water tricycle which comprises comparatively few moving parts.

Other objects are to provide a water vehicle or tricycle which is relatively simple in construction, strong, durable, compact, of light weight and which may be manufactured at low cost.

These together with other objects and advantages which will become subsequently apparent reside in the details of construction and operation as more fully hereinafter described and claimed, reference being had to the accompanying drawings forming a pact hereof, wherein like numerals refer to like parts throughout, and in which:

FIGURE 1 is a perspective view of a water tricycle constructed in accordance with the present invention, one of the floats being shown broken away;

FIGURE 2 is a fragmentary view in vertical section on an enlarged scale through the bottom portion of the device taken substantially on the line 2—2 of FIGURE 1; and

FIGURE 3 is a detailed view in cross section on an enlarged scale through the seat securing means, taken substantially on the line 3—3 of FIGURE 1.

Referring now to the drawings in detail, it will be seen that the embodiment of the present invention which has been illustrated comprises a substantially U-shaped frame of suitable metal which is generally designated by reference numeral **4**. The legs **6** of the substantially U-shaped frame **4** terminate in laterally and downwardly curved rear or free end portions **8** having affixed to their lower ends transversely aligned tubular bearings **10**.

A rear axle or shaft **12** of suitable metal is journaled for rotation in the bearings **10**. The end portions of the shaft or axle **12** project beyond the bearings **10** and fixedly mounted thereon is a pair of rear cylindrical floats **14** of suitable metal. The floats **14**, it will be noted, are transversely aligned.

A vertical tubular standard or head **16** has an upper end portion fixed at **18** in a bight portion of the frame **4**. A post or the like **20** is mounted for rotation in the head **16**. The post **20** extends upwardly beyond the head **16** and has affixed to its upper end portion a handle bar **22**. Affixed to the lower end of the post **20** is a tubular bearing **24** on which the head **16** rests.

A front axle in the form of a crank shaft **26** is journaled for rotation in the bearing **24**. Adjacent the ends of the bearing **24**, the front axle or shaft **26** comprises foot cranks or pedals **28**. Outwardly of the foot

cranks or pedals **28**, aligned cylindrical front floats **30** are affixed to the shaft **26**. Radial vanes or paddles **32** are fixedly mounted longitudinally on the cylindrical floats **30**.

A bicycle type seat **34** is mounted on the frame **4**. The seat **34** is adjustable longitudinally on the frame **4** to accommodate riders of various sizes. Toward this end, the seat **34** in the embodiment which has been shown, comprises a securing clamp **36**. The clamp **36** includes a pair of double jaws **38** which receive the legs **6** of the frame **4** therebetween. A screw or bolt **40** clamps the jaws **38** on the frame legs **6**.

It is thought that the operation of the vehicle will be readily apparent from the consideration of the foregoing. Briefly, the rider occupies the seat **34** and grips the handle bar **22** with his feet resting on the pedals or cranks **28**. The front axle or shaft **26** is then manually rotated in an obvious manner for driving the paddle floats **30**, thus propelling the vehicle. Of course, steering is accomplished by turning the handle bar **22**. The cranks **28** comprise rotary sleeves **42** which receive the feet of the user. If desired, a tandem seat **44** may be mounted on the frame **4** rearwardly of the seat **34**. A transverse brace **46** extends between the legs **6** and the frame **4** adjacent the curved portions **8** of said legs. The construction, combination and arrangement of parts is such that the vehicle will readily negotiate shallow water, swamp grass, small debris, etc. Also, the device may be propelled rearwardly as well as forwardly, as will be apparent. As hereinbefore indicated, the device is primarily for use by children, the widely spaced pairs of front and rear floats insuring maximum stability and safety. However, the device may also be used by fishermen and others, if desired.

The foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly all suitable modifications and equivalents may be resorted to, falling within the scope of the invention as claimed.

What is claimed as new is as follows:

1. A water vehicle comprising a frame, a rear axle mounted on said frame, a rotary front axle mounted for horizontal swinging movement on the frame, transversely spaced and aligned cylindrical floats affixed to the front and rear axles, said front axle including foot cranks for manually rotating said front axle and the floats thereon, a seat on the frame, and means for swinging said front axle for steering the vehicle.

2. A water vehicle comprising a frame, a rear axle mounted on said frame, a rotary front axle mounted for horizontal swinging movement on the frame, transversely spaced and aligned cylindrical floats affixed to the front and rear axles, said front axle including foot cranks for manually rotating said front axle and the floats thereon, a seat on the frame, and means for swinging said front axle for steering the vehicle, said means including a tubular vertical head on the front portion of the frame, a vertical rotary post in said head, a transverse tubular bearing on the lower end of the post rotatably receiving the front axle therethrough, and a handle bar on the upper end of the post.

3. The combination of claim 2, together with radical propulsion vanes affixed to the second-named floats.

4. The combination of claim 3, said head resting on said bearing.

5. A water tricycle comprising a generally U-shaped, onepiece frame including spaced, parallel legs comprising outwardly laterally and downwardly curved rear end

portions, a rear axle mounted transversely on the legs, cylindrical floats affixed to the axle, a generally vertical tubular head fixedly mounted in the bight portion of the frame, a rotary steering post in the head, a front axle rotatably mounted on the lower end of the post, cylindrical propulsion floats affixed to said front axle, a handlebar on the post, a seat, and means for securing said seat for longitudinal adjustment on the frame, said front axle including foot cranks operable from the seat.

6. The combination of claim 5, said propulsion floats comprising radial peripheral vanes.

7. The combination of claim 6, together with transversely aligned tubular bearings on the free ends of the legs rotatably receiving the rear axle.

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MILTON BUCHLER, *Primary Examiner.*

ANDREW H. FARRELL, *Examiner.*