

OR

506,748

Rotary hull.

(No Model.)

2 Sheets—Sheet 1.

H. THIBAUT.

REVOLVING HULL PROPELLER FOR VESSELS.

No. 506,748.

Patented Oct. 17, 1893.

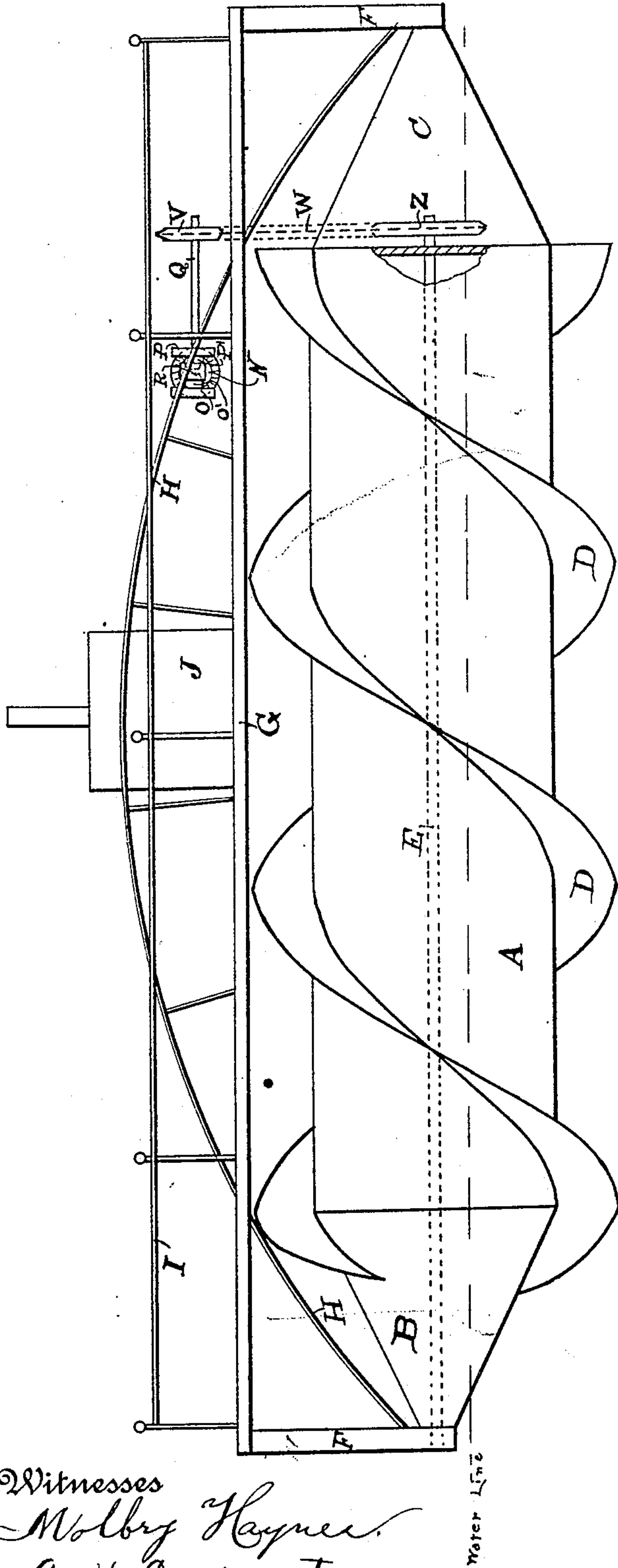


Fig. 1.

Witnesses

Molby Haynes.
A. H. Carpenter.

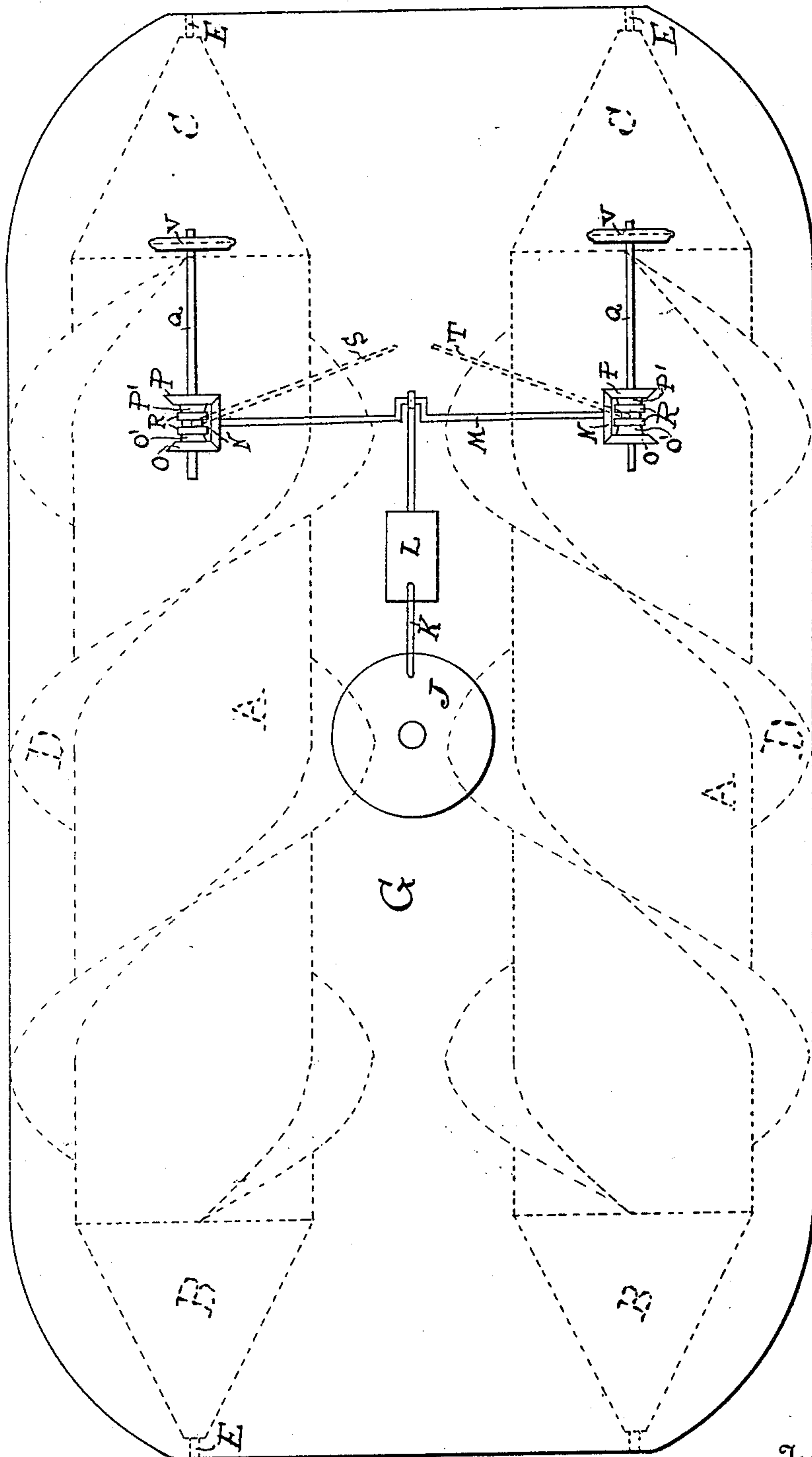
Inventor

Henry Thibault

By Joshua B. Webster
Attorney.

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Fig. 2.



Witnesses
Molby Haynes.
A. H. Carpenter.

Inventor
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UNITED STATES PATENT OFFICE.

HENRY THIBAUT, OF STOCKTON, CALIFORNIA, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, OF THIRTEEN-TWENTIETHS TO A. H. CARPENTER AND S. A. KITCHENER, OF SAME PLACE, AND WILLIAM R. GROFF, OF LINCOLN, CALIFORNIA.

REVOLVING-HULL PROPELLER FOR VESSELS.

SPECIFICATION forming part of Letters Patent No. 506,748, dated October 17, 1893.

Application filed March 24, 1893. Serial No. 467,491. (No model.)

To all whom it may concern:

Be it known that I, HENRY THIBAUT, a citizen of the United States, residing at Stockton, in the county of San Joaquin and State of California, have invented certain new and useful Improvements in a Combined Revolving Hull and Propeller for Vessels; and I do declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is to provide a vessel having a hull composed of one or more revolving buoyant air-tight cylinders having conical ends, the ends of the shafts of which cylinders support the deck and machinery of the vessel, such cylinders being provided on their periphery with one or more exterior longitudinal spiral propeller blades of which the cylinder is the axis. This I accomplish by the devices and combination of devices which will be now fully described in the specification and pointed out in the claims.

To more fully illustrate my invention reference is had to the accompanying drawings, in which—

Figure 1, is a left-hand side elevation of my improved buoyant revolving hull propeller vessel. Fig. 2, is a top view of the same and also showing the method of reversing the motion of the cylinders, the cylinders being shown and illustrated by dotted lines thereon.

Similar letters of reference indicate corresponding parts.

A, are suitable air tight cylinders having at their front ends, conical shaped air tight sections B, which may be rigidly or flexibly attached, as may be desired, to the cylinders A and are herein shown as being rigidly attached.

C, are conical sections similar in shape to the cones B, and are located at the rear, and are flexibly attached to the end of the cylinders. The cones C, may be also rigidly attached, if desired, in small vessels.

The cylinders A are provided with any suit-

able number of spiral longitudinal propeller blades D, and with parallel center shafts E, which are adapted to engage at their projecting ends, and also at intervening points if the cylinders are made in sections, with suitable standards F, which support a suitably constructed deck G.

H, are trusses attached to the standards F, for the purpose of securing the deck rigidly in position.

I, are the bulwarks above and attached to the deck and with which vessels are usually provided.

J, is a steam boiler, which is suitably situated on the deck, and is provided with a steam pipe K, which conducts the steam to the cylinder L, of the engine, which cylinder is provided with the usual piston and other attachments which engage with a crank shaft M, having on its outer ends bevel gear wheels N, which engage with two sets of bevel gear wheels O and P, provided with large hubs O' and P' respectively, which gear wheels move in opposite directions, said gear wheels being loosely mounted on suitable shafts Q. Between said gear wheels O and P on the shafts Q, are located friction clutches R, sliding back and forth on feathers or guides and are adapted to engage with the hubs O' and P' of the bevel gear wheels O and P respectively and alternately.

The clutches R, are thrown in and out of gear by means of two levers, of which S is the right hand, and T is the left hand. The shafts Q, are supplied at their back ends with sprocket wheels V which engage with sprocket chains W, which extend downwardly and engage with sprocket wheels Z, which are attached to the rear ends of the shafts E, said sprocket wheels Z, being within the cones C, which connecting mechanism sets the cylinders A in motion.

When the steam is turned on in the cylinder, the piston and attachments of the cylinder are set in motion and actuate the crank shaft M, thus setting the bevel gears N O and P in motion. Then by means of the levers T and S the clutches R, are pressed against the hubs P', causing by means of the connecting

mechanism before described, the cylinders A to rotate in opposite directions and thus forcing the vessel ahead. Should it be desired to turn the head of the vessel to the left or larboard, the clutch R on the left hand side, is released from the hub P' by means of the lever T. Should it be desired to make a sudden turn or turn entirely about, the clutch R on the left hand side is pressed hard against the hub P' by means of the lever T, thus causing the cylinder A on the left hand side to revolve oppositely. The same modus operandi is to be followed if the vessel is to be turned in the opposite direction. With this device the course of the vessel is regulated without the use of a rudder.

In large sea going vessels, the cylinders A, may be constructed in two or more sections, and additional and center supporting standards F used to support the deck and machinery.

Large sea-going vessels may be constructed with sections of the deck, at right angles thereto, in the water, suitably supported on each side by my improved air tight cylinders for the purpose of rendering the vessel less liable to be overturned.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In a buoyant propeller, the combination with the revolving hull A B C D E, the standards F, the trusses H, and the deck G, of the sprocket wheel Z, the sprocket chain W, the sprocket wheel V, the shafts Q, the friction clutches R, the levers S and T, the bevel gears O, and P which revolve in opposite directions, the bevel gears N, the crank shaft M, the cylinder L supplied with suitable steam pipe K, and the steam boiler J, all arranged and operating substantially as shown and described.

2. In a buoyant propeller, the combination with a vessel's hull composed of air tight cylinders, such cylinders being provided with longitudinal spiral propeller flanges of the parallel horizontal shafts E, the sprocket wheels Z and V and chain W, the shaft Q and connecting mechanism, the crank shaft M, the cylinder L, the steam pipe K, and the boiler J, all arranged and operating substantially as shown and described.

3. In a vessel, the combination substantially as shown and described, with the engine and machinery, of the horizontal parallel shafts E, the cylinders A, such cylinders having the longitudinal spiral propeller flanges D on their peripheries, the supporting standards F located at the ends of the shafts of said cylinders, and the deck supported by said standards.

4. In a vessel, the combination with the hull composed of the revolving air tight cylinders A, such cylinders being provided with exterior longitudinal spiral propeller flanges D, of the shafts E, the sprocket wheels Z, the chain belts W, the sprocket wheels V, the shafts Q, the friction clutches R, which are adapted to engage with the bevel gears O and P alternately, the bevel gears O and P, which are adapted to rotate in opposite directions, the bevel gear wheels N, which are adapted to engage with the gear-wheels O and P, the shaft M, the cylinder L and the steam pipe K and boiler J, all substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

HENRY THIBAUT.

Witnesses:

JOSHUA B. WEBSTER,
MALBRY HAYNE.