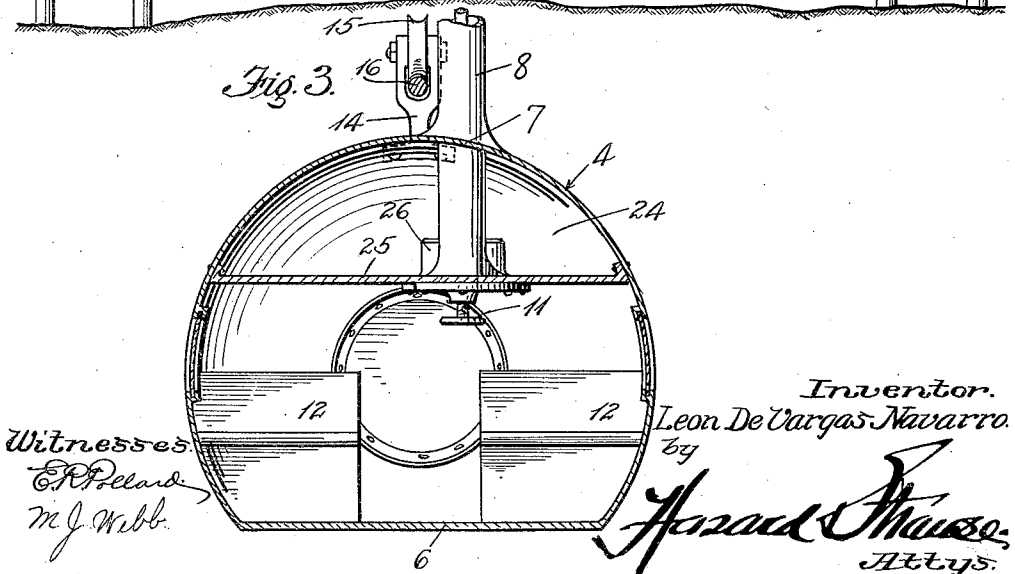
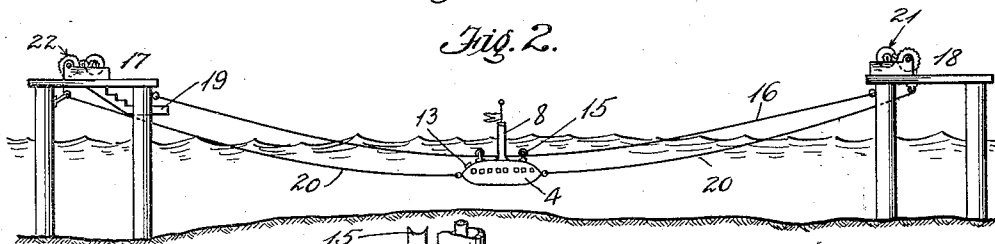
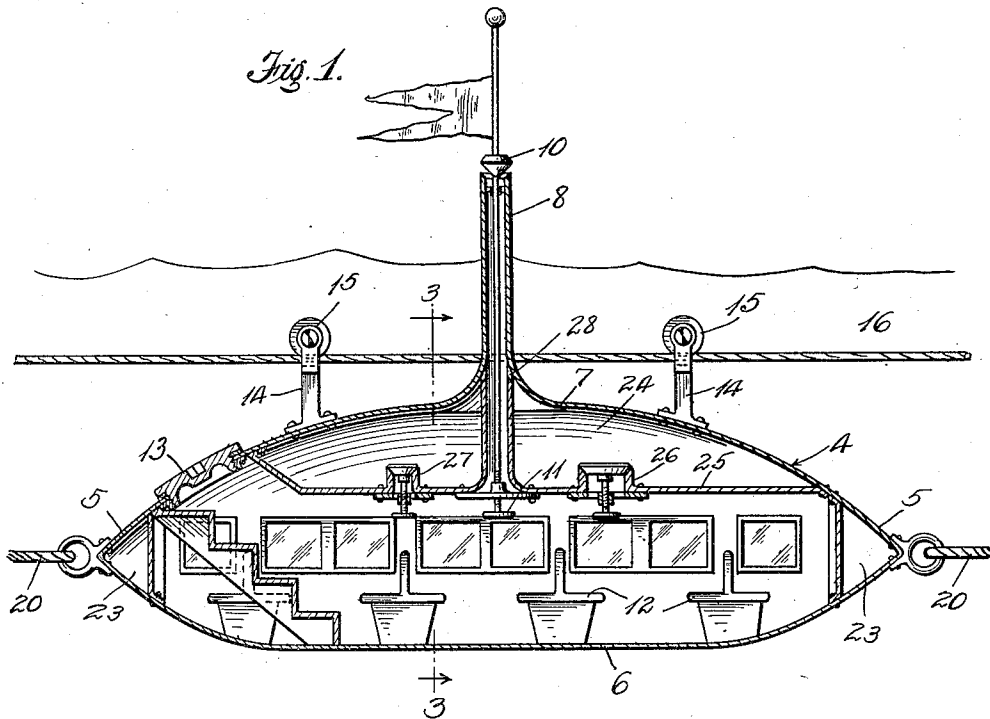


L. DE V. NAVARRO.
AMUSEMENT DEVICE.
APPLICATION FILED JUNE 8, 1912.

1,056,929.

Patented Mar. 25, 1913.



UNITED STATES PATENT OFFICE.

LEON DE VARGAS NAVARRO, OF LOS ANGELES, CALIFORNIA.

AMUSEMENT DEVICE.

1,056,929.

Specification of Letters Patent.

Patented Mar. 25, 1913.

Application filed June 8, 1912. Serial No. 702,454.

To all whom it may concern:

Be it known that I, LEON DE VARGAS NAVARRO, a citizen of Mexico, residing at Los Angeles, in the county of Los Angeles and State of California, have invented a new and useful Amusement Device, of which the following is a specification.

My invention relates more specifically to a submarine vessel construction designed for amusement purposes and it is an object of my invention to provide a construction in which persons may be safely transported beneath the surface of a body of water affording them amusement and recreation, and at the same time presenting educational features for their consideration.

It is a further object of my invention to provide a propulsion means whereby the movement of my submarine vessel may be controlled and directed along a predetermined line of travel.

I accomplish these objects by means of the construction described herein and illustrated in the accompanying drawings in which—

Figure 1 is a longitudinal section of the submarine vessel in a submerged position. Fig. 2 is a side elevation of the vessel illustrating its propulsion means. Fig. 3 is a transverse section of the vessel taken on line 3—3 of Fig. 1.

In the drawings 4 designates a submarine vessel construction preferably cylindrical in form having tapered ends 5, and provided with a flattened bottom 6, a dome shaped top 7 to which is rigidly secured a hollow mast 8 of sufficient length to extend above the surface of the water when the vessel is submerged and in an operative position, said mast being provided on its uppermost end with a valve seat on which is mounted a valve stopper 10 controlled by a hand wheel 11 secured at lower end of valve stem 12.

Located within the vessel body and along each of its longitudinally extending sides are transversely disposed seats 12 which are designed for the accommodation of passengers who enter the car through a hatch or port 13 which is adapted to be hermetically sealed when the car starts on a journey. Rigidly secured to the domed roof of the car are the trolley supports, 14 placed in the axial plane of the car so that the center of gravity will fall directly below the plane of support engaged, by the grooved wheels 15 and as shown in the drawings this support

is preferably a steel cable 16 of sufficient strength to safely carry the entire weight of the car and its passengers, and shown supported at its ends on suitable wharves or stations 17—18. These ends are supported above water and sufficient slack in the cable is allowed so that it is submerged and permits the car to also become submerged.

At 19 is shown a landing station preferably placed a little lower than the support for the car so that when the latter is drawn up close the opened hatch would be in a convenient position for passengers to step into and enter the car for their journey. To propel the car over the trolley supports, suitable cables 20—20 adapted to be fastened to the respective ends of the car are wound upon winding drums 21—22 on the deck of the wharves or supporting structure.

For safety the conical ends are closed by bulkheads forming air chambers 23—23 and also to further provide for safety and ventilation the upper portion of the car 24 is preferably inclosed by bulkhead 25 which is provided with a plurality of openings 26—27 closed by suitable valves, these being formed preferably of varied size for regulating the ventilation. The hollow mast 8 is also shown as extending to and connected with the bulkhead 25 but the ventilation openings are preferably placed near to contact with the outer shell of the car shown as 28. As previously stated, the opening in the mast may be closed in case of danger, or should the boat drop below the surface, or for any failure of the operating means to inclose sufficient air in the ventilating chambers to supply those in the car. The sides of the car as shown are provided with windows which allow floating objects to be seen and the bottom may also be thus provided so that all the beauties and wonders of submarine life and force may be studied.

As is readily seen, in the operation of the device, winding device 22 draws the car to landing station 19, where it may be opened and filled as desired. The operation of the winding device 21 carries the car supported and secured by the cable 16 to any desired position intermediate the two ends or back and forth for a continuous passage if desired.

What I claim is:

1. An amusement device, comprising a car, means of ingress therein and egress therefrom adapted to be hermetically sealed,

an auxiliary air chamber therein connected with the outside air, means for closing said connection with the outside air, a flexible cable supporting the car, and cables secured to said car to draw the car above or below the water in the path of said supporting cable.

2. In an amusement device, a sealable car, a suspended flexible track supported at its ends above a fluid medium, its lower portion submerged therein, pulleys movably connecting said car to the flexible track, and cables secured externally of said car to move the car from one end to the other of said flexible track.

3. An amusement device, comprising a car

provided with means of ingress therein and egress therefrom, air tight compartments therein, an auxiliary ventilating and air tight compartment provided with a plurality of control valves for controlling the air in said compartment, a ventilating mast connected therewith, and a valve at its external opening to control the supply of air in said compartment.

In witness that I claim the foregoing I have hereunto subscribed my name this first day of June, 1912.

LEON DE VARGAS NAVARRO.

Witnesses:

M. J. WEBB,

EARLE R. POLLARD.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."