Jan. 14, 1930. W. ROBERTSON, JR 1,743,396

FLOAT

Filed May 13, 1929

Fig 1

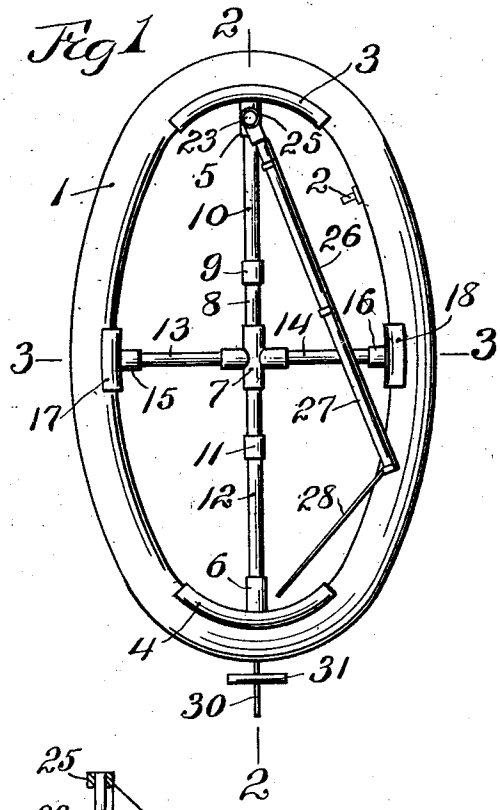

Fig 4

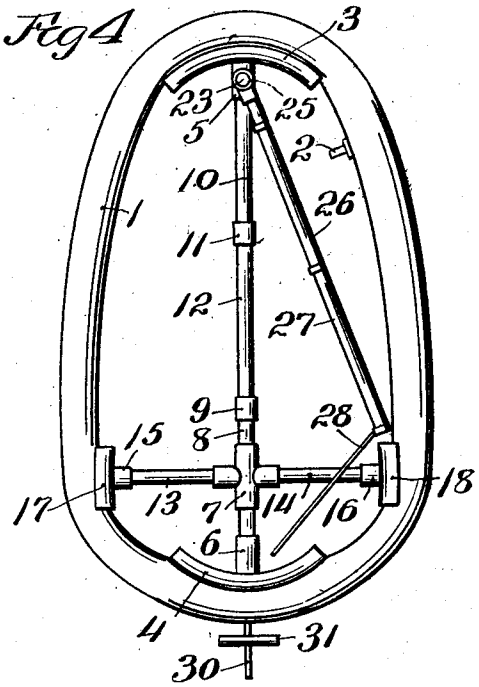

Fig 3

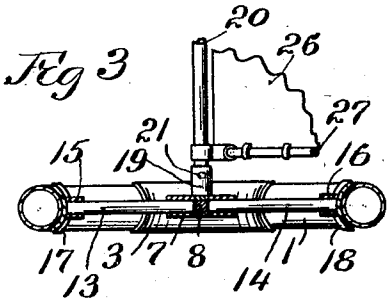

Fig 2

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Patented Jan. 14, 1930 1,743,396

UNITED STATES PATENT OFFICE

WILLIAM ROBERTSON, JR., OF PLATTE CITY, MISSOURI

FLOAT

Application filed May 13, 1929. Serial No. 362,470.

My invention relates to improvements in floats adapted for sport use and which can be used as a sail boat.

One of the objects of my invention is the provision of a float of the kind described, which is cheap, simple, durable, not likely to get out of order, which is light, collapsible, readily adapted for storing in compact form and for easy transportation.

A further object of my invention is the provision of novel forming and bracing means by which the form of the float is adapted to be changed and firmly retained in the form given it.

My invention provides further novel means for supporting a mast and a rudder.

The novel features of my invention are hereinafter fully described and claimed.

In the accompanying drawings which illustrate the preferred embodiment of my invention,

Fig. 1 is a plan view of my improved float provided with a mast and rudder and having the cross bracing members centrally disposed.

Fig. 2 is a section on the line 2—2 of Fig. 1.

Fig. 3 is a section on the line 3—3 of Fig. 1.

Fig. 4 is a plan view of the float showing the cross bracing members disposed adjacent to one end of the longitudinal bracing means.

Similar reference characters designate similar parts in the different views.

1 designates an annular inflatable tube, such as the inner tube of a tire, provided with the usual air filling tube 2.

The tube 1 is held in desired form partly by longitudinal forming and bracing means comprising the following described parts, referring particularly to Figs. 1 to 3.

3 and 4 designate two shoes adapted to removably engage opposite inner sides of the tube 1, the outer sides of the shoes being concave to receive the tube 1. Said shoes 3 and 4 are respectively provided with tubular longitudinal central stems 5 and 6.

7 designates a T member which is adapted for longitudinal adjustment between the shoes 3 and 4 and through which extends a removable member 8, one end of which has fastened to it a coupling tube 9 in which is removably mounted one end of a member 10, the other end of which is removably mounted in the stem 5.

The other end of the member 8 is removably mounted in a tubular coupling member 11 which is fastened to one end of a member 12, the other end of which is removably mounted in the stem 6.

Two cross bracing members 13 and 14 have their inner ends respectively fitted in the cross arms of the T member 7, the outer ends of the members 13 and 14 being respectively removably mounted in two inwardly extending tubular stems 15 and 16 with which two shoes 17 and 18, corresponding in form to the shoes 3 and 4 are provided. The shoes 17 and 18 respectively engage opposite inner sides of the tube 1.

The stem 5 of the shoe 3 is provided with an upwardly extending tubular projection 19 which serves as a step for a mast, which may comprise a lower member 20 mounted in the step 19 in which is it releasably held by a transverse pin 21 removably mounted in a hole which extends through the member 20 and the step 19.

The upper end of the member 20 has secured to it a tubular coupling member 22 in which is removably fitted the lower end of an upper mast member 23, which is releasably held by a removable pin 24 in the coupling member 22.

A ring 25 on the upper end of the mast member 23 has fastened to it the peak of a triangular sail 26, the lower edge of which is fastened to a boom 27 removably pivoted to one end of the lower mast member 20, and having fastened to its other end a rope 28 by which the boom is operated in the usual manner.

In assembling the parts, the tube 1 is first in a deflated condition, mounted on the shoes 3, 4, 17 and 18, the parts having been assembled, as for example, as is shown in Fig. 1. The tube 1 is then inflated in the usual manner through the filling tube 2.

Depending from the stem 6 of the rear shoe 4, is a pin 29 on which is pivotally mounted a rudder 30, which is provided with a tiller 31.

In the operation of the float, as above as-

sembled, the operator sits on the rear end of the float with the rope 28 in hand and the rudder tiller 30 within easy reach. The float is then operated for sailing purposes after the usual manner of operating sloops.

If desired, to provide greater width at the rear for the convenience of the operator, the parts may be assembled, as shown in Fig. 4, with the rear end of the member 8 fitted in the stem 6, the rear end of the member 12 fitted in the coupling member 9, and the rear end of the member 10 fitted in the coupling member 11. This arrangement will remove the cross members 13 and 14 and the shoes 17 and 18 from the central position shown in Fig. 1 to near the rear of the float, as shown in Fig. 4.

When it is desired to store or transport the float, the tube 1 is deflated, and the detachable parts may then be disassembled for compact form.

Also, if desired, the float may be used without the mast, sail, boom and rudder.

I do not limit my invention to the specific structure shown and described, as modifications, within the scope of the appended claims, may be made without departing from the spirit of my invention.

What I claim is:—

1. A float of the kind described, comprising an annular inflatable tube, longitudinal forming means engaging opposite inner sides of the tube and including a T member, and two cross bracing members respectively engaging the arms of said T and respectively engaging opposite inner sides of the tube.

2. A float of the kind described, comprising an annular inflatable tube, forming means engaging opposite inner sides of said tube and including a longitudinally adjustable T member, and two cross bracing members respectively engaging opposite inner sides of said tube and adjustable lengthwise of said forming means and respectively engaging the arms of said T member.

3. A float of the kind described, comprising an annular inflatable tube, longitudinal forming means having at opposite ends respectively two shoes engaging opposite inner sides of said tube, and two cross bracing members adjustable lengthwise of and engaging said forming means and respectively provided with two shoes engaging opposite inner side of said tube.

4. A float of the kind described, comprising an inflatable annular tube, longitudinal forming means including two shoes respectively engaging opposite inner sides of said tube and members connecting said shoes and including a T member, and two cross bracing members respectively engaging the arms of said T member and having two shoes respectively engaging opposite inner sides of said tube.

5. A float of the kind described, comprising an annular inflatable tube, longitudinal forming means includng two shoes respectively engaging opposite inner sides of said tube and members connecting said shoes and including a T member, one of said shoes having a mast step and the other shoe having means for supporting a rudder, and cross bracing means engaging the arms of said T member and opposite inner sides of said tube.

6. A float of the kind described, comprising an annular inflatable tube, longitudinal forming means including two shoes respectively engaging opposite inner sides of said tube and members connecting said shoes including a T member adjustable longitudinally between said shoes, one of said shoes having a mast step and the other shoe having means for supporting a rudder, and two cross bracing members respectively engaging the arms of said T member and opposite inner sides of said tube.

7. A float of the kind described, comprising an annular inflatable tube, two shoes respectively engaging opposite inner sides of said tube and provided respectively with a mast step and rudder supporting means, members connecting said shoes including a T member adjustable longitudinally between said shoes, two cross bracing members respectively engaging the arms of said T member and opposite inner sides of said tube, a mast removably mounted on said mast step and a rudder mounted on said rudder supporting means.

In testimony whereof I have signed my name to this specification.

WILLIAM ROBERTSON, JUNIOR.