

No. 750,322.

PATENTED JAN. 26, 1904.

J. F. TRIBBLE.

BUOY FOR SUNKEN VESSELS.

APPLICATION FILED OCT. 31, 1903.

NO MODEL.

Fig 1

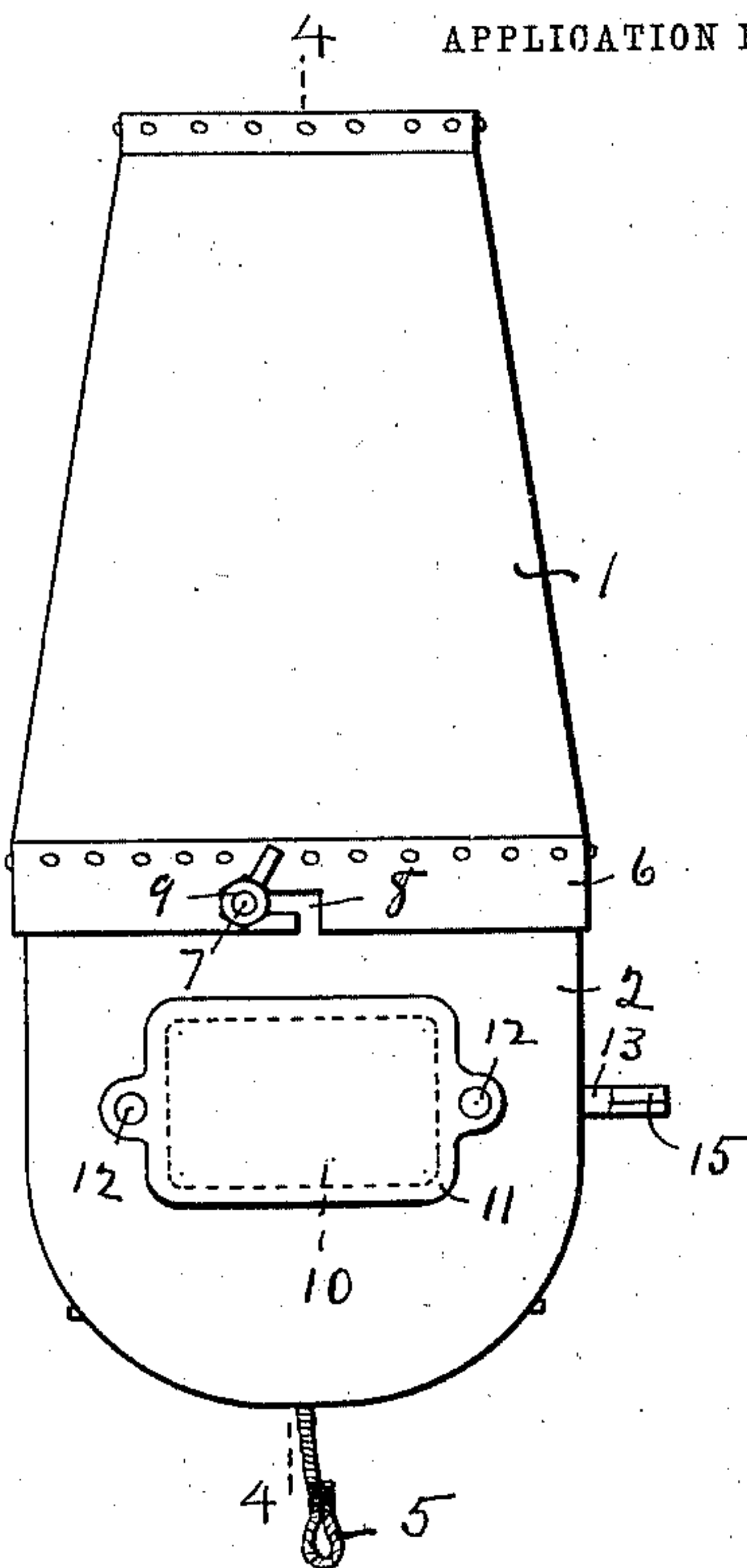


Fig 2

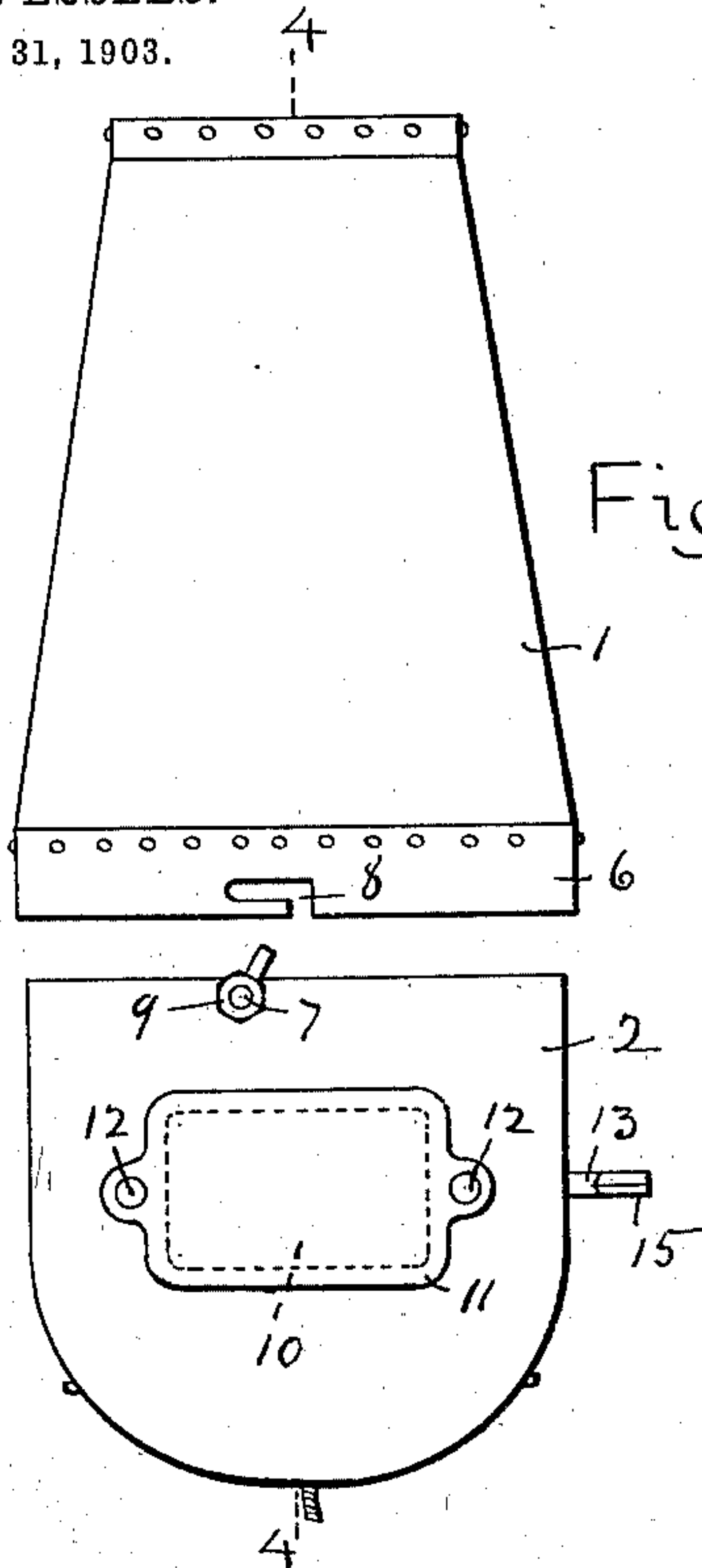


Fig 3

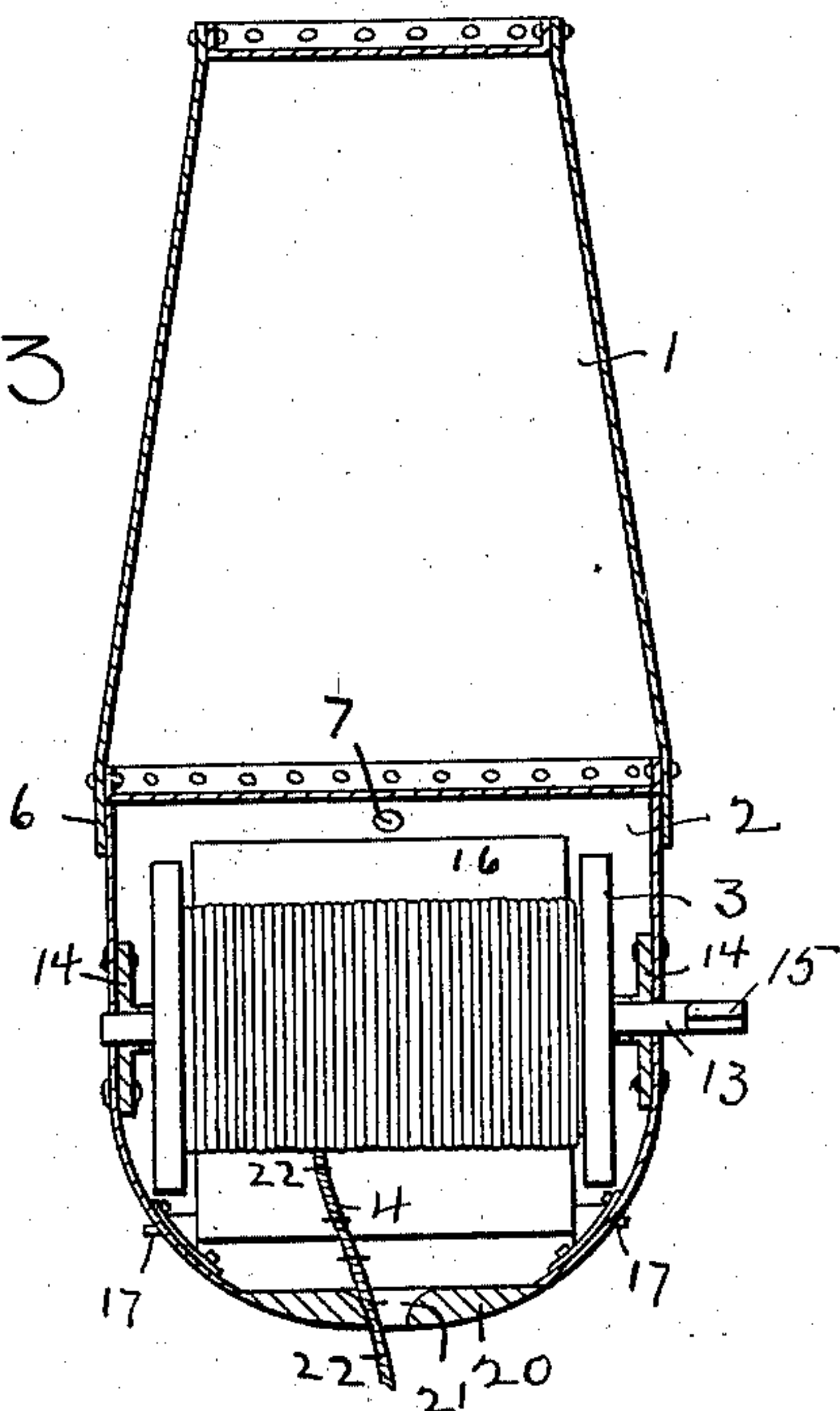
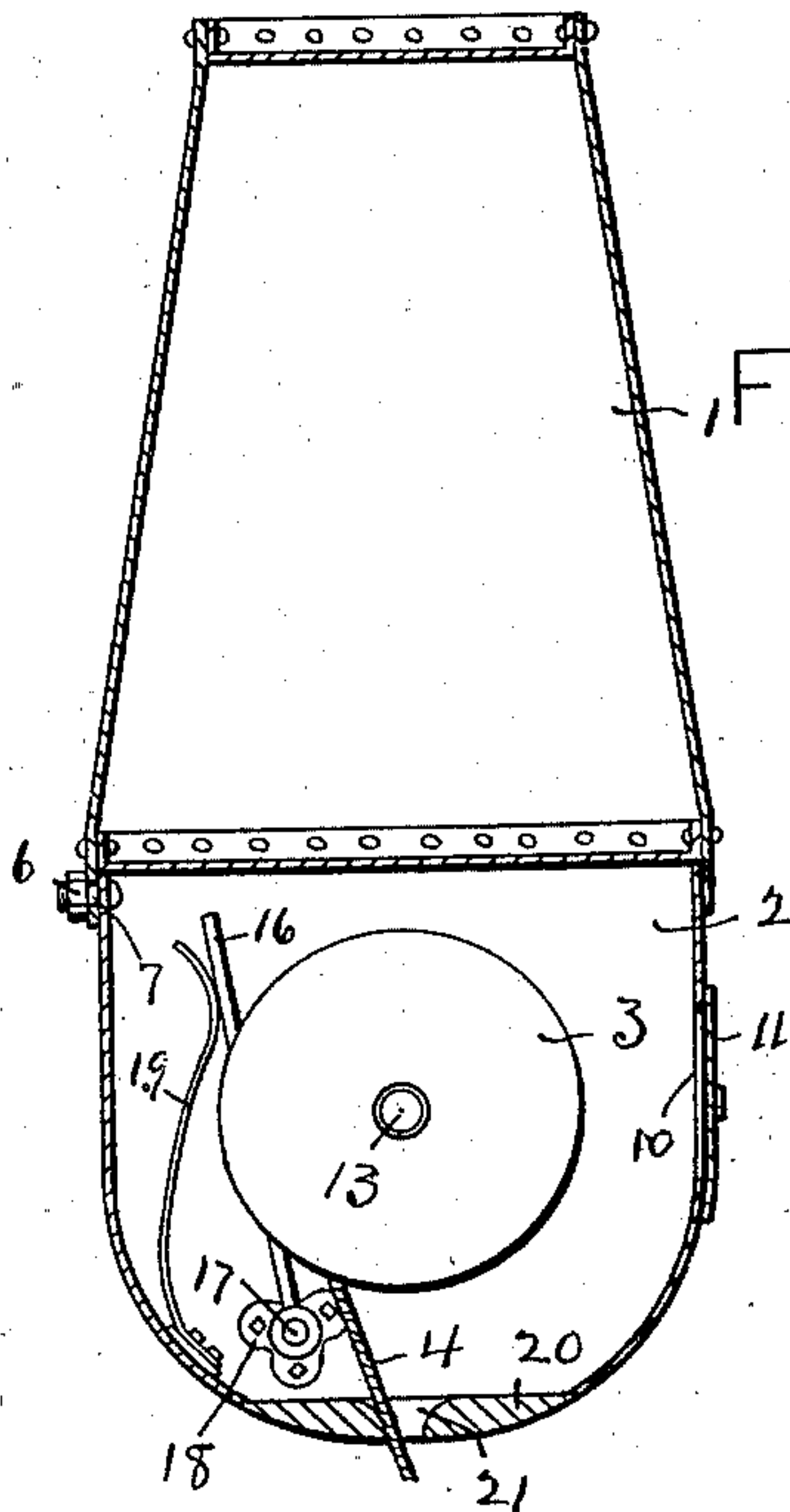


Fig 4



Witnesses

Roy D. Tolman.

Penelope Comberbach.

Inventor

Joseph F. Tribble.

By Rufus B. Towler
Attorney

UNITED STATES PATENT OFFICE.

JOSEPH F. TRIBBLE, OF NORWICH, CONNECTICUT, ASSIGNOR OF ONE-HALF TO AGNES V. PEABODY, OF WORCESTER, MASSACHUSETTS.

BUOY FOR SUNKEN VESSELS.

SPECIFICATION forming part of Letters Patent No. 750,322, dated January 26, 1904.

Application filed October 31, 1903. Serial No. 179,269. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. TRIBBLE, a citizen of the United States, residing at Norwich, in the county of New London and State of Connecticut, have invented a new and useful Improvement in Buoys for Sunken Vessels, of which the following is a specification, accompanied by drawings forming a part of the same, in which—

Figure 1 is a side view of a buoy embodying my invention. Fig. 2 is a side view of a buoy embodying my invention in which the buoyant top is shown slightly separated from the lower portion containing the reel. Fig. 3 is a central vertical sectional view of a buoy embodying my invention; and Fig. 4 is a central vertical sectional view of a buoy embodying my invention, said section being taken on a central plane at right angles to that of Fig. 3 and in the plane of the dotted line 4 4, Fig. 1.

Similar reference-figures refer to similar parts in the different views.

My invention relates to that class of buoys and similar devices which are used to indicate the position of sunken vessels and are arranged to be carried on the deck or in some convenient place on the vessel and to rise to the surface when the vessel is submerged, thereby indicating its position to persons on the surface of the water.

Referring to the accompanying drawings, 1 denotes the buoyant chamber of the buoy, which is filled with air, and 2 denotes the lower chamber, in which the reel 3 is placed, on which is wound a cable 4, provided with a loop 5, by which it may be fastened to the vessel in any suitable manner. The buoy is constructed of sheet metal or similar substance, as shown in Figs. 3 and 4, and is manufactured in two parts, as shown in Fig. 2. The upper part or air-chamber 1 is fitted with a flange 6, which extends over the lower or reel chamber 2. The two parts are locked together by "bayonet-joints" consisting of bolts 7 on the lower chamber 2, adapted to enter the angular slots 8 in the flange 6 and carrying nuts 9, which can be tightened against the flange 6 to hold the two portions of the buoy from be-

ing separated. The bolt 7 is slipped into the vertical slot 8, and the lower chamber 2 is then rotated slightly, and the nuts are then tightened, securely fastening the two portions together.

10 denotes an opening allowing access to the reel-chamber 2 and having a cover 11 bolted to the wall of the chamber 2 by bolts 12. The spindle 13 of the reel 3 is journaled in blocks 14, bolted to the wall of the chamber 2, and is provided with a squared end 15, adapted to receive a crank by which the reel may be rotated by hand to wind up the cable 4. The reel 3 is also provided with a brake 16, journaled on gudgeons 17 in blocks 18, attached to the wall of the reel-chamber 2. The brake is pressed against the cable 4 as it is wound on the reel 3 by a spring 19. The brake governs the speed of the reel 3 as the cable is being unwound and prevents a too rapid or too extended revolution of the reel 3, but is not strong enough to materially increase the force necessary to unwind the cable 4, and it also aids in laying the cable smoothly on the reel as it is being wound. The bottom of the reel-chamber 2 is provided with a layer of Babbitt metal or other suitable material 20 to give extra weight to this end of the buoy, and the Babbitt metal is provided with a hole 21, having a smooth wearing-surface for the cable 4 to prevent its being cut by chafing against the sharp edges of the sheet-metal plates of which the reel-chamber 2 is constructed. The cable 4 is preferably provided with marks 22 at certain intervals, whereby the depth of the water may be determined when the buoy is floating on the surface.

The device is intended to be used as follows: The buoy is placed upon the deck or other convenient exposed spot on a vessel and in such a situation that there will be no danger of entanglement with the masts, spars, rigging, smoke-stacks, &c., of the vessel should occasion arise for its use. The upper or air-chamber 1 of the buoy is made of a size that will allow most of it to float above the water-line and may be painted any conspicuous color with the name of the vessel or any distin-

guishing-mark desired. The buoy is supported in an upright position in any convenient manner on the vessel in the place selected and the loose end of the cable 4 securely fastened to the vessel, while the rest of the cable 4 is wound upon the reel 3. As the vessel sinks the buoy will rise, being of less specific gravity than the water, the reel revolving and the cable unwinding as the distance from the buoy to the sunken vessel increases until a length of cable equal to the depth of the water has been unrolled and the vessel rests upon the bottom and the buoy floats upon the surface of the water, when from its peculiar shape and conspicuous color it will be visible for a long distance. If from the action of the wind and water the buoy drifts to the extreme length of the cable from the sunken vessel, so that when it is picked up by other vessels it will not indicate the exact position of the sunken vessel, the reel may be revolved until the buoy assumes a position directly over the sunken vessel. The cable may be divided in any convenient manner into determined lengths, so that when it reaches a position directly over the wreck the mark appearing at the surface of the water will indicate the distance from the buoy to the sunken vessel and determine the depth of the water above the wreck.

I am aware that buoys for indicating the position of sunken vessels have heretofore been made with an air-chamber and with a reel in a second chamber and a cable in said reel attached to the sunken vessel, and I do not desire to claim that idea broadly.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. In a buoy for sunken vessels, the combination of an air-chamber, a chamber containing a reel with cable wound thereon and separable from said air-chamber, means for detachably securing said air-chamber and said reel-chamber together, with the axis of said reel-chamber coincident with the axis of said air-chamber, substantially as described.

2. In a buoy for sunken vessels, the combination of an air-chamber provided with a flange at one end, a chamber containing a reel and cable wound thereon, and means for detachably attaching said reel-chamber to said flange, substantially as described.

3. In a buoy for sunken vessels, the combination of an air-chamber, a reel-chamber, a reel inclosed in said chamber and a spring-ac-

tuated brake arranged to govern the movement of said reel, substantially as described.

4. In a buoy for sunken vessels, the combination of an air-chamber, a reel-chamber, a reel inclosed in said reel-chamber and a cable wound thereon, a spring-actuated brake arranged to press against the wound cable, a flange at one end of said air-chamber and provided with angular slots, bolts, and tightening-nuts carried by said reel-chamber and adapted to engage said angular slots, substantially as described.

5. In a buoy for sunken vessels, the combination of an air-chamber, a reel-chamber detachably attached to said air-chamber, with the axes of said chambers coincident, a reel inclosed in said reel-chamber and having a spindle projecting outside said reel-chamber to receive a crank, substantially as described.

6. In a buoy for sunken vessels, the combination of an air-chamber, a reel-chamber detachably attached to said air-chamber, an opening in the side of said reel-chamber, and a reel inclosed in said reel-chamber, substantially as described.

7. In a buoy for sunken vessels, the combination of an air-chamber, a reel-chamber, a reel inclosed in said chamber, a flat brake inclosed between the heads of said reel and arranged to bear against a cable wound on the reel, a spring pressing against said brake to compress the cable, and an opening in said reel-chamber to allow access to said reel and brake, substantially as described.

8. In a buoy for sunken vessels, the combination of a reel-chamber, an inclosed air-chamber detachably attached thereto with the axes of said chambers coincident, a reel inclosed in said reel-chamber, and a counterweight in the end of said reel-chamber opposite said air-chamber, substantially as described.

9. In a buoy for sunken vessels, the combination of an inclosed air-chamber, a reel-chamber detachably attached thereto with the axes of said chambers coincident, a reel inclosed in said reel-chamber, a metal counterweight in the end of said reel-chamber opposite said air-chamber, and a hole through said counterweight to receive a cable wound in said reel.

Dated this 16th day of October, 1903.

JOSEPH F. TRIBBLE.

Witnesses:

ARTHUR M. BROWN,
WASHINGTON M. VARS.