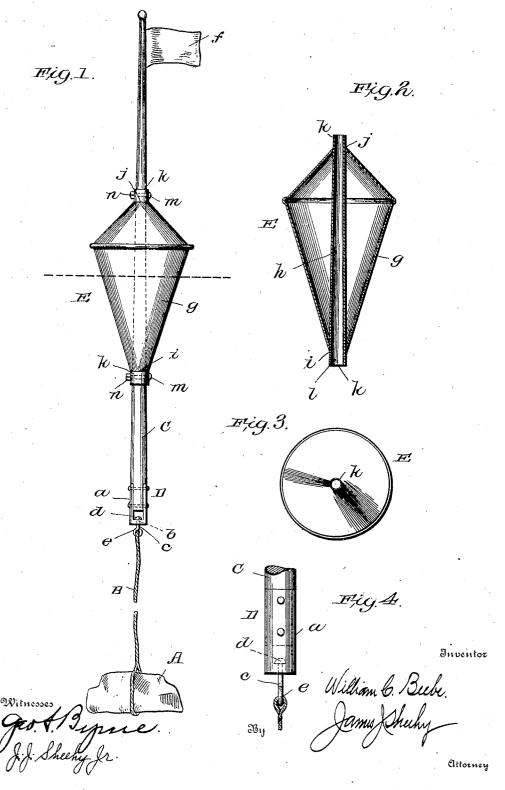
W. C. BEEBE.
BUOY.
APPLICATION FILED FEB. 8, 1907.



## UNITED STATES PATENT OFFICE.

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## BUOY.

No. 849,362.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, WILLIAM C. BEEBE, a citizen of the United States, residing at Alpena, in the county of Alpena and State of Michigan, have invented new and useful Improvements in Buoys, of which the following is a specification.

My invention pertains to buoys; and it consists in the simple and advantageous buoy hereinafter described and claimed, designed more particularly for marking the location of

nets and the like.

In the accompanying drawings, forming part of this specification, Figure 1 is a view illustrating the buoy constituting the present and preferred embodiment of my invention as properly connected with an anchor. Fig. 2 is a vertical diametrical section of the buoy, and Fig. 3 is a top plan view of the same, while Fig. 4 is a detail view illustrating the swivel connection between the post of the buoy and the anchor-cable.

Similar letters designate corresponding parts in all of the views of the drawings, re-

25 ferring to which—

A is the anchor of my improvements, which may be a stone, as shown, or a heavy device of any other description compatible

with the purpose of my invention.

B is a cable, which for the sake of cheapness is formed of rope and is designed to be tied around the anchor A in the manner illustrated or in any other approved manner, and C is the post of my novel buoy, which for the 35 sake of cheapness and lightness is formed of one piece of wood. The said post C is tapered or gradually reduced in diameter from its lower end to its upper end, as shown in Figs. 1 and 2, for an important purpose pres-40 ently set forth, and it has fixed to its lower end the **U**-shaped member a of a swivel connection D, which member a is provided in its lower portion with a vertically-disposed aperture b to receive the rotatable or axially-mov-45 able member c of the connection, the latter member being headed at its upper end, as indicated by d, and being provided at its lower end with an eye e for the connection of the before-mentioned cable B.

By reason of the swivel connection described between the cable B and the lower end of the post C, comprised in the buoy, it will be apparent that the cable B will not be twisted or kinked by the movements of the buoy in the water, and hence there is no liability of the cable being parted and permit-

ting the buoy to float away and leave a net or other submerged device unmarked.

In addition to the post C, which may, if desired, be provided at its upper end with a flag f or other device calculated to attract attention, my novel buoy comprises a hollow buoyant body E, which is preferably made of galvanized iron. The said buoyant body has an outer portion g, suitably shaped and closed at its lower and upper ends, and a tube h, which occupies the vertical center of the outer portion g and is connected thereto at i and j in a water-tight manner and has its ends k extended beyond the ends of the outer portion g and apertured, as indicated by l, for an important purpose presently set forth.

In assembling the parts of my novel buoy the wood post C is extended through the tube h of the body E from below upward and is 75 crowded into the lower end l, so as to assure a tight fit between the post and the buoyant body, and thereby preclude shaking or other casual movement of the latter on the former, such casual movement being objectionable, 80 since it would tend to cause wear of the wood post and deterioration of the buoy as a whole. It will also be apparent that the tight fit of the tapered post C in the buoyant body E is materially advantageous, because 85 it removes strain from the connections between the buoyant body and the post, which connections respectively comprise a threaded bolt m, extending through registered apertures in the ends l of the tube h and the 90 post and provided at their ends with nuts n or other means for fastening them in position.

As before stated, my novel buoy and its appurtenances are designed particularly for marking the location of submerged nets or traps, and it will be found particularly advantageous in such connection, for the reason that it is strong and durable and yet by reason of its lightness may be put off and taken noon a boat and otherwise handled with facility. From this it follows that my improved buoy is materially advantageous over buoys made entirely of wood, which soak up the water quickly and soon sink, so that it is essential to have three sets of such buoys for use in connection with a rig of nets, one set of the buoys being substituted for another set when the latter become water-logged.

In addition to the advantages hereinbefore ascribed to my novel buoy it will be apparent that the same is adapted to be easily and

cheaply made and that it is well adapted to withstand for an indefinite period the rough usage to which devices on fishing-boats and used in connection with fishing are ordinarily

5 subjected.

When my novel buoy is in use and the lower end of the body E is submerged in the water, the swelling of the wood of the post C, together with the initial tight fit of the post 10 in the lower end of the tube h, will render the body E fixed with respect to the post C, so that the connections described are subjected to no strain whatever in holding the body on

the post.

I have specifically described the construction and relative arrangement of the parts comprised in the present and preferred embodiment of my invention in order to impart a definite understanding of the said embodi-20 ment. I do not desire, however, to be understood as confining myself to the said specific construction and relative arrangement of parts, as it is obvious that in practice such changes or modifications may be made as 25 fairly fall within the scope of my invention as claimed.

Having described my invention, what I claim, and desire to secure by Letters Pat-

1. A buoy comprising a post of wood tapered or gradually reduced in diameter toward its upper end, a hollow, metallic body having an outer portion and also having a vertical central tube connected in a water-

35 tight manner to the outer portion; the said tapered post being tightly fitted in the tube of the body after the manner of a wedge, and means connecting the body to the post.

2. In a buoy, the combination with a hollow metallic body having an outer portion 40 and also having a vertical central tube connected in a water-tight manner to the outer portion and extended beyond the ends of the same and provided in its extended portions with apertures, a post of wood tapered or 45 gradually reduced in diameter toward its upper end; said tapered post being tightly fitted in the tube of the body from below upward after the manner of a wedge and having diametrical apertures registered with the aper- 50 tures in the extended portions of the tube of the body, and means extending through the said registered apertures and connecting the

body and the post.
3. The combination of an anchor, a cable 55 connected thereto, a buoy comprising a post of wood tapered or gradually reduced in diameter toward its upper end, a hollow, metallic body having an outer portion and also having a vertical central tube connected in a 60 water-tight manner to the outer portion; the said tapered post being tightly fitted or wedged in the body, and means connecting the body to the post, and a swivel connection intermediate the cable and the post of the 65 buoy comprising a member fixed on the post, and a headed rotatable member journaled in the first-mentioned member and connected

to the cable.

In testimony whereof I have hereunto set 70 my hand in presence of two subscribing witnesses.

WILLIAM C. BEEBE.

Witnesses:

DAYTON W. CLOSSER, AGNES M. REED.