April 11, 1939. W. S. GOERTZEN 2,153,750

FISHLINE FLOAT

Filed Jan. 10, 1938

FIG. 1

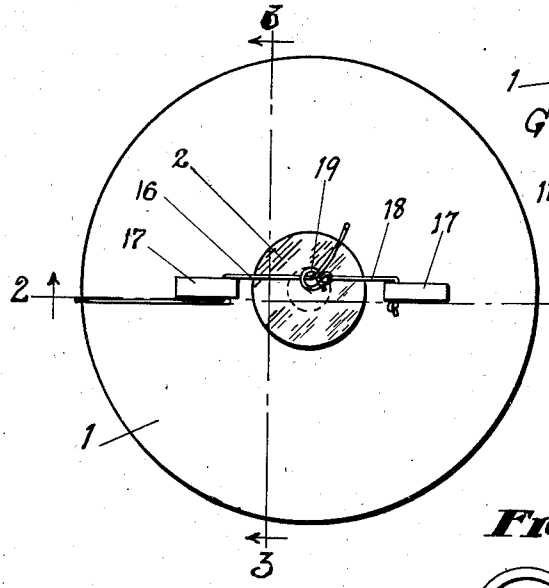


FIG. 4

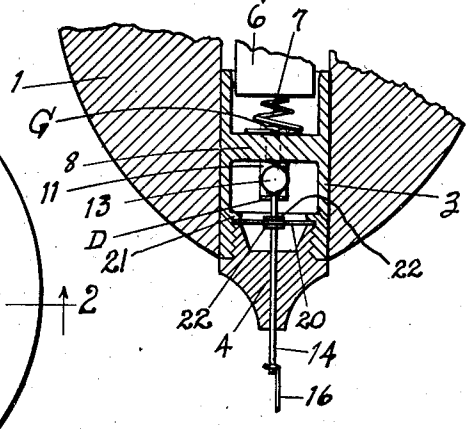


FIG. 6

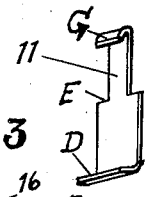


FIG. 5

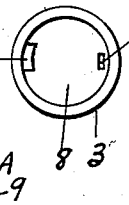


FIG. 2

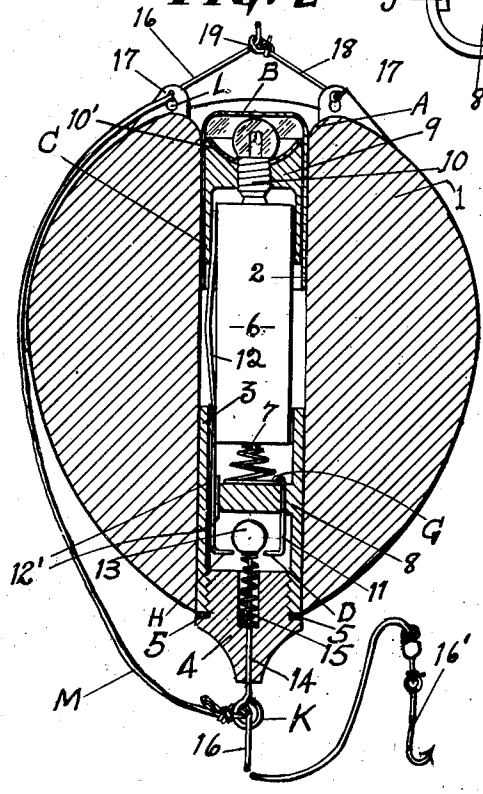
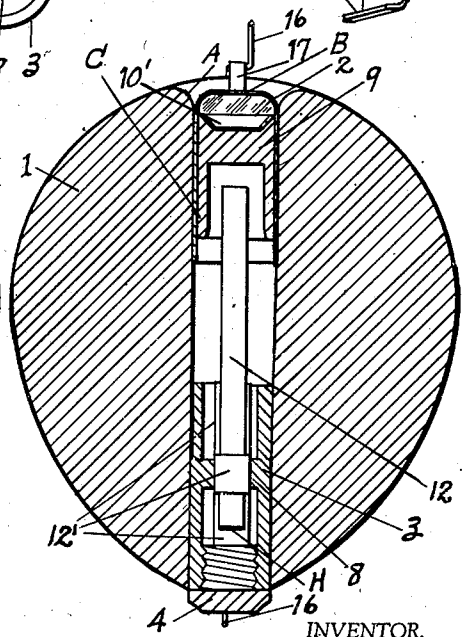


FIG. 3



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Patented Apr. 11, 1939 2,153,750

UNITED STATES PATENT OFFICE

2,153,750

FISHLINE FLOAT

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Application January 10, 1938, Serial No. 184,156

3 Claims. (Cl. 43—17)

This invention relates to a fish line float, and has for its chief object an electric illuminating means carried by the float and actuated by the fish.

A further object of my invention is to provide a float preferably of fibrous material and being bored axially therethrough, the bore functioning as a container for a battery and switch mechanism housed therein fluid tight, and a lamp connected to the battery so that light rays therefrom are visible.

A still further object of my invention is to construct a float that is inexpensive and has means whereby the battery positioned in the float is easily removed and replaced.

These and other objects will hereinafter be more fully explained, reference being had to the accompanying drawing forming a part of this specification, and in which like characters will apply to like parts in the different views.

Referring to the drawing:

Fig. 1 is a top or plan view of the float.

Fig. 2 is a sectional view taken on line 2—2 in Fig. 1.

Fig. 3 is a sectional view taken on line 3—3 in Fig. 1, illustrating the position of the positive side of the switch.

Fig. 4 is a modification for the actuating means to break the current and also as fluid tight sealing means for the switch cavity.

Fig. 5 is an end view of the sleeve, the spring, battery and contact members removed.

Fig. 6 is an enlarged perspective view of the negative contact element.

This invention herein disclosed consists of a float body 1 parabola in form and being bored axially through its major axis. The bore at the blunt end of the float is funneled as at A, the annular wall of which is arcuate in cross section radially, by which means a radiant surface is provided as a result of light rays from a lamp later described. Positioned in the bore adjacent its funneled end is a translucent thimble element 2, fitting snugly therein as fluid tight sealing means for its respective end of the bore, the closed end B protruding a short distance into the funneled portion of the bore. The other end of the bore has a sleeve 3 inserted therein fluid tight, the end portion of which is threaded internally to receive a plug 4, threadedly engaging therein, the plug being shouldered to snugly engage upon a gasket 5, as air and fluid tight sealing means for the outer end of the sleeve. The inner end of the sleeve is adapted to receive the lower end of a battery 6 positioned therein and resting upon a helical spring 7 that is carried by a medially positioned head 8 integrally joined to the sleeve. The upper end of the battery extends into the skirt C of a lamp socket 9, the socket fitting closely within the thimble 2, functioning to expand the wall of the thimble to tight engagement with the wall of the bore. In other words, the socket element may be inserted within the thimble prior to the insertion of the thimble into the bore at the time of assembly. The socket 9 is axially bored and threaded to receive the threaded base 10 of its lamp, by which means the lamp is in contact with the upper end of the battery and is enclosed fluid tight by the translucent thimble. The end of the socket adjacent the lamp is depressed and has a reflector 10' to intensify the light beams produced by the lamp.

The switch mechanism consists of a member 11, having a right angle bend on the lower end thereof as at D, the other end of the member being reduced to form a shoulder E on each side thereof. The reduced portion is insertible through aperture F of the sleeve head and is adapted to secure the spring element 7 to the head by being bent over the base coil of the spring as at G. The element 11 is the negative side of the switch. The positive side consisting of a member 12, the lower end portion of which, as at H, is bent at right angles towards the negative side, while the upper portion thereof extends through slot J and from thence upward into contact with the skirt of the lamp socket member. The positive side is insulated from the sleeve and head by an appropriate insulating material and has means to adhere the same to the sleeve as shown at 12', said insulation being a lining for slot J, while one side extends from the inner end of plug 4 to the upper extremity of the sleeve to avoid contact of member 12 at any point along the sleeve.

As closing means for the negative and positive sides above described, I have positioned a ball 13 on the inner end of a stem 14 that axially extends through said plug 4 and is free to slide therein, the ball being adapted to move to and from contact with the adjacent ends of the right angle bent portions above described, to make and break the current between the lamp and battery. The said ball is tensioned upward from contact by a spring 15 seated in the plug 4 as shown. The circuit is closed through the medium of a jerk on a line 16 that is secured to an eye K formed on the outer end of the stem 14.

It will be understood that line 16 extends up-

ward from its looped position in the eye K and passes through the eye L of an ear 17 that is secured to the float near the top thereof. A similar apertured ear is oppositely positioned on the float with respect to the axis thereof, to which is secured a cord 18, having a ring 19 attached to its free end through which the line 16 extends and is thereby anchored in axial alignment with the float. It will be noted that the line 16 snugly engages in its respective ear aperture L as frictional binding means to carry the load of the float and to provide in the line a slack portion as at M to permit free movement of the stem when actuated to make and break the current as above described. In other words, the jerk of a fish or the like upon the hook 16' will cause the lamp to light, which is convenient for night fishing.

In Fig. 4 is shown a substitute for spring 15 consisting of a disk 20, the disk having a marginal portion thereof adjacent its periphery snugly engaging between the inner end of plug 4 and a flange 21 spaced inward a short distance from the outer end of sleeve 3 by which means the disk is a fluid tight sealing means for the switch cavity. The disk is centrally apertured to receive the ball stem 14 vulcanized therein, and to insure snug engagement there is secured to the stem on each side of the disk, flange elements 22, by which arrangement the disk will flex downward by a jerk on the line, closing the circuit and then rebound to its normal straight position breaking the circuit.

While I have shown and described a float, parabolic in form, I do not wish to be restricted to such alone, as the form may be spherical or otherwise, and such other modifications may be made as lie within the scope of the appended claims.

Having fully described my invention, what I claim as new and desire to secure by Letters Patent is:

1. In a fish line float, a body axially bored, the bore being funneled at one end thereof, a translucent thimble inserted in the funneled end of the bore, a skirted lamp socket positioned in the thimble, a lamp engaging in the socket, the lamp being enclosed by the thimble, a sleeve having a medially positioned head therein, the sleeve being inserted in the bore at the other end thereof, a battery positioned in the bore, one end of the battery being in contact with the lamp and being supported by the socket skirt, the other end of the battery being supported by the inner end of the sleeve, a switch mechanism carried by the sleeve, and a line to actuate the switch.

2. In a fish line float, a body axially bored, one end of the bore being funneled upwardly and outwardly, a translucent thimble, one end of which is closed, the other end being open, a skirted lamp socket positioned in the thimble, said socket having a reflector in the end opposite its skirt, a lamp carried by the socket adjacent the reflector, the thimble being inserted in the bore adjacent its funneled end, the open end of the thimble being inward, a sleeve in the lower end of the bore, a battery positioned in the bore and carried by the inner end of the sleeve and the skirt of the lamp socket, a head positioned in the sleeve intermediate of its ends, a spring seated on the head as tensioning means for the battery toward the lamp, negative and positive current conducting elements extending through and from the head opposite the spring, one of said elements being in contact with the spring while the other element extends upwardly and outwardly from the sleeve and in contact with the lamp socket, said last-named element being insulated from the sleeve and head, a plug in the outer end of said sleeve and serving as a fluid tight closing means therefor, a ball and a stem, the stem carrying the ball in working relation to said current conducting elements, the stem being axially carried by the plug and slideable therein, and a spring to space the ball from contact with said current conducting elements.

3. In a fish line float, in combination, a float body axially bored, a lamp and socket, said socket having a skirt, translucent means enclosing the lamp, said means and socket engaging fluid tight in one end of the bore, the socket having a skirt inwardly extending with respect to the bore, a sleeve positioned in the other end of the bore, a battery positioned in the bore, one end of which is in contact with the lamp and supported by the lamp socket skirt, the other end of the battery being supported by one end of the sleeve, means in the sleeve to move the battery in contact with the lamp, current conductors which function as negative and positive sides of the current being carried by the sleeve so that the positive side is in contact with the lamp socket skirt, a switch to make and break the current, a flexible disk, and a plug to secure said disk to the outer or other end of the sleeve, said disk serving as means for permitting the switch to break or close the circuit.

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