Sept. 19, 1939. W. S. GOERTZEN 2,173,394

FISHLINE BOB

Filed July 21, 1937

FIG. 1

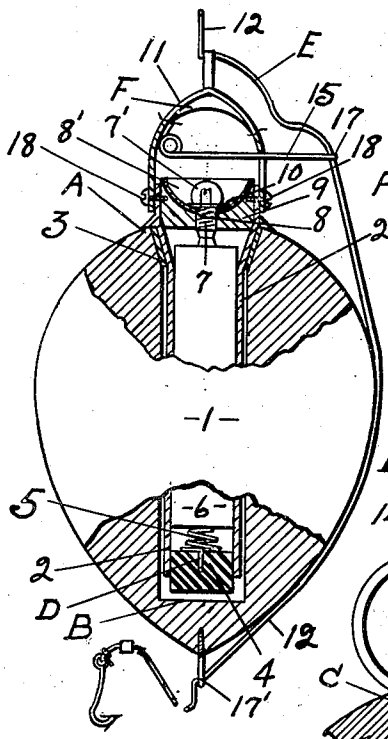



FIG. 6

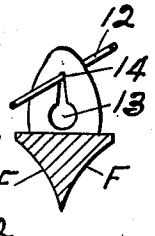



FIG. 2




FIG. 7

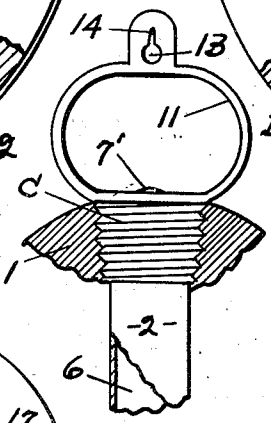



FIG. 3

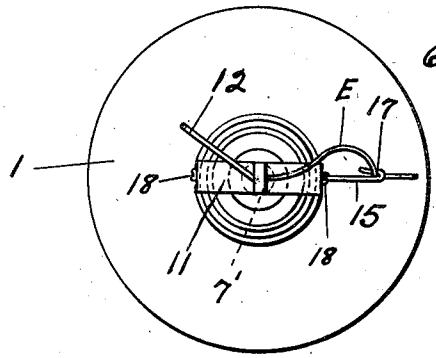



FIG. 4

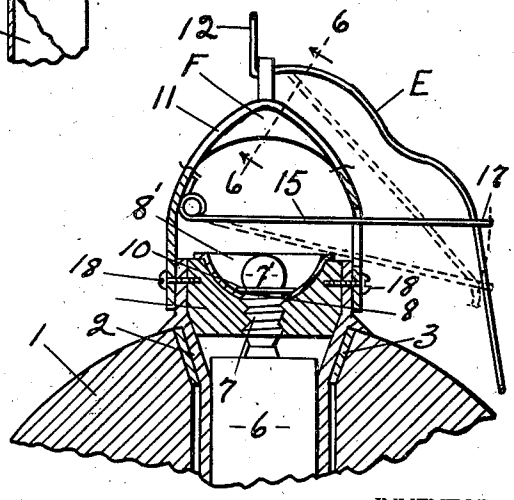
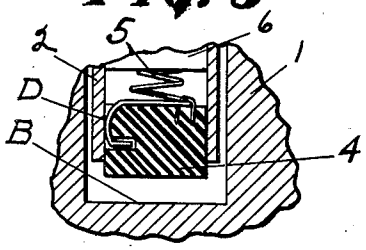



FIG. 5




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# UNITED STATES PATENT OFFICE

2,173,394

## FISHLINE BOB

William S. Goertzen, Newton, Kans.

Application July 21, 1937, Serial No. 154,788

1 Claim. (Cl. 43—17)

My invention relates to improvements in a fish line bob and has for its chief object a solid buoyant body axially bored to near one end thereof to receive a tubular housing having means at its outer end to secure the same water tight at the open end of the bore, the housing receiving a battery therein and being in contact with a lamp secured water tight in the outer end of the housing, the battery being seated on a spring element positioned in the bottom of the said housing.

A further object of my invention is to position the electric mechanism in the body of the bob in such a way as to render the bob top heavy, causing the same to invert or turn upon its side when the line depth permits lodging of the hook and sinker, the latter being the counter-balance for the bob load as arranged.

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 side view of the bob, parts removed for convenience of illustration.

Fig. 2 is a side view of the bob, transverse to that shown in Fig. 1.

Fig. 3 is a top or plan view of the bob.

Fig. 4 is an enlarged sectional view through the upper portion of the bob, and also showing the movement of the switch by dotted lines.

Fig. 5 is a sectional view showing the battery spring support and method of grounding the battery on the housing.

Fig. 6 is a cross section through the bail taken on line 6—6 in Fig. 4.

Fig. 7 illustrates threaded connection for the housing in the bore of the body, as a modified method for retaining and water proofing at the mouth of the bore.

My invention herein disclosed consists of a solid body 1, preferably egg like in form and being axially bored from one end of the body as at A, the bore terminating a short distance inward from the other end as at B.

Positioned in said bore is a battery housing 2, secured therein by a pliable water proof sleeve 3, tightly engaging between the outer adjacent ends of said sleeve and bore, as means to water proof the interior thereof. I have also provided an alternative form whereby the said sleeve is eliminated by threading the outer end portion of said housing as at C, to threadedly engage in the mouth of the bore as shown in Fig. 7, the latter being means to firmly secure the housing to the body and water proof the bore thereof.

Frictionally secure in one end of said housing is a plug 4, having a coil spring 5 seating on the inner end of the plug and secured by an end portion D of the spring which extends downward and inward and being in contact with the wall of the housing as circuit closing means between said housing and a battery 6 seated on the spring, and the said spring being means to force the other end of the battery in contact with the threaded base 7 of an electric lamp 7', that engages tightly through an aperture 8 in a concave reflector 8', seated fluid tight in the concavity of an insulator 9, that is secured in the end of the housing opposite the plug 4, said insulator having a threaded aperture in registry with the aperture of the reflector and through which the lamp stem threadedly engages, and being seated fluid tight by a rubber gasket 10, clamp between the lamp bulb and reflector adjacent its aperture.

Diametrically crossing the outer end of the housing is a bridge 11, the ends of which are secured oppositely to the housing, functioning as a bail to raise the bob through the medium of a line 12, that slidably engages in an aperture 13 positioned medially of the bail to secure the line at a desired point there-along, at which time the line is forced into a slot 14 that communicates with the aperture and extends radially therefrom.

Secured to the inside of one leg of said bridge, or bail, is a spring tensioned arm 15, said arm transversely crossing the axis of the said battery housing and in close proximity to the upper extending peripheral edge of the reflector, functioning as a switch when moved reciprocatingly to and from contact with the reflector to make and break the current between the battery and lamp. The said arm extends through a slot 16, that extends through the other leg of said bail as guiding means for the arm while being moved by said line that is secured thereto by engaging within a clamp 17, formed by lapping an outer end portion of said arm back on itself.

The line being slack as at E, gives ample movement for the switch arm and the said line extends from the clamp to the lower extremity of the body where it slidably engages through an eye 17', secured to said body and from thence downward and having a sinker and hook of conventional type.

As a means to insure visibility of the lamp light, should the bob rock from its normal upright position by the jerk of a fish, I have ar-

ranged reflectors F on the inside of the bail axial with the lamp, the planes of which diverge from said axis, and the reflectors will be visible under abnormal position above referred to and should the bob turn on its side or otherwise out of vertical alinement, such position will indicate excess line length between the hook weight and bob, in such case, proper line length is obtained by sliding the bob on its line toward the hook, spacing said hook a short distance from the bed or bottom of the water body.

The bob, under such line adjustment, will erect itself buoyantly, as the unbalanced condition of the bob, as previously described, will be counterbalanced by the hook and sinker as pendently carried by the line beneath the said bob, the counter-balance however is not sufficient to close the switch or cause illumination of the lamp which is only accomplished by an additional weight or jerk of a fish upon the hook, lighting the lamp by closing the switch as heretofore described.

The bail above referred to may be removably attached by the application of screws 18 as shown in Figs. 1, 2, 3 and 4, while the bail as shown in Fig. 7 is integrally joined to the top of the battery housing and such other modifications may be employed as lie within the scope of the appended claim.

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

In a fish line bob, a buoyant body axially bored, a tubular housing axially extending into the body from one end thereof, a bail on one end of the housing and a plug inserted in the other end of the housing, the bail having two oppositely disposed from one end thereof, a bail on one of the hous- reflecting surfaces integrally joined thereto, said surfaces slantingly positioned inward of the bail and toward each other, there being a battery in the housing and the housing carrying a lamp and reflector adjacent the bail, a helical spring seated on the inner end of the plug in such a way as to contact the tubular housing and being secured to the plug, the spring acting as carrying means for the battery positioned in the housing and current conducting means between said battery and the lamp, there being an arm and means to rock the arm in contact with the reflector closing the circuit between the battery and the lamp by which means the reflecting surfaces are illuminated.

WILLIAM S. GOERTZEN.