Aug. 12, 1941. J. TOSI 2,252,358

SIGNALING FLOAT

Filed July 20, 1940

Fig. 1.

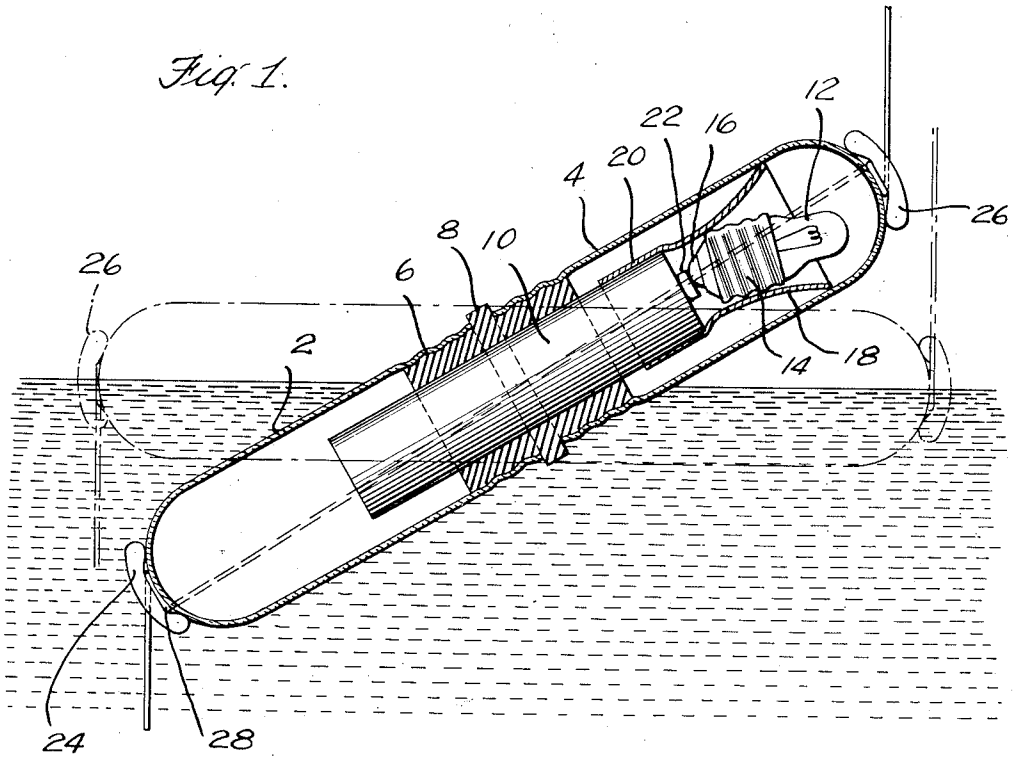


Fig. 2.

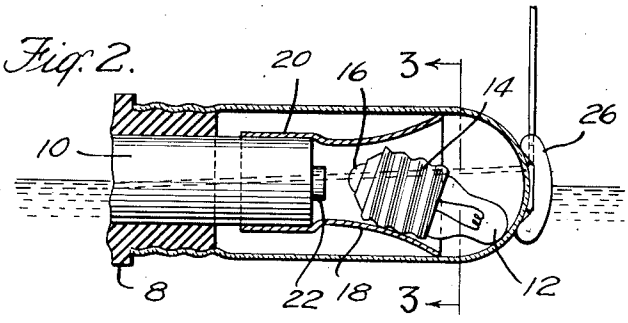


Fig. 3.

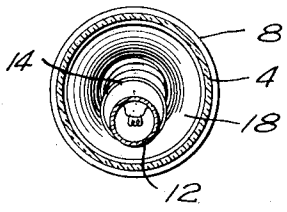
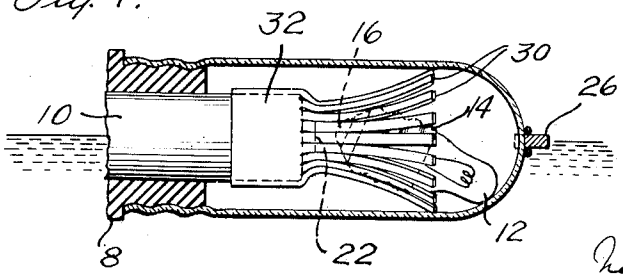


Fig. 4.



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SIGNALING FLOAT

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7 Claims. (Cl. 43—17)

This invention relates to tilt indicating or signaling means, and particularly to means adapted to be associated with a float for indicating or signaling any substantial deviation from the normal position of rest of the float upon its supporting medium.

The invention relates particularly to means for providing a luminous signal for a float to indicate the position of the float at night.

Numerous attempts have been made to provide luminous signaling means for floats for use in night fishing and several different forms of such floats are upon the market. However, either because of their complicated construction, which renders them too costly for general use, or because of the uncertainty of their operation, such floats have not gone into very extensive use. The present invention aims, therefore, to provide a luminous signaling float of such simple and inexpensive construction and such certainty of operation that it will appeal generally to night fishermen.

An important feature of the invention is the novel means for securing the float to a fish line.

Other objects and important features of the invention will appear from the following description and claims when considered in connection with the accompanying drawing, in which

Figure 1 is a longitudinal section through a float embodying the features of the present invention, the float being shown in full lines in its operative signaling position and in dotted outline in its normal position of rest;

Figure 2 is a sectional detail showing the float in its normal position of rest upon the water and the signaling lamp out of contact with one of the socket contacts;

Figure 3 is a section on the line 3—3 of Figure 2, and

Figure 4 is a sectional view showing a modified socket construction.

In the illustrative embodiment of the invention, the float casing is shown as made up of two sections 2 and 4, of substantially identical construction, each threaded at one end to screw over a combined battery holding and sealing member 6 preferably formed of soft rubber in the form of a hollow cylinder provided with peripheral threads corresponding to the internal threads upon the casing sections 2 and 4 and also provided with a flange 8 serving as an abutment and seal for the ends of the casing sections 2 and 4. The open center of the cylinder 6 is of a diameter to fit snugly over the metal exterior of an ordinary flash light battery unit 10 and to hold this battery in its adjusted position in the casing. The battery 10 furnishes the energy for the signaling lamp 12 which may be an ordinary flash light bulb having the ordinary side contact 14 and end contact 16.

The socket for receiving the lamp 12 is of special construction and unlike the ordinary lamp socket does not hold the lamp in any fixed position. As shown in Figure 1, the socket as a whole is of bell-mouthed shape and comprises a side wall 18 having a cylindrical extension 20 which fits over the metal exterior of the battery. Thus the side wall 18 constitutes the socket contact which cooperates with the side contact 14 of the lamp. Throughout its entire extent the internal diameter of the side wall 18 is greater than the diameter of the side contact section 14 of the lamp so that the lamp is free to move lengthwise of the socket 18 and also to tilt somewhat about the waist portion of said socket, such tilting, as shown in Figure 1, permitting contact of the side contact 14 of the lamp with opposite sides of the socket 18 when the lamp has slid into the position there shown. The end contact for the lamp socket is provided by the end contact or pole 22 of the battery.

The closed ends of the casing sections 2 and 4, and particularly the closed end of the section 4 which is associated with the socket 18, are preferably rounded, as shown, and the battery 10 and its associated socket 18, 20, are so located in the cylindrical combined holder and sealing member 6 that the extent of movement of the lamp out of the socket 18 will be limited by the end of the casing section 4. Thus, as shown in Figure 2 of the drawing, when the float is in its normal horizontal position upon the water the lamp 12 will rock or slide out of contact with the end contact 22 of the battery 10 and its sliding movement away from said contact 22 will be limited by the rounded end of the casing section 2. In all positions, however, except when bodily propelled from one side to the other of the socket, the side contact 14 of the lamp 12 will be in contact with the side wall 18 of the socket and thus in electrical contact with one of the poles of the battery. The only thing necessary, therefore, to complete the circuit through the filament of the lamp will be for the lamp to move over the side wall 18 of the socket to bring its end contact 16 into engagement with the battery end contact 22.

For convenience in connecting the float to a fish line, the invention also contemplates the provision of cleats attached to the two ends of

the float casing and so constructed that the fish line may be sprung between the arms of the cleats and the casing wall and thus held in position to retain the float at the proper position along the fish line. As herein shown, the casing sections 2 and 4, which may be made of any suitable transparent plastic material, to permit the light from the lamp 12 to shine therethrough, such for example as Celluloid, have moulded integrally with them or cemented to them, cleats 24 and 26 each having a central stem 28 by which the cleat is secured to or formed integral with the casing section and about which the fish line may be wrapped, the outer ends of the arms of the cleats normally contacting but not being integral with the casing section, so that the fish line may be sprung between the ends of these arms and the casing and thus held against accidental unwinding.

In Fig. 3 of the drawing is shown a modification of the construction of the side wall of the socket. In the modified form of the socket construction the side wall, instead of being formed as one continuous wall, is formed of slat-like strips 30 constituting integral parts of the sleeve part 32 which fits over the end of the battery. The general shape of the side wall of the socket is otherwise the same as that of the side wall 18 of the form shown in Figs. 1 and 2.

One of the advantages of the form shown in Fig. 3 is that the spacing of the strips or slats 30 permits multiple contacts of the side contact 14 of the lamp with the side wall of the socket.

What is claimed as new is:

1. A signaling float comprising an elongated buoyant casing, an electric battery and a connected lamp socket in fixed position in said casing, said socket having contacts adapted to be engaged by the corresponding contacts of a lamp, a lamp having cooperating contacts, said lamp being freely movable in said socket into and out of engagement with at least one of said contacts and said parts being so arranged in said casing that said lamp tends to gravitate out of engagement with one of said contacts when the float is in its normal horizontal position and tends to gravitate into engagement with said contact when the float is tilted from its horizontal position.

2. A signaling float comprising an elongated buoyant casing, an electric battery and a connected lamp socket in fixed position in said casing, said socket providing a side contact and the battery an end contact, and a lamp having cooperating contacts, said lamp being free to move to a limited extent lengthwise of said socket and casing into and out of engagement with said end contact and said socket having its side contact so inclined to the normal floating position of the casing that in said position said lamp tends to slide out of engagement with said end contact.

3. In a tiltable electric lamp socket, end and side contacts, a lamp having cooperating contacts and freely movable in said socket under the action of gravity, as said socket is tilted, to cause engagement of the lamp end contact with the end contact and disengagement therewith as the socket moves toward and away from an upright position.

4. A tiltable electric lamp socket according to claim 3 in which the side contact is outwardly flared to provide a downwardly inclined slide for the lamp when the axis of the socket is horizontal.

5. In apparatus of the class described, a tiltable electric lamp socket having therein an end contact and having a frusto-conical side wall constituting the other contact, a lamp having cooperating contacts but having its side wall contact substantially cylindrical in contour whereby said lamp is free for endwise and rocking movement in respect to said socket, and a translucent housing limiting the endwise movement of said lamp.

6. A tiltable electric lamp socket according to claim 3 in which the side contact is formed of a plurality of strips flaring outwardly from a common battery embracing sleeve.

7. A tiltable electric lamp socket according to claim 3 in which the side contact of the socket has a waist portion about which the lamp may rock into and out of engagement with the end contact.

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