PORTABLE LANTERN FLOAT

Fig. 3.

Fig. 4.

Fig. 5.

INVENTOR.
DON L. JACOBSON

BY

Head & Johnson

ATTORNEYS
This invention relates to floating lantern holders. More particularly, this invention relates to portable lantern holders which are adaptable to holding in position almost any of the commercially available electric, gasoline or kerosene camp lanterns.

Many floating devices containing signal lights are well known. For example, there are various patents for light buoys such as U.S. 2,365,587 and 2,367,818. However, these are generally non-portable devices and are usually made to include an integral light and consequently are not adapted to holding other light sources such as lanterns. U.S. 2,917,755 discloses a floating lantern support. However, as disclosed therein the lantern is held in position only when the support is inflated and consequently the lantern to be used must be one that is readily adaptable to the support itself.

The primary object of this invention is to provide a portable floating lantern holder which is adaptable to hold practically any type of commercial lantern.

Another object of this invention is to provide a floating lantern holder of simple construction which is economical to build.

A further object of this invention is to provide a portable floating lantern holder which does not have to be inflated prior to use and which is a device upon which the lantern can be easily installed or removed for refueling without deflating the holder or removing from the anchored position in the water.

Further objects and advantages of the invention will become apparent from the following description and claims taken in connection with the accompanying drawings wherein:

FIGURE 1 is a side elevation view of one embodiment of the lantern float showing the lantern in place. FIGURE 2 is a vertical cross-sectional view of the lantern float of FIGURE 1.

FIGURE 3 is a perspective view of another embodiment of the lantern float with lantern in place.

FIGURE 4 is a vertical cross-sectional view of the lantern float of FIGURE 3.

FIGURE 5 is a cross-sectional view of the embodiment of FIGURE 3 showing a balance arm attachment in position.

Referring now to the drawings in detail, FIGURE 1 discloses an extensible lantern float, generally 10, which has a light weight body portion 12 preferably formed of a moldable plastic material and in which the body portion 12 is hollow and contains an air chamber 22. The air chamber 22 helps make the lantern holder more buoyant. In order to keep the lantern to float from bobbing up and down too much in the water or swaying or tipping sideways in rough water because of its light weight, a balance arm 14 may be partially or fully filled with lead shot 36. The lantern 20 is held in position on the platform 24 by means of a retaining spring which is formed of a circular coil spring portion 18 which surrounds the lantern based on a number of vertical coil spring portions 19 spaced evenly around the circumference of the platform and which are connected to the eyelets 16. The towing eyelet 26 is provided so that the lantern float may be easily moved from place to place without being taken from the water. The lantern float can be provided with an extensible balance arm 14 which may be positioned upward within the air chamber 22 through the vertical passageway 33 shown as the dotted lines in FIGURE 1 or which may be extended as shown in FIGURES 1 and 2. This balance arm may also be made an integral part of the lantern float. When the balance arm 14 is inserted into the air chamber 22 the reverse opening 34 is made to coincide with the passageway 31 and the bolt 28 is then inserted through the opening and passageway and wing nut 30 is secured on the end of the bolt 28. When using the float in deeper water greater stability may be obtained by extending the balance arm 14 to its outermost position whereby the upper opening 32 coincides with passageway 31 and the arm is secured in this position by inserting the bolt 28 through the opening and passageway and again securing the bolt 28 with the wing nut 30. The lantern float is kept from floating away by means of the anchor 42 attached by an anchor line or anchor rope 40 to the anchor rope eyelet on the bottom of the balance arm 14.

Another embodiment of this invention is disclosed by FIGURES 3, 4 and 5. The ring type lantern float, generally 100, is shown in FIGURE 3. The lantern 200 is shown being held in position on the platform 106 by the retaining spring 180 which is connected by the vertical coil springs 190 to the eyelets 108. The platform 106 is shown as covering the central opening in a doughnut-shaped tubular body portion 102. Extending downward from the platform 106 into what would otherwise be the center of the doughnut-shaped body 102 is the balance arm connection 110. The balance arm may be attached to this connection by various means. A portion of the balance arm connection 110, shown in FIGURES 4 and 5, contains threads 112 which are formed to correspond to the threads 116 on the interior portion of the screen type balance arm 104. In this way the balance arm 104 can be removed for use of the float in shallow water or the balance arm 104 may be threaded into place for use of the float in deep water. At the downward extremity of the balance arm connection 110 is the balance arm connection eyelet 114. An anchor 42 may be attached to this eyelet by means of an anchor rope 40 tied directly to the eyelet 114. But a preferred manner of attachment is that shown in FIGURE 4 where the anchor rope 40 first passes through the anchor rope eyelet 118, an eyelet having an elongated stem, before being connected through the balance arm connection eyelet 114. Whenever the balance arm 104 is used, one manner of attaching the anchor 42 is shown in FIGURE 5 wherein the anchor rope 40 passes through the anchor rope guide 118 before being connected to the anchor rope eyelet 38. In addition to the arrangement whereby one end of the anchor rope 40 may be secured to the anchor 42 another means of attachment and use of the anchor 42 is shown in FIGURES 4 and 5 wherein the anchor rope 40 passes around the anchor rope pulley 122 which is attached to the anchor rope swivel 124 and may be then tied to another object such as a boat or a water or some stationary object on shore.

As explained above, the lantern float shown in FIGURE 1 may be used either in shallow water or deep water. The balance arm 14 may be extended or withdrawn as the occasion requires. The lantern float of FIGURE 1 and 2 is launched simply by dropping into the water where desired with the anchor 42 attached.

The balance arm provides stability for the lantern float. When the weighted balance arm 14 is extended as shown in FIGURE 2 or when the weighted balance arm 104 is attached as shown in FIGURE 5 the lantern float will not turn over in either rough water or high winds. Nor will the lantern float turn over should the anchor 42 become snagged on some underwater object or become entangled in a fishing line so long as the balance arm is attached. As shown in FIGURE 1, the balance arm 14 may be withdrawn within the body 12 either for use of...
the lantern float in shallow water or for convenience in carrying or storage. Likewise, the lantern float of FIGURES 4 and 5 may be used with or without the balance arm 104 depending upon the depth of the water and the balance arm may also be removed for carrying or storing.

The figures disclose a number of ways in which the lantern float may be secured while in use. One end of a line may be tied to the towing eyelet 26 or to the balance arm connection eyelet 114 and the other end of the line tied either to a boat or to an object on shore. Or, as suggested by FIGURE 4, after being tied to the balance arm connection eyelet 114 the anchor line may be passed through the anchor rope guide 118 and then the other end tied to a boat or to an object on shore. The simplest manner of anchoring the lantern float is shown in FIGURE 1 where-in the anchor 42 is tied to the anchor rope eyelet 38. FIGURES 4 and 5 show preferred methods of attachment. One end of the anchor line 40 is tied either to the anchor rope eyelet 38 or to the balance arm connection eyelet 114 and is then passed through the anchor rope guide 118 and around the pulley 122. This arrangement permits the launching of the lantern float from shore. The person launching the lantern float from shore first passes the anchor rope 40 around the pulley 122 and holds both ends of the anchor rope in his hands. He then throws the anchor 42 into the water the desired distance from shore. One end of the anchor rope 40 is tied to an object on shore and the other end of the rope is tied to the lantern float as shown in FIGURES 4 or FIGURE 5. The lantern float is then placed in the water and positioned in a proper spot by pulling on the anchor rope 40 from the shoreward side of the rope. To retrieve the lantern float from shore it is necessary only to pull gently on the anchor rope until the anchor 42 and the float are pulled into shore. The weight of the anchor 42 can be chosen so that it will not cause the lantern float to become submerged.

Floating lanterns serve numerous purposes. Besides giving visibility to a fisherman at night, a lantern attracts fish. However, the light also attracts insects and snakes. In the past it has been common to place a lantern in the boat or on a short pole extending from the boat. If the lantern is placed in the boat it frequently happens that snakes crawl into the boat. Placing the lantern at a distance remote from the boat keeps snakes out of the boat and insects away from the fisherman.

The lantern float of this invention provides a means for controlling the orientation of the lantern float. The placement of the anchor rope guide 118 in relation to the balance arm connection eyelet 114 insures that the lantern float will be maintained in a certain position in response to the action of the wind and water. When the anchor rope is connected in the manner shown in FIGURE 4 the same side of the float will always be nearest the boat or the shore. Thus, when using a lantern which is equipped with a reflecting device the fisherman may position this reflector so that the light from the lantern does not shine in his eye. Also, should he not have a lantern already equipped with a reflector, a fisherman may position a makeshift reflector around the lantern as for example a piece of cardboard or tin may be secured between the lantern and the retaining spring. In addition to the benefits just discussed the anchor rope swivel 124 prevents the anchor rope from getting tangled by the action of the water, either when launching the lantern float or while the float is in use.

Since many different embodiments of this invention may be made without departing from the spirit and scope thereof, it is to be understood that the specific embodiments described in detail herein are not to be taken in a limiting sense, since the scope of the invention is best defined by the appended claims.

I claim:
1. A lantern float comprising:

3. a rigid, hollow, toric body member having an upper platform portion tangentially covering and integral with said body member;
4. a plurality of eyelets extending upwardly from said platform portion;
5. a plurality of coil springs, one for each of said eyelets, each of said springs having first and second ends, said first end attachable to said eyelet;
6. a circular retaining spring positionable substantially horizontally above said platform and attached to each of said second ends of said coil springs, said retaining spring positionable around a lantern to hold said lantern on said platform;
7. a balance arm connection depending centrally downwardly from under surface of said platform;
8. a rigid, substantially cylindrical weight-balanced arm removably depending downwardly from said balance arm connection;
9. an anchor rope guide extending downwardly from under the surface of said platform terminating with an eyelet;
10. an eyelet at the lower end of said balance arm;
11. an anchor rope having one end secured to said balance arm and one end passing through said eyelet of said anchor rope guide, said rope passing around an anchor rope pulley whereby the other end of said rope is free;
12. an anchor rope swivel attached to said anchor rope pulley; and
13. an anchor attached to said anchor rope swivel.
2. A lantern float as described in claim 1 wherein said balance arm is threadably depending from said balance arm connection.
3. A lantern float comprising:
4. a rigid, hollow, toric body member having a platform portion tangentially covering and integral with said body member;
5. a plurality of eyelets extending upwardly from said platform portion;
6. a plurality of coil springs, each having a first and a second end, whereby each of said first ends is attached to one of said eyelets;
7. a circular retaining spring positionable substantially horizontally above said platform and attached to each of said second ends of said springs, said retaining spring positionable around a lantern to hold said lantern on said platform;
8. a balance arm connection depending centrally downwardly from under surface of said platform;
9. a balance arm connection eyelet at lower end of said balance arm connection;
10. an anchor rope guide extending downwardly from under surface of said platform, said guide being an eyelet having an elongated stem;
11. an anchor rope having one end secured to said balance arm connection eyelet, said rope then passing through said anchor rope guide, then said rope passing around said anchor rope pulley whereby a second end of such rope is removably secured to a remote object; an anchor rope swivel attached to said anchor rope pulley; and
12. an anchor attached to said anchor rope swivel.
4. A lantern float comprising:
5. a rigid, hollow, toric body member having an upper platform portion tangentially covering and integral with said body member;
6. a plurality of eyelets extending upwardly from said platform portion;
7. a plurality of coil springs, one for each of said eyelets, each of said springs having first and second ends, said first end attachable to said eyelet;
8. a circular retaining spring positionable substantially horizontally above said platform and attached to each of said second ends of said coil springs, said
5 retaining spring positionable around a lantern to hold said lantern on said platform;
a balance arm connection depending centrally downwardly from under surface of said platform;
an anchor rope guide extending downwardly from under surface of said platform terminating with an eyelet; and
an anchor rope having one end secured to said balance arm connection, said rope then passing through said eyelet of said anchor rope guide whereby the other end of said rope is free.

5. A lantern float as described in claim 4 wherein said float includes a rigid, substantially cylindrical, weighted balance arm removably depending downwardly from said balance arm connection.

References Cited by the Examiner

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Patent</th>
<th>Date</th>
<th>Inventor</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,313,739</td>
<td>8/1919</td>
<td>Ryerson</td>
<td>240—90</td>
</tr>
<tr>
<td>2,917,755</td>
<td>12/1959</td>
<td>Pock</td>
<td>9—8.3</td>
</tr>
<tr>
<td>3,167,793</td>
<td>2/1965</td>
<td>Keats</td>
<td>9—8</td>
</tr>
</tbody>
</table>

10 MILTON BUHLER, Primary Examiner.
T. MAJOR, Assistant Examiner.