Oct. 31, 1944. J. A. RAMSEY 2,361,414

MARINE SAFETY LIGHT

Filed Aug. 27, 1942 3 Sheets-Sheet 1

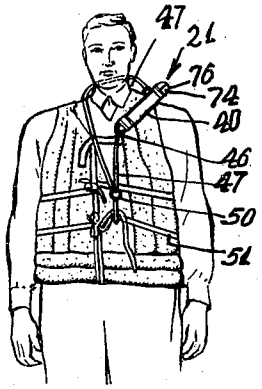


Fig. 1.

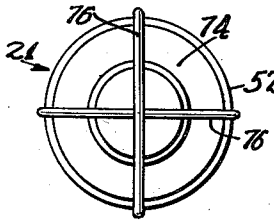


Fig. 3

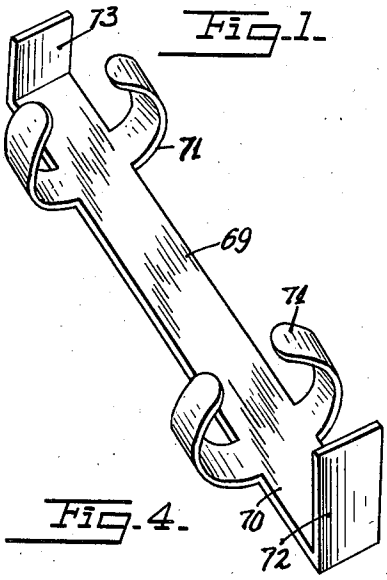


Fig. 4.

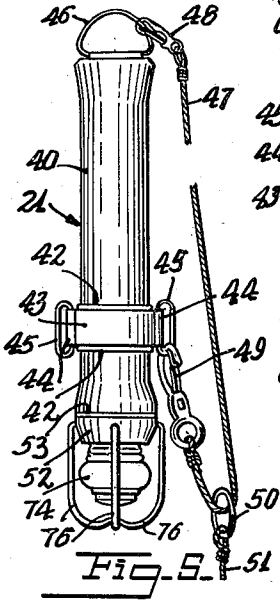


Fig. 5.

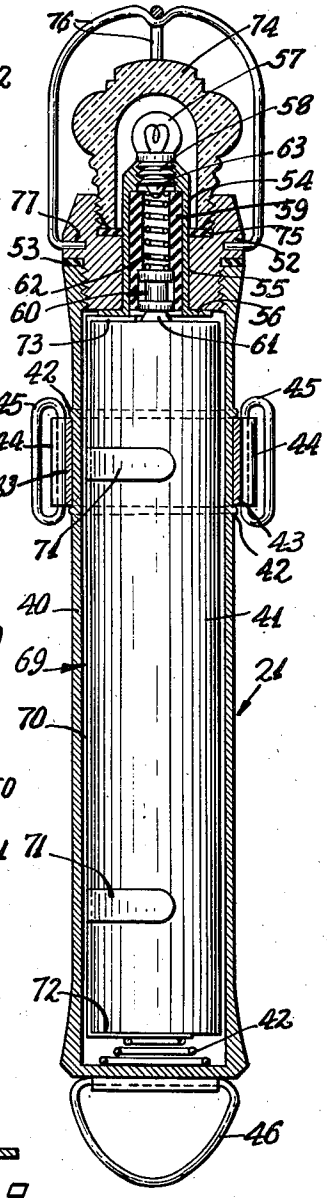


Fig. 2.

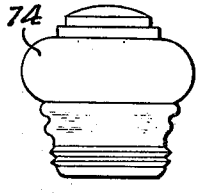


Fig 7

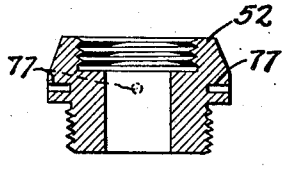


Fig 8

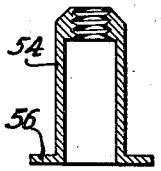


Fig. 9.

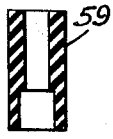


Fig. 10.



Fig. 11.

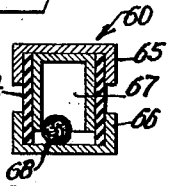


Fig. 12.

BY

INVENTOR.

Jesse A. Ramsey

Zoltan J. Polachek

ATTORNEY

Oct. 31, 1944. J. A. RAMSEY 2,361,414

MARINE SAFETY LIGHT

Filed Aug. 27, 1942 3 Sheets-Sheet 2

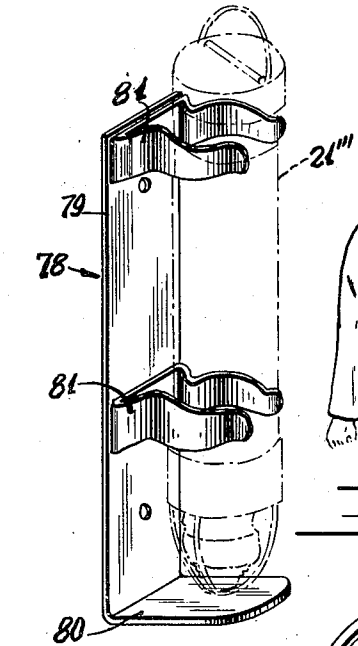


Fig. 6

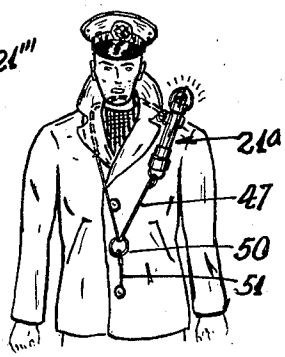


Fig. 13

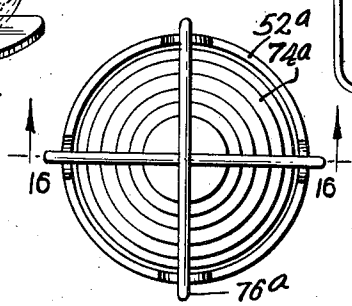


Fig. 15

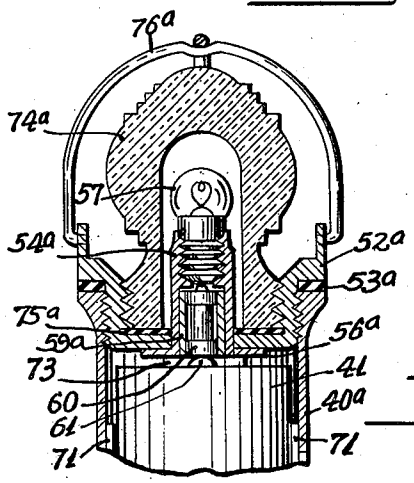


Fig. 16

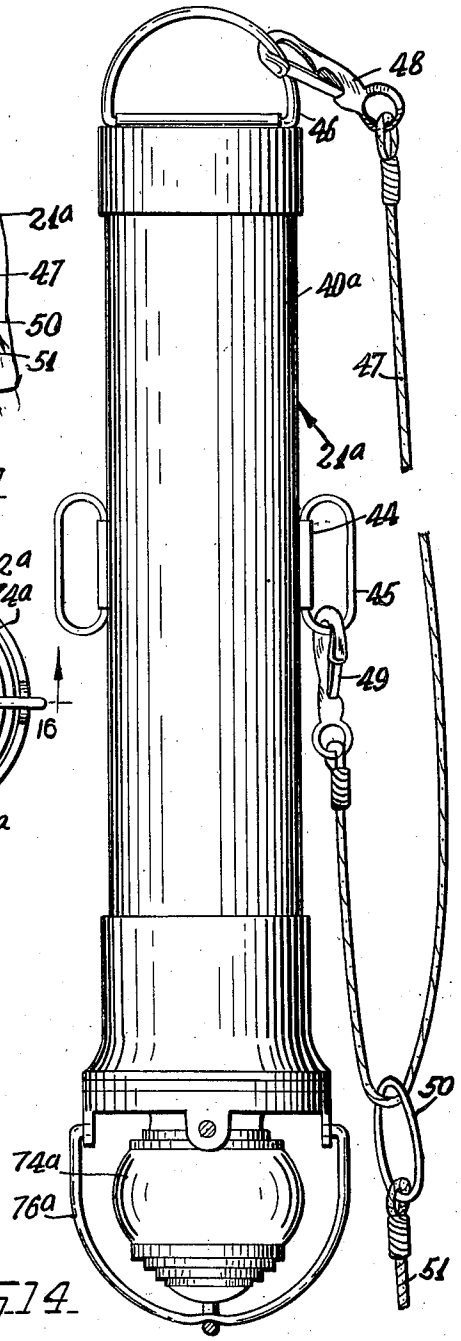


Fig. 14

INVENTOR.
Jesse A. Ramsey
BY
Walter A. Wolcheski
ATTORNEY

Oct. 31, 1944. J. A. RAMSEY 2,361,414

MARINE SAFETY LIGHT

Filed Aug. 27, 1942 3 Sheets-Sheet 3

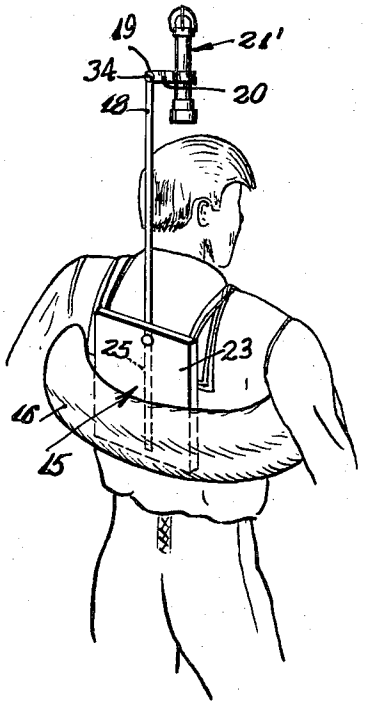


Fig. 17.

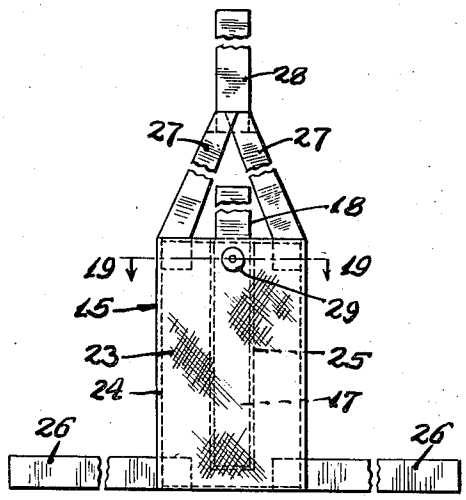


Fig. 18.

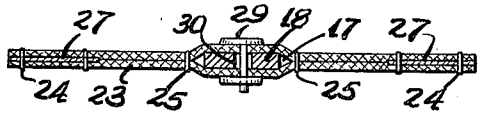


Fig. 19.

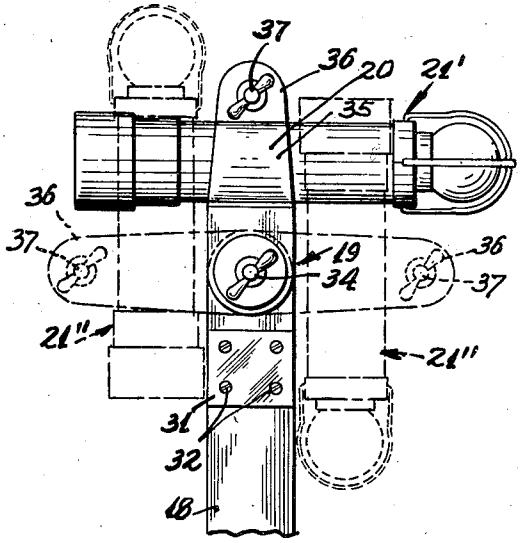


Fig. 20.

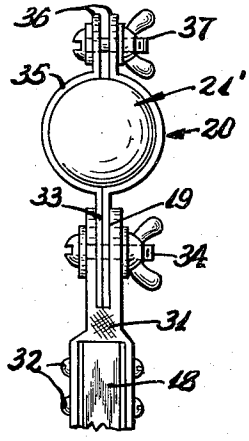


Fig. 21.

INVENTOR.
Jesse A. Ramsey
BY Zoltan A. Polachek
ATTORNEY

Patented Oct. 31, 1944

2,361,414

UNITED STATES PATENT OFFICE

2,361,414

MARINE SAFETY LIGHT

Jesse A. Ramsey, Wenonah, N. J.

Application August 27, 1942, Serial No. 456,304

10 Claims. (Cl. 240—6.4)

This invention relates to new and useful improvements in a marine safety light.

More specifically, the invention proposes the construction of a marine safety light characterized by a flashlight having a waterproof body and containing a mercury make break switch arranged in a manner to cause the bulb of the flashlight to be illuminated or extinguished in various positions of the flashlight.

A further object of the invention proposes the provision of means for supporting the flashlight body in position upon a person and over a life saving suit or other floatable mechanism and arranged to assume a vertical operative position extended slightly above the shoulders.

It is a further object to so arrange the supporting mechanism that the flashlight may be conveniently moved from an operative vertical position over one shoulder to an inoperative upside down position over the other shoulder merely by pulling on a lanyard used for supporting the flashlight on the body.

The invention further contemplates the construction of a safety light as mentioned which is characterized by a vest adapted to be worn under a life preserver or over a life saving suit, a batten mounted on and projecting from said vest above a person's head, and a flashlight of a specific construction adjustably mounted on said batten.

More specifically, it is proposed that the flashlight have a make and break mercury switch which will cause the flashlight to flicker while a person is being tossed about on the waves at sea.

Another object of the invention resides in so constructing the flashlight that it has globe lens at the top through which the light is visible in all side directions.

Still further the invention proposes certain means for mounting the flashlight on the batten so that it may be supported in an upright position or in various pivoted positions, including positions all the way down to an upside down position. Moreover, it is proposed to so construct and arrange the make and break mercury switch that the flashlight will flicker when in the vertical position and in all positions well above the horizontal, that in the horizontal, or substantially horizontal position, the light will be continuous, and in the upside down position the flashlight will not be lit.

The invention contemplates so constructing the supporting means for the flashlight that a wearer floating on the sea may easily adjust the flashlight to its various positions so as to give out the signals desired.

The invention contemplates a particularly simple construction of the vest so that a person may quickly don the same, as required.

For further comprehension of the invention, and of the objects and advantages thereof, reference will be had to the appended claims in which the various novel features of the invention are more particularly set forth.

In the accompanying drawings forming a material part of this disclosure—

Fig. 1 is a view of a person provided with a marine safely light constructed in accordance with this invention.

Fig. 2 is a vertical sectional view of the flashlight, per se.

Fig. 3 is a plan view of Fig. 2.

Fig. 4 is a perspective view of the conductor strip, per se.

Fig. 5 is an elevational view of the flashlight body in its upside down inoperative position.

Fig. 6 is a perspective view of a wall clip used for supporting the flashlight in an inoperative upside down position.

Fig. 7 is an elevational view of the globe lens of the flashlight, per se.

Fig. 8 is a vertical sectional view of the top end cap, per se.

Fig. 9 is a vertical sectional view of the lamp holder, per se.

Fig. 10 is a vertical sectional view of the insulation bushing, per se.

Fig. 11 is an elevational view of the make break mercury switch, per se.

Fig. 12 is a vertical sectional view of the switch shown in Fig. 11.

Fig. 13 is a view of a person provided with a marine safety light constructed in accordance with a modified form of this invention.

Fig. 14 is an elevational view of the marine safety light illustrated in Fig. 13 but shown in an upside down condition.

Fig. 15 is a bottom view of Fig. 14.

Fig. 16 is a vertical sectional view taken on the line 16—16 of Fig. 15.

Fig. 17 is an illustration of a person floating at sea on a life preserver and equipped with a marine safety lamp constructed in accordance with another modification of this invention.

Fig. 18 is a developed view of the vest, per se.

Fig. 19 is a transverse sectional view taken on the line 19—19 of Fig. 18.

Fig. 20 is an elevational view of the top portion of the batten with the flashlight mounted thereon

and schematically illustrating several positions of the flashlight.

Fig. 21 is a side elevational view of Fig. 20.

The marine safety light, according to this invention, includes a flashlight 21 which comprises a flashlight casing 40 having a closed bottom end and arranged to receive a battery cell 41. An expansion spring 42 operates between the bottom end of the cell 41 and the closed bottom end of the casing 40. The casing 40 is constructed of non-conducting plastic material and is formed at a point intermediate of its ends with spaced ribs 42 between which a metallic ring 43 is rotatively supported. Opposite sides of the ring 43 are provided with tubular extensions 44 within which metallic loops 45 are mounted. The bottom end of the casing 40 pivotally supports a loop 46. A lanyard 47 is provided at its end with spring clips 48 and 49. These spring clips are so arranged that one is adapted to be engaged with the loop 46 while the other is selectively engaged with one of the loops 45. This connects the ends of the lanyard 47 with the flashlight casing 40, permitting the lanyard to be engaged about one's neck to support the flashlight 21 in an operative position over the wearer's left shoulder (see Fig. 1).

The lanyard further carries a ring 50 to which one end of a length of rope 51 is adapted to be engaged. The opposite end of the rope 51 is adapted to be passed around one's waist and knotted in position, as shown in Fig. 1, for holding the ring 50 permitting the lanyard 47 to slide through the ring as the flashlight 21 is moved from an operative position over the left shoulder to an inoperative position over the right shoulder, as will be hereinafter described.

The top end of the casing 40 is closed by means of a cap 52 also constructed of non-conducting plastic material and having its bottom portion threadedly engaging the top end of the casing 40. A gasket 53 is disposed between the contacting faces of the casing 40 and the cap 52 for forming a waterproof joint.

A metallic lamp holder 54 extends through a central opening 55 formed in the cap 52 and is formed with a bottom flange 56 which extend along the bottom face of the cap 52. The top end of the lamp holder 54 threadedly supports a lamp 57 of conventional construction and makes an electrical contact with the shell contact 58 of the lamp 57.

An insulation bushing 59 is extended into the lamp holder 54 and has its top end disposed at a point adjacent the bottom of the lamp 57. A mercury switch 60 is mounted within the bottom end of the insulation bushing 59 and contacts the central end contact 61 on the top end of the battery cells 41. A spring 62 is also mounted within the insulation bushing 59 and contacts the top of the mercury switch 60 and the end contacts 63 of the lamp 57.

The mercury switch 60 is of the make break variety and includes a tubular insulation member 64 supporting a cap 65 at one end and a cap 66 at its other end. The cap 65 makes an electrical contact with a shell 67 housed within the insulation member 64 and which has its bottom end terminating a short distance from the cap 66. A small mass of mercury 68 is contained within the switch 60 and is arranged to close an electric circuit through the switch whenever the mercury 68 contacts the shell 67 and the cap 66, as shown in Fig. 12. The mercury mass 68 is of a relatively small size so that when the flashlight bobs around the mass of mercury will move about within the switch and make and break the electric circuit to cause the lamp to flicker. However, when the switch 60 is in any angular position ranging between the vertical and the substantially horizontal with the lamp directed upwards, the mass of mercury will maintain a relatively stationary position and will continuously maintain the circuit through the switch, causing the lamp to be continuously lit.

A conductor strip 69 is provided for completing the electric circuit and comprises a metallic member 70 extending along the sides of the battery cell 41 and which is provided with longitudinally spaced clips 71 for gripping the sides of the cell 41. One end of the metallic strip 70 is formed with an offset portion 72 which extends along the bottom end of the cell 41 and which is urged to continuously make electric contact with the cell by the spring 42. The opposite end of the metallic strip 70 is formed with an offset end 73 which is arranged to engage the flange 56 of the lamp support 54 to complete the circuit through the shell contact 58 of the lamp 57.

A globe lamp 74 constructed of transparent glass or other material is threadedly engaged into the top of the cap 52 and surrounds the top end of the lamp 57 in a manner to permit light rays to pass from all sides thereof when the lamp is lit. A gasket 75 is disposed between the contacting edges of the globe lens 74 and the cap 52 for forming a waterproof joint.

Right angle wire guards 76 extend over the globe lens 74 and have their ends extended into openings 77 formed in the sides of the cap 52. The wire guards 76 act to protect the glass globe lens from being broken.

In Fig. 6 a wall clip 78 is shown for supporting the flashlight in an inoperative upside down or an operative vertical position. This bracket houses a strip of material 79 adapted to be attached to a wall and provided at its bottom end with a forwardly extending flange 80. Spaced spring clips 81 are mounted on the strip 79 and are arranged to encircle the casing 40 of the flashlight 21. In Fig. 6 the flashlight 21 is illustrated supported upon the wall bracket in an inoperative upside down position by the dot and dash lines 21'''. However, it is possible to reverse the position of the flashlight 21 permitting it to assume an operative position in which the mercury switch 60 will be closed, causing the lamp 57 to be illuminated.

The operation of the device is as follows:

To use the flashlight 21 as a safety light the wearer attaches the clips 48 and 49 of the lanyard 47 to the members 45 and 46. The lanyard 47 is then engaged about the wearer's neck with the ring 50 located to the front of the wearer. The free end of the rope 51 is then passed about the wearer's waist and knotted in position to retain the ring 50 in position between the lanyard 47 and the rope 51. In this position the lanyard 47 is free to be slipped through the ring, permitting the flashlight 21 to assume the operative position over the wearer's left shoulder, as shown in Fig. 1. However, to extinguish the flashlight 21 it is merely necessary to pull on the lanyard 47, causing the flashlight to pass around the back of the wearer's neck to assume an inoperative upside down position over the wearer's right shoulder. This latter position is not shown on the drawings but it is believed that movements of the flashlight from the operative

to the inoperative position will be clearly understood.

The marine safety light, in accordance to the form of the invention illustrated in Figs. 13–16 inclusive, includes a flashlight 21ª which has a casing 40ª adapted to receive the battery cells 41. An end portion of the casing 40ª is provided, on opposite sides, with tubular extensions 44 supporting metallic loops 45. The remote end of the casing 40ª pivotally supports a loop 46. A lanyard 47 has spring clips 48 and 49 at its ends. These spring clips are so arranged that one is engaged with the loop 46 while the other is engaged with the loop 45. Thus the lanyard 47 may be engaged about one's neck, as clearly illustrated in Fig. 13, so as to support the flashlight 21ª across the wearer's left shoulder.

The lanyard 47 carries a ring 50 adapted to engage one button of a jacket of a user of the marine safety light, as clearly shown in Fig. 13. With this arrangement the lanyard 47 may be shifted so that the marine safety light extends first across the back of the wearer's shoulder and then across the right hand shoulder. It is then in a downwardly tilted inoperative position similar to the arrangement described relative to Fig. 1.

The top of the casing 40ª is closed by means of a cap 52ª. A gasket 53ª is disposed between the contacting faces of the casing 40ª and the cap 52ª for forming a waterproof joint. A metallic lamp holder 54ª extends through a central opening formed in the cap 52ª and is formed with a bottom flange 56ª which extends along the bottom face of the cap 52ª. The top end of the lamp holder 54ª threadedly supports the lamp 57. An insulation bushing 59ª is extended into the lamp holder 54ª and has its top end disposed to a point adjacent the bottom of the lamp 57. A mercury switch 60 is mounted within the insulation bushing 59ª and contacts the central end contact 61 on the top of the battery cells 41, and the central contact of said lamp 57. The mercury switch 60 is of the make and break variety previously described in detail.

A conductor strip is provided for completing the electric circuit from the cam contact of the battery cell 41 to the lamp holder 54ª. This conductor strip is provided with the spaced clips 71 for gripping the sides of the cell 41. It is provided with an offset end 73 contacting the lamp holder 54ª.

A globe lens 74ª is threadedly engaged into the top of the cap 52ª and surrounds the top end of the lamp 57. A gasket 75ª is disposed between the contacting edges of the globe lens 74 and the cap 52ª forming a waterproof joint. The cap 52ª has lugs upon which a wire guard 76ª is mounted which extends over the globe lens 74ª. In other respects this form of the invention is identical in construction and operation to the previous form.

The marine safety light, according to the form of the invention shown in Figs. 17 to 21 includes a vest 15 adapted to be worn under a life preserver 16 or over a life saving suit, the latter not being illustrated on the drawings. The vest 15 has a vertical pocket 17 on its back portion. A batten 18 is supported in and projects from the pocket 17 to a point above the head of a person wearing the life saver or life saving suit (as illustrated in Fig. 17). A swivel joint 19 is located on the top portion of the batten 18. A flashlight 21′ is supported by the light holder 20, as hereinafter more fully described. The construction is such that the flashlight 21′ may be placed in a horizontal position, as illustrated by the full lines in Fig. 20, or in the vertical positions illustrated by the dot and dash lines 21″. The flashlight 21′ is of a construction to be waterproof, that is, not to be effected if submerged. It is also of a construction so as to flicker when in the upward vertical position 21″, and to be continuously lit when in the horizontal position, and to be completely out when in the upside down vertical position 21″, similar to flashlight 21 previously described, which as already known has a mercury make and break switch.

The vest 15 is preferably made from canvas. It is provided with a back piece 23 preferably of double layer material sewed together by stitches 24 along its edges and by the stitches 25 which are extended inwards from the top to form the pocket 17. The back piece 23 is provided with straps 26 attached to its bottom corners. These straps may incircle one's body to form the waist strap of the vest. A pair of diagonal straps 27 are attached to the top corners of the back piece 23 and are adapted to extend over the shoulders of a wearer to the front. These straps 27 are connected with each other and with a main central strap 28 which extends downwards and is adapted to be attached or to be tied to the straps 26. It should be noted that the vest is of exceptionally simple construction and is well suited for the purpose intended. However, the vest could be made more elaborate with sleeve openings and other features, if this is desired.

The batten 18 is in the nature of a strip of wood, preferably ¼″ thick, 1½″ wide, and some 20″ high. This height is sufficient for the batten to project above the head of a person provided with said marine safety light. The batten 18 is held from accidentally coming out of the pocket 17 by a fastener 29 engaged through the layers forming the pocket 17 and through an aperture 30 formed in the batten.

The swivel joint 19 comprises a bracket 31 which is secured on the top of the batten 18 by rivets 32. This bracket 31 has a forked upper end between the finger of which a lug 33 from the light holder 20 extends. A wing nut clamp screw 34 extends through the fingers of the bracket 31 and through the lug 33 for swivelly connecting these parts. The wing nut may be loosened and then the light holder may be swung upwards and downwards. The wing nut 34 may be tightened to clamp the light holder 20 in a selected fixed position.

The light holder 20 comprising encircling strips 35 adapted to engage around the center of the flashlight 21′. At one side the strips 35 have the lugs 33. At the other side, they are provided with a pair of parallel end portions 36 through which a wing nut clamp screw 37 passes. The wing nut clamp screw 37 may be tightened to cause the strips 35 to tightly clamp and hold the flashlight 21′. It is only necessary to loosen the wing nut and screw 34 to pivot the swivel joint 19 to selected positions, as indicated in Fig. 20. The wing nut and screw 37 is not disturbed after the flashlight is mounted in position.

The operation of the device is as follows:

During an emergency when one must don a life preserver or life saving suit and take to the water, the vest 15 is also donned. The vest supports the batten 18 which in turn indirectly adjustably supports the flashlight 21′. The wing nut and screw 34 is loosened and the flashlight 21′ is moved to a position in which it is upside

down. The wing nut and screw **34** is then tightened. When the wearer wishes to attract the attention of a rescue party he reaches up and loosens the wing nut and screw **34** and pivots the light holder **20** to a position in which the flashlight **21'** is vertical. The lamp of the flashlight will now flash because the circuit through the lamp will be periodically made and broken by the make and break mercury switch thereof. If a steady light is desired the wing nut **34** is again loosened and the flashlight is placed in a substantially horizontal position in which the mercury switch will maintain constant contact.

While I have illustrated and described the preferred embodiments of my invention, it is to be understood that I do not limit myself to the precise constructions therein disclosed and the right is reserved to all changes and modifications coming within the scope of the invention as defined in the appended claims.

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

1. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact of said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down.

2. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact or said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down, and to continuously make said circuit when said safety light is horizontal and bobs around.

3. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact or said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down, said vest being of canvas.

4. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens on the top of said casing, water proof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact or said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down, said vest comprising a back member formed with said vertical pocket and being provided with straps by which it may be secured in position.

5. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens

on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact of said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, to break said circuit when said safety light is substantially upside down, and a fastener for holding said batten connected with said vest.

6. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact or said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down, said swivel joint comprising a bracket attached on said batten and having a pair of parallel fingers, a lug from said flashlight holder engaging between said fingers, and a clamp screw engaged through said fingers and lug.

7. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact of said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down, said waterproof means comprising gaskets clamped between certain parts.

8. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported and at its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact of said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down and a wire guard for said globe lens.

9. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder and engageable with the end contact of said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down, said flashlight holder, comprising a strip having a pair of parallel ends, and a wing nut and screw engaged through said ends for clamping said strip in position.

10. A marine safety light, comprising a vest adapted to be worn under a life preserver or over a life saving suit, a vertical pocket on the back of said vest, a batten supported in and projecting from said pocket to a point above the head of a person wearing said life preserver or life saving suit, a swivel joint on the top portion of said batten, a flashlight holder supported by said swivel joint, and a flashlight comprising a flashlight casing for battery cells supported at

its center by said flashlight holder, a globe lens on the top of said casing, waterproof means for connecting said lens and casing, a lamp holder in the top of said casing for supporting a lamp in said lens, a gravity actuated make and break mercury switch within said lamp holder and insulated from the lamp holder engageable with the end contact of said lamp, waterproof means sealing the bottom end of said casing, battery cells within said casing and having one of their terminals connecting with said switch, and a circuit of electricity from said cells connecting said lamp and switch in series, and said switch being adapted to make and break said circuit when said safety light is substantially vertical and bobs around, and to break said circuit when said safety light is substantially upside down, said make and break mercury switch comprising an insulation tube having end caps, a shell within said tube contacting one end cap and spaced from the other, and a mass of mercury within said shell and in certain positions electrically connecting said shell and one of said end caps.

JESSE A. RAMSEY.