Oct. 13, 1959 L. E. PERKINS 2,908,807

MARINE LAMP

Filed March 5, 1958

Fig. 1.

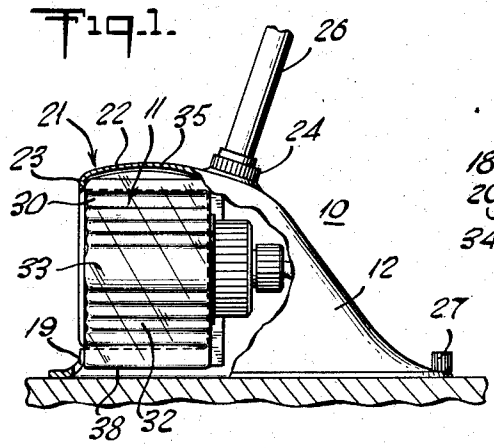
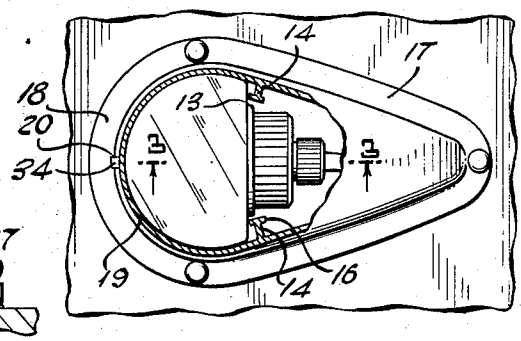


Fig. 2.



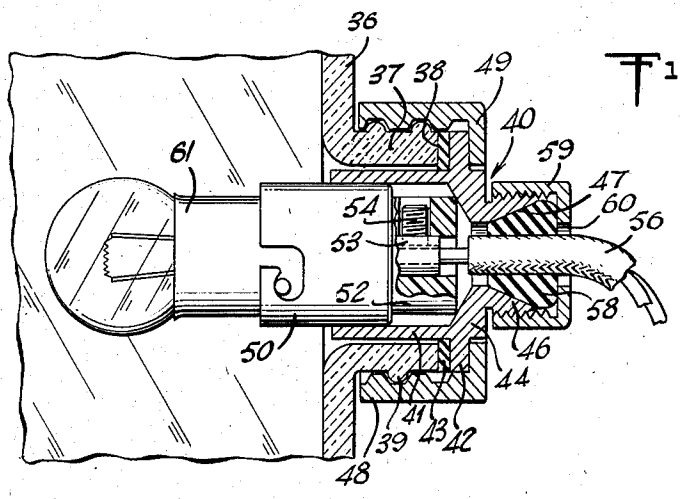


Fig. 3.

Fig. 4.

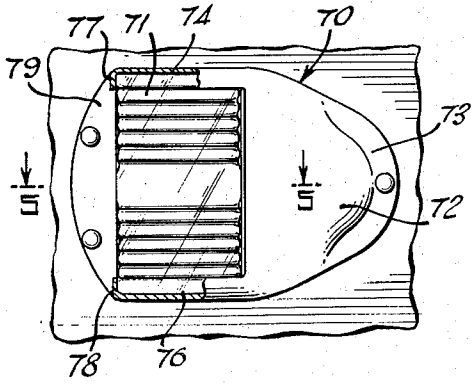
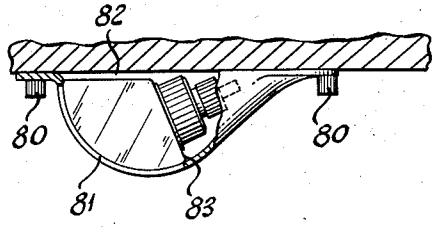


Fig. 5.



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MARINE LAMP

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2 Claims. (Cl. 240—7.5)

The present invention relates generally to improvements in electric lamps, and in particular it relates to improvements in electric marine lights.

Marine lights, particularly running lights such as bow and side lights, are subjected to high corrosive action by reason of the nature of the ambient conditions which generally include very high humidity and heavy salt water spray. The various electrical contacts and connections are thus rapidly corroded with resultant loss of efficiency and effectiveness. As a result, the conventional electric marine lamp requires frequent attention, repair and replacement.

It is thus a principal object of the present invention to provide an improved electric lamp.

Another object of the present invention is to provide an improved electric marine light.

Still another object of the present invention is to provide an improved electric marine light, the electrical connections to which are fully protected from ambient corrosive influences.

A further object of the present invention is to provide an improved electric marine light of simple, inexpensive and rugged construction.

The above and other objects of the present invention will become apparent from a reading of the following description, taken in conjunction with the accompanying drawings, wherein

Figure 1 is a side elevational view, partially broken away and partially in section, of an electric marine bow light embodying the present invention;

Figure 2 is a top plan view thereof, partially broken away and partially in section;

Figure 3 is an enlarged detailed sectional view taken along line 3—3 in Figure 2;

Figure 4 is a side elevational view, partially broken away and partially in section of an electric marine side light embodying the present invention; and

Figure 5 is a top plan view thereof, partially broken away and partially in section.

In a sense, the present invention contemplates the provision of an electric marine light comprising a support frame having an outwardly directed opening formed therein; a lamp housing formed of transparent material engaged by said support frame and having a forward wall registering with said opening; a rearwardly directed tubular neck formed integral with said housing and communicating with the interior thereof, and an electric bulb socket supporting bracket separably registering with said neck and having a rearwardly directed tubular portion adapted to receive an electrical conductor connected to said bulb socket.

Referring now to the drawings and more particularly to Figures 1 through 3 thereof, which illustrate a preferred embodiment of the present invention, the numeral **10** generally designates a support frame and the numeral **11** a bulb housing. The support frame **10** is preferably formed of a corrosion-proof metal and includes a rear shell section **12** defined by a rearwardly downwardly

directed tapering wall having a forwardly directed opening **13** formed therein. Vertical T-shaped members **14** are formed on the inside of shell **12**, said members **14** including web portions and horizontal cross bars **16**, the outer forward edges of which define the side edges of the opening **13**. Extending along the base of shell **12** is a horizontal peripheral flange **17** of substantially triangular outline, the forward ends of flange **17** being formed integrally and joining a flange **18** of forwardly directed semicircular outline. Formed along the inner edge of flange **18** is an upwardly directed lip **19** which is connected to flange **18** by means of a curved intermediate portion, a vertical slit **20** being formed along the medial line of lip **19** and the trailing portion of flange **18**.

Projecting forwardly from the upper part of shell **20** is a cap member **21** having a domed top wall **22** extending into the wall of shell **12**, and having a semicircular forward edge from which depends a skirt **23** which is slightly inwardly offset with respect to the upper edge of lip **19**. Immediately rearward of cap **20** there is disposed a staff coupling member **24** of conventional construction which releasably engages the rearwardly inclined staff **26**. The support frame **10** is mounted on the hull, cabin or elsewhere on the boat by means of suitable fasteners **27** in any well known manner.

Bulb housing **11** is preferably formed of glass or other suitable transparent material and includes a front cylindrical wall **30** of slightly greater than 180° about its circumference, the wall **30** having circumferential ridges **32** and an intermediately circumferential arcuate surface **33** formed on its front face to define a cylindrical Fresnel lens divided by a medially located forwardly projecting vertical rib **34**. Housing **11** has a flat rear wall **36**, a slightly outwardly domed top wall **35** and a flat bottom wall **38**. The upper part of housing **11** nests within the support frame cap structure **22**, the peripheral edge thereof snugly engaging the inner face of skirt **23**. Vertical rib **34** registers with slot **20** in rib **19**, and the outer borders of the housing rear wall **36** abut the forwardly directed edges of the rib cross pieces **16** removably to retain housing **11** within support frame **10**.

Extending rearwardly from and formed integral with housing back wall **30**, and centrally located thereon, is a hollow tubular neck portion **37** communicating with the interior of housing **11**, said neck **37** having a trailing annular wall **38** externally threaded, as at **39**. A lamp socket supporting bracket **40** includes a forwardly projecting sleeve member **41**, which registers with the neck **39**, and an outwardly directed peripheral flange **42** disposed slightly forward of the trailing end of sleeve **41**, the front face of which confronts the rear face **38** of neck **37**, a washer or gasket **43** of suitable resilient material being interposed between the rear face **38** anad the confronting face of flange **42**. A centrally-apertured rear wall **44** is located at the trailing end of sleeve **41** and is provided with a rearwardly directed externally threaded tubular stub **46**, having a forwardly inwardly tapered frustoconical wall **47**.

An internally threaded locking collar **48** engages the threaded wall **39** of neck **37** and is provided at its trailing end with an inwardly directed peripheral flange **49** which abuts the rear face of sleeve flange **42**, the inner edge of flange **49** being closely spaced from the trailing peripheral wall of sleeve **41**. A tightening of the cap **48** effects a liquid-tight connection between bracket member **40** and housing neck **37** by way of the sealing gasket **43**.

A bayonet type electric bulb socket **50** of conventional construction registers with the forward end of the sleeve **41** and is secured in position by means of a lock screw, not shown, registering with the corresponding tapped opening formed in the bracket sleeve **41** and tightly en-

gaging the outer surface of socket **50**. The socket **50** is provided with a rearwardly directed contact supporting insulator base or block **52** located within sleeve **41**, provided in the well known manner with a pair of conductor engaging terminals **53** and conductor lock screws **54** engaging tapped openings formed in the terminals **53** and registering with aligned openings formed in block **52**. A two-conductor cable **56** extends through the opening of bracket tube **46** into sleeve **41**, the leading ends of the conductors engaging and being locked in the respective terminals **53**.

A gasket **58** of frusto-conical configuration and formed of a resilient material such as rubber nests within the tubular stub **46** and registers with the cable **56**, the trailing end of the gasket **58** extending rearwardly of the tubular stub **46**. An internally threaded cap member **59**, having a central aperture **60** in its rear wall, engages the threaded tubular stub **46**, the inner face of cap member **59** abutting the trailing wall of the resilient gasket **58**. Upon tightening of cap **59** gasket **58** is compressed thereby reducing the diameter of its axial central bore to effect a hermetic engagement between confronting walls of cable **56** and washer **58** and the confronting walls of washer **58** and the stub inner wall **47** thereby to produce a liquid-tight seal between cable **56** and housing **11**. An electric bulb **61** is mounted in socket **50** and the cable **56** is connected to a source of energizing current in any well known manner.

In the event that electric bulb **61** burns out and requires replacement, support frame **10** is removed by disengaging fasteners **27**. Housing **11** is then slipped from support frame **10** and bracket **40** and socket **50** separated from housing **11** by disengaging cap **48** from neck **37**, and thereby permitting replacement of the bulb **61**. A liquid-tight reassembly is effected by following these steps in reverse order.

Referring now to Figures 4 and 5 of the drawings which illustrate another embodiment of the present invention as applied to marine side lights, numeral **70** generally designates a support frame and numeral **71** the bulb housing. Support frame **70** includes a rear shell portion **72** open at its front end at a side face thereof, and including a rearwardly tapered wall terminating in a trailing vertical flange **73**. Projecting forwardly from the upper and lower edges of shell **72** are upper and lower cap members **74** and **76** respectively. Cap members **74** and **76** are of segment configuration, having a peripheral edge extending circumferentially for approximately 115° and provided with downwardly and upwardly directed lips **77** and **78** which are in vertical alignment with each other. A flat bridge member **79**, substantially coplanar with flange **73**, extends between the rear portions of caps **74** and **76**. Suitable separable fasteners **80** extend through openings formed in flange **73** and bridge member **79** to permit securement of the support frame **70** to any desired location on the boat.

Housing **71**, as in the previous embodiment, is formed of a transparent material, and includes a cylindrical front wall **81**, having a Fresnel outer surface and a pair of substantially flat rear walls **82** and **83** respectively extending rearwardly from the wall **81** and intercepting to form a dihedral angle. Housing **71** is carried by support frame **70**, the upper and lower ends thereof nesting within caps **74** and **76**, and the upper and lower borders of the front wall **81** abutting the inner faces of lips **77** and **78**. As in the previous embodiment, a tubular neck projects rearwardly from the housing wall **83** and supports the socket mounting bracket in the manner previously described. In all other respects the embodiment illustrated in Figures 4 and 5 of the drawing is similar to that of the earlier embodiment.

While there have been described and illustrated preferred embodiments of the present invention, it is apparent that numerous alterations and omissions may be made without departing from the spirit thereof.

I claim:

1. A marine lamp comprising a support frame having an outwardly directed opening formed therein which lies in a plane curved about a vertical axis and is provided with a peripheral border having a rearwardly directed face, a lamp housing integrally formed of a transparent material and located in said support frame, said housing having an outwardly cylindrically convex lens defining a front wall registering with said opening and having a peripheral border substantially abutting said opening border rear face and a vertically extending rear wall disposed posterior of said front wall and top and bottom walls, a rearwardly directed, externally threaded hollow tubular neck formed integral with said rear wall and communicating with the interior of said housing and having a rearwardly directed shoulder, a bulb supporting tubular bracket registering with said hollow neck and having a peripheral flange confronting said neck shoulder and an internally threaded collar engaging said threaded neck and having an inwardly directed annular flange urging said bracket flange into tight engagement with said neck shoulder, an externally threaded sleeve extending coaxially and rearwardly from said bracket and having an outwardly rearwardly tapered inner surface, an axially bored resilient frusto-conical plug nesting in said sleeve and having a base portion disposed rearwardly of the trailing edge of said sleeve, a conductor extending through said plug bore, and an internally threaded cap engaging said sleeve and compressing said plug to effect a tight engagement of said conductor, said cap having an opening formed in the end wall thereof to permit the passage of said conductor.

2. A marine lamp in accordance with claim 1, including a compressible gasket disposed between said bracket annular flange and said neck shoulder.

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