Sept. 16, 1930. A. LUDERS 1,776,004

SHIP'S LIGHT

Filed July 8, 1929

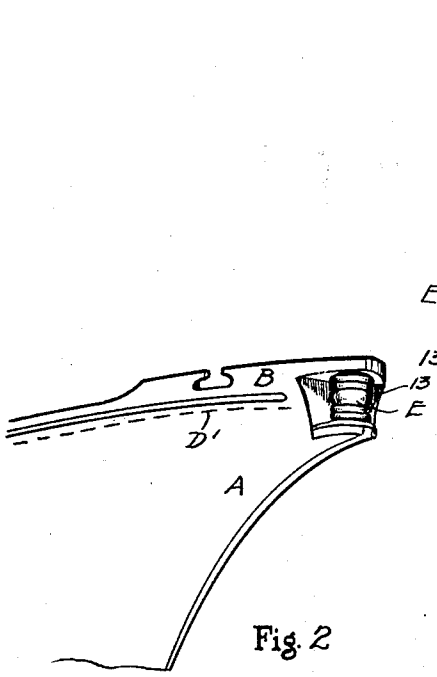


Fig. 2

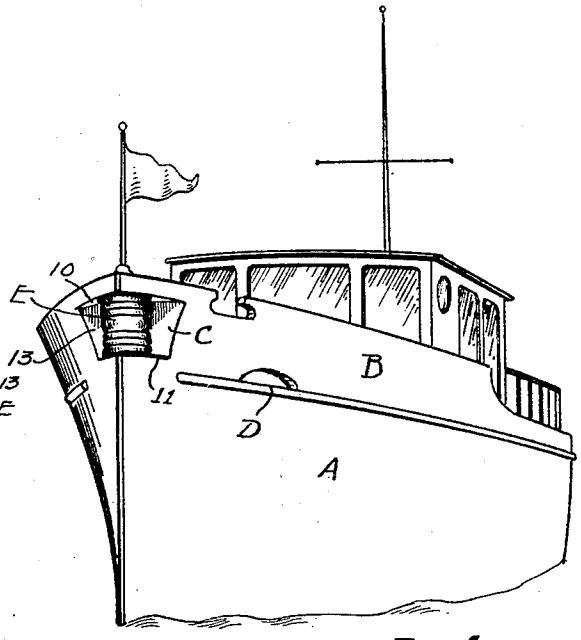


Fig. 1

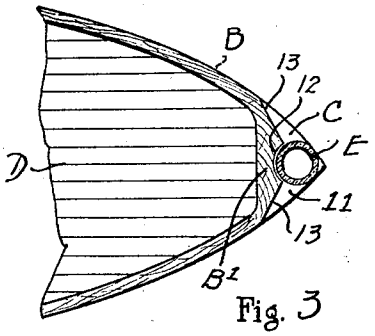


Fig. 3

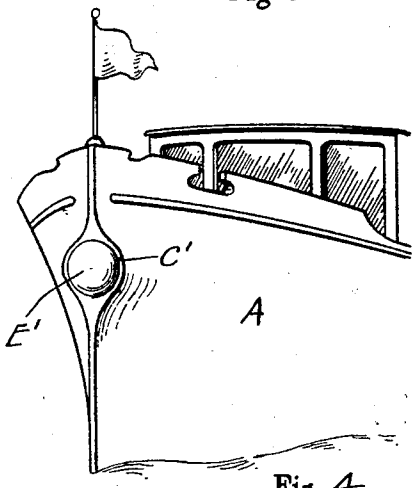


Fig. 4

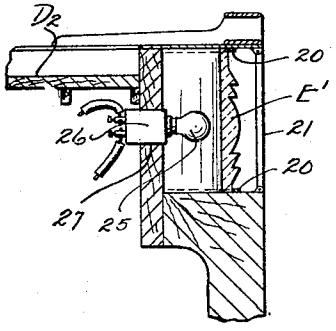


Fig. 5

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UNITED STATES PATENT OFFICE

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SHIP'S LIGHT

Application filed July 8, 1929. Serial No. 376,718.

This invention relates to a construction of vessels enabling the carrying of the bow light in such manner that there will be no troublesome backward rays to interfere with the vision of the helmsman. It is the usual practice to carry the light on a pole at the bow, or on the mast, or on the pilot house or other superstructure, or on the rigging of the boat about the deck-line. One result of this is to cause reflections from the deck, which are sometimes troublesome to the helmsman. In my vessel, I avoid the difficulty by placing the bow light in a pocket which is built as an integral part of the hull or bulwark structure of the vessel. This is so arranged that the light rays are uninterrupted through twenty points of the compass, namely, from straight ahead to two points abaft the beam on either side—equivalent to 225°.

By providing this pocket in the hull or bulwark structure, I not only absolutely prevent any rays of the light from coming onto the deck of the vessel, but I provide a permanent location for the light and protect the light itself from injury, and enhance the design and appearance of the vessel.

The light may be carried in a usual lantern having Fresnel glass, and may be inserted in the pocket either from the front or the rear, and, if desired, protecting bars may be extended across the front of the pocket.

My invention is illustrated in the drawings with two forms of light and two different types of vessel. It is to be understood however, that these are simply illustrations of various forms in which the invention may be embodied.

In the drawings, Fig. 1 is a perspective from the front of a vessel equipped with my light; Fig. 2 is a side elevation of the bow portion of a vessel of the clipper type having my light; Fig. 3 is a horizontal section through the construction of either Figs. 1 or 2; Fig. 4 is a perspective of a vessel having my invention, in which the light is of spherical form and mounted in a corresponding formed pocket; Fig. 5 is a fragmentary vertical section through a bow of a vessel somewhat similar to Fig. 2, but with a differently arranged lantern.

In Fig. 1, A indicates the hull of the vessel, B the bulwark, and C the pocket which in this case is set into the bulwark, the deck line in this case being indicated at D. The pocket C has preferably parallel top and bottom horizontal surfaces as indicated at 10 and 11, and the lantern may readily be of such height as to practically fill the space between these two surfaces when it rests on the surface 11. The rear of the pocket may have a vertical concavity as indicated at 12 in Fig. 3 to receive the rear portion of the light. Beyond this cavity the rear wall of the pocket flares as shown at 13 on an angle preferably at 22½° behind an athwartship line, thus giving an available free space for the rays of light of 225°. The center of the light is preferably on or forward of the plane where the inclined surfaces 13 would meet. The rear wall of the pocket, providing the surfaces 12 and 13, is preferably made by a transverse portion B^1 of the bulwark itself, as shown in Fig. 3.

The lantern, designated E, may be of any desired construction. It stands on the bottom 11 of the pocket and may extend into the concavity 12 of the bulwark front. If desired, the lantern may be of sufficient height to practically contact with the top wall 10 of the pocket. This lantern is held in place in any suitable manner by means not shown, as for instance, suitably movable bars or straps extending about the upper and lower portion of the light. If desired, the bulwark front B^1 may have a central portion normally closed by a door, which may be opened to enable the light to be inserted from the rear. In this case the protecting bars would be permanent.

Fig. 2 indicates a similar construction to that described, but in this case the pocket, instead of being entirely made into the bulwark, is partly in the hull of the vessel and partly in the bulwark, the deck-line being indicated at D^1.

In Fig. 4, I have shown the pocket C^1 as of a different shape and mounted entirely in the hull A of the vessel. In this instance the lantern E^1 is shown as of the spherical type and the pocket has a partially spherical

recess to receive such lantern. The lantern however projects sufficiently so that its rays are visible for 112½° either side of the fore-and-aft axis of the vessel.

Fig. 5 indicates a similar construction to that illustrated in Fig. 2 and heretofore described, but in this case the lantern is segmental and is partly in the hull of the vessel and partly in the bulwark, the deck line being indicated at D^2. In this instance I have shown the lantern, designated E^1 as being retained in position by suitable bars or straps 20 extending about the upper and lower portion of the light and a protecting bar 21 is shown in front of the light. The light indicated at 25 is retained in a socket member 26 which may readily be inserted from the rear through the opening 27 in the bulwark.

It will be seen from the drawings that by the provision of the pocket in the structure of the vessel itself, I accomplish the various desired results of forming a definite and protected location for the light, and of preventing the rays from the light being reflected from the deck of the vessel though they are unobstructed at the front and for the requisite distance at the sides. Furthermore, the arrangement of the pocket enhances the appearance of the vessel, so that the light becomes a practical ornament.

By locating the bow light at the extreme front of the vessel as shown, it also has the advantage that it may be employed as a search light for throwing a beam on the water immediately in front of the vessel, which is of advantage when running in dangerous waters.

I claim:—

1. A vessel having in its bow above the water line, a pocket extending to either side of the extreme bow line, said pocket being formed to carry a lantern the rays of which may be visible for about 112½° either side of the axis of the vessel.

2. A vessel having in the point of its bow, above the water line, a pocket built into the hull or bulwark as a permanent part of the structure, said pocket being open in front and for at least a portion of each side but closed in use at the rear, and a lantern occupying the pocket and having its rays visible in front and at both sides of the axis of the vessel.

3. A vessel having formed in the structure thereof at the bow above the water line a pocket with top and bottom walls substantially horizontal and with a rear surface in vertical planes inclined backwardly from the transverse plane at right angles to the vertical fore-and-aft plane of the vessel.

4. A vessel having formed in the structure thereof at the bow above the water line a pocket with a rear surface in vertical planes inclined backwardly from the transverse plane at right angles to the vertical fore-and-aft plane of the vessel, the rear wall of said pocket being recessed between the inclined planes to receive the lantern.

In testimony whereof, I hereunto affix my signature.

ALFRED LUDERS.