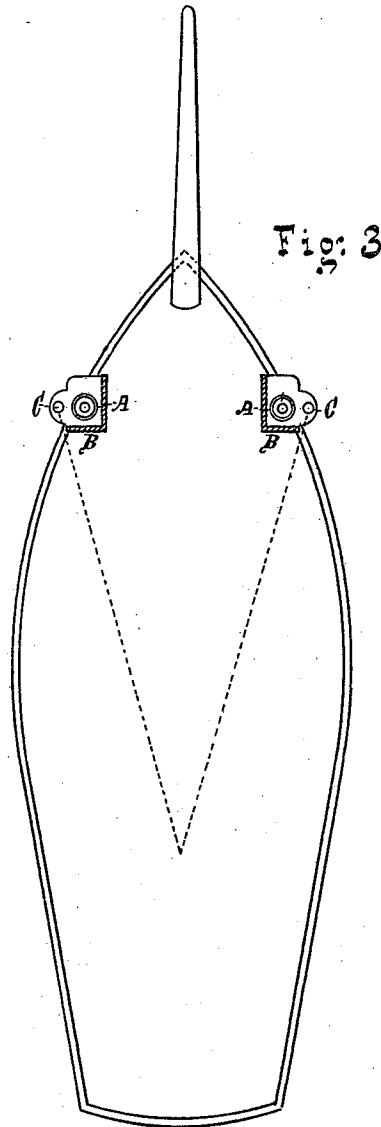
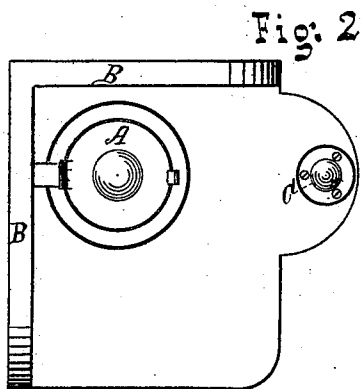
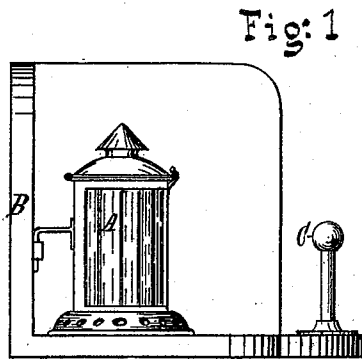


W. SHERMAN.
HEAD-LIGHT FOR VESSELS.

No. 173,140.

Patented Feb. 8, 1876.



Witnesses:

Julius Wiley
Thomas Lomis

Inventor:

William Sherman,
per Sherburne & Co
Catholics,

UNITED STATES PATENT OFFICE.

WILLIAM SHERMAN, OF WAUKEGAN, ILLINOIS.

IMPROVEMENT IN HEAD-LIGHTS FOR VESSELS.

Specification forming part of Letters Patent No. **173,140**, dated February 8, 1876; application filed March 15, 1875.

To all whom it may concern:

Be it known that I, WILLIAM SHERMAN, of Waukegan, in the county of Lake and State of Illinois, have invented an Improvement in Marine Signal-Light Indicators; and I do hereby declare the following to be a full, clear, and exact description thereof, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a plan view of a ship with my signal-light indicator attached thereto. Fig. 2 is a front elevation of a signal-light indicator embodying my invention, and Fig. 3 is a top view of the same.

Similar letters of reference indicate like parts in the several figures of the drawing.

In the night-time it is necessary to the safety of vessels at sea that each should carry signal-lights on each side near their bow, in order to enable the officer of the deck and the man at the wheel, on each ship, to observe an approaching vessel; and, to enable them to determine the position and exact course of the approaching vessel, the lights must be so screened as to prevent their rays from radiating backward toward the stern of the vessel. This screen prevents the officer of the deck, or man at the wheel, from seeing the light on their own vessel; consequently they are unable to know at all times whether or not the lights are burning. This difficulty renders the signal-lights more or less unreliable, for the reason that they are often extinguished, which would not be noticed for a space of time unless especially watched. It is to overcome this difficulty that my invention is designed; and to that end it consists, in combination

with the burner, of a cylindrical reflector located forward of the screen, and at the proper distance therefrom to the right or to the left, to cause the reflection of the light to radiate aft at the proper angle, to be seen from any point near the stern of the vessel.

In the drawing, A A represent the burners, which are made in the usual form, and located at any suitable point near the bow of the vessel and at any requisite height above the deck. B B are the screens, which are arranged in the usual manner. C C are the reflectors, which are made in a cylindrical form, and of any highly-polished metal that will produce a reflection of the light. These reflectors are located at a suitable distance outward from the burner, and beyond the end of the screen, to admit of being seen from any point aft near the stern of the vessel.

By the use of these reflectors the rays of light from the burner are radiated aft so as to be readily seen by the officer of the deck, or the man at the wheel, and at the same time producing a light which is readily distinguished from the signal-light of an approaching vessel, thereby enabling them to see whether or not the signal-lights of their own vessel are in perfect order.

Having thus described my invention, I claim—

In combination with the burner A of a marine signal-light, the reflector C, located forward of the screen, and at the proper distance outward therefrom, to cause the reflection of the light to radiate aft, as specified.

WILLIAM SHERMAN.

Witnesses:

T. T. LOOMIS,
G. H. FROST.