

R. W. PROCTER.

LANTERN.

No. 177,422.

Patented May 16, 1876.

Fig. 1.

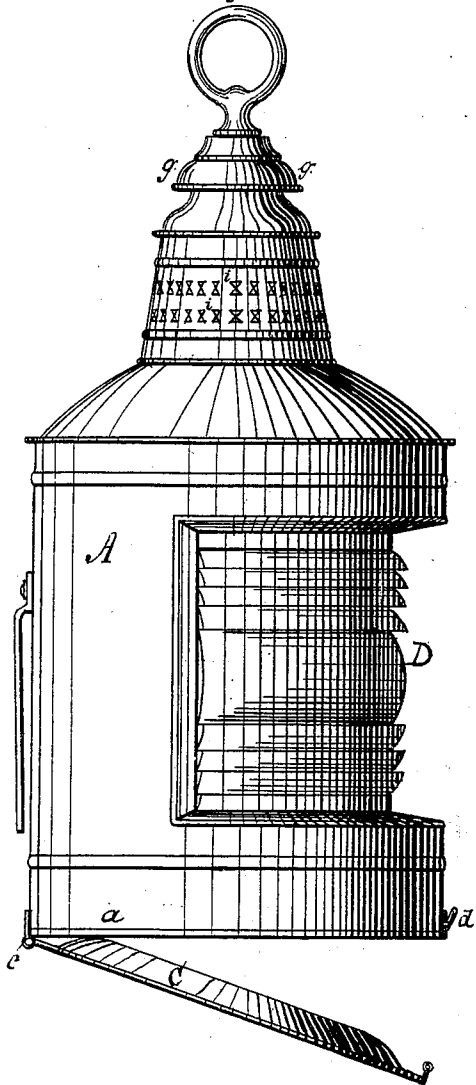
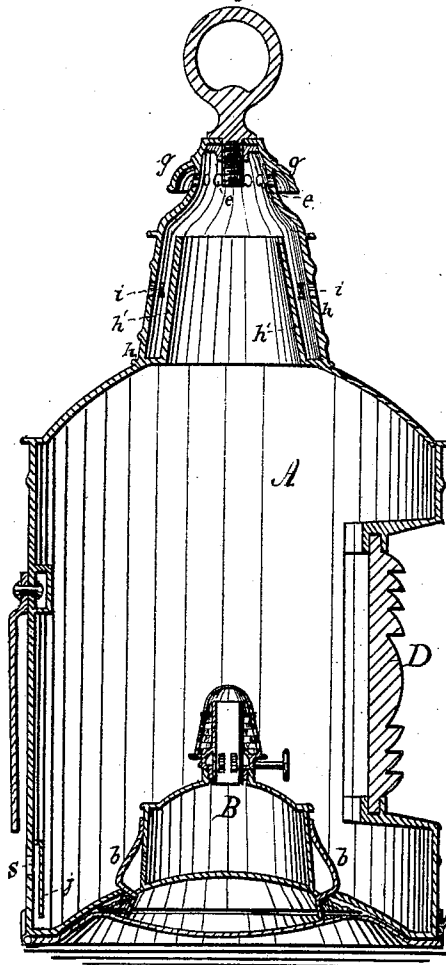


Fig. 2.



Witnesses:

Theodore Procter.
T. E. Clark.

Inventor:

R. W. Procter

UNITED STATES PATENT OFFICE.

ROBERT W. PROCTER, OF CLIFTON, NEW YORK.

IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. **177,422**, dated May 16, 1876; application filed March 31, 1876.

To all whom it may concern:

Be it known that I, ROBERT W. PROCTER, of Clifton, Staten Island, New York, have invented an Improvement in Lanterns, of which the following is a specification, reference being had to the accompanying drawings forming part of the same.

Figure 1 is an exterior side view of a lantern containing my improvement, and Fig. 2 is a vertical central section of the same.

My invention relates to that description of lanterns in which the light is very completely protected against the movement of the external air, so as to be prevented from being extinguished thereby, and more particularly to lamps designed for mast-heads and other lights on board ships and other vessels, when they are subjected to the action of high winds and to violent movement and agitation from the motion of the vessel; and consists in the combination, with the lamp inserted and held in the stationary bottom of the lantern by spring-catches or other suitable device, of a supplementary movable bottom, whereby the lower end of the body of the lamp is entirely closed, and the lamp is prevented from falling out in case it should escape from its fastenings to the stationary bottom.

A is the body of the lantern, being preferably a closed cylinder of shot metal, without a door or other opening, except at the bottom for the insertion of the lamp, and the ventilating-apertures. B is the lamp, inserted in the lantern through an opening in the stationary bottom *d*, and secured in place by several spring-catches, *b*, in the ordinary way. C is a supplementary movable bottom, preferably hinged on one side at *c*, and provided on the opposite side with a secure fastening or lock, *d*. Any suitable device for this fastening may be used, only it should be one that is entirely secure. D is the glass through which the light is thrown from the front of the lantern. It should be cemented in its place with air-tight joints, and, for convenient construction, as well as to protect it against accidental violence,

it should be set in a recess, as shown in the drawings.

The apertures *s* for the admission of air to feed the lamp should be near the bottom, on the side opposite the glass, where they will not be subjected to the direct force of the wind, the side opposite the glass being made flat, so that it may be secured to a plane support.

The ventilating-apertures *e* at the top of the lantern are protected by the overhanging rim *g*. The conical roof above the dome is formed of two concentric walls, *h h'*, both joined to the dome, thus inclosing an air-chamber, open only at the top. The wall *h* is provided with ventilating-apertures *i*. By this arrangement the air which may be blown in through these apertures by the force of the wind is prevented by the inner wall *h'* from being thrown upon the flame of the lamp, but is thereby deflected upward and out of the apertures *e*, thereby, instead of doing mischief, contributing to create a draft of air upward from the bottom of the lantern, thus increasing the supply of air to the flame through the apertures *s*. *j* is a shield or curtain which hangs on the inside of the lantern, down over the apertures *s*, whereby the air, as it enters the said apertures, is deflected downward, and not permitted to blow directly on the flame of the lamp, whereby in a high wind the lamp-flame might be extinguished.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a lantern, of the body A, lamp B, secured in the stationary bottom *a* by suitable fastening, and the movable supplementary bottom C, all constructed to operate as and for the purpose described.

In witness whereof I have hereto set my hand this 27th day of March, 1876.

ROBERT WM. PROCTER.

Witnesses:

B. S. CLARK,
A. S. FITCH.