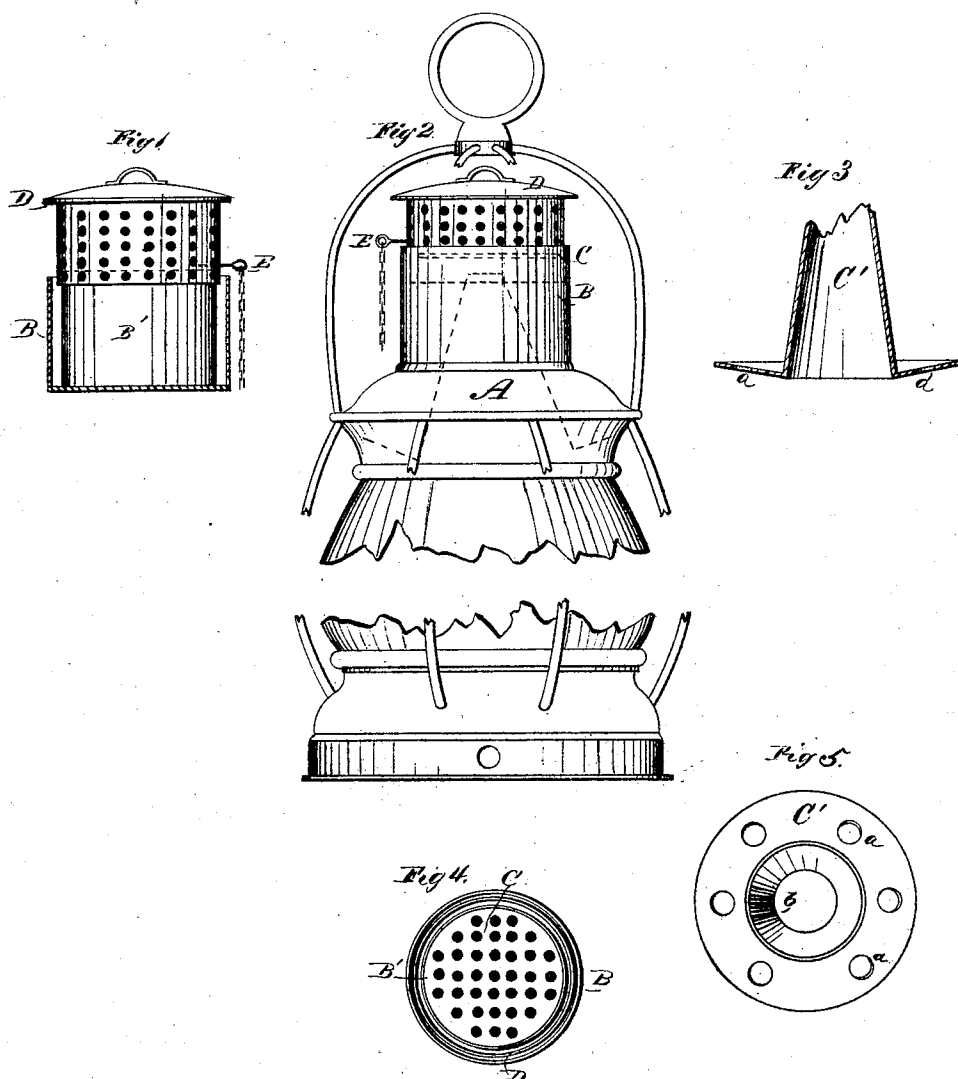


H. SAUNDERS.
Ships Lanterns.

No. 135,371.

Patented Jan. 28, 1873.



Witnesses;
H. Carlin Clark.
H. E. Matthews.

Inventor.
Herbert Saunders
by Izec. Beadle &c
his Attys

UNITED STATES PATENT OFFICE.

HERBERT SAUNDERS, OF SOUTH KINGSTON, RHODE ISLAND.

IMPROVEMENT IN SHIPS' LANTERNS.

Specification forming part of Letters Patent No. **135,371**, dated January 28, 1873.

To all whom it may concern:

Be it known that I, HERBERT SAUNDERS, of South Kingston, in the county of Washington and State of Rhode Island, have invented a new and Improved Ship's Lantern; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawing and to the letters of reference marked thereon.

This invention relates to that class of lanterns which are provided at the top with means for regulating the apparatus that permits the discharge of the heated air, smoke, &c.; and consists in the employment of a vertically-adjustable cap having its cylindrical sides provided with successive series of horizontal holes, in connection with a socket in which the cap is adjusted, and a perforated diaphragm extending across the top of the lantern below the cap, as will be fully described hereinafter.

In the drawing, Figs. 1 and 2 are views of my improvement in different stages of elevation; Fig. 3, a sectional view of the flue-diaphragm; Fig. 4, a plan view of the upper diaphragm; and Fig. 5, a bottom-plan view of the flue-diaphragm.

To enable others skilled in the art to make and use my invention, I will now proceed to describe fully its construction.

A represents a lantern, which is constructed generally in any proper manner. B B' represent cylinders secured to the top of the lantern in any proper manner, with a little space between them. C represents a perforated diaphragm which extends across the top of the lantern a little below the upper edge of the inner cylinder, as shown, and C' a flue diaphragm, perforated with openings *a*, secured below the cylinders, with the flue *b* rising to a point a little below the diaphragm C. D represents the cap, the sides of which consist of a perforated cylinder which is adapted to move freely vertically in the space formed be-

low the cylinders B B'. The perforations may be irregularly placed, if desired; but I prefer to make them in horizontal rows, as shown. E represents a securing-pin, fastened to the lantern in any proper manner, by means of which the cap D is held in any suitable manner.

The manner of adjusting the air-openings is by moving the cap up or down, as the case may be, to expose more or less of the holes, as may be desired.

When the wind is blowing strong the light is liable to be blown out if much wind is permitted to enter the lantern; but when the wind is light, or the air calm, it is essential to have more openings to enable the light to burn properly.

By means of the construction described very nice adjustments may be made quickly and easily.

The employment also of the diaphragm C is advantageous because by means of it the air that does enter the lantern is not permitted to descend upon the flame in undivided volume, but is separated into small jets, so that the liability of extinguishing the flame is much diminished.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The vertically-adjustable perforated cap D, in combination with its socket and means for securing it in place, substantially as described.

2. The combination of the cylinders B B', diaphragm C, cap D, and pin E, in a ship's lantern, as described, for the purpose set forth.

This specification signed and witnessed this 12th day of December, 1872.

HERBERT SAUNDERS.

Witnesses:

EDM. F. BROWN,
H. E. MATTHEWS.