

J. M. JENNESS.

Lantern.

No. 102,551.

Patented May 3, 1870.

Fig. 1

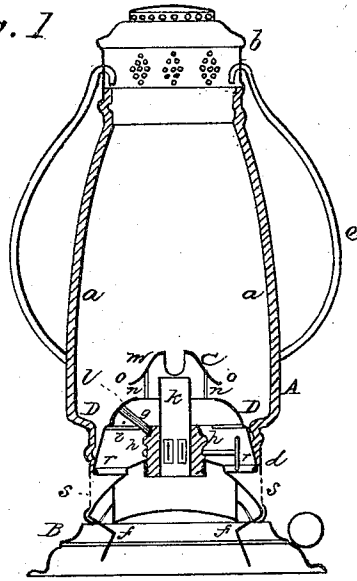
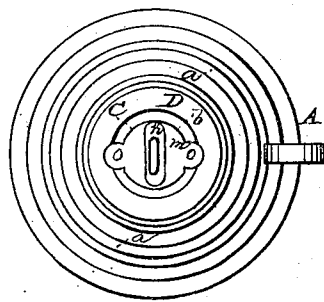
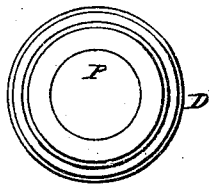


Fig. 3

Fig. 2



Witnesses

S. N. Piper

J. Brown

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by his attorney

R. H. Eddy

# United States Patent Office.

JOSEPH M. JENNESS, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO HIMSELF,  
JAMES D. JENNESS, AND SAMUEL D. JENNESS, OF SAME PLACE.

Letters Patent No. 162,551, dated May 3, 1870.

## IMPROVEMENT IN LANTERNS.

The Schedule referred to in these Letters Patent and making part of the same.

To all persons to whom these presents may come:

Be it known that I, JOSEPH M. JENNESS, of Boston, of the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Lanterns; and do hereby declare the same to be fully described in the following specification and represented in the accompanying drawings, of which—

Figure 1 is a vertical section of a lantern containing my invention.

Figure 2 is a top view of the auxiliary deflector.

Figure 3 is a horizontal section taken through the transparent portion of the body of the lantern, and representing the primary air-deflector of the wick-tube, and also the auxiliary air-deflector employed with such primary deflector, in manner as hereinafter explained.

In such drawings—

A denotes the lantern body, as composed of the transparent glass chimney *a*, the metallic foraminous or perforated cap or dome *b*, and the metallic collar *d*, whose sides are also provided with air-passages *s*.

A suspension handle or bale *e* is applied to the cap *b*.

The lamp, represented at B, closes into the collar, and is held thereto by two spring catches *f f*.

Furthermore, there is in the neck of the lamp a male screw, *g*, to receive and to fit to a female screw annulus, or ring, *h*, from which radiates or projects a series of arms, *i*, that is fastened to and serves to sustain the primary air-deflector or cone C of the wick-tube *k* of the lamp.

This deflector has a concavo-convex base, *l*, projecting from the body part *m*, extended immediately about and above the wick-tube. The said body part has lateral openings or aeroducts *n n* made in its opposite sides, each of them being provided with a cap or deflector, *o*, extended from the cone, in manner as represented.

With the lantern case, the lamp, and the primary deflector, I make use of an auxiliary deflector, D, which is dome-shaped, and provided with an opening, *p*, at its top, whereby it is caused, when in use, to fit upon the base of the primary deflector.

This auxiliary deflector rests on a shoulder, *r*, formed in the collar *d*, and is held in place thereon by the glass chimney, which fits into the collar and rests on the lower part of the auxiliary deflector, the whole being as represented in the drawings.

By means of the auxiliary deflector all the air which enters the lantern through the perforations *s* in the

sides of the collar *d* will be directed into the primary deflector, and; by the latter, to the flame of the wick.

From the above it will be seen that, provided the opening *p* be large enough, the lamp, with the primary deflector screwed to it, may be readily detached from the lantern body and the auxiliary deflector. Also, that by causing all the air for the promotion of combustion to flow up through the primary deflector, combustion will be improved, and a better light obtained than when part of the air entering the lower part of the lantern body is allowed to flow up around the outside of the primary deflector.

The purpose of the lateral aeroducts and their caps is to prevent the flame of the wick from being extinguished by a downward current of air induced by a sudden lifting up of the lantern.

The aeroducts allow the surplus air to flow laterally from the wick and the primary deflector, and the flame, when blown downward, to spread and extend into the ducts, in which case it is found that the chance of it being extinguished is greatly lessened to what it would be were there no such ducts.

The caps facilitate the outrush of the air through the aeroducts, and prevent currents from rushing downward into them.

The glass chimney of the lantern body screws both into the collar and the cap applied to it.

With the auxiliary deflector the flame of the wick is not only rendered steadier and less liable to smoke, but its light is greatly increased to what would be the case without such deflector, as can easily be discovered by, first, the lantern with, and next, without the auxiliary deflector.

I claim as my invention the following, viz:

The combination and arrangement of the lateral aeroducts *n* of the primary deflector with such deflector, the lamp, the auxiliary deflector, and the lantern body, arranged as set forth.

Also, the arrangement and combination of the lateral aeroducts *n n*, and their caps *o o*, with the primary deflector, the lamp, the auxiliary deflector, and the lantern body, arranged as specified.

Also, the primary air-deflector, as made with the female screw collar *h*, for supporting and fixing the deflector on the neck of the lamp by a male screw formed thereon.

JOSEPH M. JENNESS.

Witnesses:

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J. R. SNOW.