

JOSEPH S. DENNIS.

Tubular Lantern.

No. 123,981.

Patented Feb. 27, 1872.

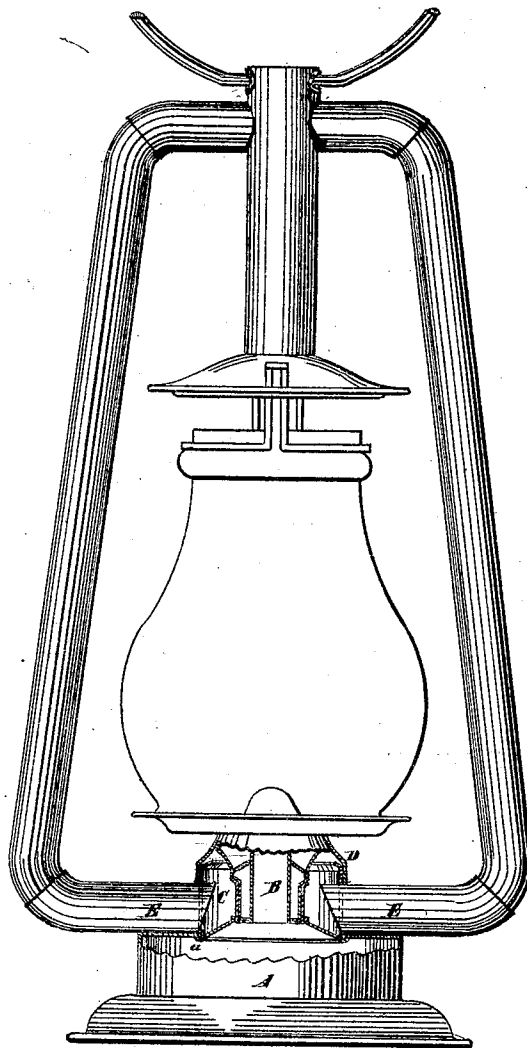


Fig. 1.

Fig. 2.

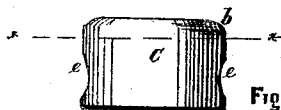
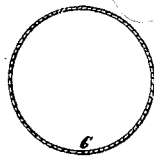


Fig. 3

Witnesses:

Sherrill F. Burns

John W. Munday

Inventor:

J. S. Dennis.

UNITED STATES PATENT OFFICE.

JOSEPH S. DENNIS, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN TUBULAR LANTERNS.

Specification forming part of Letters Patent No. 123,981, dated February 27, 1872.

Specification describing certain Improvements in the Construction of Tubular Lanterns, invented by JOSEPH S. DENNIS, of Chicago, in the county of Cook and State of Illinois.

This invention relates to an improvement in the construction of that style of lantern well known to the art as the tubular lantern; and it especially appertains to the construction of the air-chamber below the cone of the burner of such lanterns. This chamber surrounds the neck of the oil-pot and lower portion of the burner and wick-tube, being of cylindrical shape, and consisting of a vertical annular band or wall, at the sides of which enter the air-tubes for conveying air for combustion to the burner, and fitted at top to receive the overlapping lower edge of the cone of the burner. Hitherto this chamber has been made of a band or strip of tin bent or rolled into shape and having the ends soldered together, making a vertical seam at one side where joined. It has been impossible on account of this seam, which produces a ridge, to make the cone fit down over the edge of the chamber so closely as to exclude the air; and it has also been found that, where the chamber is made of such a strip so soldered, it is practically impossible to make the chambers all of a given diameter, the variation being likely to occur in the holding, soldering, or bending in the process of manufacture. And the present invention consists in making this air-chamber, or rather the vertical wall thereof, of a continuous sheet of tin, stamped out of the metal into the desired form, whereby a regular form is produced, never varying in size, and entirely without the objectionable side seam, and whereby a regular and even taper may be given to the upper end of said chamber, and a perfect fit insured for the overlapping edge of the cone.

In the accompanying drawing, Figure 1 represents a front view of a tubular lantern with

the air-chamber in section. Fig. 2 is a horizontal section looking downward, taken on the line *x x* of Fig. 3; and Fig. 3 is a front view of the air-chamber detached.

Like letters of reference made use of in the several figures indicate like parts.

General Description.

A is the oil-pot, B the burner of the lantern, and C the vertical wall of the air-chamber, resting in an annular groove, *a*, upon the top of the oil-pot, which groove facilitates the soldering of the wall C to said top. D is the cone, the base of which is made to fit over the upper edge of the wall C. E E are the air-tubes entering the sides of the air-chamber through the wall C. This vertical wall is stamped or drawn out of a flat piece of tin by appropriate machinery, and has the top and bottom open, with the top edge slightly beveled or rounded inward, as at *b*, for the greater ease of adjusting the cone to its place, and apertures *e e* are cut in opposite sides of the said wall to receive the tubes E E, which are soldered in place. By this construction the parts accurately fit one another and are interchangeable—the parts of one lantern for those of another—an advantage not easily overestimated in a large factory.

Claim.

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

The vertical cylindrical wall C of the air-chamber of a tubular lantern, when stamped from a continuous sheet of metal, as shown and described, and for the purposes specified.

J. S. DENNIS.

Witnesses:

JOHN W. MUNDAY,
HEINR. F. BRUNS.