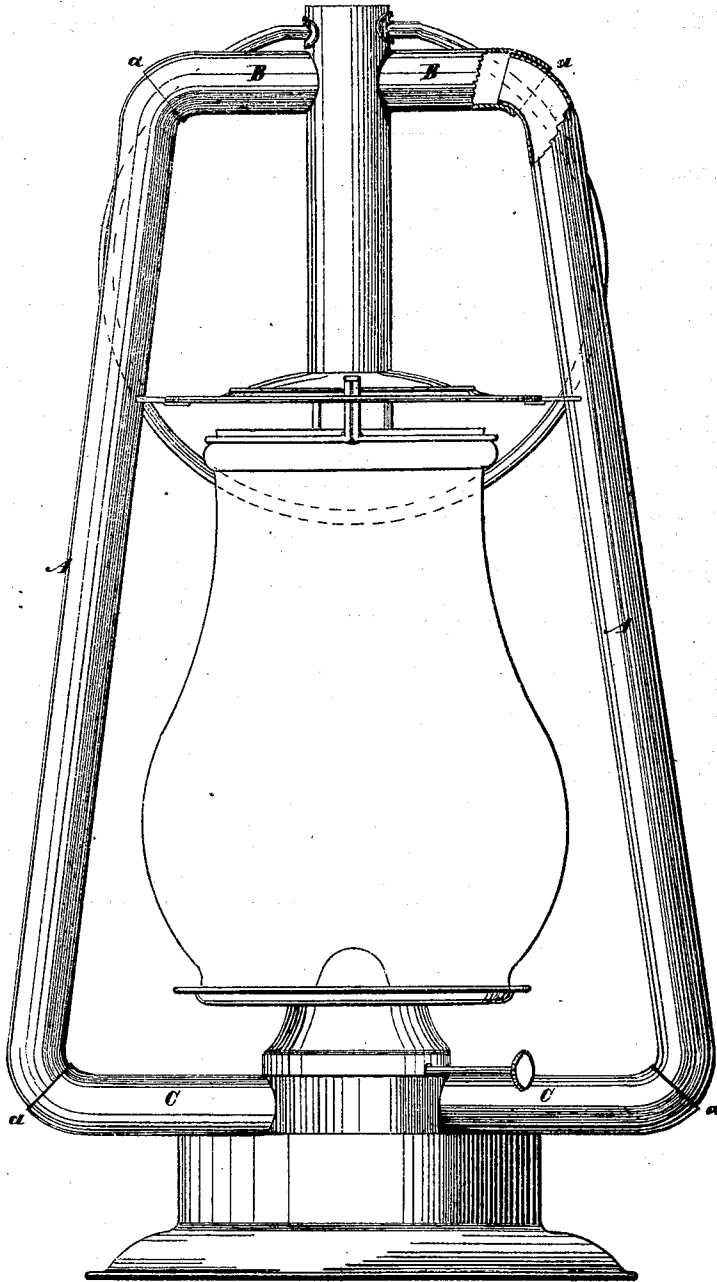


JOSEPH S. DENNIS.  
Tubular Lantern.

No. 123,980.

Patented Feb. 27, 1872.



Witnesses:

*Henry F. Brown*

*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. 123,980, 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 the method of constructing the joints between the vertical side tubes and the horizontal upper and lower tubes of the well-known "tubular lantern," whereby much labor and expense are saved in the manufacture of said lantern, and a stronger and better joint produced. And the invention consists in curving, by any of the well-known processes, the ends of the tin tubes to be joined, and inserting one end within the other, whereby but a single circular seam is left to be closed by solder.

The drawing represents an elevation of a tubular lantern containing my improvement, one of the joints being partially cut away to exhibit the method of joining. In the said drawing, A A represent the side tubes; B B, the upper horizontal tubes; and C C, the lower horizontal tubes.

It is desirable, in this style of lantern, that the joints between these tubes should be curved, both on account of the more graceful appearance

of the lantern, and because of the more important fact that the curved joint allows an easier passage for the air; heretofore this curved portion of the tube has been made by stamping it out of tin in two halves, which were soldered together and then soldered to the tubes, making four seams to close by solder.

In the present invention, both ends of the side tubes A A are slightly curved, and the outer ends of the tubes B B C C also curved, so that the joint is formed by inserting one tube within the other, with a sufficient lap, as shown in the drawing, leaving only a single circular seam, *a*, which is soldered up, and the joint is complete.

### *Claims.*

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

The curved joint hereinbefore described for the tubes of tubular lanterns, made by curving the ends of the tubes and inserting one within the other, as specified and shown.

Witnesses: J. S. DENNIS.

JOHN W. MUNDAY,  
HEINR. F. BRUNS.