

JOSEPH S. DENNIS.

Tubular Lantern.

No. 123,982.

Patented Feb. 27, 1872.

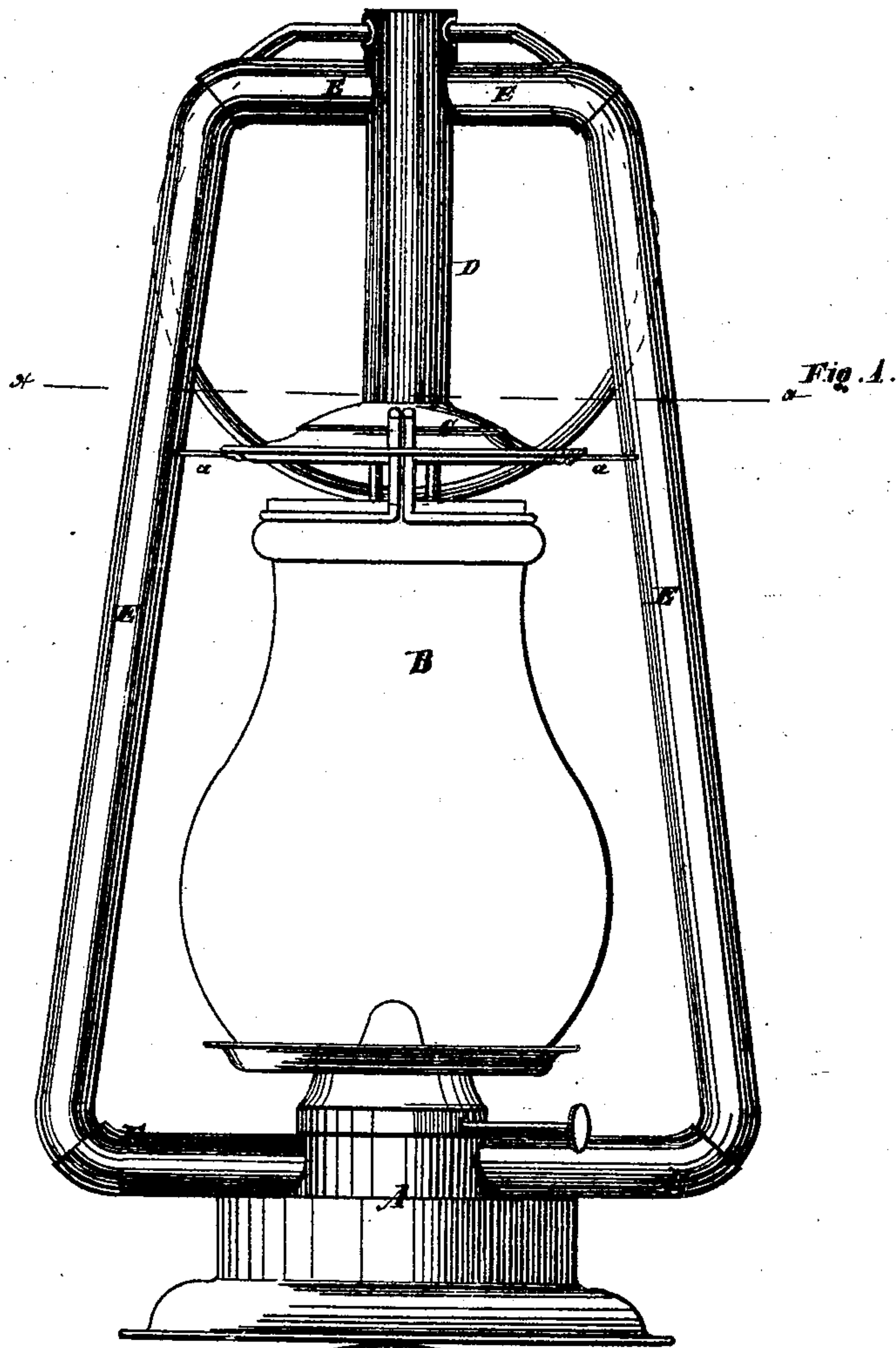


Fig. 1.

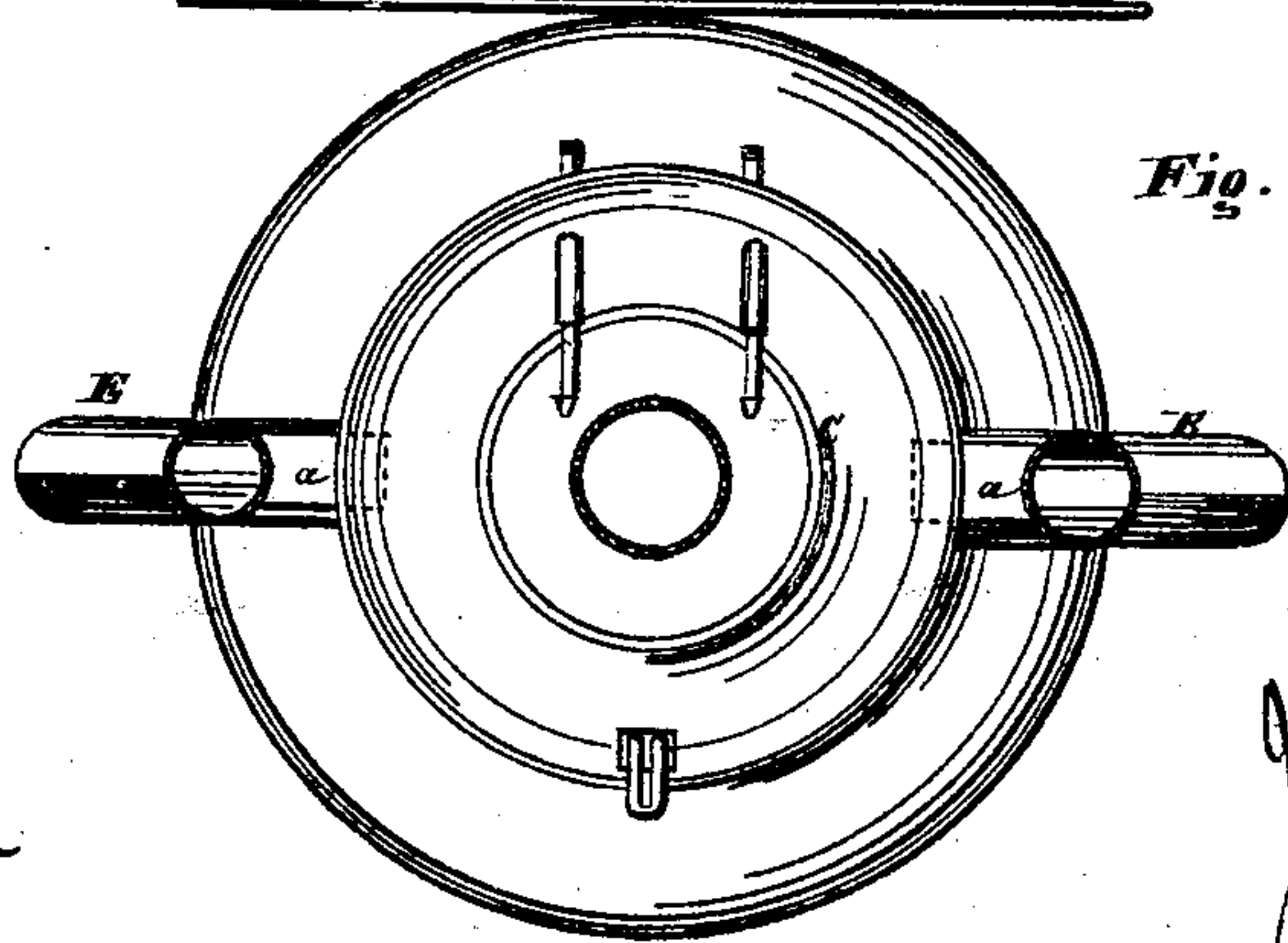


Fig. 2.

Witnesses:

Henry F. Bruns.  
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. 123,982, dated February 27, 1872.

Specification describing certain Improvements in 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 class of lanterns well known to the art as "tubular lanterns;" and the invention consists especially in the construction and arrangement of the bell or receiver placed above the flame in connection with the side tubes; the said receiver or bell being extended laterally in the present invention, and attached by proper means to the said side tubes, thus adding greatly to the strength and durability of the lantern.

In the accompanying drawing, Figure 1 represents a front elevation of a tubular lantern embodying my improvement; and Fig. 2, a horizontal section of Fig. 1 on the line *x x*, looking downward.

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

### *General Description.*

A is the base of the lantern; B, the globe or protector; and C, the receiver or bell, placed above the globe, and communicating with the short central vertical tube D, to the upper extremity of which are attached the pair of descending tubes E E, re-entering at the base of the lantern. The bell C is attached to the bottom of the tube D, being commonly soldered thereto. To this bell, or, as is sometimes the case, to the tube D, is attached the spring device for retaining the globe in position by means of a downward pressure exerted from the tube or bell through the spring and upon the globe at its upper rim, and necessarily with some force.

When the globe-holding spring is to be released, more or less lateral pressure occurs, especially when the style shown in the drawing is used, tending to push the bell out from between the tubes E, straining and loosening the joints, and tending ultimately, by the torsion thus produced, to destroy the integrity of the joints at the juncture of the tube D with the tubes E, and tending to crimp and loosen the bell C from the tube D. To obviate this tendency, the metal straps *a a* are soldered or otherwise attached to the sides of the bell C, and extended out and connected to the tubes E E upon each side. By this simple device a perfect bracing of the entire upper portion of the lantern is effected, and the difficulty hitherto existing entirely done away with.

An equivalent to the employment of the separate straps or pieces *a a* would be the extension of the bell itself so as to reach the tubes and be joined thereto, and I contemplate so attaching the bell, either by enlarging the entire diameter thereof, or by making it of a greater diameter in one direction than another.

### *Claim.*

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

The combination of the bell C and tubes E E of a tubular lantern, when the bell is attached laterally to the tubes, in the manner substantially as specified and shown.

J. S. DENNIS.

Witnesses:

JOHN W. MUNDAY,  
HEINR. F. BRUNS.