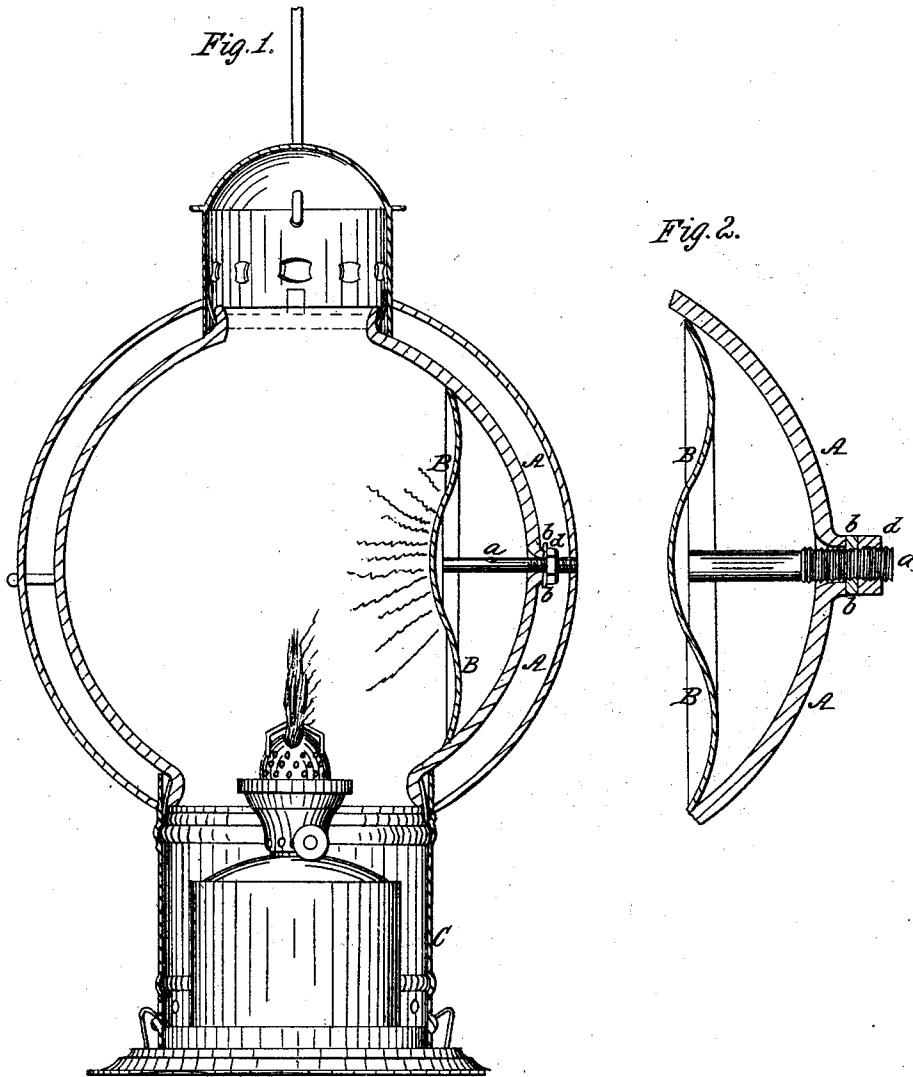


J. S. & T. B. ATTERBURY.

Lantern.

No. 38,457.

Patented May 12, 1863.



Witnesses:

*R. T. Hamplell*  
*Gustav D. Dietrich*

Inventors:

*James S. Atterbury*  
*Thos B. Atterbury*  
by their Atty,  
*Mason, Fenwick & James*

# UNITED STATES PATENT OFFICE.

JAMES S. ATTERBURY AND THOMAS B. ATTERBURY, OF PITTSBURG, PA.

## IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. 38,457, dated May 12, 1863.

*To all whom it may concern:*

Be it known that we, JAMES S. ATTERBURY and THOMAS B. ATTERBURY, both of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Lanterns; and we do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical diametrical section through a globe-lantern with our improvement applied to it. Fig. 2 shows the method of applying the reflector to the glass globe.

Similar letters of reference indicate corresponding parts in both figures.

Our invention consists in combining the advantages of a reflector with a lantern which is entirely surrounded with glass, by securing the reflector directly to the glass body of the lantern, as will be hereinafter described.

To enable others skilled in the art to make and use our invention, we will proceed to describe its construction and operation.

In the accompanying drawings, A represents the glass body of what is denominated a "globe" lantern; and B is a metallic reflector, which is applied within the globe A, in a proper relative position with the flame of the lamp contained in the lantern and which is secured to this globe by means of a stem, *a*, which is secured to the reflector and passes through a perforation made through the glass, receiving on its outer end a confining-nut, *d*, as shown in the drawings. The circumferential edges of the reflector B bear upon the inside surface of the glass when the nut *d* is set up tightly, and thus the reflector is confined in its place within the lantern. A soft washer, *b*, may be interposed between the nut *d* and the outside surface of the glass A to prevent the accidental breaking of the glass in securing the reflector to it. The perforation which is made through the glass A to receive the

stem *a* of the reflector may be made by drilling, but it will be found preferable to perforate the glass in the following manner: In the "blowing" of the globe A a small teat or blister can be made in the glass at the desired point, and this blister, being made on the outside of the globe, can be ground off on a suitable stone so as to leave a hole large enough to allow the stem *a* to pass through it. A perforation thus formed will make the glass much stronger at this point than a hole made by hand with the usual drill, and the glass will not be so liable to crack in securing the reflector to the lantern. By this simple arrangement we are enabled to practically apply a metallic reflector to a lantern which is entirely surrounded with glass, for the purpose of more perfectly reflecting and intensifying the rays of light in this kind of lantern. It will be seen that the reflector B, although securely confined in its place within the glass globe A, may be removed at pleasure for cleaning, by taking off the bottom C and removing the nut *d*, or, if it be desirable, a permanent fastening may be applied to the globe A, and the reflector secured to it by means of a sliding catch or other suitable fastening, which will obviate the necessity of removing the nut *d* every time it is desired to detach the reflector from the lantern.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

1. Applying a metallic reflector to a lantern surrounded with glass, substantially as herein described.
2. Making the glass surrounding the lantern, or the lantern-glass, the support for the reflector, substantially as herein described.

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Witnesses:

LEMAN S. JOHN,  
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