

G. R. BOYNTON.

Lantern.

No. 35,800.

Patented July 1, 1862.

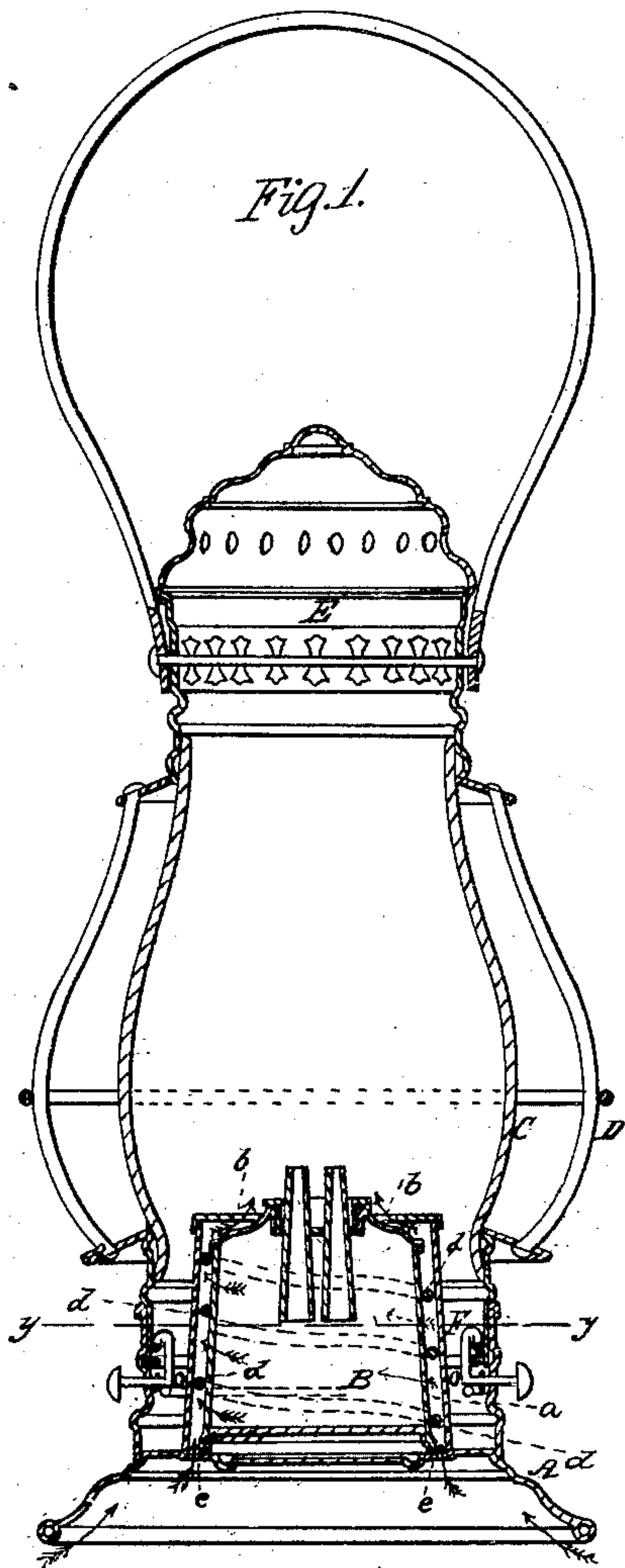
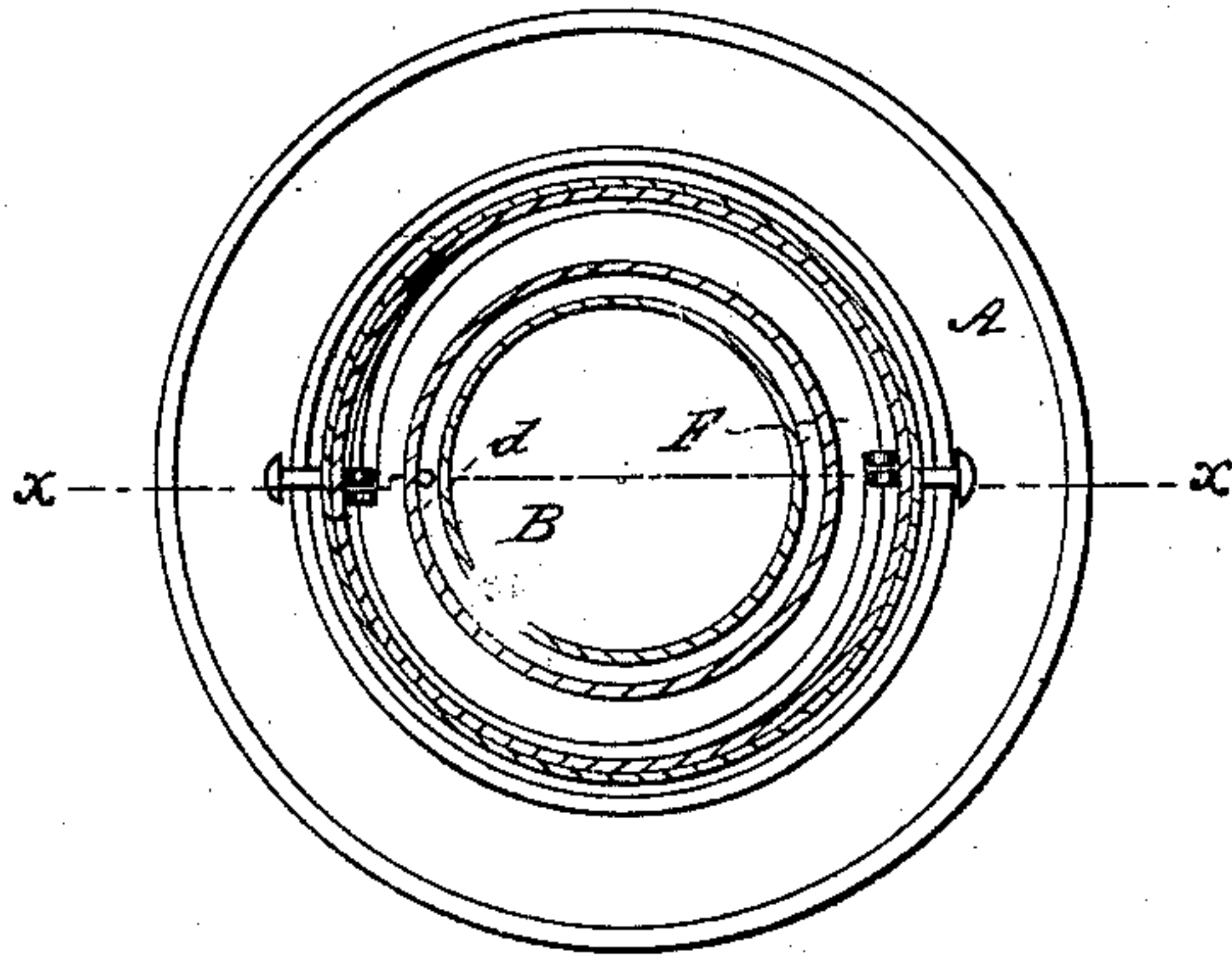


Fig. 2.



Witnesses:

J. W. Brooks
G. W. Reed

Inventor:

S. R. Dymont
per Dumas & Co
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UNITED STATES PATENT OFFICE.

G. R. BOYNTON, OF CHICAGO, ILLINOIS, ASSIGNOR TO G. G. POPE AND
E. F. SLOCUM, OF SAME PLACE.

IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. 35,800, dated July 1, 1862.

To all whom it may concern:

Be it known that I, G. R. BOYNTON, of Chicago, in the county of Cook and State of Illinois, have invented a new and useful Improvement in Lanterns; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is a vertical central section of my invention, taken in the line *x x*, Fig. 2; Fig 2, a horizontal section of the same, taken in the line *y y*, Fig. 1.

Similar letters of reference indicate corresponding parts in the two figures.

The object of this invention is to supply the flame of the lamp, while in the lantern, with air in such a manner that the flame will not be liable to be affected by the swinging of the lantern, or be extinguished by a sudden movement of the same—a contingency which frequently occurs in using the ordinary lanterns, especially if coal-oil be employed as a burning material.

The invention consists in having the oil-cup encompassed by a jacket, in which a spiral passage is formed, through which the air is admitted to the flame and the desired end attained.

To enable those skilled in the art to fully understand and construct my invention, I will proceed to describe it.

A represents the base of a lantern, to which the oil-cup or fountain B of a lamp is secured, as usual. C is the glass shade or protector; D, the guards, and E the top or cap. These parts may be constructed in the usual way, and therefore do not require a minute description.

The oil cup or fountain B is encompassed by a jacket, F, which is sufficiently large in diameter to admit of a space, *a*, between it and the oil cup or fountain. This jacket projects over the top of the oil cup or fountain so as to have an annular space or opening, *b*, around the top of the oil cup or fountain at the base

of the cap *c* of the oil cup or fountain as shown clearly in Fig. 1.

To the outer surface of the oil cup or fountain B there is secured a wire, *d*, which is bent in spiral form and extends around the oil cup or fountain, so as to form a partition in the space *a*, and consequently a spiral passage, the outer edge of the wire *d* being in contact with the inner side of the jacket F. A wire would probably be the most economical article to use in order to form the partition. A flat plate bent spirally around the oil cup or fountain would answer equally as well, but it would be more troublesome and expensive to adjust it to the oil cup or fountain.

The base A around the oil cup or fountain is perforated, as shown at *e*, so as to admit air into the lower part of the space *a*, and the air passes through the spiral passage to the flame, as indicated by the black arrows in Fig. 1. This circuitous route of the air between the convolutions of the wire *d* prevents the flame being extinguished by a sudden movement of the lamp, and causes it to burn comparatively steady when the lantern is being carried about, the wire *d* serving as a barrier between the flame and external air, and causing any external disturbing cause—such as the swinging of the lantern or a sudden jerking or movement thereof, which either impedes or accelerates the draft—to be lost or neutralized in the long and winding passage.

I do not claim the jacket F separately or in itself considered, for that has been previously used; but

I do claim as new and desire to secure by Letters Patent—

The jacket F, in combination with the spiral wire or partition *d*, placed in the space *a*, between the jacket and the oil cup or fountain B, substantially as and for the purpose herein set forth.

G. R. BOYNTON.

Witnesses:

HENRY C. CLOYES,
M. A. THAYER.