

E. J. Hale,
Lantern.

No 79,569.

Patented July 7, 1868.

Fig. 1.

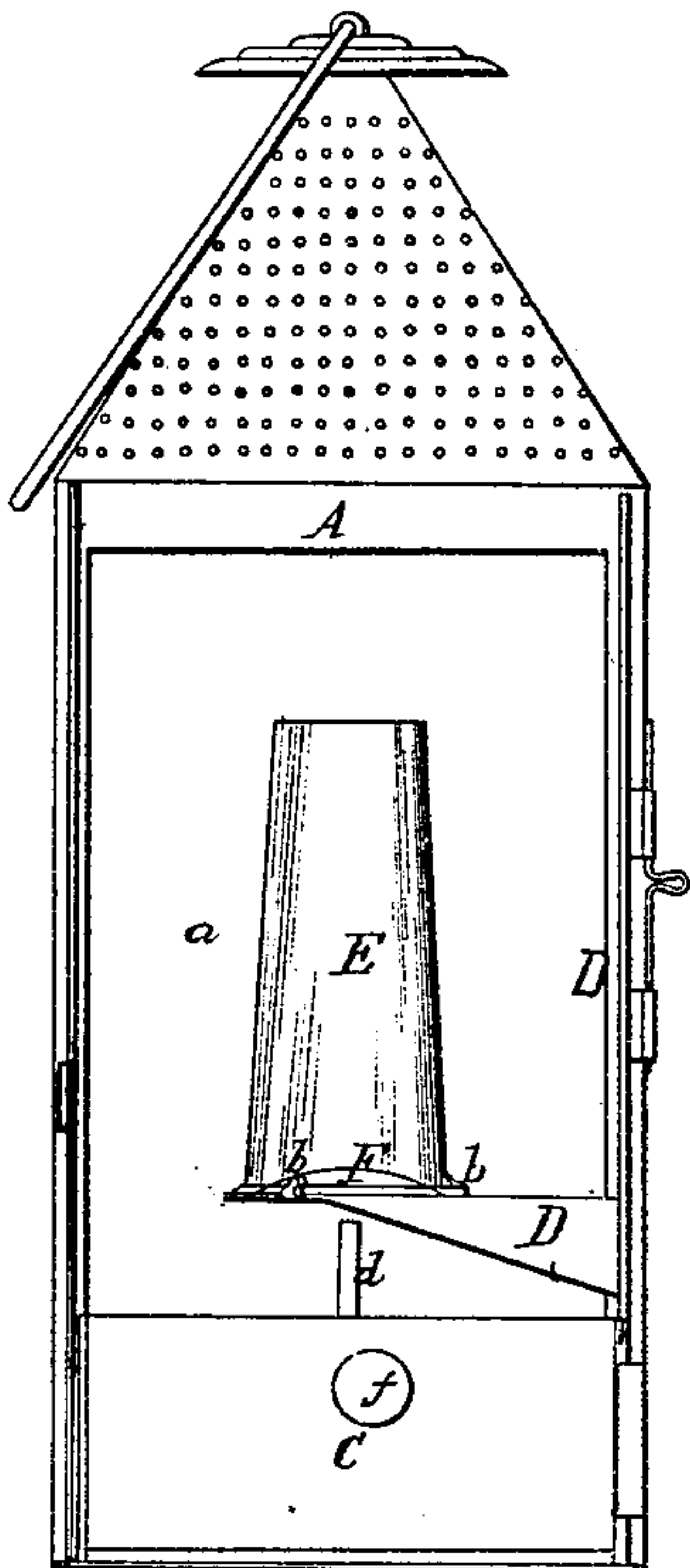


Fig. 2.

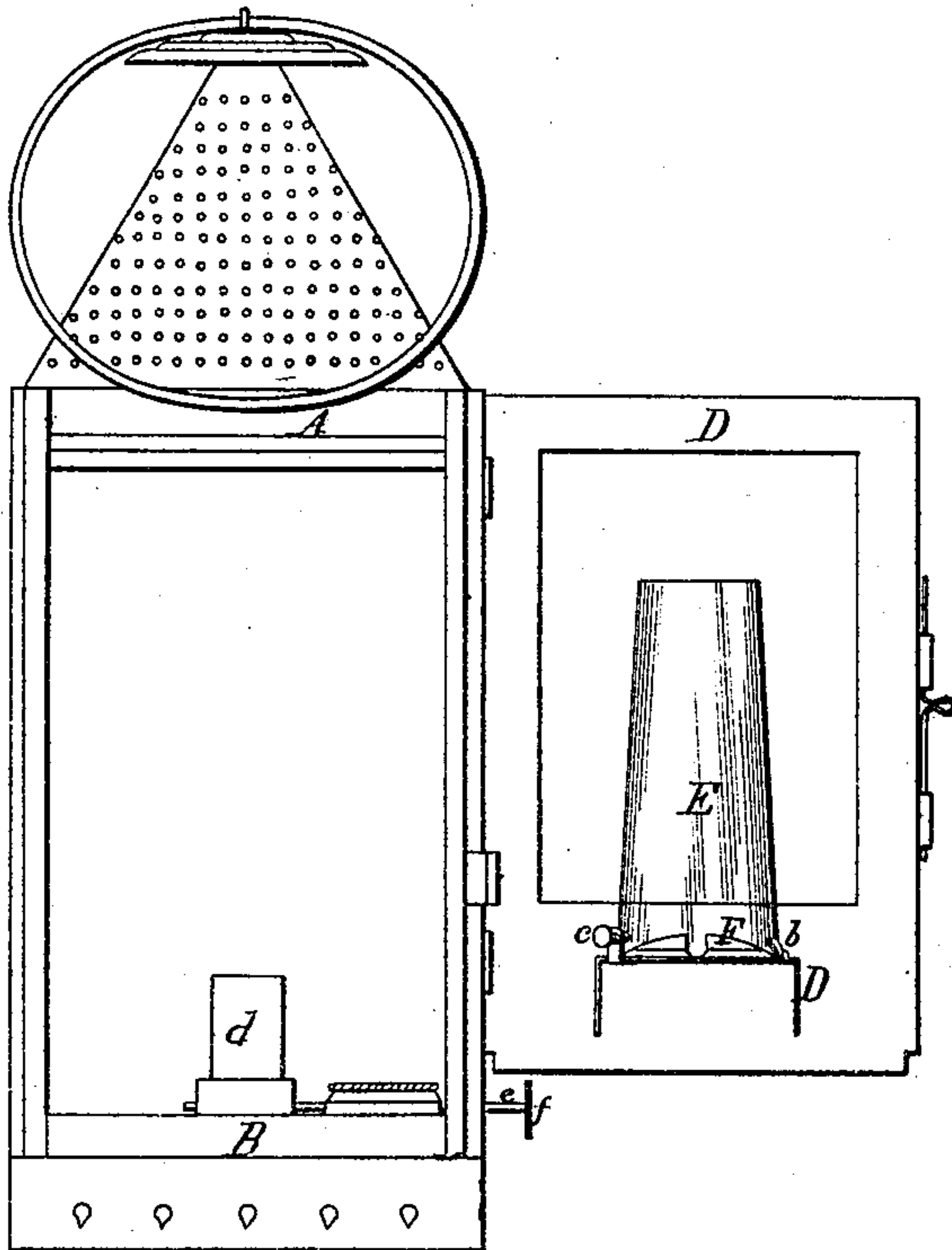
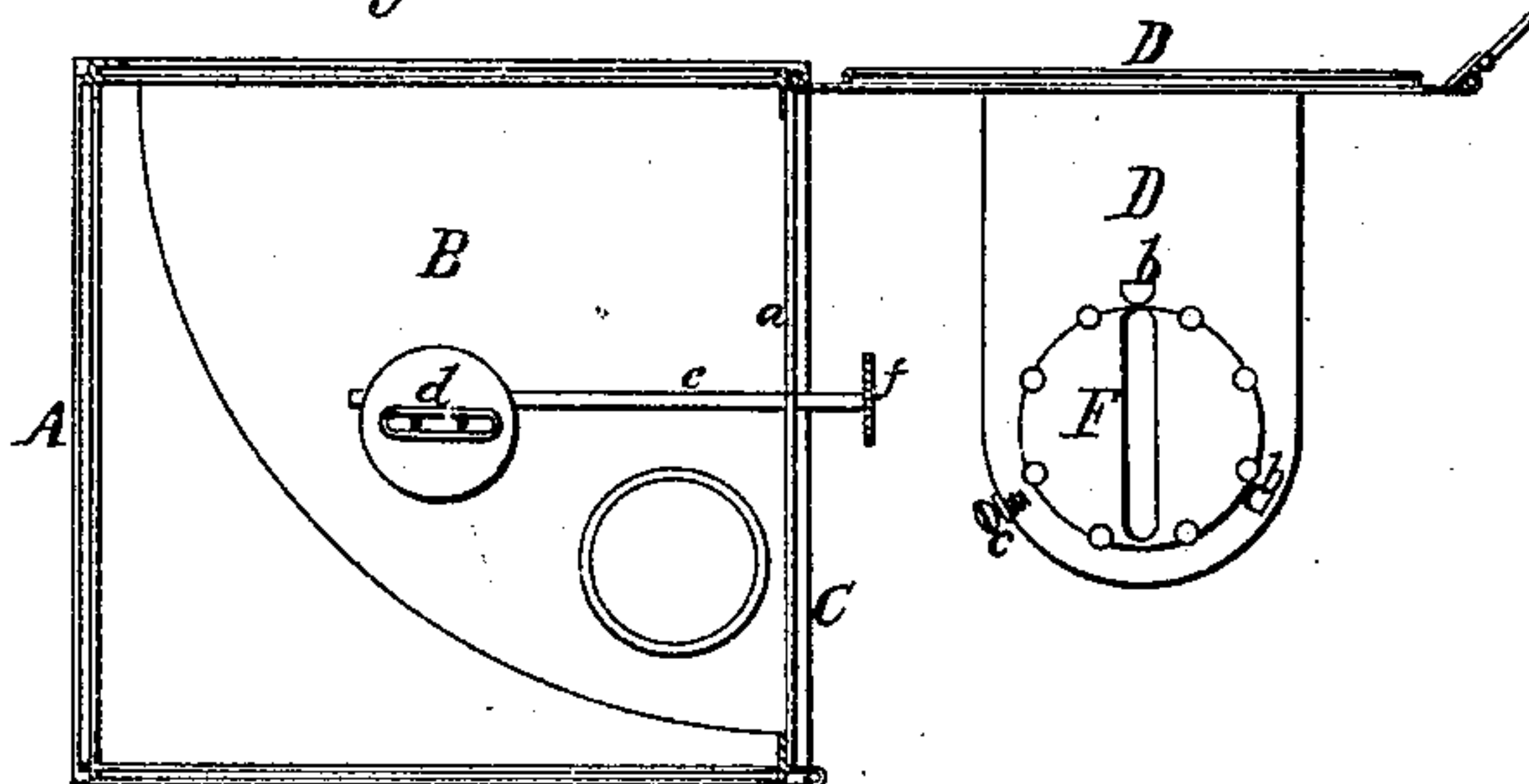


Fig. 3.



Witnesses:
S. N. Piper,
Dr. P. Hale, Jr.

Inventor:
E. J. Hale.

by his attorney
R. W. Brady

United States Patent Office.

ELIAS J. HALE, OF FOXCROFT, MAINE.

Letters Patent No. 79,569, dated July 7, 1868.

IMPROVEMENT IN LANTERNS.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL PERSONS TO WHOM THESE PRESENTS MAY COME:

Be it known that I, ELIAS J. HALE, of Foxcroft, in the county of Piscataquis, and State of Maine, have invented a new and useful Improvement in Lanterns; and do hereby declare the same to be fully described in the following specification, and represented in the accompanying drawings, of which—

Figure 1 denotes a front elevation,

Figure 2 a side view, and

Figure 3 a horizontal section of a lantern provided with my invention, the door of the lantern, in such views, being shown as open at an angle of ninety degrees.

In such drawings, A denotes the lantern-case, and B the lamp arranged within such case, such lamp having a quadrantal form, and being fastened to the lower or lesser door, C, of the lantern-case, so as to be capable of being turned or withdrawn from the lantern-case with such door.

The lantern-case I make with two doors, C D, which may be hinged or otherwise applied to the opening *a* of the case, so as to enable it to be either closed or opened.

From the inner surface of the upper or larger door, I extend a bracket or shelf, D', or its equivalent, to support the glass chimney E or the air-deflector or cone F, or either of them.

The cone may be struck up or formed in one piece with the shelf or bracket, or they may be in separate pieces. There are to be studs, *b b*, and a clamp-screw, *c*, or other suitable devices, applied to the bracket, for holding the chimney, or the same and the deflector, in place thereon.

The cone or deflector and the chimney are to be so arranged on the bracket that when the door D is closed they shall come or be in their proper places over the wick-tube *d* of the lamp, provided the lamp-door C be closed, or the lamp be entirely within the lantern-case.

The shaft of the wick-elevator is shown at *e*. It is extended through the lower door, C, and has a milled head or button, *f*, fixed on its outer end. The upper door may extend a short distance below the lower one, so as to keep it closed when the upper door is closed. Or the lower door may project above the outer surface of the upper door, so as to hold the upper door closed when the lower one is shut.

By having the chimney and air-deflector connected with the door, or supported by a shelf, bracket, or arm, extending from such door, such chimney and cone, or either, when used without the other, will be withdrawn from over the wick-tube when the door is open, and thus free access may be had to the wick, for the purpose of either trimming or inflaming it, or extinguishing its flame, as circumstances may require. So, by withdrawing the lamp while the upper door is closed, the same result may be attained.

I am aware of the invention described in the United States patent, No. 49,274, and make no claim thereto, my invention having reference to a lantern-case provided with a door in its side separate from the lamp, whereas the lantern described in such patent has no door in its side, the lamp being hinged to the open bottom of the lantern-case, which necessitates the turning of the case, the deflector, and the chimney down, from a vertical to a horizontal position, or thereabouts, to enable access to be had to the lamp, in which case the lamp, during such movement of such parts, is liable to smoke them. Furthermore, if the lamp is turned down from the horizontal to a vertical position, its liquid contents will be liable to escape from it; but with my improved lantern there is little or no danger of smoking the case when the main door is being opened, or the lamp being moved out from underneath the deflector and chimney, and there is no danger of spilling oil from the lamp, as it is not inclined, but is maintained in its horizontal position.

What, therefore, I claim as my invention, in a lantern whose case is provided with a door to open therefrom, as described, is—

The combination of the glass chimney and air-deflector, or either, with the door, so as to be capable of being moved with and by it, with respect to the lamp, in manner as described, when such lamp is in the case.

I also claim the lamp as made quadrantal in form, and hinged at its radial centre to the lantern-case, as set forth.

And with the lamp and its chimney, applied to separate doors of the lantern-case, I claim the arrangement of either door so as, when closed, to lap on and keep the other closed, as specified.

ELIAS J. HALE.

Witnesses:

R. H. EDDY,

F. P. HALE, Jr.