W. WESTLAKE.

Lantern.

No. 108,221. Patented Oct. 11, 1870.

Fig 1

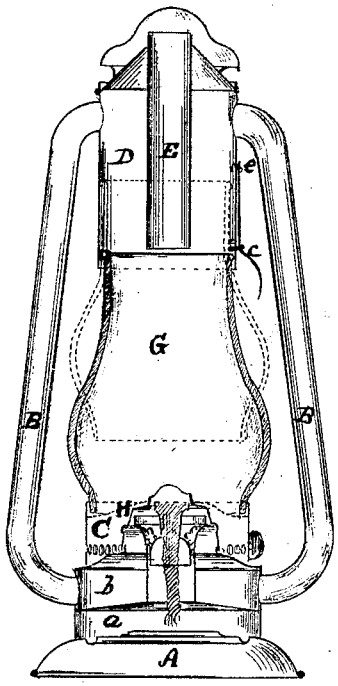


Fig 2

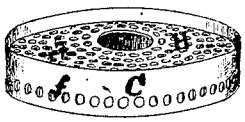
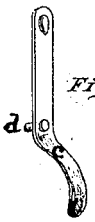


Fig 3.



Witnesses

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WILLIAM WESTLAKE, OF CHICAGO, ILLINOIS.

Letters Patent No. 108.221, dated October 11, 1870.

IMPROVEMENT IN LANTERNS.

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

To all whom it may concern:

I, WILLIAM WESTLAKE, of the city of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Lanterns, of which the following is a full description, reference being had to the accompanying drawing making a part of this specification, in which—

Figure 1 is a vertical section.

Figure 2, a detached view of the plate and rim which support the globe.

Figure 3, a detached view of the spring *c*.

My invention relates particularly to that class of lanterns now known as tubular lanterns; and

Its objects are to provide a convenient method of gaining access to the burner, for the purpose of filling and lighting; also, to so construct the lantern that the globe can be readily removed; also, to provide a substantial support for the globe.

In the drawing—

A represents the base of the lantern.

a is the oil-pot.

b, an air-chamber above the oil-receptacle.

D is a cylinder, forming an air-chamber above the globe.

B B are air-tubes, the upper ends of which are connected with the air-chamber D, and the lower ends with the air-chamber *b*.

The base of the lantern, including the oil-pot *a*, air-chamber *b*, and burner, as well as the tubes B, is constructed in the usual manner. The oil-pot and chamber *b* are, in fact, part of the base.

Within the cylinder D is a tube, E, through which the products of combustion escape.

The lower end of the globe rests upon the perforated plate H, fig. 2, which plate is provided with a vertical rim, C, extending beyond the plate on both sides.

This rim has a series of openings, *f*, for the admission of air.

The plate H has a central opening, for the reception of the burner.

The plate does not rest upon the burner, as is customary in this class of lanterns, but the lower edge of the rim C rests upon the top of the air-chamber *b*, thus furnishing a substantial support for the globe.

To the cylinder D, I fasten a spring, *c*, at *e*.

This spring has a pin, *d*, which passes through a hole in the cylinder.

The upper end of the globe is, for some distance, a little smaller than the cylinder D, and passes into the cylinder readily; and, when in place for use, the pin *d* passes over the upper edge of the globe, preventing any vertical movement, while lateral movement is prevented at the bottom by the projecting rim C, and at the top by the cylinder D. This cylinder is closed at the top.

Air is supplied to the outside of the flame through the plate or disk H, and a portion of the air entering the globe through this disk passes up into the chamber D, and thence, through the tubes B, to the air-chamber *b*, supplying air within the burner.

The operation of my devices is as follows:

To light the lantern, the pin *d* is withdrawn from over the edge of the globe by pressing the spring outward. The globe can then be lifted up into the cylinder D far enough to permit the burner to be reached. Then the spring can be released, and the end of the pin *d* will be pressed against the outside of the globe, retaining it in its elevated position as long as may be desired.

To remove the globe, first withdraw the pin *d*, as before; raise the globe a little; then remove the rim and plate C H, after which the globe can be readily removed.

By supporting the disk H, by means of the band C resting upon the base of the lantern, the oil-pot can, if desired, be made removable in this class of lanterns. The weight of the globe is also removed from the burner to the base, thereby making a stronger and more durable lantern.

What I claim as new, and desire to secure by Letters Patent, is as follows:

1. The removable plate or disk H, when provided with the rim C, resting upon the base, substantially as specified.

2. The spring *e*, when provided with the pin *d*, and applied to the cylinder D, in combination with a sliding globe, substantially as described.

3. The combination and arrangement of the sliding globe G with the cylinder D, disk H, and base A, substantially as and for the purposes specified.

WILLIAM WESTLAKE.

Witnesses:

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