

O. I. KING.
LANTERN.

No. 193,257.

Patented July 17, 1877

Fig. 1.

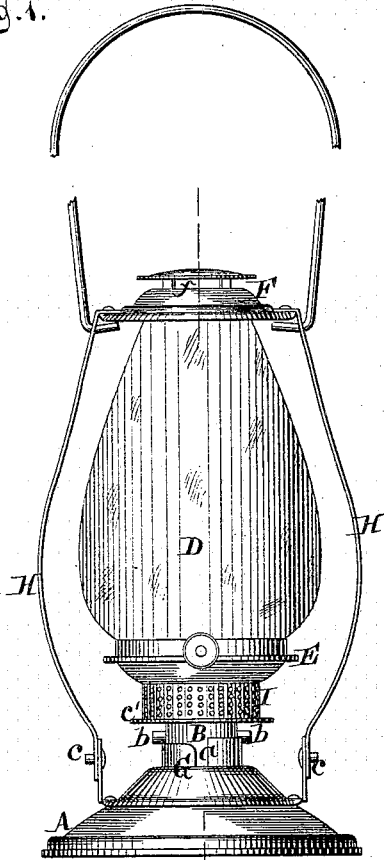


Fig. 2.

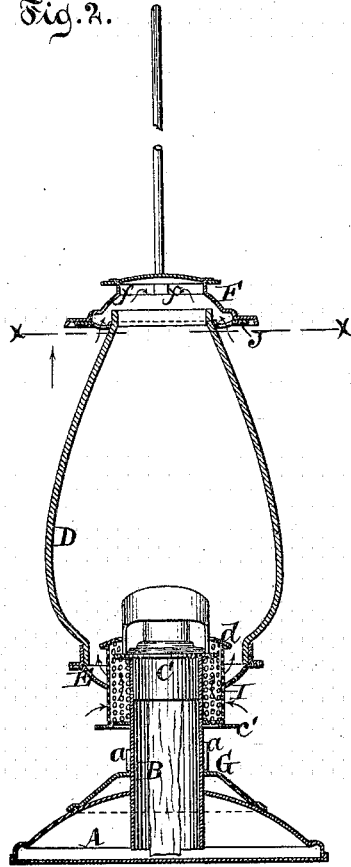


Fig. 3.

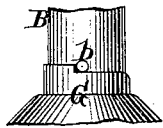
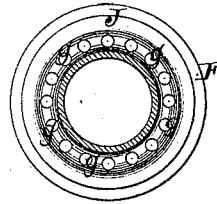


Fig. 4.



Witnesses.

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OSWALD I. KING, OF NEW YORK, N. Y.

IMPROVEMENT IN LANTERNS.

Specification forming part of Letters Patent No. 193,257, dated July 17, 1877; application filed June 6, 1877.

To all whom it may concern:

Be it known that I, OSWALD I. KING, of the city, county, and State of New York, have invented a new and useful Improvement in Lanterns, which invention is fully set forth in the following specification, reference being had to the accompanying drawing, in which—

Figure 1 represents a side elevation of a lantern containing my improvement. Fig. 2 is a vertical central section thereof. Fig. 3 is a side view of the rotating collar carrying the guards and a portion of the neck of the base. Fig. 4 is a horizontal section in the plane of the line *x x*, Fig. 2, looking in the direction of the arrow marked opposite to that line.

Similar letters indicate corresponding parts.

My invention consists in the combination of a partially-rotating collar resting upon the lantern-base, and embracing the neck thereof, and which has longitudinal slots (one or more) in its upper edge, with pins (one or more) projecting radially from said neck of the base immediately above said rotating collar, and with two hinged guard-rails, which are arranged opposite each other, fastened at one end to the lantern-cap, and at the other end to the rotating collar, in such a manner that if the lantern-globe is placed in position, and the lantern-cap is brought to bear on the upper end thereof, while the rotating collar is so adjusted that said radial pins catch over its upper edge, the globe is firmly held in place, and if, on the other hand, the rotating collar is turned so as to bring its slots opposite to said radial pins, the collar, together with the hinged guard-rails and the lantern-cap, can be lifted up, while the cap, together with the guard-rails, moreover can be turned sidewise, so as to permit of removing the globe; also, in the combination of an annular globe-supporting plate inclosing the burner of the lantern, and a foraminous cylinder, which is arranged within said plate, and extends both below and above it, while it is provided with a flange on its upper edge, so that the greater part of the air which is admitted through the lower part of said foraminous cylinder escapes sidewise through the upper part thereof, and thence passes up into the globe, whereby a steady flame is produced.

In the drawing, the letter A designates the

base of my lantern, constructed with a neck, B, which receives the burner C in its upper end. D is the lantern-globe, which rests on a plate, E, having an annular shape; and F is the lantern-cap. On the neck B of the base is arranged loosely a collar, G, which has a partly-vertical and partly-conical shape, as shown, the conical part thereof resting on the base A. In the upper edge of the vertical part of the collar G are formed two slots, *a a*, and the neck B of the base is provided with two radial pins, *b b*, which are situated immediately above the collar G. The collar G is connected to the cap F by means of rails H, which form guards for the globe D, said rails being fastened at their opposite ends to the collar G and cap F, respectively. The rails H are each made in two parts, which are hinged together at points directly opposite to each other, as at *c c*.

When the collar G is rotated so that its upper edge catches beneath the pins *b b*, as seen in Figs. 1 and 3, the collar is tightly held down upon the base A, and if the globe D is previously placed on its supporting-plate E, and surmounted by the cap F, it is firmly held in place. If the collar G is rotated so as to bring its slots *a a* opposite to the radial pins *b b*, said collar can be moved upward, so as to lift the cap F off of the globe D, and permit of swinging said cap sidewise, together with the rails H, (the rails being swung on their hinge-joints *c c*,) when the globe D can be removed.

The annular globe-supporting plate E is secured to the outer surface of a foraminous cylinder, I, which extends both below and above said plate, and on the upper end of which is formed or secured a flange, *d*. (See Fig. 2.) This foraminous cylinder I is secured to the neck B of the base by means of a plate, *e*, extending across the bottom of the cylinder.

It will be seen that the greater portion of the air which enters the cylinder I below the supporting-plate E is deflected sidewise by the flange *d*, and hence escapes through the upper part of the cylinder I, whence it passes into and up through the globe D, so that a comparatively-small amount of air is brought in contact with the flame of the burner C, while at the same time an effective draft is created in the globe.

The cap F is constructed with openings *f* in its top part for the escape of air, and to its lower and outer part is secured a plate, J, which has an annular shape, and is provided with perforations *g*. This plate J receives and holds the upper end of the globe D within it, as shown in Fig. 2, and through its perforations *g* air is admitted to the cap F, exterior of the globe D, whereby the cap F is obviously cooled, and at the same time the draft in the globe D is increased.

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

1. The combination of a partially-rotating collar, which rests upon the lantern-base, and embraces the neck thereof, and which has longitudinal slots (one or more) in its upper edge, with pins (one or more) projecting radially from

said neck immediately above said collar, and with two hinged guard-rails arranged opposite each other, fastened at one end to the lantern-cap, and at the other end to said collar, substantially as and for the purpose described.

2. The combination of an annular globe-supporting plate and a foraminous cylinder, which extends both below and above said plate, and is provided with a flange on its upper edge, substantially as and for the purpose described.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 4th day of June, 1877.

OSWALD I. KING. [L. s.]

Witnesses:

W. HAUFF,

E. F. KASTENHUBER.