

(No Model.)

H. KORELL.
LANTERN.

No. 549,921.

Patented Nov. 19, 1895.

Fig. 4.

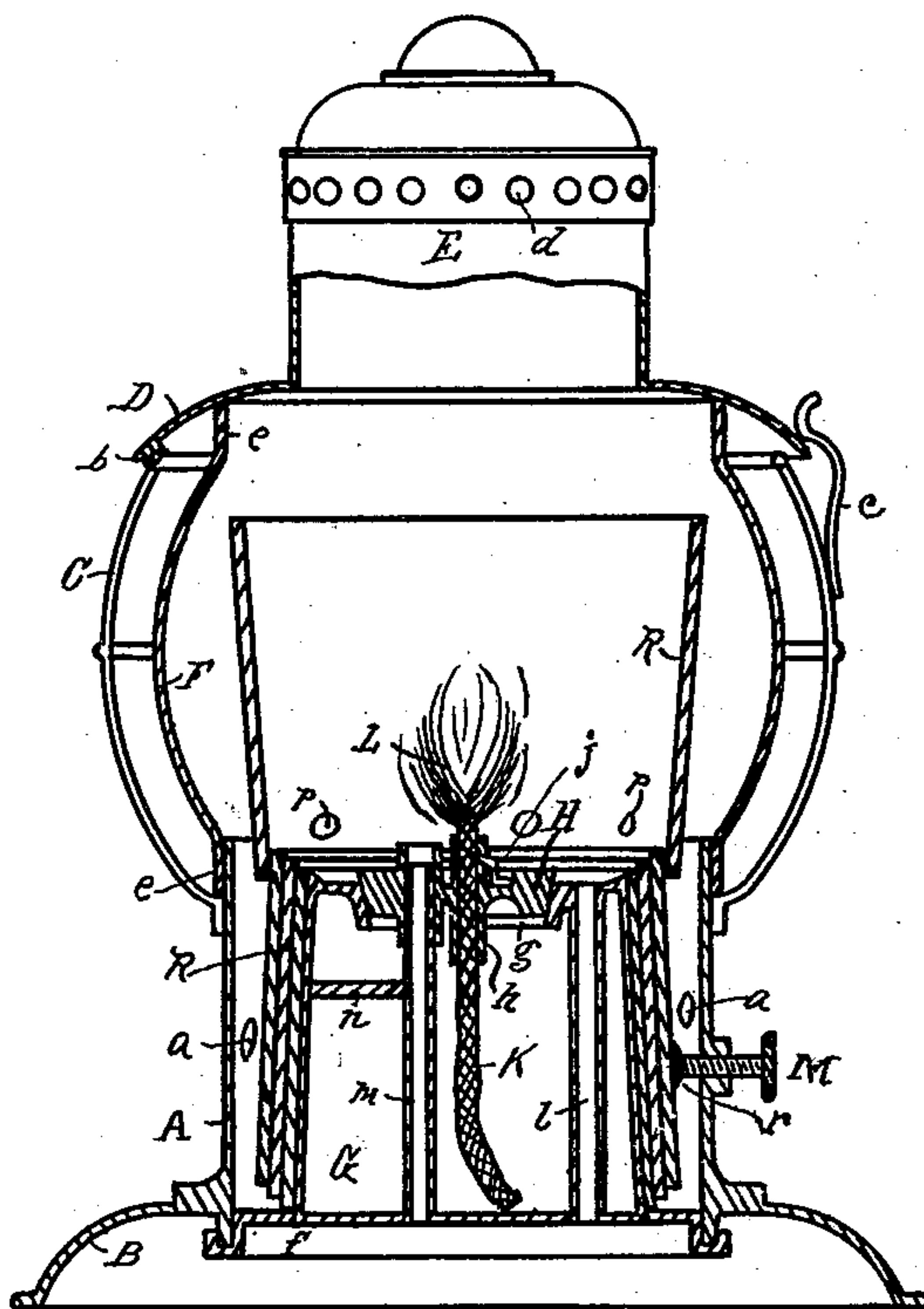
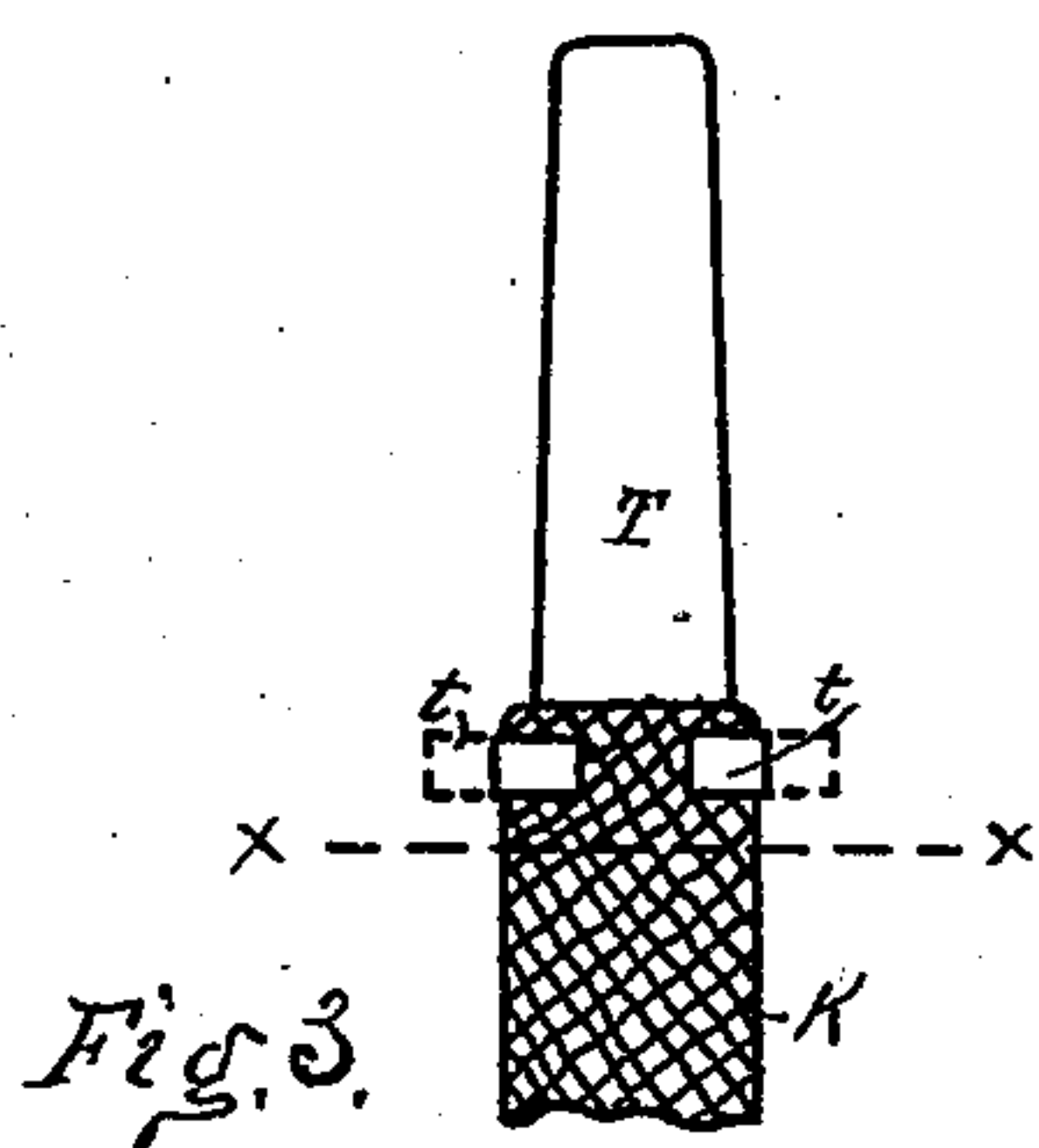


Fig. 1.

Fig. 5.

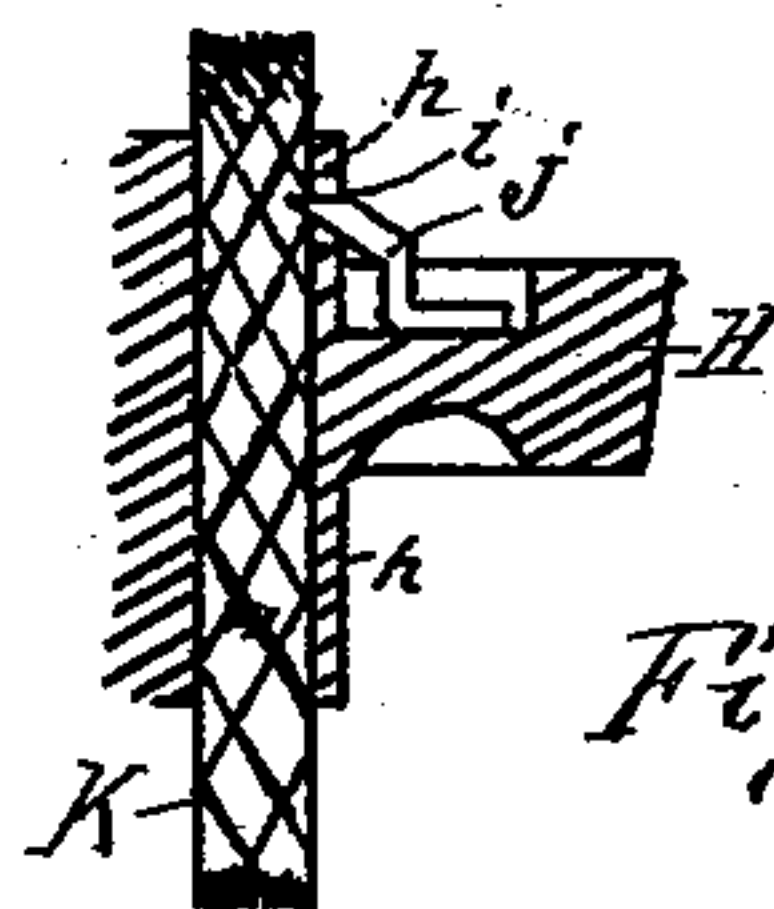
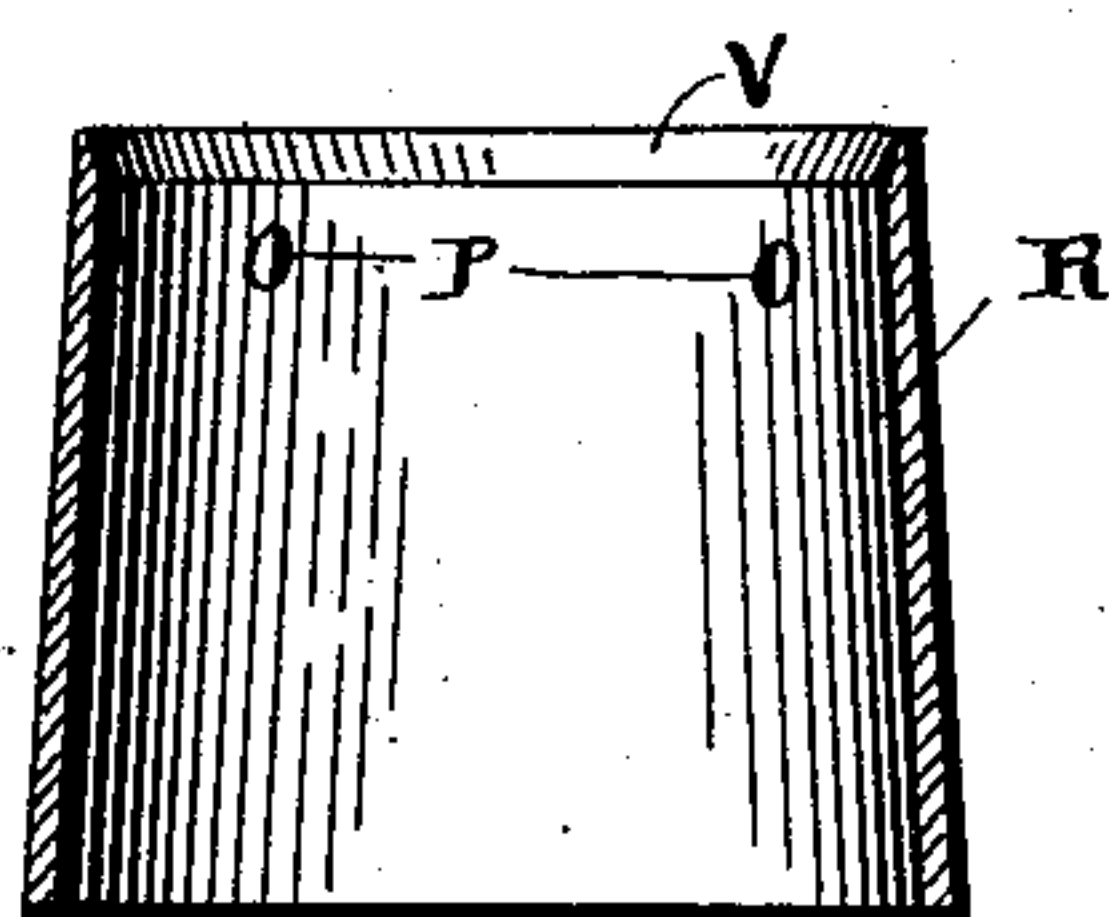


Fig. 2.

WITNESSES,

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HENRY KORELL, OF HAMILTON, OHIO.

LANTERN.

SPECIFICATION forming part of Letters Patent No. 549,921, dated November 19, 1895.

Application filed September 8, 1894. Serial No. 522,427. (No model.)

To all whom it may concern:

Be it known that I, HENRY KORELL, of Hamilton, Ohio, have invented certain new and useful Improvements in Lanterns, of which the following is a specification.

My invention relates to that class of lanterns that may be used for night signals, and the object of my improvement is to provide means to change the color of the light, to convey the air-supply to the flame from beneath the lantern to prevent it from being accidentally extinguished, and to provide an attachment for the wick to facilitate its insertion through the burner-tube. These objects are attained in the following-described manner, as illustrated in the accompanying drawings, in which—

Figure 1 is a vertical section through the axis of the lantern; Fig. 2, a section of the burner; Figs. 3 and 4, the attachment on the wick to facilitate its insertion in the burner; and Fig. 5 is a vertical sectional view of one of the shades, showing the smaller end beveled on the inside.

In the drawings, A represents the base mounted on annular flange B. It is cylindrical in form and contains perforations *a* to admit the air to its interior. The frame C is formed of wire and secured to the outside of the base a short distance below its top edge. Hood D covers the top of the frame and is fastened thereon by hinge *b* on one side and spring-catch *c* on the opposite side. Said hood is surmounted by ventilating-chamber or chimney E, that is formed with perforations *d* for the exit of the heated air and smoke. Globe F is preferably of transparent glass and formed with each of its ends alike, to make it reversible. A short neck *e* terminates each end of the globe and is adapted to fit snugly around the top portion of the base that extends upward within the frame. The top of the globe is retained in the proper position within the frame by the pressure of hood D thereon when closed. Oil-cup G is formed with a bottom flange *f*, by which it is removably fastened within the base in the usual manner, preferably like a bayonet-joint. It is formed with upwardly-convergent sides to resemble the frustum of a cone, and the top surface contains an opening *g* for the insertion of the

burner H therein, similar to the stopper in a bottle. Said burner contains the usual wick-tube *h*, that is formed with opening *i* through one of its sides and above the body of the burner. Finger *j* is attached to the top surface of the burner and at an angle to the tube. Its point projects through opening *i* in the tube and yieldingly presses against the wick K therein in such manner that the wick may be easily pulled in an upward direction, but is prevented from descending by the engagement of the point of the finger therein.

Vertical tubes *l* and *m*, formed in the oil-cup G, extend through the interior thereof to convey the air from beneath the lantern to the flame L on the end of the wick. Tube *m* is located near one side of the wick-tube and consists of two sections that are detachably connected together by a sliding joint, the top section being formed in the burner, the other being held in position by brace *n*.

Shades R consist of glass or other suitable semi-transparent material, each being of a color different from the other, as green, red, yellow, &c. They are formed with open ends and with tapering sides that conform in slant with the sides of the oil-cup. They also differ in size sufficiently to permit them to fit snugly within each other and nest closely around the oil-cup. Any one of the shades may be separately removed from the nest and wedged in an inverted position within the top portion of the space from which it is removed. In the inverted position the shade extends above and encircles the flame L, and the rays of light that pass therethrough are changed to agree in color with that of the shade. The length of the shades may be such that they will occupy the entire space under the hood to intercept all the light that radiates laterally from the flame. Perforations *p* may be made in the sides of the shades and near their smaller ends to admit the air to the flame in addition to or in the absence of the tubes *l* and *m* in the oil-cup. Set-screw M, with button *r* of some suitable yielding substance mounted on its point, is adjustable through the side of the base A to clamp the nest of shades securely together and on the oil-cup.

Access to the shades may be had through the globe by opening the hood on its hinge, or

the oil-cup may be removed from the base and replaced after the desired arrangement of the shades is effected.

Needle T consists of a single strip of sheet metal, preferably tin, and formed with wings *t* at one end that project therefrom in opposite directions from its respective edges. The width of the needle is preferably less than the width of the wick K, and it is attached to one end of the wick by having the wings *t* turned over the edges of the wick and pressed closely against its opposite side. By first inserting the needle through the wick-tube it serves to pull the end of the wick therethrough with ease. After the wick is properly in place in the wick-tube it should be severed on the line *xx* to detach the needle therefrom. The same needle may be successively used on different wicks, or each wick may be provided with its own separate needle.

A carrying-bail (not shown) for the lantern may be hinged to the chimney E in the usual manner. The smaller ends of the shades R may be beveled on the inside, as shown at V in Fig. 5, to facilitate their insertion when inverted in the top of the space between contiguous shades of the nest from which they are removed.

The lantern may be used with a yellow shade on quarantined residences that contain patients afflicted with contagious diseases. It may be provided with a shade variously colored to serve as a sign at night for a barber-shop. Its use for many other purposes are evident.

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

1. In a signal lantern, the combination, with a tapering oil cup, of a series of tapering glass shades of variant diameters fitting around the cup, each of said shades being adapted to be removed and inverted in the same position relatively to the other shades that it occupied before it was inverted, substantially as set forth.

2. In a signal lantern, the combination, with a tapering oil cup, of a series of tapering shades of different colors and variant diameters fitting around the cup, the smaller end of each of said shades being beveled upon its interior, whereby it may be removed from around the cup and placed in an inverted position in the same position relatively to the other shades that it occupied before it was inverted, substantially as set forth.

3. In a signal lantern, the combination, with a base, of a tapering oil cup removably secured therein, a series of tapering shades of variant diameters around the oil cup, each of which is adapted to be removed and placed in an inverted position above the series, and a screw through the side of the base, the inner end of which is provided with a clamp for engaging with the shades around the cup and clamping them together, substantially as set forth.

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