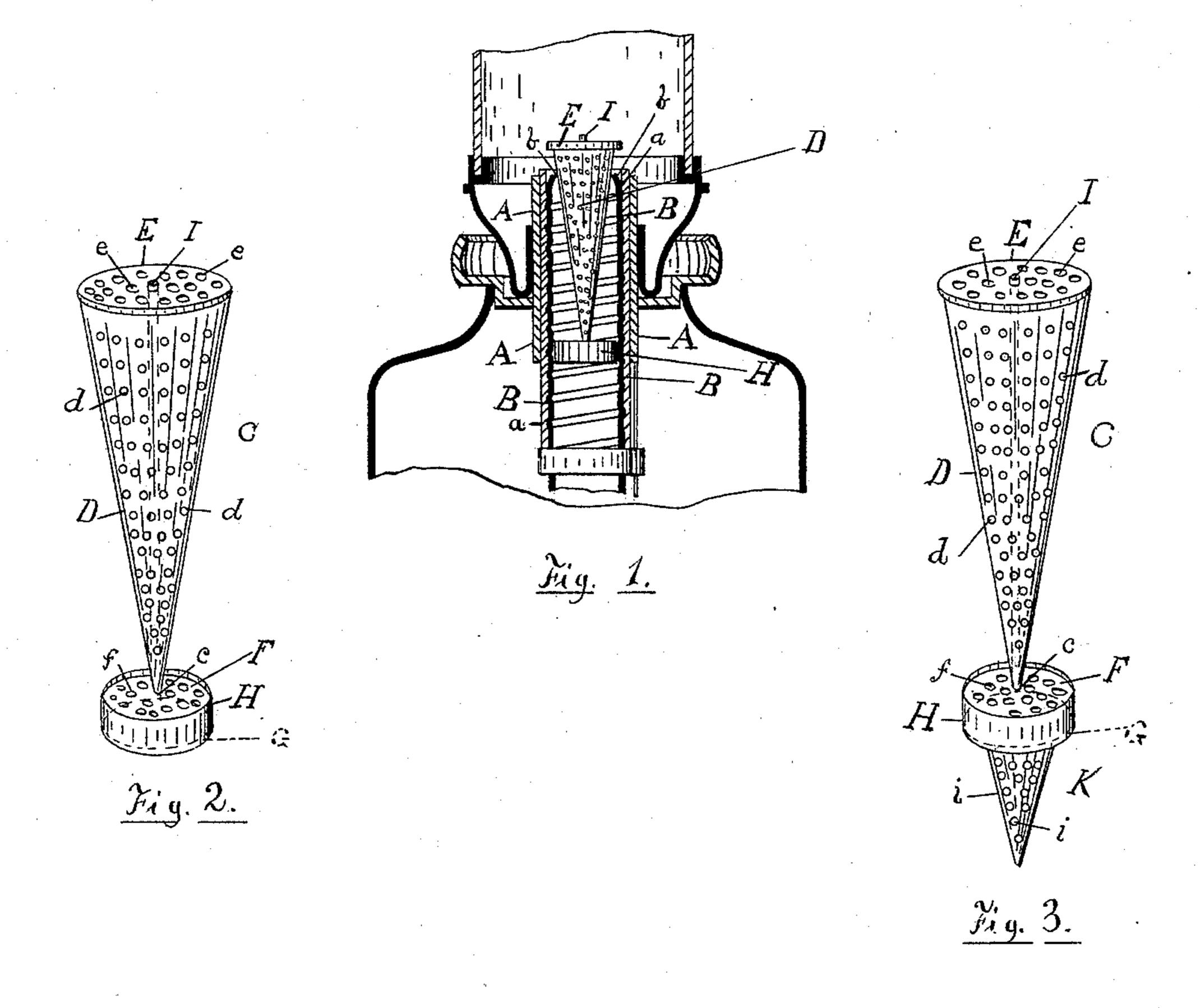
(No Model.)

A. C. WEST.
LAMP.

No. 422,864.

Patented Mar. 4, 1890.



Witnesses L. S. Burbank A. S. Hansiem. A.C. Mest

By his attorneys Miff, Brown Harrely,

## United States Patent Office.

AUGUSTINE C. WEST, OF SOMERVILLE, ASSIGNOR TO THE SMITH & ANTHONY STOVE COMPANY, OF BOSTON, MASSACHUSETTS.

## LAMP.

SPECIFICATION forming part of Letters Patent No. 422,864, dated March 4, 1890.

Application filed September 16, 1889. Serial No. 324,041. (No model.)

To all whom it may concern:

Be it known that I, AUGUSTINE C. WEST, of Somerville, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Lamps, of which the following is a specification.

The object of my invention is to furnish a lamp in which a greater circulation of air is supplied to the flame than in those heretofore used, so as to increase the intensity and size of said flame.

In the accompanying drawings, Figure 1 illustrates a sectional view of my improvements as attached to a lamp. Fig. 2 is a detail. Fig. 3 illustrates a modification.

Similar letters of reference represent like

parts in all of the figures.

A and B are the outer and inner cylinders, respectively, forming an annular chamber between them which incloses the tubular wick a. The upper end of the inner tube B is deflected inward, as shown at b.

C is an inverted cone, which is located between the walls of the inner cylinder B, the deflected edge b of said cylinder serving as a rest for the outwardly-expanding sides D of the cone C. Said sides D and the base E of the cone C have openings or perforations de, respectively, for a purpose hereinafter to be described.

F and G are two disks having openings or perforations f, and these disks are connected by a ring H, which fits closely within the walls of the inner cylinder B, and which is adapted to slide vertically therein. The cone C is secured to the disks F and G by means of a rod I, passing through the center of the base E of the cone, its apex c, and the centers of the two disks F and G, and with said apex c in juxtaposition with the center of the upper disk F. The ring H serves as a guide to hold the cone C firmly in a vertical position with its apex c in the center of the cylinder B and to allow said cone to slide vertically in said cylinder.

My improvements being applied to a lamp in which air is admitted within the inner cylinder B, said air will pass up through the openings f in the disks F and G, and through

the openings d and e in the sides and base of 50 the cone to the flame, and cause a constant circulation of air to and within said flame, and thus increase its intensity. The deflecting sides D of the cone above the wick tubes or cylinders will cause the flame to be deflected 55 also, and thus increase its size. The inwardly-deflected edge b of the cylinder B will hold the cone C away from the sides of said cylinder, so as to allow plenty of circulation of air between said cone and cylinder, and thus add 60 still more to the intensity of the flame.

If desired, a second and smaller cone K, having openings i in its sides and base, may be attached in an inverted position in the tube B to the apex of the cone C, and the ring H 65 and perforated disks F and G should then be attached to the apex of the cone K, as shown in Fig. 3.

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

1. The combination, with the wick-tubes, the inner one of which has an inwardly-deflected upper edge, of an inverted hollow cone having openings in its walls and base, said cone being inclosed within the inner tube, ex-75 tending above the same, and resting upon the deflected edge of the inner tube, all as set forth.

2. The combination, with the two wick-tubes, one being inclosed within the other, of two inverted hollow cones having lateral open-80 ings in their walls and openings in their bases, one cone being disposed entirely within the inner tube and the other cone being partly inclosed within said tube and extending above the same, all as set forth.

3. The combination, with the wick-tubes, of the two inverted hollow cones C and K, the guide-ring H, and means for connecting said cones and ring, all as set forth.

In testimony whereof I have signed my 90 name to this specification, in the presence of two subscribing witnesses, this 12th day of September, A. D. 1889.

AUGUSTINE C. WEST.

Witnesses:

PENNINGTON HALSTED, ARTHUR W. CROSSLEY.