G. W. THOMAS.

Combined Chimney-Holder and Air-Distributer.

No. 211,945. Patented Feb. 4, 1879.

FIG. 1

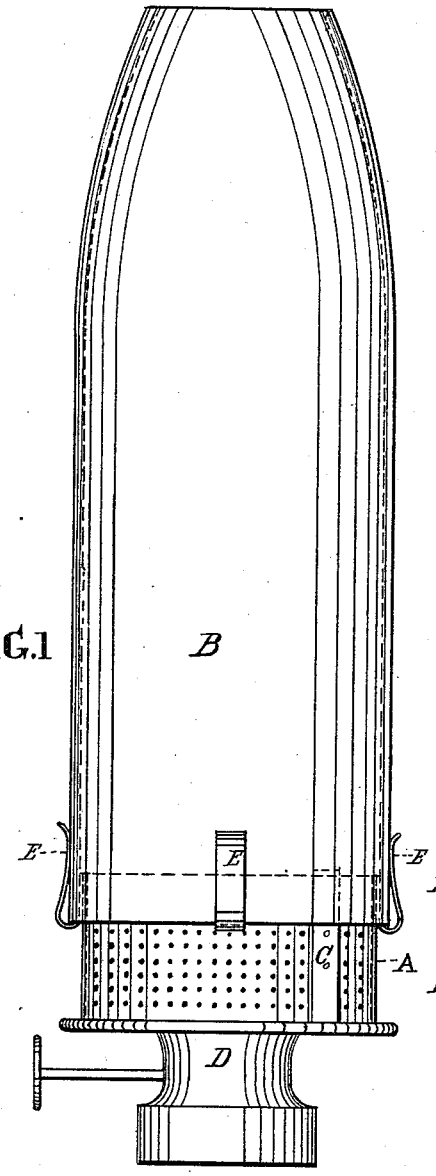



FIG. 3

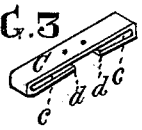



FIG. 4

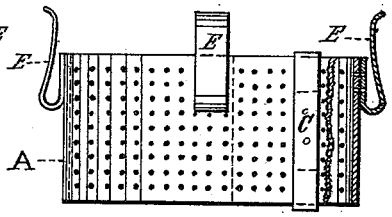



FIG. 2

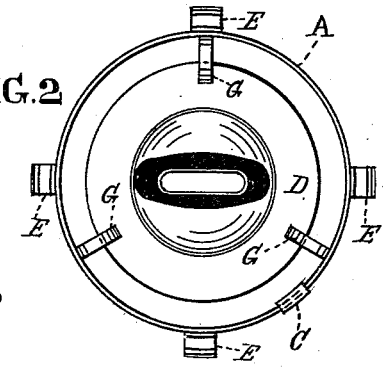
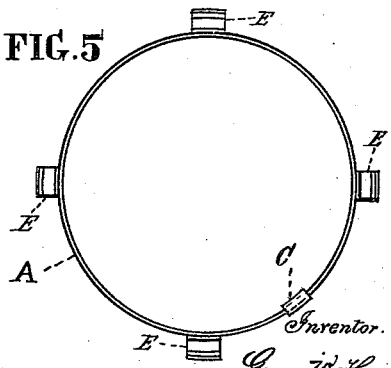



FIG. 5




Witnesses

Thomas J. Bewley

Curtis G. Stoddard

Inventor.

George W. Thomas.

per Stephen Ualick atty

# UNITED STATES PATENT OFFICE.

GEORGE W. THOMAS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO JOHN H. KENNEDY, OF SAME PLACE.

## IMPROVEMENT IN COMBINED CHIMNEY-HOLDER AND AIR-DISTRIBUTER.

Specificationforming part of Letters Patent No. **211,945**, dated February 4, 1879; application filed December 17, 1878.

*To all whom it may concern:*

Be it known that I, GEORGE W. THOMAS, of the city and county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Combined Lamp-Chimney Holder and Air-Distributer, of which the following is a specification:

Heretofore much difficulty has been experienced by lamp-chimneys becoming intensely hot, which has caused them to crack or break, and sometimes causing an explosion of the lamp, and even loss of life.

To avoid all this is the object of my invention; and the invention consists of a perforated ring adapted to fit the inner surface of the lower end of the chimney, the lower part of the ring being connected with the burner of the lamp.

I usually make the ring of a strip of sheet metal and connect the ends together by means of an open clasp, so as to provide for the ring being varied in size to suit the size of any chimney with which it has to be used. The outer surface of the ring is provided with spring-clasps, which press against the outer surface of the chimney, to hold it in connection with the ring.

The perforations are of sufficient size and close enough together to admit the requisite amount of cold air through them to insure enough being spread over the inner surface of the chimney to counteract the heat from the flame of the burner in such a manner as to prevent the heating of the chimney.

In the accompanying drawings, Figure 1 is front elevation of the burner D, chimney-holder and air-distributer A, and chimney B. Fig. 2 is a plan view of the chimney-holder and air-distributer A, in connection with the burner D, the chimney being removed. Fig. 3 is a perspective view of the spring-clasp C. Fig. 4 is a side elevation of the chimney-holder and air-distributer A, a small portion at one side being broken away to show the mode of connecting the spring-clasps *b*. Fig. 5 is a plan view of the same.

Like letters of reference in all the figures indicate the same parts.

A represents the perforated chimney-holder and air-distributer, which, in the present case, is of circular form, to suit the form of the lower end of the chimney B. It is made of a strip of perforated sheet metal, the ends of which are connected by means of the spring-clasp C. (Shown in detail in Fig. 3.) One end of the strip is riveted to the clasp, as seen in Figs. 1 and 4, and the other end is slipped through the openings *c c*, (seen in Fig. 3,) and clasped by the spring ends *d d*, by which it is held securely when adjusted, so as to make the ring or chimney-holder and air-distributer of the right diameter to fit the inner surface of the lower end of the chimney. The spring-clasps E E E E are riveted to the chimney-holder and air-distributer, and their resilient ends bear against the outer surface of the chimney, as seen in Fig. 1, and hold the latter securely in connection with the former.

The spring-clasps G G G, which are usually employed for holding the chimney in connection with the burner D, in this case hold the chimney-holder and air-distributer in connection therewith.

It will be seen that as the outer surface of the perforated ring or chimney-holder and air-distributer A is exposed to the atmosphere of the room, any desirable amount of cold air will pass through the perforations to insure a sufficient amount of it ascending up and over the inner surface of the chimney B to prevent its heating, and thus prevent it cracking it or breaking when exposed to a cold atmosphere, or when water is dashed against it.

I claim as my invention—

1. The perforated ring A, having open clasps E, in combination with the burner D and chimney B, the ring being adapted to fit the inner surface of the chimney and to cause the cold air which passes through the perforations to spread over and ascend up said surface, and the clasps to hold and secure the chimney firmly in connection with the ring, substantially in the manner and for the purpose set forth.

2. A perforated chimney-holder and air-distributer formed of a strip of sheet metal, held together at its ends by means of a spring-clasp, C, whereby it is capable of being expanded or contracted, to adapt it to chimneys of various sizes, substantially as set forth.

GEORGE W. THOMAS.

Witnesses:

STEPHEN USTICK,

THOMAS J. BEWLEY.