(No Model.)

L. A. COOPER.

REGENERATIVE GAS LAMP.

No. 442,613. Patented Dec. 16, 1890.

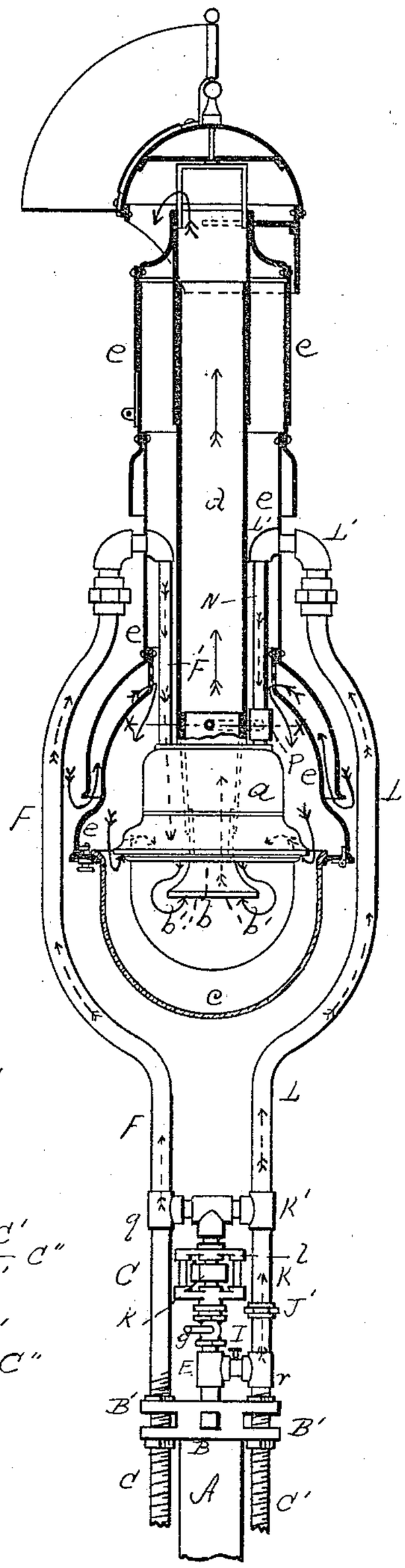

Fig. 1.

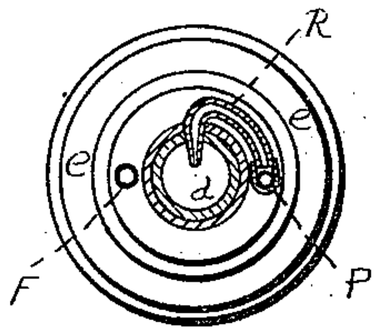

Fig. 3.

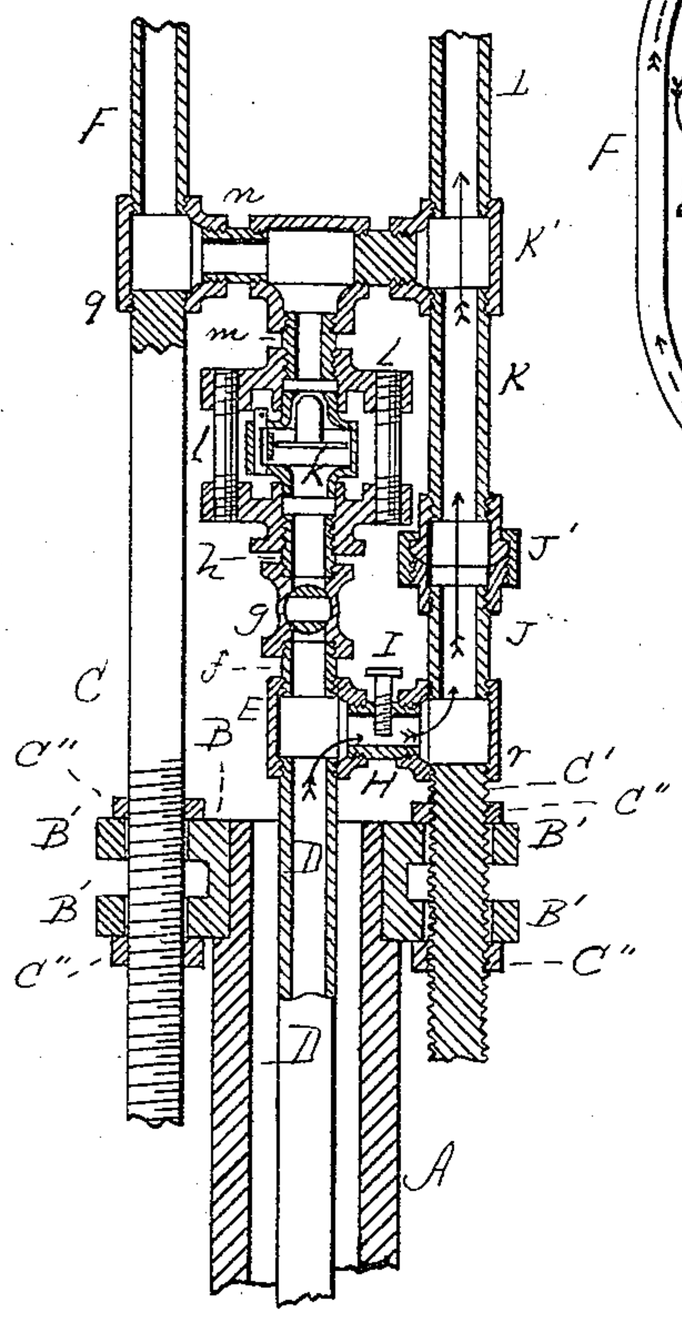

Fig. 2.

WITNESSES.

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UNITED STATES PATENT OFFICE.

LESLIE A. COOPER, OF BOSTON, MASSACHUSETTS, ASSIGNOR OF ONE-HALF TO FISKE, COLEMAN & CO., OF SAME PLACE.

REGENERATIVE GAS-LAMP.

SPECIFICATION forming part of Letters Patent No. 442,613, dated December 16, 1890.

Application filed September 1, 1890. Serial No. 363,698. (No model.)

To all whom it may concern:

Be it known that I, LESLIE A. COOPER, of Boston, in the county of Suffolk and State of Massachusetts, have invented new and useful Improvements in Regenerative Gas-Lamps, of which the following is a specification.

This invention relates to regenerative gas-lamps, such as are used principally for street and other outside lighting and for lighting large interior spaces; and the improvements relate particularly to those portions which form what is technically termed the "fixture."

In the accompanying drawings, in which similar letters of reference indicate like parts, Figure 1 is an elevation of a lamp and fixture embodying my invention, the lantern, not new in this invention, being shown in section. Fig. 2 is an enlarged central vertical section of a portion of the same, a part of one of the rods being shown in elevation. Fig. 3 is a horizontal section on line *x*, Fig. 1.

a represents the lamp; *b*, the burner, (*b'* being the lip;) *c*, the globe, and *d* the chimney.

e is the lantern, the novel parts in the construction of which are made the subject of an application for Letters Patent of even date herewith.

A represents the top of the supporting-post, and B is a ring secured thereto and provided with wings B', perforated to receive two vertical supporting or steadying rods C C', which are adjustably supported therein by means of nuts C''.

D is the service-pipe. The parts by means of which the gas passes from this pipe to the burner, none of which are claimed to be novel in this device, consist of the T-joint E, pipe *f*, stop-cock *g*, pipe *h*, governor *k*, supported by the yoke *l*, pipe *m*, and T-joint *n*, connecting with the pipe F, which leads by means of suitable joints to the pipe F', and thence to the burner *b*. The upper ends of the rods C C' are held, respectively, in the joints *q r*.

A portion of the gas from the service-pipe D passes into the pipe H, the amount thus passing being fixed by the regulator I, and thence through the T-joint *r*, through the pipe J, union J', pipe K, T-joint K', (the whole forming what is termed a "by-pass,") and pipe L, and suitable joints L', to the pipe N, and thence into a T-joint P, just outside the chimney of the lamp. (See Fig. 3.) Thence the gas enters a small pipe R, which curves horizontally partly around the chimney and then bends sharply and extends through to the inside, so that its end or tip is within the chimney above the burner. This tip is kept constantly lighted, and being within the chimney is unaffected by the wind and may be very small. By means of the by-pass above mentioned it also entirely avoids the governor.

By turning the cock *g* the burner is supplied with gas in the ordinary manner, which is ignited by the pilot-light R.

Having thus fully described my invention, what I claim, and desire to secure by Letters Patent, is—

In a regenerative gas-lamp, the adjustable support comprising the ring B, provided with the perforated wings B', and the adjustable posts or rods C C', arranged substantially as set forth.

LESLIE A. COOPER.

Witnesses:
HENRY W. WILLIAMS,
J. M. HARTNETT.