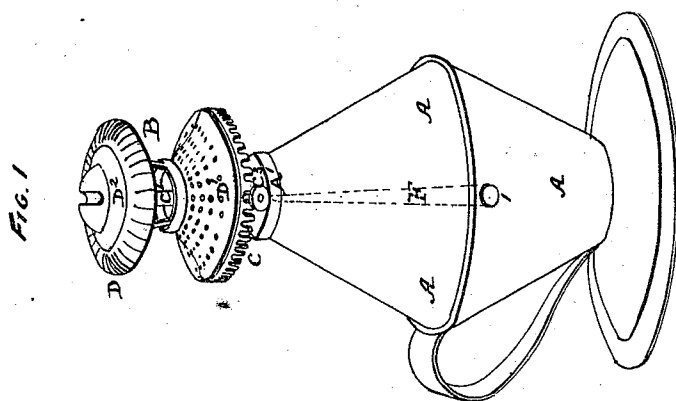
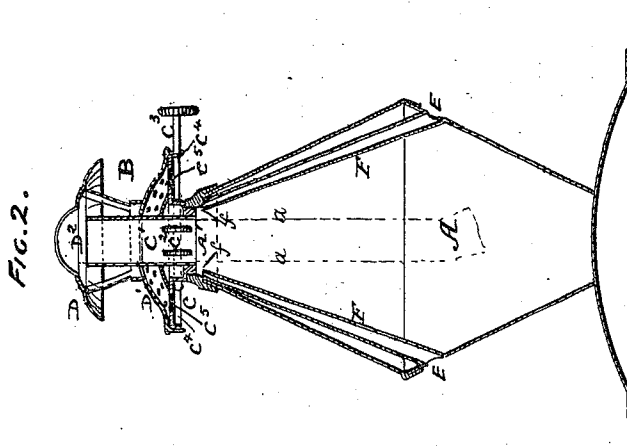


C. MCKINNON.

Lamp.

No. 164,016.

Patented June 1, 1875.



Witnesses :-

Colborne Brooks ^{2nd}

E. Brooks

Inventor :-

Cameron M^c Kinnon

By his Attorney

B. D. Hyatt

UNITED STATES PATENT OFFICE.

CAMERON McKINNON, OF MIDWAY, ALABAMA.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **164,016**, dated June 1, 1875; application filed May 6, 1875.

To all whom it may concern:

Be it known that I, CAMERON McKINNON, of Midway, in the county of Bullock and State of Alabama, have invented new and useful Improvements in Lamps, which improvements are fully set forth in the following specification, reference being had to the accompanying drawings.

My invention relates to improvements in lamps particularly adapted for burning hydrocarbon oils, whereby such lamps are rendered non-liable to explosion by reason of gas from the oil accumulating in the space left within the bowl of the lamp between the surface of the oil and the lower end of the wick-tube as the oil is consumed, and also the prevention of the smoking of the lamp-tube.

In carrying out my invention I form two apertures in the periphery and on opposite sides of the bowl or body of the lamp, to which apertures I connect tubes of gradually-diminishing diameter, conducted up within the bowl to a point just below the wick-tube and in a line with the center of the narrow side thereof, in such position that air introduced through such tubes from the exterior of the lamp-bowl shall be caused to impinge directly against the wick immediately below the wick-tube and pass up through such tube to the flame, and at the same time carry with it any vapor or gas which may be generated from the oil in the bowl or body of the lamp, thereby increasing the volume and brilliancy of the flame, while, at the same time, it prevents the slightest possibility of an explosion by reason of the accumulation of gas between the surface of the oil and the under side of the burner; but, that my invention may be fully understood, I will proceed to describe the same in detail, by reference to the accompanying drawings, which form part of this specification.

Figure 1 represents a perspective view, and Fig. 2 a vertical section, of a lamp constructed according to my invention.

In each of the views similar letters of reference are employed to indicate corresponding parts wherever they occur.

A represents the bowl or body of the lamp, which in the drawings is shown formed of metal. It may, however, be formed of glass, earthenware, or other suitable material. B repre-

sents the burner, which is formed in two parts, C D, the part C being formed to screw into the neck A' of the bowl or body A of the lamp. It is also formed with a vertical wick-tube, C¹, within which a pair of wheels, C², are caused to revolve by means of the spindle C³, for the purpose of raising and lowering the wick. The part C is also formed with a circular plate, C⁴, provided with large perforations C⁵ for the passage of air. Over the part C the part D fits, as shown, the part D being composed of a raised perforated plate, D¹, (fitting tightly at its periphery onto the plate C⁴, and in the center being formed with an opening for the passage of wick-tube C¹,) and a raised disk or deflector, D², formed with a central opening for the flame, and on its periphery being serrated, so as to yield freely for the passage of the lamp-chimney thereover, and as a flexible support for the same when in position. E E are openings formed in the periphery of the bowl A, to which are connected pipes or tubes F, gradually diminishing in diameter and extending from such apertures E up into position, so that their nozzles or mouths f shall discharge thin streams of air directly against the wick a, (shown by dotted lines in Fig. 2,) in fine sprays or jets at a point immediately below the wick-tube C¹, and on opposite sides of the wick a, so that two jets or streams of air shall commingle and pass up together through the tube C¹ to the flame, and at the same time the combined streams will unite with and draw up with them any vapor or gas which may have been generated from the oil in the bowl A, and which, by its lightness, would be carried to the upper part of the space between the surface of the oil and the lower edge of the burner.

Having thus described my invention, I would have it understood that I do not claim, broadly, a pipe or tube for conducting air from the exterior of a lamp bowl or body to the upper part of the interior of the same; nor do I claim the employment of a single pipe or tube such as described in the specifications of Letters Patent granted to Theodore Clough, dated November 26, 1867, No. 71,281, and Frank Saunders, dated May 4, 1869, No. 89,795; but

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

The combination, with the lamp bowl or body A and wick-tube C¹, of the tubes F F, gradually decreasing in diameter and extending up from apertures E E on opposite sides of the interior of the bowl or body A to a point just below the under side of the tube C¹, in position that the jets or streams from the nozzles

or openings *ff* shall impinge against the opposite edges of the wick *a*, in the manner and for the purpose set forth.

CAMERON McKINNON.

Attest:

J. N. RASBURY,

A. G. JORDAN.