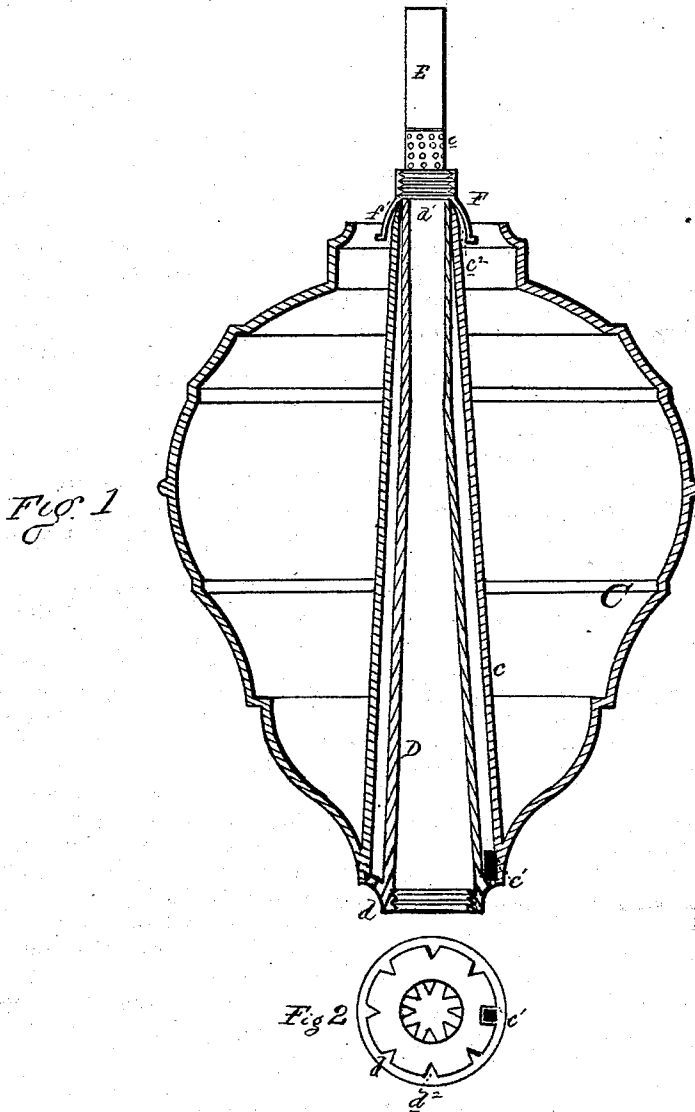


A. COMBS.
Lamps.

No. 150,939.

Patented May 19, 1874.



WITNESSES,
Eugene P. Hudson.
J. B. Connolly.

By

INVENTOR,
Abel Combs.
Connolly Prof Attorneys.

UNITED STATES PATENT OFFICE.

ABEL COMBS, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **150,939**, dated May 19, 1874; application filed September 22, 1873.

To all whom it may concern:

Be it known that I, ABEL COMBS, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Lamps; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification, in which—

Figure 1 is a vertical section of a lamp provided with a removable tapering draft-tube, and Fig. 2 is a bottom view of said tube applied.

This invention has relation to lamps; and consists, first, in the combination, with a lamp-bowl having central openings at the top and bottom and a fixed tube rising from the lower opening, of a draft-tube located in the latter and removable from the bottom thereof; secondly, in the combination, with a lamp-bowl having central openings at the top and bottom and a circular wall or tube rising from the lower opening, of a tapering removable draft-tube; thirdly, in the combination, with a tapering removable draft-tube applied to a lamp, of a collar, whereby said draft-tube is secured at its upper end, all as hereinafter more fully described.

Referring to the accompanying drawings, C designates a lamp-bowl having central openings at the top and bottom, from which latter rises a circular wall or tube, *c*, terminating at and within the former. The central removable draft-tube is shown, at D, rising from the collar *d*, which engages with a stud, *c*¹, on the wall *c*, and tapering to a point, *d*¹, whence it continues or connects with the cylinder E, said cylinder being perforated, as shown. F is a screw cap or ring for retaining the removable

tube in place, said ring being applied after the removable tube has been inserted in the bowl, as shown, and its collar made to engage with the stud *c*¹. This ring is provided with a downwardly-projecting flange, *f*¹, which serves to hold the wick out from the wall *c*, and deflects the air-current that enters through the openings *d*² in the collar *d*, and passes out through the slot *c*². The deflected current then passes up outside of the flange *f*¹, cooling and partially drying the wick, and enters the cylinder E through the perforations *e e*, whence it arises to the flame. The flange *f*¹, against which the wick rests, serves also to retard the too free flow of the oil, which collects at this point and drips back to the main body of oil in the bowl, thus preventing "sweating."

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

1. In combination with a lamp bowl or reservoir having central openings at the top and bottom, and a fixed tube arising from the lower opening, a draft-tube located therein and capable of being removed and replaced through the bottom, the whole being arranged as described, allowing the wick to rest outside the fixed tube, as shown.

2. In combination with a lamp-bowl having central openings at top and bottom, and a circular wall or tube, *c*, rising from the lower opening, a detachable tapering draft-tube, substantially as described.

3. In combination with the removable tapering draft-tube D of a lamp, the collar F, for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 13th day of September, 1873.

ABEL COMBS.

Witnesses:

GEO. C. SHELMEKDINE,
M. DANL. CONNOLLY.