G. Neilson.

Lamp.

No 73372 Patented Jan. 14, 1868.

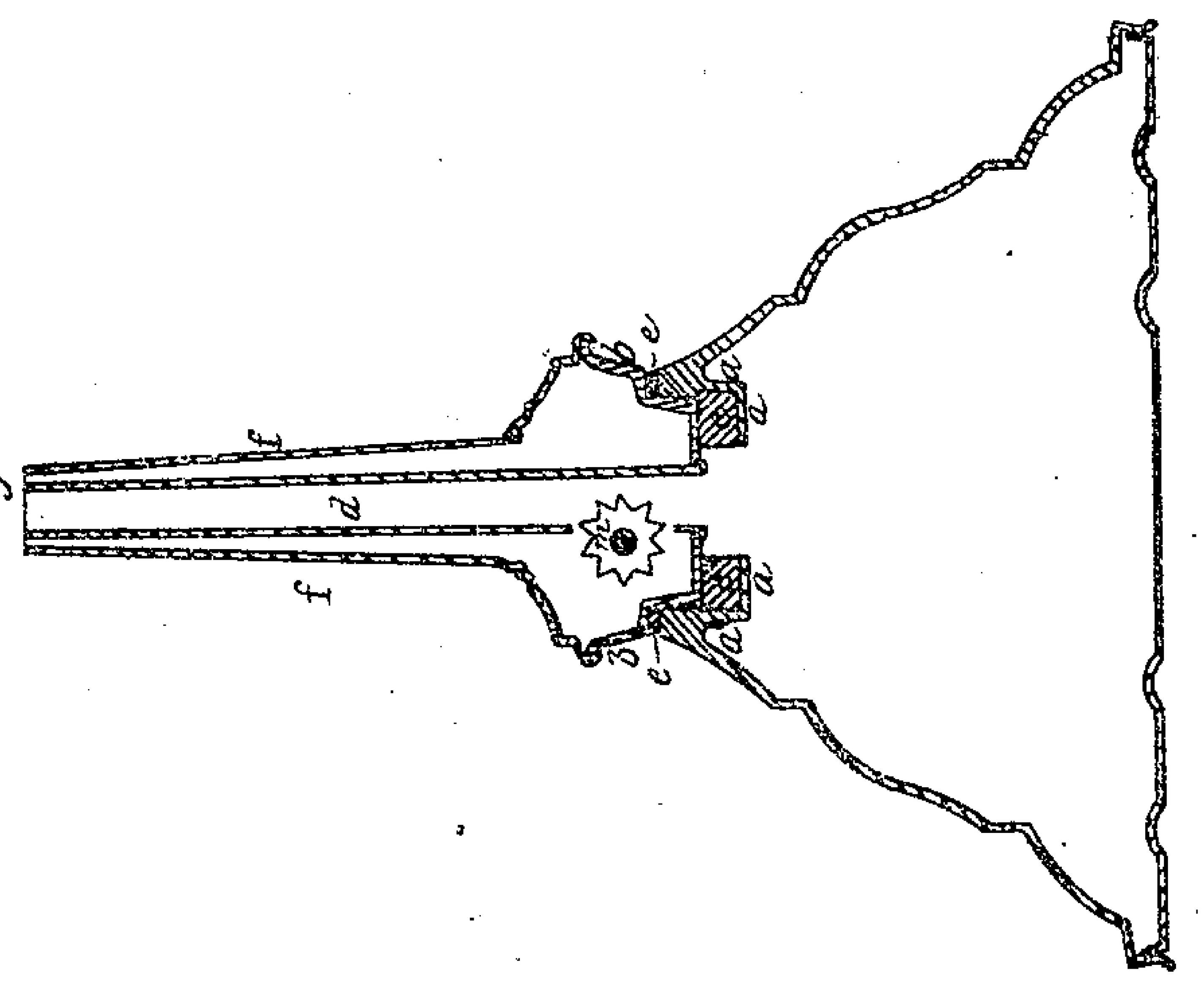

Fig. 2.

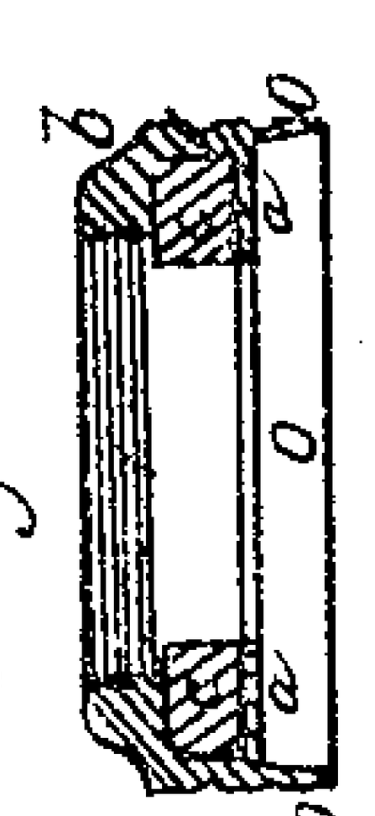

Fig. 3.

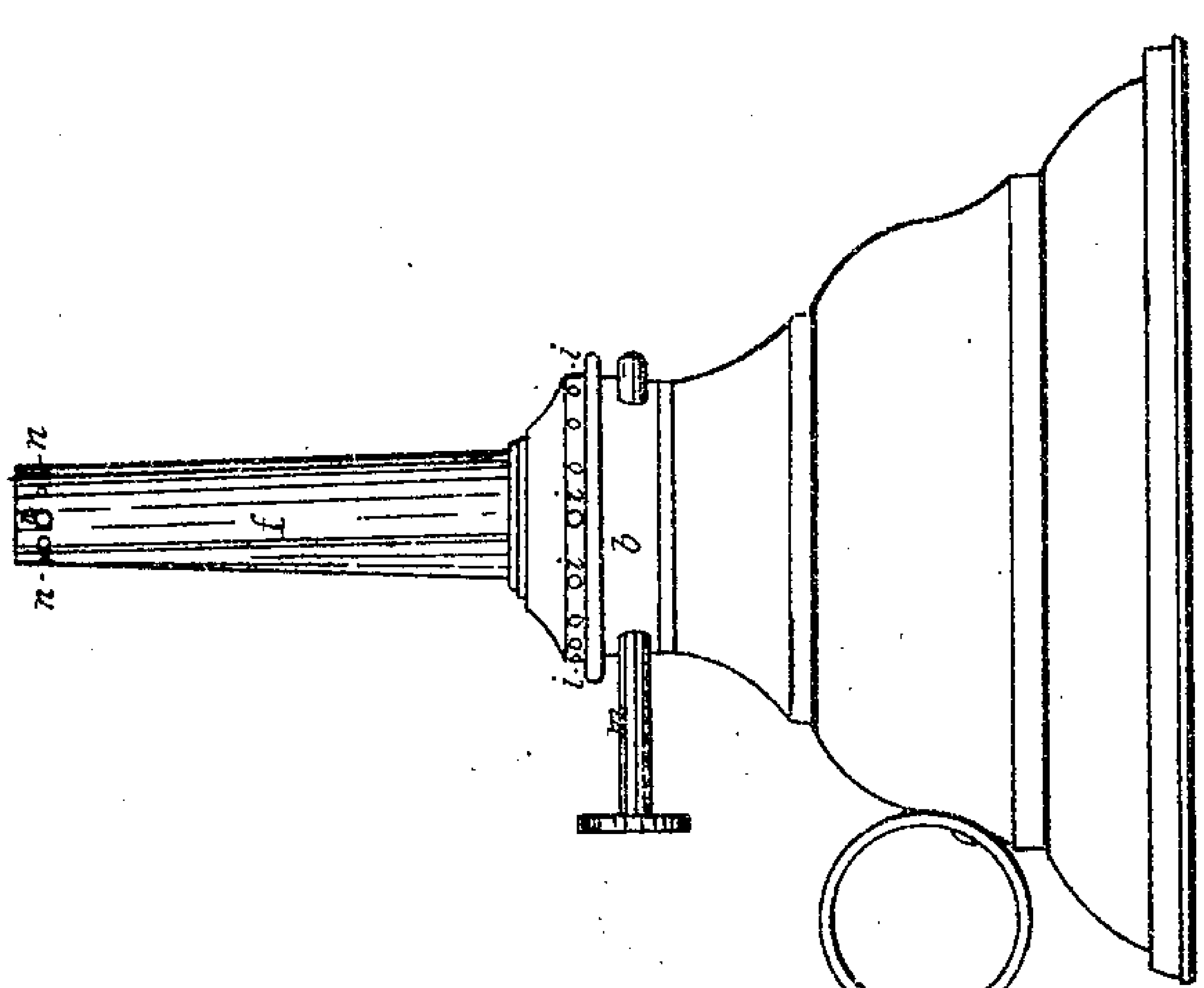

Fig. 1.

Witnesses:

Jn. D. Patten

C. C. Wilson

Inventor:

George Neilson,

By Atty A. B. Stoughton.

UNITED STATES PATENT OFFICE.

GEORGE NEILSON, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN LAMPS.

Specification forming part of Letters Patent No. **73,372**, dated January 14, 1868.

To all whom it may concern:

Be it known that I, GEORGE NEILSON, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Packing or Sealing the Tops of Lamps; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 represents an external view of the lamp. Fig. 2 represents a vertical section through the same. Fig. 3 represents a vertical section through a top designed for a glass or other bowl, to which it must be cemented.

My improvement relates to the arrangement and location of an annular cork packing horizontally placed and supported, and against which the lamp-top is screwed down vertically, so as to prevent any vapor that may be generated in the lamp from escaping in any other way than up through the wick-tube and to the flame, where it is burned.

To enable others skilled in the art to make and use my invention, I will proceed to describe the same with reference to the drawings.

The lamp, when made of metal, has a recess formed on its inner top portion by means of the vertical and horizontal metallic flanges *a a*, on which is placed so as to be firmly held there an annular ring, *c*, of cork; and above this cork packing-ring, on the inside of the neck, is cut a female screw-thread, into which the male screw-thread on the cap *b* takes, so as to draw down said cap vertically upon the cork ring. This closes and seals the only avenue for the escape of any gas that might generate in the lamp, except through the wick-tube *d*, where it would be conducted to the flame and burned.

A rubber ring, *e*, may be placed on the shoulder of the cap to sit and be compressed against the top of the bowl, if desired, and without any liability to be softened or dissolved by the burning-fluid, which it would be if in contact with it, as it would if placed where the cork packing is placed.

The wick-tube *d* is surrounded by an external tube, *f*, with air-space between them, the air to support combustion and prevent the lamp from becoming highly heated being introduced at the holes *i* at the lower end of the external tube, and its current is very direct and unimpeded from said air-holes to the top of the wick-tube or the flame. Other air-holes, *n*, are made through the external tube, *f*, near its top, for supplying or promoting the flame. The usual shaft and star-wheel, *m*, are used for raising and lowering the wick.

When the bowl of the lamp is made of glass or other vitrified substance, a flange, *o*, is made on the bottom of the cap, by which it is cemented to the neck of the bowl; and the cork packing-ring is first inserted and then the annular metal ring slipped in against it and soldered in place.

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

In combination with the tops of lamps for using burning-fluids, an annular cork packing made, arranged, located, and held in the position in the lamp in the manner and for the purposed herein described and represented.

GEORGE NEILSON.

Witnesses:
A. B. STOUGHTON,
EDM. F. BROWN.