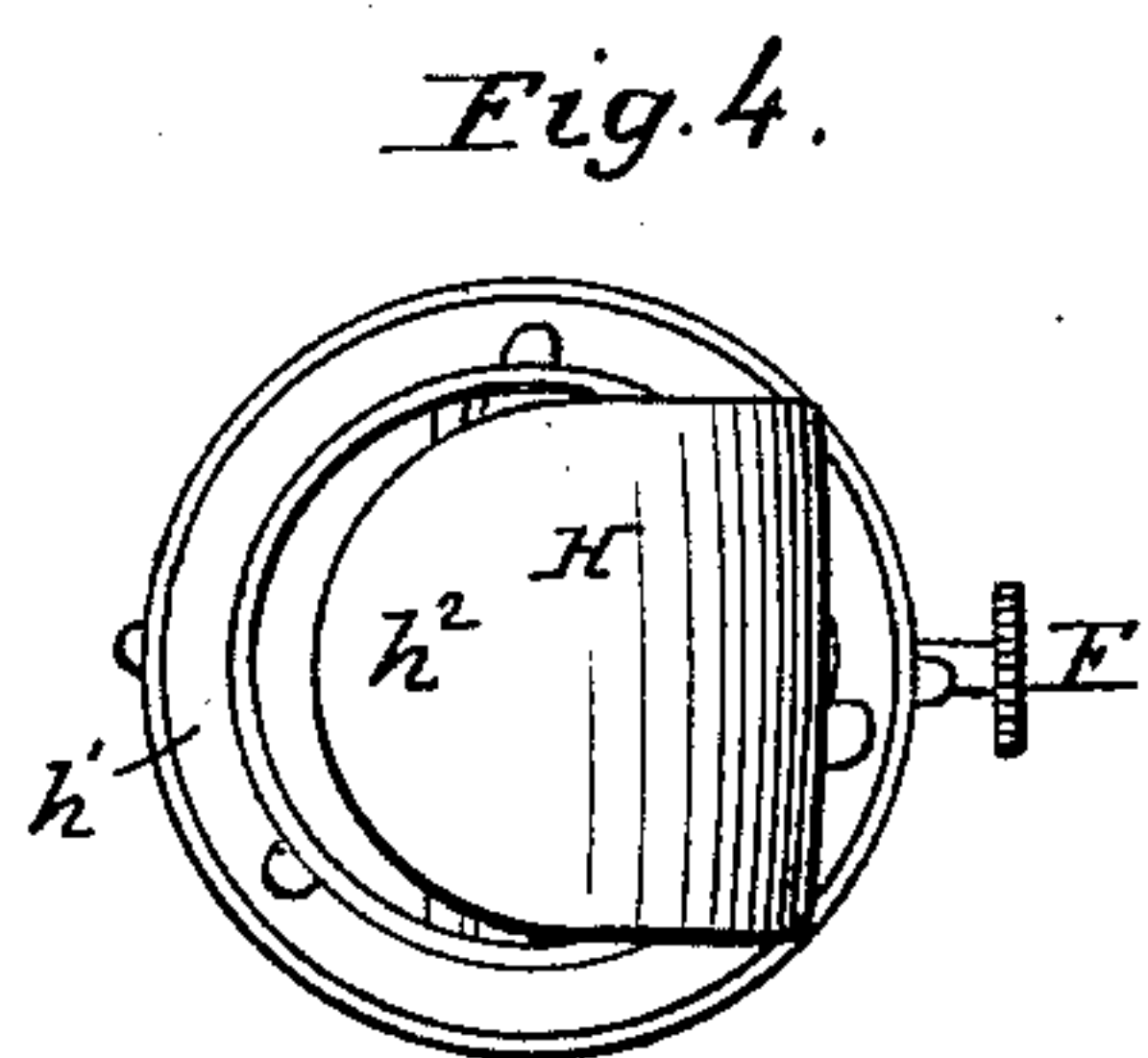
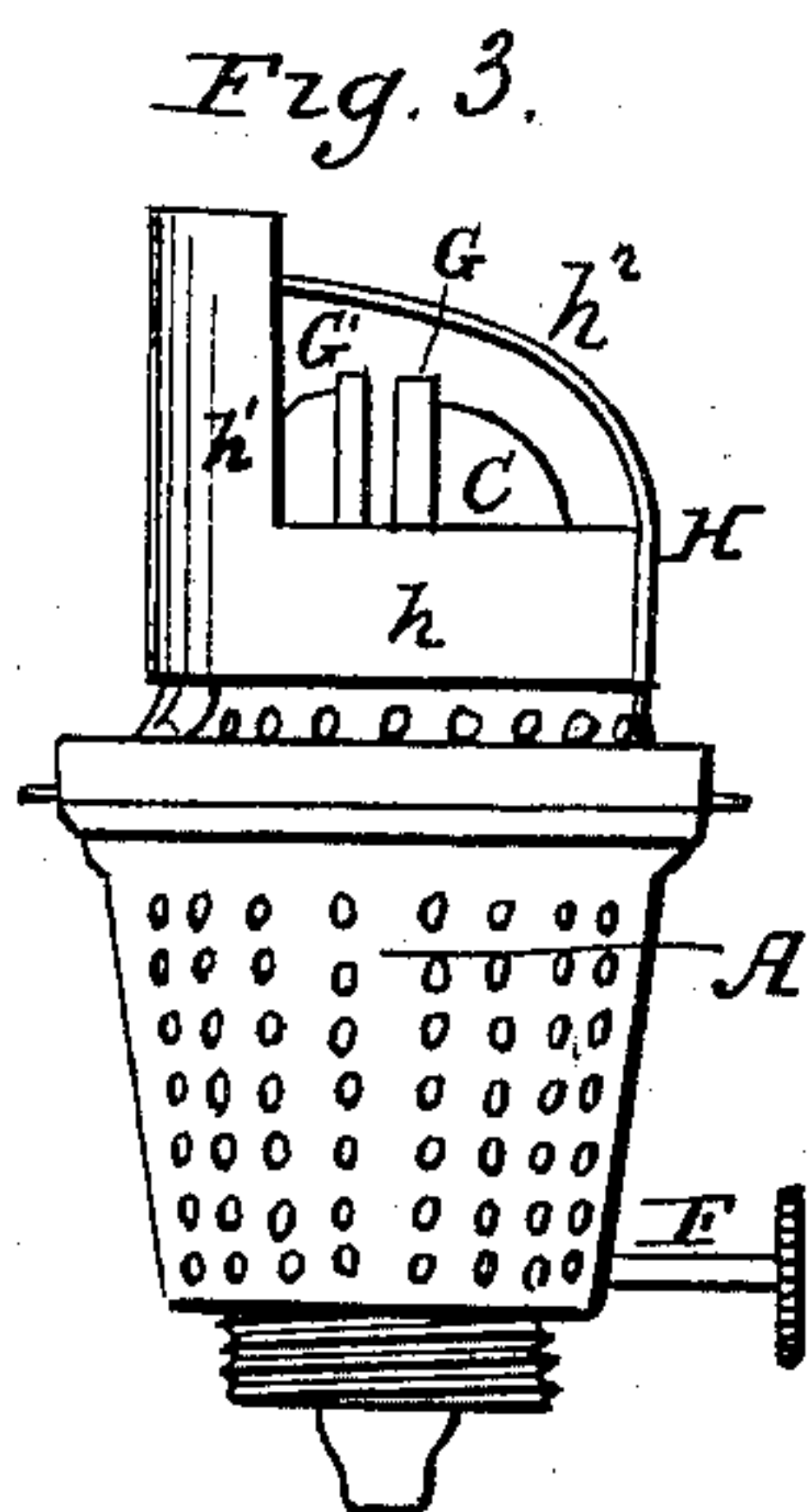
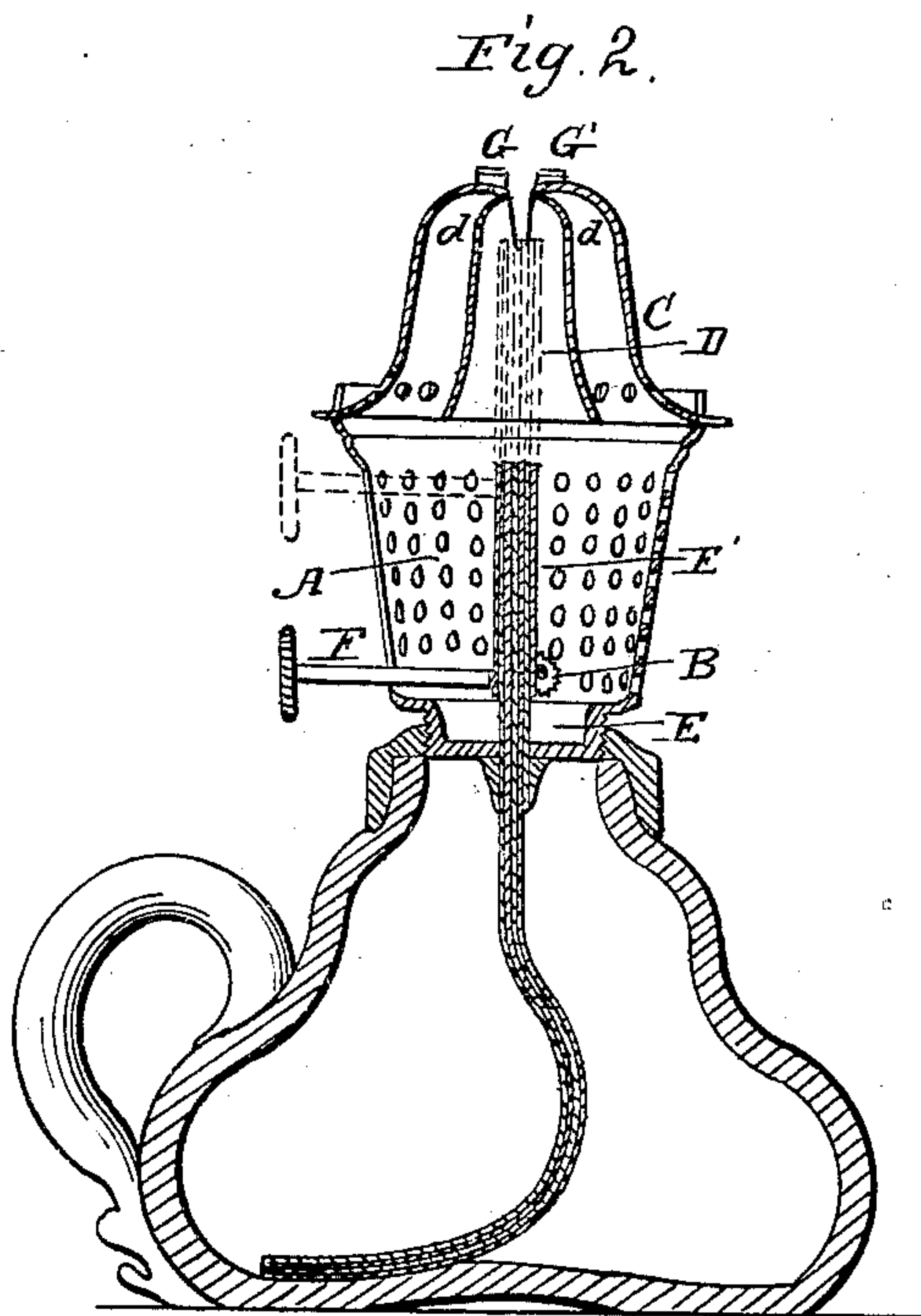
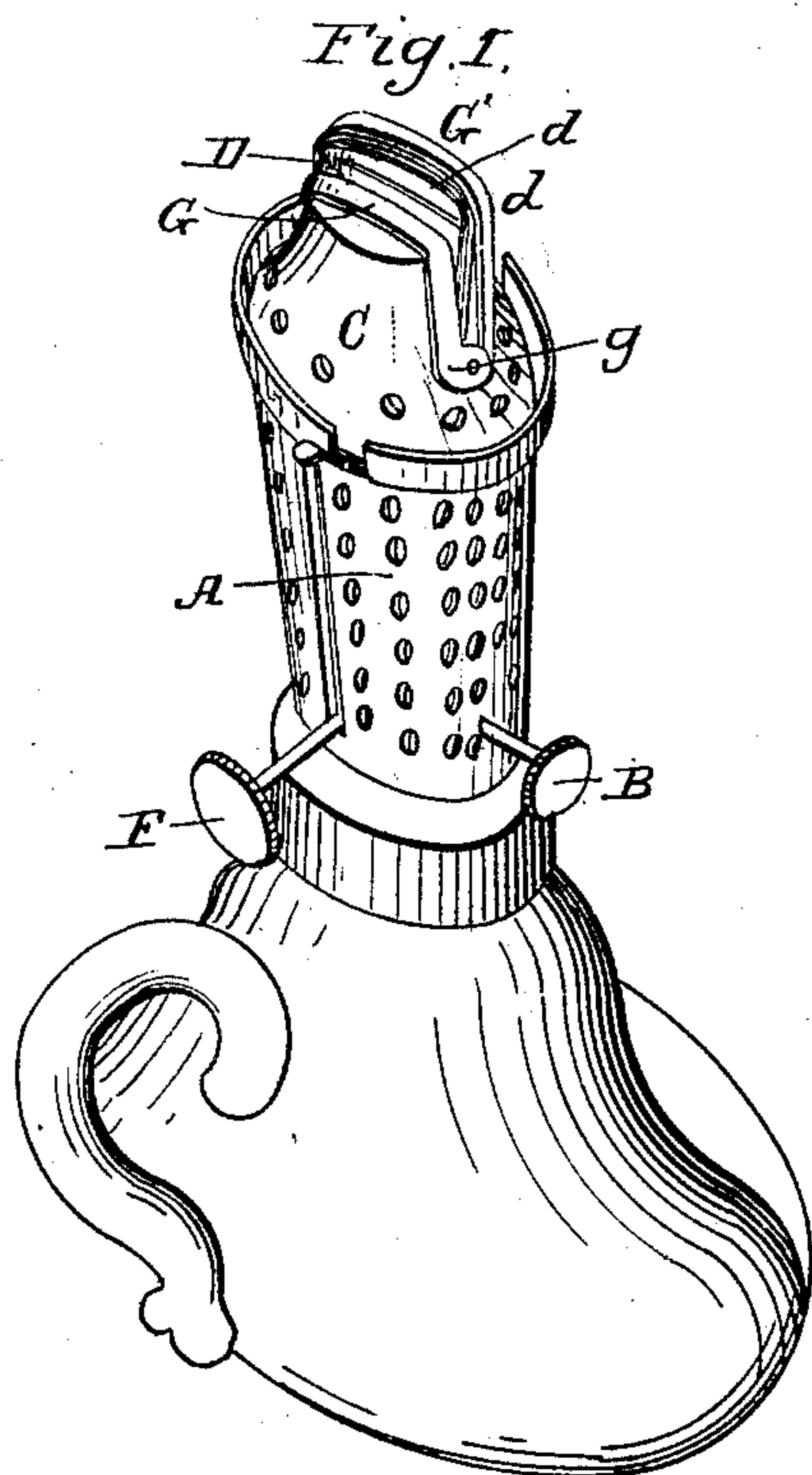


J. C. WRIGHT.

Lamp Burner.

No. 32,847.

Patented July 16, 1861.



Witnesses:
Oscar Wright
L. W. Furdell.

Inventor:
J. C. Wright
Per M. M. Ho
Atorney.

UNITED STATES PATENT OFFICE.

JOSEPH C. WRIGHT, OF MINERSVILLE, PENNSYLVANIA.

LAMP.

Specification of Letters Patent No. 32,847, dated July 16, 1861.

To all whom it may concern:

Be it known that I, JOSEPH C. WRIGHT, of Minersville, in the county of Schuylkill and State of Pennsylvania, have invented certain
5 new and useful Improvements in Lamps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

10 Figure 1 is a perspective view of a lamp illustrating a part of my invention. Fig. 2 is a vertical transverse section of the same. Fig. 3, is an elevation of the lamp complete.
15 Fig. 4, is a top view of the same.

Similar letters of reference in the several figures indicate corresponding parts.

The subject of my invention is a lamp adapted for burning hydrocarbon oils without the use of a chimney, and the improvements consist, 1st, in an improved combination and arrangement of wick tubes and concentric conical deflectors; 2nd, in a new
20 form of movable cap or deflector.

25 To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

The perforated shell A, elevator B, and conical deflector C, may be of common construction, excepting that the wick slot in the
30 latter extends some distance down the sides being longer than those in most common use.

D, is a second deflector fixed concentrically within the first by riveting at the base; and
35 extending upward nearly to the top. The inner deflector is formed in its transverse section with straight converging sides and in its longitudinal section with sides nearly parallel and is imperforate with the exception of a horizontal slot d , at each side near
40 its top.

The wick tube is constructed in two parts E, E', the former being fixed to the shell in customary manner and the latter adapted
45 to slide thereon. F, is a handle attached to the sliding tube E', for the purpose of setting it at any height.

G, G', are a pair of jaws hinged at g , to the deflector C, and extending up over the
50 top of the same as is clearly represented in the drawings. The said jaws are for the purpose of graduating the capacity of the wick aperture in the deflector as will be hereinafter explained.

H, represents a movable cap or deflector 55 of peculiar form adapted to fit over and around the deflector C, and jaws G, G'. Its construction is shown in Figs. 3 and 4. It is formed with a supporting collar h , to which are secured a vertical segmental
60 flange h' , and a deflecting flange h^2 , the latter being formed of a flat plate of metal with a round end, curving above the wick aperture and extending so far over the same as to leave a contracted segmental space between the convex end of the horizontal
65 flange h^2 and the concave side of the vertical flange h' .

For first lighting the lamp the wick and the jaws G, G', are set as shown by red lines 70 in Fig. 2. When the parts become heated the jaws are set in as shown by black lines in order to produce more perfect combustion and the wick, and wick tube, may if desired be lowered as also represented in black. 75 In this position the operation is that of a generating lamp, the vapor rising from the wick and burning within and above the deflectors and little or no consumption of wick taking place. By retaining the wick and
80 wick tube in the position represented by red lines the flame is kept in contact with the wick, rendering it less sensitive to sudden drafts of air. Each condition is preferable under certain circumstances and by the use
85 of my sliding wick tube facilities for both are afforded in the same lamp. The sliding tube is likewise of great utility for graduating the size of the flame.

It is well known that it is extremely difficult 90 to light a coal oil lamp through an aperture sufficiently contracted to produce perfect combustion. By the use of the hinged or sliding jaws G, G', ample space is afforded for the first lighting of the lamp
95 and the aperture may afterward be contracted as needful. By the use of the cap H, a flame is produced of semi-circular form and of great intensity and brilliance. The cap is likewise of great service in protecting
100 the flame from the effect of sudden downward draft such as occurs in carrying the lamp up stairs.

My improved lamp is particularly designed for use without a chimney, but it is 105 evident that some parts of the invention are equally applicable to lamps in which a chimney is employed.

I do not desire to confine myself to the specific device described, for raising and lowering the tube E'. A rack and pinion may if preferred be employed for this purpose.

I am aware that sliding wick tubes have been previously used, but with a somewhat different object from mine. To accomplish the purposes of this part of my invention, two concentric conical deflectors are essential, the inner being imperforate at its lower part for the purpose of conducting heat and preventing side draft. I do not therefore desire to be understood as claiming the use of the sliding wick tube except when combined with two concentric conical deflectors, constructed and arranged as hereinbefore made known. I am also aware that a lamp has before been provided with a movable cap projecting over the wick and operating to deflect the flame to one side and protect it from downward or horizontal currents. I do not therefore claim novelty in the movable cap, excepting when constructed as described and employed in connection with a

flat wick to produce a flame of semicircular form; but

What I do claim as new and of my invention herein, and desire to secure by Letters Patent, is:—

1. The combination of the concentric conical deflectors C, and D, and sliding wick tube E', all constructed arranged and operating in the manner and for the purposes herein shown and explained.

2. The movable cap H, constructed with a supporting collar h, vertical segmental flange h', and oblique convex ended deflectors h², and used in combination with the slotted conical deflector C, in the manner and for the purposes herein shown and explained.

The above specification of my improvements in lamps, signed this twentieth day of March 1861.

JOS. C. WRIGHT.

Witnesses:

JAMES M. LINDLEY,
W. A. BROWN.