

(No Model.)

E. B. REQUA.

LAMP BURNER.

No. 343,545.

Patented June 8, 1886.

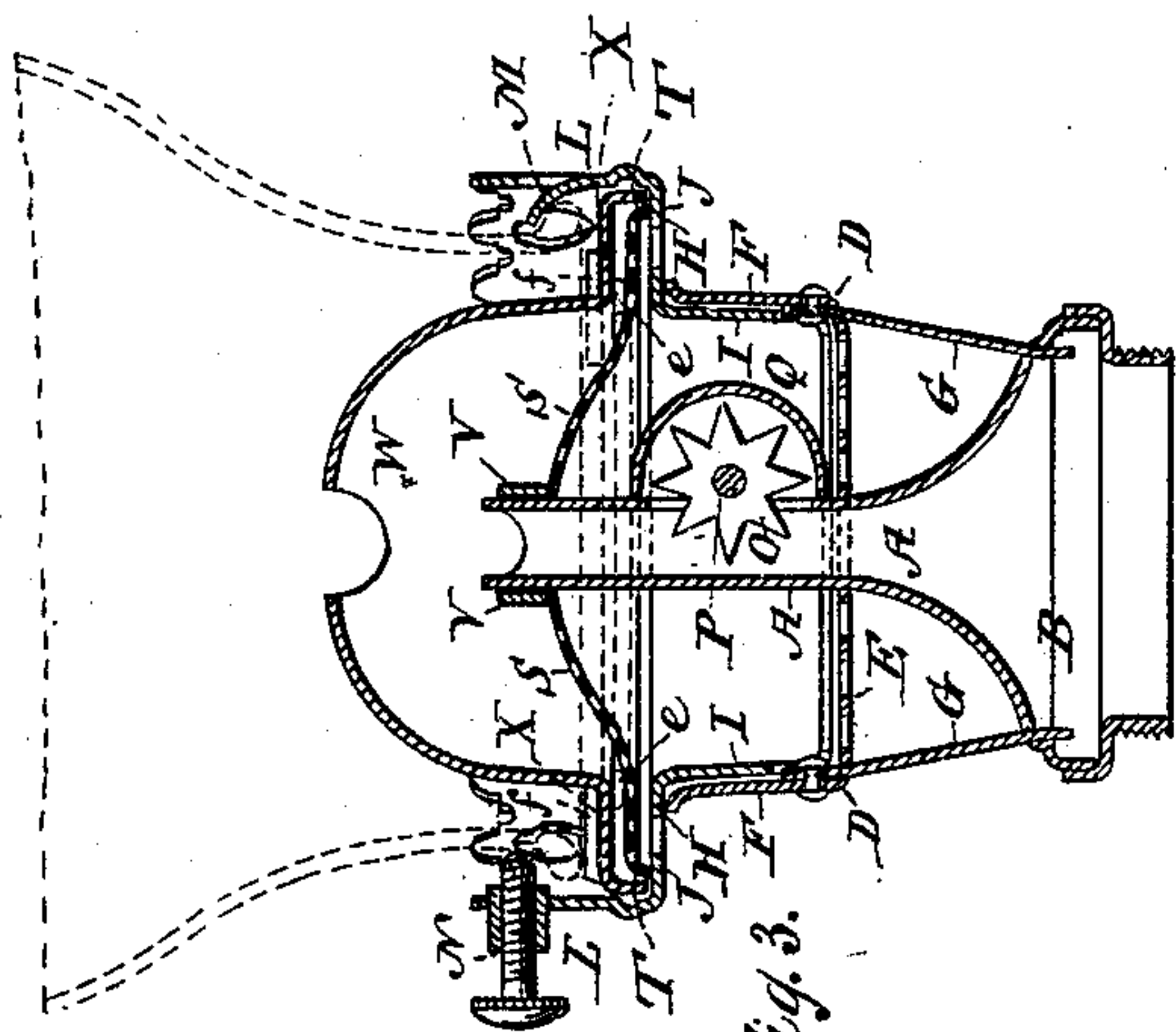


Fig. 3.

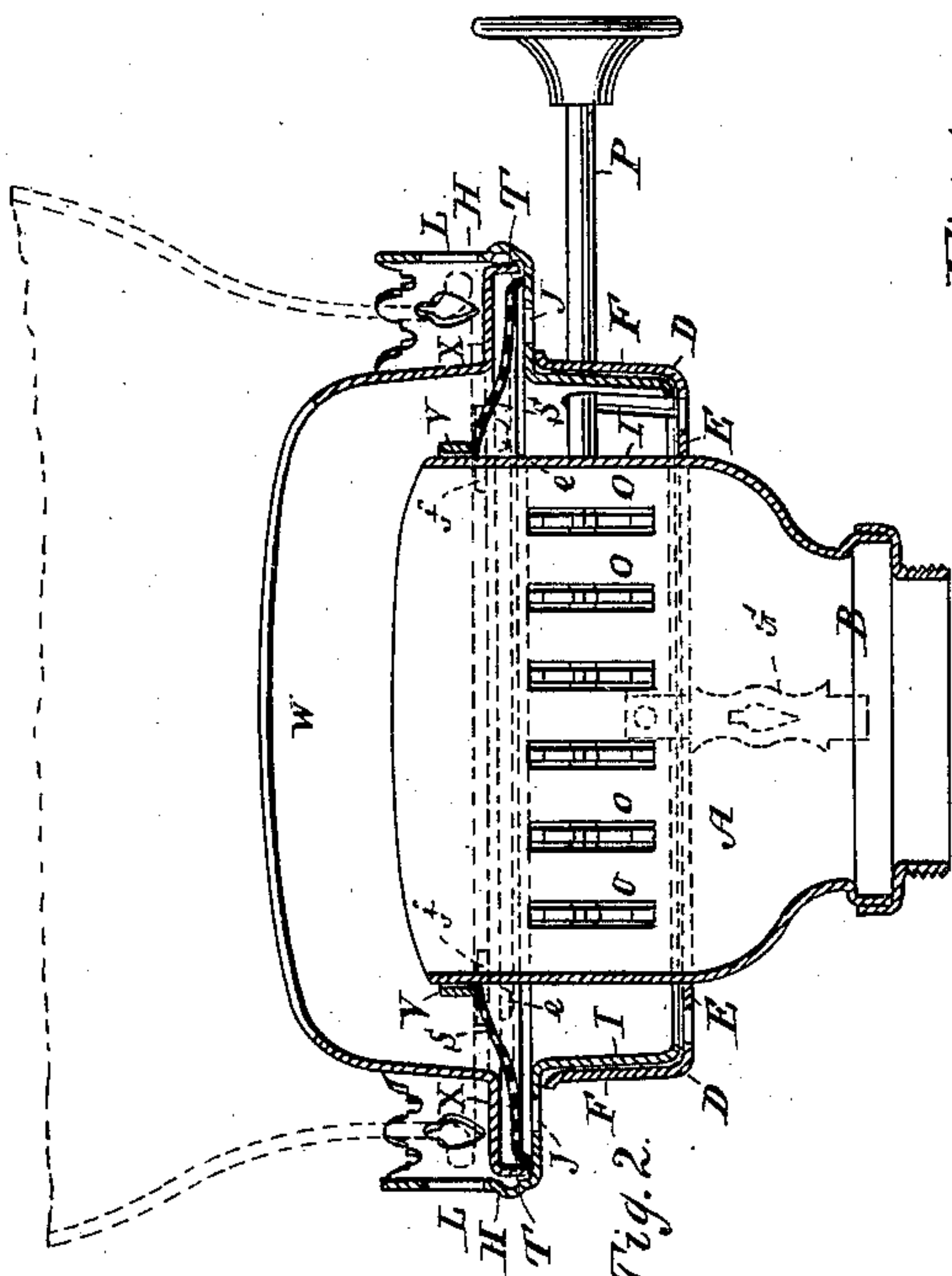
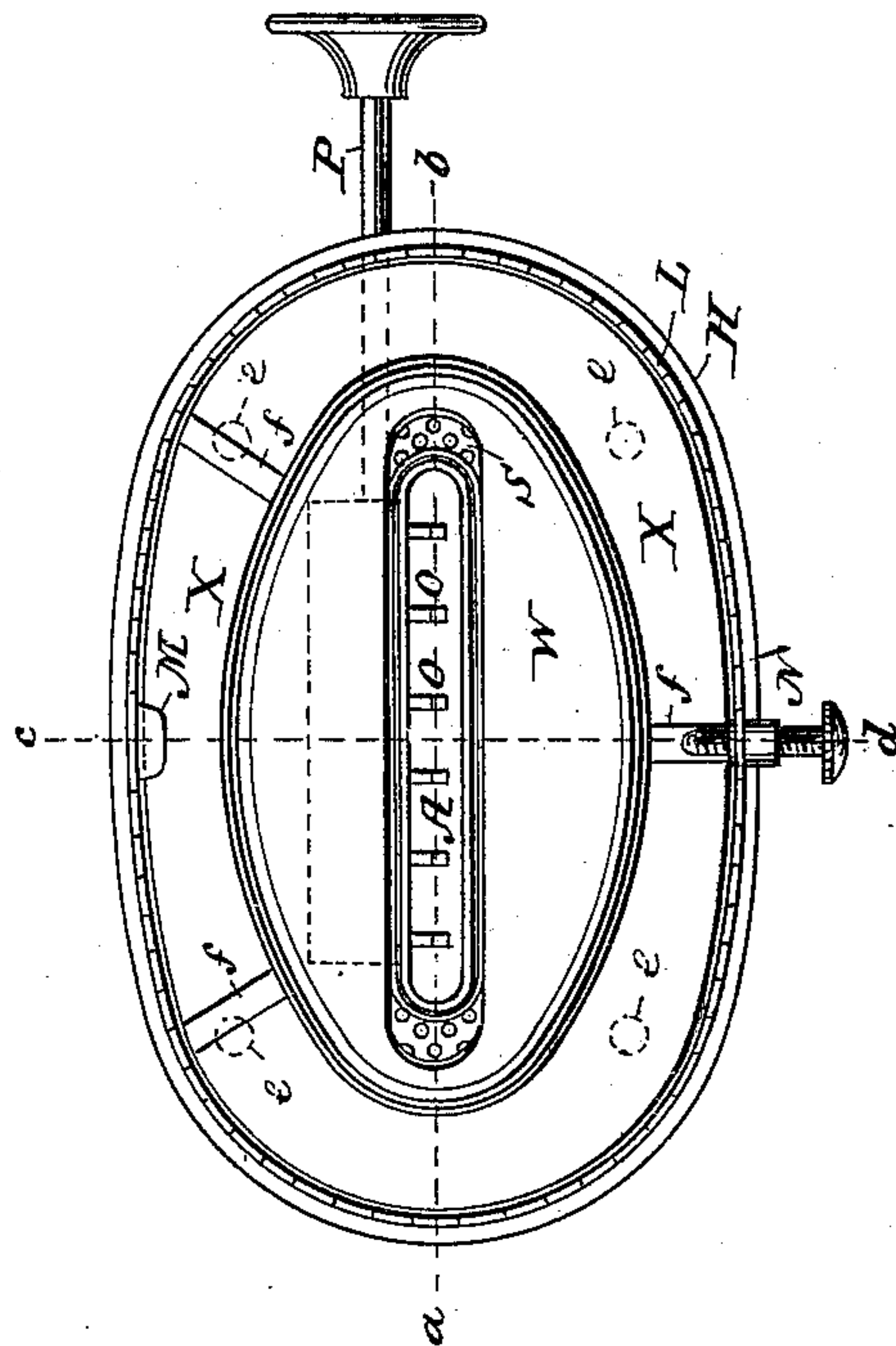


Fig. 2.

Fig. 1.



WITNESSES:

Edward Wolff  
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Elias B. Requa,



# UNITED STATES PATENT OFFICE.

ELIAS B. REQUA, OF JERSEY CITY, NEW JERSEY.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 343,545, dated June 8, 1886.

Application filed July 25, 1885. Serial No. 172,622. (No model.)

*To all whom it may concern:*

Be it known that I, ELIAS B. REQUA, a citizen of the United States, and a resident of Jersey City, in the county of Hudson and State of New Jersey, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification.

The invention relates to improvements in lamp-burners; and it consists in certain novel features of construction hereinafter described, and particularly pointed out in the claims.

The invention which is the subject of this application embraces improvements on the lamp-burner shown in Letters Patent No. 318,030, issued to me May 19, 1885.

Referring to the accompanying drawings, Figure 1 is a top view of a lamp-burner embodying the invention. Fig. 2 is a central vertical longitudinal section of same on the dotted line *a b* of Fig. 1, and Fig. 3 is a central vertical transverse section on the dotted line *c d* of Fig. 1.

In the drawings; A designates the wick-tube, the upper portion of which has parallel sides and ends, while its lower portion is expanded on opposite sides and contracted at opposite ends to form a circular base, B, to which a threaded collar is applied for attachment to the oil-fount. The sides of the lower portion of the wick-tube converge upward and inward, and the ends of same diverge upward and outward, meeting the upper parallel portions of the tube, the whole being made from a single piece of metal.

The peculiar formation of the base of the wick-tube is of great importance, since it permits the use of a wide wick without the necessity of employing a burner-base of undue dimensions, and the said base and tube proper being in a single piece, the expense of making joints or seams therein is avoided, there is no liability of leakage, and the tube is much stronger and able to withstand greater strain without liability of breaking or losing its form.

Around the central portion of the wick-tube A is arranged the burner-base D, which is elliptical in horizontal section, and consists of the perforated bottom E and vertical wall or flange F. The burner-base D is passed centrally over and firmly affixed to the wick-tube, it being held partly by its close fit thereon and partly by the vertical arms G on oppo-

site sides thereof, the lower ends of the arms being inserted through close-fitting slots in the base of the wick-tube, while their upper ends are inserted through similar slots in bottom E and riveted to the inner side of the wall or flange F, as shown in Figs. 1 and 3.

The burner-frame H consists of the vertical body I, resting snugly within the vertical wall F, the horizontal perforated flange J, extending outward from the body I, and the vertical flange L, suitably perforated and ornamented, and passing upward from the outer edges of the horizontal flange J. By reason of the body I resting snugly within the wall F a double thickness of metal is produced, which adds strength to the structure, and the burner-frame and chimney may, while connected together, be applied to or detached from the burner-base.

At one side of the flange L is cut the lip M, and on the opposite side thereof is provided the finger-screw N, the purpose of the lip and screw being to firmly hold the lamp chimney or globe in position.

Within the lower portion of the burner-frame are provided the wick-raising wheels O, one edge of which passes through slots cut in one side of the wick-tube, and which wheels are mounted on a shaft, P, and inclosed by a casing, Q.

Upon the horizontal flange J of the burner-frame is placed the foraminous plate S, having a non-perforated vertical flange, T, on its outer edge, which rests upon the flange J beyond its line of perforations. The central portion of the plate S is removed, so that it may slip over the wick-tube, around which it is provided with the non-perforated vertical flange V, which closely encompasses the upper portion of the tube, and serves to strengthen the plate S and prevent its being easily bent or broken. The flange T aids the flange V in preserving the plate S from breakage and distortion.

The flame-dome W rests upon the horizontal flange J beyond the edges of the foraminous plate S, and on the under side of its horizontal portion X are formed lugs *e*, which impinge the plate S and hold it firmly in position.

Upon the upper side of the horizontal portion X of the flame-dome are furnished three radial ribs, *f*, upon which the chimney or



globe rests, and which not only enable the chimney to set firmly, but permit the passage of air under its lower edge.

It is well known that the lower edges of chimneys are rarely so regular that the chimney will not rock or shake when on the lamp, and it is to obviate this objection that the three ribs *f* are provided. It has been found that three ribs will permit the chimney to rest firmly, while four will not, the latter number operating substantially as a flat surface.

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

1. In a lamp-burner, the combination of the wick-tube, the burner-base D, encompassing the same, and being composed of the bottom E and vertical wall F, the burner-frame H, consisting of the vertical body I, horizontal

flange J, and vertical flange L, the foraminous plate, and a flame-dome, the said body I corresponding in outline with and resting snugly but detachably within the said wall F, substantially as and for the purposes set forth.

2. A lamp-burner consisting of the wick-tube, the burner-base D, secured thereon by straps G, the detachable burner-frame H, the foraminous plate S, and flame-dome W, substantially as set forth.

Signed at New York, in the county of New York and State of New York, this 23d day of July, A. D. 1885.

ELIAS B. REQUA.

Witnesses:

CHAS. C. GILL,

GEO. A. BOWMAN.