

G. HILLEGASS.

Lamp Burner.

No. 93,087.

Patented July 27, 1869.

Fig. 1.

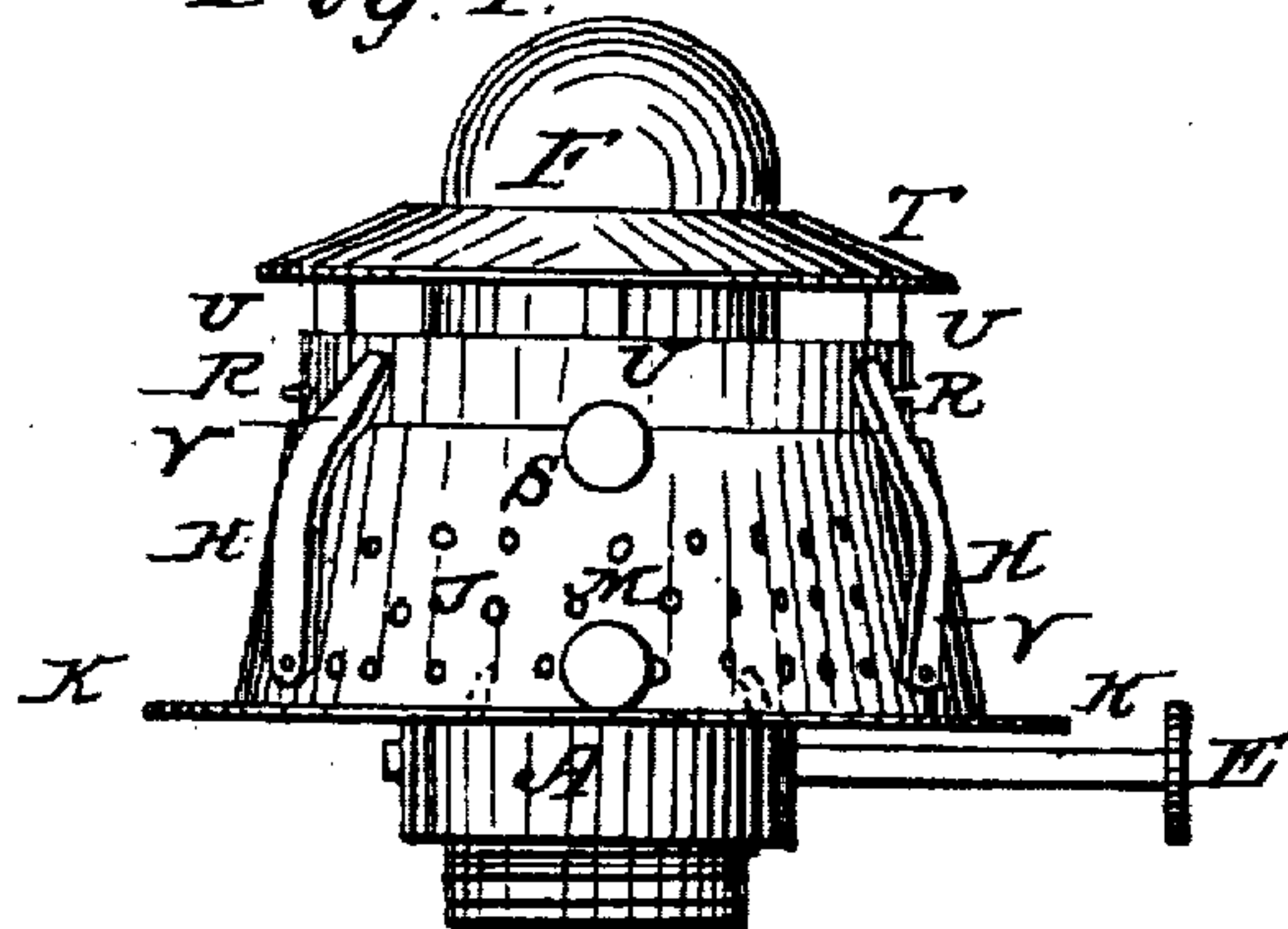


Fig. 2.

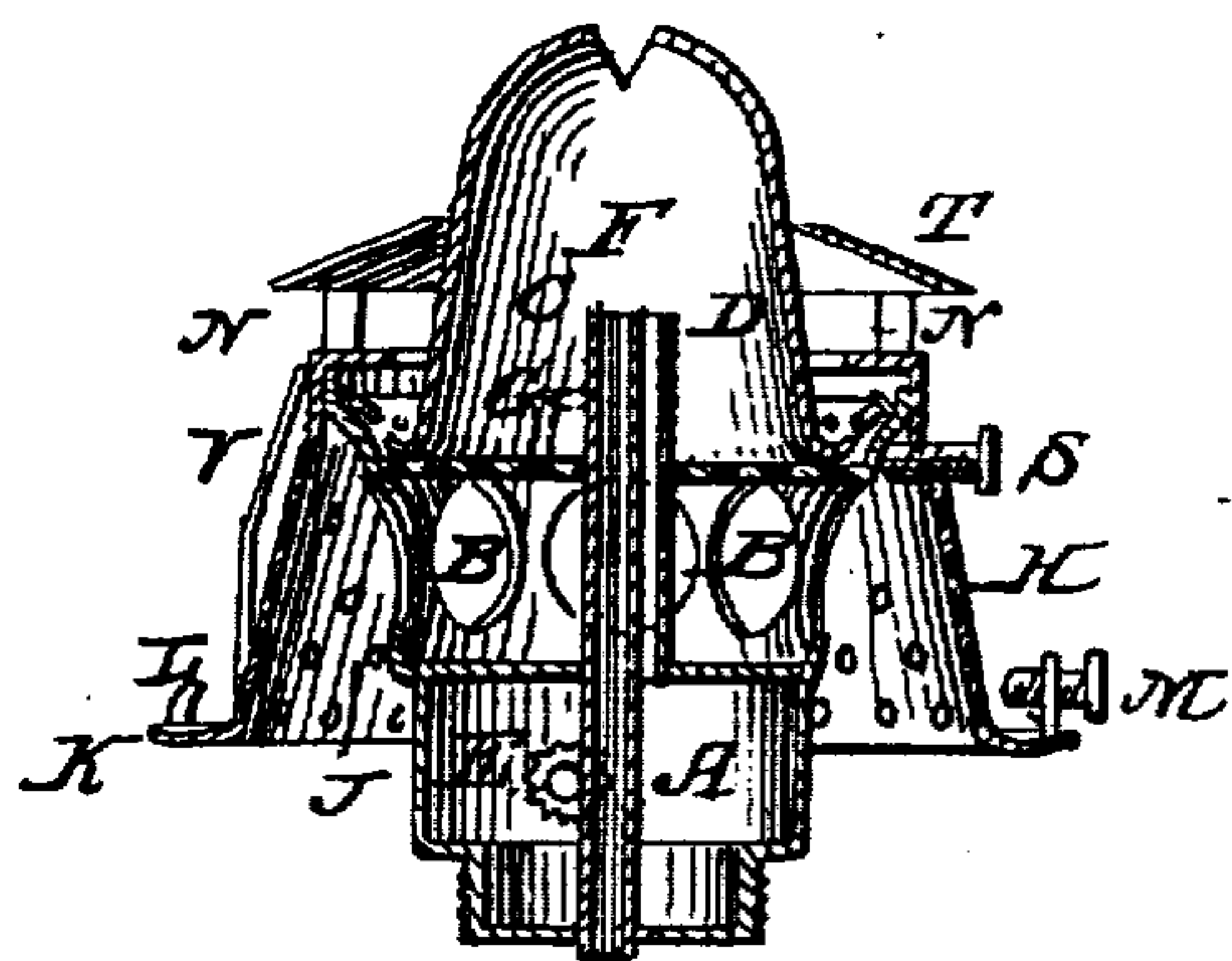


Fig. 3.

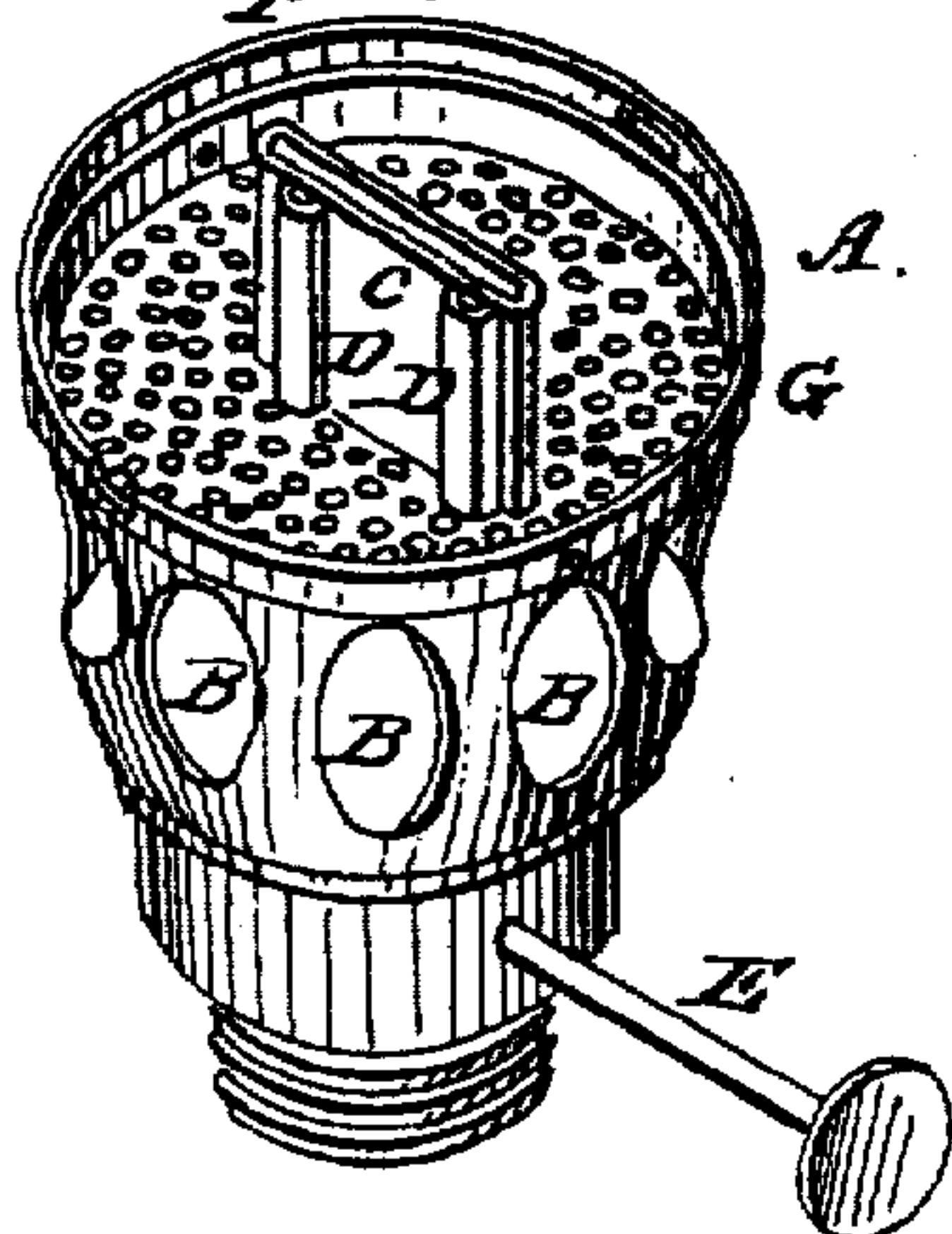
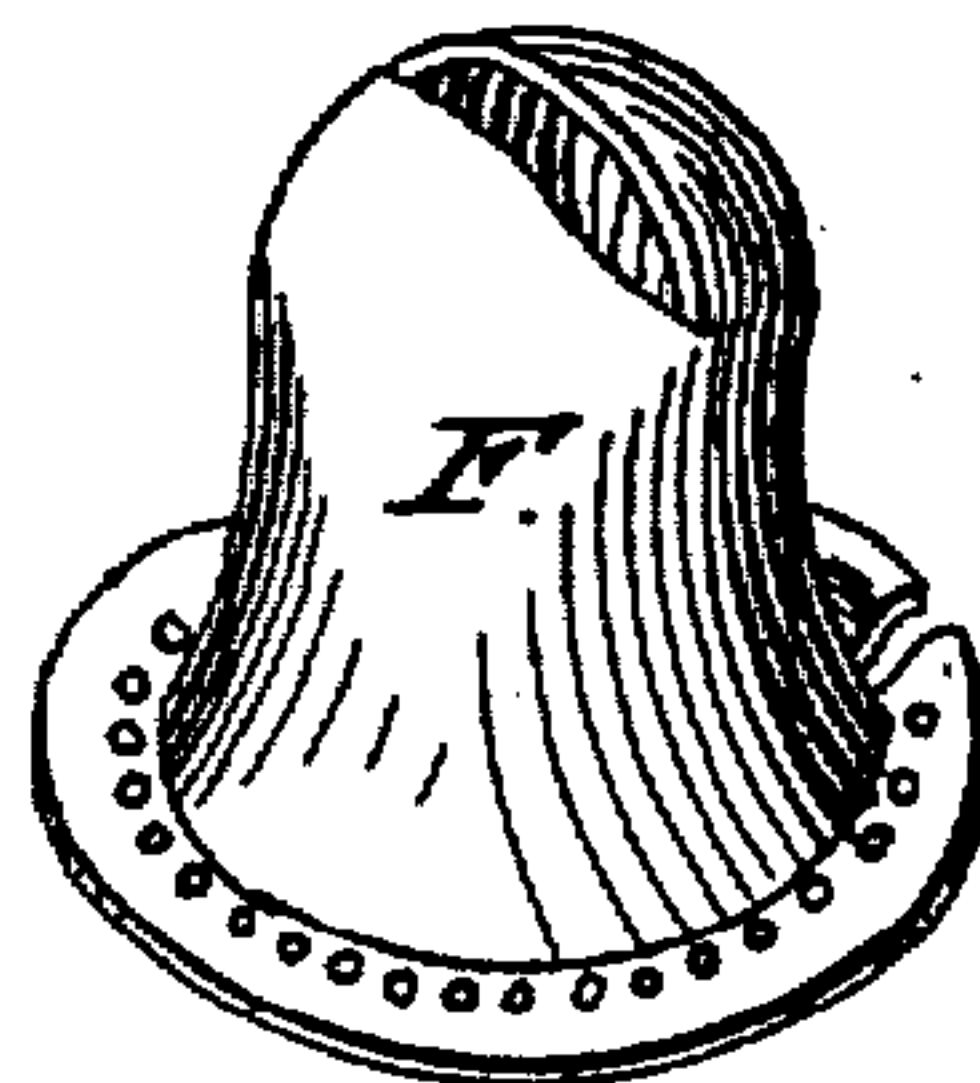


Fig. 4.



WITNESSES

Ab. Klink
John W. Farley

INVENTOR

George Hillegass
by Henry J. Reigart

United States Patent Office.

GEORGE HILLEGASS, OF PHILADELPHIA, PENNSYLVANIA.

Letters Patent No. 93,087, dated July 27, 1869; antedated July 21, 1869.

IMPROVEMENT IN LAMP-BURNERS.

The Schedule referred to in these Letters Patent and making part of the same

To all whom it may concern:

Be it known that I, GEORGE HILLEGASS, of the city of Philadelphia, and State of Pennsylvania, have invented an Improved Burner for Lamps; and I do hereby declare the following to be an exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, making a part of this specification, in which—

Figure 1 represents a perspective view of the burner, with the air-distributor.

Figure 2, a vertical section of the same.

Figure 3, the inner view of burner and wick-tube.

Figure 4, the common dome.

The nature of my invention consists in the construction of the air-distributor on the outside of the burner, having a deflector at top, and outside springs to support a glass chimney, and regulating-screws to hold the air-distributor to the burner.

A represents the inner burner, with its apertures B, wick-tube C, gas-ducts D D, wick-screw E, dome F, and perforated bed-plate G.

Around these I attach my improvement that I style the "air-distributor," that is, a conical cylinder, H, with perforations J around the side, and a rim or flange, K, at the bottom, for a glass chimney to rest upon and be held and fastened by the hook L and thumb-screw M.

An upper flange, N, rests upon the upper edge P of the burner, so as to support the cylinder H, while the cylinder is secured by a slot and pin, R, on each side, and also a thumb-screw, S.

A deflector, T, is attached, by upright posts U, to the upper side of the top flange N, and the curved springs V, on the outside of the cylinder H, are intended for a glass chimney to rest against, and be kept securely in its place.

The advantage of my improvement is to distribute the surrounding air on all sides, and conduct it directly to the flame, so as to consume less oil, while I obtain a clearer and brighter flame.

First, the air rushes upward on the inside of the cylinder H, and passes through the apertures B and G, inside of the dome F, and around the wick-tube to the flame, which increases the flame, and causes it to burn brighter, saving the necessity of raising the wick or consuming more oil.

Second, another portion of the outside air passes into the lower part of the cone H, and through the apertures J, to the outside of the cone, thence upward until it strikes against the lower side of the deflector T, and is conducted between the upper and inner edge of the deflector against the dome F, and also assists in feeding the flame at the top of the dome.

Third, another portion of the outside air passes into the lower part of the cone H, out again through the apertures J, and rushes up between the outside edge of the deflector T and the glass chimney, and assists in driving off the smoke through the chimney, and increasing the draught of the chimney.

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

The movable and perforated air-distributor H, with the deflector T at top, and springs V and regulating-screws S and M at the sides, constructed as herein described, and arranged, in relation to the cone F and burner A, substantially as shown, and for the purposes set forth.

GEORGE HILLEGASS.

Witnesses:

J. FRANKLIN REIGART,
EDM. F. BROWN.