

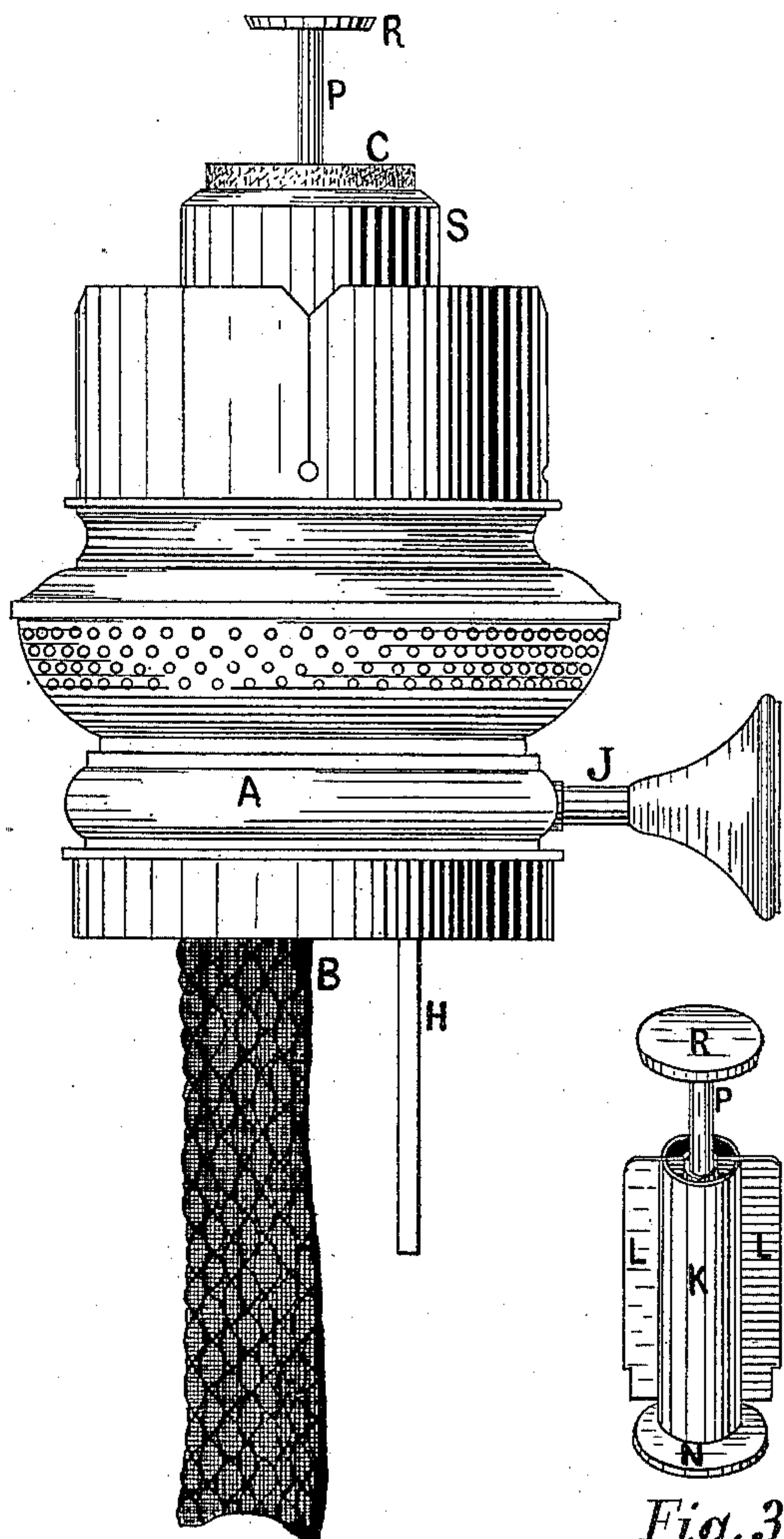
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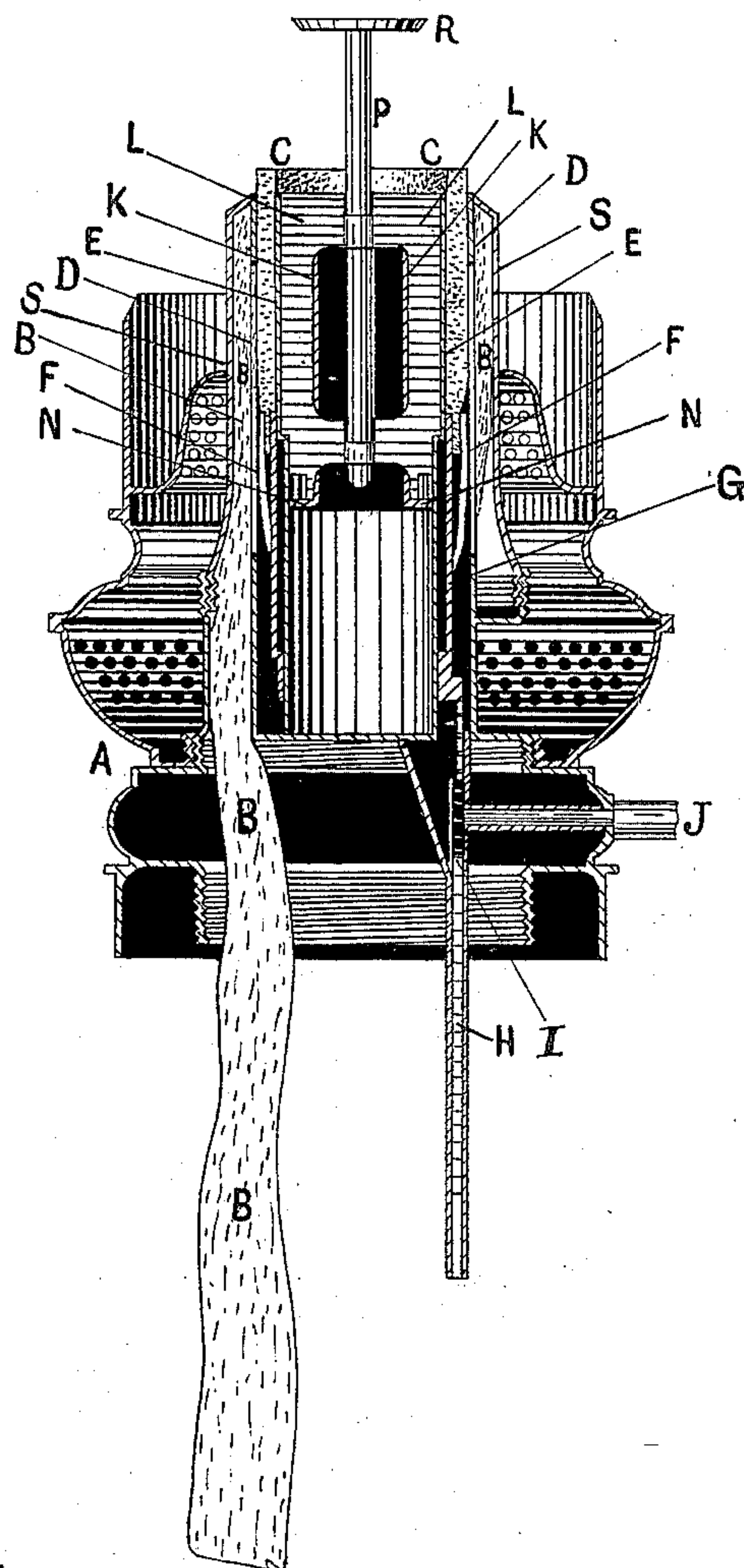
N. S. WAX.  
LAMP BURNER.

No. 299,301.

Patented May 27, 1884.



*Fig. 1.*



*Fig. 2.*

Witnesses.

Chas. S. Gooding.

W. R. Marble

*Inventor.*

Newman D. Waxe,

3

Supernus Walker  
Attorney

(No Model.)

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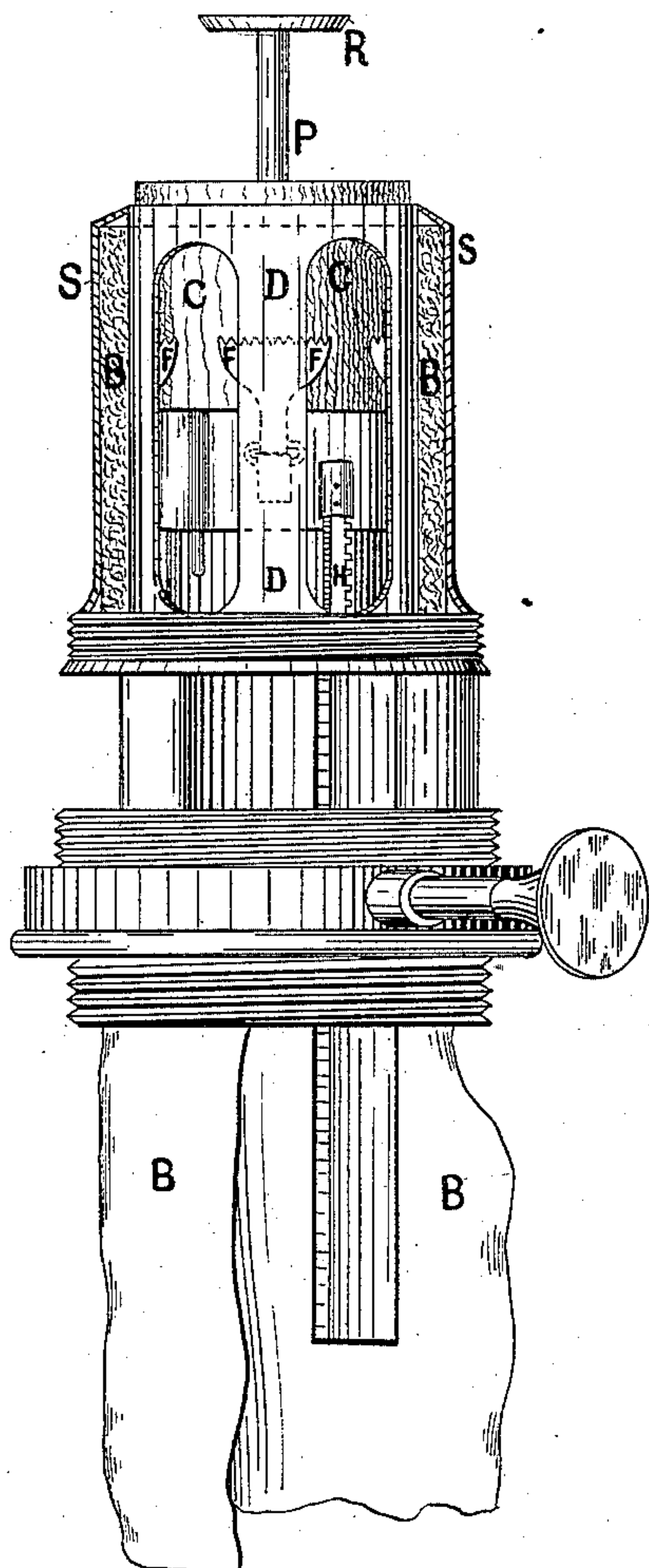


Fig. 4.

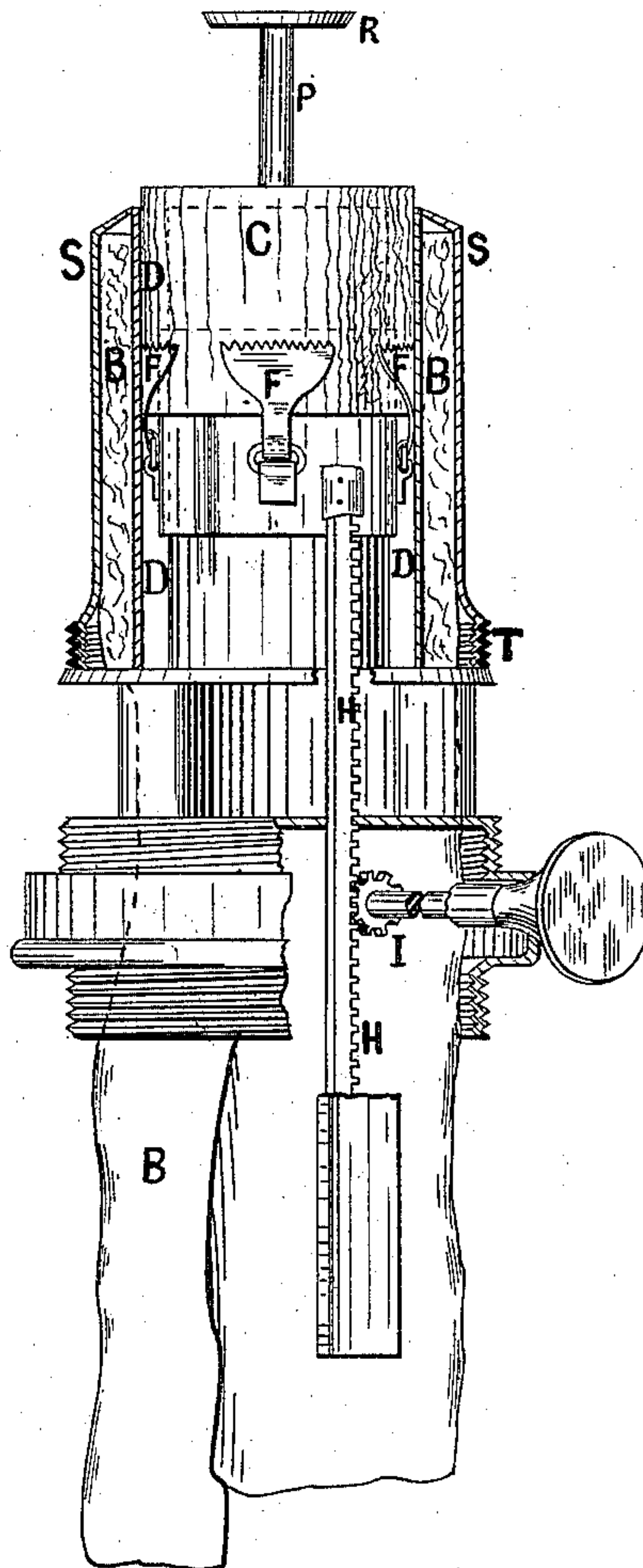


Fig. 5.

WITNESSES:

*Chas. S. Gooding.*

*W. R. Marble*

INVENTOR:

*Newman S. Wax.*

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# UNITED STATES PATENT OFFICE.

NEWMAN S. WAX, OF BOSTON, MASSACHUSETTS.

## LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 299,301, dated May 27, 1884.

Application filed March 29, 1883. (No model.)

*To all whom it may concern:*

Be it known that I, NEWMAN S. WAX, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and useful Improvement in Lamp-Burners, of which the following is a full, clear, precise, and exact description.

The object of my invention is to provide a cheap, simple, and efficient Argand lamp-burner which shall give a very brilliant light without communicating excessive heat to the oil contained within the lamp-reservoir; and it consists in the combination and arrangement of the several parts of the burner, as hereinafter more fully described, and set forth in the claims.

Figure 1 represents a side elevation of an Argand lamp-burner constructed according to my invention. Fig. 2 represents a vertical section of the same. Fig. 3 represents a perspective view of a detached portion of the burner. Fig. 4 represents a vertical sectional elevation of a lamp-burner constructed to embody my invention. Fig. 5 represents a similar view of the same, showing the wick-elevating mechanism.

A represents the base of the burner, provided at its lower end with a screw-thread, by which it is connected to the corresponding collar secured to the top of the lamp-reservoir, as heretofore. The interior portion of the said base A is provided with a semi-annular opening, through which is inserted the auxiliary wick B, the lower end of which extends within the lamp-reservoir, and the upper end portion is formed tubular and fitted over the skeleton tubular frame D, and in contact with the exterior surface of the short adjustable combustion-wick C, which is formed tubular, and fits upon the upper portion of the draft-tube E, and is adjusted vertically thereon by the spring or hinged clamp or ring F, which has inward-projecting teeth at its upper end, which engage with the said short combustion-wick C near its lower end, and is extended downward at several points, or on opposite sides of the short adjusting-tube G, which has connected at one side, or at some convenient point, the upper end of a vertical rack-bar, H, which engages with the teeth of the adjusting-wheel I, secured to the horizontal wick-adjusting rod

J, provided with a milled head, by which it may be rotated, as usual. Within the draft-tube E is provided a smaller concentric air-tube, K, provided with longitudinal wing or side supports, L, which fit within vertical grooves formed within the said draft-tube E, so as to preserve the said air-tube K centrally therein and permit of its removal to cleanse the said draft-tube; and in order to readily remove any cinders or charred portions which may have fallen from the wick C therein, I have provided the lower end of the said air-tube K with an annular flange, N, which fits within the said draft-tube E, and receives thereon all charred portions which may be removed from the combustion-wick, and by the removal of the said air-tube from the draft-tube the same is readily cleaned. Within the center of the said air-tube K is secured the vertical rod P, to the upper end of which is secured the air-deflecting button R, which is thereby elevated a greater distance above the upper end of the said draft-tube E and combustion-wick C than heretofore, by which means, and by means of the said annular flange N, the hot air is carried more centrally through the draft-tube E, and consequently farther from the interior face of the said combustion-wick C, and is then deflected outward into the flame thereof at a higher point from the point of combustion, whereby it (the air) is more intensely heated when it unites with the carbon in the flame, whereby the draft is increased and the combustion is augmented, and consequently an increase of illumination is imparted to the flame and a more perfect combustion produced, rendering the flame very white, as compared with those heretofore constructed produced from this class of burners. The said auxiliary wick B is held at its upper end portion in close contact with the said combustion-wick C by means of a slightly-tapering or conical-shaped tube, S, which has an inwardly-projecting flange at its upper end, which fits upon or contacts with the outer face of the upper end of the said draft-tube E, its lower end being provided with a screw-thread to connect it with a corresponding screw-threaded socket or ring, T, provided just above the air-duct formed at one side of the base portion of the burner.



The base of the burner is provided with the usual perforated air-deflectors, U and V, and a chimney-holding adjustable sectional ring, as heretofore employed for the purpose.

5 Having thus described my invention, what I claim is—

1. The combination, in an Argand lamp-burner having a cylindric draft-tube, E, of the air-tube K, provided with an annular flange, 10 N, and deflecting-button R, secured to the vertical rod P, and the flanges L, constructed and arranged substantially as described, as and for the purposes set forth.

2. In an Argand lamp-burner, the combination, with the draft-tube E, of the auxiliary 15 wick B, combustion-wick C, and conical tube S, having an inward-projecting flange at its

upper end and a screw-thread at its lower end, by which it is connected to the socket-ring T, substantially as described, as and for 20 the purposes set forth.

3. In an Argand lamp-burner, the combination, with the draft-tube E, of the auxiliary wick B, combustion-wick C, adjusting-clamp F, skeleton frame tube D, adjusting-tube G, 25 vertical rack-bar H, and toothed adjusting-wheel I, whereby the said combustion-wick may be raised or lowered independent of the said auxiliary wick, as and for the purposes set forth.

NEWMAN S. WAX.

Witnesses:

SYLVENUS WALKER,  
CHAS. S. GOODING.