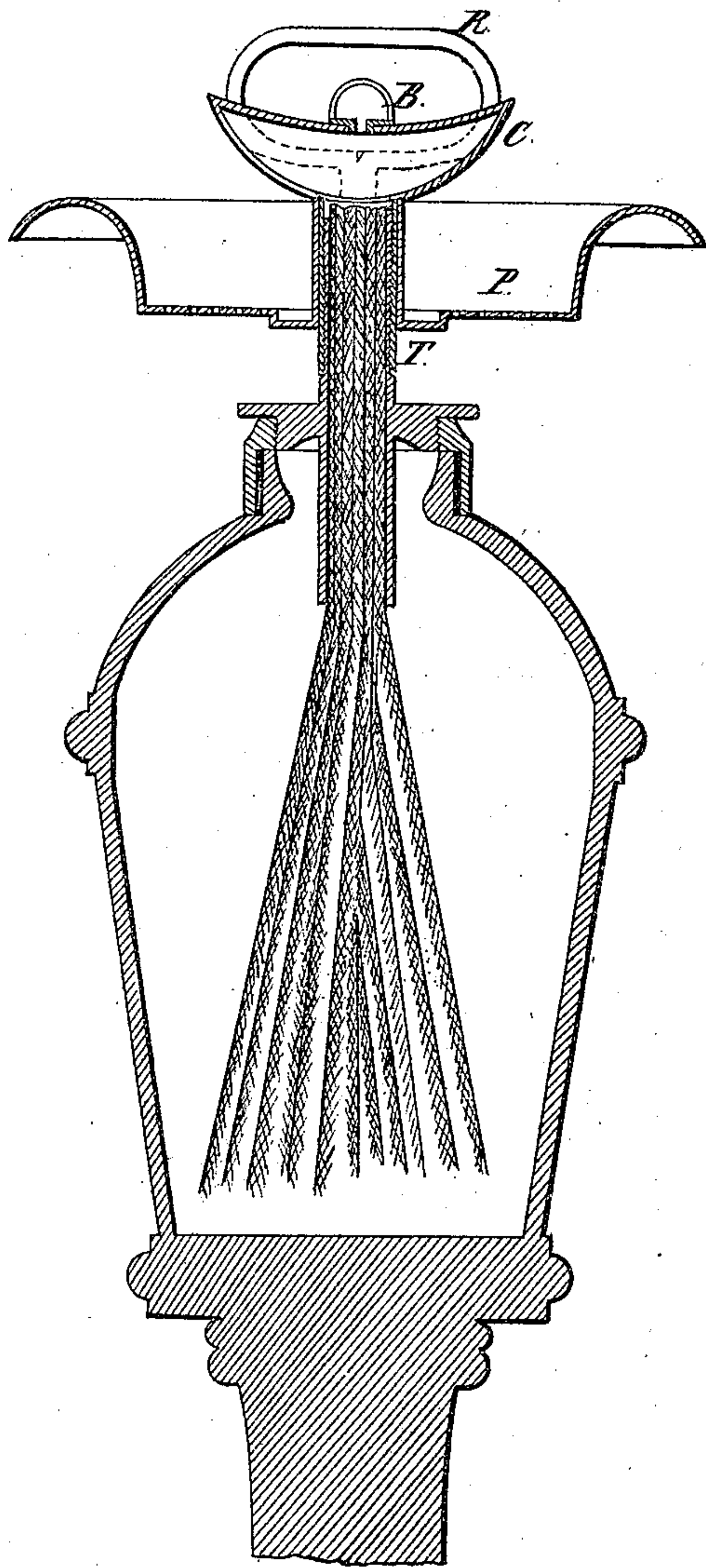


C. B. LOVELESS.  
FLUID LAMP.

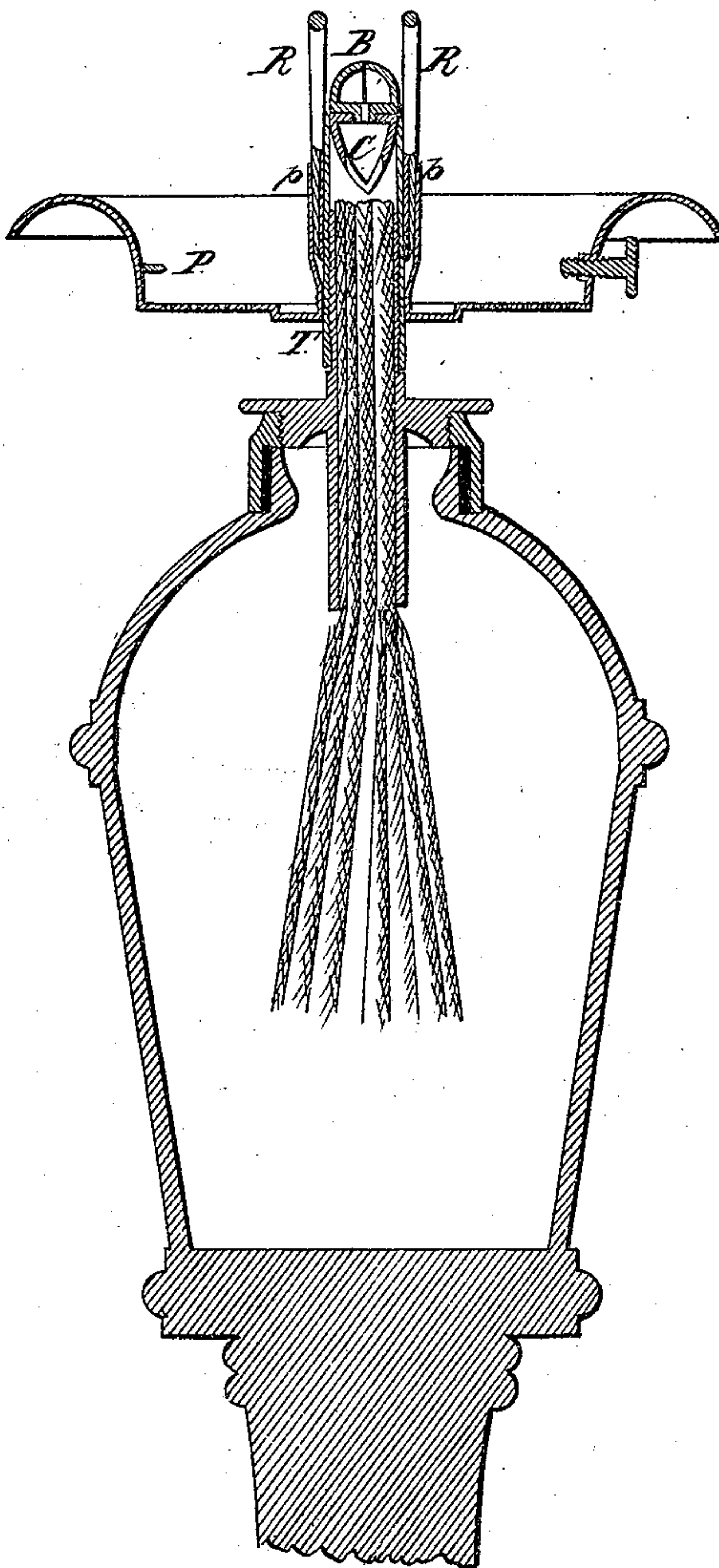
No. 31,179.

Patented Jan. 22, 1861.

*Fig. 1.*



*Fig. 2.*



*Witnesses:*  
*Jas. O'Clair*  
*W. A. Dorsey*

*Inventor:*  
*C. B. Loveless*  
*per Geo. Patton atty*



# UNITED STATES PATENT OFFICE.

C. B. LOVELESS, OF TOMS RIVER, NEW JERSEY.

## VAPOR-LAMP.

Specification of Letters Patent No. 31,179, dated January 22, 1860.

*To all whom it may concern:*

Be it known that I, C. B. LOVELESS, of Toms River, in the county of Ocean and State of New Jersey, have invented a new and useful Improvement in Fluid-Lamps; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, forming part of this specification, in the several figures of which similar characters of reference denote the same part.

Figure 1, is a vertical section taken longitudinally through the center of the gas chamber. Fig. 2, is a vertical section taken at right angles thereto.

The object of this invention is to produce a broad gas flame from an ordinary wick fluid lamp, and its nature consists in having attached to the top of the wick tube a burner, and a crescent shaped gas chamber, which serves to draw the flame laterally, and give a broad thin flame instead of burning straight up in the center. On each side of this gas chamber is a pocket against the side of the tube into which fits the branches of two rings which are flattened or elongated in the direction of the gas chamber, and which perform the double office of conducting the heat to the tube, and thereby generating the gas; and also of assisting the crescent shaped chamber in drawing the flame laterally, and giving it an even rounding shape at the top, so as to prevent it from burning up pointed and smoking at the ends of the flame.

The upper part of the wick tube screws on the lower part so as to regulate the amount of flame as desired, by raising or lowering it.

In the drawing T, represents the tube, having the burner B, and the crescent shaped gas chamber C, at its top, R, the heat conducting rings whose branches fit into the pockets *p*, on each side of tube T, and P the

circular plate around the tube on which the shade rests. So that the heat being conducted to the tube by the rings R, the gas is generated and passing into the chamber C, is ignited at the opening in burner B, and this chamber C, being crescent shaped attracts the flame and spreads it laterally, the rings R, not only conducting the heat for generating the gas but assisting the gas chamber C, to spread the flame laterally and preventing it from smoking by giving it the rounding shape as above described, thus effecting the desired object of producing a broad, thin, gas flame from an ordinary fluid lamp, the flame being regulated by raising or lowering the upper part of the tube as before described.

I know that heat conducting rings for the generation of gas have been used before, but mine being elongated in the direction of the crescent shaped gas chamber serve the double purpose of generating gas, and also of spreading the flame laterally, and giving the rounding shape at the top. Therefore I disclaim the heat conducting rings of themselves considered, but

What I do claim and desire to secure by Letters Patent, is,

The combination with the wick tube T, of the crescent shaped gas chamber C, having the burner B, and the elongated heat conducting rings R, performing the double function of generating gas and aiding in the lateral spreading of the flame, the whole being constructed and operating substantially in the manner and for the purpose set forth.

In testimony whereof I have hereunto signed my name before two subscribing witnesses.

C. B. LOVELESS.

Witnesses:

W. NEVINS DORSEY,  
JOHN S. HOLLINGSHEAD.