

J. P. EGAN.  
Lamp Burner.

No. 47,625.

Patented May 9, 1865.

Fig. 1.

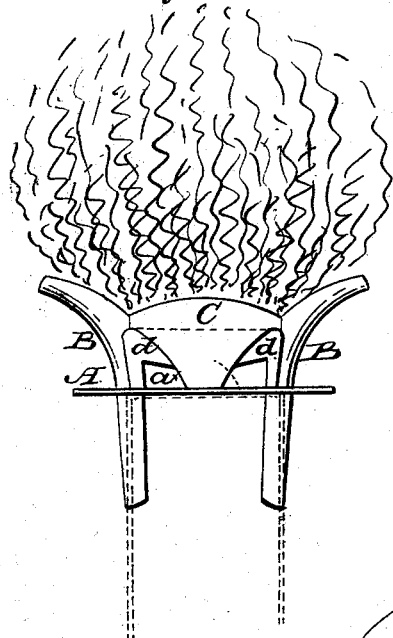


Fig. 2.

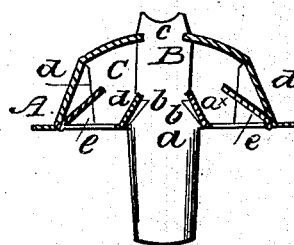
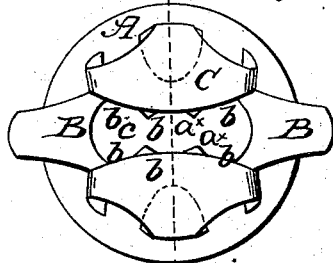


Fig. 3.



Witnesses  
Wm. Brown  
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# UNITED STATES PATENT OFFICE.

JAMES P. EGAN, OF ZANESVILLE, OHIO.

## IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. 47,625, dated May 9, 1865.

### *To all whom it may concern:*

Be it known that I, JAMES P. EGAN, of Zanesville, in the county of Muskingum and State of Ohio, have invented a new and useful Improvement in Lamp-Burners; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side elevation of my invention; Fig. 2, a vertical section of the same, taken in the line *x x*, Fig. 3; Fig. 3, a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new and useful attachment to be applied to the wick-tubes of lamp-burners for the purpose of spreading the flame and admitting of the latter being supplied with a requisite quantity of air to support proper combustion under all adjustments of the wick.

A represents a circular plate of sheet metal, having an oblong opening, *a*, made centrally in it, with a lip, *a\**, projecting upward from each side and inclined slightly inward or toward each other, said lips being bent or corrugated by swaging or otherwise, so as to form air-passages *b* between the lips *a\** and the sides of the wick-tube, the plate A being fitted on the wick-tube, as shown in Fig. 1, the tube being shown in red outline.

B B represent two guides or channels, which are of semicircular form in their transverse section, and pass through the oblong slot or opening in the plate A at each end thereof. These guides or channels extend down below the plate A nearly parallel with each other, and fit over the rounded narrow edges of the wick-tube, while the upper parts

of said guides or channels above plate A flare outward from each other, forming about a quarter-circle each, as shown clearly in Fig. 1.

C represents a cap on the plate A, which may be of quadrilateral form, and has a slot, *c*, extending entirely across its upper or face side from one channel or guide B to the other. (See Fig. 3.) This cap also has an opening, *d*, at each angle or corner, and openings *e* are made in the plate A within the cap C, any suitable number of the latter being used. The cap C extends some distance above the top of the wick-tube, and the wick projects a trifle above the upper edges of the lips *a\**. The wick, however, may be adjusted higher or lower, as may be desired. The upper flaring parts of the channels or guides B B spread the flame, as will be seen by referring to Fig. 1, while the air that passes into the cap C through the openings *b d e* is made to impinge against the flame at the top of the wick, insuring to the former a requisite supply of oxygen to support proper combustion for illuminating purposes.

I would remark that the plate A may merely be fitted loosely on the wick-tube or attached permanently to it, as desired.

I claim as new and desire to secure by Letters Patent—

The combination of the plate A, provided with openings *e* and an oblong opening, *a*, with a corrugated lip, *a\**, at each side of the latter, the curved or flaring channels or guides B B, and the cap C, having openings *d* at its side, and a slot, *c*, in its upper or face side, all constructed and arranged to be applied to a wick-tube of a lamp to operate substantially as and for the purpose herein set forth.

JAMES P. EGAN.

Witnesses:

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