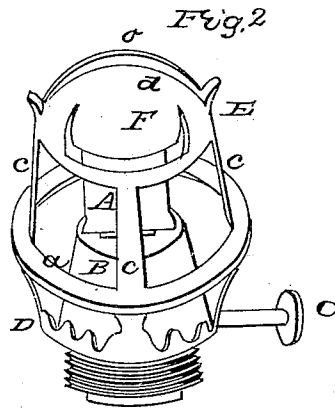
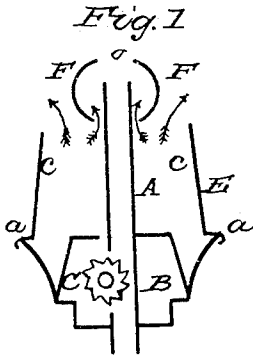


A. B. HENDRYX.
Lamp Burner.

No. 49,680.

Patented Aug. 29, 1865.



Inventor:

Andrew B. Hendryx

Witnesses

Wilson H. Clark

Herbert Beebe

In his atty

John E. Earle

UNITED STATES PATENT OFFICE.

A. B. HENDRYX, OF DERBY, CONNECTICUT, ASSIGNOR TO HIMSELF, H. A. SHIPMAN, AND ROBERT HOADLEY, OF SAME PLACE.

IMPROVEMENT IN KEROSENE-LAMP BURNERS.

Specification forming part of Letters Patent No. 49,680, dated August 29, 1865.

To all whom it may concern:

Be it known that I, ANDREW B. HENDRYX, of Derby, in the county of New Haven and State of Connecticut, have invented a new and useful Improvement in Kerosene-Lamp Burners; and I do hereby declare the following to be a full, clear, and exact description of the same, when taken in connection with the accompanying drawings and the letters of reference marked thereon, and which said drawings constitute part of this specification, and represent, in—

Figure 1, a perspective view, and in Fig. 2 a central vertical section.

My invention relates to an improvement in that class of kerosene-lamp burners which are designed to burn without the necessity of a chimney, its objects being to produce a burner which will more perfectly consume the carbon, and at a less cost of construction than the burners for the same class now in use.

To enable others skilled in the art to construct my improvement, I will fully describe the same as illustrated in the accompanying drawings.

A is the wick-tube, fixed to a neck, B, provided with a screw-thread by which to secure it to the lamp, is also furnished with an adjusting-screw, C, in the usual manner for similar burners.

D is the basket surrounding the neck B, and supports the dome E, the two being secured together in any convenient or known manner.

The construction of the dome, which forms the principal feature of my invention, is as follows: It is first "struck up" in dies prepared for the purpose, forming a rim or flange, *a*, the side and spherical end uncut; then open the sides by removing all the metal save enough to form supports *c* for the spherical part *d*. This removes a large portion of the weight of the dome, and permits an unobstructed passage of air around the tube to keep it cool, and thereby prevent the generation of gases within the lamp.

In order to perfectly consume the carbon, it is necessary to mingle atmospheric air with the flame at or very near the lighted end of

the wick, and it is further necessary that only a sufficient amount of air should be admitted for this purpose. This has been partially accomplished by inserting a separate piece of metal around the tube, so as to leave a narrow opening around the tube for the admission of air; but this arrangement fails, inasmuch as the said piece of metal does not close the dome, but permits more air to pass up over the edge of the said piece, which is not required, and therefore partially defeats the object of the burner.

In my invention this difficulty is entirely overcome. Instead of inserting a separate piece of metal I cut through the two sides of the dome, (after having first cut the opening *o* for the flame,) as seen in Fig. 1, forming on each side a tongue, F, which I bend in, as seen in Fig. 2, to form the air-space *i*. This may be more or less by bending the tongues more or less near to the tube A, the surplus air passing out, as denoted by arrows in black, Fig. 2, while red arrows denote the passage of air for the purpose of supporting combustion.

Thus I produce a burner which will burn perfectly without a chimney, reduced in cost, inasmuch as a large amount of metal is removed, owing to the construction of the dome, which does not require that the passage of air should be obstructed, and avoiding the use of an extra piece around the burner to produce but partially the result fully accomplished by the tongues F. Therefore,

Having, as fully shown, produced a better and cheaper burner than heretofore produced, I claim as new and useful and desire to secure by Letters Patent—

1. The combination of the tongues F F with the tube A, substantially as and for the purpose specified.
2. A dome constructed in the manner and for the purpose specified, when combined with the tube of burners.

A. B. HENDRYX.

Witnesses;
SYLVESTER BARLOW,
N. S. JOHNSON.