E. L. BRYANT.

LAMP-BURNERS.

No. 194,327. Patented Aug. 21, 1877.

Fig. 1.

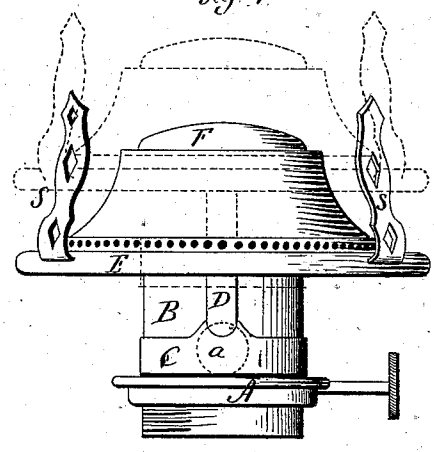


Fig. 4.

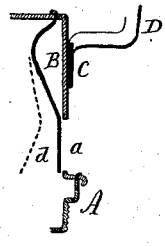


Fig. 3.

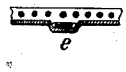
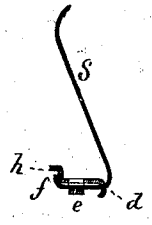


Fig. 2.



Witnesses.

J. H. Shumway

G. A. Pitson.

Edson L. Bryant
Inventor.

By Atty.

Wm. Earle

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

EDSON L. BRYANT, OF ANSONIA, CONNECTICUT, ASSIGNOR TO WALLACE & SONS, OF SAME PLACE.

IMPROVEMENT IN LAMP-BURNERS.

Specification forming part of Letters Patent No. **194,327**, dated August 21, 1877; application filed July 27, 1877.

To all whom it may concern:

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

Figure 1, side view; Figs. 2, 3, and 4, detached views.

This invention relates to an improvement in lamp-burners designed for burning hydrocarbons, and with special reference to burner for which Letters Patent were granted to this applicant, dated February 20, 1877, No. 187,595, parts of which are applicable to other constructions of burner. In the said patent a vertical cylinder is arranged around the wick-tube as a part of the base, and around this tube is a sleeve movable vertically; and to this sleeve the chimney-support and deflector are attached, so that the deflector and chimney may be raised to expose the wick for lighting, &c.; and through the said vertical cylinder an opening is made for filling the lamp, exposed by raising the said sleeve. The object of this invention is the arrangement of a valve at said opening, so that when the sleeve is raised the opening will be closed, but in such manner that the simple introduction of the filler-spout will open the valve, and in such an arrangement the first part of invention consists. The second part consists in the peculiar method of securing the chimney-springs to the chimney-rest, as more fully hereinafter described.

A is the base of the burner, provided with the usual screw-thread, wick-tube, and wick-adjuster. Around the wick-tube, and substantially as a part of the base, is a vertical cylinder B. Around this cylinder a sleeve, C, is placed so as to slide freely up and down, and from which arms D extend outward and upward to support the chimney-rest E and deflector F, in substantially the same manner as in the patent before referred to. Through the cylinder B an aperture, *a*, is made, as seen in Fig. 4 and in broken lines Fig. 1, and so as to be covered by the sleeve when it is down and the parts in normal condition; but when the sleeve and the connected parts are raised, as seen in Fig. 4 and in broken lines Fig. 1, the aperture is exposed so that the spout of a filler may be inserted and the oil flow therefrom into the lamp.

In order to protect this opening at other times than filling, as when the parts are raised for the purpose of lighting, a spring-valve, *d*, is arranged upon the inside of the cylinder, as seen in Fig. 4, so as to cover the aperture *a;* but with a pressure so slight that the simple insertion of the filler-spout will open the valve, as indicated in broken lines, and return to its closed position when the spout is removed.

S, the chimney-holding springs, usually three in number, are secured by passing the lower end through an aperture, *a*, in the edge of the chimney-rest, then through a loop, *e*, struck down from the rest, as seen in Figs. 2 and 3, and the inner end *f* turned up onto a shoulder, *h*, inside the chimney-rest, as seen in Fig. 2. This firmly holds the spring in its position, and avoids the use of rivets, solder, or other fastenings. This part of the invention is applicable to any other construction of burner.

I do not broadly claim a lamp-burner constructed so that the lamp may be filled without removing the burner.

I claim—

1. The combination, in a lamp-burner, of a cylinder around the wick-tube, the said cylinder constructed with a filling-aperture, a vertically-sliding sleeve on said cylinder, and an automatic valve inside said filling-aperture, substantially as described.

2. In a lamp-burner, the method herein described for securing the chimney-springs, consisting in the insertion of the lower end of the spring through the edge of the chimney-rest, and through a loop upon said rest, and turned upon an internal shoulder, substantially as described.

EDSON L. BRYANT.

Witnesses:
L. L. SMITH,
T. J. WOOD.