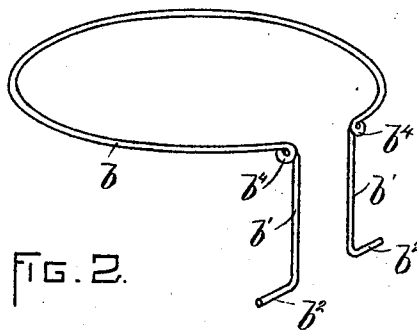
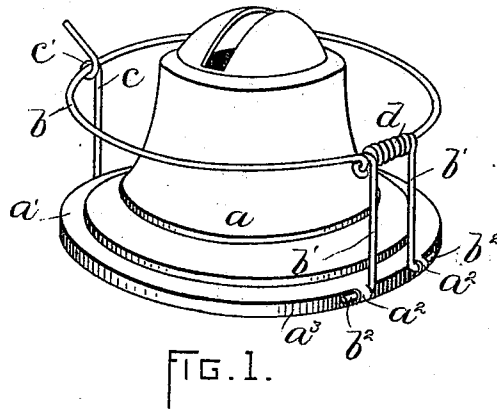


(No Model.)

B. P. LUCE.
LAMP BURNER.

No. 501,284.

Patented July 11, 1893.



WITNESSES:

A. D. Harrison.

J. P. S. P. Leach.

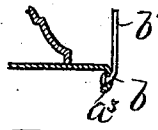


FIG. 3.

INVENTOR:

by B. P. Luce,
Might, Brown & Co. attys.

UNITED STATES PATENT OFFICE.

BARTLETT P. LUCE, OF BOSTON, MASSACHUSETTS.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 501,284, dated July 11, 1893.

Application filed December 22, 1892. Serial No. 456,037. (No model.)

To all whom it may concern:

Be it known that I, BARTLETT P. LUCE, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and useful Improvements in Lamp-Burners, of which the following is a specification.

This invention relates to lamp burners of the class shown in Letters Patent of the United States No. 481,729, granted to me August 30, 1892. In said patent, I show a lamp burner having a series of independent elastic chimney-holding arms projecting upwardly from its base and adapted to bear independently on a cylindrical chimney at their upper ends, and a reinforcing spring band engaged with said arms and provided with a closing or contracting spring of helical form, the arrangement being such that the spring band presses inwardly upon the chimney-holding arm, holding the latter in yielding contact with the chimney.

My present invention has for its object to provide a chimney-holding band adapted to surround and yieldingly embrace the burner at a suitable height above the chimney supporting flange of the chimney, so that the chimney may be held independently of said arms.

The invention consists in a lamp burner provided with a contractile chimney holding band formed to bear directly upon and surround the chimney and supported at a suitable height above the burner to enable it to hold the chimney.

The invention also consists in a lamp burner provided with a contractile chimney-holding band, having a closing or contracting spring of helical form; and supporting arms for said band, two of which are integral with the band, and are formed by bending downwardly the ends of the piece of wire of which the band is made and engaging the lower ends of the bent-down portions with the base of the burner, said arms being adapted to support the band in its operative position above the base of the burner.

The invention also consists in certain minor details, all of which I will now proceed to describe.

Of the accompanying drawings, forming part of this specification, Figure 1 represents a perspective view of a lamp burner provided

with my improvement. Fig. 2 represents a perspective view of the chimney-holding band detached from the burner. Fig. 3 represents a sectional view, showing a modification.

The same letters of reference indicate the same parts in all the figures.

In the drawings, *a* represents a lamp burner, having the base or chimney-seat *a'* formed to support the lower end of a chimney, the base of which is preferably cylindrical like the ordinary sun burner chimney.

b represents the chimney-holding band, which is made of suitable elastic wire or metal, and is formed to entirely surround the chimney and to bear yieldingly thereon. I prefer to make the main portion of the band of a single piece of wire, the ends of which are bent downwardly to form substantially vertical arms *b' b'* engaged at their lower ends in any suitable way with the base of the burner, said lower ends being here shown as bent outwardly at *b² b²* and passed through eyes *a² a²* formed on the flange *a³* of the base of the burner, as shown in Fig. 1, the eyes *a²* and bent ends *b²* being so arranged as to permit the arms *b' b'* to have some lateral play toward and from each other.

c (Fig. 1) represents an arm or standard, affixed at its lower end to the base of the burner and projecting upwardly, its upper end being engaged with the band *b* at or near the center of the length of said band, or at a point at the opposite side of the burner from the arms *b' b'*. I prefer to engage the standard *c* with the band *b* by forming a loop *c'* in said standard, said loop surrounding the wire of the band *b*. I also prefer to extend the standard *c* above the loop *c'* and bend the extended portion outwardly, so that it stands in an inclined position and therefore serves as a guide *c²* to aid in inserting the chimney in the band *b* when the chimney is being applied to the burner. It is obvious that there may be more than one of the arms or standards *c*, if desired.

d represents a closing or contracting spring, which is of helical form and is engaged at its ends with the free end portions of the band *b*, said spring normally closing or contracting, and therefore contracting the band and causing it to bear with a yielding pressure upon a chimney inserted in it. The ends of the spring

d may be engaged with the band in any suitable way as by means of eyes or loops $b^4 b^4$, formed by bending the wire of the band at the point where said wire is bent downwardly to form the arms $b' b'$.

I do not limit myself to the described means of engaging the arms $b' b'$ with the burner base, as said arms may be rigidly instead of loosely engaged with said base, if preferred. If the arms are rigidly engaged, they may be passed through orifices in the base, formed to closely receive them, the ends of the arms being bent inwardly, as shown at b^5 , Fig. 3, and headed or upset on the inner surface of the flange a^3 of the burner base.

It will be seen that the construction shown in Fig. 1 enables the band b to hold the chimney, without the aid of the usual chimney-holding arms, so that the cost of the burner is materially reduced.

It will be seen that the band, with its closing spring, enables the burner to securely hold chimneys of different sizes, it being well-known that there is a considerable variation in the sizes of chimneys intended for the same size burner. It will also be seen that the band permits expansion of the chimney due to heat, without liability of injury to the chimney.

The band b may be made in two parts, hinged or jointed together at or about the center of its length.

I claim—

1. A lamp burner, having a chimney supporting flange and a contractile yielding band located above the said flange and adapted to entirely surround and yieldingly grasp the base of a chimney at a point sufficiently ele-

vated above said flange, to enable the band to securely hold the chimney in place, the band being provided with a fixed support intermediate of its ends, movable supports at its ends and a helical spring connecting its ends and tending to draw them together as set forth.

2. A lamp burner, provided with a chimney-embracing yielding band having downwardly-projecting arms integral with the band, said arms being formed on the free ends of the band and movably engaged at their lower ends with the base of the burner, and a closing or contracting spring of helical form engaged with the band and extending across the space between said arms, as set forth.

3. In a lamp burner, the combination of an upwardly-projecting arm or standard outside of the chimney support or seat, a chimney-embracing yielding band engaged at or near its central portion with the upper portion of said standard and bent downwardly at its ends to form supporting arms or standards which are movably engaged with the base of the burner, and a closing or contracting spring of helical form engaged with the band and extending across the space between said arms, as set forth.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, this 6th day of December, A. D. 1892.

BARTLETT P. LUCE.

Witnesses:

C. F. BROWN,

A. D. HARRISON.