No. 793,411. PATENTED JUNE 27, 1905.

R. BLACK.

LAMP BURNER.

APPLICATION FILED SEPT. 8, 1904.

Fig. 1

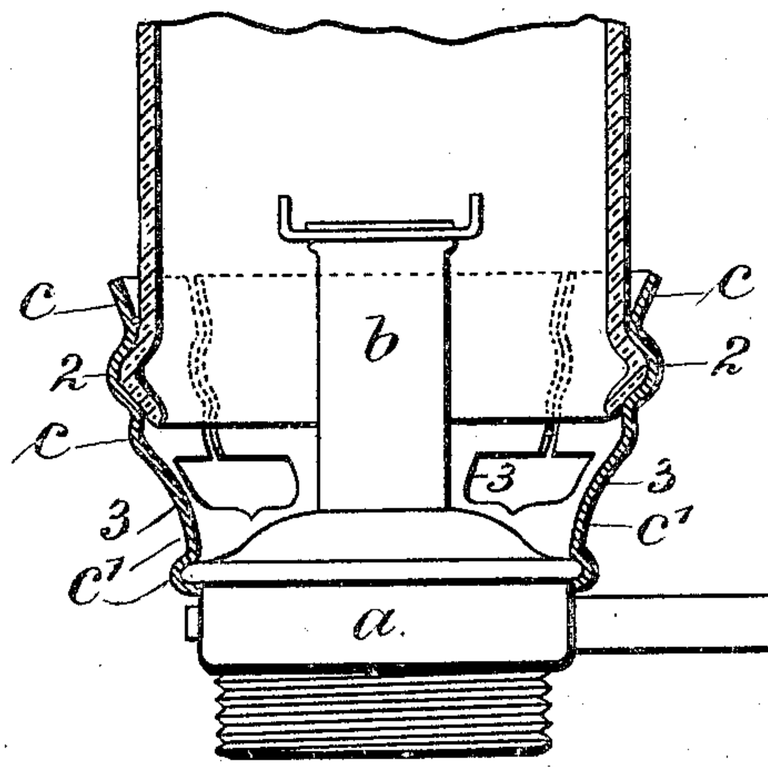


Fig. 3.

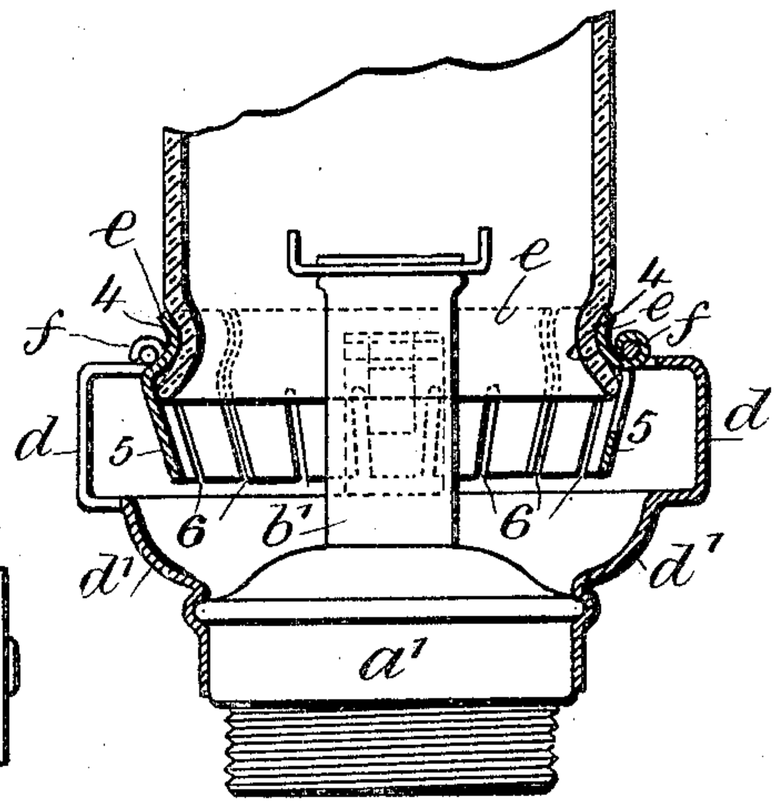


Fig. 2.

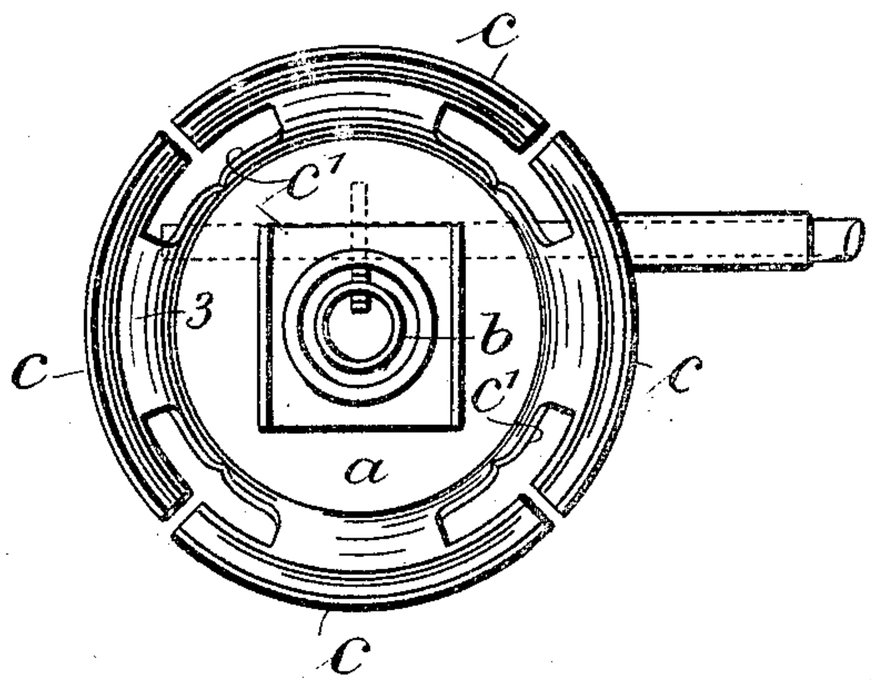
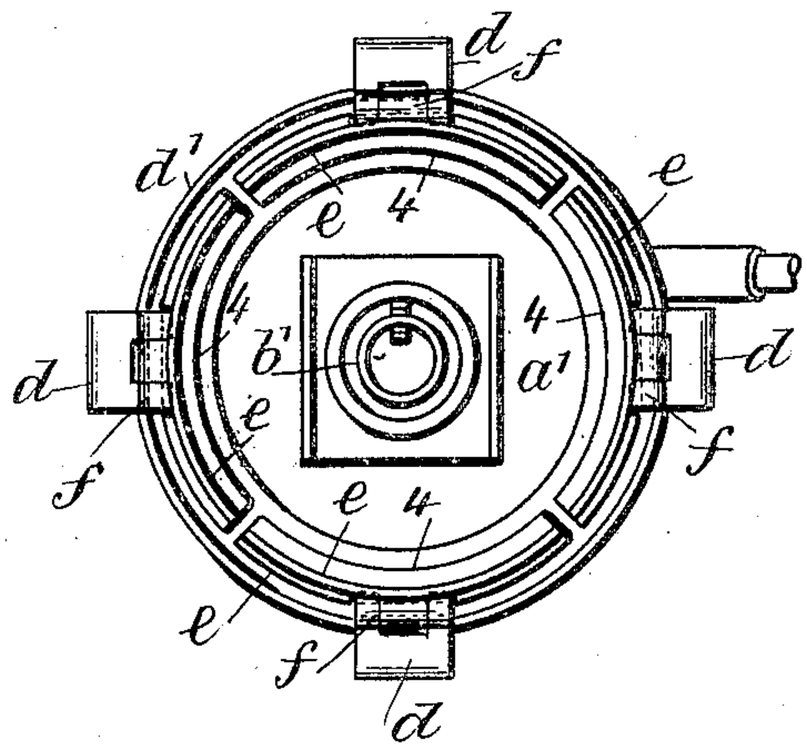


Fig. 4.



Witnesses
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No. 793,411. Patented June 27, 1905.

UNITED STATES PATENT OFFICE.

ROBERT BLACK, OF NEW YORK, N. Y., ASSIGNOR TO THE DRESSEL RAILWAY LAMP WORKS, OF NEW YORK, N. Y., A CORPORATION OF NEW YORK.

LAMP-BURNER.

SPECIFICATION forming part of Letters Patent No. 793,411, dated June 27, 1905.

Application filed September 8, 1904. Serial No. 223,732.

To all whom it may concern:

Be it known that I, ROBERT BLACK, a citizen of the United States, residing in the borough of Manhattan, city, county, and State of New York, have invented an Improvement in Lamp-Burners, of which the following is a specification.

My invention relates to a lamp-burner; and the object thereof is the production of an article of this class provided with means in and by which the lamp-chimney may be supported with a yielding or spring tension, so as to compensate for the expansion and contraction of the parts caused by the rise and fall in the temperature thereof, said means being so placed on the base of the burner as to come entirely beneath the flame, thereby offering no obstruction to the dissemination of the rays of light from the lamp.

In carrying out my invention I employ a base, a suitable burner connected thereto, a segmental band having a circumferential rib and resultant groove therein adapted to receive a corresponding rib in the lamp-chimney to support the said chimney, and means for supporting the said segmental band.

In the drawings, Figure 1 is a partial sectional elevation illustrating my improved lamp-burner. Fig. 2 is a plan of the same. Figs. 3 and 4 are a partial sectional elevation and plan, respectively, of a modified form of my invention.

Referring particularly to Figs. 1 and 2, *a* represents a base of any desired character, and *b* a suitable burner attached to the same.

c represents a band, preferably made of metal and provided with a circumferential rib 2 and a resultant groove. The band *c* is divided into any desired number of segments, and each segmental portion is connected to the base *a* by a spring-arm 3 or other equivalent yielding means.

In the drawings I have shown the segmental portions of the band and the arms 3 as integral with an annulus or sleeve *c'*, which is secured to the base *a* by being spun around a suitable rib provided on the same for this purpose. It will be apparent, however, that any other convenient structure may be employed for connecting the segmental portions of the band and the arms to the base without departing from the nature and spirit of my invention and also that in placing the chimney upon the burner (the chimney employed being provided with a suitable circumferential rib) the base of the chimney is forced into position, moving the segmental portions outward and causing the spring-arms 3 to yield, and when positioned with the rib of the chimney in the groove formed on the inside of the segmental portions of the band by the rib 2 the chimney will be maintained in position in such a way as to permit of any expansion and contraction due to the difference in temperature of the parts.

Referring to Figs. 3 and 4, in which I have illustrated a modification of my invention, *a'* represents the base of the lamp-burner, and *b'* a suitable burner connected thereto. At equally-spaced-apart positions arms *d* are secured in any desired manner to the base *a'*, and these arms *d* are each preferably an inverted-L shape in cross-section. As shown in Figs. 3 and 4, the arms *d* may be integral with an annulus or sleeve *d'* spun around the base *a'* and engaging a suitable rib thereof; but it is to be understood that I do not limit myself to this construction.

e represents a segmental band, preferably of metal and provided with a circumferentially-ribbed portion 4 and a downwardly and inwardly inclined conical portion 5, which latter is preferably apertured, as indicated at 6, in order to permit a freer ingress of air to the flame. The segmental band *e* is composed of a predetermined number of segments, which in any lamp correspond to the number of arms *d* employed, and each segmental portion of the band *e* is hinged to the inner end of an arm *d*, as indicated at *f*, the point at which the segmental portion of the band is hinged to the arm being preferably at the junction of the ribbed portion 4 and the conical portion 5. The hinge connection may be formed in any desired manner. The lamp-chimney employed in this form of my invention is provided adjacent to its base with a circumferential groove, and in placing the

chimney in position the base thereof bears against the inner surface of the rib 4, thereby swinging all of the segmental portions on their pivots and permitting the base of the lamp-chimney to pass into the said ribbed portions 4, whereupon the base of the lamp-chimney contacts with the inner faces of the conical portions 5, forcing the same outward and returning the segmental portions to their normal positions, with the ribbed portions 4 engaging the groove in the lamp-chimney, and by the weight of the chimney the parts are maintained in this position. As the lamp-chimney is removed the upper rib portions of the segmental band are moved outward by the base of the lamp-chimney, and simultaneously the conical portions 5 are moved inward, the parts remaining frictionally in this position ready to receive the chimney again.

I claim as my invention—

1. A lamp-burner, comprising a base, a burner and wick-raiser, in combination with a band divided into a number of segments, a circumferential rib and resultant groove formed in said segments to receive the ribbed lower end of a lamp-chimney, an annulus or sleeve and means for connecting the same to the said base, and a series of arms integral with the base and extending centrally of the segments to connection therewith, the parts presenting a minimum extent of material centrally placed to yield or spring with a maximum of holding-surface to engage the chimney.

2. A lamp-burner, comprising a base, a burner and wick-raiser, in combination with a band divided into a number of segments, a circumferential rib 2 and resultant groove formed in said segments to receive the ribbed lower end of a lamp-chimney, an annulus or sleeve spun around a rib of the base and so connected therewith, and a series of arms integral with the base and with the segments and extending centrally of the said segments, the parts comprising a minimum extent of material centrally placed to yield or spring, and a maximum holding-surface to engage the chimney.

Signed by me this 7th day of September, 1904.

ROBT. BLACK.

Witnesses:
GEO. T. PINCKNEY,
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