

No. 753,405.

PATENTED MAR. 1, 1904.

E. KREBS.
LAMP BURNER ATTACHMENT.
APPLICATION FILED APR. 2, 1903.

NO MODEL.

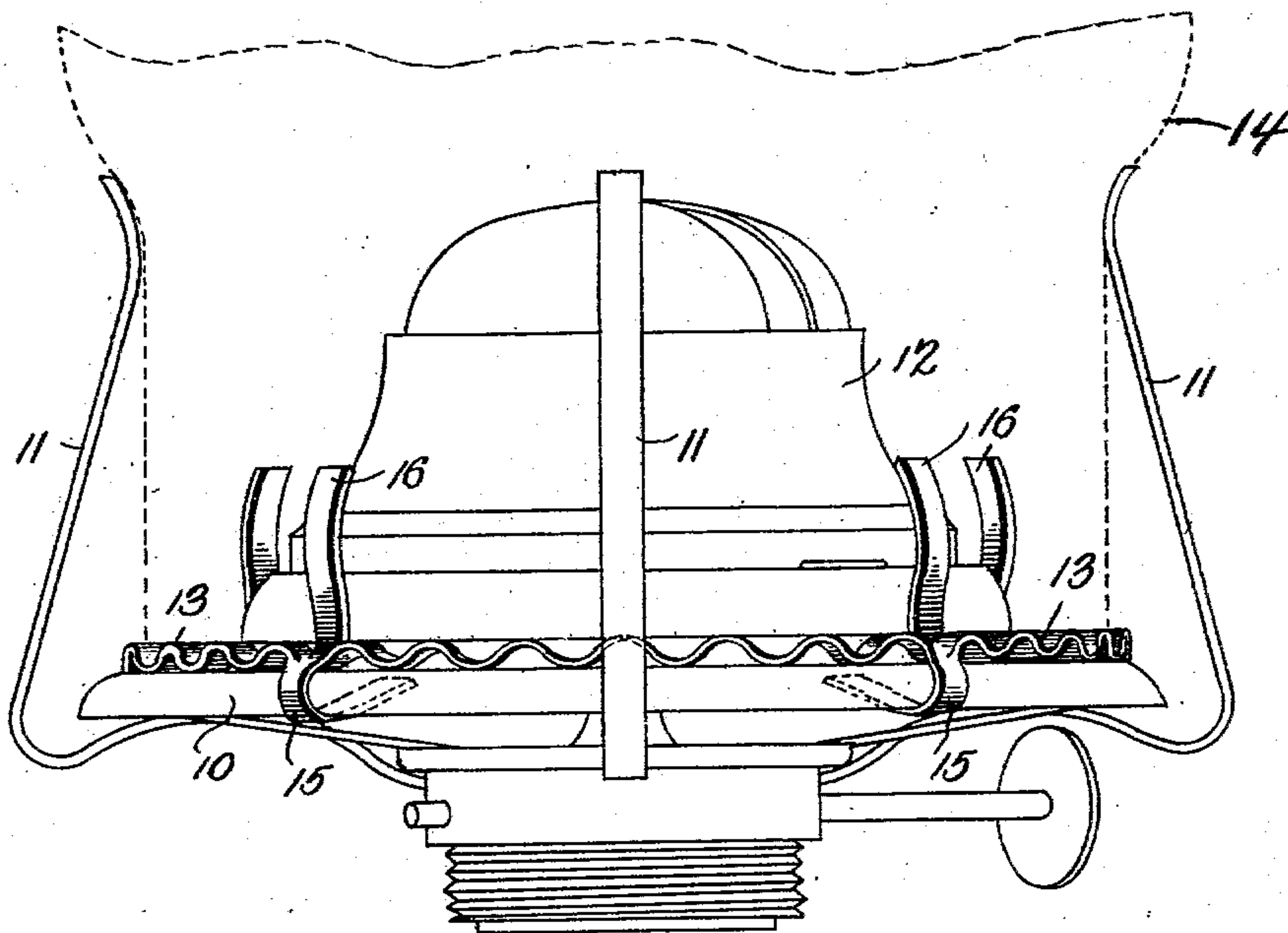


Fig. 1.

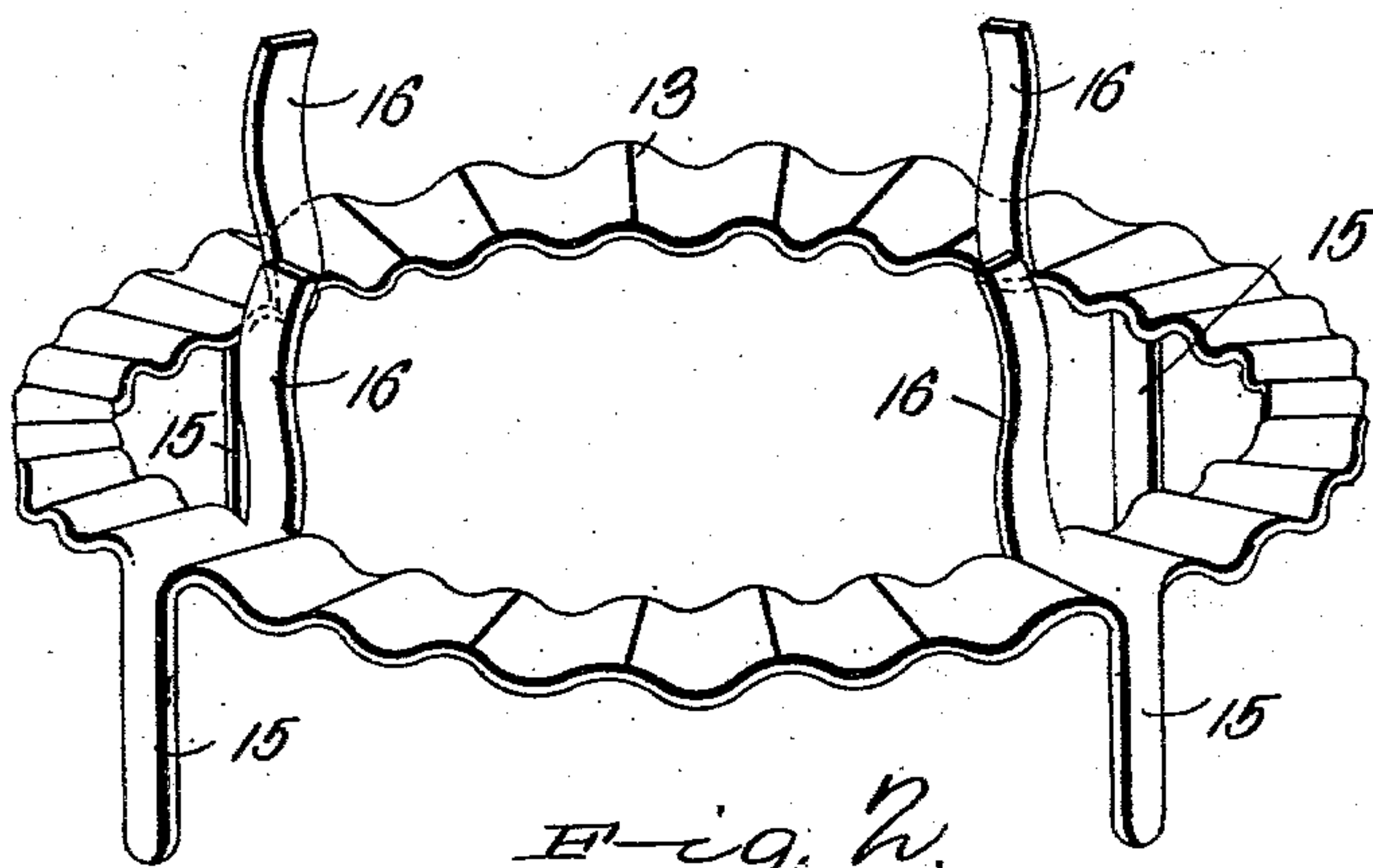


Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

EMIL KREBS, OF ELWOOD, INDIANA.

LAMP-BURNER ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 753,405, dated March 1, 1904.

Application filed April 2, 1903. Serial No. 150,820. (No model.)

To all whom it may concern:

Be it known that I, EMIL KREBS, a citizen of the United States, residing at Elwood, in the county of Madison and State of Indiana, have invented a new and useful Lamp-Burner Attachment, of which the following is a specification.

This invention relates to lamp-burners adapted for use with glass chimneys, and has for its object the production of an attachment for supplying fresh air to the flame to improve the combustion and increase the light-giving qualities and likewise to reduce the tendency to fracture the chimney by the expansion caused by undue heat.

The invention consists in certain novel features of the construction, as hereinafter shown and described, and specified in the claim following.

The improved device may be employed in connection with any of the various forms of lamp-burners on which glass chimneys are used, and I do not, therefore, wish to be limited in the use of the device to any particular form of burner; but for the purpose of illustration the device is shown in the drawings applied to a burner of the ordinary construction.

Figure 1 represents a perspective view of a burner with the improved device applied. Fig. 2 is a perspective view of the improved device detached.

The burner is of the usual form, having the chimney-supporting base 10 and spring-arms 11 and the "flame-bell" or cap 12.

The improved device consists of an annular band 13, provided with spaced projections and adapted to rest upon the base portion and between the base and chimney, the spaces between the projections provided for the free passage of the air beneath the chimney, and thus form passages for the introduction of a supply of fresh air between the "bell" member 12 and the chimney, (indicated at 14,) which becoming heated rises and commingles with the flame as it emerges through the aperture in the cap, and thereby materially increases the combustion and effectually prevents the generation of smoke or soot. The free ventilation at the lower part of the chim-

ney also aids materially in keeping the lower end of the chimney cool and prevents the undue heating and abnormal expansion and contraction, and thus reduces the danger of fracture from that cause.

The band 13 will preferably be formed of an endless annular strip of sheet metal, with the spaced projections produced by corrugating the strip transversely, as shown. By this means two sets of the air-apertures are formed, which permit a much greater volume of air to pass without increasing the weight or expense. The two sets of apertures also divide the inflowing air into two currents, one passing above the ring or between the ring and chimney and the other passing beneath the ring or between the ring and burner. The air-currents are thus more uniformly distributed, one portion carried upward adjacent to the inner face of the chimney and the other portion carried farther inward adjacent to the bell 12 and nearer the flame, thus supplying the fresh oxygen where most needed to produce complete combustion and effectually preventing accumulations of unconsumed carbon particles or other similar matter. This accumulation upon the surfaces of the burner is one of the objectionable features of the ordinary lamp-burners which is obviated by my improved attachment and is therefore one of the valuable and important advantages thereby gained.

The band 13 will be attached to the base portion in any suitable manner; but this means will preferably be flexible clips 15, extending from the band and adapted to be folded or "clenched" beneath the base portion. As many of the clips may be employed as required, but generally four will be used, as shown.

Extending from the inner edge of the band 13 are stop-bars 16, adapted to project inside the chimney to serve as stops to prevent lateral movement thereof and likewise prevent displacement of the chimney relative to the band. The clips 15 and bars 16 will preferably be integral with the band, as indicated, and will possess sufficient resiliency to cause them to retain the band and chimney in their proper relative positions, while at the same time being sufficiently yieldable to permit the

ready removal of the chimney or band when required.

The band 13 and its attachments 15 16 may be formed of any suitable metal, but will generally be of brass, like the burners, and will preferably be "struck up" from a single piece. The bands may be of any suitable size to adapt them to burner-bases of different sizes, and the corrugation may be of any required size to provide for the passage of the requisite amount of air.

A lamp-burner equipped with an attachment of this character will not, therefore, produce smoke or soot, as the combustion is complete, as above noted, while the brilliancy of the flame will be materially increased by the supply of fresh oxygen fed to it at the point where it emerges from the cap or bell.

The attachments may be manufactured at a very small expense, and will not, therefore, add materially to the first cost of the burner.

While the bands 13 will preferably be of

sheet metal stamped into the required shape, they may be of wire bent to shape or of cast metal; but such modifications would not be a departure from the principle of the invention or sacrifice any of its advantages.

Having thus described the invention, what I claim is—

A lamp-burner attachment comprising a transversely-corrugated annular band having integral clips depending from the outer edge thereof and adapted to be clenched under the base of the burner, and integral chimney-supporting fingers extending upwardly from the inner edge of said band.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

EMIL KREBS.

Witnesses:

SAMUEL TEMPLETON,
ELMER GREEN.