

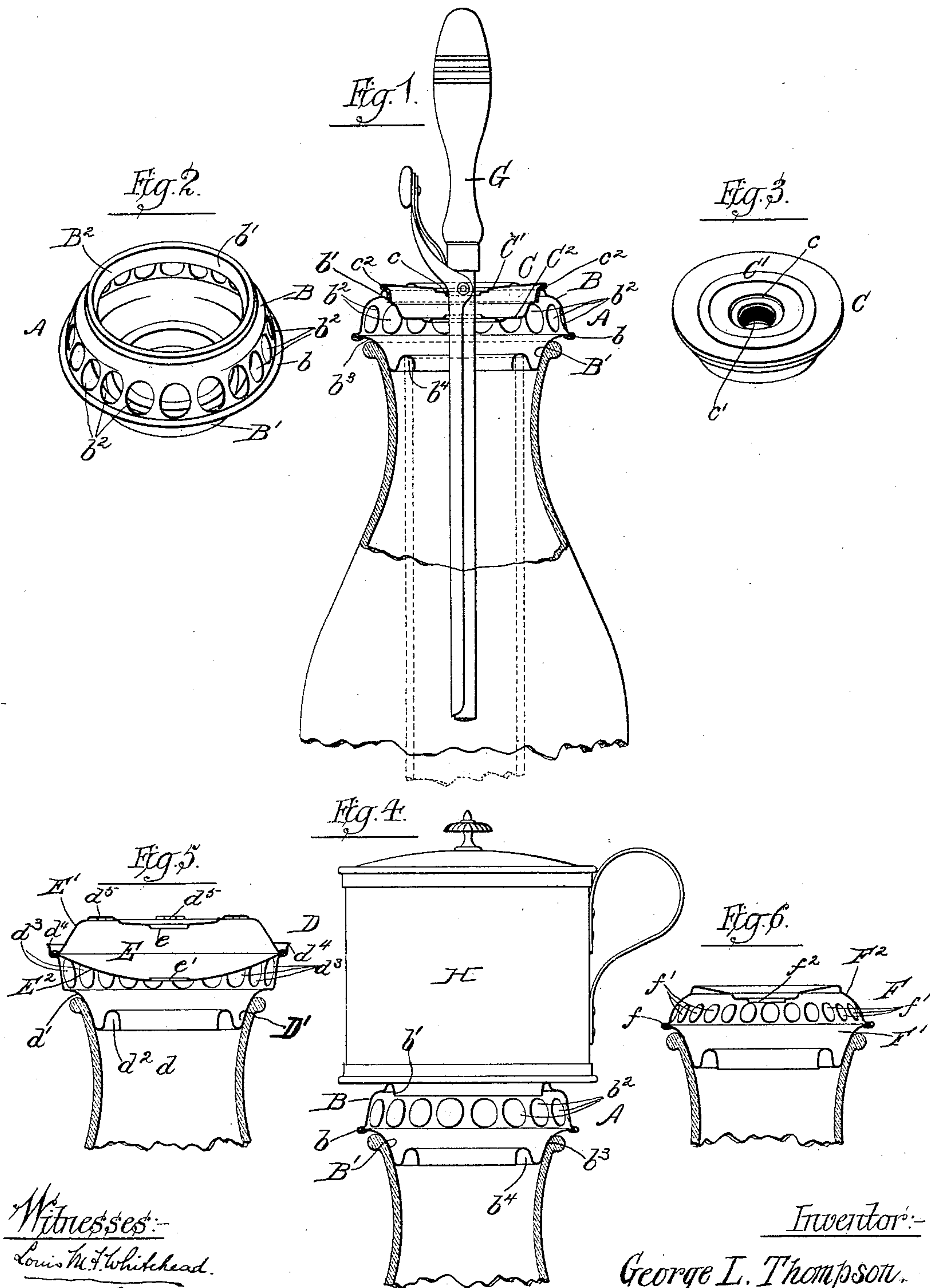
(No Model.)

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## HEATING ATTACHMENT FOR LAMP CHIMNEYS.

No. 460,693.

Patented Oct. 6, 1891.



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# UNITED STATES PATENT OFFICE.

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## HEATING ATTACHMENT FOR LAMP-CHIMNEYS.

SPECIFICATION forming part of Letters Patent No. 460,693, dated October 6, 1891.

Application filed December 16, 1890. Serial No. 374,928. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE L. THOMPSON, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Heating Attachments for Lamp-Chimneys; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in the construction of heating attachments for lamp-chimneys; and it consists in the matters hereinafter described, and more particularly pointed out in the appended claims.

In the accompanying drawings, illustrating my invention, Figure 1 is a view, partly in section, of the upper portion of a lamp-chimney, showing my improved heating attachment arranged for heating a curling-iron applied thereto. Fig. 2 is a perspective view of one portion of my improved heating attachment. Fig. 3 is a perspective view of another portion of the attachment. Fig. 4 is a central vertical section of my improved heating attachment as adapted for heated liquids. Fig. 5 illustrates a modified form of my improvement. Fig. 6 is a view illustrating another modification of my improved heating attachment.

As shown in Figs. 1, 2, 3 and 4, A indicates, as a whole, an annular or ring-shaped hollow body forming the attachment, said annular body being suitably shaped upon its under side to conform to the shape of the top of a lamp-chimney and adapted to rest upon the same.

The annular body A consists of an annular upper part B and an annular lower part B', suitably joined around their outer margins, as indicated at b. The annular upper part B is provided with a central opening B<sup>2</sup>, preferably having a downwardly-turned inner edge b', and is further provided with a plurality of marginal draft-apertures b<sup>2</sup> b<sup>2</sup>. The lower annular part B' is preferably formed, as shown more particularly in Figs. 1 and 4, with an annular shoulder b<sup>3</sup>, below which the lower portion of the part B' is contracted, so

as to fit within the inside of the top of the lamp-chimney, the shoulder having a bearing thereon. In order to adapt the attachment for use upon straight lamp-chimneys of small diameter, such as are used upon "Argand" burners, as well as upon chimneys having outwardly-flaring tops, I turn the lower margin of the part B' inwardly and form in its lower side a groove b<sup>4</sup>. As indicated by the dotted lines, Fig. 1, the groove b<sup>4</sup> receives the top of the straight lamp-chimney, so as to support the attachment firmly in place.

C indicates, as a whole, a removable annular filling-piece, formed from top and bottom plates, or disks C' and C<sup>2</sup>, provided, respectively, with central apertures c and c', through which a curling-iron may be passed, as in Fig. 1. The two parts C' and C<sup>2</sup> are joined in any suitable manner at their outer peripheries, and an annular shoulder or rib c<sup>2</sup> is preferably provided around the outside of the filling-piece C, which rib c<sup>2</sup>, when the filling-piece is in position, bears upon the upper inner margin of the piece B around the central opening therein.

By the employment of the removable filling-piece C, as shown in Figs. 1, 2, 3 and 4, the attachment is adapted for use in heating a curling-iron while the piece C is in position, and by removing said piece it may be used for heating vessels containing liquids, &c.

In the form of construction shown in Fig. 5 the annular body D consists of a lower part D', corresponding in shape with the part B' in the form shown in Figs. 1, 2, 3, and 4, and an upper part E, corresponding with the part C, before described, and consisting of top and bottom plates or disks E' E<sup>2</sup>, provided with opposite central apertures e e', through which a curling-iron may be inserted in the same manner, as hereinbefore described, in connection with the form of device shown in Figs. 1 to 4. The lower part D' is provided with a large central opening d and with annular bearing-surfaces d' and d<sup>2</sup>, similar to the bearing-surfaces b<sup>3</sup> and b<sup>4</sup>, before described, and is further provided with draft-apertures d<sup>3</sup> d<sup>3</sup> around its outer wall. In this form of construction the part E is held in engagement with the part D by means of an up-



turned flange  $d^4$  upon the outer periphery of said part D, within which the part E is inserted. Said flange  $d^4$  is preferably made to closely embrace the outer periphery of the part E, so as to hold the part E securely in place upon the lower part D, while at the same time the parts D and E are separable, so as to permit the lower part alone to be used for heating liquids in the same manner, as before described.

In Fig. 6 is shown another form of attachment, in which an annular body F is employed, said body consisting of a lower part  $F'$  and an upper part  $F^2$ , said parts being connected together at their outer peripheries, as indicated at  $f$ . The lower part  $F'$  is provided with bearing-surfaces for engagement with the lamp-chimney, as before described. Draft-apertures  $f' f'$  are provided around the outside of the upper part  $F^2$ , and a central aperture  $f^2$  for the insertion of a curling-iron is provided in said upper part.

In the forms of construction shown in Figs. 1, 2, 3, and 4 by the employment of the diaphragm  $C^2$  below the top plate or disk  $C'$  of the filling-piece, the heat from the burner is prevented from coming directly against the upper part of the said filling-piece when the device is in use as a curling-iron heater. Similarly, in the form shown in Fig. 5, by the employment of the diaphragm  $E^2$  the heat is prevented from coming into direct contact with the top plate  $E'$  of the attachment. By this construction, when the device is in use as a curling-iron heater, the heat is permitted to come into direct contact with the depending curling-iron below the diaphragm, but is deflected outwardly and away from the center by said diaphragm, and therefore does not materially heat the handle of the curling-iron, the space between the diaphragm and the upper plate or disk forming a dead-air space and preventing the radiation of heat from the top of the lamp-chimney to the handle of the curling-iron. By this construction, therefore, the curling-iron may be heated to any desired degree and the handle of the curling-iron kept cool, so as not to be uncomfortable to the hand of the user.

As illustrated in Fig. 4, when the removable center or filling piece C is removed the heated air and other products of combustion are permitted to come into direct contact with the bottom of a cup or other vessel placed upon the top of the attachment, while a perfect draft is provided by the apertures  $b^2 b^2$  around the outer periphery of the annular body. In this form also the currents of heated air escaping through the apertures  $b^2 b^2$  pass upwardly, coming into contact with the vessel containing the liquid around the outside of the ring-shaped body.

In the form shown in Fig. 5 the attachment is designed chiefly for use as a curling-iron heater; but a cup or other vessel may be

placed upon the top of the attachment. In this construction raised projections  $d^5 d^5$  are provided, upon which the cup rests, so as to elevate the cup somewhat above the top of the annular upper part  $E'$  and to permit a circulation of the gases and heated air between the bottom of the cup and said annular upper part  $E'$ . In this instance a portion of said gases will pass through the central apertures  $e$  and  $e'$  in said upper part  $E'$  and diaphragm  $E^2$ , while the remaining portion of said gases pass outwardly through the marginal openings  $d^3 d^3$  and upwardly into contact with the cup or other vessel.

In the form of construction shown in Fig. 6 the device may be used either for heating a curling-iron or for heating a vessel containing liquid. In heating a curling-iron the heat comes into direct contact with the depending metallic portion of the curler below the upper part  $F^2$  of the annular body F, and is deflected by said upper part  $F^2$ , so as to pass outwardly through the marginal apertures  $f' f'$  and away from the handle of the curling-iron. When used for heating a vessel containing liquids, the heated gases and air flow through the apertures  $f' f'$  and come against the vessel containing the liquid.

A main advantage gained by the construction of a heating attachment of any of the constructions herein described is that by the arrangement of the annular body with a central aperture for the insertion of a curling-iron and with marginal draft-openings the handle of the curling-iron is protected from the currents of heated air and gases, and is kept cool while the metallic portion of the curling-iron below the central aperture is being heated.

I claim as my invention—

1. The herein-described heating attachment for lamp-chimneys, comprising a hollow annular body provided with central apertures through its upper and lower walls and with a plurality of marginal draft-openings, and a centrally-apertured diaphragm located within said annular body below said upper wall and also provided with a central opening, substantially as described.

2. A heating attachment for lamp-chimneys, comprising a hollow annular body provided with a central aperture through its upper and lower walls and with a plurality of marginal apertures, and a removable center or filling piece adapted to occupy the central opening in the upper wall of said annular body, said removable center-piece being provided with central apertures in its upper and lower walls, substantially as described.

3. A heating attachment for lamp-chimneys, comprising a hollow annular body provided with central openings in its upper and lower walls and with a plurality of marginal draft-apertures in its side walls, said annular



body being provided upon its lower wall  
around the central opening therein with an  
annular groove and also with an annular  
conical bearing-surface for engagement with  
5 the upper end of a lamp-chimney, substan-  
tially as described.

In testimony that I claim the foregoing as

my invention I affix my signature in presence  
of two witnesses.

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