

No. 664,994.

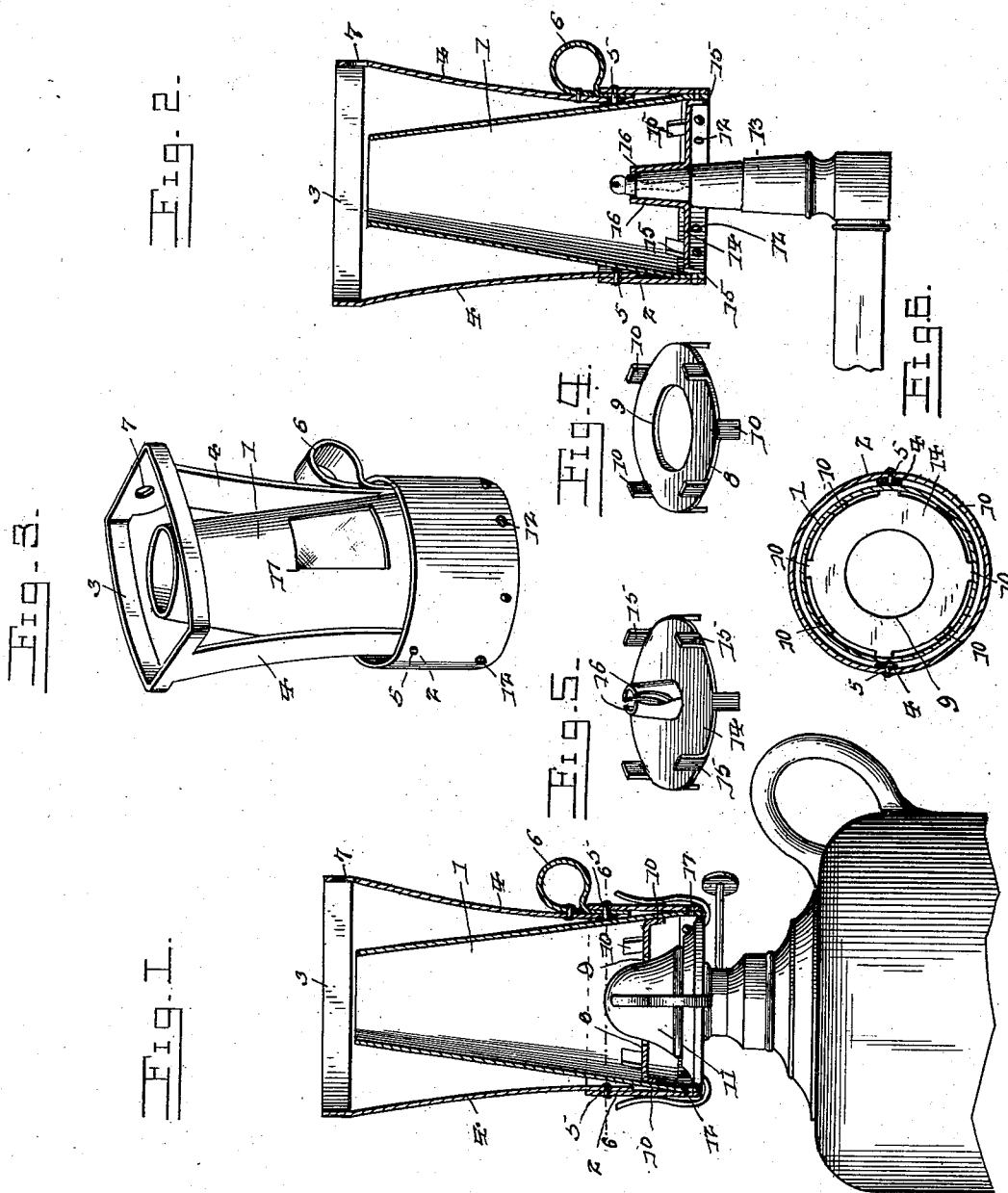
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C. P. DART.

HEATING ATTACHMENT FOR BURNERS.

(Application filed Aug. 16, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

CHRISTOPHER P. DART, OF CANAL, PENNSYLVANIA.

HEATING ATTACHMENT FOR BURNERS.

SPECIFICATION forming part of Letters Patent No. 664,994, dated January 1, 1901.

Application filed August 16, 1900. Serial No. 27,101. (No model.)

To all whom it may concern:

Be it known that I, CHRISTOPHER P. DART, a citizen of the United States, residing at Canal P. O., in the county of Venango and State of Pennsylvania, have invented a new and useful Heating Attachment for Burners, of which the following is a specification.

This invention relates to heating attachments for lamp and gas burners, and has for one object to provide an improved device of this character which is adjustable, so that it may be conveniently applied either to a lamp or a gas-jet and arranged to support a pair of curling-irons or a cooking vessel directly over the flame of the burner, so as to effectively heat the same. It is furthermore designed to arrange the device for conveniently applying and removing the same from a burner without exposing the operator to the danger of being burned and also to maintain the burner comparatively cool, and thereby prevent explosion of a lamp.

With these and other objects in view the present invention consists in the combination and arrangement of parts, as will be hereinafter more fully described, shown in the accompanying drawings, and particularly pointed out in the appended claims, it being understood that changes in the form, proportion, size, and minor details may be made within the scope of the claims without departing from the spirit or sacrificing any of the advantages of the invention.

In the drawings, Figure 1 is a central longitudinal sectional view of the improved heating attachment applied to a lamp. Fig. 2 is a similar view showing the device applied to a gas-burner. Fig. 3 is a detail perspective view of the heating attachment removed from a burner. Fig. 4 is a detail perspective view of the burner-engaging support, which also forms a closure for the bottom of the device. Fig. 5 is a similar view showing the change in the support for application to a gas-burner. Fig. 6 is a detail transverse sectional view taken on the line 6 6 of Fig. 1.

Corresponding parts are designated by like characters of reference in all of the figures of the drawings.

Referring to the drawings, 1 designates the body of the heating attachment, which is in

the form of a tubular shell of sheet metal or other suitable material. This shell is open at opposite ends and is preferably in the form of a truncated cone, so as to form an upwardly-tapered chimney to concentrate the heat of the flame of the burner to which the device may be applied. Surrounding the base of this chimney is a comparatively broad band or collar 2, which has its lower edge fixedly secured to the chimney in any suitable manner, and by reason of the convergence of the walls of the chimney the upper portion of the band forms an upstanding flange separated slightly from the chimney.

Located slightly above the top of the chimney is a support 3 for a cooking vessel, said support being preferably in the form of a band, and pendent therefrom are the opposite arms 4, which extend downwardly at opposite sides of the chimney and have their lower ends connected to the adjacent portions of the inner side of the flange 2 by means of suitable fastenings 5. A suitable handle 6 is connected to the upper edge of the flange 2 and also to one of the arms 4. In one side of the band-like support 3 there is provided an opening 7 for the reception of the jaws of a curling-iron. The lower edge of this opening is substantially upon a level with the upper edge of the chimney, so that the curling-iron may rest upon the top of the chimney and be exposed to the heat of the burner upon which the device may be placed.

Located within the lower end of the chimney is a circular plate 8, which is provided with a circular opening 9 and a plurality of marginal spring-tongues 10, which are bent alternately at opposite sides of the plate, so as to frictionally engage the inner side of the chimney, and thereby adjustably support the plate within the chimney. It will be understood that the spring-tongues space the outer marginal edge of the plate slightly away from the inner walls of the chimney, so as to permit of the proper supply of air to the burner when the device is applied thereto.

As shown in Fig. 1 of the drawings, the present device is applied to a lamp-burner in the manner of an ordinary lamp-chimney, with the plate 8 receiving the top of the burner through the central opening 9, whereby the plate forms a closure for the bottom

of the chimney. It will now be apparent that the attachment takes the place of an ordinary lamp-chimney, and the tapered chimney 1 is designed to concentrate the heat of the flame at the center of the skeleton support 3, and thereby concentrate the heat upon the bottom of the vessel placed upon the support. When applied to a lamp, the plate 8 is disposed above the bottom edge of the chimney, and the lower edge portion of the burner closes the bottom of the chimney, and therefore perforations 12 are formed through the collar 2 and the chimney, so as to admit cool external air to the burner, and thereby maintain the latter in a comparatively cool condition, so as to prevent the lamp from exploding.

Although I have shown in the drawings the lower edge of the chimney resting upon the usual upturned spring-fingers for embracing the lamp-chimney, yet this may not be the case, and it is the purpose of the plate 8 to rest upon the burner, and thereby support the device independently of any other support.

To apply the device to a gas-burner 13, as shown in Fig. 2 of the drawings, the plate 8 is removed and another plate 14 is substituted therefor. This plate has marginal spring-tongues 15 and a smaller central opening, from the walls of which rise the opposite spring clamping-jaws 16, which tightly embrace the burner, and thereby support the device upon the gas-fixture. Air is supplied to the burner through the space between the outer marginal edge of the plate 14 and the inner walls of the chimney, as explained for the form shown in Fig. 1 of the drawings. The plate is designed to have a vertical adjustment within the chimney, so as to vary the distance of the support 3 from the flame to regulate the heating effect of the latter.

In order that the light may not be entirely obscured, one or more transparently-covered openings 17 are formed in the chimney to permit of the escape of light from the flame.

It will be noted that the greater portion of the flange 2 is out of contact with the chimney, and the handle is connected to the flange in order that it may not become heated, and thereby to permit of the convenient handling of the device.

What is claimed is—

1. A heating attachment of the class de-

scribed comprising a chimney, having a burner-engaging plate within the lower end thereof, said plate being adjustable longitudinally within the chimney, and also provided with an opening for the reception of a burner, and means for supplying air to the latter.

2. A heating attachment of the class described comprising a chimney, and a removable burner-engaging plate which is adjustable longitudinally within the bottom portion of the chimney, said plate having marginal spring-tongues in frictional engagement with the inner side of the chimney, and also a central opening for the reception of a burner, the outer marginal edge of the plate being spaced from the inner walls of the chimney, thereby forming an inlet for air.

3. A heater of the class described, comprising a chimney, an upstanding marginal flange having its lower edge secured to the bottom edge of the chimney, the upper edge of the flange being separated from the chimney, and a support located above the top of the chimney, and having pendent arms connected to the upper free edge portion of the flange.

4. A heating attachment of the class described, comprising an upwardly-tapered chimney, an upstanding marginal flange secured at its lower edge to the bottom of the chimney and having its upper edge separated from the chimney, a vessel-support located above the top of the chimney, and having pendent arms connected to the upper edge of the flange, a handle connected to the flange, and a burner-engaging plate adjustably fitted within the bottom of the chimney, said plate having a central opening for the reception of a burner, and marginal spring-tongues frictionally engaging the inner side of the chimney, the outer marginal edge of the plate being spaced from the inner walls of the chimney by the spring-tongues, thereby forming an inlet for air for the burner.

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

CHRISTOPHER P. DART.

Witnesses:

SAMUEL C. BEIGHTEL,
SAMUEL McKENZIE.