July 22, 1947. J. J. POLITE 2,424,502

HAIR DRIER

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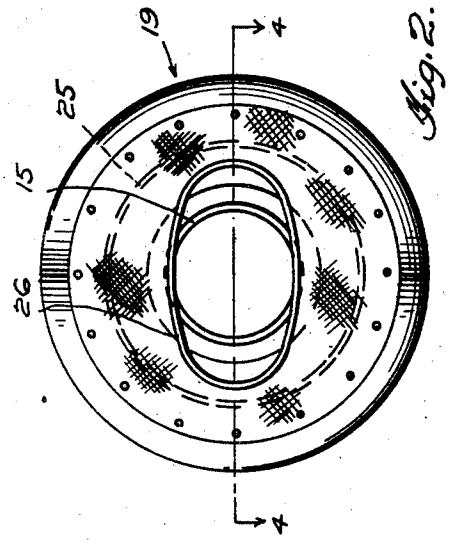

Fig. 2.

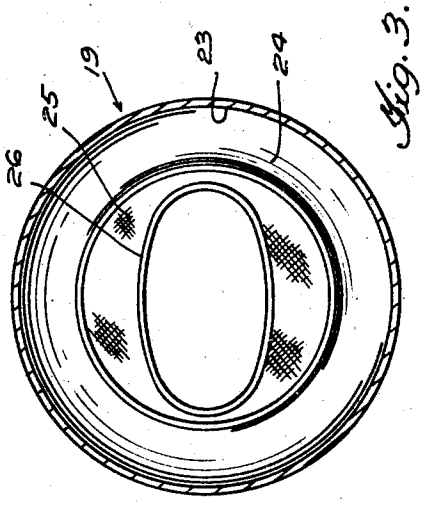

Fig. 3.

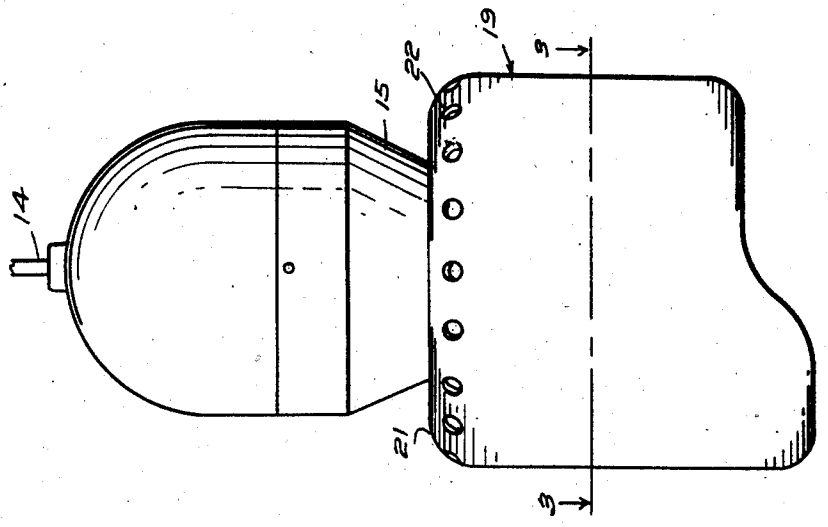

Fig. 1.

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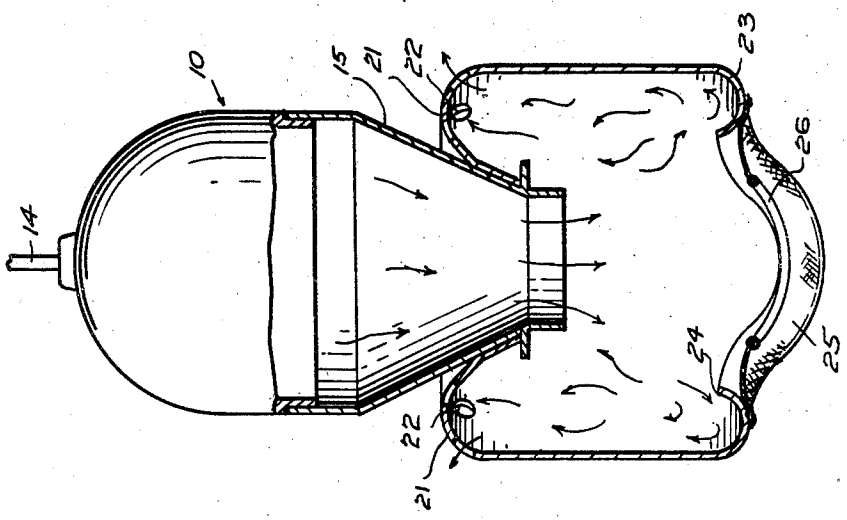

Fig. 3.

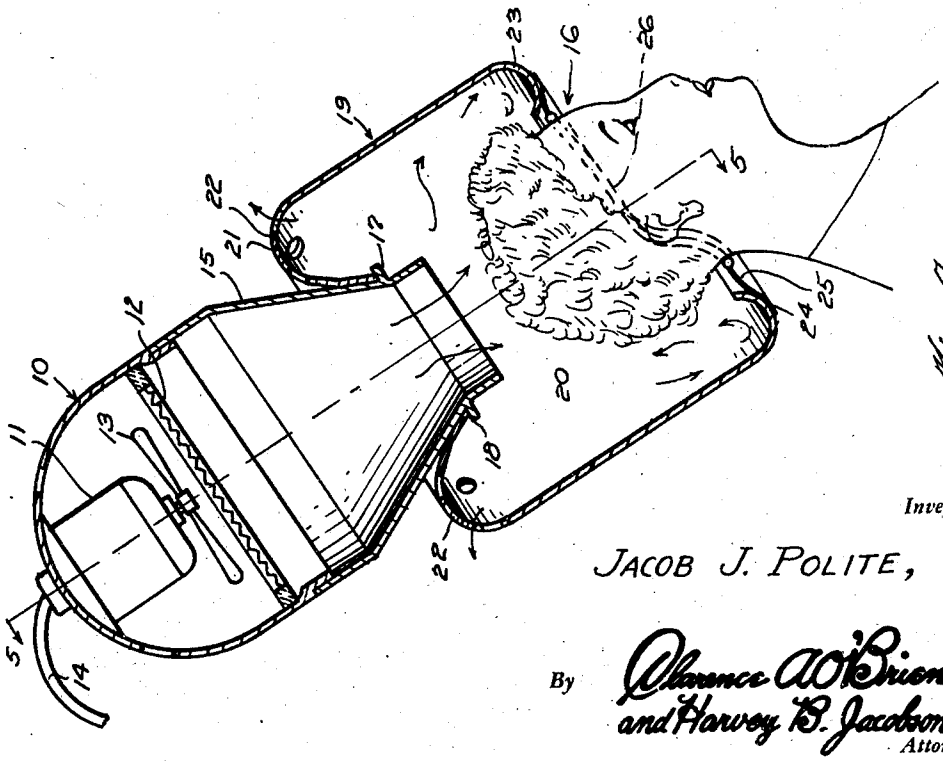

Fig. 4.

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HAIR DRIER

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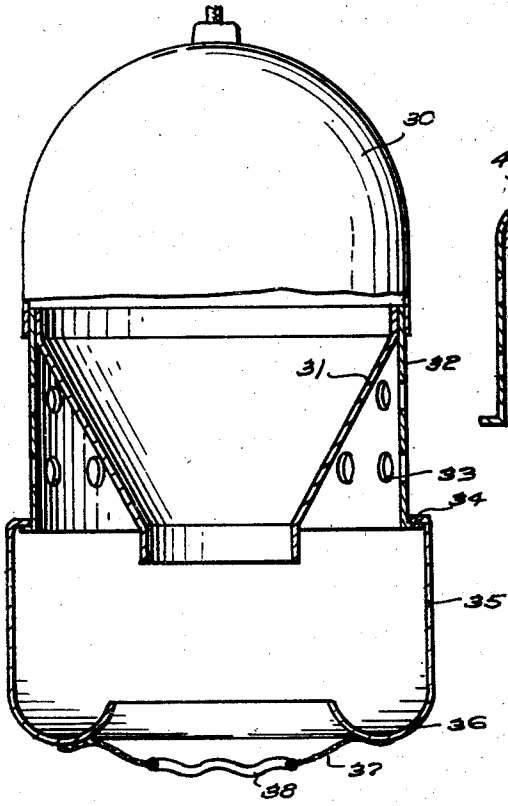

Fig. 6.

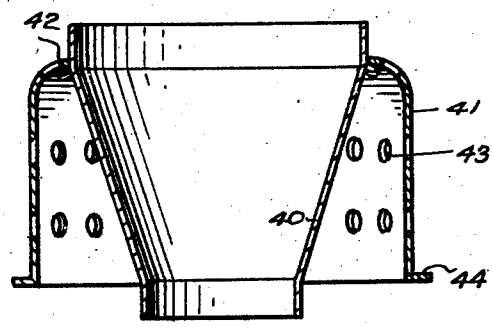

Fig. 8.

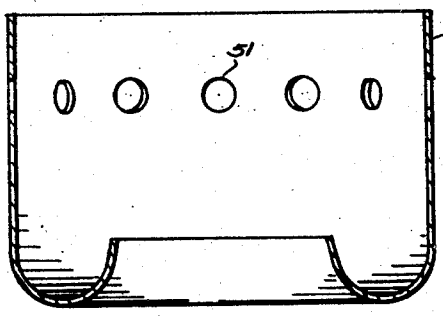

Fig. 7.

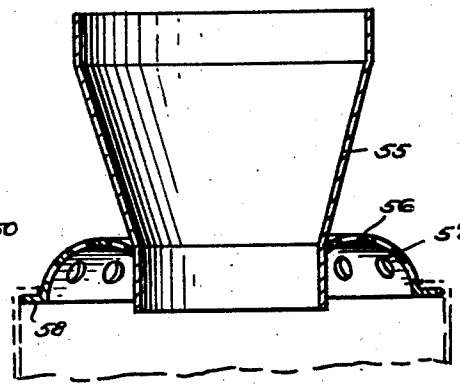

Fig. 9.

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Patented July 22, 1947 2,424,502

UNITED STATES PATENT OFFICE

2,424,502

HAIR DRIER

Jacob J. Polite, Youngstown, Ohio

Application September 13, 1944, Serial No. 553,872

4 Claims. (Cl. 34—99)

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This invention relates to an hair drier, and more particularly to a hood for such a drier.

A primary object of this invention is the provision of an improved hood or adapter for hair driers wherein the loss of heat and heated air is reduced to a minimum.

A still further object is the provision of such a drier adapted to be used with a minimum of discomfort to the user, precluding access of heated air to the face and skin.

A still further object is the provision of such a device adapted to reduce to a minimum the noise occasioned by conventional hair driers in order to avoid annoyance or discomfort to the user thereof and permit conversation in normal tones.

A more specific object is the provision of an adapter unit which may be applied to a conventional hair drier of the type now in use.

A still further object is the provision of such a device which may be readily adapted to be applied to hair driers now in the course of manufacture.

Still further objects reside in the combinations of elements, arrangements of parts, and features of construction, all as will be more fully pointed out hereinafter and disclosed in the accompanying drawings, wherein there are shown preferred embodiments of this inventive concept.

In the drawings:

Figure 1 is a side elevational view disclosing one form of adapter unit incorporating features of the instant invention.

Figure 2 is a bottom elevational view of the device shown in Figure 1.

Figure 3 is a sectional view taken along the line 3—3 of Figure 1, as viewed in the direction indicated by the arrows.

Figure 4 is a sectional view taken substantially along the line 4—4 of Figure 2, as viewed in the direction indicated by the arrows.

Figure 5 is a sectional view taken substantially along the line 5—5 of Figure 4 as viewed in the direction indicated by the arrows.

Figure 6 is a front view partially in section, and partially in elevation of a modified form of this invention.

Figure 7 is a view, in section, of a modified form of one of the parts of Figure 6.

Figure 8 is a still further modified form of one of the parts disclosed in Figure 6, viewed in section, and

Figure 9 comprises a still further modified form of this device.

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Like reference numerals refer to like parts throughout the several views of the drawings.

Having reference now to the modification shown in Figures 1 to 5, inclusive, there is generally indicated at 10 a chamber adapted for the heating and propulsion of air, containing within its interior an electric motor 11 (see Figure 4), a heating grid 12, a fan 13, actuated by the motor and adapted to flow air over the heating grid 12, and provided with current from any suitable external source as through a wire or conduit 14. The arrangement heretofore described is more or less conventional and no claim is made thereto in the instant application.

Suitably affixed to the lower portion of chamber 10, a wind cone or tunnel 15 is adapted to direct the heated air toward the hair of a subject, schematically indicated at 16, (see Figure 4) for the purpose of drying. The lower portion of wind tunnel 15 is provided with a flange 17 to which is adapted to be secured the peripheral rim 18 of an aperture in the upper extremity of an adapter or the like generally indicated at 19. Adapter 19 is comprised of a relatively cylindrical body portion encompassing an air circulating concentrating chamber 20 provided at its upper extremity with a curved peripheral portion 21 constituting a hollow perforated torus terminating in a flange or extremity 18. Suitable apertures 22 are provided in this modification to permit the escape of used and surplus air circulated within air chamber 20 said apertures being positioned wholly behind the discharge end of the cone whereby air must circulate through the adapter before it may escape from apertures 22. The lower portion of the device is curved to conform approximately to the hair line of the user and provided with a peripheral dip or groove 23, to the inner rim 24 to which is adapted to be secured in any desired manner a flexible covering 25 having an interior recess surrounded as by an elastic band 26 of a general configuration adapted to conform to the outline of the head. In operation band 26 is adapted to be positioned about the head of the user above the ear. The fan 13 is then turned on and the grid 12 heated and the air circulated through air chamber 20 being guided upwardly and downwardly in circulatory fashion by grooves or dips 21 and 23, and ultimately escaping through apertures 22. A relatively tight seal is effected about the head of the user and below the hair line by the band 26.

From the foregoing it will now be seen that the adapter device of the instant invention is adapted to conserve heated air as well as protect the skin

of the user during the operation of the device and preclude substantially the passage of noise from the fan and motor to the ears of the user.

Having now reference to the modification shown in Figure 6, there is disclosed at 30 an air heating chamber similar to chamber 10 and a cone 31 similar to cone 15. Secured to, or integral with the upper peripheral rim of cone 31 is a circular annulus 32 provided with a series of rows of escape apertures 33 about the periphery thereof, and having an annulus 34 about the face thereof. In this embodiment the apparatus is provided with an adapter or circulating chamber 35 provided with a groove or dip 36 similar to the corresponding groove 23 in the previously described embodiment and having a cloth or similar flexible sealing member 37 provided with an interiorly disposed recess surrounded by an elastic band 38. In this embodiment air mixing or circulating chamber is not provided with escape apertures, the air being permitted to pass upwardly between the wall of cone 31 and the wall 32 to escape through the apertures 33. Figure 8 discloses a modified form of construction including an air cone 40 surrounded by a cylindrical wall 41 offset as by a band 42 from the periphery of the cone and correspondingly provided with escape apertures 43 and a flange 44 to which an air circulating chamber may be attached.

If desired the air circulating chamber may take the form disclosed in Figure 7 being provided with a circular exterior wall 50 having a plurality of apertures 51 therein, which latter chamber is adapted to be utilized in conjunction with a wall about the air cone which may be either provided or not provided with apertures as desired.

Having reference now to the form shown in Figure 9 there is disclosed an air cone 55 to which is secured, in any desired manner, a flange circular in configuration and arcuate in cross-section, provided with apertures 57 and an extending peripheral flange 58 to which may be secured any desired type of air circulating or mixing chamber.

From the foregoing it will now be seen that there are herein provided a plurality of devices accomplishing all the objects of this invention and others including many advantages of great practical utility and commercial importance.

As many embodiments may be made of this inventive concept, and as many modifications may be made in the embodiments hereinbefore described and shown in the accompanying drawings, it is to be understood that all matter herein is to be interpreted merely as illustrative and not in a limiting sense.

I claim:

1. In a device of the class described, the combination with a conventional hair drying unit having a warm air directing cone, of an air circulating hood adapted to be attached to said cone which comprises a hollow substantially cylindrical body having an inturned flange at its lower end, flexible sealing means carried by the flange for engaging the head of the user immediately below the hair line, a hollow perforated torous at the opposite end of the body, the perforations of which are located wholly behind the discharge end of the cone whereby air introduced into the hood through the cone cannot escape without circulation therethrough.

2. In a device of the class described, the combination with a conventional hair drying unit having a warm air directing cone, of an air circulating hood adapted to be attached to said cone which comprises a hollow substantially cylindrical body having an inturned flange at its lower end, flexible sealing means carried by the flange for engaging the head of the user immediately below the hair line, a hollow annular torous at the opposite end of the body, said torous at least partially embracing the cone and having an annular row of air escape openings disposed wholly behind the discharge end of the cone.

3. In combination with a conventional hair drying device having a warm air directing cone, an air circulating hood attached to said cone and including a hollow, substantially cylindrical body, annular troughs internally of each end of said body, an aperture for loosely receiving a head at the lower end of said body, flexible sealing means secured to said body at the under side of a trough for engaging the head of a user below the hairline, and a plurality of apertures in said other trough for discharging air from said hood only after circulation thereof from said cone and through said hood.

4. In combination with a conventional hair drying device having a warm air directing cone, an air circulating hood attached to said cone and including a hollow, substantially cylindrical body, annular troughs internally of each end of said body, an aperture for loosely receiving a head at the lower end of said body, flexible sealing means secured to said body at the under side of a trough for engaging the head of a user below the hairline, and a plurality of apertures in said other trough for discharging air from said hood only after circulation thereof from said cone and through said hood, said other trough and apertures therein being positioned rearwardly of the discharge end of said cone.

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