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C. W. LANTER

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HAIR DRIER

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Fig. 3.

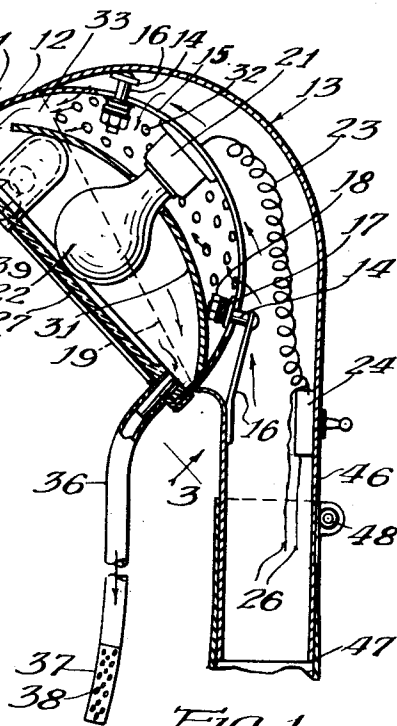
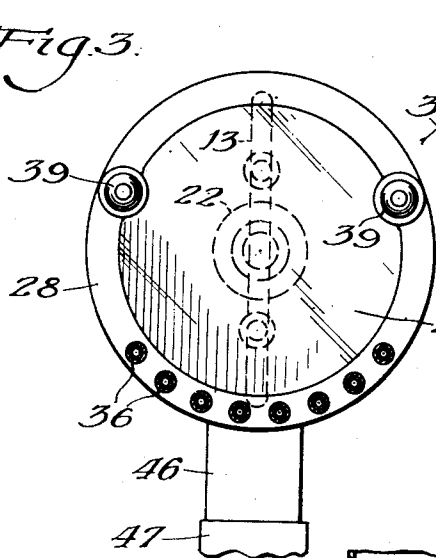


Fig. 1.

Fig. 2.

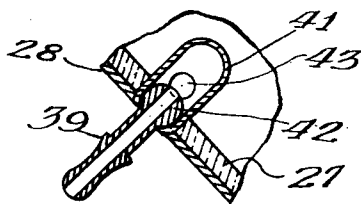
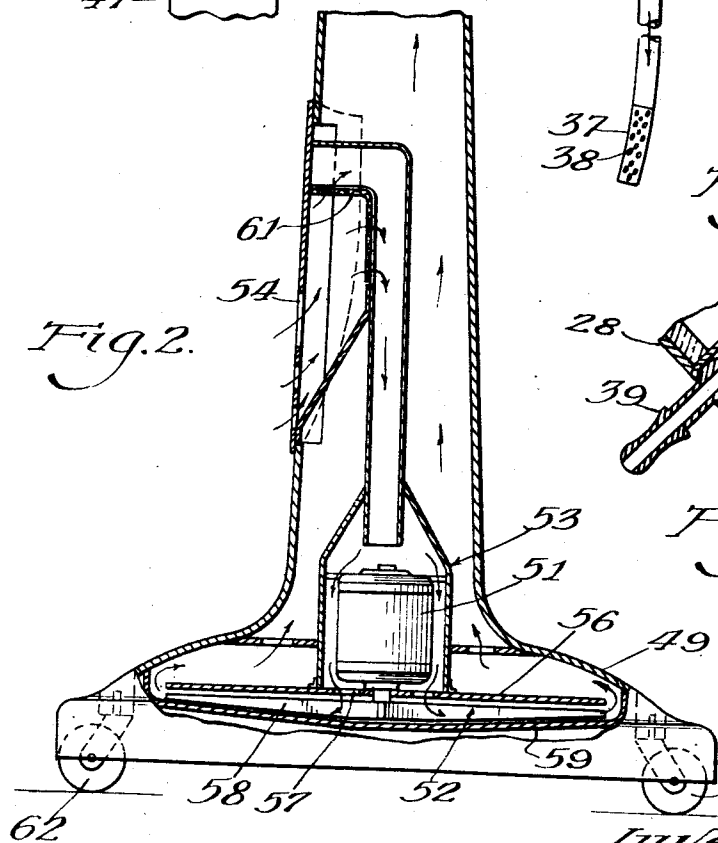


Fig. 4.

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HAIR DRIER

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7 Claims. (Cl. 34—99)

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This invention relates to improvements in hair driers and is more particularly concerned with apparatus of this type in which streams of preheated air are directed to the interior of tubular hair curlers and thence outwardly through apertures provided therein to effect rapid drying of hair wound around said curlers.

This invention further contemplates the provision of hair driers embodying means for directing light rays and auxiliary streams of air toward the head of the user to aid in the hair drying operation, said auxiliary streams of air being directed from the drier apparatus through nozzles telescopically movable for controlling the flow of air therethrough.

This invention further contemplates the provision of a hair drying apparatus embodying an adjustable head for projecting light rays and auxiliary air streams, said head having a reflector for projecting the light rays and also serving as a baffle for directing a stream of air past an electric lamp for the purpose of absorbing heat therefrom. However, it is contemplated that additional air heating means may be provided in addition to the electric lamp.

This invention further contemplates the provision of a hair drier having a head mounted upon a tubular pedestal provided with a base portion for enclosing a motor driven blower unit employed for directing air upwardly through the pedestal and thence outwardly therefrom for drying hair. The air inlet passage leading to said blower unit preferably extends from the side of the pedestal and thence downwardly around and/or through an electric motor employed to drive the blower for the purpose of preheating the inflowing air and for cooling the motor. By disposing the air inlet end of said passage in the side of the pedestal and in spaced relation to the base thereof, the inflowing air stream is maintained relatively free of dirt or other foreign material.

This invention embodies other novel features, details of construction and arrangements of parts which are hereinafter set forth in the specification and claims and illustrated in the accompanying drawing wherein:

Fig. 1 is a sectional view showing the head portion of a hair drier embodying features of this invention.

Fig. 2 is a sectional view showing the base portion of the hair drier and the means provided for directing a stream of air upwardly toward the head portion.

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Fig. 3 is a sectional view taken along the line 3—3 of Fig. 1.

Fig. 4 is a detailed sectional view showing the auxiliary air nozzle construction.

Referring now to the drawing for a better understanding of this invention, the hair drier is shown as comprising a head 11 having a ball-shaped back wall 12 for adjustable air tight positioning in an adapter 13. The back wall 12 is slotted at 15 to receive a pair of adjustment bolts 14 mounted in bolt brackets 16 secured to the adapter 13. The threaded ends of the bolts 14 are provided with compression springs 17 and nuts 18 for maintaining the wall 12 of the head 11 in air tight engagement with the circular opening 19 provided in the adapter 13. A lamp socket 21 is mounted on the wall 12 to receive a lamp 22, and suitable lead wires 23 extend from the socket 21 to a switch 24 connected to a suitable source of current by means of leads 25. A lens 27 is mounted on the front of the head 11 by means of an annular rim 28 demountably connected to the back wall 12. An annular gasket 29 is provided between the lens 27 and the inwardly projecting flange of the rim 28 to prevent leakage of air from the head 11 at this point.

A reflector 31 is secured to the inner face of the wall 12 for directing light rays from the lamp 22 outwardly through the lens 27. The back wall 12 is provided with a plurality of air inlet openings 32 for the passage of air into a chamber 33 defined by the wall 12 and the reflector 31. The air from the chamber 33 is directed through an opening 34 provided in the upper end of the reflector 31 and thence downwardly around the electric lamp 22 for the purpose of absorbing heat therefrom.

A plurality of flexible conduits 35 lead from the lower portion of the head 11 for connection with a plurality of tubular hair curling members 37 provided with apertures 38. A plurality of auxiliary air nozzles 39, preferably formed of rubber, are telescopically mounted in housing members 41 to direct streams of air from the head 11 toward the hair of the customer. The nozzles 39 are formed with ball-shaped portions 42 which permit angular adjustment of the nozzles when same are drawn outwardly to their hair drying positions. The housing members 41 are provided with air inlet openings 43 intermediate their ends. The flow of air through each nozzle 39 may be stopped by moving same inwardly until the ball-shaped portion 42 engages the inner end of its housing 41.

The adapter 13 is provided with a tubular por-

tion 46 for telescopic adjustable engagement within a tubular pedestal 47 by means of a locking screw 48. The lower end of the pedestal 47 terminates in an enlarged hollow base portion 49 to receive a blower unit comprising an electric motor 51 and a centrifugal fan 52. The motor 51 is enclosed and supported within an air conduit 53 which leads downwardly from a grilled opening 54 formed in the side wall of the pedestal 47. The air conduit 53 terminates at a circular partition wall 56 provided with air ports 57 through which the air passes into the fan chamber 58 defined by the partition 56 and a partition 59. The stream of air passes through the fan chamber 58 and is forced upwardly through the interior of the pedestal 47, and thence through the apertures 32 into the chamber 33 of the head 11. The air stream then passes from the chamber 33 through the opening 34 for movement past the electric lamp 22 to be heated thereby. After the air is heated, it is directed through the flexible conduits 36 and the apertures 38 of the hair curlers 36 for drying hair wound thereupon. If desired, the air nozzles 39 may be moved to their forward position, as indicated in Figs. 1 and 4, to permit streams of air to flow through the ports 43 and nozzles 39 toward the head of the customer.

The grilled openings 54 are preferably disposed in the side wall of the pedestal 47, and at a substantial distance upwardly from the base 49, to reduce the amount of dirt or other foreign material drawn therethrough into the air conduit 53. In order to further reduce the amount of dirt or foreign material in the air stream passing into the conduit 53, it is desirable to provide a suitable air filter 61 adjacent the air inlet for removing such dirt and foreign material from the air stream. It will be noted that the head 11 may be manually pivoted in a vertical plane for properly directing light and/or heat rays and auxiliary air streams toward the head of the user. The hair drier is also provided with casters 62 to facilitate movement of the drier. The electric motor 51 may also be connected to a source of current leading through and controlled by the switch 24 for operating the light 22 and/or the motor.

While this invention has been shown in but one form, it is obvious to those skilled in the art that it is not so limited but is susceptible of various changes and modifications without departing from the spirit and scope of the claimed invention.

I claim as my invention:

1. In a hair drier, a tubular pedestal having an enlarged base portion, a head supported upon said pedestal, means providing communication between said pedestal and said head for circulation of air, said pedestal having an air inlet formed in the side thereof, an air conduit extending downwardly from said air inlet, a plurality of air tubes leading from said head for engagement with apertured hair curling members, a blower unit positioned within the base portion of said pedestal for drawing a stream of air downwardly through said air conduit and thence for moving said stream of air upwardly through said pedestal and outwardly through said air tubes, electrical air heating means disposed in said head, said electrical air heating means including an electric lamp disposed in the path of the air stream, a reflector for said lamp serving as a partition for directing a stream of air around said lamp, and a lens provided on the face of said

head for the passage of light rays from said electric lamp.

2. In a hair drier, a tubular pedestal having an enlarged base portion, a head supported upon said pedestal, means providing communication between said pedestal and said head for circulation of air, said pedestal having an air inlet formed in the side thereof, an air conduit extending downwardly from said air inlet, a plurality of air tubes leading from said head for engagement with apertured hair curling members, a blower unit positioned within the base portion of said pedestal for drawing a stream of air downwardly through said air conduit and thence for moving said stream of air upwardly through said pedestal and outwardly through said air tubes, electrical air heating means disposed in said head, said electrical air heating means including an electric lamp disposed in the path of the air stream, a reflector for said lamp serving as a partition for directing a stream of air around said lamp, a lens provided on the face of said head for the passage of light rays from said electric lamp, and auxiliary air nozzles mounted on the face of said head to direct streams of air toward the head of the user.

3. In a hair drier, a tubular pedestal having an enlarged base portion, a head supported upon said pedestal, means providing communication between said pedestal and said head for circulation of air, said pedestal having an air inlet formed in the side thereof, an air conduit extending downwardly from said air inlet, a plurality of air tubes leading from said head for engagement with apertured hair curling members, a blower unit positioned within the base portion of said pedestal for drawing a stream of air downwardly through said air conduit and thence for moving said stream of air upwardly through said pedestal and outwardly through said air tubes, electrical air heating means disposed in said head, said electrical air heating means including an electric lamp disposed in the path of the air stream, a reflector for said lamp serving as a partition for directing a stream of air around said lamp, a lens provided on the face of said head for the passage of light rays from said electric lamp, auxiliary air nozzles mounted in the face of said head to direct streams of air toward the head of the user, casings mounted on said head to enclose the inner ends of said nozzles, said nozzles having port openings, and means provided on the inner ends of said nozzles to move into and out of registry with said casing port openings to control the flow of air through said nozzles.

4. In a hair drier, a tubular pedestal having an enlarged base portion, said pedestal having an air inlet formed in the side thereof, an air conduit extending downwardly through said pedestal from said air inlet, an adapter having a tubular neck for telescopic engagement in said pedestal, said adapter having an enlarged opening formed therein, a head positioned in the opening formed in said adapter, means providing communication between said pedestal and said head for circulation of air, a plurality of air tubes leading from said head for engagement with apertured hair curling members, a blower unit positioned within the base portion of said pedestal for drawing a stream of air downwardly through said air conduit and thence for moving said stream of air upwardly through said pedestal and outwardly through said air tubes, electrical air heating means disposed in said head, said elec-

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trical air heating means including an electric lamp disposed in the path of the air stream, a reflector for said lamp serving as a partition for directing a stream of air around said lamp, and a lens provided on the face of said head for the passage of light rays from said electric lamp.

5. In a hair drier, a tubular pedestal having an enlarged base portion, said pedestal having an air inlet formed in the side thereof, an air conduit extending downwardly through said pedestal from said air inlet, an adapter having a tubular neck for telescopic engagement in said pedestal, said adapter having an enlarged opening formed therein, a head positioned in the opening formed in said adapter, means providing communication between said pedestal and said head for circulation of air, a plurality of air tubes leading from said head for engagement with apertured hair curling members, a blower unit positioned within the base portion of said pedestal for drawing a stream of air downwardly through said air conduit and thence for moving said stream of air upwardly through said pedestal and outwardly through said air tubes, electrical air heating means disposed in said head, said electrical air heating means including an electric lamp disposed in the path of the air stream, a reflector for said lamp serving as a partition for directing a stream of air around said lamp, a lens provided on the face of said head for the passage of light rays from said electric lamp, and auxiliary air nozzles mounted on the face of said head to direct streams of air toward the head of the user.

6. In a hair drier, a tubular pedestal having an enlarged base portion, said pedestal having an air inlet formed in the side thereof, an air conduit extending downwardly through said pedestal from said air inlet, an adapter having a tubular neck for telescopic engagement in said pedestal, said adapter having an enlarged opening formed therein, a head positioned in the opening formed in said adapter, means providing communication between said pedestal and said head for circulation of air, a plurality of air tubes leading from said head for engagement with apertured hair curling members, a blower unit positioned within the base portion of said pedestal for drawing a stream of air downwardly through said air conduit and thence for moving said stream of air upwardly through said pedestal and outwardly through said air tubes, electrical air heating means disposed in said head, said electrical air heating means including an electric lamp disposed in the path of the air stream, a reflector for said lamp serving as a partition for directing a stream of air around said lamp, a lens provided on the face of said head for the passage of light rays from said elec-

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tric lamp, auxiliary air nozzles mounted in the face of said head to direct streams of air toward the head of the user, casings mounted on said head to enclose the inner ends of said nozzles, said nozzles having port openings, and means provided on the inner ends of said nozzles to move into and out of registry with said casing port openings to control the flow of air through said nozzles.

7. In a hair drier, a tubular pedestal having an enlarged base portion, said pedestal having an air inlet formed in the side thereof, an air conduit extending downwardly through said pedestal from said air inlet, an adapter having a tubular neck for telescopic engagement in said pedestal, said adapter having an enlarged opening formed therein, a head positioned in the opening formed in said adapter, means providing communication between said pedestal and said head for circulation of air, a plurality of air tubes leading from said head for engagement with apertured hair curling members, a blower unit positioned within the base portion of said pedestal for drawing a stream of air downwardly through said air conduit and thence for moving said stream of air upwardly through said pedestal and outwardly through said air tubes, electrical air heating means disposed in said head, said electrical air heating means including an electric lamp disposed in the path of the air stream, a reflector for said lamp serving as a partition for directing a stream of air around said lamp, a lens provided on the face of said head for the passage of light rays from said electric lamp, auxiliary air nozzles mounted in the face of said head to direct streams of air toward the head of the user, casings mounted on said head to enclose the inner ends of said nozzles, said nozzles having port openings, and means provided on the inner ends of said nozzles to move into and out of registry with said casing port openings to control the flow of air through said nozzles.

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