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HAIR DRIER

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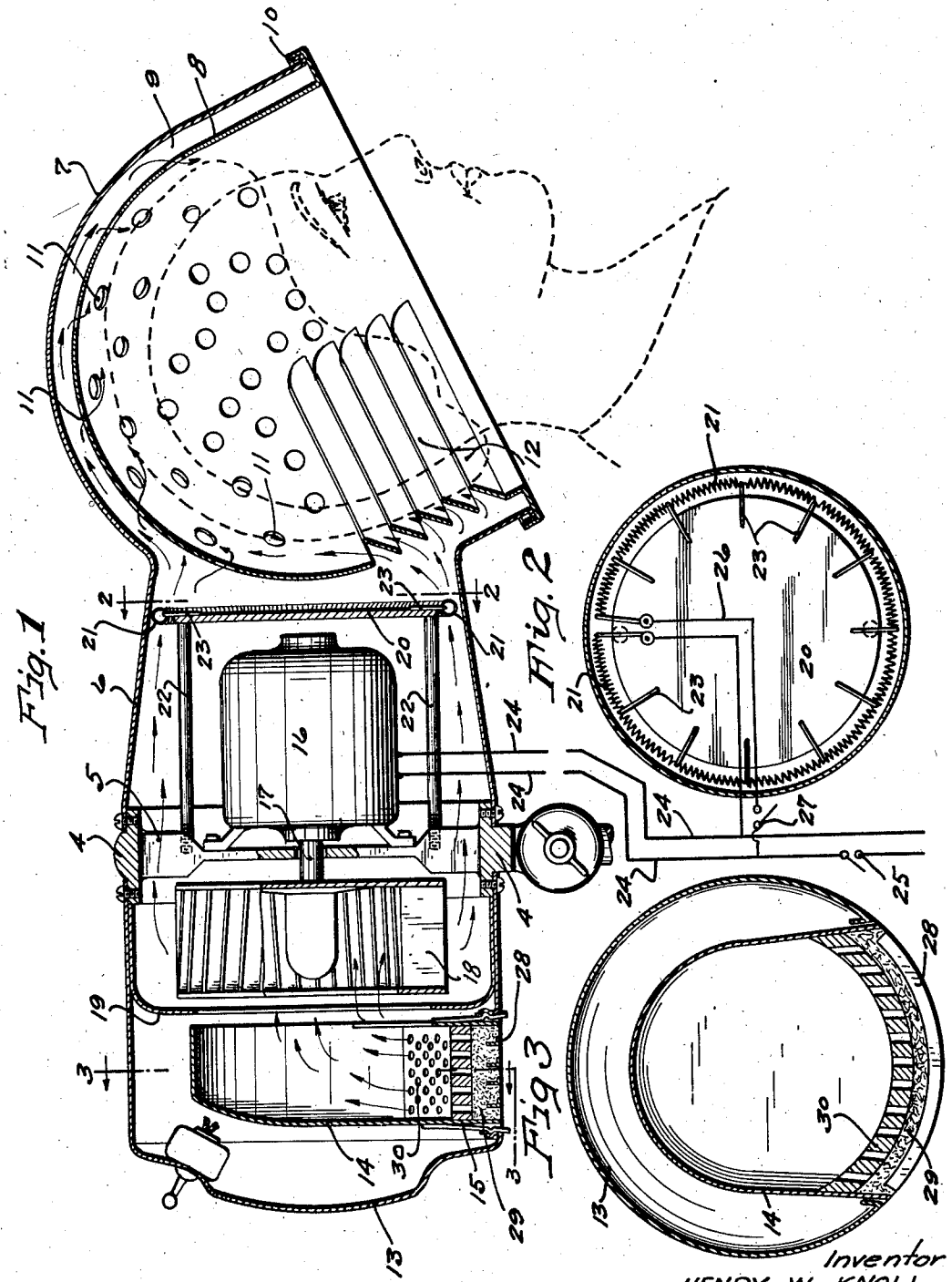


Fig. 1

Fig. 2

Fig. 3

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HAIR DRIER

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2 Claims. (Cl. 34—26)

My invention provides a simple and highly efficient hair drier for drying human hair and especially adapted for use in hair-dressing establishments or so-called "beauty parlors". There have been serious objections to the use of hair driers such as hitherto provided for the uses above indicated, and among these objections may be mentioned the fact that hot air was delivered directly against the head in uneven distribution, which causes objectionable and dangerous application of heat at certain places and relatively too slow drying in other places. Also, in the old form of apparatus, wherein a motor-driven fan was employed, to draw air from the room and to force the same past hot electrical heating elements, loose hair or lint would sometimes be picked up and ignited, producing disastrous burning of the hair of the person being treated.

The above objections are entirely eliminated in my improved apparatus, and various other improved actions are accomplished. A commercial form of the device is illustrated in the acccompanying drawing, wherein like characters indicate like parts throughout the several views.

Referring to the drawing:

Fig. 1 is a vertical axial section of the device or apparatus, some parts being shown in full;

Fig. 2 is a transverse section taken on the line 2—2 of Fig. 1; and

Fig. 3 is a transverse section taken on the line 3—3 of Fig. 1.

Various parts of the apparatus are supported directly or indirectly from the annular frame or rim 4 of a supporting spider 5. Rigidly but detachably secured to the frame 4 and projecting forwardly therefrom is a large tubular air delivery neck 6 of a sheet metal imperforate outer hood 7. Within the outer hood 7 is an inner hood 8 that is spaced from the hood 7 to form an air distributing pressure chamber 9. The two hoods 7 and 8 at their rims are shown as connected by telescoped or interlapped frictionally engaged flanges indicated at 10 so that the said hoods might be quite readily removed when desired, but will not be accidentally displaced. The inner hood 8 is formed with a large number of perforations or air passages 11 that distribute the air evenly over the upper and side portions of the head of the person being treated. Moreover, at that portion of the hood 8 that is opposite the lower portion of the head and upper portion of the neck of the party being treated, said inner hood is formed with deflecting louvers 12.

Rigidly but detachably secured to the annular supporting frame 4 and projecting rearward therefrom, is a drum-like housing or cap 13, the outer end of which is closed, but the lower rear portion of which is provided with an opening into which is detachably inserted a hood-like deflector shell 14, the upper front portion of which is open for the free passage of the air in a forward direction. As shown, the deflector shell 14 is detachably locked in position by spring latch fingers 15. Within the air delivery neck 6 is a small electric motor, the frame 16 of which is secured to the spider 5 with the shaft 17 of its rotor extended through said spider and axially aligned with said neck 6. The motor shaft 17 carries a fan or blower 18 shown as of the sirocco type. Preferably and as shown, the fan 18 is surrounded by an annular housing 19, the rear edge of which is formed with an annular flange having a large opening aligned with the air discharge passage of the deflector shell 14.

Located in front of the motor is a disc-like baffle 20 that is spaced from the surrounding neck 6 to afford a rather narrow annular air passage in which is located an annular electrical heating element 21. The baffle 20 is preferably of insulating material, and as shown, it is supported from the spider 5 by long studs 22. As shown, the heating coil or element 21 is connected to the insulated baffle 20 by circumferentially spaced metal fingers 23. The motor receives current through a circuit 24 in which is a switch 25. The heating element 21 receives current from a shunt 26 that is connected across the motor circuit 24 and in which is a switch 27.

Extended across the air intake opening in the bottom of the deflecting shell 14 is an open grid shown as made up of segmental bars 28 and which supports a filter 29 of suitable filtering material, such as fibrous mineral wool or the like. On top of the filter 29 is placed a perforated segmental body 30 of solid but slowly volatile disinfecting substance.

Operation

When switch 25 is open, the current will be cut off both to the motor and to the heating element, but when the said switch is closed, the current will be delivered to the motor and also to the heating element, providing the switch 27 is then closed. Hence, it is evident that the motor can be operated to force air even after the heating element is cut out, as is frequently desirable in the finishing of the hair-drying operation.

When the current is supplied to the motor and to the heating element, air will be drawn from the fan and delivered past the hot heating ele-

ment where the air will be heated and the hot air will be delivered into the distributing chamber 9 between the hoods 7 and 8. Some pressure will be built up within the chamber 9, and by the perforations 11 and louvers 12 will be properly distributed over all parts of the hair. The louvers 12 will in fact, partly reverse or upwardly deflect the air against the lower back portion of the hair so that the air will be delivered against the hair with a sort of hair-lifting action, which insures complete drying of the hair in places where hitherto the drying has been much slower than at other places. The perforations are distributed so as to give the proper proportionate delivery of air at places where the hair is easier or more difficult to dry. By this manner of distribution, less hot air will be required to dry the hair than in the older apparatus, and moreover, by the proper distribution of air, objectionable intense heat is not required and there will be no channels where the air will produce discomfort to the person being treated. All the air, of course, must pass directly through or against the heating element 21. Inasmuch as hot air is not wasted in this apparatus, less capacity in the heating element is required and a relatively small motor may be employed, thus effecting a saving in the use of the electric current.

In the hitherto used forms of hair driers which did not employ a filter, foreign substances such as hair clippings, lint, dandruff and the like would be drawn into and passed through the drier. Some of this foreign substance would, of course, pass immediately through the device onto the head and clothing of the person being treated, but some thereof would collect about the necessarily more or less oily surfaces around the bearings and the motor and form a heavy deposit, which deposit at times would loosen and be blown past the heating element in relatively large chunks, be ignited by the heating element and thereafter pass onto the head or clothing of the person being treated. Obviously, these dislodged deposits being comparatively large and oily are very hot and relatively dangerous. Furthermore, it will be obvious that foreign substances of this kind being delivered in a blast directly onto and about the person being treated, will produce a very unsanitary condition.

In my improved hair drier, the filter 29 positively prevents loose hair, lint or other foreign matter, combustible or otherwise, from being drawn into the drier, thus eliminating fire hazard present in the old devices and delivering only clean air onto the head and about the person being treated. The use of the disinfectant or deodorant materials disinfects and deodorizes all of the air drawn into the device and delivered onto the person being treated.

From the foregoing it is evident that various modifications and relative arrangement and structure of the parts may be made within the scope of the invention herein disclosed and claimed.

What I claim is:

1. A hair drying device comprising an outer hood, an inner head receiving hood spaced from the outer hood to form an air distributing chamber between the hoods, means for delivering air through the hood to said distributing chamber, said inner hood at its upper portion being formed with perforations adapted to deliver air directly onto the upper portion of the hair of persons being treated and at its lower rear portion said inner hood being formed with approximately semi-circular upwardly and inwardly opening louvers that will direct air upwardly and inwardly against the downwardly directed and usually relatively thick lower back portions of the hair with a kind of hair raising action.

2. In a hair drying device a hood adapted to fit over the head of a person to be treated, a housing extending from an opening into said hood, and a motor driven fan or blower mounted in said housing, said housing being provided a point beyond and axially offset from the fan with an intake opening, of a deflector shell removably attached to the casing, extending from the intake opening therein and constructed and arranged to direct air drawn through the intake opening to the eye portion of the fan, and an air filter of loosely packed fibrous material interposed in and carried by the deflector shell.

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