United States Patent

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[54] **HAIR-DRYING DEVICE**
7 Claims, 5 Drawing Figs.

[52] **U.S. Cl.** **34/96,** 132/9
[51] **Int. Cl.** **A45d 20/20**
[50] **Field of Search** 34/3, 95, 96; 126/400, 204; 132/9, 36, 36.2; 128/54, 402, 403

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ABSTRACT: A device for drying and/or setting hair which enables the wearer to move about freely during use thereof. The device comprises separate hood and cap members. The cap is constructed of a multilayer, open mesh, moisture-absorbing material which is initially placed over the wearer's hair. The hood is formed of alternating layers of asbestos or glass fiber cloth with additional layers of heat-retaining fibrous packing and flexible heat-reflecting foil placed therebetween. The hood, after being heated by external heating means to a temperature of about 200° C., is placed over the cap thereby providing the requisite thermal energy for drying the hair.

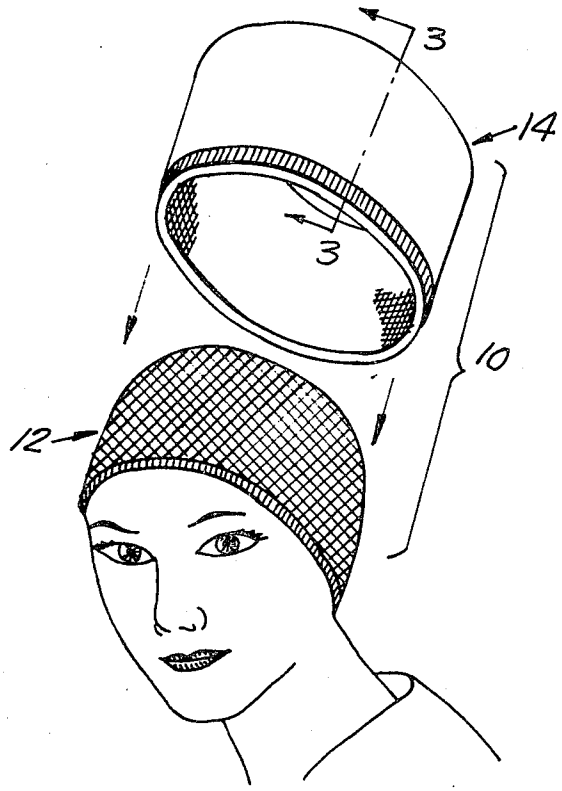


FIG. 1.



FIG. 2.

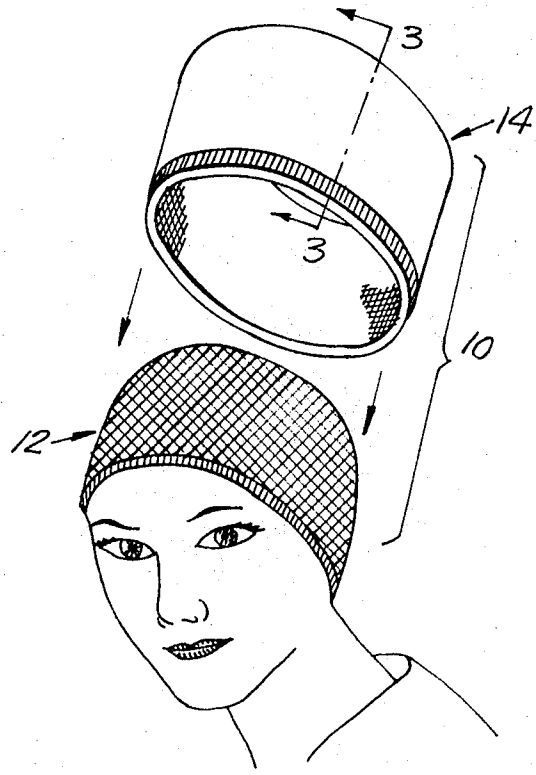


FIG. 3.

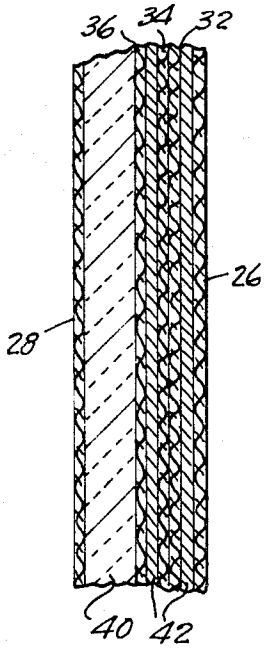


FIG. 4.

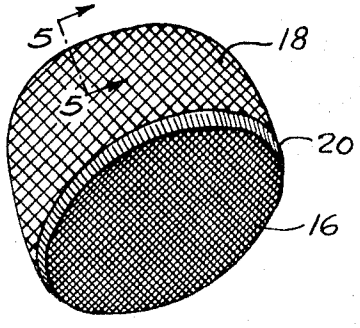
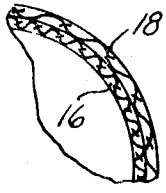


FIG. 5.



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HAIR-DRYING DEVICE

BACKGROUND OF THE INVENTION

This invention relates to an improved hair-drying device adapted to give the wearer unrestricted mobility during use thereof.

Present day hair dryers and/or hair setting devices suffer from the disadvantage of restricting the user's mobility. For example, a woman sitting under one or more of the commonly used rigid bowl-type devices generally finds the experience time consuming and discomforting. Since conventional devices are generally stationary, the user must remain in a relatively fixed position during the duration of the drying cycle which lasts from about one-half hour to 1 hour. If perchance it becomes necessary for the user to temporarily leave the stationary dryer before the hair is dry, even more unproductive time spent is then required, a part of which is to make up for the heat lost to the cooler atmosphere.

Accordingly, it is a primary object of the present invention to provide a drying device which enables the user to move freely about during the period of hair drying thereby productively utilizing such time without discomfort or inconvenience.

Another object of the present invention is to provide a new and improved hair-drying device having sufficient heat retaining means to achieve fast and effective hair drying.

Still another object of this invention is to provide a hair-drying device which is economical to manufacture and capable of mass production.

Yet another object of this invention is to provide a hair-drying device susceptible of wide usage at a low cost and having the added advantage of being portable.

A further object of this invention is to provide a hair-drying device having a separate moisture-absorbing heat-resistant cap used in combination with a preheated overlaid hood.

DESCRIPTION OF THE DRAWINGS

FIG. **1** is a perspective view, in elevation, of a hair-drying device designed and constructed in accordance with this invention;

FIG. **2** is a perspective view, in elevation, of the device in exploded view showing the cap in use and the hood in superimposed position ready for placement over the cap;

FIG. **3** is an enlarged fragmentary vertical cross-sectional view of the hood showing one embodiment of its internal construction, taken along a plane indicated by the line **3–3** of FIG. **2**;

FIG. **4** is a perspective view of the cap illustrating one embodiment of the inner and outer open mesh construction; and

FIG. **5** is an enlarged fragmentary cross-sectional view of the cap construction taken along the plane indicated by the line **5–5** of FIG. **4**.

DESCRIPTION OF A SPECIFIC EMBODIMENT

Referring now to the drawing in detail, wherein like numerals indicate like elements throughout the several views, a specific embodiment of the hair setting device comprising the subject matter of the present invention is shown as numeral **10**. The hair-drying device **10** comprises separate cap and hood members **12** and **14**, respectively, used in combination.

Cap **12** is shaped to cover the hair and when placed on the head completely covers the hair from the forehead to the nape of the neck. The cap is preferably constructed of a double-layer of water-absorbing material such as cotton, linen, muslin and the like. In FIGS. **4** and **5**, both inner layer **16** and outer layer **18** are of open mesh construction, formed of one-sixteenth inch or one-eighth inch thick heat-resistant strands. Inner layer **16** may be provided with openings approximately ⅛ inch or ¼ inch diameter, while the outer layer **18** may be provided with somewhat larger openings, on the order of ½ inch diameter. It should be understood, however, that the exact number of layers, the relative position of said layers, and the exact reticulated structure may be altered, provided, the cap is constructed with sufficient material so as to effectively remove the moisture from the damp or wet hair while simultaneously protecting the scalp from any excessive heat which may emanate from the hood.

A relatively thin band of elastic material **20** is provided at the lower edge portion of cap **12** adjacent the opening thereof along the outer or inner peripheral surfaces or secured between the layers **16** and **18**.

Hood **14** is designed to fit loosely over the head disposed adjacent to cap **12**, being formed of a crown **22** and a body portion **24** of identical material construction. Dimensionally hood **14** is about eight inches deep having an inner circumference of about 28 inches.

As best illustrated in FIG. **3**, the hood may be constructed of multiple concentric layers disposed circumferentially in the case of the body portion and arranged vertically in the crown portion, comprising a combination of metallic and nonmetallic materials. Inner layer **26** and outer layer **28** are preferably woven from insulating materials which may be asbestos, glass fiber, or the like. Intermediate layers **32**, **34** and **36** may be of the same material as inner and outer layers **26** and **28**, and serve to separate additional layers **40** and **42**.

A heat-retaining layer **40** is the heat sink compactly placed between layers **28** and **36**, filling the space therebetween and possesses the requisite thermal capacity to effect drying of the hair. Layer **40** may be of any commercially available fibrous or granular material which is physically and chemically suited to the elevated temperature subjected to, e.g. about 200° C. Asbestos, glass wool are examples of such suitable materials. Layer **40** is generally thicker than the other layers comprising the hood, being approximately one-half inch or more.

At least one and preferably two intermediate layers **42** of a flexible metal foil are also provided for heat-reflecting purposes and for regulating the flow of thermal energy from the heat source or layer **40** inwardly to the hair.

As shown in FIG. **3**, one specific embodiment of hood **14** comprises five layers of woven glass or asbestos cloth **26**, **28**, **32**, **34** and **36**, the first two separating the heat-retaining fibrous glass wool layer **40**, the others being used to separate layers **42** which are flexible aluminum foil. Variations in the exact number and arrangement of the laminate are contemplated. For example, additional foil and cloth layers may be placed outwardly from layer **28**, further minimizing heat loss to the atmosphere.

As stated earlier, the crown portion **22** of hood **14** is preferably constructed of the same laminate construction and material as the body portion **24**. It may be formed as a separate component and thereafter suitably fastened to the body portion. For example, the crown may be of disclike shape secured along its outer peripheral edge. At the lower edge of body portion **24** an elastic band **52** is also provided.

The hair-drying device of the present invention is to be used in conjunction with any suitable external heat source or supply. One such heat source contemplated is an electrically heated unit small enough to be placed under the hood being capable of fully heating the heat-retaining layer **40** to an elevated temperature, as for example 200° C.

During the time the hood member is being heated, the cap should be placed over the wearer's head and in position ready to receive the preheated hood. Thus, the scalp is protected from any excessive heat emanating from the hood. With the hood in position, sufficient thermal energy is available for removing moisture from the hair at a controlled rate. Due to the rather impervious nature of the hood member, it is imperative that the cap have sufficient material to fully absorb the released moisture.

From the foregoing description, it will become readily apparent that the hair-drying device of the present invention represents a novel and improved device which, when in use, enables the wearer to move freely about and perform a variety of household tasks without any loss of time. Further, the wearer is neither inconvenienced by having to sit erectly for a

prolonged period nor is she discomforted by the noise of outrushing hot air associated with conventional drying devices.

While a preferred embodiment of the hair-drying device of the present invention has been described in the foregoing description, it should be understood that this invention is not limited in its scope to the embodiments described, and variations in the form of the invention are contemplated thereby.

I claim:

1. A hair-drying device adapted to allow the user to move freely about during use thereof, comprising a separate heat-resistant cap member shaped to cover the hair portion of the user's head including means for absorbing moisture from the wet hair, and a heat-storing and distributing hood member positioned over said cap member, said hood member comprising a plurality of layers including a relatively thick heat-retaining layer of fibrous nonmetallic heat-resistant material and at least one layer of thin flexible reflective metal foil disposed inwardly of said heat-retaining layer for regulating the flow of thermal energy from said heat-retaining layer inwardly to the hair.

2. The device in accordance with claim 1, wherein said member includes at least one open mesh layer formed of heat-resistant fibers capable of absorbing moisture.

3. The device in accordance with claim 2, wherein said member is formed of a plurality of layers, each being woven from natural fiber material, one of said layers having mesh openings substantially smaller than another layer.

4. The hair-drying device of claim 1, and wherein said hood member is provided with a plurality of layers of thin flexible reflective metal foil disposed inwardly of said heat-retaining layer for regulating the inward flow of thermal energy, with thin layers of woven heat-resistant material interposed between the metal foil and the heat-retaining layer and between the metal foil layers, respectively.

5. The hair-drying device of claim 4, and wherein said metal foil comprises aluminum and said woven heat-resistant material comprises insulating material taken from the group consisting of fibrous glass and fibrous asbestos.

6. The hair-drying device of claim 5, and wherein said cap member comprises a plurality of layers of woven natural fiber material, one of said natural fiber layers having mesh openings substantially smaller than the mesh openings of the layer adjacent thereto.

7. The hair-drying device of claim 6, and relatively thin inner and outer layers of insulating fibrous material on the hood member.