Feb. 19, 1957 B. F. MILLER 2,781,764

HAIR TREATMENT CAP

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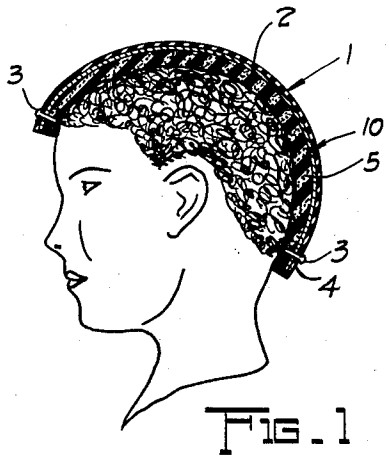


FIG. 1

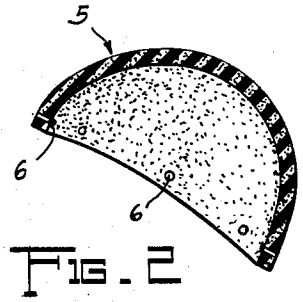


FIG. 2

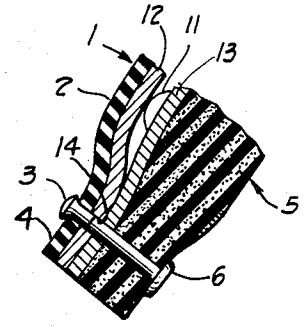


FIG. 4

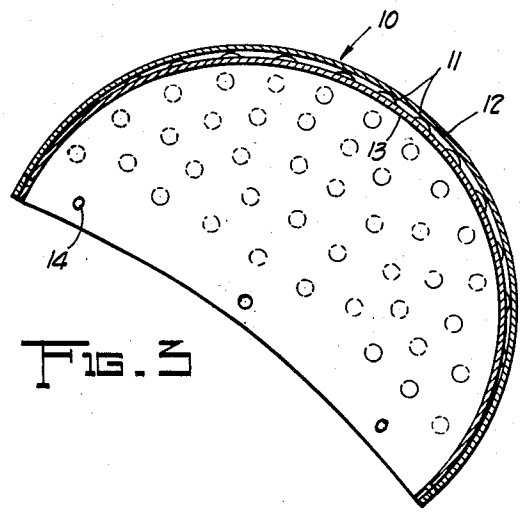


FIG. 3

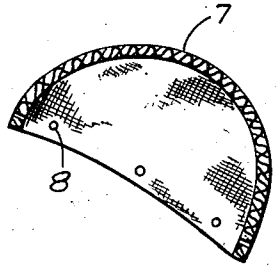


FIG. 5

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HAIR TREATMENT CAP

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2 Claims. (Cl. 132—9)

This invention relates to novel means for effecting treatment of hair, and primarily to cap construction which is designed to make possible the carrying out of various hair treatment techniques.

Generally speaking, the invention contemplates the employment of a cap body of waterproof material, formed so as to substantially enclose the hair of a user when applied to the head. The body is provided with suitable instrumentalities to frictionally engage the head of the user and thus retain liquid therewithin in contact with the hair.

Further, the cap body is likewise adapted to enclose a porous liner which likewise surrounds the hair, suitable means being provided to removably connect the liner to the body. Additionally, an inter-liner may be availed of for positioning between the cap body and liner, such interliner being constructed so as to act as a carrier for treatment materials, the interliner being maintained in place by the same means which connect the liner and body.

It is therefore a principal object of this invention to provide a cap which makes possible the use of several different hair treatments, such as shampooing, dyeing, and other desirable techniques with a minimum of the usually required additional steps.

A further object of the invention is to provide a cap construction which may be used with a liner of porous nature for containing liquid, which may be applied to the hair of a user, without other protective measures.

An additional object of the invention is to provide cap construction which may be used to perform certain hair treatment processes normally requiring extensive preparation and usually resulting in subsequent nuisance.

Other and further objects of the invention will be understood as set forth in the accompanying specification and exemplified in the drawing wherein:

Figure 1 is a view of the cap constructed in accordance with this invention, as in place upon the head of a user, showing the cap in construction and certain of the parts thereof.

Figure 2 shows in cross section, a porous liner.

Figure 3 shows in cross section on a somewhat enlarged scale a material treatment carrying element which is availed of in the construction.

Figure 4 is an enlarged detailed fragmentary view in section showing the manner of connection of the cap body, the liner, and the inter-liner therefor.

Figure 5 illustrates in section a different material which may be used for the porous liner in the cap construction.

Turning to a consideration of the drawing, and particularly Figure 1, a user is shown as having applied to his head or her head as the case may be, the cap unit of this invention generally designated **1**. The cap **1**, includes a cap body **2** which for the purposes hereof may be of generally hemispherical shape, and preferably of a resilient material such as rubber or the like to thus closely conform to the user's head although not necessarily limited to such close conformation. At the lower portion of the cap body **2** and forming a skirt section therefor, the same is provided with snap fastening parts such as illustrated in Figure 4, there being several of these and denoted **3**. These parts may be affixed to the material from which the cap body **2** is constructed in any preferred manner at the skirt section **4** thereof.

Within the cap body **2** and preferably of substantially a shape suitable for conforming generally to the head of a user and thus confining the hair therewithin, is the porous or liquid retaining liner such as illustrated in Figure 2 and designated **5** generally, the same being equipped at its lower edge at the periphery thereof with suitable fastening parts such as **6** for engagement with the corresponding fastening parts **3** previously referred to. This porous liner **5** may be of sponge rubber or similar material which is capable of absorbing and retaining therein a quantity of water or other liquid. It should be noted that the form of porous liner such as **5**, may also be made of different material such as shown in Figure 5, and denoted **7**, in this particular instance the material being terry-cloth or the like, formed in the general shape of the user's head and so as to also closely or at least relatively closely be able to confine the hair therewithin. This liner of Figure 5, may also and is preferably equipped with suitable snap fastening members or parts **8** which may be likewise be fastened to the fastener members **3** previously referred to.

Adverting to Figures 1, 3, and 4, and particularly Figure 3, between the porous liner **5** in this particular example, as shown in Figure 1, and the cap body **2**, an interliner as shown in Figure 3 and generally denoted **10** may be mounted. This interliner **10** is preferably formed of any suitable material such as paper, shaped similarly to that of the cap body and shaped in substantially the same manner and adapted to be placed between the porous liner **5** and the cap body **2**, the said inter-liner **10** in this instance for example being adapted to have incorporated therein suitable soap-like material or other cleansing composition generally such as indicated at **11** in Figure 3, the said material being received and preferably compressed between an outer layer **12** and an inner layer **13** of the inter-liner **10**. This is one method of providing a shampoo material carrier for example as will be understood. In view of the shape of the inter-liner **10**, and its preferred location, the same is provided at its lower periphery with suitable openings **14** which as shown in Figure 4 in enlarged detail may receive therethrough the fastening parts **3** and **6**, in order to maintain the treatment carrying element **10** in its position within the cap both in use and prior to use. Also this will enable the provision of an inter-liner or treatment carrying element **10** which may be disposed of after use with ease.

The treatment carrying element **10** may also in lieu of the soap material **11**, have provided therein a tinting or other dyeing material such as is occasionally preferred by the user whereby in use considerable increase in facility of handling the same is attained as will be subsequently explained.

While the general manner of use of the cap of this invention will be understood from a consideration of the description herein before set forth, there are certain phases which may be clarified and desirably point out the particular advantages of this construction.

Assuming that the individual who proposes to use the cap of this invention desires to shampoo the hair, a treatment carrying element **10** which has incorporated therein suitable soap-like particles is emplaced between the cap body **2** and the sponge rubber or other liquid holding liner **5**, and fastened in place by suitable adjustment of the snap fastening parts **3** and **6**. Thereafter the sponge rubber liner **5** is supplied with sufficient water to carry out the shampooing technique and subsequently the cap as a whole is emplaced upon the head so as to enclose the hair therewithin. The skirt **4** is of such a nature as to

closely encompass the head of the user and prevent the escape of water, and thereafter massaging of the exterior of the cap body will cause the soap material in the inter-liner **10** to be dissolved and effectively transmitted to the hair. Thereafter, after the required time has elapsed, the individual may remove the cap and subsequently the inter-liner **10**, as will be apparent, replacing the sponge rubber liner **5** for example and rinsing the same so as to remove the soap or other shampooing material. Numerous applications of the cap in the condition last described using clear water, will accomplish the rinsing desired. This clearly provides for shampooing the hair of the individual without other necessary body covering usually availed of and thus provides the advantages sought to be attained.

Another use to which the cap may be put when an inter-liner **10** is provided which incorporates therein hair tinting material, is carried out in a similar way to the shampooing operation above described, the advantage in this particular instance being clear that tinting material is confined within the cap and the desired tinting resulting with a minimum amount of nuisance accompanying the same.

Under certain circumstances where the sponge rubber liner **5** is not desired to be used by reason of intent to leave the same on the head for a longer period of time, the terry-cloth liner **7** may be substituted and hair treatment material applied to the scalp and the cap left in place for a long period of time as may be desired.

In view of the foregoing description of the cap of this invention and its preferred manner of use, it will be apparent that a novel form of hair treatment cap is provided, making possible use of the same in carrying out a number of different hair treatment techniques, involving the use of a water or liquid impervious cap body, havnig mounted therewithin for ready removal suitable porous liner which may be of substantial thickness such as **5**, the

provision of the liner **5** being such that it may be readily attached to or detached from the cap body, making possible further the insertion between the liner **5** and the cap body **2** of a hair treatment inter-liner such as **10** shown in Figure 3, the same being a vehicle for supplying either soap or dye or other hair treatment material, all of the same being accomplished with a minimum amount of covering usually necessary in carrying out known types of hair treatment operations.

I claim:

1. In a cap of the class described, in combination, a cap body of resilient material for positioning on the head of a wearer to enclose the hair therewithin, said body having a skirt section for frictionally engaging a wearer's head, fastening devices in said skirt, a porous liner capable of retaining and supplying liquid within said body likewise substantially conforming with a wearer's head and having a portion adjacent the skirt section of the cap body, fastening parts in said portion removably engaged with the fastening devices, and a treatment material carrying element mounted intermediate the body and liner and of substantially the same area.

2. The combination as claimed in claim 1, wherein the treatment material carrying element is formed with fastening receiving openings at points generally coinciding with the fastening devices and parts, said openings providing for engagement of said parts and devices therethrough.

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