Aug. 25, 1959 R. TOFIELD 2,900,739

PORTABLE ELECTRIC HAIR DRYER

Filed April 21, 1958

FIG. 1

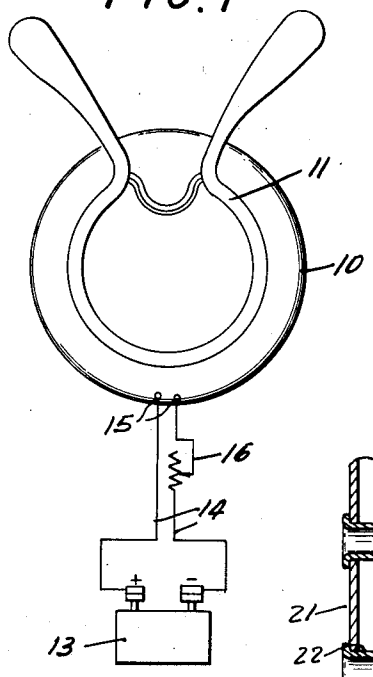
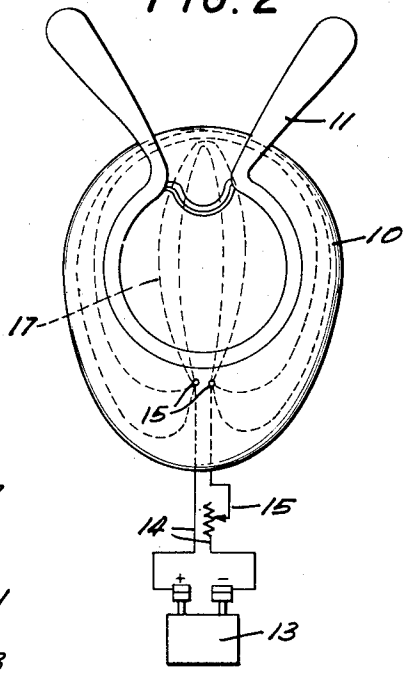



FIG. 2



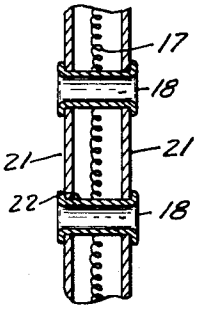




FIG. 5

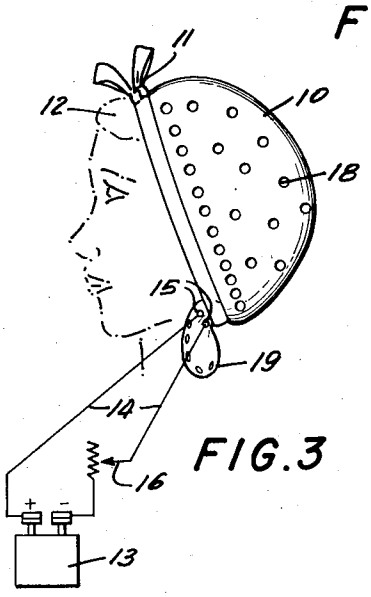



FIG. 3

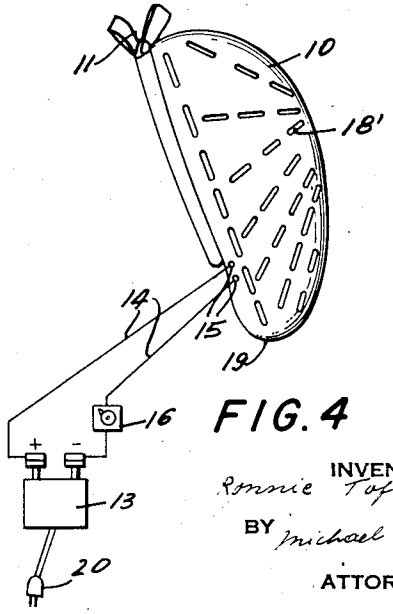



FIG. 4

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# PORTABLE ELECTRIC HAIR DRYER

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1 Claim. (Cl. 34—99)

The invention relates in general to electric dryers and more particularly, to electric hair dryers.

An object of the invention is to provide an electric hair dryer of relatively light weight so that it can be easily transported.

Another object of the invention is to provide an electrical hair dryer which can be adjustably fitted on to various head sizes (also, being adjustable to various amounts of hair, i.e., long hair or short hair).

Another object of the present invention is to put both the dryer and the source of electrical energy into one complete portable unit.

Still another object of the invention is to have the receptacle containing the heating elements of the dryer perform simultaneously the functions of drying hair and being worn as a beret-type cap that completely covers the part of the head covered with hair. This cap being somewhat decorative, may be used in lieu of a hat.

With the above objects in view the present invention includes an electric dryer in the form of a receptacle adapted to receive articles to be dried, the walls of the receptacle carrying electric heating elements for heating the receptacle when the heating elements are energized, and connecting means which can connect the heating elements to a source of electrical energy for energizing the heating elements so that when an article is inserted into the receptacle the energized heating elements carried by the walls of the receptacle will heat the article and thereby dry the same.

The novel features which are considered as characteristic for the invention are set forth in particular in the appended claim. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of specific embodiments when read in connection with the accompanying drawings, in which:

Figure 1 is an illustration of the electrical hair dryer looking inwardly into the receptacle of the dryer. The dryer is energized by a portable battery, which is shown schematically;

Figure 2 is an illustration of an electrical hair dryer of a different configuration (for a larger amount of hair) looking inwardly into the receptacle of the dryer. The dryer is energized by a portable battery, which is shown schematically;

Figure 3 is an illustration of the hair dryer when worn on a head, said electrical hair dryer being energized by a portable electrical battery, which is shown schematically;

Figure 4 is another view of an electrical hair dryer of a different configuration worn on a head, the electrical hair dryer being energized by a rechargeable portable electrical battery; and

Figure 5 is a cross sectional view of a part of the electrical hair dryer.

With reference to the drawing, the invention is illustrated in Figure 1 where there is shown a cap **10** that can be adjusted to different head sizes by an elastic band **11**.



On the frontal part of the cap **10** there is attached a piece of decorative material **12**. A portable battery **13**, shown schematically, is operatively connected to the cap by means of a pair of wires **14** which are connected to a pair of contact leads **15** of the cap. In circuit between the battery **13** and the pair of leads **15** is an adjustable resistance **16** shown schematically in Fig. 1.

Figure 2 shows a different shape of the cap **10** (this shape may accommodate a larger head or longer hair). On this Figure 2 is shown in addition to the elements shown on Figure 1, the heating elements **17** which are located between two layers of the cap. These heating elements **17**, which are also used in the cap of Fig. 1, are electrically connected to the pair of leads **15**.

The electrical current emanating from the battery **13**, which can be adjusted by means of the resistance **16** will energize the heating elements **17**. These heating elements will heat the cap **10** which in turn heats the hair enveloped by the cap when said cap is placed on the head of a person and thereby dries the hair.

Figure 3 is a view of the electrical dryer when worn on a head. The elastic band **11** can be tied around the head and can be held together by means of a bow-tie as shown on Figure 3. The cap **10** may have a plurality of cutouts **18**. These cutouts which completely penetrate the cap will permit the rapid evaporation through the cutout of the moisture contained in the hair. Part of the cap **10** extends beyond the elastic band **11**. This extension **19**, on which are located the pair of leads **15**, can be folded inwardly so as to be invisible. By folding only part of the extension **19** the cap can be adjusted to various head sizes or to different amounts of hair.

The electrical dryer may be energized by a rechargeable portable source of electrical energy as indicated in Figure 4. An electrical plug **20** which is operatively connected to the rechargeable battery **13**, as indicated on Figure 4, can be plugged into conventional outlet, and thereby the battery **13** will be recharged. A pair of wires **14** again lead from battery **13** to the pair of leads **15** as indicated on Figure 4. An adjustable resistance **16** is shown in circuit between the battery **13** and the leads **15**. This regulates the amount of current which energizes the heating elements **17**. The cutouts **18'** of the cap shown in Figure 4 have a different configuration than the cutouts **18** shown in Figure 3. The extension **19** is shown to envelop a larger volume of hair in Fig. 4 than in Fig. 3.

Figure 5 is a partial cross sectional view of the cap. Two flexible layers of moisture proof material **21** form the cap. Heating elements **17** are located between the two layers of material. The cap is formed with a plurality of cutouts **18** the cutouts of one layer being respectively aligned with the cutouts of the other layer and communicating therewith by means of tubes to form a plurality of pairs of aligned cutouts joined by tubes. These tubes permit the rapid evaporation of moisture contained in the hair and also prevent the moisture from penetrating into the space defined by the two layers of material **21**. The tubes are fixed with the layers.

The cap can be made from any type of flexible sheet material which is heat resistant, such as certain types of plastic or cloth materials. When the heating elements are properly insulated and moisture proofed it is not essential that the two layers of material are also moisture proof. Consequently, it is not necessary to provide the cap with cutouts. It should be noted that instead of the portable battery the electrical dryer can be energized by any conventional electrical outlet. This can be accomplished by connecting an electrical plug **20**, as shown in Fig. 4 directly to the pair of electrical leads **15**. An electrical adjustable resistance **19** can be inserted in circuit. This resistance can be used to regulate the electrical

current from the electrical outlet which energizes the electrical dryer.

However the preferred embodiment of the invention is illustrated in Figs. 1–4, namely the electrical energy source is an electrical battery 13 which together with the cap 10 forms a complete portable unit.

It will be understood that each of the elements described above, or two or more together, may also find a useful application in other types of electrical dryers differing from the types described above.

While the invention has been illustrated and described as embodied in portable electrical hair dryers, it is not intended to be limited to the details shown, since various modifications and structural changes may be made without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can by applying current knowledge readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention, and therefore, such adaptations should and are intended to be comprehended within the meaning and range of equivalence of the following claim.

What is claimed as new and desired to be secured by Letters Patent is:

An electric hair dryer, comprising, in combination, a cap adapted to be worn as a head gear having an inner layer of moisture-proof flexible material and an outer layer of sheet material, each of said layers of material being formed with a plurality of cutouts, the cutouts of one layer being aligned and communicating with the cutouts of the other to form a plurality of pairs of aligned cutouts; an elastic band carried by said cap for adjustable fixing said cap to the head of a person; connecting means connecting the cutouts of each pair to each other, so as to form a plurality of passages from the interior to the exterior of the cap; heating means located between the two layers of material and the connecting means being operatively connected with said cap for heating the same; a self-contained portable rechargeable source of electrical energy connected to said heating means for energizing the same; and connecting means carried by said self-contained rechargeable source of electrical energy for connecting the same to an electrical outlet of a source of electrical energy in order to recharge said self-contained source of electrical energy, so when said receptacle is placed on the hairy part of a scalp, said heating means when energized by said self-contained portable source of electrical energy will heat the head gear and thereby dry the hair.



**References Cited** in the file of this patent

UNITED STATES PATENTS

| | | |
|---|---|---|
| 1,751,573 | Bishinger | Mar. 25, 1930 |
| 2,281,993 | Pritchard | May 5, 1942 |
| 2,295,824 | Batsel | Sept. 15, 1942 |
| 2,342,744 | McCready | Feb. 29, 1944 |
| 2,488,793 | Amerkan | Nov. 22, 1949 |
| 2,668,367 | Chedister | Feb. 9, 1954 |
| 2,745,192 | Crise | May 15, 1956 |