

Sept. 20, 1971

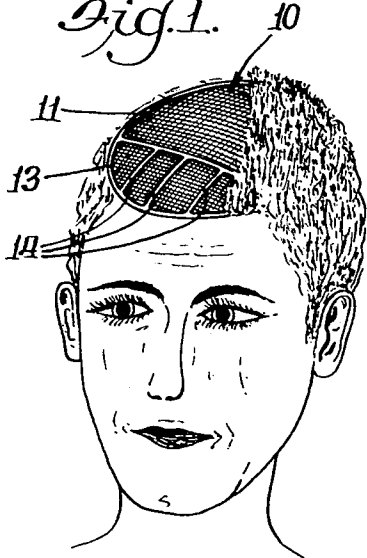
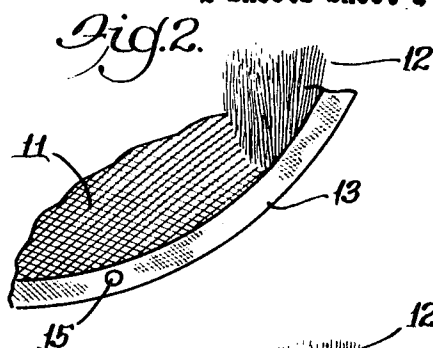
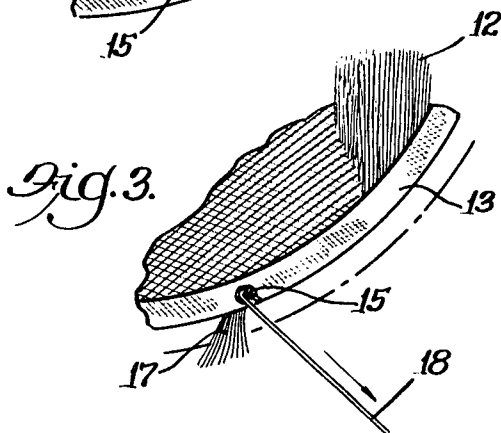
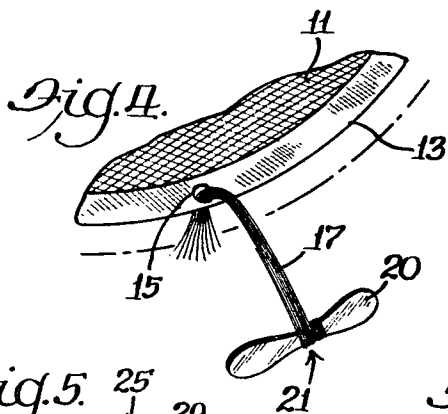
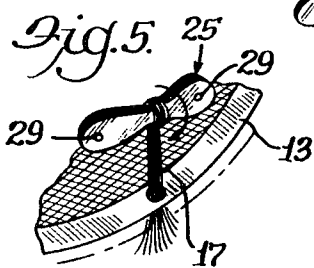
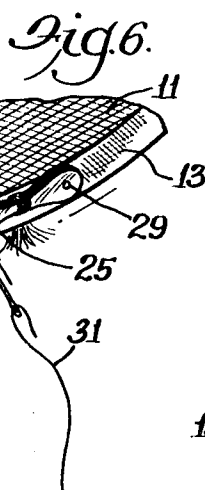
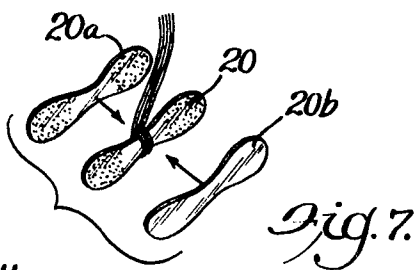
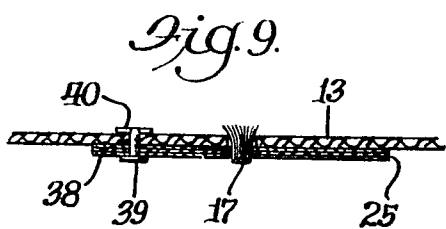
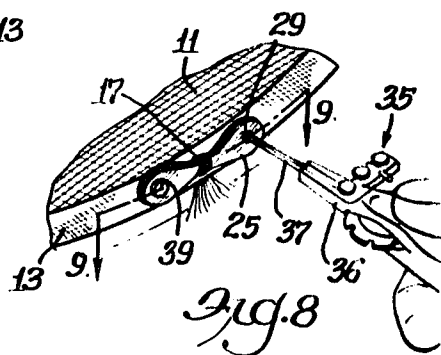
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3,605,761

METHOD OF FASTENING HAIRPIECE

Filed Jan. 13, 1970

2 Sheets-Sheet 1



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METHOD OF FASTENING HAIRPIECE

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2 Sheets-Sheet 2

Fig. 10.

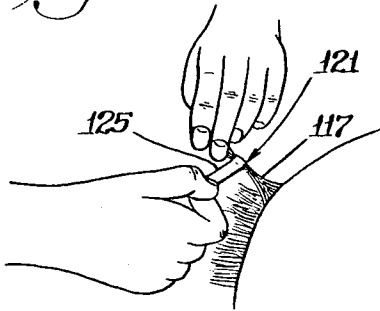


Fig. 11.

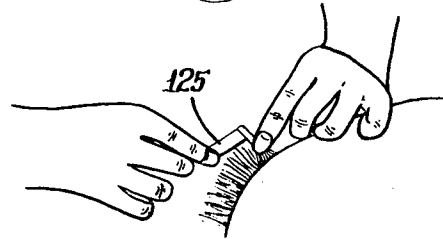


Fig. 12.

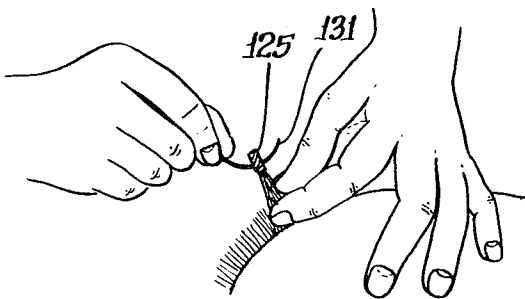


Fig. 13.

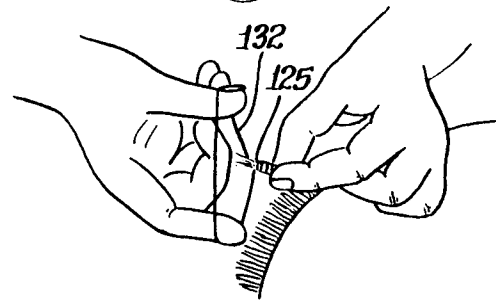


Fig. 14.

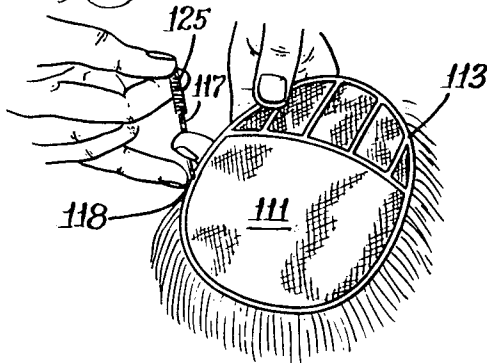
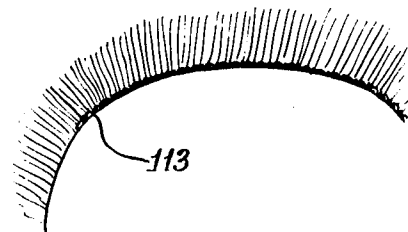


Fig. 15.



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3,605,761

METHOD OF FASTENING HAIRPIECE

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U.S. Cl. 132—5

10 Claims

ABSTRACT OF THE DISCLOSURE

A method of attaching a hairpiece with a base cap to cover a bald area on the head of a person includes passing a number of tufts of the person's own hair through peripheral holes in the base. The holes are spaced about the bald area. An anchor member is permanently secured to each tuft either before or after it is passed through the cap. The anchor members are located at a distance from the scalp sufficient to permit loosening of the hairpiece for cleaning the scalp. The original registration of the base on the bald area is retained upon re-tightening of the hairpiece. The hair between the anchor member and the scalp is then taken up until the cap is tightened to the scalp; and the anchor member is then releasably secured to the cap to hold it in place.

BACKGROUND AND SUMMARY

The present invention relates to method of fastening a hairpiece wherein individual strands of false hair are secured to a base or cap to cover a bald area on the head of a person.

Prior techniques for securing a hairpiece to the head of a person centered on designing the hairpiece to be contoured to the surface of the area to be covered and held there by an adhesive agent contacting the skin. Other techniques employed a material which frictionally engaged the wearer's scalp so that pulling of the artificial hair could dislodge the hairpiece.

More recent techniques emphasize a more permanent attachment of the hairpiece which permits wearing the hairpiece at all times, for example, in the shower, during the strenuous physical exercise, to bed, etc. Problems have arisen in evolving techniques for the more permanent securing of a hairpiece. The problem is not solved by supplying a more firm adhesive because any permanent adhesive contact with the skin or scalp of the wearer will cause irritation and may result in infection.

Our copending application entitled Method of Attaching Hairpiece to the Existing Hair of a Wearer, filed herewith, discloses a method of permanently affixing a hairpiece with a base to the wearer's head by spacing a plurality of discrete anchor points about the area to be covered and forming, with individual tufts of the wearer's natural hair, anchor points which are then sewn to the base or cap of the hairpiece. Although this technique is a great improvement over known techniques, as explained in the application, all these techniques nevertheless require periodic professional treatment because as the wearer's hair grows, the hairpiece becomes loose and must be tightened. Further, when a hairpiece is permanently affixed to the existing hair of a wearer, because it must be tightly secured and firmly engage the area to be covered, there is very little spacing between the base cap of the hairpiece and the wearer's scalp. Although this normally does not involve any discomfort, nevertheless, as the hairpiece is worn and used as normal hair (for example, shampooed) soap and other materials collect beneath the cap which cannot be rinsed away; and this ultimately leads to irritation of the skin.

The present invention provides a base or cap to which the false hair is secured and which is contoured to the

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area of the scalp to be covered, as already known. The cap is provided with a number of apertures spaced about the periphery of the bald area adjacent to or overlapping the natural hair surrounding the bald area. Individual tufts of the wearer's own hair are drawn through each of the apertures in the cap; and an anchor member is permanently secured to each tuft at a short distance from the scalp of the wearer either before or after drawing the hair tufts through the cap. The distance of permanent attachment of the anchor member is selected to permit the cap to be removed from its normal tight engagement with the scalp to a secondary position when it is desired to wash the hair and head of the wearer. Thus, one of the functions of the anchor members is to retard further removal of the cap beyond the secondary position; and the individual tufts retain the original registration of the hairpiece on the bald area that had been arrived at with professional help.

Two methods of permanently attaching the anchor member to the natural hair of the wearer are disclosed—in one embodiment, the anchor member is attached to the tuft of hair prior to drawing the hair tuft through an associated aperture in the cap and in the other embodiment, the tuft of hair is first drawn through the cap and then the anchor member is permanently attached at the secondary position.

After the anchor member is permanently attached to each tuft of hair at each location, the hair between the secondary location and the scalp is taken up either by wrapping the hair around the anchor member or around the cap; and the anchor member is then secured directly to the cap. Thus, professional assistance will normally be required only the first time that the hairpiece is secured to the hair. Thereafter, an inexperienced person can remove the attachment of the anchor member to the cap to permit the release of the hairpiece to the secondary position and thus allow the wearer to wash his scalp and hair and to thoroughly rinse the underlying, exposed skin. By permitting removal of the hairpiece to the secondary position and using the individual tufts of hair, the original, professional registration of the cap relative to the bald area and the person's head is retained. An important advantage of the inventive technique is that during this re-affixing of the hairpiece to the wearer's head, any growth of the tufts of hair that has taken place since the last attachment is automatically taken up, either by wrapping the hair about the anchor member or by wrapping the hair about the base cap prior to affixing the anchor member to the cap.

Another feature of the present invention is the manner in which the anchor members are formed. It has always been difficult to permanently secure foreign matter to individual tufts of hair in a way which absolutely prevents slippage. One method of forming an anchor point is disclosed in our copending application, identified above. In the present application, two other methods of securing individual tufts of hair to an anchor member and a secondary location are disclosed, and each is satisfactory from the viewpoint of permanently attaching the hair to the anchor member in non-slip engagement.

Other features and advantages of the present invention will be apparent to persons skilled in the art from the following detailed description of preferred embodiments accompanied by the attached drawing wherein identical reference numerals will refer to like parts in the various views.

THE DRAWING

FIG. 1 is a perspective view of an artificial hairpiece attached according to the present invention with a portion of the false hair cut away;

FIGS. 2-9 illustrate one technique for securing the hair-

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piece to the existing hair of a wearer according to the present invention; and

FIGS. 10-15 illustrate a second technique for attaching the hairpiece to the existing hair of the wearer to cover the bald area.

DETAILED DESCRIPTION

Referring first to FIG. 1, the hairpiece includes a base 10 having a grid of synthetic material cross-hatched to provide a mat or cap 11 for attaching the false hair, designated 12 in FIGS. 2 and 3. The grid work 11 is preferably formed from non-woven material such as synthetic plastics like nylon or other flexible synthetic materials.

About the periphery of the grid work 11 there is a band 13 of woven material which edges the grid work and which serves as a frame for stays 14 for keeping the front part of the hairpiece in place and snug against the scalp in locations where there is no natural hair surrounding the bald area, for example in the front where the stays 14 would be formed over the forehead of the wearer.

Turning now to FIGS. 2 and 3, at locations spaced about the peripheral band 13, there are formed apertures designated 15; and the number and spacing of apertures depends upon the size of the area to be covered, but as an example, a spacing of 1.5 to 3 in. has been found to be adequate.

The attachment of the false hair 12 to the grid work 11 is conventional and forms no part of the present invention. Further, caps or bases of the type illustrated are known in the art and commercially available; however, they are not normally provided with the apertures 15. These apertures may be formed with a hole punch, if desired.

Turning now to FIG. 3, a tuft of the natural hair of the wearer is designated by reference numeral 17, and it is drawn through the aperture 15 by means of a hook 18. The size of the tuft 17 is not critical, but good results are obtained if the diameter of the tuft is about $\frac{1}{16}$ in.

The length of each tuft should be about $\frac{1}{2}$ to 2 in. In this embodiment, after the tuft of hair 17 is pulled through the peripheral band 13 of the base cap, a first, intermediate anchor member 20 is permanently secured to the tuft at an intermediate location (sometimes referred to herein as the "secondary" position) generally designated by reference numeral 21. The anchor member 20 is formed of a thin plastic material, and it has the plan shape of an hour glass or figure 8. It is important to permanently secure the hair to the anchor member 20 in non-slip engagement, and this may be done by wrapping the hair about the anchor member 29, securing it thereto by means of an epoxy glue, and then placing two side anchor members 20a and 20b (see FIG. 7) in engagement with the intermediate anchor member 20 and either sewn thereto or secured by a suitable adhesive.

The length of the tuft 17 between the scalp and the secondary position is a matter of choice, but it should be at least $\frac{1}{2}$ in. and preferably more in order to permit the loosening of the base cap from the scalp and to allow access beneath it with a hand, wash cloth or brush. It will be observed that the function of the formed anchor member is to permit such loosening of the base cap while retaining the tuft 17 in position with the aperture 15 and thus retain the original registration of the cap on the wearer's head which had been acquired with professional skill.

Turning now to FIG. 5, the anchor point formed as described above is generally designated by reference numeral 25; and the hour glass shape of the anchor points 25 is useful in taking up the portion of the tuft 17 between the scalp and secondary location 21. This is accomplished by wrapping the tuft 17 about the anchor point 25 as illustrated by the curved arrow in FIG. 5. Thus, the anchor point 25 is drawn tightly against the peripheral

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band 13 of the base cap; and apertures 29 may be formed in the side of the three-part anchor points 25. A needle 30 and nylon thread 31 may be used to sew the anchor points 25 to the peripheral band 13 of the cap, as illustrated in FIG. 6.

Alternatively, the anchor point 25 may be secured to the peripheral band 13 by using a button attacher of the type commercially available under the trade name Buttoneer and manufactured by the Dennison Manufacturing Company of Framingham, Mass. In this device, a magazine of plastic attachment members is generally designated 35, and it is fed transversely into a handle 36 to which is secured a hollow needle 37. Each attachment member (see FIG. 9) includes a stem 38, a round cap 39, and a transverse bar 40. The needle 37 is inserted through the aperture 29 in the anchor member 25 and through the peripheral band 13 of the base cap. The handle of the device 36 is then actuated to force one of the attachment members with the transverse bar 40 through the aperture of the channel-shaped needle 37 into the operative placement shown in FIG. 9. The round cap 39 of the attachment member 35 holds the anchor point 25 securely to the base 13.

In either of the two methods of attaching the figure eight anchor member to the base cap, it will be observed that removal is simply and easily accomplished without the need of cutting the natural hair of the wearer. In the embodiment of FIG. 6, the thread securing the anchor member 25 to the base cap 13 may simply be cut; whereas, the example of FIGS. 8 and 9, once the attachment members 35 are located, they may be snipped with a scissors and when it is desired to re-secure the anchor member 25 to the peripheral band 13 of the base cap, new attachment members may be used.

In FIG. 9, of course, only one of the attachment members is shown, and a similar member will be formed on the other side of the tuft 17.

Turning now to the embodiment of FIGS. 10-15, each anchor point is formed prior to passing the tuft of hair through the apertured base cap; however, the base cap may be the same as the previously-described base cap 10 including a grid 11.

In this embodiment, the tuft of the wearer's natural hair is designated 117, and, at an intermediate location generally designated by reference numeral 121, spaced from the scalp of the wearer by a distance which is selected as previously described, there is wound about the tuft a piece of double-coated adhesive tape 125 which will perform the same function as the previously-described anchor member 25. After one or two turns of the adhesive tape about the tuft 117, the distal end of the tuft 117 is folded downwardly as in FIG. 11, and the tape 125 is wrapped about the doubled-over tuft for one or two more turns. Although not illustrated in the drawing, it is preferable that the distal end of the tuft be again turned upwardly and two more revolutions of the tape be made so that a permanent non-slip anchor point is formed. The loose end of hair may be clipped and any excess tape may also be trimmed.

Turning now to FIG. 12, a nylon binding is formed about the cylindrical shape formed by the tape 125. Initially, a curved sewing needle 131 is placed through the tape adjacent the base and the tuft of hair to draw a nylon string through the tape at a location toward the end of the tape which is closer to the scalp. Next, as illustrated in FIG. 13, a number of half-hitch knots of the nylon string 132 are formed about the tape 125 to form a complete peripheral wrapping of the tape. As each knot is formed, it is tightly secured to cause the tape 125 to bite into the tripled-fold of the individual tuft. After the nylon binder 132 has been thus wrapped or tied about the tape 125 and then bound so that it does not come loose, there is formed an anchor point with an anchor member spaced at a secondary position in the tuft of hair. Turning now to FIG. 14, the anchor member is

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drawn through a pre-formed aperture 115 in a peripheral band 113 of a cap 111 which is similar to the previously-described hairpiece 10. The tuft of hair 117 extends through the aperture 115, and the anchor point 125 is pulled while pressing on the cap 111 to tighten the cap to the scalp of the wearer. The diameter of the anchor point 125 is formed to be about the diameter of its associated aperture to retain the cap on the head when it is loosened. Next, the anchor member 125 is drawn beneath the cap and re-drawn through the aperture 115. This procedure is repeated until the excess amount of hair in the tuft 117 is taken up; and then, the anchor point 125 is placed (see FIG. 15) beneath the peripheral band 113 and secured thereto, for example, by sewing with a nylon thread.

As with the previous example, a number of such anchor points are formed with the wearer's natural hair about the periphery of the bald area, and each is secured to the base cap of the hairpiece in a similar fashion.

As mentioned, with the embodiment of FIGS. 10-15, the bulk of the anchor member 125 is sufficient to prevent accidental dislodgement of the tuft from the artificial hairpiece when it is loosened for cleansing the scalp. That is, the anchor members are formed first and then threaded through the cap, but when they are loosened, the anchor members restrict complete removal. However, it is noted that since there are a number of turns or loops of the tuft through each of the apertures in the hairpiece, some of these loops may be retained during washing in order to retain the registration of the hairpiece on the wearer's scalp.

Persons skilled in the art will appreciate that each of the above embodiments of the inventive technique permit the tight, rigid yet removeable affixing of a false hairpiece to the existing hair of a wearer while permitting loosening thereof for cleaning beneath the same. Further, once the hairpiece is placed through skilled help, registration remains the same, and non-skilled persons can thereafter loosen the hairpiece yet retain its original registration.

In addition, each time the hairpiece is loosened for cleansing and then tightened, the growth of the natural hair tuft is automatically taken up during the re-tightening process. In the first of the above embodiments, additional twists of the anchor member 25 will take up the growth portion; and, for the second embodiment, when the anchor member is wound or looped through the hairpiece, it is affixed to the peripheral band at a location further around the periphery thereby taking up the slack in the new growth.

Another advantage of the invention is that the person wearing the hairpiece may re-form the anchor points himself without seeking professional aid. For example, a year or so after the original placement, the hair tufts may have grown to a length which is too long for convenient tightening. The wearer may then clip the excess hair and re-tape or otherwise form the anchor points without losing the original registration of the hairpiece on the person's head. In the embodiment of FIGS. 10-15, it will also be realized that excess hair growth may also be compensated for by further looping of the anchor member through its associated aperture during adjustment.

Having thus described in detail a number of embodiments of the inventive technique, persons skilled in the art will be able to modify the illustrated steps and to substitute equivalent structure for that which has been disclosed; and it is, therefore, intended that all such modifications and equivalents be covered as they are embraced within the spirit and scope of the appended claims.

I claim:

1. A method of placing a hairpiece having a base cap to cover a bald area on the head of a person comprising: passing a tuft of the person's own hair through said

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cap at a plurality of locations spaced about the periphery of the bald area, forming an anchor point in each tuft at a secondary position spaced from the person's scalp sufficient to permit selective loosening of the hairpiece, taking up the slack in each tuft to position said cap tightly against the person's head, and then fastening each anchor point to said base cap.

2. The method of claim 1 wherein said cap is provided with a plurality of apertures spaced about the periphery thereof and wherein an anchor point is formed in each tuft after passing the same through an associated aperture by securing an anchor member to each tuft at a location spaced from said scalp at a distance from said scalp of about at least 1/2 in. and wherein said step of taking up said slack comprises twisting the hair between said secondary position and the person's scalp about said anchor member.

3. The method of claim 2 wherein said step of fastening said anchor points to said base cap comprises sewing the same thereto with nylon thread.

4. The method of claim 3 wherein said step of fastening said anchor points to said base cap comprises removably attaching the same to the periphery of said cap with button lock means.

5. The method of claim 1 wherein each of said anchor points is formed prior to passing the associated tuft through said cap.

6. The method of claim 5 wherein said step of taking up slack in each tuft comprises wrapping said tuft about the cap to form a number of loops with the hair between said anchor point and the person's scalp.

7. The method of claim 6 wherein said step of fastening said anchor point to said base cap comprises pulling said anchor point to firmly secure said cap to said tuft and then sewing said anchor point to said base cap.

8. A method of placing a hairpiece having a base cap to cover a bald area on the head of a person comprising: forming a plurality of anchor points in individual tufts of the person's hair spaced at a plurality of locations about the periphery of the bald area by attaching anchor means to each individual tuft at a secondary position spaced from the person's scalp at a distance sufficient to permit selective loosening of said hairpiece once it is attached, then passing each anchor point thus formed through an associated aperture in said cap, drawing each individual tuft of hair to tighten said cap to the person's head, and then fastening each anchor point to said cap whereby each anchor point may be loosened to permit said cap to be released to said secondary position without losing registration relative to said anchor points.

9. A method of placing a hairpiece having a base cap to cover a bald area on the head of a person comprising: at each of a plurality of locations spaced about the bald area to be covered, passing a tuft of the person's own hair through the cap, then securing an anchor member to each tuft after it is drawn through the cap in non-slip relation with each tuft, then tightening said anchor member by rolling the same down against said cap, then securing said anchor member to said cap.

10. The method of claim 9 characterized in that said anchor member is releasably secured to said cap.

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LOUIS G. MANCENE, Primary Examiner

G. E. McNEILL, Assistant Examiner

UNITED STATES PATENT OFFICE
CERTIFICATE OF CORRECTION

Patent No. 3,605,761 Dated September 20, 1971

Inventor(s) Ronald A. Magro

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

On the two sheets of drawings: the inventor's name "R. A. Margo" should be "R. A. Magro".

Signed and sealed this 28th day of November 1972.

(SEAL)

Attest:

EDWARD M. FLETCHER, JR.
Attesting Officer

ROBERT GOTTSCHALK
Commissioner of Patents