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Claunch

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[54] **HAIR PROTECTOR**

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[73] Assignee: **Ralph B. Claunch**, Menlo Park, Calif.

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[52] **U.S. Cl.** **132/49**, 2/172

[51] **Int. Cl.** **A45d 8/40**

[58] **Field of Search** 132/49, 46; 2/68, 2/171, 197, 201; 104/35

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Assistant Examiner—Gregory E. McNeill
Attorney—Stephen S. Townsend, John L. McGannon et al.

[57] **ABSTRACT**

A hair protector having a first portion for covering the hair and a second portion adapted to fit tightly across the forehead and the sides of the face to secure the hair protector in place on the head. The second portion includes a band of stretch knit material having a smooth surface for engaging and extending across the forehead without forming creases therein yet the band holds the protector from slipping downwardly and forwardly across the face during use. Several embodiments of the hair protector are disclosed including a shower cap adapted for use with a bouffant hairdo.

14 Claims, 12 Drawing Figures

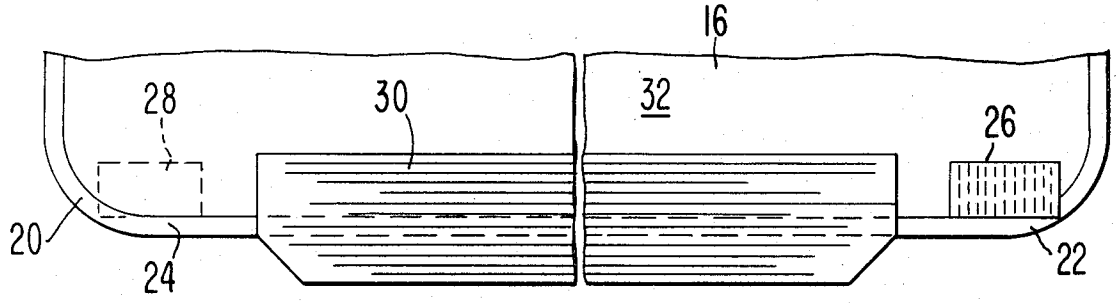


FIG. 1



FIG. 2

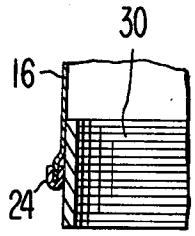


FIG. 1a

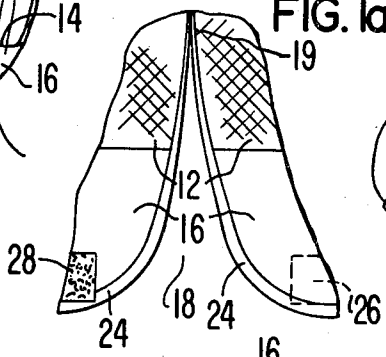


FIG. 6

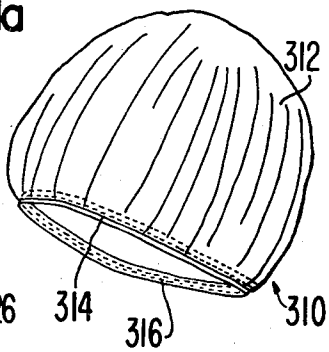


FIG. 3

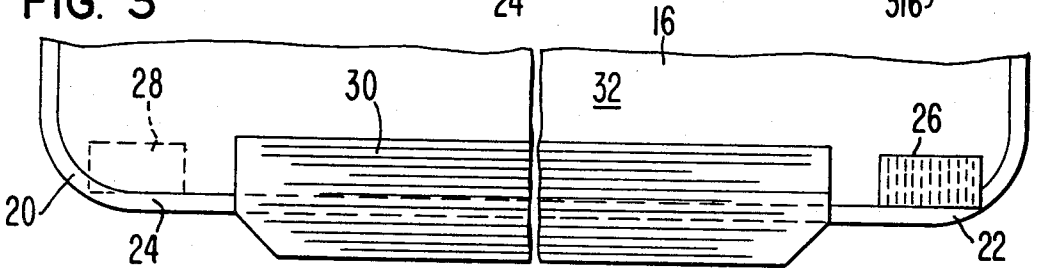


FIG. 4

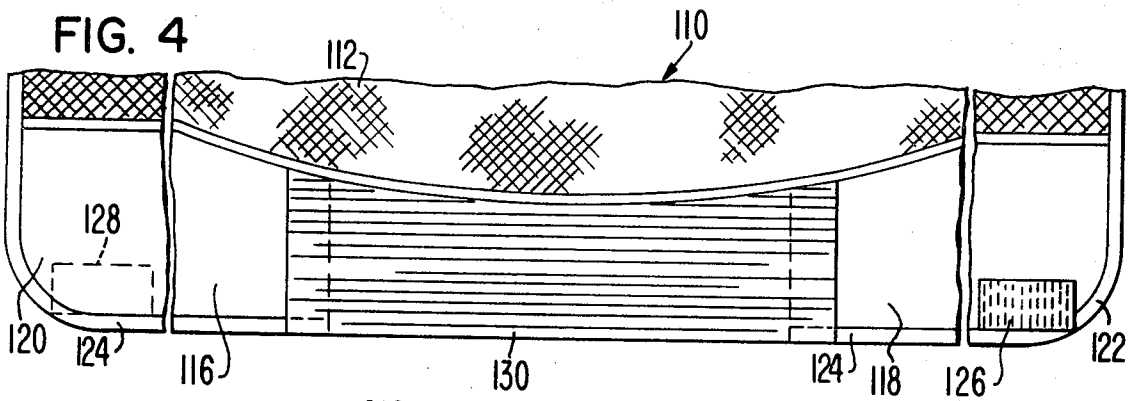


FIG. 5

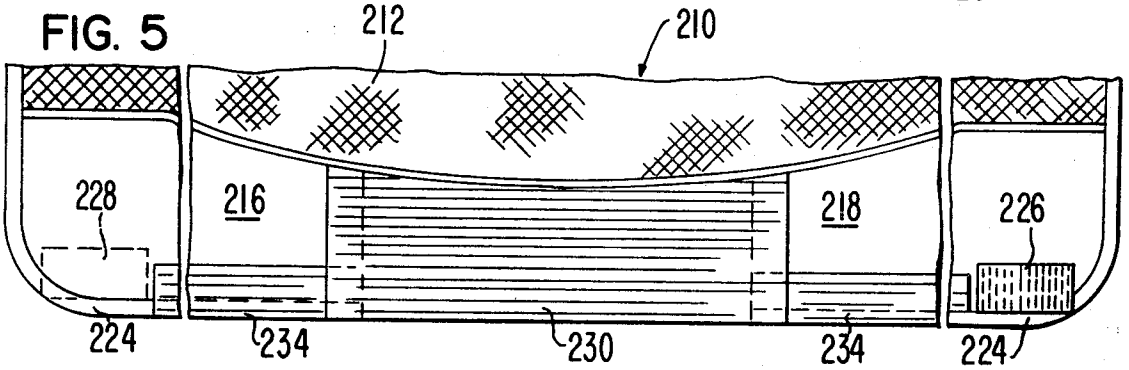


FIG. 7

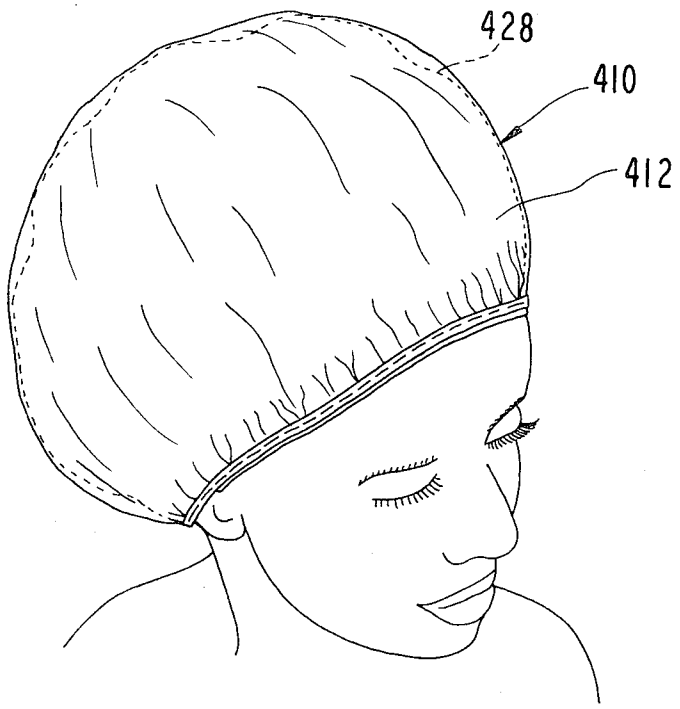


FIG. 8

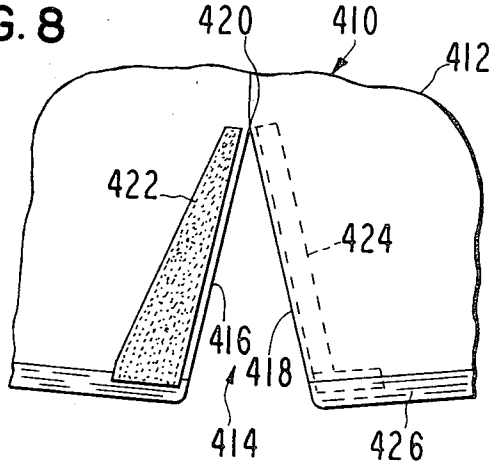


FIG. 10

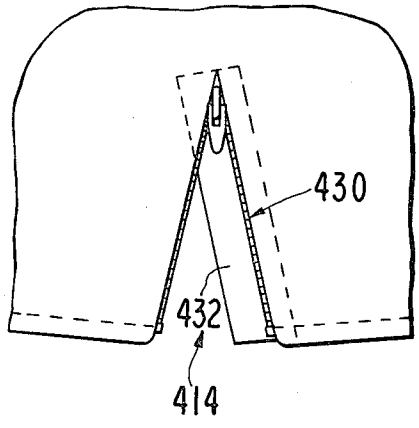


FIG. 9

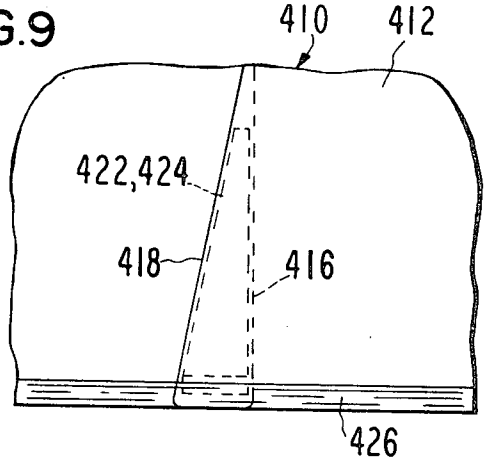
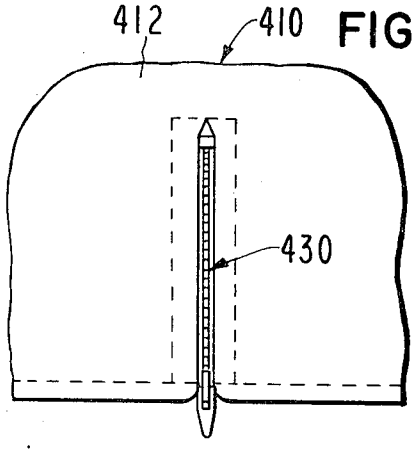


FIG. 11



HAIR PROTECTOR

This invention relates to hair protectors of the type worn during sleep or when taking showers. More particularly, the invention relates to improvements in hair protectors to render them comfortable for wear without causing creases or lines in the forehead and face of the wearer.

Conventional hair nets worn during periods of sleep generally have an upper, net portion for covering the hair and a lower, face-engaging portion which fits tightly along the forehead and sides of the face during use. The lower portion is usually of a fabric material and has a reinforcing binding on its outer edge. This binding is of a fabric material, is relatively narrow in width and generally is not elastic. It causes creases in the forehead and sides of the face when the hair protector is worn since the lower portion must be firmly wrapped about the head to keep the upper portion in the proper position covering the hair. However, the lower portion cannot be wrapped too tightly across the forehead and face; otherwise, it would become too uncomfortable. On the other hand, if it is too loosely wrapped, the lower portion slips forwardly over the nose and eyes and the upper net portion does not perform as it should to protect the hair.

Conventional protectors use various means to hold the same in place. One type of protector uses a Velcro fastener at the back near a pair of ends separated by a V-shaped notch, the latter allowing the hair protector to be adjustably mounted on the head so as to accommodate the hair protector for head shapes of different sizes. Other hair protectors have narrow elastic, continuous bands adapted to engage the forehead and sides of the face to hold the hair protectors in place on the head. Notwithstanding the type of releasable connection used, all conventional hair protectors suffer from a common defect, namely, that creases are formed by the face-engaging portions thereof in the forehead and sides of the face during use, especially if they are worn for any length of time, such as overnight while sleeping. Even conventional shower caps, which are only worn for short periods of time, cause such creases.

The present invention provides an improvement over conventional hair protectors of the type described by utilizing stretchable bands having a smooth surface for engaging the face, especially the forehead, so that the hair protector can be worn comfortably yet tightly and also can be worn for long periods of time without causing creases or lines to be formed in the forehead or sides of the face. The band is preferably of a tubular stretch knit material which can be attached to the inner surface of an existing binding or fabric band of a conventional protector or can form the only material at the central part of the protector. Other forms of the invention include a central band and a pair of side bands which are relatively narrow with respect to the central band for engaging the sides of the face while preventing the formation of creases or lines in the face as the hair protector is wrapped tightly on the head to avoid its slipping forwardly and downwardly over the eyes and nose. The band also is sufficiently flexible to permit it to conform to various head shapes; thus, the invention permits the aforesaid benefits to be realized while being universally applicable to many different wearers.

Another aspect of this invention is the provision of a plastic shower cap having a size suitable for use with a bouffant hairdo. The shower cap has the aforesaid stretch knit band at its continuous other periphery to allow the band to engage the face without causing the formation of creases or lines therein. Also, the shower cap has a V-shaped notch extending inwardly from the outer periphery and an improved fastener associated with the notch so that the shower cap can be readily put on and taken off even though the particular hairdo is of the bouffant type. Furthermore, the improved fastener provides an effective seal at the notch notwithstanding the fact that the fastener can be released to increase the size of the head-receiving opening of the shower cap to facilitate its being put on and taken off the head.

The primary object of this invention is to provide a hair protector of improved construction which has means thereon for allowing for a relatively tight fit across the forehead and sides of the face without forming creases or lines in the face and will be comfortable even for relatively long periods of time.

Another object of this invention is to provide a hair protector of the type described wherein a band of stretch knit material having a smooth surface is used as the only portion of the protector for engaging the forehead and sides of the face during use, whereby the protector can be tightly but comfortably worn while the stretch knit material prevents the formation of creases or lines in the face even though the protector is adjustable in size to fit heads of different shapes and sizes.

A further object of this invention is to provide an improved hair protector for use as a shower cap with bouffant hairdos wherein the hair protector has a face-engaging band of the type described and a notch in the outer periphery for adjustably mounting the same on the head with the hair protector having improved fastener means associated with the notch to seal the latter when the hair protector is on the head yet the band prevents creases and lines in the face as mentioned above.

Other objects of this invention will become apparent as the following specification progresses, reference being had to the accompanying drawing for illustrations of several embodiments of the invention.

In the drawing:

FIG. 1 is a perspective view of one form of the hair protector of the present invention showing the way in which it is worn on the head;

FIG. 1*a* is an enlarged, fragmentary, rear elevational view of the hair protector of FIG. 1, showing it in an unfastened condition;

FIG. 2 is a fragmentary, cross-sectional view taken along line 2—2 of FIG. 1;

FIG. 3 is a side elevational view of the head-engaging portion of the hair protector when the same is flattened out, before completion of its assembly, to illustrate the face-engaging band thereof and the means for fastening it about the head of the wearer;

FIG. 4 is a view similar to FIG. 3 but showing a different form of the invention;

FIG. 5 is a view similar to FIGS. 3 and 4 but showing a third form of the invention;

FIG. 6 is a perspective view of still another form of the hair protector;

FIG. 7 is a perspective view of a shower cap suitable for use with bouffant hairdos;

FIG. 8 is an enlarged, fragmentary, rear elevational view of the shower cap of FIG. 7, with the slit at the rear of the cap open;

FIG. 9 is a view similar to FIG. 8 but showing the slit closed; and

FIGS. 10 and 11 are views similar to FIGS. 8 and 9 and showing a zipper for closing the slit.

The first form of the hair protector of this invention is denoted by the numeral 10 and incluces a hair-receiving net portion 12 which is bowl-shaped to receive and substantially enclose the hair. Net portion 12 has a generally continuous outer periphery 14 stitched or otherwise secured to a second portion 15 including a cloth band 16, the band being split at its rear end (FIG. 1a) to form a V-shaped region 18 terminating near a seam 19 in net portion 12. The view of band 16 as shown in FIG. 3 is the view seen when the band is flattened out and before it is stitched or otherwise secured to net portion 12. FIG. 3 is shown for purposes of illustration only, it being understood that, once hair protector 10 is fully assembled, band 16 could not be flattened out as in FIG. 3. Fastening means carried at the opposed ends 20 and 22 of band 16 permits such ends to be brought together and interconnected so that band 16 can encircle and tightly engage the head with net portion 12 covering the hair. Normally, the outer periphery of band 16 is provided with a fabric binding or web 24 which reinforces the band. The binding is stitched or otherwise secured to the band so that they form a unitary construction.

The fastening means can be of any suitable construction. For purposes of illustration, it includes a Velcro fastener including a first part 26 having the pile and a second part 28 having the loops in which the pile is pressed to thereby cause a connection to be made therebetween. Parts 26 and 28 are preferably stitched to band 16, part 26 being secured to the normally outer surface of the band and part 28 being secured to the normally inner surface of the band.

A second band 30 of tubular stretch knit material, such as nylon, is stitched or otherwise secured to the inner surface of binding 24 as shown in FIG. 3. Band 30 has a substantially smooth outer surface even when it is longitudinally stretched. It is tubular in the sense that it has two layers integral with each other at the sides thereof. Band 30 is sufficiently wide relative to binding 24, of the order of one inch, so that it can be stretched in the direction of its length while engaging the forehead of the user without forming creases or lines in the forehead over long periods of use, such as during sleeping. Also, band 30 projects laterally from the opposed sides of the central portion of binding 24 and partially underlies the inner surface 32 of band 16. Thus, no inner part of binding 24 is effectively exposed so that, essentially, only second band 30 engages the wearer's face, the length of band 30 being sufficient to engage the face from ear to ear as shown in FIG. 1.

In use, protector 10 is placed on the head first by moving band 30 into engagement with the forehead as the wearer faces downwardly, then lifting the head as net portion 12 is moved onto the hair, then bringing ends 20 and 22 together at the back of the head and finally, pressing parts 26 and 28 together to interconnect the same as second portion 15 tightly but comfortably engages the head. The position of hair protector 10 on the head is adjusted so that net portion 12 will fit snugly over the hair so as to keep the hair in place, especially during sleeping. The net can be constructed so that its internal volume can be adjusted to accommodate the net to a particular hairdo. Band 30, because it is stretchable and is relatively wide, does not form creases in the forehead as second portion 15 tightly engages the head and, because of its stretchability, band 30 readily adapts itself to a particular forehead notwithstanding the skeletal structure of the head itself. Since the band extends from ear to ear, it also protects against creases in the sides of the face as well as the forehead. The protector, being sufficiently tight on the head, cannot slip downwardly and over the eyes and nose of the wearer during sleep, yet no discomfort is experienced because of the tight fit and the hair is properly held in place. Band 30 is preferably stitched to band 16 or to binding 24 although it could be adhesively attached or fused thereto. Also, band 30 as well as band 16 and net portion 12 can be static-free if desired.

A second embodiment of the hair protector of this invention is denoted by the numeral 110 and is shown only partially in FIG. 4 and for the same reason as described above with respect to FIG. 3. Protector 110 is similar to protector 10 in that it has a first, bowl-shaped net portion 112 and a second, head-engaging portion 113 secured to the outer periphery of net portion 112. Second portion 113 has a V-shaped rear notch of the type shown in FIG. 1*a*. However, instead of a single elongated cloth band, such as band 16, it has two side bands 116 and 118 of cloth which are stitched or otherwise secured to the opposed ends of a central band 130 of tubular stretch knit material having a smooth outer surface. Side bands 116 and 118 and central band 130 are stitched or otherwise secured to the adjacent outer periphery of net portion 112. Bands 116 and 118 are provided with binding 124 which reinforces their outer edges. Fastening means is provided on the ends 120 and 122 of bands 116 and 118, whereby the ends can be coupled together in the manner described above with respect to protector 10. Again, for purposes of illustration, such fastening means can include Velcro parts including a first part 126 having a pile for meshing with the loops of a second part 128, the parts being on inner and outer surfaces of respective bands 116 and 118.

Protector 110 is put on the head and used in the same manner as protector 10, band 130 engaging the forehead of the user to prevent creases in the forehead yet allowing second portion 113 to be worn relatively tightly on the head. The width of band 130 is sufficient to allow for the tight fit yet it avoids discomfort and prevents the formation of creases in the skin as mentioned above. Band 130 has a length which preferably extends from ear to ear so that it will protect against creases at any location on the face of the wearer. Also, band 130 is of the same material as band 30.

A third embodiment of the invention comprises a hair protector 210 which is similar in construction to protector 110 except that it has a central, smooth band 230 of approximately the same width and material as band 130 but of a shorter length. Band 230 is stitched or otherwise secured to the central part of a net 212 and to side bands 216 and 218 whose lengths are longer than side bands 116 and 118 but whose ends are provided with a fastener means such as Velcro parts 226 and 228. Binding 224 is also provided for bands 216 and 218.

In addition to the foregoing, protector 210 has a pair of relatively narrow bands 232 and 234 of the same material and construction as band 230 but of a narrower width. Bands 232 and 234 are adapted to engage the

sides of the face and the ears of the user while band **230** is adapted to engage substantially only the forehead region. Bands **232** and **234** are stitched or otherwise secured to binding **224.**

In use, protector **210** is placed on the head and used in substantially the same way as protectors **10** and **110** and the ends of bands **216** and **218** are releasably coupled together by the aforesaid Velcro parts to maintain the band **230** in relatively tight, wrapped engagement with the head with band **230** engaging the forehead and bands **232** and **234** engaging the sides of the face and the ears. In this way, protector **210** can be worn for long periods of time, such as throughout the night while sleeping, without causing creases in the forehead, the sides of the face or the ears. As in the case of the other protectors mentioned above, the net portion of protector **210** can be made so that it is adjustable in volume to accommodate it to different hair styles.

Another embodiment of the invention suitable as a shower cap is denoted by the numeral **310** and includes a hair protector provided with an outer, bowl-shaped cover portion **312** which can be of a suitable plastic material. The head opening of cover **312** defines a generally continuous outer periphery to which is stitched or otherwise secured a generally continuous, relatively wide smooth band **316** defining a head-engaging portion. WIth band **316** attached to cover portion **312,** the hair protector is effectively maintained on the head and will not droop down over the eyes and nose yet it is comfortable to wear and will not form creases in the forehead and in the sides of the face and ears. Band **316** is of the same material as bands **30, 130** and **230** and can drip-dry in a relatively short time. While protector **310** is described as a shower cap, it could be used to protect the hair during sleep. In such a case, cover portion **312** will preferably be of a net material rather than plastic.

As shown in FIG. **6,** band **316** extends partially outwardly beyond the outer periphery of cover portion **312.** It also extends inwardly of such outer periphery. For purposes of illustration, band **316** is secured by two lines of stitching **318** so that band **316** is substantially continuous throughout the entire extent of the head-receiving opening of cover portion **312.**

A further embodiment of the invention, shown in FIG. **7,** is denoted by the numeral **410** and is suitable for use as a shower cap for bouffant hairdos which require a relatively large interior of the cap. A shower cap with a continuous band, such as shown in FIG. **6,** is not suitable with a bouffant hairdo because it will crush or flatten the hairdo when the cap is put on or taken off. To this end, cap **410** has a plastic or waterproof body **412** of increased size and provided with a slit **414** normally at the rear thereof. The slit is formed by two side edges **416** and **418** which converge to a point **420.** A first Velcro member **422** of generally triangular shape is disposed on the outer surface of body **412** near edge **416.** A second Velcro member **424** is disposed on the inner surface of body **412** near edge **418.** Members **422** and **424** are adapted to move into coupled relationship with each other to close slit **414** in the manner shown in FIG. **9** and also to provide a seal to prevent water from entering the cap through the overlapping parts of body **412.** The triangular shape of member **422** is provided to permit adjustable closing of the slit.

Body **412** is also provided with a band **426** which is of tubular stretch knit material. As shown, the band extends substantially completely around body **412** at the head-receiving opening thereof. Band **426** is provided for the same purposes as bands **30, 130, 230** and **316.**

In using cap **410,** slit **414** is initially open as shown in FIG. **8,** then the cap is placed over the hairdo **428,** the open slit increasing the size of the head-receiving opening so that the cap can be put on the head to cover the hairdo without crushing or flattening the same. Then, member **424** is moved into coupled relationship with member **422** so that slit **414** is closed and sealed and band **426** comfortably engages the forehead and sides of the face. Then, the wearer can shower without getting the hairdo wet. Removal of the cap after the shower merely requires that slit **414** be opened and the cap gently removed from the hairdo.

In lieu of the Velcro fastener means of FIGS. **8** and **9,** a zipper **430** can be provided to close slit **414** as shown in FIGS. **10** and **11.** The zipper fastener can also be used to close the hair protectors of the other embodiments described above. When used with cap **410,** zipper **430** not only closes the slit but effectively seals the same against entrance of water thereinto. To assure this sealing action, a strip **432** is placed behind the zipper to prevent any leakage through the zipper from contacting the hair.

I claim:

1. A hair protector comprising: a first, generally inelastic portion for covering the hair, said first portion having an outer periphery; a second, head-engageable portion coupled with the outer periphery of said first portion and including a centrally disposed tubular stretch knit band having a substantially smooth outer surface adapted for engaging the forehead and the side of the face, the width of said band being sufficient to permit said second portion to be at least partially wrapped tightly about the head while substantially preventing the formation of creases in the skin, said second portion having means thereon for permitting the same to be wrapped tightly about the head.

2. A hair protector as set forth in claim **1,** wherein said second portion has a generally inelastic band of fabric material provided with a rear notch defining a pair of converging margins on opposite sides of the notch, said permitting means including quick release fasteners carried on said margins and operable to releasably interconnect said margins.

3. In a hair protector as set forth in claim **1,** wherein said first portion is comprised of a net material, said second portion including a flexible, generally inelastic band of fabric material secured to and extending outwardly from the outer periphery of said first portion, said stretch knit band extending along the inner surface of the inelastic band at the outer periphery thereof and projecting laterally therefrom in opposed directions.

4. A hair protector as set forth in claim **3,** wherein is included a flexible, inelastic binding secured to the outer periphery of said inelastic band, said stretch knit band being secured to the binding and extending longitudinally thereof.

5. A hair protector as set forth in claim **1,** wherein said first portion is formed of a plastic material, said outer periphery of said first portion being substantially continuous and defining a head-receiving opening, said stretch knit band being substantially continuous and

circumscribing the head-receiving opening of said first portion.

6. In a hair protector as set forth in claim 1, wherein said first portion is bowl-shaped and formed of a net material, said band being stitched to the outer periphery of said first portion, said second portion further including a pair of side bands of flexible, generally inelastic material secured to the opposed ends of said first-mentioned band and to the adjacent outer periphery of said first portion, said permitting means including structure on said side bands for releasably fastening the band in partially wrapped relationship about the head.

7. In a hair protector as set forth in claim 6, wherein is included a pair of stretch knit side bands having substantially smooth outer surfaces and being of widths less than that of said central band, said side bands being secured to the outer peripheries of corresponding inelastic side bands and adapted to engage the sides of the face as said central band engages the forehead.

8. In a hair protector comprising: a first hair-receiving net portion having a generally continuous outer periphery; a second head-engageable portion stitched to the outer periphery of said first portion, said second portion having a V-shaped, rear notch therein and provided with a pair of opposed ends provided with fastening means thereon, whereby said second portion can be wrapped around and releasably held on the head as said first portion covers the hair, said second portion including a central band of tubular stretch knit material having a substantially smooth outer surface and being disposed for engaging the face of the wearer with the width of said band being sufficient to substantially prevent the formation of creases in the skin when said second portion is wrapped around and held on the head.

9. A hair protector as set forth in claim 8, wherein said second portion includes an inelastic band of fabric material, said net portion and said inelastic band being formed of anti-static material.

10. A hair protector as set forth in claim 9, wherein said central band is stitched to the inner surface of said inelastic band and extends laterally from the outer periphery thereof in opposite directions relative thereto.

11. A hair protector as set forth in claim 9, wherein said inelastic band comprises a pair of spaced side band sections, said central band being stitched to and spanning the distance between said sections, the width of said central band being generally the same as that of said side bands.

12. A hair protector as set forth in claim 11, wherein is included a pair of stretch knit side bands secured to the outer peripheries of respective sections and coupled with said central band.

13. A hair protector comprising: a body having a head-receiving opening and adapted to be placed on the head to cover the hair, said body having a pair of generally converging edges extending from said opening to present a slit to permit the size of the opening to be increased; means on said body near said edges for releasably closing the slit; and a band of tubular stretch knit material coupled with said body in at least partially surrounding relationship to said opening, said band having a substantially smooth outer surface and being disposed for engaging the face of the wearer when the body is placed on the head in covering relationship to the hair and when said slit is closed by said closing means.

14. A hair protector as set forth in claim 13, wherein said body is of a waterproof material and is of a relatively large size to permit the body to be placed over a bouffant hairdo, the closing means including structure for sealing the slit to substantially prevent the ingress of water therethrough.

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