Feb. 23, 1954 O. P. HAEGELE 2,669,725

PAPER ARTICLE OF HEADWEAR

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FIG. 1A.

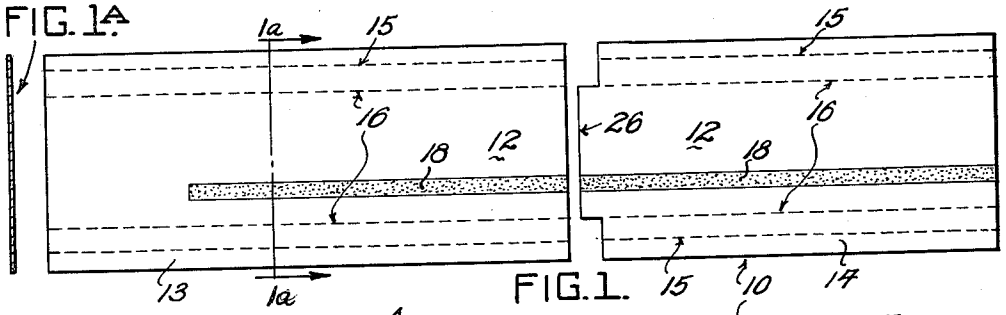


FIG. 1.

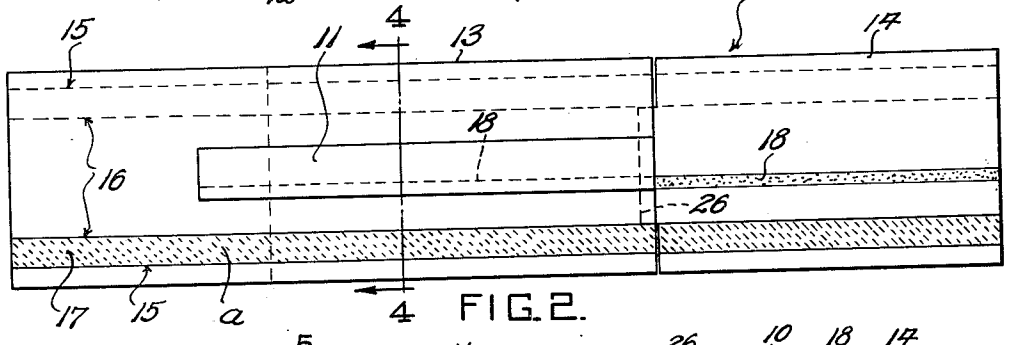


FIG. 2.

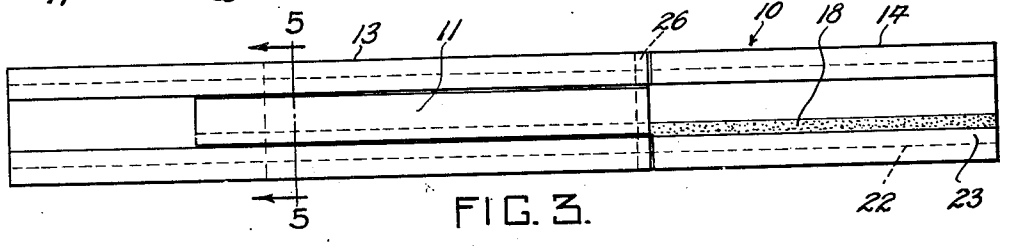


FIG. 3.



FIG. 4.

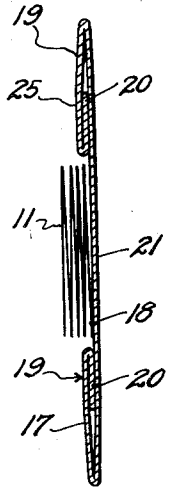


FIG. 5.

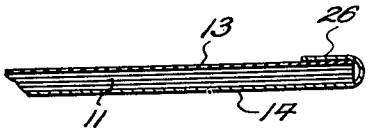


FIG. 6.

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PAPER ARTICLE OF HEADWEAR

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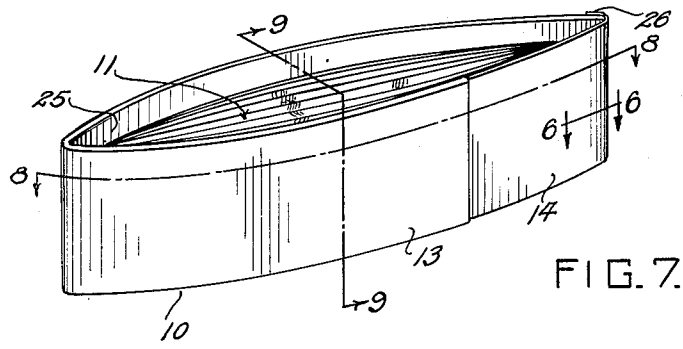


FIG. 7.

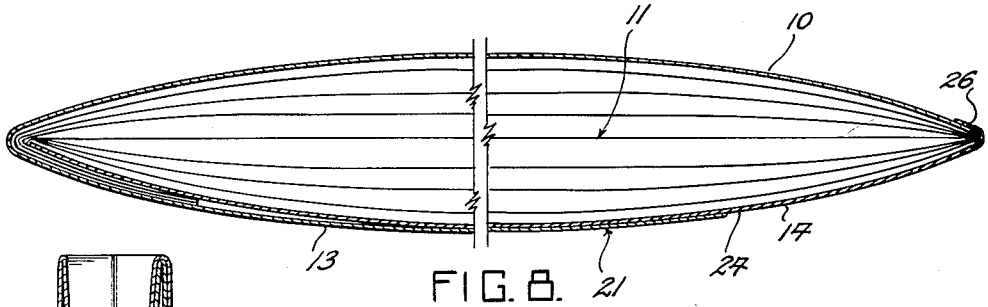


FIG. 8.

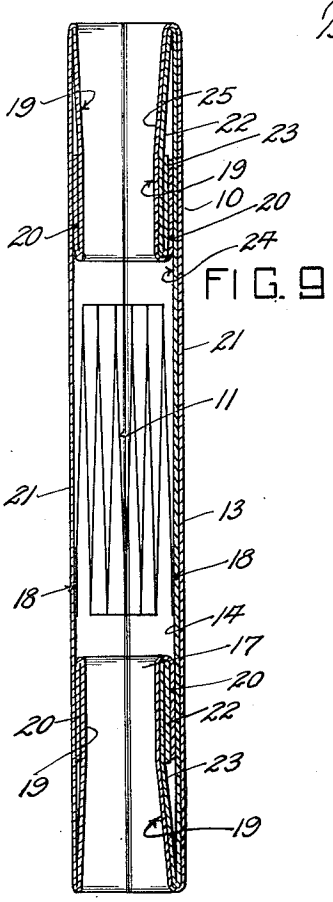


FIG. 9

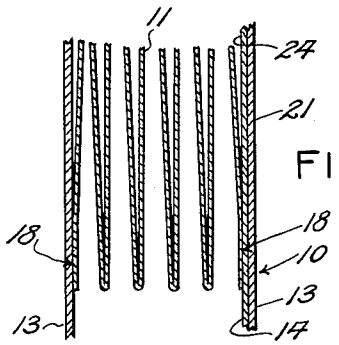


FIG. 10.

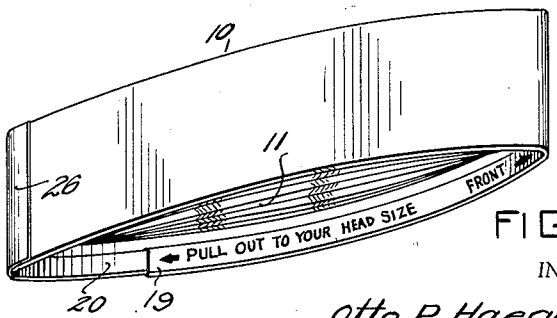


FIG. 11.

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PAPER ARTICLE OF HEADWEAR

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Application September 1, 1950, Serial No. 182,735

2 Claims. (Cl. 2—197)

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This invention relates to an improved article of head wear, having particular reference to the construction of such articles when the same are formed from relatively inexpensive materials, such as paper, and capable of being produced with the use of automatic machines.

In certain industrial occupations, it is customary or necessary for the workers or operatives therein to wear various types of head covering. For example, in kitchens, bakeries and restaurants, workers commonly wear what is known as a "chef's" hat, and the same is true of various other industries unrelated to the food-producing and serving industry.

Heretofore, such caps or head covering devices have been made largely from fabrics or other materials requiring cutting and sewing operations, which involve relatively high costs, including repeated launderings, all of which contribute substantially to their ultimate costs.

It is the purpose of the present invention, therefore, to provide a simple inexpensive cap or hat construction in which paper is the basic material employed in the manufacture thereof, and wherein the construction of the cap is such as to lend itself readily to manufacture by machine methods and appliances, to the end of producing a cap, or other similar article of head wear, which will provide an attractive appearance when worn, will offer adequate protection to the hair and head of the wearer and which, after a given period of wear and usage may, upon becoming soiled, be discarded and replaced by a new and clean cap at low cost.

It is a further object of the invention to provide a paper cap having an adjustable head band by which the cap may be adapted readily to different head sizes of wearers thereof.

For a further understanding of the invention, reference is to be had to the following description and the accompanying drawing, wherein:

Fig. 1 is a view of the paper blanks from which the primary and secondary sections of my improved article of head wear is formed;

Fig. 1A is a transverse cross-sectional view taken through the blank on the line 1a—1a of Fig. 1;

Fig. 2 is a view similar to Fig. 1, showing the blank partly joined;

Fig. 3 is also a view similar to Fig. 1, disclosing the secondary section in longitudinally aligned and end-overlapping order with the primary section to form my improved article of head wear;

Fig. 4 is a transverse sectional view taken on the plane indicated by the line 4—4 of Fig. 2;

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Fig. 5 is a similar view on the line 5—5 of Fig. 3;

Fig. 6 is a horizontal sectional view taken on the plane indicated by the line 6—6 of Fig. 7;

Fig. 7 is a perspective view of the completed article;

Fig. 8 is a horizontal sectional view on the line 8—8 of Fig. 7;

Fig. 9 is a transverse sectional view on the line 9—9 of Fig. 7;

Fig. 10 is a detail enlarged sectional view;

Fig. 11 is a detail perspective view, showing the inside of the adjustable head band of the article.

The article of head wear comprising the present invention embodies an outer band 10 composed preferably of a fairly heavy grade of paper, and within the band and closing the opening formed by the same is a crown sheet 11 of a thinner or lighter grade of paper, such, for example, as one having substantially the weight of tissue paper. In Figs. 7 through 11 of the drawings, the cap has been shown in a partly opened condition, although when applied to the head of a wearer, the band periphery conforms to the shape of the wearer's head. When packed for shipment or storage, the band is substantially flat, possessing a rectangular configuration, permitting of the placing of a maximum number of caps in a standard shipping or storage container.

In producing the band 10, I utilize an elongated rectangular strip 12 of paper which for each cap is cut transversely to produce a primary section 13 and a shorter secondary section 14. Each of these sections is formed with parallel fold lines 15 and 16 which are disposed adjacent to and in parallel relationship with the outer longitudinal edges of the band-forming sections 13 and 14. Between the fold lines 15 and 16 disposed nearest to the lower edge of the blank, there may be applied resin, paraffin or other similar treating material by which the material formed between the lower fold lines 15 and 16 is stiffened and rendered moisture-resistant for producing the sweat band indicated at 17. Additionally, there is applied to the sections 13 and 14 preferably between the inner fold lines 16 thereof, an elongated, longitudinally extending, relatively narrow strip 18 of an adhesive substance by which the marginal edges of the accordion-plaited crown sheet 11 are attached to said sections. The plaiting of the crown sheet 11 prevents any tendency on the part of the same to stretch or tear when the cap is opened or closed and with the marginal edges of the crown sheet adhesively joined with the cap body.

After cutting a paper blank to produce the

band 10, and its primary and secondary sections 13 and 14, respectively, the secondary section is placed over the primary section in registration therewith. To produce reinforced head-engaging folds at the bottom of the cap and similar folds around its upper edge, the combined sections are folded along the lines 15 and 16 in a manner forming webs 19 and 20, the web 19 projecting inwardly and vertically into the confines of the cap in parallel relation with the outer vertical wall 21 of the primary section 13.

Similarly, in this folding operation the secondary section 14 is bent to produce complemental webs 22 and 23, respectively, which are slidably telescoped within the webs 19 and 20 of the primary section, with the outer vertical wall 24 of the secondary section in movable contact and flat, abutting relationship with the outer wall 21 of the primary section. The outer marginal edges of the crown sheet 11 are, as shown in Fig. 3, adhesively united as at 18, with the inner surfaces of the vertical walls 21 and 24 of said primary and secondary sections. The folding of the sections 13 and 14 to produce the reinforcing bottom folds or sweat band 17 is duplicated in producing the top folds or crown band 25 of the article.

In its manufacture, the strip of material constituting the secondary section 14 is formed at one end only with an adhesive-receiving lap 26, which projects beyond the corresponding adjacent end of the paper strip forming the primary section 13. This lap is bonded to the adjacent end of the strip forming the primary section 13 when the cap is finally folded and as a last step in the manufacturing operation, so that the secondary section forms in effect a continuation of the primary section. However, by forming the band 10 of two sections, as indicated at 13 and 14, the operation of placing the crown sheet within and between the sections is facilitated, as well as manufacture of the cap by automatic machine operations. Due to the telescoping order of the webs 19 and 20 of the primary section and the complemental webs 22 and 23 of the secondary section in producing the sweat band and crown folds, a sliding adjustment is provided on the part of said folds which controls the circumferential dimension of the cap when the same is extended for use, enabling the same to conform to different head sizes by merely pulling the sweat band outwardly or inwardly, as indicated by the individual requirements of the wearer. The adhesive strip 18, as shown in Fig. 1, extends but part of the length of the primary band section 13. This is done so that the crown sheet 11 will have its outer marginal edges adhesively secured in but a part of their total length to the band section 13. This unattached marginal edge portion of the crown sheet provides for relative adjustment of the overlapping ends of the primary and secondary sections of the composite band without interference in such adjustment on the part of the associated crown sheet. The crown sheet is thus not stretched or torn during the adjustment since portions of its marginal edges are disposed between and in registry with the outer end region of the section 13 lying between the outer edge of the section 13 and the end of the band or strip 18.

It will be understood that certain features and sub-combinations are of utility and may be employed without reference to other features and sub-combinations. This is contemplated by and is within the scope of my claims. It is further obvious that certain changes may be made in details within the scope of my claims without departing from the spirit of my invention. It is, therefore, to be understood that my invention is not to be limited to the specific details shown and described.

I claim:

1. An article of head wear, comprising: a pair of originally separate rectangular paper sheets providing primary and secondary band-forming sections having adjacent and outer ends, means permanently uniting the adjacent ends of said sections in longitudinal alignment to produce an elongated composite strip for the formation of a head band, said composite strip being folded upon itself along longitudinally spaced lines extending adjacent and parallel to oppositely disposed longitudinal edges of the composite strip, said folding providing inwardly disposed multiple-thickness web folds, the outer ends of the composite strip having the web folds thereof relatively telescoped to provide for the adjustment of a resultant band circumferentially in adapting the same to different head sizes, and a crown sheet having outer marginal edges attached throughout the major part of their total length to inner plain and unfolded surfaces of the joined primary and secondary sections of the band at positions independent of and between the longitudinal web folds thereof, the portions of the marginal edges of the crown sheet which are not attached to the band being disposed in registration with the outer end region of the primary section of the band to adapt the crown sheet to the circumferential adjustments of said band.

2. An article of head wear, comprising: an elongated composite paper strip composed of two originally separate sections united along adjacent ends thereof in longitudinally aligned order, said strip being folded upon itself along spaced longitudinally extending fold lines disposed adjacent and in parallel relation to upper and lower edges of the strip, said folds providing inwardly disposed multiple web thicknesses of the material from said strip at the top and bottom thereof, the web folds at one end of the composite strip being telescoped and held frictionally within those of the opposite end of the strip, whereby to provide a band adjustable circumferentially to different head sizes, and a separate crown sheet having its marginal edges adhesively attached throughout a major portion of their total length to plain and unfolded inner surfaces of said strip sections at positions independent of and substantially midway between the upper and lower web folds of the band, the unattached marginal edge portions of the crown sheet being disposed in registry with the outer end portions of the primary section of the band to adapt the crown sheet to the circumferential adjustments of said band.

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