March 21, 1967 T. M. KAUFMAN 3,309,713

SELF-SIZING SWEAT BAND

Filed Sept. 4, 1964

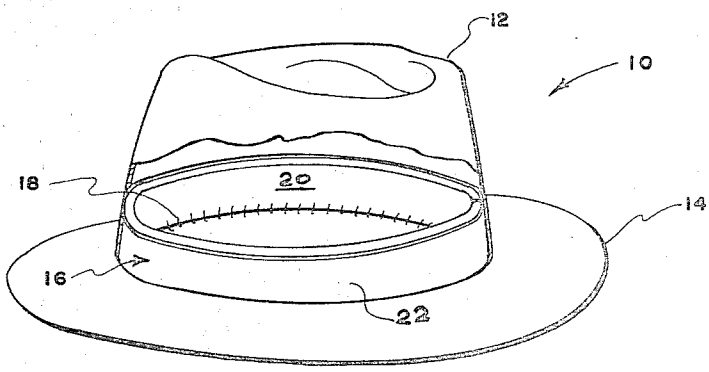


FIG-1

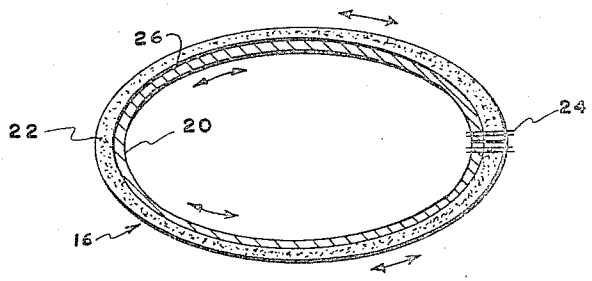


FIG-2

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SELF-SIZING SWEAT BAND

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5 Claims. (Cl. 2—183)

This invention relates to a self-sizing means for a hat which includes a stretchable sweat band, and in particular, a sweat band made of a combination of stretch type and foam materials.

In the hat retailing trade, there are approximately 8 or 9 hat sizes which are usually used so that ready made hats can be manufactured for the range of men's head sizes. These sizes ordinarily range from 6⅝ to 7⅝.

By the provision of a stretch hat sweat band, I can cover all of the regular men's sizes with no more than three hat sizes instead of the usual 8 or 9. The advantages are obvious in that a retail store need carry a smaller stock, and there will be great economies in manufacture. In addition, each hat will fit better because of the qualities of the sweat band.

I have found that a sweat band sized for a 6⅞ hat placed in a hat blocked for a 7¼ hat will fit all head sizes between 6⅞ and 7¼. In this fashion, I can cover the entire range with three hats similarly made. For example, a hat blocked for size 6⅞ with a 6⅝ size sweat band will fit all sizes between 6⅝ and 6⅞, and a hat blocked for a size 7⅝ with a sweat band size 7⅜ will fit all sizes between 7⅜ and 7⅝. I have arranged this in the following table to show how three hats designated as small, medium and large will cover the entire range:

Small (6⅞); 6⅝; 6¾; 6⅞
Medium (7¼); 7; 7⅛; 7¼
Large (7⅝); 7⅜; 7½; 7⅝

It is, therefore, an object of this invention to provide a self-sizing means for a hat which permits the hat to be worn by persons having differing head sizes.

It is also an object of this invention to provide a self-sizing means for a hat to reduce the number of sizes of hats necessary to be stocked in a hat store.

A further object of this invention is to provide such a self-sizing hat having a crown of a given size and which includes a sweat band of smaller size made of stretch type and foam materials which may be increased in circumferential size at least up to the size of the hat crown of such a hat.

Further objects and advantages of this invention will appear in the specification hereinbelow. These objects and advantages are achieved in the hat illustrated in the accompanying drawings in which:

FIG. 1 is a perspective view with parts of the crown cut away to show the sweat band; and

FIG. 2 is a top medial cross section view of the sweat band when removed from the hat, greatly enlarged in thickness for purposes of illustration.

Similar numerals refer to similar parts throughout the several views.

I refer now to FIG. 1 of the drawings in which there is illustrated a hat **10** comprising a crown portion **12** and a brim portion **14**. There is a sweat band **16** secured within the crown portion **12** by means of stitching **18** or by any other suitable means. For purposes of illustration, I will select one set of the sizes set forth hereinabove as applicable to FIGS. 1 and 2 of the drawings, it being understood that this specification is equally applicable to all of the ranges of sizes as set forth hereinabove. Let us assume that the crown **12** has been blocked for size 7¼. I will prepare a sweat band **16** of size 6⅞.

The sweat band **16** will be comprised of a combination or laminated material including a stretch material **20** and a foam material **22**. The laminated material of the sweat band **16** is fashioned into a circumference by means of appropriate fastening or securing means **24** which would normally be positioned at the rear of the hat in the usual fashion. The laminated material **16** is adapted to have a two-way stretch in the direction of the double headed arrows shown in FIG. 2 of the drawings. This is accomplished by preparing the stretch material **20** from a material such as Lycra. I have found that a material made in accordance with the following specifications is most satisfactory:

72% Dacron® polyester
15% Combed cotton
13% Lycra® spandex
41–42 width

While the foregoing example is given, any Dacron and cotton stretch material would be suitable as well as any other stretch type material having the qualities necessary for the invention.

The foam material **22** is made up of a polyurethane foam, and it is bonded to the stretch material **20** by means of a stretch type bonding adhesive **26**. The stretch type bonding adhesive must have the same stretch qualities as the stretch material **20** so that when the composite laminated material has been prepared, all of the elements will stretch together without any undue stress.

It is to be understood that the materials are fashioned in the usual size for a sweat band of 6⅞. The stretch material **20** is relatively thin and the foam material **22** should be approximately ⅛ of an inch in thickness. However, these measurements are not critical to the invention. When the sweat band is fashioned, it should have a two-way stretch within the direction of its circumference as designated by the double headed arrows in FIG. 2 of the drawings. The sweat band **16** is preferably secured to the inside of the crown **12** by means of stitches **18** made of a stretch thread such as Filco made by the American Thread Company. This is a Dacron and cotton stretch sewing thread. As an alternative, the stretch band may be secured to the inside of the crown **12** by means of a stretch adhesive. The combination of the stretch material and the foam which will stretch along with it as a bonded laminate into a sweat band sized relatively smaller than the hat crown provide a hat which will properly fit every head size within the ranges as set forth hereinabove.

It has also been found that a hat manufactured in such fashion provides a superior fit and superior wearing comfort.

While I have described my hat with self-sizing means in its preferred form, there are other forms which it may take without departing from the spirit and scope of the invention. For example, one may make the crown **12** or even the brim **14** of the hat out of a stretch material as a part of the invention. As another example, the foam material **22** need not specifically be polyurethane foam. Any equivalent material having the properties of the polyurethane foam, namely the characteristics of deformability and resiliency with relation to the stretch material **20**, and also with relation to being compressed between the stretch material and the crown portion **12** when the hat is inserted on the head of a wearer, with the ability to return to an uncompressed state when the hat is removed from the head of the wearer, would be suitable for the invention.

I, therefore, desire to be protected for all forms coming within the scope of the claims hereinbelow.

Wherefore I claim:

1. A self-sizing headwear which includes a crown por-

tion of a given head size; and comprises a sweat band of a normally relatively smaller head size than the given head size of said crown portion in which the said sweat band is comprised of a laminated material including the combination of a layer of stretch material including a spandex type component, said sweat band further including a layer of a foamed deformable and resilient material, an intermediate layer comprising bonding adhesive means having characteristics of stretch related to the stretch of said stretch material bonding said spandex component to said foamed material, said deformable and resilient material positioned around the said stretch material and between the said stretch material and the said crown portion; said laminated sweat band adapted to stretch circumferentially from its normal size to a size as large as said crown portion.

2. A self-sizing headwear as defined in claim 1, comprising stretch-type thread means securing said sweat band to said crown portion.

3. A self-sizing headwear as defined in claim 1, in which the said crown portion of the headwear comprises stretch type material.

4. A sweat band adapted to be incorporated into a hat or cap which includes a crown portion of a given head size: said sweat band adapted to be normally of a relatively smaller head size than the said crown portion of the hat or cap into which it is adapted to be incorporated; said sweat band being of laminated construction comprising a layer of material comprising spandex yarn and a layer of resilient foamed sheet material, an intermediate layer comprising bonding material having stretch properties bonding said layers together, said sweat band adapted to be stretched circumferentially from its normal size to a size as large as the head size of the crown portion of a hat or cap into which it is adapted to be incorporated.

5. A sweat band adapted to be incorporated into a hat or cap which includes a crown portion of a given head size: said sweat band adapted to be normally of a relatively smaller head size than the said crown portion of the hat or cap into which it is adapted to be incorporated; said sweat band being of laminated construction comprising a layer of material comprising Lycra yarn and a layer of foamed polyurethane sheet material, an intermediate layer comprising bonding material having stretch properties bonding said layers together, said sweat band adapted to be stretched circumferentially from its normal size to a size as large as the head size of the crown portion of a hat or cap into which it is adapted to be incorporated.

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