Aug. 27, 1946. I. B. MILLER 2,406,701

HAT SIZE REDUCER

Filed Feb. 14, 1945

Fig. 1

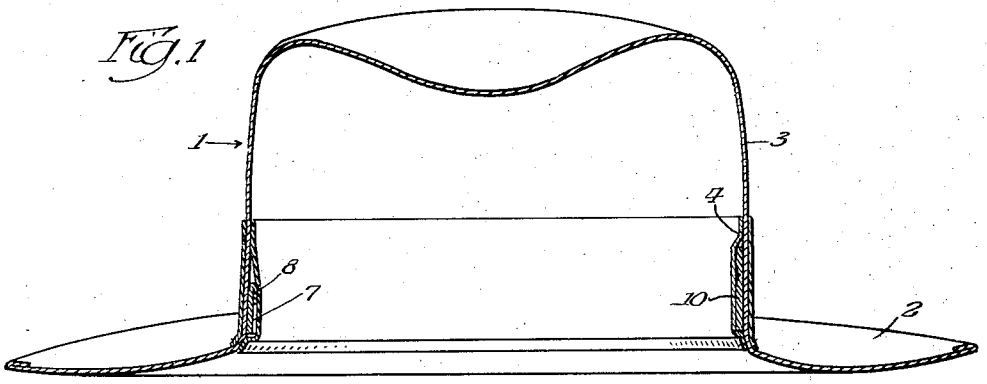


Fig. 2

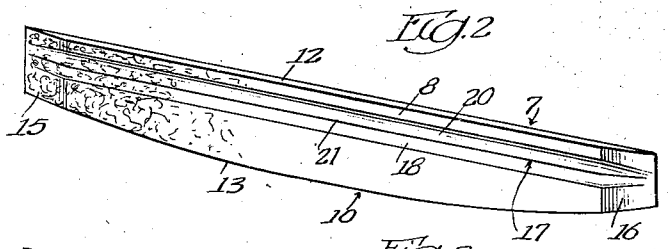


Fig. 3

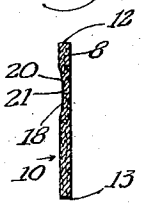


Fig. 4

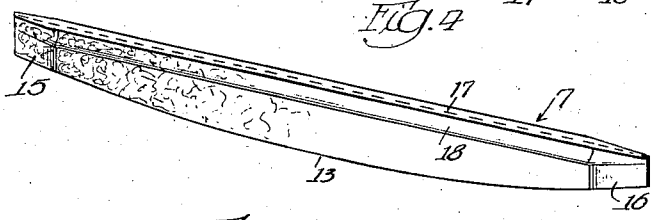


Fig. 5

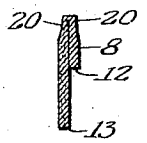


Fig. 6

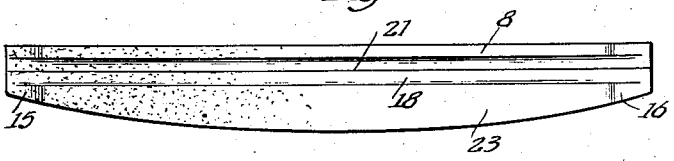


Fig. 7

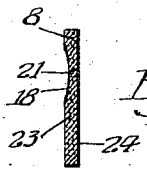
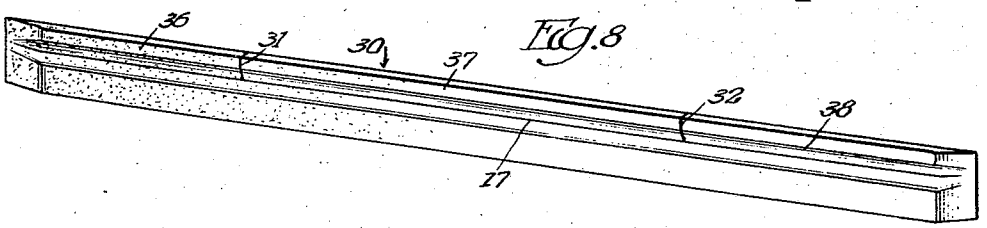


Fig. 8



Inventor
Irving B. Miller
By Morris Spector, atty.

Patented Aug. 27, 1946 2,406,701

UNITED STATES PATENT OFFICE

2,406,701

HAT SIZE REDUCER

Irving B. Miller, Chicago, Ill., assignor to Herman J. Blackman, Chicago, Ill.

Application February 14, 1945, Serial No. 577,744

4 Claims. (Cl. 2—183)

1

This invention relates to hat size reducers of the type which may be incorporated in a hat either as a permanent part thereof when the hat is originally constructed, or which may be readily put into or removed from a hat, and which will enable the changing of the effective size of the hat.

It has heretofore been proposed to provide a hat size reducer for use with a hat of the type that has a sweat band, said reducer comprising a strip of substantial thickness which may be introduced between the hat sweat band and the rest of the body of the hat, and which strip is arranged so that it may be folded along a longitudinal line of fold, which is in a direction circumferentially of the hat, thereby to increase the effective thickness of the sweat band and effect an increase or diminution of the head opening of the hat. It is with such sweat bands and hats that the present invention is concerned.

It is an object of the present invention to provide a hat size reducer strip which is so constructed that it may be inserted into the hat in an unfolded position to effect one hat size reduction, and may be folded to provide a greater hat size reduction, and which strip is so constructed as to effect a minimum distortion of the sweat band.

It is a further object of the present invention to provide a hat size reducer strip which has a longitudinally extending weakened line constituting a line of fold, and which such strip is economical of manufacture.

In my prior application, Serial No. 512,205, filed November 29, 1943, to which reference may be had, I show a foldable hat size reducer strip consisting of two or more pieces of material sewed together by a line of stitching which constitutes a hinge. This is a comparatively expensive strip because of the expense of accurately stitching two pieces together by a hinge stitching. It is an object of the present invention to provide a hat size reducer which consists of one integral strip and wherein the weakened line of fold is formed by a line of cut extending longitudinally of the strip almost but not quite entirely through the strip. It is a further object of the present invention to provide such a strip wherein the weakened line of fold is made by forming in the strip a longitudinally extending concave depression so that upon folding of the strip the line of fold presents a skived or tapered edge.

In reducing the size of a hat to fit a particular wearer it is sometimes necessary to effect a greater reduction on the sides of the hat than at the front, or vice versa. It is one of the objects of the present invention to provide a hat size reducer strip wherein by the use of a single strip a different amount of size reduction may be effected at one portion of the hat than at another.

2

It is a still further object of the present invention to provide a hat size reducing strip comprising a comparatively thick body of material held on a backing of muslin or other very thin fabric. The line of weakening may consist of a cut extending through the thick layer but not penetrating the muslin backing, which muslin backing then constitutes a hing for the reducer strip.

It is a still further object of the present invention to provide a reducer strip which may be made of a synthetic plastic that has a sufficient amount of resiliency so that it may be shaped by the fingers of the hand to the desired curvature, and has a sufficient amount of stiffness so that it will retain its shape but sufficiently flexible that it will alter its shape to conform to the particular head contour of the wearer of the hat in which the strip has been placed.

The attainment of the above and further objects of the present invention will be apparent from the following specification taken in conjunction with the accompanying drawing forming a part thereof.

In the drawing:

Figure 1 is a longitudinal sectional view through a hat in which the hat size reducer of the present invention has been incorporated;

Figure 2 is a perspective view of a hat size reducer embodying the present invention;

Figure 3 is a transverse sectional view of the reducer illustrated in Figure 2;

Figure 4 is a view corresponding to Figure 2 and illustrating the reducer in its folded condition;

Figure 5 is a transverse sectional view of Figure 4;

Figure 6 is a front view of another form of hat size reducer;

Figure 7 is a transverse sectional view of the reducer of Figure 6; and

Figure 8 is a perspective view of still another hat size reducer.

Reference may now be had more particularly to Figure 1. In this figure a hat is indicated in general by the reference numeral 1. This hat is the usual type of soft felt men's hat, the body of which is made of fur felt. The hat includes a brim 2, and crown portion 3, and a sweat band 4 of thin flexible leather, as is usual in men's hats. The sweat band is secured to the rest of

the hat by a line of stitching extending along the bottom of the sweat band, the top of said band being free of connection with the hat. Two separate hat size reducers, of the type hereinabove described, are positioned in the hat. One of the reducers, indicated at 7, is at the front of the hat and may extend through approximately 90°, more or less, of the hat periphery. The top portion of the hat size reducer strip 7 is folded downwardly, as indicated at 8, so that at this downwardly folded portion the hat size reducer is of twice the thickness as it is at the lower portion of the reducer. The hat may, optionally, have an additional hat size reducer strip, indicated at 10, located at the rear of the hat and extending through 90°, more or less, of the hat periphery. The strip 10 is of the same construction as is the strip 7 and may be of a greater or lesser length than the strip 7. In the case of the strip 10, it is illustrated as unfolded so that the reduction in hat size is greater at the front of the hat than at the back of the hat. The hat size reducer strip may be located at the front of the hat, the back of the hat, either side of the hat or any combination of the above, and any one or more of those strips may be folded downwardly, as indicated at 8 in Figure 1, to produce a hat size reduction at a portion of the periphery of the hat opening wherever needed, as determined by the shape of the head of the wearer.

The hat size reducer strip 7 is illustrated more fully in Figures 2 and 3. The strip may be formed of any desired material such as, for instance, felt, or synthetic plastic. It is initially a strip of uniform thickness. The top edge 12 is a straight edge whereas the bottom edge 13 is preferably round so that the strip is of maximum width at approximately the center thereof and of slightly diminishing width from the center to the opposite ends. The round curved edge 13 is desirable in strips that are to be used at the front or back quarters of the hat. Such strips may also be used at the side quarters, but it is preferable to provide for the side quarters a strip wherein the bottom edge 13 is parallel with the top edge 12. The strip 7 is of a length approximately equal to one-quarter, more or less, of the internal circumference of the hat. The edges 15 and 16 of the strip are skived.

The strip is provided with a longitudinally extending weakened line of fold 17 which extends parallel to the edge 12 and a distance below the top edge 12 approximately equal to one-third of the maximum width of the strip 7. The weakened line of fold consists in the removal of some of the material of the strip 7 to form a longitudinally extending groove or depression 18 which is concave in the direction at right angles to the length of the strip, so that the material is of a minimum thickness along the center of the weakened line 17 and tapers gradually to the regular thickness of the material in a direction across the face of the strip, as indicated by the lines 20. If desired, and this is optional, there may be a cut 21 extending longitudinally of the strip at the center of the weakened portion 17, said cut extending almost but not quite through the entire thickness of the strip.

When the strip 7 of Figures 2 and 3 is folded, as illustrated in Figures 4 and 5, the edges 20—20 which extend longitudinally of the strip on opposite sides thereof at the fold line form a taper or skived portion. This greatly reduces or entirely eliminates any tendency for the production of an unsightly bulge at the exposed surface of

the sweat band due to the interposed hat size reducer strip.

Figures 6 and 7 illustrate a strip of a shape substantially the same as that of the strip of Figures 2 and 3 and adapted to the same use as the strip of Figures 2 and 3. The strip of Figures 6 and 7 differs from that of Figures 2 and 3 in that here the strip instead of being made of fur felt consists of a ground cork body 23 supported on a thin loose mesh muslin fabric 24 which extends over the entire area of the back of the strip. The muslin backing serves to hold the cork body together notwithstanding the flexing of the same. The line of cut 21 extends almost entirely through the cork body but does not extend to the muslin backing 24, so that the muslin backing acts as a hinge. If the top part 8 of the strip of Figures 6 and 7 is folded backwardly, the cork will break along the line of cut 21 but the muslin backing 24 will hold the upper and lower pieces of cork together as an integral strip.

Figure 8 shows the present invention as applied to a strip of appreciably greater length than the length of one-quarter of the hat sweat band. In this instance the hat size reducer strip, indicated by the reference numeral 30, is of a length which may be three-quarters of the circumference of the sweat band, or may be approximately 100% of the circumference of the sweat band. The strip 30 has a weakened line of fold 17 similar to and of the same shape as the weakened line of fold 17 of the strip of Figures 2 and 3. In addition, the top part of the strip 30 has a plurality of transversely extending lines of cut, indicated at 31 and 32. These lines of cut extend through the entire thickness of the strip and extend from the top edge down to but not beyond the center of the weakened lien of fold 17. While I have herein shown a strip having two cuts 31—32, it is within the purview of the present invention to provide a lesser or greater number of such cuts. As a result of the cuts 31—32 the top third of the strip 30 is divided into three parts, indicated by the reference numerals 36, 37 and 38. Any one or more of the parts 36 through 38 may be folded back to overlie the back of the lower part of the hat size reducing strip.

The hat size reducer of Figure 8 may be placed in a hat with the center of the hat size reducer substantially at the front of the hat so that the hat size reducer extends across the front and both sides of the head of the wearer, it being understood that the reducer is between the sweat band and the body of the hat. This gives one size of hat reduction. If it is desired to effect a greater reduction at the sides of the hat than at the front of the hat then the parts 36 and 38 are folded back while the part 37 is left in an upstanding position. If it is desired to effect a greater reduction at the front than at the sides of the hat, then the parts 36 and 38 are not folded back whereas the part 37 is folded back.

As heretofore stated, the strip 30 may be of a length approximately equal to the entire inside circumference of the hat and may have more than two lines of cut, such as indicated at 31—32. This will allow for selective reduction of the size of the hat at the front, at the back, at the left hand side and at the right hand side, or any combination of the above.

The hat size reducer of the present invention may be sold as one continuous strip on a large

roll from which the hat fitter cuts off the required length for each specific hat customer. The fitter of the hat may then, optionally, skive the opposite edges of the cut off strip, as indicated at 15 and 16 in Figure 2.

In compliance with the requirements of the patent statutes I have here shown and described a few preferred embodiments of my invention. It is, however, to be understood that the invention is not limited to the precise constructions here shown, the same being merely illustrative of the principles of the invention. What is considered new and desired to be secured by Letters Patent is:

1. A hat size reducer comprising a unitary elongated flexible strip of substantial width and thickness, the strip being provided with a longitudinally extending groove intermediate its longitudinal edges, the groove tapering from its maximum depth to zero depth in a direction across the strip, the groove constituting a weakened zone in the strip to facilitate folding thereof along the deepest part of the groove, the strip having at least one cut extending entirely therethrough from one longitudinal edge thereof to the deepest part of the groove to permit folding of only a fractional part of the length of the strip.

2. A hat size reducer comprising a unitary elongated flexible strip of substantial width and thickness, the strip being provided with a longitudinally extending groove intermediate its longitudinal edges, the groove tapering from its maximum depth to zero depth in a direction across the strip, the groove constituting a weakened zone in the strip to facilitate folding thereof along the deepest part of the groove, the strip being also skived at its transverse edges, the strip having at least one cut extending entirely therethrough from one longitudinal edge thereof to the deepest part of the groove to permit folding of only a fractional part of the length of the strip.

3. A hat having a sweat band and a hat size reducer between the band and the body of the hat, said reducer comprising an elongated flexible strip of substantial width and thickness, the strip being provided with a longitudinally extending groove intermediate its longitudinal edges, the groove tapering from its maximum depth to zero depth in a direction across the strip, said strip having a longitudinally extending cut at the deepest part of the groove and extending only partially through the resulting thickness of the strip, the groove and the cut constituting a weakened zone in the strip to facilitate folding thereof along the deepest part of the groove.

4. A hat having a sweat band and a hat size reducer between the band and the body of the hat, said reducer comprising an elongated flexible strip of substantial width and thickness, the strip being provided with a longitudinally extending groove intermediate its longitudinal edges, the groove tapering from its maximum depth to zero depth in a direction across the strip, said strip having a longitudinally extending cut at the deepest part of the groove and extending only partially through the resulting thickness of the strip, the groove and the cut constituting a weakened zone in the strip to facilitate folding thereof along the deepest part of the groove, the strip having at least one cut extending entirely therethrough from one longitudinal edge thereof to the deepest part of the groove to permit folding of only a fractional part of the length of the strip.

IRVING B. MILLER.