Oct. 1, 1946. J. CAVANAGH 2,408,610

FABRIC HAT AND METHOD OF MAKING THE SAME

Filed Dec. 11, 1943

Fig. 1

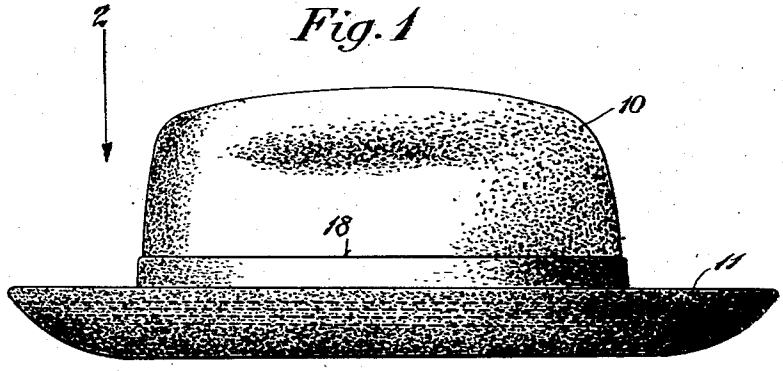


Fig. 2

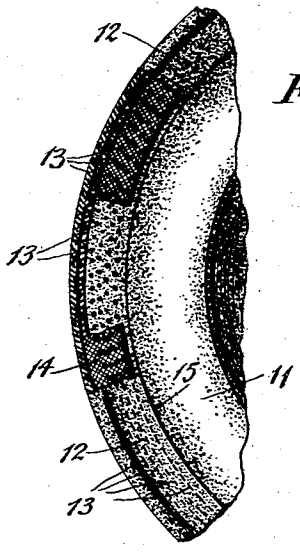


Fig. 5

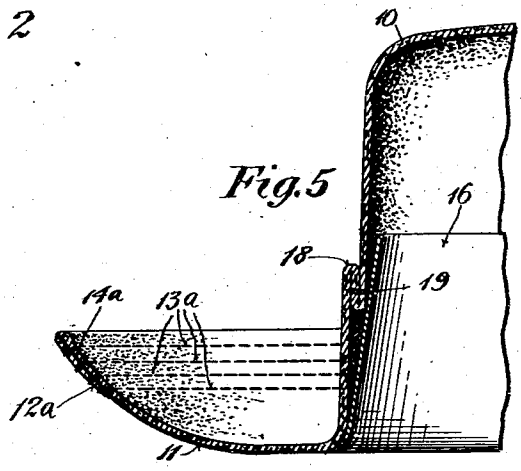


Fig. 4

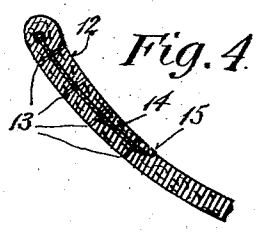


Fig. 6

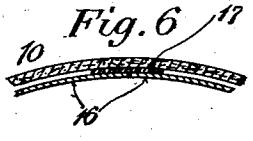


Fig. 3

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Patented Oct. 1, 1946 2,408,610

UNITED STATES PATENT OFFICE

2,408,610

FABRIC HAT AND METHOD OF MAKING THE SAME

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Application December 11, 1943, Serial No. 513,878

10 Claims. (Cl. 2—192)

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This invention relates to felt hats, and to methods of making the same.

An object of the invention is to provide an improved felt hat of quality and apeparance comparable to high quality felt hats now on the market, yet which can be manufactured at a cost considerably less than these high quality hats.

In accomplishing this object, the invention provides an improved method of making felt hats whereby certain skillful finishing operations, and operations where trimming is added, are eliminated by inexpensive alterations of, and additions to, other operations normally required in hat manufacture so that a reduction in cost is effected, while at the same time producing a product of improved characteristics. Also, according to the invention, the number of components required to produce hats of finished quality and appearance is less than that previously required, and there is thus a further saving of materials, which in the present case are comparatively costly, resulting in reduced overall manufacturing costs.

In practicing the invention, a felt hat is produced which may be termed a "self-trimmed" hat, in that the trim on the hat is formed mainly by a novel and inexpensive arrangement of the material of the hat itself, rather than by the addition of extra material especially adaped for trimming purposes. At the outer circumferential edge of the brim of the hat a novel trimming effect is produced, after the hat has been shaped to substantially its final form, by folding back on itself a considerable portion of the material of the brim, and reinforcing and wet-working same in a novel manner to economically produce a thickened edge portion, which may have a curl or other shape as desired.

In the embodiments shown, the brim of the hat is of a single normal thickness of material where it joins the crown, and also for a given distance uniformly spaced about the crown, and is of substantially double thickness at the outer circumferential edge thereof, the double thickness decreasing gradually and merging with the single normal brim thickness at intermediate points between the crown and the brim edge. If desired, a thickness of tape may be located in the fold at the outer edge of the brim, and the folded portion of the brim and the tape may be sewed together with a plurality of lines of stitches along the edge. After trimming off excess material, the edge portion of the brim is then wet-worked under heat and pressure to cause the double thickness thereof to blend and substantially merge into the single brim thickness, and a curl is imparted to the edge as desired. Thus the edge of the brim has a finished appearance which materially enhances the overall appearance of the hat, this being accomplished without the use of any extra trimming material such as ribbon, etc. Moreover, the brim edge, being thus thickened and reinforced, will hold a shape better, and without irregularities, which is particularly desirable when soft felt is used in making a hat.

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In practicing the invention further, a novel arrangement of the material of the crown of the hat is provided in the form of a circumferential tuck extending about the crown and uniformly spaced above the brim of the hat, so as to reinforce the crown and at the same time simulate the appearance of a hat band. The crown is thus in effect provided with trimming by shaping the material of the crown in a novel manner, and the use of extra expensive components such as dress bands and the like is obviated, as well as the resultant operations required in attaching same.

It should be noted that the reinforcement provided along the brim edge of the hat and also in the crown by the tuck thereof is particularly desirable when especially soft and limp fur felts are used, such as may be produced from beaver fur, fur and other fiber mixtures, etc., said reinforcing serving to maintain the shape of the hat and therefore preserving a neat appearance during the life of the hat. The brim may be worn either curled up or curled down in front, and due to its reinforcement the curvature given it will remain smooth without irregularities. Moreover, when a hat is made from soft felt materials the appearance is often adversely affected by the addition of tape or ribbon trimmings, since generally the soft felt materials have a more or less fuzzy surface which does not show up to best advantage when provided with smooth-finished ribbon trimming.

When a soft felt material is used in making a hat according to the invention, the reinforcing of the crown, as accomplished by the circumferential tuck extending thereabout, will enable the crown to hold its shape more readily at the lower portion thereof, and yet permit various shapes to be formed in the upper portion according to the dictates of style or individual taste.

After the brim edge of the hat has been folded and sewed, it is usually cut or trimmed to remove the excess material. In the following the method of the present invention, this cutting need not be carried out in too exacting a manner, inasmuch

as the folded edge is wet-worked after the cutting to produce substantially a merging of the surfaces which tends to hide irregularities in the cut edge. Therefore, the cutting operation is less costly than that ordinarily required in hats not made according to the present invention and fewer rejections are necessary.

Other features and advantages will hereinafter appear.

In the accompanying drawing showing several embodiments of the invention—

Figure 1 is a side elevation of an improved hat made according to the invention.

Fig. 2 is a fragmentary plan view showing the folded edge portion of the brim cut away to reveal the reinforcing means.

Fig. 3 is a fragmentary vertical section showing the crown with circumferential tuck and one form of improved brim wherein a portion thereof has been folded upwardly and back on itself.

Fig. 4 is an enlarged section of the improved brim edge.

Fig. 5 is a vertical section of another embodiment of the invention showing the improved brim wherein a portion thereof has been folded downwardly and back on itself.

Fig. 6 is a horizontal fragmentary section taken through the crown of the hat, showing the ends of the sweat band.

Referring to Fig. 1, the hat of the present invention comprises a crown 10 and a brim 11, both being preferably formed from a single rough hat body of fur felt which has previously been built up in the well-known manner.

According to one usual procedure in making felt hats, the crown and brim of a hat, after being formed substantially to shape by a machine blocking operation, goes through various final shaping and dry finishing operations in the so-called front shop where the sweat and dress bands are added and in some instances trim or binding is put on the brim. If the hat is made of a felt material which is especially soft, limp and flexible, such as may be produced from beaver fur, fur and other fiber mixtures, etc., it becomes increasingly desirable to reinforce the brim edge in some manner, as with a binding or by thickening the edge to prevent irregularities in the shaping and curvature thereof when the hat is being worn.

These various operations generally known as finishing oprations, which are performed on a hat materially add to the cost of manufacture, not only from the standpoint of the labor required, but also when considering materials, such as the dress bands, brim binding ribbon, etc., which are used.

According to the present invention, an improved brim is provided which enhances the appearance thereof and reduces both the labor and material cost of the hat, said brim having a novel circumferential edge portion providing for both reinforcement and ornamentation.

Referring to the embodiment of Figs. 2, 3 and 4, the brim 11 has its outer edge portion 12 folded back on itself a substantial amount, said folded portion being bound and held in place with a plurality of lines of stitches 13, the entire brim being curled in the manner shown. For the purpose of further reinforcing the brim edge, a tape 14 is interposed in the fold of the brim edge, and also secured by the stitches 13. The folded portion 12 of the brim has a tapering cross section becoming thinner as the inner circumferential edge 15 is approached, and it will be noted that the

edge 15 is nested into the adjacent material of the brim 11, so as to substantially blend or merge into the same. This tapering of the folded portion, merging the edge thereof, and curling is accomplished by a wet-working and blocking operation using heat and pressure as will be explained in more detail later in the description of the improved method of making the hat.

The present invention further provides in a felt hat an improved crown which eliminates the necessity for employing dress bands for ornamentation or for other reasons such as strength, etc. This not only reduces the cost of the hat to the consumer as a consequence of reduced labor and material costs, but also reduces the upkeep cost of the hat, it being well known that dress bands soil easily when exposed to inclement weather and therefore require periodic replacement if satisfactory appearance is to be maintained.

Referring to Figs. 1 and 4, the crown 10 of the hat is provided with a tuck 18 extending circumferentially about the crown and spaced uniformly above the brim, the tuck being sewed with preferably a single line of stitches 19 in a manner to be described shortly.

It is at present preferred to have the stitches 19 extend through only the center and the inner thickness of the tuck and not through the outer thickness thereof. The tuck 18 is located approximately where the upper edge of a dress hat band would normally extend on a hat.

Referring again to the brim of the hat, it will be noted that each of the lines of stitches 13 in said brim is preferably continuous with itself so that the lines form concentric circles in the manner shown. The stitches may be made comparatively large and prominent so that they are visible to contribute to the ornamentation of the brim edge, or they may be made small and worked well into the felt during the wet-working thereof so that they become difficult to see, depending upon the effects desired.

It is at present preferred to make the outer row or rows of stitches larger than the inner stitches so that the latter, being less easily visible, contribute to the blending effect where the double thickness meets the single thickness of the brim.

I have found that by forming the tape 14 of cloth cut on a bias, interposing same between the folded material at the edge portion of the brim, then stitching said edge portion and the tape together, the stitches function to anchor and cause to be frictionally held the individual diagonal threads of the tape so that a yielding stiffening effect is produced. When the tape is first placed around the brim edge, before sewing, it is comparatively flexible and easy to form into a curve, yet after the sewing, the tape coacts with the stitches and the felted material to reinforce the brim edge materially.

A sweat band 16 is fastened to the inside of the crown 10 with stitches in the usual manner, the meeting ends of the band, Fig. 6, being secured together with a tape 17 so that the band is for all practical purposes continuous and adapted to hold its size. As shown, the tuck 18 in the crown is located near the upper edge of the sweat band 16 where it will not interfere with the feel of the band on a wearer's head, and yet where it will tend to reinforce the crown of the hat and maintain its shape.

The making of a hat according to the invention is, in the initial stages, similar to the manufacture of the usual felt hat. After the hat has been machine-blocked, the brim 11 is turned up

sharply at its outer edge in a hand-blocking and wet-working operation to prepare the edge portion 12 for turning back. The hat is then dried. The bias tape 14 is then placed around the upturned brim, and the edge portion 12 thereof folded back and sewed with a plurality of lines of stitches 13. A cutter is then employed to trim off the excess material from the folded edge. The folded edge portion 12 of the brim is now wet-worked under heat and pressure. The purpose of wet-working the brim edge is to cause the folded portion 12 thereof to blend and merge into the single thickness of the brim material, and also to cause the stitches 13 to work into the felted material more or less as desired. At this point the desired curl is also imparted to the brim.

Following completion of the brim-forming operations, the hat is again dried and then the material of the crown is folded back on itself along a circumferential line uniformly spaced from the brim and located normally where the top edge of the dress band of the hat would lay. The crown is then sewed preferably with a single line of stitches 19 at the point where the material is folded back on itself, after which it is folded again to its normal position, forming a tuck extending about the crown in the manner of a dress band. After the tuck is formed in the crown, the entire hat is hand-pressed to its final finished form.

It should be noted that the operation of cutting away the excess material of the folded portion of the brim does not require the expenditure of much time for it need not be carried out in too exacting a manner, inasmuch as the folded portion 12 is wet-worked after the trimming to produce substantially a merging surface which tends to hide any irregularities, and the same applies to the stitching 13 of the brim edge. Therefore, less skillful operators may be employed and also less rejections will be had.

Another embodiment of the invention is shown in Fig. 5, wherein the outer brim portion 12*a* of the hat is folded downwardly and inwardly, a tape 14*a* interposed, and the double thickness and tape sewed together with stitches 13*a* in the manner described above. The brim edge is then wet-worked to blend the double and single thicknesses of the brim together, and a curl imparted as desired. In some cases, it appears desirable to fold the brim edge under instead of over the brim, especially where a wearer favors a brim turned down at the front.

The brim 11 made according to the present invention may be worn either curled entirely up or entirely down, or curled down only at the front, and due to the reinforcement provided at the edge of the brim, the curvature given same will remain smooth and without irregularities.

There is thus provided by the invention an improved hat and method for making same wherein expensive finishing materials have been eliminated and labor costs reduced, while at the same time maintaining a quality and appearance comparable to the better grade hats on the market.

Variations and modifications may be made within the scope of this invention and portions of the improvements may be used without others.

I claim:

1. A felt hat having a brim having the material of the outer circumferential edge portion thereof folded back on itself to form a double thickness at said edge, said brim having separate nonfeltable stiffening means interposed in the fold of the brim edge and extending along the latter for reinforcing same, and said brim having a plurality of lines of stitches extending along the edge portions thereof and passing through said stiffening means and both thicknesses of the material of the brim to secure the same together.

2. A felt hat having a brim having the material of the outer circumferential edge portion thereof folded back on itself to form a double thickness at said edge, said brim having separate nonfeltable stiffening means interposed in the fold of the brim edge and extending along the latter for reinforcing same, and said brim having means for binding together said stiffening means and both thicknesses of the material of the brim to secure the same together.

3. A hat having a brim having the material of the outer circumferential edge portion thereof folded upward and inwardly back on itself to form a double thickness at said edge, the material of the brim alongside the inner circumferential edge of the folded portion having a circumferential shoulder providing a nesting space in said material for said inner edge; and a plurality of lines of stitches extending along the edge portion of the brim and passing through both thicknesses of the material thereof to permanently secure same together.

4. A felt hat having a brim having the material of the outer circumferential edge portion thereof folded back on itself to form a double thickness at said edge, the folded portion of the brim material having a radial cross-section tapering to a lesser thickness at the inner circumferential edge of said folded portion, and the material of the brim alongside of the inner circumferential edge of the folded portion being of less than normal thickness, so that the double thickness of the brim substantially merges into the single brim thickness at said inner circumferential edge; a separate nonfeltable tape interposed in the fold of the brim edge and extending along the latter for reinforcing same; and a plurality of lines of stitches extending along the edge portion of the brim and passing through the tape and both thicknesses of the material of the brim to secure the same together.

5. A hat having a brim having the material of the outer circumferential edge portion thereof folded back on itself to form a double thickness at said edge, the folded portion of the brim material having a radial cross-section tapering to a lesser thickness at the inner circumferential edge of said folded portion; a separate bias tape interposed in the fold of the brim edge and extending along said edge for reinforcing same; and a plurality of lines of stitches extending along the portion of the brim and passing through the tape and both thicknesses of the material of the brim to secure the same together.

6. A hat having a brim having the material of the outer circumferential edge portion thereof folded back on itself to form a double thickness at said edge, the material of the brim alongside the inner circumferential edge of the folded portion having a circumferential shoulder providing a nesting space in said material for said inner edge; and a plurality of lines of stitches extending along the edge portion of the brim and passing through both thicknesses of the material of the brim to permanently secure the same together.

7. A hat having a brim having the material of the outer circumferential edge portion thereof folded back on itself to form a double thickness at said edge, the folded portion of the brim

material having a radial cross-section tapering to a lesser thickness at the inner circumferential edge of said folded portion, the material of the brim alongside the inner circumferential edge of the folded portion having a circumferential shoulder providing a nesting space in said material for said inner edge; and a plurality of lines of stitches extending along the edge portion of the brim and passing through both thicknesses of the material thereof to permanently secure the same together.

8. A hat having a brim having the material of the outer circumferential edge portion thereof folded downward and inwardly back on itself to form a double thickness at said edge, the material of the brim alongside the inner circumferential edge of the folded portion having a circumferential shoulder providing a nesting space in said material for said inner edge; and a plurality of lines of stitches extending along the edge portion of the brim and passing through both thicknesses of the material of the brim to permanently secure the same together.

9. A hat having a brim having the material of the outer circumferential edge portion thereof folded back on itself to form a double thickness

at said edge, the folded portion of the brim material having a radial cross-section tapering to a lesser thickness at the inner circumferential edge of said folded portion, and the material of the brim alongside the inner circumferential edge of the folded portion having a circumferential shoulder providing a nesting space in said material for said inner edge; a separate tape interposed in the fold of the brim edge and extending along the latter for reinforcing the same; and a plurality of lines of stitches extending along the edge portion of the brim and passing through the tape and both thicknesses of the material of the brim to secure the same together.

10. The method of finishing a felt hat after it has been initially blocked, which includes the steps of wet-working the brim to sharply bend inwardly the circumferential edge portion thereof to form a fold therein, drying the hat, placing a nonfeltable tape in and along the circumferentially extending fold of the brim, sewing the tape and both thicknesses of the folded brim edge together, and wet-working the brim to substantially merge the double and single thicknesses of the brim about the tape.

JOHN CAVANAGH.