FUR BUTTON OR ORNAMENT

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5 Claims. (Cl. 24—92)

1 This invention relates to fur-covered buttons and buttons covered with fur-like fabrics and to their method of manufacture.

Fur buttons are used on fur garments and as ornaments or buttons on other articles of apparel. They would have a wider market but for the excessive amount of hand labor required to make them, since there is an ample supply of small pieces of fur, in the form of waste from making fur coats and the like, usable as covering material. It is not feasible to use with fur the techniques in common use for making fabric-covered buttons in a button press, since the fur fibers get drawn in between the edges of the telescoped metal shells which form the body of the button, creating unattractive bald-looking edges and an irregular contour. It therefore remains the general practice to apply fur coverings to button forms or molds by tedious hand-sewing methods which make their manufacture costly and hence limit the potential market.

The objects of this invention include the provision of an improved fur button requiring no hand sewing, which can be constructed with button parts readily available in the trade, which can be made with great speed, which has an attractive and uniform bushy appearance, particularly at the edges, which may be made with a variety of fastening means for attaching it to a garment; which requires no special machinery not already available in fur-working establishments, which is of rugged construction not liable to come apart in use, and which is economical to manufacture.

Further objects are the provision of novel methods of making fur buttons which greatly reduce the cost of manufacture, result in better looking buttons and which enable the assembly of fur buttons with telescoped metal bodies in button presses without loss of the desired bushy edges.

Other objects and advantages will in part appear and in part will be obvious from the following detailed description of the present preferred embodiments of the invention, given for purposes of illustration, taken in conjunction with the drawings in which:

Fig. 1 is a perspective view of one form of completed button;

Fig. 2 is a plan of a fur blank for use in making the covering of the button, as seen from the leather side;

Fig. 3 is a plan view of a section of untensioned elastic tape for application to the periphery of the blank of Fig. 2;

Fig. 4 is a perspective view illustrating the method of applying the elastic tape to the blank;

Fig. 4a is an enlarged detail showing the type of machine stitching used to secure the elastic tape to the fur covering, as seen looking down on the edge of Fig. 4.

Fig. 5 shows the inverted fur covering with the elastic applied thereto;

Fig. 6 is an elevation of a wooden button mold;

Fig. 7 is a view of the back of an unfinished button before the metal button back has been applied;

Fig. 8 is a sectional elevation of a well-known form of sheet metal button back showing a nail inserted therein;

Fig. 9 is an enlarged detail of the fastening-securing device which is centrally located in the back shown in Fig. 7;

Fig. 10 is an elevation of a completed button, partly in section and partly broken away, with a modified form of fastening means;

Fig. 11 is a central sectional elevation of a pair of button-forming dies and their holders such as are used in a well-known type of button press;

Figs. 12 and 13 are central sectional elevations respectively of an outer shell and an inner shell of sheet metal adapted to form the body of a covered button by means of the dies of Fig. 11 and suitable for use in making fur-covered buttons in accordance with one aspect of the invention;

Fig. 14 is a sectional elevation of the throat portion of the die assembly shown at the top of Fig. 11 but in inverted position with the outer shell and the fur blank in position in accordance with the practice usually employed in making fabric-covered buttons;

Fig. 15 is a side elevation of a button showing the results produced when this practice is used in making fur-covered buttons, illustrating the unsatisfactory results obtained;

Fig. 16 is a view similar to Fig. 14 illustrating a stage in the manufacture of a fur button in accordance with the invention; and

Fig. 17 is a central sectional elevation of the finished fur button produced in a press in accordance with the invention.

The first step in the manufacture of the fur button of the invention is to cut out a fur blank which is substantially circular in form as shown in Fig. 2. This blank may, for example, have a diameter of approximately 2½", which is an appropriate size for a button suitable for use on a fur coat, and is shown full size in the original drawings. A short piece of a length of fabric-covered elastic tape 12 of well known construction and capable of a considerable amount of ex-
tension is then sewed to the periphery of the fur blank in the manner indicated in Fig. 4. Elastic tape of the desired length may vary with respect to its extensibility and the tape selected should be one which is very extensible so that, for example, a piece between 2″ and 3″ in length may be extended to a maximum length of 7″ to 8″. The initial length of the tape 12 should be such that when it is stretched close to its maximum extension it is about equal to the periphery of the fur blank. For a fur blank having a 2½″ diameter a piece of tape between 2″ and 3″ long is used. The tape is applied to the fur blank by means of a so-called “fur machine” which is a sewing machine in common use for sewing fur skins together with the type of stitch shown in Fig. 1a. This machine, as is well known, is provided with gripping elements to hold the materials being sewed together and forms stitches 14 which are cast over the edge of the tape and the peripheral edge of the fur blank and interlocked with other loops 15 formed at one side of the work. As soon as the first few stitches have been made so that the end of the tape is securely held in the machine, the tape is placed under tension so as to be practically fully extended and sewed around the periphery of the blank 16 as shown in Fig. 2. As shown in Fig. 4, the tape is preferably sewed to the blank in contact with its fur-bearing side and when the tape has been sewed to the entire periphery of the blank and removed from the machine, thus releasing the tension on the tape, the blank will take the form shown in Fig. 3 in which it is turned inside out, with the fur on the inside and the leather on the outside.

A button mold of wood or other suitable material, of any desired form, such for example as the mold shown in Fig. 6 which has a flat back 18 and a curved face 19, is then placed on the inverted constricted blank shown in Fig. 5 and the blank drawn over the mold so as to bring the fur fibers onto the outside with the elastic across the back of the mold, as shown in Fig. 7.

At this stage it will be seen that the fur covering is secured to the wooden mold by means of the contraction of the elastic 12 and all that remains is to provide the button with a suitable backing by means of which it may be secured to a garment. For this purpose the metal back of Fig. 8 may be used, which back is a sheet of stamped sheet-metal cup having an upturned flange 20, a circular web 21 and a central depression 22. Referring to Fig. 9, a small disk 24 of sheet spring-metal is secured in the depression 22 by means of stamped-up lugs 25 of which four are shown. The disk 24 is centrally perforated at 26 and slotted outwardly from the perforation as shown at 27 so that a nail 28 or other fastening device forced through the perforation 26 is held securely against removal by the spring segments between the slots 27. This type of button back and the fastening-securities may vary as are not a part of the invention but are already obtainable on the market for use in making fabric-covered buttons, one of the advantages of the present invention being that specially manufactured parts are not required for the assembly of the novel construction. Nor is the invention limited to the particular shape of mold or back shown either of which may be modified in form without departing from the invention as will be clear from the ensuing description.

With the unfinished button in the form shown in Fig. 7, the metal back of Fig. 8 is then placed over the back of the button concentric with the mold and the nail 28 is driven into the wood or other material of the mold. The flange 20 of the back surrounds the elastic 12 concealing it from view and the nail holds the entire assembly together.

To secure the button to a garment a tape 30 may be placed under the nail 28 as shown in Fig. 8, the securing of fur buttons to fur garments by means of such tapes being common practice and well understood. Alternatively, as shown in Fig. 10, a screw eye 31 may be substituted for the nail and the button assembled by screwing it into the mold of Fig. 6. The screw eye may be used either with or without the fastening-retaining element shown in detail in Fig. 8, the use of such retaining element is to be preferred since with either type of fastening all of the strain placed on the button is taken by the metal backing and there is little or no pull on the mold tending to separate it from the backing. It will be readily understood that the mold may have a tapped hole to receive a threaded fastening.

The diameter of the metal backing in the embodiment of the invention above described is preferably equal to or slightly less than the diameter of the back 18 of the mold so that the fur covering 11 will fit between the edge of the flange 20 and the back 18 of the mold. It will be observed, however, that the retention of the fur covering on the mold is not dependent upon this gripping action as the elastic 12 continues to secure the fur covering on the mold whether or not it is gripped firmly between the back and the mold. Thus the covering cannot loosen or come off even if the mold and the metal backing should become loosened.

From the foregoing description it will be seen that a complete fur button may be rapidly constructed by the three steps of sewing the elastic to the blank under tension, drawing the elasticized blank over a mold and fastening the metal backing to the mold. The single skill labor required is the operator who stitches the elastic to the blank and such operators are readily available.

The embodiment of the invention described above in connection with Figs. 1 through 10 embodies a solid mold or body of wood or the like such as that shown in Fig. 6. There will now be described an alternative form of the invention in which the mold is replaced by a hollow sheet metal outer shell, such as that shown in Fig. 3 used in conjunction with an inner sheet metal shell, such as that shown in Fig. 13, which is adapted to be telescoped within the outer shell and the two shells clamped together by means of the dies shown in Fig. 11.

Referring to Fig. 11, the dies, which are of well-known construction, comprise a cylindrical tube 48 having a flange 41 and a rim 42. Slidably mounted in the tube 48 is a plunger 44 secured against removal by a screw 45 which enters a slot 46. The face of plunger 44 is dished as shown at 48 to correspond to the curvature of the face 49 of the outer shell. The cooperating die consists of a tube 50 having a flange 51 which is adapted to be seated within the rim 42 against the flange 41. The open end of the tube 50 is provided with a concave flare 52 which serves to crimp the edge 54 of the inner shell. Sliding in the tube 50 is a plunger 55 secured against removal by a screw 56 and urged outwardly by a coil spring 58.

It will be understood that after the button parts have been positioned in the dies they are placed together and inserted in a suitable press.
which moves the plungers 44 and 55 toward each other as shown by the arrows in Fig. 11. This telescopes the outer and inner shells, between which the covering is clamped, and slightly crimps the edge 54 of the outer shell around the inner shell to secure them together.

Referring to Fig. 14, the practice in using such dies to make fabric covering buttons is to center a fabric blank over the face 49 of the outer shell and push these two parts into the tube 40 into contact with the face 48 of the retracted die 44. The outer shell 66 is then pushed into the tube 50 into contact with the die 55, where it is held by frictional engagement with the tube 50, and the dies are then pressed together which moves the inner shell 60 into engagement with the fabric, drawing it inwardly of the flange 54 of the outer shell.

When this procedure is used, however, with a fur covering, the inner shell 50 gathers in a large portion of the fur fibres which are rooted in that portion of the fur blank which surrounds the flange 54 of the outer shell, which fibres have been given an upright position by reason of the fact that they are confined within the tube 48, as may be seen in Fig. 13. When the finished button is removed from the press it will be found that the fur fibres at the edge of the button have been drawn over the edge of the outer shell and clamped between the two shells, producing a button having the appearance shown in Fig. 15, in which most of the fibres around the edge have been caught between the two shells and drawn taut, producing a button which looks as though it had badly worn edges.

In accordance with the invention, an attractive button, avoiding such unsightly appearance, can be made in the button press above described by proceeding in the following manner. A fur blank is taped with tensioned elastic, as explained above in describing the first form of the button, and this elasticized fur blank is stretched over the outer shell of Fig. 12. At this stage the unfinished button has the appearance of Fig. 7. The inner shell 60 of Fig. 13 is then placed over the back of the unfinished button and thereupon both shells, together with the fur blank, are pushed into the tube 40. By reference to Fig. 16 it will be seen that the fur fibres rooted in that part of the blank surrounding the flange 54 are pushed upwardly but on the outside of the inner shell. The two parts of the die are then placed together and the plungers 44 and 55 are pressed toward each other in the usual way. This secures the two shells together and clamps the fur blank in place. The button removed from the press will have the appearance shown in Fig. 17 in which, it will be noted, the edge of the button has an attractive bushy appearance since the fibres rooted in the leather outside of the inner shell have not been drawn inwardly between the shells. Thus it will be seen that by using the elasticized fur blank and proceeding in the manner described one is enabled to form attractive fur buttons by means of equipment readily available.

In the construction just described the elastic 12 serves another important function. Due to the thickness of leather in a fur covering combined with the slipperiness of fur fibres, the fur has a tendency to pull out from between the shells in use unless restrained by means other than the clamping action of the shells. This restraint is provided by the elastic tape which tends constantly to pull the edge of its base blank inwardly and prevents it from working out.

The term "fur" as used herein includes, as well as natural fur, fur fabrics made in simulation of natural fur and heavy pile fabrics having a fur-like structure.

It is to be understood that the invention is not limited to the detailed constructions herein specifically described by way of illustration but can be carried out in other ways without departing from its spirit, within the purview of the claims.

What is claimed is:

1. A button structure comprising a substantially circular fur blank, an elastic tape stitched to the circumference of said blank while under extension and gathering the edges of said blank together at its edge, a mold filling the pocket formed thereby within said fur blank, a cup-shaped back overlying said mold and enclosing said elastic tape, a fastening member passing through said back and into said mold and securing the back and mold together, and means carried by said member for attaching the button to a garment.

2. A covered button structure comprising, a covering blank of material having a sheet-material base and a​ thick pile on one side thereof, a strip of elastic tape stitched to the entire periphery of said blank under substantial tension and gathering its edge together when released from tension, a mold filling the space within the thus gathered blank, a back covering the said tape and its seam and cooperating with said blank, and fastening means joining the back and mold together.

3. A covered button structure comprising, a covering blank of fur-like material, a strip of elastic tape stitched to the entire periphery of said blank under substantial tension and gathering its edge together when released from tension, a hollow mold part in the space within the thus gathered blank, and a back seated within and secured to said mold part and covering said tape.

4. A covered button structure comprising, a covering blank of fur-like material, a strip of elastic tape stitched to the entire periphery of said blank under substantial tension and gathering its edge together when released from tension, a cup-shaped metal shell in the space within the thus gathered blank, and a back seated within said shell and covering said tape, the edge of said shell being crimped to secure the shell and back together.

5. A covered button structure comprising, a covering blank of fur-like material, a strip of elastic tape sewed to the entire periphery of said blank under tension and gathering its edge together when released from tension, a mold part in the space within the thus gathered blank, and a back secured to said mold part with said tape positioned between said mold part and said back.

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REFERENCES CITED

The following references are of record in the file of this patent:

UNITED STATES PATENTS

<table>
<thead>
<tr>
<th>Number</th>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,364,718</td>
<td>Cohen</td>
<td>Jan. 4, 1921</td>
</tr>
<tr>
<td>1,482,475</td>
<td>Lichtenstein</td>
<td>Apr. 29, 1924</td>
</tr>
</tbody>
</table>