Sept. 14, 1948. M. J. SCHIFRIN 2,449,416

ARTIFICIAL FUR FABRIC

Filed Dec. 7, 1946

Fig. 1.

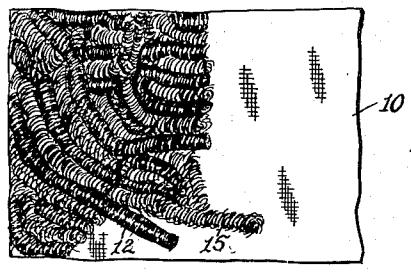


Fig. 2.

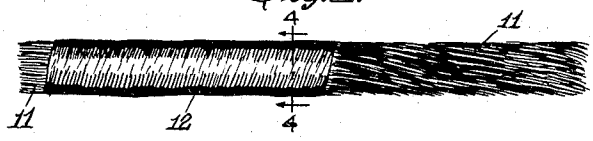


Fig. 3.



Fig. 4.

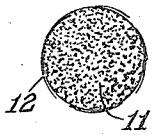


Fig. 5.

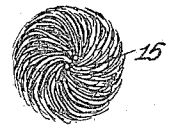


Fig. 6



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ARTIFICIAL FUR FABRIC

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5 Claims. (Cl. 2—278)

1

This invention relates to artificial fur fabric and more particularly to such a fur fabric having the appearance of Persian lamb.

The principal objects of the invention are to produce a fur fabric which is a more accurate and lasting imitation of Persian lamb than those heretofore known and one having better wearing qualities, maintaining its appearance and close resemblance to the natural fur. Natural Persian lamb embodies both tightly and loosely curled fibers. Previously known artificial Persian lamb fabrics after wear and exposure to the elements have tended to become matted and to lose their characteristic appearance. The artificial product of my invention is so constructed, however, that the simulation of the tight curls of the natural fur is permanent and unaffected by wear or weather, at the same time having enough loose curls to have a natural appearance.

In accordance with the invention, my new fabric comprises a backing of pliable sheet material, such as textile fabric, chamois or other light leather, or plastic film, to one surface of which there is applied, in sinuous, undulating or vermicular pattern, and so as to completely cover the surface, a mixture of two specific types of material. One of said types is a product known as curled or swirled round cut chenille having a glossy filling filament of natural or artificial silk such as rayon. Such a product and a method of making it is disclosed in U. S. Patent No. 1,934,398. The other type of material is a cord-like material having a resilient core covered by a wrapping of multi-fiber continuous filament yarn, such as rayon, having the desired gloss and little if any twist. Such a material is disclosed in my Patent No. 2,204,776. Either of these two materials, for the purpose of the present invention would be made with a diameter of about a quarter of an inch. The color is optional, depending on the type of fur to be imitated, black being the more usual and a mottled grey being sometimes desired.

The invention will be more fully understood from the following detailed description of an illustrative embodiment, taken in conjunction with the drawings in which:

Fig. 1 is a representation of a small portion of an artificial fur fabric illustrating its construction;

Fig. 2 shows a short length of the cord-like material used as one of the surfacing elements of the fabric, the cover or wrapping being removed at the ends to show its core;

Fig. 3 shows a short piece of cut round chenille

2

a portion of which has been curled or swirled, the curled chenille constituting the other surfacing element of the fabric;

Fig. 4 is a section on the line 4—4 of Fig. 2;

Fig. 5 is a section on the line 5—5 of Fig. 3; and

Fig. 6 is a section through a small portion of fabric showing the relationship of the two different kinds of surfacing materials in the finished article.

It will be understood that it is not possible to depict accurately in ink drawings the exact appearance of the materials or finished product with which the invention is concerned and therefore the drawings are to be regarded as more or less diagrammatic and as merely suggestive of the actual appearance.

In manufacturing my artificial fur fabric one starts with a sheet of textile 10 or other sheet material which can be sewed on, such as leather or other pliable material, which is preferably dyed the same color as that desired in the finished product. To one surface thereof strands of the two types of material referred to above are secured in a sinuous pattern, preferably by machine stitching, so that the surface is completely covered. These two differing strands are mingled in the course of their application and in applying them they are twisted about in such fashion that no strand crosses itself or the other strand so that the thickness of the finished fabric is uniform throughout.

Referring to Fig. 2, the cord-like material has a compressible resilient core 11 of wool roving, for example, around which is wrapped, so as to slightly compress the core, a winding 12 of a multi-fiber yarn having little or no twist. This wrapping yarn is preferably made of a large number of substantially continuous filaments such as rayon having a glossy sheen. When this material is sewed to the backing 10 in a sinuous pattern it will be appreciated that it will resemble the tight curls of Persian lamb. Due to the nature of the wrapping 12 there will be substantially no loose or projecting fibers, or at most only very few.

Referring to Fig. 3, there is shown a piece of cut round chenille part of which, designated 14, is in the original condition in which the filling fibers are straight and extend radially in all directions from the core. In this state the chenille may have a diameter of half an inch or so. The remainder of the piece of chenille, shown at 15, is curled or swirled, as by reciprocating it in a heated tube with a threaded interior surface as

taught in Patent No. 1,934,398. After curling the diameter of the chenille is reduced by about one half and the filling fibers are bent in the process so that they extend spirally about the core. The ends of the fibers of curled chenille, of course, lie for the most part on its surface and the surface is irregular and rough. When this material is sewed to a backing in a sinuous pattern it has a fur-like appearance resembling the loose curls of natural Persian lamb.

Figs. 4 and 5 show cross-sectional views respectively through the cord-like material of Fig. 2 and the curled chenille of Fig. 3 and in Fig. 6 I show how, in applying these distinct materials in admixture to the surface of the base material 10 they are juxtaposed so that alongside of what appears to be a tight curl, formed by the wrapping 12 of the cord-like material, are the free end fibers of curled chenille 15. For the most part these covering materials should alternate in forming the irregular undulating pattern though from time to time, to create the type of irregularities which occur in the natural fur, two or more strands of either material may lie side by side as shown at the right of Fig. 6.

The covering materials may be simultaneously arranged on and stitched to the base fabric by means of embroidery machines such as the Schiffli and Bonnaz machines, the operation of which is well known in the art. Thermoplastic or other adhesives may or may not be used instead of or in addition to sewing in securing the surfacing materials to the base and after-treatments such as steaming, brushing and pressing may be used as may be desired to perfect the appearance of the finished product.

The more realistic reproduction of the appearance of Persian lamb is the result of my novel combination of the two varieties of surfacing materials laid onto the base in side-by-side relationship. When the fabric is worn, as for example in a coat made thereof or as trimming on a coat or other garment, it undergoes changes closely similar to the natural fur under similar conditions. The wrapped cord surfacing material undergoes substantially no change and always maintains the tight curl appearance, its resilient core preventing any change in appearance under conditions of rubbing or crushing. The substantial percentage of open ended curled fibers in the chenille may undergo some straightening but its intertwining with the wrapped cord prevents the fabric as a whole from becoming matted and losing its distinctive appearance and resemblance to Persian lamb. Such straightening as may occur is similar to that which may take place with the natural fur and merely increases somewhat the number of free ends extending outwardly from the surface of the fabric which is what happens when genuine Persian lamb loses some of its curl in use.

The invention is not to be regarded as limited to the specific details of the embodiment described above for purposes of illustration but is to be given a liberal construction within the purview of the claims.

What is claimed is:

1. An artificial fur fabric having the appearance of Persian lamb comprising a base of pliable sheet material one surface of which has attached thereto, so as substantially to completely cover it, separate surfacing materials of two different characteristics, one of said materials being characterized by a continuous surface wrapping of continuous filaments and the other of said materials being characterized by curled short fibers whose ends are exposed, said materials being applied flat upon said base in sinuous paths in side-by-side relationship.

2. An artificial fur fabric having the appearance of Persian lamb comprising a base of pliable sheet material one surface of which has attached thereto, so as substantially to completely cover it, separate surfacing materials of two different characteristics, one of said materials being characterized by a continuous surface wrapping of continuous filaments and the other of said materials being characterized by curled short fibers whose ends are exposed, said materials being sewed flat upon said base in side-by-side relationship substantially without crossing over one another and applied in an irregular sinuous pattern.

3. An artificial fur fabric having the appearance of Persian lamb comprising a base of pliable sheet material one surface of which has attached thereto, so as substantially to completely cover it, separate surfacing materials of two different characteristics, one of said materials being a cord-like material having a resilient compressible core completely covered by a wrapping of substantially continuous filaments and the other of said materials having relatively short curled fibers with exposed ends, said materials being arranged flat upon said base in an irregular sinuous pattern and secured thereto by stitching.

4. An artificial fur fabric having the appearance of Persian lamb comprising a base of pliable sheet material one surface of which has attached thereto, so as substantially to completely cover it, separate surfacing materials of two different characteristics, one of said materials being a cord-like material with a continuous surface wrapping having the appearance of a tight curl substantially devoid of free fiber ends and the other of said materials being a curled cut chenille, said materials being applied flat upon said base in a sinuous pattern and intermingled with one another in side-by-side relationship.

5. An artificial fur fabric having the appearance of Persian lamb comprising a base of extile fabric one surface of which is substantially completely covered with intermingled strands of curled round chenille and cord-like material having a resilient core and a surface wrapping of substantially continuous filaments, the said two types of strands being laid flat on said base in irregular sinuous patterns in side-by-side relationship substantially without any overlapping and secured to the base by stitching.

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