Feb. 4, 1930. W. O. SNELLING 1,745,724

FUR SKIN

Filed Sept. 28, 1925

FIG. 1.

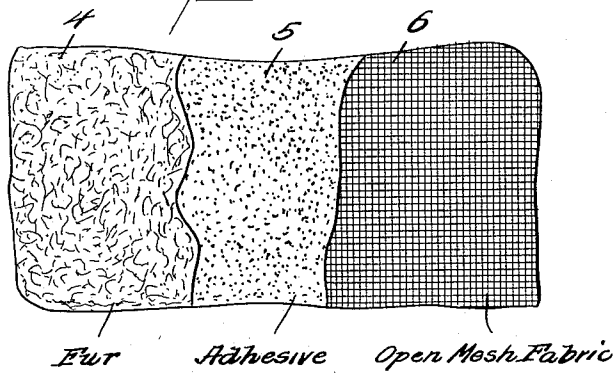


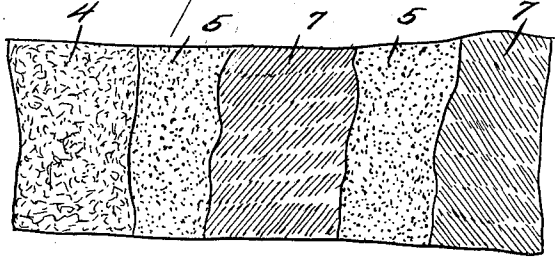
FIG. 2.



FIG. 3.



FIG. 4.



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UNITED STATES PATENT OFFICE

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FUR SKIN

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My invention relates to improvements in skins or pelts of fur bearing animals, and more particularly to the method of reinforcing or strengthening the texture of skins of fur bearing animals, normally too weak structurally to be satisfactorily employed in the manufacture of articles of the furriers' art, whereby such skins can be utilized advantageously in the manufacture of fur garments and the like.

It is well recognized that a number of animals bred in captivity, and some wild animals as well, in particular the rabbit and the ordinary house cat, have fur which is admirably adapted for fur garments and the like. The fur of such animals, however, can not be successfully employed in the manufacture of fur garments because of the fact that their skins are too weak structurally to withstand the different operations as stretching, sewing, and the like, incident to fur garment manufacture, without being irreparably damaged or rendered utterly useless. Because of the weakness of the skins of this class of fur bearing animals, the fur of such animals which is and would be otherwise suitable for garment manufacture, is practically of little or no commercial value for such purpose.

Accordingly, one of the objects of my invention is the production of fur skins, normally too weak structurally to be employed in the furriers' art, having a strengthened texture, and which are especially adapted for use in garment manufacture.

Another object of my invention is the method of reinforcing or strengthening the texture of normally weak skins of fur bearing animals by applying a composite backing to the inner or flesh side of the skins.

A further object of my invention is the method of reinforcing the texture of normally weak skins of fur bearing animals by applying a composite backing comprising a reticulated fibrous material embedded within an adhesive coating composition to the inner or flesh side of the skins.

Other and further objects of my invention will appear from the more detailed description of my invention set forth below, it being understood that various changes may be made therein by those skilled in the art without departing from the scope and spirit of my invention.

Basically, my invention relates to a method of reinforcing or strengthening the skins of fur bearing animals, which are normally too weak structurally to be adapted for fur garment manufacture, by applying a composite backing comprising either a single or a plurality of layers consisting of a fibrous reticulated material embedded within an adhesive coating composition to the inner or flesh side of the skins as illustrated in the accompanying drawings, in which—

Fig. 1 is a plan view with parts broken away, showing the flesh side of the skin having a composite backing consisting of an open meshed fabric embedded within an adhesive composition.

Fig. 2 is a detail sectional view of a portion of the structure shown in Figure 1.

Fig. 3 is a detail sectional view of a portion of the structure shown in Figure 1 wherein the composite backing includes a plurality of layers of open meshed fabric embedded within adhesive coating compositions.

Fig. 4 is a plan view, with parts broken away, showing a modification wherein the composite backing includes a plurality of layers of reticulated fibrous material embedded within adhesive coating compositions.

In carrying out my invention I apply to the flesh or inner face of a structurally weak fur bearing pelt or skin 4, a plastic adhesive coating body 5, preferably a pyroxylin composition having as its basic ingredient cellulose nitrate, and I then impregnate an open meshed fabric 6, as fly netting or mosquito netting with the same or an equivalent adhesive coating body. I then place the coated flesh side of the fur upon the impregnated fabric, the fabric being preferably passed forward as a belt, and suitably cut portions of the skins being laid upon the belt so as to completely cover it. The fur skin carrying the composite backing is then dried whereupon the cohesive coating body having the open meshed fabric embedded therein unites the fabric with the flesh side of the skin and thus strengthens or reinforces

the skin. By applying the pieces of coated skins to a continuous web of open meshed fabric I obtain a fur surface of any desired width and length, the web of fabric serving the double purpose of structurally reinforcing the individual pieces of skins and at the same time holding together the different pieces of fur as in one continuous piece. It is to be noted that the flesh side of the skins to which my composite backing is to be applied should be properly tanned. Furthermore, while I prefer a pyroxylin coating composition having as its basic constituent a cellulose nitrate I may also use other cellulosic adhesive compositions as cellulose acetate, viscose, and the like as the medium in applying the composite backing to the fur skins.

Some skins of fur bearing animals, although carrying a reinforcing medium or composite backing on the inner or flesh surface consisting of a coating or layer having an open meshed fabric embedded within an adhesive coating body, do not possess the requisite strength, I have found that the required additional strength can be imparted to such skins by applying a second layer or coating consisting of a soft open meshed fabric of a finer mesh than that of fly netting, as for example cheese-cloth, embedded within an adhesive body, to the first layer of reinforcing medium or backing. This is preferably done by first soaking the cheese-cloth in the adhesive composition, and then applying the soaked cheese-cloth to the fly netting coating by pressing the cheese-cloth against the fly netting coating until proper adhesion is secured. If a still greater reinforcement is desired I paint the backing medium with pyroxylin lacquer, which due to the open mesh of both the cheese-cloth and the fly netting readily penetrates to the skin surface of the fur bearing pelt, thus producing a composite reinforcement after the solvent in the lacquer has been evaporated or dissipated.

In a modified form of my invention, I coat the flesh side of a properly tanned skin 4 with an adhesive coating body 5, as a pyroxylin adhesive composition or other like composition, and while the coating is still in a wet condition, I dust fibers of cotton or other material 7 on the freshly treated flesh surface. The fibers are dusted over the wet surface, either in an irregular manner so that the individual fibers have no distinct orientation, or the fibers are dusted from a moving carrier in such manner that the greater portion of the fibers lie more or less in a single direction. After the reinforcing medium has been dried, other coatings of the adhesive or coating material alone, or of the coating material and fibrous material may be applied, and where a plurality of coats of fibers are applied, the coatings may be oriented differently if desired, the fibers forming one coat being at right angles to the fibers of the previous coat for the purpose of giving additional strength to the combined reinforcing medium or composite backing as shown in Fig. 4.

It is sometimes desirable to have the composite backing or reinforcing medium consist of a plurality of superimposed layers, the first layer consisting of a reticulated fibrous material embedded within an adhesive composition coating, the second layer consisting of an open meshed fabric embedded within an adhesive coating composition, a third layer consisting of a reticulated fibrous material embedded within an adhesive, and so on, every other coating or layer carrying an open meshed fabric. In some cases the reinforcing medium or composite backing may consist of only two layers, the one layer having the reticulated fibrous material embedded therein and the other having the open meshed fabric embedded therein.

Having described my invention, I claim:

1. The method of increasing the strength of fur skins which comprises applying a coating composition to the flesh side of such skins through the openings of an open-mesh fabric in contact with such skins.

2. The method of increasing the strength of fur skins which comprises applying an open-mesh reinforcing fabric to the flesh side of such skins, coating the skin with a liquid coating composition through the open meshes of the reinforcing fabric, and thereafter causing the solidification of the coating composition.

3. A fur skin reinforced on its flesh side by a composite backing comprising a coating composition and an open-mesh fabric the individual threads of which are wholly embedded in such coating composition.

WALTER O. SNELLING.