

UNITED STATES PATENT OFFICE.

HENRI MARCHE, OF FOURMIES, FRANCE.

PROCESS FOR TRANSFERRING HAIRS FROM SKINS TO SUITABLE SUPPORTS.

1,047,822.

Specification of Letters Patent.

Patented Dec. 17, 1912.

No Drawing.

Application filed March 11, 1911. Serial No. 613,785.

To all whom it may concern:

Be it known that I, HENRI MARCHE, a citizen of the French Republic, residing at Fourmies, Nord, France, have invented certain new and useful Improvements in Processes for Transferring Hairs from Skins to Suitable Supports, of which the following is a specification.

This invention relates to a process enabling animal hairs in their natural state and direction to be transferred to any fabric or support.

The process consists in utilizing the operation of freezing obtained by any desired means, either naturally (when the season is suitable) or by means of a freezing machine.

The process is carried out as follows:— After having prepared the skin in a suitable manner and having stretched the same, it is dipped into a reservoir of a suitable shape filled with pure water or (if it is considered advisable) with water to which antiseptic, dyeing, etc., substances have been added, whereupon the whole is submitted to cooling sufficient to freeze it, and thus a block of ice is obtained, inclosing the skin and the hairs. These blocks of ice thus obtained, are cut into geometrical surfaces, if considered advisable, then arranged side by side on a special table, in the interior of which circulates a refrigerating mixture, they become welded together, and it is then easy to pare off the skin by means of a knife, plane or of a special machine, but leaving the hairs embedded in their layer of ice. Single pieces of ice can also be treated, without being arranged side by side. The skin could also be prepared in a manner required for removing the hair, either by means of orpiment or other processes, so that, the hair adhering very slightly to the skin, the latter could be easily torn away without being cut, of course after the freezing of the whole. The skin having been removed by any of the said means, a certain thickness of ice is melted by means of a suitable salt or some source of heat, so as to allow the hairs to project to a small extent from the block of ice, the said portion is then coated with an adhesive substance resisting water, such as a solution of rubber or any other capable of fulfilling the same object, and a suitable fabric is caused to adhere to it, or a thickness of solution can be formed which will constitute the background. The ice is then

melted on the rest of the hairs, and as soon as the evaporation is completed, the fabric, that is to say, the background and the hairs adhering to the same, are submitted to a calendering and to any other necessary finishing operations.

The product obtained is quite similar to the skin of the animal, the hairs being in the same state and the same direction as if attached to the natural skin.

Under certain conditions, in view of the hardness of the body thus obtained by freezing, it is even possible simply to reduce the thickness of the skin by planing or by any other means, so as to give it more suppleness and lightness.

When it is considered advisable, the extent of the surface of the fur to be produced can be increased by depositing the hairs on elastic film-like surfaces.

Threads, fibers, etc., may be similarly treated in the manufacture of plushes, velvets and the like, this process forming the subject of a co-pending application Serial No. 613,784.

What I claim as my invention and desire to secure by Letters Patent is:—

1. A process of transferring furs, hairs and the like in their natural state as regards shape and arrangement to suitable supports, which consists in treating the skins bearing hairs with liquid and freezing to form solid blocks inclosing the hairs and keeping them in their natural direction, then detaching the skin, then exposing a certain length of the hairs, at the ends adjacent the skin and securing the same to a suitable supporting fabric and finally melting away the frozen liquid.

2. A process of transferring furs, hairs and the like in their natural state as regards shape and arrangement to suitable supports, which consists in treating the prepared skins bearing hairs with water and freezing to form solid blocks inclosing the hairs and keeping them in their natural direction, then detaching the skin, then exposing a certain length of the hairs at the ends adjacent the skin, and securing the same by an adhesive substance to a flexible supporting fabric and finally melting away the frozen liquid and subjecting the product to a suitable finishing treatment.

3. A process of transferring furs, hairs and the like in their natural state as regards

shape and arrangement to suitable supports,
which consists in treating prepared skins
bearing hairs with liquid containing water
and freezing to form solid blocks inclosing
5 the hairs and keeping them in their natural
direction, then detaching the skin and ex-
posing a certain length of the hairs at the
ends adjacent the skin, then applying an
adhesive substance thereto and securing to a
10 flexible supporting fabric and finally melt-

ing away the frozen liquid and subjecting
the product to a suitable finishing treatment.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

HENRI MARCHE.

Witnesses:

GEORGES FAUYER,

LEON SCIOT.