

UNITED STATES PATENT OFFICE.

LOUIS FALKENAU, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN PREPARING SEAL-SKINS.

Specification forming part of Letters Patent No. 116,578, dated July 4, 1871.

To all whom it may concern:

Be it known that I, LOUIS FALKENAU, a resident of the city and county of San Francisco and State of California, have invented a new and original method or process for preparing fur seal-skins and skins of other fur-bearing animals so and in such a manner as to render them susceptible of receiving and retaining color, and for dyeing, dressing, and beautifying the same for furs; and my invention consists in the application, to the skin of fur-bearing animals, of such tanning compounds or substances as shall not only tan the skin, but at the same time give to the fur the proper mordant for receiving and fixing the colors thereafter applied thereto; and also in the method in which said colors are combined and applied to the fur, whereby such skins can be readily and economically prepared for use or sale, of which the following is a specification:

The process consists of several operations, viz.: I first take the skin of the fur-seal or any other fur-bearing animal, either in its natural state or in the condition in which it is commonly prepared for shipment. Thereupon I pursue consecutively the following steps and subject it to the following treatment: 1st, I thoroughly cleanse and swell the skin by any of the ordinary methods in vogue for that purpose. 2d, I then shave, split, or thin the back of the skin to any requisite thinness. 3d, I then pluck or free it from all bristles or long hairs, leaving only the fur or fleecy undergrowth upon the skin. 4th, I then immerse the skin in a solution of gum catechu. This is done for the double purpose of tanning and giving the mordant or basis of chemical action for dyeing in different tints. The skin is left in this solution for a time sufficiently long to perfect the tanning of it and securing the mordant upon the fur. 5th, after the tanning of the skin is thus effected and the mordant thus obtained, I, by wringing it out and drying it, free the skin from a surplus of the tanning substance adhering to it. 6th, when I have thus thoroughly tanned the skin, thereby securing the mordant, I treat it by applying to it a solution of nitrate of copper or a combined solution of sulphate of copper and chloride of ammonium. I then dry the skin and again apply the above solution of said salts, and then dry it again, alternating this process as often as is necessary to obtain the desired tint. In case the above process fails to give the re-

quired tint or intensity of color I then alternate the above process by the introduction of a dilute solution of gum catechu, which thus increases the strength of the mordant, whereby a darker and more intense color can be readily obtained. By the above applications of the solution of said salts acting upon the mordant the color for the lower portion of the fur is obtained. 7th, after the groundwork or under color above mentioned is thus obtained the tops or upper part of the fur are brushed to the required depth with a solution of nitrate of iron, or a solution of persulphate of iron, and afterward dried. This process of brushing and drying may be alternated or repeated. 8th, if, by the above process, the color of the tips or upper portion of the fur should not be sufficiently dark or intense, I then alternate the above process by an application of either the original mordant, gum catechu, or any substance containing gallic or tannic acid, or their derivatives, according to the tint desired. 9th, after I have secured a complete tanning of the skin, and procured a mordant by the use of gum catechu, various tints and colors or shades of colors may be obtained by the effect of different salts and by the use and application of solutions of the same salts but of different strengths.

In the process, as above detailed, it will be observed that two colors are to be obtained in the preparation of furs. By operation No. six (6) I obtain a color for the whole of the fur, which color I preserve as the color for the lower portion of the fur. By operations Nos. seven (7), eight (8), and nine (9), I produce the upper color of the fur without destroying the color obtained in operation No. six (6), for the lower portion of the fur.

The use of the gum catechu, as herein described, not only effects the tanning of the skin, but also, at the same time, secures a chemical basis or mordant upon the fur, which mordant will cause the fur to become susceptible of receiving and holding firmly the required colors of sufficient darkness and intensity. The fur-skin of the seal in its natural state has not the properties required to receive and hold color. By my discovery the chemical effect produced by the application of a solution of gum catechu upon the furs is such that a mordant or chemical property in each hair of the fur is secured to receive and retain a firm color or colors.

While I have described the application of my

process to seal-skins, I do not desire to limit myself thereto, as it can be applied to tanning and coloring any fur-bearing skins.

Gum catechu has, I am aware, been heretofore used for dyeing or coloring cotton or woolen goods, and also to a limited extent for tanning leather; and I do not, therefore, claim it broadly or alone as a tanning agent; but,

What I do claim, and desire to secure by Letters Patent, is—

1. The use of gum catechu in tanning seal and other fur-skins as a mordant for coloring and dyeing the same.

2. The method of coloring and dressing seal and other fur-skins by the combined use of gum catechu and the salts before mentioned, substantially as and in the method described.

3. The combination of the several operations herein described so as to constitute a method of preparing the furs, substantially as described.

LOUIS FALKENAU.

Witnesses:

WILLIAM G. COUSINS,
HENRY S. TIBBEY.