UNITED STATES PATENT OFFICE.

FRANK E. DIETSCH, OF WOODBURY FALLS, NEW YORK.

TAWING SKINS.

SPECIFICATION forming part of Letters Patent No. 287,255, dated October 23, 1883.

Application filed January 24, 1883. (No specimens.)

To all whom it may concern:

Be it known that I, FRANK E. DIETSCH, a citizen of the United States, residing at Woodbury Falls, in the county of Orange and State of New York, have invented new and useful Improvements in Treating Skins, of which the

following is a specification. This invention relates to the treatment of skins, the object being to lay the naps or fibers ro on the flesh side thereof, so as to produce a smooth surface and put a face on the skins and cause the same to resemble California Indiantanned buckskin. This is accomplished by applying a composition to the flesh side of the 15 leather or skins, and then smoking the same, the term "skins," as used in the following specification, being used in the sense of tanned skins or leather. It is known that skins, after being tanned, possess an uneven or rough 20 surface, due to the naps or fibers which rise up from the surface. This is the case with what is called the "flesh side" of the skin. As is known, the skins are frequently skived, by which operation that part of the skin which 25 forms the hair side or outside is taken off, this part being largely used for such purposes as sweat-leather for hats and the like, and being known as the "grain." The inner part of the skin is called the "flesher," is very soft 30 and pliable and agreeable to the touch, and is adapted for such purposes as the manufacture of gloves and the like. For such purposes, however, it is advantageous that the flesher should have a perfectly smooth face, so as to 35 be acceptable to the eye and to the touch, and to imitate California Indian-tanned buckskin. In order to produce this smooth face and to lay the naps, I use a composition consisting of water, oil, soap, and an adhesive (gum or glue) 40 and an alkali, such as potash. The object of the adhesive is to render the mixture cohesive, and cause it to lay the naps and hold them to the face of the skins, while the object of the oil, alkali, and soap is to render the mixture 45 soft and glossy and prevent its cracking either when dry or when the leather is bent. Consequently any proportion of these ingredients which will accomplish these objects—namely, rendering the mixture adhesive, and also leav-50 ing it pliable and not apt to crack—will an-

swer the purpose. I have found satisfactory |

results to be obtained by observing the following proportions: five gallons of water; one-half gallon of oil; two pounds of glue; one-fourth pound of alkali, such as potash; one-55 half pound of soap.

As the solution of the soluble materials is expedited by heat, it is well to use hot or boiling water when preparing the mixture, whereby time is saved.

With respect to the oil, I would recommend such oils as vegetable oils, or neats'-foot oil, or horse-oil. Some kinds of oils—such as fish-oil—are not satisfactory.

With respect to the glue, it should be ob-65 served that the same may be replaced by another adhesive—such as gum or shellac—and as regards such adhesives as possess stronger adhesive qualities than glue, the proportion of such adhesive may be correspondingly de-70 creased.

It is to be remarked that in the above composition the oil and potash will form soap, and that therefore it is possible to dispense with the soap and still obtain a satisfactory mix-75 ture; but it is well to add the soap, as the same gives a consistency to the mixture.

The above-named composition of matter is applied to the skins with a sponge, cloth, brush, or by any convenient means, and is left 80 to dry. Several coatings may be applied in succession until the result is satisfactory, and I have generally found good results to be obtained by the application of two coatings.

The process of applying or spreading the 85 composition over the skins, as is seen, is very simple and rapidly accomplished, and as the mixture can be readily made, the manner of treatment possesses the advantage of consuming but little time, labor, or money.

This composition is applied to the flesher, the result being to put a face on the flesher. It is to be remarked that before applying this composition it is well to grind a smooth face onto the flesher, an emery-wheel being adapted 95 for this purpose.

As this composition causes the flesher to become soft and pliable, so that it does not easily crack or break, the value of the flesher is considerably increased, and it obtains a better 100 price in the market.

It should also be remarked that after the

flesher has been treated with the composition it is smoked, which deepens the color and causes the flesher to assume the appearance of California Indian-tanned buckskin. It is also 5 to be remarked that this process can be applied to the flesh side of skins without the grain having been first removed, and upon being removed the whole skin will present the appearance of California Indian-tanned buck-10 skin; but as the fleshers from which the grain has been removed are cheaper to be obtained, and as the removal of the grain also enables the latter to be used for other purposes, as already mentioned, the process in practice is 5 applied only to fleshers from which the grain

has been removed.

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

The process of treating skins by applying to the flesh side an adhesive composition, and 20 then smoking the same, substantially as and for the purpose described.

In testimony whereof I have hereunto set my hand and seal in the presence of two sub-

scribing witnesses.

F. E. DIETSCH.

Witnesses:

W. C. HAUFF,

E. F. KASTENHUBER.

It is hereby certified that in Letters Patent No. 287,255, granted October 23, 1883, upon the application of Frank E. Dietsch, of Woodbury Falls, New York, for an improvement in "Tawing Skins," an error appears requiring correction, as follows; in line 8, page 2, of the printed specification, the word "removed" should read smoked; and that the patent should be read with this correction therein to make it conform to the record of the case in the Patent Office.

Signed, countersigned, and sealed this 30th day of October, A. D. 1883.

[SEAL.]

M. L. JOSLYN,

Acting Secretary of the Interior.

Countersigned:

E. M. MARBLE,

Commissioner of Patents.