UNITED STATES PATENT OFFICE.

EMANUEL MANASSE, OF NAPA, CALIFORNIA.

IMPROVEMENT IN PROCESSES OF PREPARING OR TANNING SKINS.

Specification forming part of Letters Patent No. 165,348, dated July 6, 1875; application filed May 3, 1875.

To all whom it may concern:

Be it known that I, EMANUEL MANASSE, of Napa, in the county of Napa and State of California, have invented a certain Improved Process of Tanning or Preparing Animal Skins for Use in the Arts, of which the fol-

lowing is a specification:

My invention relates to the process of tanning animal skins to convert them into leather: and it consists in the employment of the compositions hereinafter described, by which I treat and prepare the skins without the use of lime, the object of my invention being to produce a leather that shall be soft and pliable, and still possess qualities of toughness to render it of use in the manufacture of gloves and other small articles.

The skins to which my process is specially applicable are sheep-skins, but can be used to

treat other skins with good effect.

They are taken from the sweat-house, after being properly washed, fleshed, and dried, and immersed in a solution composed of the following ingredients, in about the proportion

No. 1.—Twenty pounds of salt, thirty pounds of white-rock potash, three hundred gallons of

They are kept in this solution two hours, then wrung out very dry, and immersed in a

solution composed as follows:
No. 2.—Twelve pounds of hard soap and two gallons of neat's foot oil in one hundred

and fifty gallons of water.

After being kept in this solution long enough to wet them through they are taken out and hung up to dry, and they are wet and dried in this manner two or three times, as they may seem to require, or until they are tanned, as some skins may need to have this part of the process repeated a greater number of times. After the skins are treated in this manner and are properly tanned, they are put in a dry state into clear water, and washed in a thorough manner to remove all foreign matter from them, and in this moist condition they are put into the different kinds of dyes to produce leather of various colors; or, if a white leather is required, they are allowed to dry

without further treating.

In this manner I produce a leather that is much superior to any kind now in use in the combined qualities of softness, pliability, and toughness, or the quality that renders it capable of being sewed together, as in the manufacture of gloves and like articles, without tearing or allowing the stitches to pull out; and as I am enabled to effect the tanning of skins without the employment of lime, I do not rot them, or take away any of their natural qualities.

The proportions of the ingredients given in the above solutions, Nos. 1 and 2, are estimated for two hundred sheep-skins, and the process of tanning, as above described, consists of, first, an immersion of the skins from the sweathouse into the solution No. 1 for two hours; second, a wetting through in solution No. 2 two or more times, being dried after each wetting; third, a washing out in clear water after being tanned and before coloring; but the length or number of immersions and the proportions of the above ingredients may be changed, as the nature of the skins may require, without affecting the process.

Having thus fully described my newly-invented process, what I claim therein as new, and desire to secure by Letters Patent, is-

1. The tanning solution, No. 1 and No. 2, composed of the ingredients named, in about

the proportions stated.

2. As an improvement in the art of tanning, the application of the solutions named to animal skins, substantially in the manner and order stated.

EMANUEL MANASSE.

Witnesses:

T. J. DEWOODY, S. E. HELDER.