

UNITED STATES PATENT OFFICE.

WASHINGTON L. ALBEE, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF
TO SCHOELLKOPF & COMPANY, OF BUFFALO, NEW YORK, A FIRM.

METHOD OF PREPARING SKINS FOR TANNING.

SPECIFICATION forming part of Letters Patent No. 702,864, dated June 17, 1902.

Application filed March 29, 1901. Serial No. 53,510. (No specimens.)

To all whom it may concern:

Be it known that I, WASHINGTON L. ALBEE, a citizen of the United States, and a resident of Buffalo, in the county of Erie and State of New York, have invented a new and useful Improvement in Methods of Preparing Skins for Tanning, of which the following is a specification.

This invention relates to that treatment of sheepskins which has the purpose to cleanse the skins after the wool has been removed and before tanning the skins.

In preparing sheepskins for tanning the wool is first removed from the skins by hand as far as possible. The greater part of the fine short hair or wool, which is almost invisible and very difficult to remove, remains on the skin. This fine hair is grounded in the outermost layer of the skin, usually called the "epidermis" or "scarf-skin." The object of my invention is to disintegrate and remove this outer layer or scarf-skin containing this fine short hair and other foreign matter by a simple, cheap, and efficient method which cleanses the skins thoroughly in a comparatively short period of time and without injuring the skins.

In practicing my invention the skins are first steeped for a period of about ten hours in a preliminary cleansing solution, then milled or agitated for about three hours in the main cleansing solution, then milled or agitated for about two hours in a final cleansing solution, and finally rinsed in cold water.

The preliminary cleansing solution consists of about two parts, by weight, of sulfid of sodium, one part of bicarbonate of soda, and one part of borax dissolved in ninety-six parts of cold water. This solution is placed in a vat, tank, or pit, and the skins are steeped in this solution for about ten hours, preferably overnight.

The main cleansing solution consists of about two parts of sulfid of sodium, two parts of bicarbonate of soda, one part of borax, and one part of caustic soda dissolved in ninety-four parts of water. This solution is placed

in the usual pin-wheel or rotary drum in which skins are milled or agitated preparatory to tanning. The skins are removed from the steeping solution and placed in this drum or pin-wheel and are agitated in the same for about three hours at a temperature of about 80° Fahrenheit. The solution is then withdrawn from the drum, and the latter is supplied with the final cleansing solution, which consists of about one part of bicarbonate of soda and one part of borax dissolved in ninety-eight parts of water. The skins are agitated in this solution for about two hours at a temperature of about 90° Fahrenheit. The final cleansing solution is then drawn off, and the skins are rinsed in the pin-wheel in cold water for about ten minutes. This treatment disintegrates and removes the outer scarf-skin or epidermis containing the fine hair or wool and cleanses the skins thoroughly on both sides without injury to the skins, leaving the latter soft, plump, clean, and strong. The skins are then pickled with sulfuric acid and salt in the usual manner and are then ready for tanning.

While this process is particularly desirable for the treatment of sheepskins, it may also be advantageously applied for the treatment of other skins. The strength of the solutions given above is suitable for most kinds of skins, but may be varied somewhat in accordance with the character of the skins, as thick and heavy skins require stronger solutions than light and delicate skins.

I claim as my invention—

1. The herein-described method of cleansing skins preparatory to tanning which consists in steeping the skins in a watery solution of sulfid of sodium, bicarbonate of soda and borax, then agitating the skins in a watery solution of sulfid of sodium, bicarbonate of soda, borax and caustic soda, and then agitating the skins in a watery solution of bicarbonate of soda and borax, substantially as set forth.

2. In the art of cleansing skins preparatory to tanning, the method of preparing the skins

for treatment with the main cleansing solution which consists in steeping the skins in a watery solution of sulfid of sodium, bicarbonate of soda and borax, substantially as set forth.

5 3. In the art of cleansing skins preparatory to tanning, the method of treating the skins with a main cleansing solution which consists of a watery solution of sulfid of sodium, bi-

carbonate of soda, borax, and caustic soda, substantially as set forth.

Witness my hand this 26th day of March, 1901.

WASHINGTON L. ALBEE.

Witnesses:

EDWARD WILHELM,
CYESTA HORNBECK.