

UNITED STATES PATENT OFFICE.

WILLIAM FARRIS, OF YARMOUTH, MAINE.

IMPROVEMENT IN TANNING PROCESSES AND COMPOUNDS.

Specification forming part of Letters Patent No. **181,061**, dated August 15, 1876; application filed June 22, 1876.

To all whom it may concern:

Be it known that I, WILLIAM FARRIS, of Yarmouth, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Tanning Process and Compound; and do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to which it pertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

The object of my invention is the production of a new and useful compound and process for the treatment of hides, and for the tanning of them.

My compound and process are particularly adapted for the treatment of those skins, from which gloves are made, known as "buckskin gloves."

By my process and compound the skin is made tough, soft, flexible, and of light color, if desired.

My invention comprises two steps and two compounds, which, following each other, produce the desired effects upon the skin.

I first take the skin with the hair on and soak it in a lye-bath for a time varying from twenty-four to forty-eight hours, in accordance with the thickness, hardness, and general condition of the hide. I make my lye-bath by putting about six or seven gallons of lye to four or five hogsheads of water. The lye is taken in the condition in which it comes from ashes or potash. I usually run about seven gallons of water through one-half bushel of ashes, to get the lye of the proper strength. After removal from the lye-bath, the skin is then submitted to the operation of removing the hair, being placed in a vat or other vessel, and then retained for this purpose from thirty-six to forty-eight hours, according to the condition of the skin. This bath is made as follows: I take about three pecks of lime, three pounds of soda-ash, and two pounds of sulphur, and give them a thorough boiling in a sufficient quantity of water. This solution I then place in about four hogs-

heads of water, and thoroughly plunge up the whole mixture. The skin is then placed into this compound in a vat for the time above described. When taken from this solution the skin is ready for the drench. After being properly drenched, the skin is then submitted to a tanning compound, which I will now describe.

I take four or five hogsheads of liquor, composed of the extracts of juniper and sumac, mixed in the proportion of one-third juniper extract to two-thirds sumac. To this I add one pound of sal-soda, six to eight pounds of common salt, five pounds of gamboge, three pounds of sulphur.

I obtain the sumac and juniper extracts by first grinding, and then steeping the same separately.

All of the other ingredients will mix more easily and readily if first dissolved in hot water separately. With the gamboge this is quite necessary.

For all the lighter leathers four to eight days is sufficient length of time for the tanning process.

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

1. The process of softening skins and hides and removing the hair therefrom preparatory to tanning the same, which consists in immersing the said hides or skins first in the lye-bath and then the lime, soda-ash, and sulphur bath, substantially as described.

2. The tanning compound herein described composed of the ingredients named, substantially as set forth.

3. The process herein described of dressing and tanning hides and skins, which consists in first submitting the skin to the lye-bath; second, to the lime, soda-ash, and sulphur bath; and, finally, to the tanning compound, all as herein set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

WILLIAM FARRIS.

Witnesses:

CHARLES E. CLIFFORD,
H. G. BRIGGS.