UNITED STATES PATENT OFFICE.

JOHN M. MÜLLER, OF COBLESKILL, NEW YORK, ASSIGNOR TO HIMSELF AND FRANKLIN S. MERRITT, OF SOUTHBRIDGE, MASSACHUSETTS.

IMPROVEMENT IN COMPOSITIONS FOR TANNING HIDES.

Specification forming part of Letters Patent No. 123,118, dated January 30, 1872.

To all persons to whom these presents may come:

Be it known that I, JOHN M. MÜLLER, of Cobleskill, in the county of Schoharie, of the State of New York, have invented or discovered a new and useful or Improved Composition for Tanning Hides or Skins; and do hereby declare the same and mode of making it to be described as follows—that is to say, in manufacturing it:

I take three hundred gallons or thereabout of water; twelve pounds or thereabout of sulphate of soda; six pounds or thereabout of sal-soda; two pounds or thereabout of sulphuric acid; and two hundred pounds or thereabout of gambier or cutch. In compounding these materials, I first dissolve the gambier or cutch in a suitable amount of the water, say about two hundred and ninety gallons of it; next dissolve in about four gallons of the water the sulphate of soda; next I dissolve in the rest of the water the sal-soda; next I mix all the above-mentioned solutions and stir them well together, and subsequently add to the mixture the sulphuric acid, which is to be thoroughly incorporated with the combined solutions. In dissolving the gambier or cutch heat may be employed to facilitate the process; the heat being applied through the agency of steam or in any other proper manner. So heat may also be employed in facilitating or effecting the dissolving of the sulphate of soda.

In using the liquid composition, the hides or skins to be tanned may be immersed in it, or it may be applied to them by a tanner's wheel or drum; it usually requiring about fifteen days to effect the tanning of ordinary hides or skins.

I am aware of the tanning compound described in the United States Patent No. 17,043, dated April 14th, 1857, and granted to David H. Kennedy, and make no claim thereto. I make no use of sulphate of magnesia and sulphate of alumina, as does the said Kennedy in forming his composition; nor do I employ a solution of borax or boracic acid, but make use of sulphuric acid, the effect of which on the leather is different from that of borax or boracic acid. Although in the formation of boracic acid, artificially. sulphuric acid is used with borax dissolved in water, the salt produced does not possess the qualities of sulphuric acid. In making his composition Kennedy uses thirteen pounds of alkaline sulphates to twenty-four pounds of valonia, whereas, in manufacturing my composition, I am enabled, by using sulphuric acid, to make twelve pounds of sulphate of soda answer for two hundred pounds of the gambier, catechu, or cutch; therefore, while Kennedy employs to a given weight of the valonia more than half its weight of alkaline sulphates, I employ to a given weight of the gambier about a sixteenth as much of sulphate of soda, thereby greatly cheapening the composition and producing one, as I have every reason to believe, as, if not far more, effective.

I therefore claim as my invention—

My improved tanning composition as composed of the single alkaline sulphate, sulphuric acid, sal-soda, and gambier, combined in or about in the proportions and in manner substantially as hereinbefore set forth.

JOHN M. MÜLLER.

Witnesses:
R. H. EDDY,
J. R. SNOW.