

# UNITED STATES PATENT OFFICE.

WILLIAM FARRIS, OF YARMOUTH, MAINE.

## IMPROVEMENT IN TANNING-COMPOUNDS.

Specification forming part of Letters Patent No. 132,269, dated October 15, 1872.

*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 a new and useful Liquid for Tanning Leather; and I hereby declare the following to be a full, clear, and exact description of the same, such as would enable those skilled in the art of tanning to use the same.

The object of my invention is to produce a liquid which, with far less expense and trouble, will produce the same effect as the bath commonly prepared from the barks of hemlock, oak, and other trees, and which will contain a principle as effective as the tannic acid derived from those barks, or from the preparations known in commerce as "quercit-rine."

My preparation will not only produce all the desirable effects of the above-named barks or preparation, in respect to hardening and toughening the hides macerated in it, but in addition to those effects, my preparation renders the hides, after being treated, and the leather manufactured therefrom, far more susceptible and sensitive to receive the coloring substances used in the manufacture of certain kinds of leather. Let it be understood that the hides to be tanned are treated in all respects, except as to the quality and composition of the liquor in which they are bathed in the vats, in the ordinary manner.

This liquor is made of the following ingredients, or their equivalents, and in about the following proportions, viz.: Six pounds (avoir-dupois) sulphate of soda; two pounds sulphate

of potash; three pounds alum; two pounds sulphur; sixteen pounds common salt, chloride of sodium, or muriate of soda; sixteen pounds catechu or cutch; six pounds quercit-rine.

To express this formula in a fractional form it may be thus:  $\frac{6}{51}$  sulphate of soda;  $\frac{2}{51}$  sulphate of potash;  $\frac{3}{51}$  alum;  $\frac{2}{51}$  sulphur;  $\frac{16}{51}$  catechu;  $\frac{16}{51}$  common salt;  $\frac{6}{51}$  quercitrine.

These ingredients may be dissolved in sufficient water to submerge the skins to be tanned, or a quantity of the ordinary tanning-liquor may be used, but is not necessary.

By the use of this liquor a vast amount of time over the ordinary methods may be saved, as well as a large percentage of expense, the transportation of the bark having been heretofore the largest item of expense attending the operation, and by use of the composition herein described this is entirely obviated; and not only this advantage is obtained, but also leather of a very superior quality over that tanned in the ordinary manner by the usual means is produced, both in the particular of receiving color herein named and also in strength, toughness, and durability.

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

The compound of ingredients for a tanning-bath and the described equivalents, substantially as herein set forth.

WILLIAM FARRIS.

Witnesses:

WM. H. CLIFFORD,  
D. W. SCRIBNER.