Anited States Patent Office.

WILLIAM B. BRITTINGHAM, OF LA FAYETTE, INDIANA.

Letters Patent No. 98,916, dated January 18, 1870.

IMPROVEMENT IN TANNING AND STUFFING LEATHER.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM B. BRITTINGHAM, of La Fayette, in the county of Tippecanoe, and State of Indiana, have invented an Improved Process for Tanning and Stuffing Leather.

The following description will enable persons skilled

in the art to reduce my process to practice.

The tanning-compounds heretofore used for treating hides, have almost invariably had the effect of destroying the gluten therein, whereby the tenacity of the leather was impaired to a great extent. And in finishing the leather thus prepared, too little attention has been paid to making it soft and pliable, so that it shall not, after a little wear, become brittle and break.

It is the object of my invention to treat the hides with a tanning-compound which shall leave the gluten in such hides to a great extent unimpaired, but at the same time give the necessary elasticity and pliability to the finished product; and also, afterward, to treat the hides thus tanned with another compound, to increase the pliability and softness of the finished leather.

The first part of my process consists in treating the hides with a tanning-compound, composed of the following ingredients:

Nitrate of potassa, four ounces.

Alum, two ounces.

Terra-japonica, two ounces. Sulphuric acid, two drachms.

Distilled water, two quarts.

In preparing this compound, the nitrate of potassa, alum, and terra-japonica, are first dissolved in the water, after which the sulphuric acid is added.

The hides are soaked in a compound thus prepared, from, say, five to ten days, after which they are taken out and stuffed.

For this part of my process, I use a compound composed of the following ingredients, in the proportions stated:

Cod-liver oil, two ounces. Neat's-foot oil, two ounces. Glycerine, two ounces:

Tallow, four ounces.

This compound is prepared by placing the different substances in a kettle, and subjecting them to the action of heat for a sufficient length of time to produce a perfect union of such substances. The compound thus prepared is spread on the tanned hides, upon both sides, which are then hung up to dry, the whole process being completed in about fifteen days.

I am aware that tanning-compounds are in use, in which some or all of the ingredients are used which I employ, but I have found, by actual experiments, that no other combination of these ingredients than that above given will produce the result at which I have aimed, namely, to tan the hides without destroying the gluten in them, whereby the strength of the raw hide is retained, and at the same time giving the necessary elasticity and pliability to the finished leather.

Having thus described my improved process for tan-

ning and stuffing leather, What I claim, and desire to secure by Letters Patent, is—

The process of tanning and stuffing leather, herein set forth, by first treating the raw hides with a compound composed of the ingredients and in the proportions specified, and afterward stuffing the tanned hides by another compound, composed of such ingredients, and in the proportions as herein described.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

W. B. BRITTINGHAM.

Witnesses:

B. Edw. J. Ells,

C. F. CLAUSEN.