

UNITED STATES PATENT OFFICE.

J. N. STURTEVANT AND HARVEY E. JONES, OF MCGREGOR, IOWA.

IMPROVED PROCESS FOR TANNING.

Specification forming part of Letters Patent No. **57,795**, dated September 4, 1866.

To all whom it may concern:

Be it known that we, JAMES N. STURTEVANT and HARVEY E. JONES, of McGregor, Clayton county, and State of Iowa, have discovered a new and useful Process for Tanning Skins; and we do hereby declare that the following is a full, clear, and exact description of the same.

In the first place, the hide to be tanned is taken and soaked in water until well softened. If it is to be tanned with the hair on, it is then well fleshed and passed into a vessel filled with a solution which will be composed as follows: One-half barrel of water, (hard or soft,) eight (8) pounds common salt, and six and a half ($6\frac{1}{2}$) pounds of sulphuric acid. The salt is well dissolved in warm water, and then the salt thus dissolved is, with the acid, poured into the barrel containing the water, and stirred well before placing the hide in it.

If it is desired to tan the hide with the hair off it is first passed into lime, and when well limed and reduced it is placed in the solution above described.

The hide should remain in this solution from six hours to two weeks, according to the thickness of said hide. After the hide has remained in this solution the proper length of time it is taken out and well rinsed in water, and scoured with a stiff brush, removing all salt and acid.

After this we apply to the hide a solution of liquid tan, composed as follows: Lye made from elm, oak, or cotton-wood ashes, one (1)

gallon; tanners' oil, one (1) gallon; neat's-foot oil, one (1) gallon, the several ingredients being placed together in a vessel and well beat up for half an hour. A heavy coating of this solution is applied to the hide with a stiff brush, and then the hide is hung out to dry.

After this we take lye which is made of elm, oak, or cotton-wood ashes, and reduce it so that it will not stain or color the hide, and sponge it, giving it three coats, one after the other, rolling the hide up after each of the first two coats.

After the third coat oil must be applied while the hide is damp, and rubbed in with a stiff brush. It is then hung up to dry. The hide, after this, is ready for finishing.

By the first solution the gluten of the hide is (as we term it) "crystallized," and the second solution relaxes the crystals, filling the hide, giving body and weight to the leather.

What we claim as new, and desire to secure by Letters Patent, is—

The within-described process for tanning leather, when used substantially as herein specified.

As evidence that we claim the foregoing we have hereunto set our hands in the presence of two witnesses.

J. N. STURTEVANT.
H. E. JONES.

Witnesses:

ELIJAH ODELL,
D. BAUGH.