

UNITED STATES PATENT OFFICE.

R. ENOS AND B. T. HUNT, OF ST. CHARLES, ILLINOIS.

IMPROVEMENT IN TANNING.

Specification forming part of Letters Patent No. **9,624**, dated March 22, 1853.

To all whom it may concern:

Be it known that we, ROSWELL ENOS and BELA T. HUNT, of the town of St. Charles, in the county of Kane and State of Illinois, have invented a new and useful Improvement in the Art of Tanning Leather—such as harness, belting, upper, kip, and calf-skins—of which the following is a specification.

The nature of our invention consists in preparing a hide for the lime and liming it in the usual way: first, in not disturbing the lime in the hide by any process of bating in the usual way; second, in bringing the raw hide in contact with salt, sumac, bran, and tan while the hide is full of lime, producing a desirable effect, it being superior to any other known mode of tanning. The pores of the hide being left open, in consequence of the lime's being left in, the salt, bran, and tan, together with the lime, act directly and rapidly with the gelatine of the hide, forming leather more expeditiously and perfect than any other method of tanning.

To enable others skilled in the art of tanning to use our improvement, we will describe our method of proceeding.

First, we lime in the usual way of liming hides for the removal of the hairs. Then put the hides into cold water for one day, and work them twice on the grain with the knife or stone for the purpose of cleansing the grain of the fine hairs.

The hides being limed and cleansed, as described, make a liquor for tanning:

First. For fifty sides of upper-leather, two hundred gallons water; two hundred pounds domestic sumac in bundle, twenty pounds

salt; thirty pounds wheat-bran; to be constantly handled for ten or twelve hours on the first day. This tanning process should be conducted at a temperature of 45°.

Second. For the second-day liquor add thirty pounds sumac; thirty-six pounds cutch, or extract of hemlock-bark; twenty pounds salt; thirty pounds wheat-bran.

Third-day, handle four times.

Fourth day, add to the liquor as on the second day, and handle well, and so continue to strengthen every day until tanned, which will take from twelve to fourteen days, according to weight of hides.

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

The process of tanning with the use of lime, salt, bran, sumac, and cutch, or any other tanning in room of cutch, substantially in the manner described, whereby we commence tanning at the same time that we commence reducing, as the salt and bran overpower the lime, the tan takes the place of the lime, and converts the hides into more perfect leather, and in less time than can be made in any other way.

Hides are not liable to get damaged by our process, as we do not use an article that is injurious to leather. It is not on the materials used that we claim Letters Patent, but on the manner of applying them to the hide, as set forth in the schedule:

ROSWELL ENOS.
BELA T. HUNT.

Witnesses:

A. S. VAN VORST,
W. D. BARRY.