

UNITED STATES PATENT OFFICE.

A. H. BUZZELL, OF BRIDGETON, MAINE.

IMPROVEMENT IN THE PROCESS OF TANNING.

Specification forming part of Letters Patent No. 1,741, dated August 25, 1840.

To all whom it may concern:

Be it known that I, ABEL H. BUZZELL, of Bridgeton, in the county of Cumberland and State of Maine, have invented a new and Improved Mode of Tanning Sole-Leather; and I do hereby declare that the following is a full and exact description.

The nature of my invention consists in raising the hide by the aid of sulphuric acid, (oil of vitriol of the shops,) and, when raised sufficiently, so charging the same with tannin that it will not return to its original condition. Then I suspend wood-ashes contained in sacks in the pits to destroy the compound which is formed by the tannin and sulphuric acid, and which prevents the gelatine of the hide from uniting with the tannin. This method renders the use of the acid to any desirable or necessary extent perfectly safe, shortening the period for tanning, and by increasing by means of the acid the capacity of the hide for receiving tannin, and adding much to the quality and weight of the leather.

To enable others skilled in the art to use my invention, I will proceed to describe the operation thereof and the method of tanning by this process in full.

After the hides are prepared for the bark by liming five or six days in a strong lime, I drench from one to two days in a good drench, as the case may require. I then handle them in a weak bark liquor until they are well colored. I then put the hides in a pit, cover them with water, to which is added twenty ounces of sul-

phuric acid to each one hundred pounds of green hides, usually putting into each pit a pack of thirty-two sides, permitting the hides to remain in the acid-water until they are sufficiently raised, which is usually accomplished in from twenty-four to thirty-six hours. I then remove them into another pit fitted with strong bark-liquor and handle them ten days, being careful to keep the liquor up, and at the end of said ten days I suspend in the liquor half a bushel of wood-ashes, contained in a sack, to the said pack of thirty-two sides. Potash may be substituted for wood-ashes should any prefer it. I continue to handle the hides ten days longer, during which time I strengthen the liquor every third day at least. After this I give them a light layer of bark with strong liquor, and this I repeat once in thirty days until the hides are tanned, which will be in four and a half months from the drench.

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

The mode of tanning hides by placing them, when raised, in a decoction or solution of bark or other liquor containing tannin, and after they have remained there a suitable time, as herein specified, adding an alkali to the liquor, as herein set forth.

A. H. BUZZELL.

Witnesses:

SAMUEL ANDREWS,
LEWIS BRIGHAM.