

UNITED STATES PATENT OFFICE.

GEORGE W. HATCH, OF LAWRENCE, KANSAS.

IMPROVEMENT IN THE PROCESSES OF TANNING.

Specification forming part of Letters Patent No. **148,056**, dated March 3, 1874; application filed January 17, 1874.

To all whom it may concern:

Be it known that I, GEO. W. HATCH, of Lawrence, county of Douglas, State of Kansas, have invented or discovered an Improvement in the Art of Tanning, whereby smoke may be better utilized for preserving tan-liquors from souring, or for restoring sweetness to tan-liquors which have become sour.

The following is a true description of my process: Take woolen blankets or other suitable fibrous material when wet, and by the use of hardwood chips, or other suitable substance, thoroughly impregnate them with smoke, which may be done by hanging them in a close room filled with the smoke, for two or three hours, or more, and then press out the moisture from the smoked material, and mix it with the tan-liquor direct, or add to the tan-bark leaches, taking care by stirring to have it thoroughly mixed with the tan-liquor. By this method, the water in the material will become thoroughly impregnated with smoke.

This treatment I have found preserves the tan-liquor from souring, and at the same time prevents the precipitation and destruction of tannin, resulting from sour liquor coming in

contact with fresh or sweet liquor, which often involves much loss. Sour tan-liquor also destroys a portion of the tannin already incorporated into the leather, thus causing it to fall back in plumpness, which cannot again be restored, thereby occasioning much of loss in the weight of the leather when finished for market.

In tanning sole-leather, I find that by directly smoking the hides they become porous, and the smoke thereby becomes a detriment, as that kind of leather should be close, hard, and solid. My new method of applying the smoky fluid, while it preserves the tan-liquor from souring and restores sour liquor sweet, also benefits the leather.

Having described my invention or discovery, I claim—

As an improvement in the art of tanning, the impregnating of suitable fibrous material, when in a wet state, with smoke, and then expressing the moisture from it into the tan-liquor, for the purpose specified.

GEORGE W. HATCH.

Witnesses:

JAMES T. STEVENS,
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