

UNITED STATES PATENT OFFICE.

FREDERICK FUNKE, OF DETROIT, MICHIGAN.

IMPROVEMENT IN TANNING COMPOUNDS.

Specification forming part of Letters Patent No. **196,081**, dated October 16, 1877; application filed June 11, 1877.

To all whom it may concern:

Be it known that I, FREDERICK FUNKE, of the city of Detroit, in the county of Wayne and State of Michigan, have invented a new and useful Process for Tanning Leather, which process is fully set forth in the following specification.

This invention relates to that class of processes employed for tanning the different kinds of leather (whip, lace, and the so-called Alaska leather) tanned with a hair surface thereon, sole-leather, &c.

In carrying out my invention I take to one hundred (100) gallons of water five (5) pounds of wheat-flour mixed with four (4) gallons of boiling water, to which is added one (1) ounce of pure brewers' yeast, and one (1) ounce of sugar of lead. This substance fully ferments, mixed as above, in less than two (2) days, after which I add to this fermented compound four (4) ounces of salicylic acid, two (2) pounds of sulphuric acid, two (2) quarts of milk, one (1) ounce of yellow-oak-bark extract, forty (40) pounds of

cooking-salt, two (2) ounces dissolved alum, and one (1) quart cider-vinegar, mixing the whole with the one hundred gallons of water, as named above.

The process of tanning with the solution above given is by dipping the hides to be converted into leather into the fluid as stated for one (1) hour.

The fermented fluid gained has an alcoholic percentage of sixteen to eighteen degrees.

I claim as my invention—

As an improvement in the art of tanning, the compound composed of wheat-flour mixed with boiling water, pure brewers' yeast, sugar of lead, salicylic acid, sulphuric acid, milk, yellow-oak-bark extract, cooking-salt, alum, and cider-vinegar, all compounded substantially as and in about the proportions stated.

FREDERICK FUNKE.

Witnesses:

WILLIAM A. WANSLEBEN,
JUL. LOHMAN.