

UNITED STATES PATENT OFFICE.

NICHOLAS WILSON, OF BECKET, MASSACHUSETTS.

PROCESS OF BATING HIDES.

SPECIFICATION forming part of Letters Patent No. 444,771, dated January 13, 1891.

Application filed June 30, 1890. Serial No. 357,297. (No specimens.)

To all whom it may concern:

Be it known that I, NICHOLAS WILSON, a citizen of the United States, residing at Becket, in the county of Berkshire and State of Massachusetts, have invented new and useful Improvements in Processes for Treating Hides and Skins in Tanning the Same, of which the following is a specification.

This invention relates to the treatment of the hides or skins of animals, &c., in the process of tanning them; and it consists in treating the hides or skins after they have been subjected to the action of lime in the lime-pits in the usual manner to solutions or compounds, substantially as hereinafter described.

In this invention the hides or skins are first subjected to the action of lime in the usual manner. When so properly treated, they are removed from the lime-pit and placed in a tank or reservoir containing the following solution: About three pounds of sulphuric acid, about three pounds of borax, and about three pounds of Glauber's salt, these ingredients being thoroughly mixed with about five or six barrels of water, or sufficient water to cover, when in the tank, about one hundred and fifty hides or skins. After being placed in this solution, if they are not agitated in any manner, then the hides or skins should remain in the solution about thirty-six (36) hours; but if the solution and the hides or skins are in a tank provided with a wheel, &c., for stirring or agitating them then about five hours will be sufficient for the proper action of the solution.

The treatment of the skins in the solution above described constitutes what is termed by tanners as the "bating" step in the process of tanning a hide; in other words, the treatment of the latter, whereby the lime that they may have taken up in the aforesaid lime treatment is entirely neutralized.

After the treatment of the hides in the solution above described they are then deposited for a second treatment in an ordinary bark-liquor, to which is added about three (3) pounds of muriatic acid and about fifty (50) pounds of common salt. The quantity of

bark-liquor to which the above ingredients are added is about one thousand (1,000) gallons of six degrees strength. The addition of said muriatic acid and salt to the bark-liquor, as aforesaid, serves to precipitate all foreign substances in the liquor and to prevent any fermentation thereof, and the action of these ingredients in the solution so formed is to soften and render the hides soaked therein more plump.

The above-described treatment of the hides in a solution of water, sulphuric acid, borax, and Glauber's salt for neutralizing the lime in the hides may be practiced without necessarily treating them subsequently to the solution of bark-liquor, muriatic acid, and salt, and also the hides may be treated to the action of the latter-named solution without necessarily submitting them to the action of the above-described solution for neutralizing the lime in the hides.

Having now described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In the process of tanning hides or skins after they have been subjected to the action of lime for removing hair, &c., the treating of them to a solution consisting of water, sulphuric acid, borax, and Glauber's salt, in about the proportions stated, for neutralizing the lime therein, and subsequently treating said skins in the ordinary bark-liquor, to which is added muriatic acid and common salt in about the proportions stated, whereby all foreign substances in said liquor are precipitated and the skins soaked therein are rendered softer and more plump, substantially as set forth.

2. In the process of tanning hides or skins after they have been subjected to the action of lime for removing hair, &c., the treating of them to a solution consisting of water, sulphuric acid, borax, and Glauber's salt, in about the proportions stated, for neutralizing the lime therein, substantially as set forth.

NICHOLAS WILSON.

Witnesses:

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