

UNITED STATES PATENT OFFICE.

GEORGE GOODWIN, OF COOKSHIRE, QUEBEC, CANADA.

IMPROVEMENT IN TANNING LEATHER.

Specification forming part of Letters Patent No. **199,054**, dated January 8, 1878; application filed March 24, 1877.

To all whom it may concern:

Be it known that I, GEORGE GOODWIN, of Cookshire, in the county of Compton, Province of Quebec, and Dominion of Canada, have invented a new and useful Improvement in Tanning Water-Proof Leather, of which the following is a specification:

The object of this invention is to furnish an improved process for tanning water-proof leather for boots, gloves, lace-leather, belts, harness, and various other uses.

The invention consists in the process of tanning hides by means of sulphuric acid, alum, japonica, salt, and water or bark-liquor, as hereinafter set forth, and in the mixture of alum, japonica, salt, and water or bark-liquor, in the proportions hereinafter set forth, for tanning hides.

In carrying my invention into practical effect I first lime the hides in the usual way, take off the hair, and then put the skins into a solution of sulphuric acid, in the proportion of four ounces of acid to ten gallons of water. The skins are left in the solution for forty-eight hours, with frequent stirring. The skins are next put into a mixture of alum, japonica, salt, and water, in the proportions of two pounds of alum, two pounds of japonica, three quarts of salt, and ten gallons of water, and handled well for one week. This is the application for lace-leathers.

For uppers and other heavy stock, the solution of alum, japonica, and salt should be renewed every three days for two weeks, and

the hides should be left in the last liquor for one week at least.

Boot and glove leather is drenched after liming in the ordinary way, and the acid is not used when the leather is required to be very soft.

When the leather is required to be firm, I use the acid after the hide comes from the lime, as hereinbefore described, or when it comes from the drench.

The alum, japonica, and salt may be used together in a mixture, as hereinbefore described, or each ingredient may be used by itself in the proportion given each for a week; but the time for the acid should not be increased beyond that given.

Old bark-liquor may be used instead of water, to change the color of the stock.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

An improved process of tanning hides after the hair has been removed, so as to make water-proof leather, that consists in first soaking and agitating them forty-eight hours in a solution of sulphuric acid, and then treating them with a tanning-liquor formed of alum, two pounds; japonica, two pounds; salt, three quarts; and water, ten gallons, as set forth.

GEORGE GOODWIN.

Witnesses:

M. E. COOK,
M. R. RICE.