

UNITED STATES PATENT OFFICE.

JESSE MORGAN, OF SUMTERVILLE, SOUTH CAROLINA.

IMPROVEMENT IN METHODS OF TANNING.

Specification forming part of Letters Patent No. 20,502, dated June 8, 1858.

To all whom it may concern:

Be it known that I, JESSE MORGAN, of Sumterville, in the county of Sumter and State of South Carolina, have invented a new and useful Compound for Tanning Leather; and I do hereby declare that the following is a full, clear, and exact description of the nature of and manner of using the same.

This invention consists in an improved compound composed of sugar or other saccharine matter, Glauber's salt, and muriate of soda for the purpose of completing the tanning process more expeditiously than when it is completed in the usual way, and at the same time making leather equal in quality, weight, and durability to that tanned entirely by the old process.

To prepare the compound solution, I take eight (8) pounds of sugar or one (1) gallon of molasses, treacle, sirup, or honey, one (1) pound of Glauber's salt, and half ($\frac{1}{2}$) a pound of muriate of soda, or similar, or nearly similar, proportions of these ingredients, and mix them together with as little water as is necessary to effect the dissolution of all the salts, keeping the mixture as warm as possible without boiling it, and stirring it continually till the solution of the salts is effected.

Before the application of my compound solution the hides or skins are treated by the usual tanning process—that is to say, soaked in a solution of tannin—till they are about half tanned—*i. e.*, for about half the time that would be necessary to complete this process—then removed from the tan-vat, shaved, (when required,) and scoured in the usual manner, after which they are ready to receive my compound solution, which is rubbed into them on a table. If intended for sole-leather, they should have the compound applied on both

faces—a "side" that will weigh about eight (8) pounds, and has been about half tanned by the common process, requiring about half a pint or three gills of the compound solution; but if it has been more than half tanned by the old process less of my compound solution will be required, and if less than half tanned more of my compound solution is necessary.

When the said compound solution has been applied the hide or skin may be immediately dried and finished in the usual manner.

For upper-skins for boots, &c., or harness-leather, in which oil or stuffing is required, my compound solution should be applied on the flesh side only, after which the grain is to be oiled and the stuffing applied and the operation of drying and finishing performed in the usual manner.

The action of the compound is to unite with the gelatine of the hide, and thereby to overcome its hardening properties without impairing its tenacity or the strength or durability of the leather, thus making the leather as soft as is required for usual purposes.

I will remark that experiment shows but little difference in result in the use of the several saccharine matters hereinbefore mentioned, except that the sugar gives the leather rather the best appearance.

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

The compound composed of saccharine matter, Glauber's salts, and muriate of soda, in about the proportions herein set forth, for the purpose of expeditiously completing the process of tanning, as described.

JESSE MORGAN.

Witnesses:

HENRY S. EARLEIGH,
RAVENEL S. BRADWELL.