

UNITED STATES PATENT OFFICE.

EDWARD LOGUE, MATHEW T. JONES, AND CHARLES E. MORRILL, OF DEERING, MAINE, ASSIGNORS TO SAID MORRILL.

COMPOSITION FOR TANNING.

SPECIFICATION forming part of Letters Patent No. 283,798, dated August 28, 1883.

Application filed December 4, 1882. (No specimens.)

To all whom it may concern:

Be it known that we, EDWARD LOGUE, MATHEW T. JONES, and CHARLES E. MORRILL, all of Deering, in the county of Cumberland and State of Maine, have invented certain new and useful Improvements in Tanning Compounds; and we do hereby declare that the following is a full, clear, and exact description of the invention, that will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to the manufacture of shoe-bindings, and more particularly to the preparation of the skins. For such a purpose it is essential the skins be compact, thin, and tough.

In the ordinary process the skins are first treated with lime and a drench. They are then immersed in vats containing a tanning-mixture, and occasionally moved about until thoroughly saturated with the mixture. They are then removed from the vats and hung up to dry. When thoroughly dried, (a period of one to three weeks being necessary to accomplish this,) the skins are rinsed in water, then cut into strips of double the width of the binding to be made, the strips united in a continuous band, colored, and then split. The objection to this process lies in the imperfect manner in which the skins are filled with the tanning-mixture and expense of and time lost in drying the skins, thorough drying being required to prevent the tanning from being washed out during the rinsing of the skins.

Our improvement may be described as follows: We treat the skins with lime and a drench in the ordinary manner. A certain number of skins—say one hundred—are then

placed in a rotary cylinder or agitator, the inner surface of which is provided with pegs or similar projections. Into this cylinder is put a tanning-mixture consisting of oil, sumac, salt, oil of vitriol, and water. For one hundred skins the formula would be one gallon of oil, (preferably neat's-foot or petroleum oil,) twenty-five pounds of sumac, twenty pounds of salt, three pounds of oil of vitriol, and water to the extent of thirty gallons. The agitator is then revolved until the mixture is completely taken up by the skins. The skins are then cut into strips, and the process pursued as above set forth.

This process is more particularly designed for sheep-skins, but may with advantage be used with other skins. The formula as given above for one hundred skins must of course be modified to adapt it to skins of different weight, size, and thickness.

We do not claim the tanning composition described and claimed in Letters Patent of the United States No. 93,498, granted to N. A. Thornton, August 10, 1869.

What we claim as our invention is—

A tanning-mixture consisting of oil, sumac, oil of vitriol, salt, and water, in about the proportions stated.

In testimony that we claim the foregoing we have hereunto set our hands this 29th day of November, 1882.

EDWARD LOGUE.
MATHEW T. JONES.
CHAS. E. MORRILL.

Witnesses:

GEORGE E. BIRD,
DAVID W. SNOW.