

UNITED STATES PATENT OFFICE.

DAVID H. KENNEDY, OF NEW ALEXANDRIA, PENNSYLVANIA.

COMPOSITION FOR TANNING HIDES.

Specification forming part of Letters Patent No. 17,043, dated April 14, 1857.

To all whom it may concern:

Be it known that I, DAVID H. KENNEDY, formerly of Reading, in the county of Berks, but now of New Alexandria, in the county of Westmoreland and State of Pennsylvania, have invented or discovered certain new and useful Compositions of Matter to be used in the Tanning of Leather; and the following is a full, clear, and exact description of the manner of preparing and using the same.

This composition consists of twenty-four pounds of valonia or of divi-divi, eight pounds of sulphate of soda, four pounds of sulphate of magnesia or sulphate of potash, one pound of sulphate of alumina, two pounds of sal-soda, (carbonate of soda,) one pound of borax or boracic acid. These ingredients should be dissolved separately in hot water, or in a hot decoction of tan-bark, which is preferable, and then poured into a tank and thoroughly stirred together to form the tanning-liquor, which may be drawn off as required, to supply the vats or vessels in which the hides are to be tanned. The tanning-liquor thus formed in the tank is in the most concentrated form, and only suitable to apply to hides in the advanced stages of the tanning process, and must be largely diluted with water or bark-water before it is applied to hides at the commencement of this process; or else before applying it to such hides it should be partially spent by having had hides in a more advanced state steeped in it. The strength of the liquor should be increased as the tanning progresses, care being taken to handle the hides frequently in the early part of the process, while the liquor is weak; but less handling will do as the process advances. Hides intended for sole-leather may, near the close of the process, be laid down in a vat alternately with layers of ground bark, and then a liquor composed of three parts of the composition be-

fore mentioned and one part of strong bark-liquor should be poured into the vat until it covers the hides. Hides thus laid down may continue undisturbed until fully tanned—say from ten to fifteen days. Light skins need not be laid down, as they will be thoroughly tanned by merely handling in the liquor.

Hides will be tanned by this process quickly or slowly, according to the amount of handling and the strength of the tanning-liquor.

When a tan-yard has become impregnated thoroughly with the chemicals employed the tanning will be performed with less expense than at first, the quality of the leather will be noticeably improved, and the time required for tanning diminished.

When the before-mentioned tanning compound is employed with hemlock-bark in the proportion of fifteen pounds of the compound to about one hundred and twenty-eight cubic feet of the bark the leather produced will have the color, pliancy, and other desirable qualities of the best oak-tanned leather. In this way the expense of oak-tanned leather will be greatly reduced, while the quality will be fully maintained.

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

The combination of valonia, the sulphate of soda; sulphate of magnesia or sulphate of potash, and sulphate of alumina, sal-soda, borax or boracic acid, dissolved in water or tan-bark liquor for the purpose of tanning hides and skins, substantially as herein set forth.

In testimony whereof I have hereunto subscribed my name.

D. H. KENNEDY.

In presence of—

DAVID BEDFORD,
JAMES B. DUNN.