

UNITED STATES PATENT OFFICE.

GEORGE W. CRABTREE AND JOHN G. STOAKES, OF CHOCOVILLE, ARKANSAS.

IMPROVED COMPOSITION FOR TANNING.

Specification forming part of Letters Patent No. **104,276**, dated June 14, 1870.

We, GEORGE W. CRABTREE and JOHN G. STOAKES, of Chocoville, in the county of Sebastian and State of Arkansas, have invented an Improvement in Composition for Tanning, of which the following is a specification:

The hair may be removed from the skins by any of the known methods.

The composition for tanning consists of the following-named ingredients with the proportions of each.

For tanning light hides, robes, and furs: water, twenty gallons; soda, bicarbonate, one pound; buttermilk or whey, two gallons; salt, twelve pounds; sulphuric acid, four pounds. For tanning harness, boot, and sole leather, and skirting, are added to the above: japonica, four pounds; extract of oak bark or cedar tops, two pounds. These ingredients are mingled together until fully incorporated, and in the solution formed the robes, furs, hides, or skins are placed and handled until thoroughly saturated.

To tan deer skins, the time required is from eight to twelve hours; furs, from six to eight hours; calf, from two to six days, according to the thickness of the skin. We generally tan heavy leather in twenty days.

The stuffing, finishing, &c., may be done by any of the known methods employed by tanners.

Having described our invention, what we claim, and desire to secure by Letters Patent, is—

The combination of the ingredients mentioned, in the proportions and manner substantially as specified, for the purpose set forth.

G. W. CRABTREE.
J. G. STOAKES.

Witnesses:

I. DUD. DOAK,
G. B. WORTHINGTON.