

# UNITED STATES PATENT OFFICE.

JOHN E. PARK, OF SEGUIN, TEXAS.

## IMPROVEMENT IN TANNING.

Specification forming part of Letters Patent No. 51,407, dated December 5, 1865.

### *To all whom it may concern:*

Be it known that I, JOHN E. PARK, of Seguin, in the county of Guadalupe and State of Texas, have discovered an Improvement in Tanning; and I do hereby declare the following to be a full, clear, and exact description thereof.

The nature of my invention and improvement consists in the discovery and procuring of a tanning material and extractive matter for the manufacture of leather from the wood and bark of the mesquit—a tree of extensive growth on the prairies of western and northwestern Texas. Other material being scarce and difficult to procure in this section renders the discovery more important.

To enable others skilled in the art to make and use this improvement in tanning, I will proceed to describe the method of obtaining and preparing this tanning material for use.

I have in use two methods of preparing the wood. The body of the tree and large limbs are reduced by a circular saw to sawdust. The saw, making transverse sections and being made very open, reduces the wood rapidly to small chips or sawdust. The smaller branches are reduced to chips by two knives placed on the periphery of a cast-iron wheel making a circular plane. These give ample material for the filling of two vats per day. The wood must be seasoned before it is used. This may be done either before or after chipping. The wood chips as easily when dried as when fresh cut. The best time of the year to cut the timber is from August to February, the astringent matter being most abundant before the sap rises. When the chipped material has been thus obtained, and either dried or obtained from wood dried previous to its being chipped, it is ready for use; and to secure uniform and rapid combination between the tanning-matter of this material and the skins, I place the chips or sawdust in a wooden vat or boiler having a copper bottom and place this boiler over a furnace and boil about six hours, when the liquor is fully ready for use. A pack of fifty sides or more, prepared in the ordinary way, are now

stratified with fresh or unboiled material—say three packs to the side—and covered with boiled liquor, prepared as above described, and cooled before use.

The length of time required to make good leather with this material depends upon the strength of the liquor. If the boiler is entirely filled with the chipped wood and the chips merely covered, a liquor will be obtained that will tan all light leather in twenty days at two courses. This strength will finish calf-skins in five days without any detriment to the grain. To tan sole-leather thoroughly with this grade of liquor requires four months and four courses. For all light leather two courses and two months is ample time. For heavy harness-leather three courses and two and a half to three months is full time.

Then I propose no change in the preparation of skins for tanning, but an improvement in the finding or discovery of tanning material in localities and conditions not known heretofore to exist, and in a section of country where scarcely any of the ordinary tanning substances are to be found at all, while of this growth there is the greatest abundance, and the same may and can be applied to the manufacture of leather in all mesquit regions as economically as leather can be made in the most abundant bark regions.

While specifying the mesquit wood as one which I have used successfully and on an extensive scale, I do not wish to be understood as restricting myself thereto. The wood of the live-oak and that of the chestnut may be used in the same manner with good effect.

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

The tanning material and extractive matter of the mesquit-wood, live-oak, or chestnut applied to the tanning of leather, prepared in the manner described, for the purposes specified.

JOHN E. PARK.

Witnesses:

ALEXR. A. C. KLAUCKE,  
W. F. HALL.