

UNITED STATES PATENT OFFICE.

IRA CARLE, OF KINGSTON TOWNSHIP, LUZERNE COUNTY, PENNSYLVANIA.

IMPROVEMENT IN TANNING COMPOSITIONS.

Specification forming part of Letters Patent No. **17,867**, dated July 28, 1857.

To all whom it may concern:

Be it known that I, IRA CARLE, of the township of Kingston, Luzerne county, and State of Pennsylvania, have invented a new and improved mode of making or tanning leather from the hides of animals; and I do hereby declare that the following is a full and exact description thereof.

The nature of my invention consists in tanning leather, as aforesaid, by a process by which the raw hide, after the hair is removed, can be tanned thoroughly, ready to be dressed with less labor and expense in a period of time much less than is required by any other process now used, and tanning the leather in a much better manner.

To enable others skilled in the art to make and use my invention, I will proceed to describe the composition to be used, the manner it is to be used, and its operation.

To a vat of the ordinary size you put in fifty sides of cowhides—that is, the whole of twenty-five skins. In the vat containing the said fifty sides of cowhides you put in the liquor leached or extracted from two cords and a half of hemlock or oak bark ground. This liquor or extract will cover the hides in the vat. Having prepared the vat with the hides and liquor extracted, as aforesaid, there is to be put in it three pounds of nitric acid and twenty pounds of Glauber's salt. The acids and salt are to be admitted, so as to impregnate the whole contents of the vat. Having thus prepared the whole thing, for the first twelve hours the hides are to be taken out of the vat and aired once an hour. After the first twelve

hours the hides are to be taken out and aired once a day. In twenty days after they (the hides) have been put in the vat and under the above process the hides will be thoroughly tanned, and can be taken from the vat and dressed for sale or use.

By using the above composition and subjecting them to the same process calf-skins can be thoroughly tanned in eight days.

For the purpose of experiment to tan, say, two calf-skins after the hair has been removed, take one barrel of strong liquor extracted from hemlock or oak bark, and mix in with it half a pound of nitric acid and four pounds of Glauber's salt. Into this preparation put two calf-skins. Take them out once an hour for the first ten or twelve hours, and thereafter once a day. In seven days they will be thoroughly tanned and ready to be dressed.

The above descriptions show the proportions to be used in making the composition. The quantity to be used of the composition will depend, of course, upon the number of hides to be tanned, which can always be regulated by the quantity used, as above, to fifty sides of cowhides.

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

The use of hemlock or oak bark, nitric acid, and Glauber's salt, all to be used in one bath for the purpose of tanning leather from hides in a short space of time, as set forth.

IRA CARLE.

Witnesses:

REUBEN JONES,
CHAS. JACKSON.