

UNITED STATES PATENT OFFICE.

AUGUST C. KRUEGER, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN THE MANUFACTURE OF RAWHIDES.

Specification forming part of Letters Patent No. **178,305**, dated June 6, 1876; application filed November 27, 1875.

To all whom it may concern:

Be it known that I, AUGUST C. KRUEGER, of San Francisco city and county, State of California, have invented Improvements in the Manufacture of Rawhides; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to an improved process for converting green hides into rawhides.

In the manufacture of rawhides from the green hide I employ a process which is peculiarly my own, and which possesses many advantages, especially when the hides are intended to be waterproofed by the above process; and this process is described as follows:

The green hides I soak in water over night. Then after they are brushed and partly fleshed I put them in an air-tight sweat-box, and sweat them with steam until the hair and flesh can be readily removed. When the hides are unhaired and fleshed I put them in a hot solution of two parts of alum and one part salt, dissolved in a sufficient quantity of water to cover the hides. In this solution I leave the hides until they are tanned, stirring the hides or turning them every three hours. When the hides are tanned I wash them thoroughly, so as to remove the salt and alum as much as possible, and then hang them up to dry. When they are dry I dip them once or twice in water, and place them in a pile one upon another, so as to allow the dampness to penetrate them in a uniform manner.

The hides are then stretched, and dipped in a solution composed of tanner's oil, four parts; glycerine, two parts; tar, two parts.

The hides are then rolled together, in which condition they are allowed to remain about ten minutes, when they are again stretched, and laid by for an hour or two to dry out. This produces a superior rawhide, and it is then in the proper condition to be waterproofed by the first-described process.

I am aware that it is not new to sweat the hair off of green hides, neither is it new to tan with alum hides which have been unhaired with lime; but hides which have been unhaired by the sweating process have never to my knowledge been tanned with alum; neither has it been known that the alum and salt could be washed out of the hide after they have been used for accomplishing the tanning.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

The process above described for converting green hides into rawhides, the same consisting in sweating the hair from the hides, then tanning the hides in a solution of alum and salt, then washing the salt and alum out of the hides, then dipping them in a solution of tanner's oil, glycerine, and tar, substantially as and for the purpose described.

AUGUST C. KRUEGER.

Witnesses:

JNO. L. BOONE,
C. M. RICHARDSON.