

UNITED STATES PATENT OFFICE.

CHARLES W. KOCH, OF MILWAUKEE, WISCONSIN.

PROCESS OF BATING HIDES.

SPECIFICATION forming part of Letters Patent No. 640,776, dated January 9, 1900.

Application filed September 30, 1899. Serial No. 732,256. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES W. KOCH, a resident of Milwaukee, county of Milwaukee, and State of Wisconsin, have invented a new and useful process for removing lime from all hides or skins or preparing the same for the tanning process after the hides or skins have been limed and unhaired in the well-known way quite familiar to those skilled in the art of tanning, of which the following is a specification.

After the hides or skins have been thoroughly washed and as much of the lime removed therefrom as practicable by washing with water a further treatment is necessary in order to more completely prepare the hides or skins for tanning and produce a superior quality of leather. To accomplish this object in a simple manner and without injury to the hides, I make a solution of about two hundred and fifty (250) gallons of water, one hundred and fifty (150) pounds of common salt, three (3) pounds of hyposulfite of soda, and three (3) pounds of sulfuric acid or three (3) pounds of hydrochloric acid instead of the sulfuric acid. About two hundred calfskins and about fifty hides can be agitated in this solution, where they should remain for about two hours or longer. After this I agitate them in a second solution composed of about two hundred (200) gallons of water, ten (10) pounds of Glauber salts, and sixty (60) pounds of hyposulfite of soda or the same quantity of sodium-sulfite crystals. In this

solution they should be agitated for about two hours or longer, after which they are ready for what is known as the "tanning step" of any kind—viz., bark, gambier, &c.

The above solutions can be used for a long time, as they will not ferment or decompose. They only require strengthening proportionally as they become weakened by adding the same ingredients. The ingredients of both solutions can be combined in one with good results.

I do not broadly claim the use of acids as bating material, as I am aware that acids have been used in other patents heretofore. I am also aware that hyposulfite of soda ($\text{Na}_2\text{S}_2\text{O}_3, 5\text{H}_2\text{O}$) is used in processes of chrome tanning in combination with acids; but I am not aware that hyposulfite of soda in combination with acids, common salt, and Glauber salt has ever before been used as bating material for hides or skins.

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

The process of bating hides by submitting them to a solution, consisting of water, sulfuric acid, common salt, and hyposulfite of soda, $\text{Na}_2\text{S}_2\text{O}_3, 5\text{H}_2\text{O}$, substantially as described.

CHARLES W. KOCH. [L. S.]

Witnesses:

C. H. KORMAN,
GUST JANZER.