## United States Patent Office.

JACOB SCHMITT, OF ALLEGHENY, PENNSYLVANIA.

## PROCESS OF TREATING HIDES.

SPECIFICATION forming part of Letters Patent No. 434,645, dated August 19, 1890.

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To all whom it may concern:

Be it known that I, JACOB SCHMITT, a citizen of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Process of Treating Hides, of which the following is a specification.

My invention relates to a process of treating hides whereby the hide is thickened and ro raised, the weight thereof increased, and a superior article of leather is produced, which when placed on the market is more salable

and commands a better price.

Heretofore in this art it has been common to depilate the hides by means of lime baths. Ordinarily three or four vats, each containing a solution of lime and water of different degrees of strength, are employed, the hides being successively placed each day from one vat to the other, thus allowing the hides to soak about three or four days in the aggregate.

I propose to introduce a new step in this old process, and this new step consists in coating the fleshy side of the hides with a thick solution of fresh-slaked lime and water while the hair is on the hides, this coating of the hides preceding the process of depilating or "unhairing" the hides, above referred to, so as to preserve the hides from spoiling during

30 the warm season.

It is well known to all manufacturers who use the common process of depilation of hides that great danger is experienced during the warm season of the hides becoming spoiled, as hard spots appearing on the body of the hides, necessitating them to be sold as second-class goods. In my experiments to avoid this objection to the common process, and also with the object in view to increase the weight and thickness of the hides, I have reduced to practice a process of treating the hides which has been tested over fifteen months with great success in the tannery of J. C. Lappe & Sons, of Allegheny, Pennsylvania, of which I am foreman of the "beam-house."

The complete process of treating the hides will now be fully explained. I take the hides in the condition they are left by the butcher and soak them for a day or a day and a half in a vat containing cold water. The hide is given to an operator to "green-flesh" them—that is, he cuts off all thick parts of flesh, the

ears, and trims off the head. The hides are then hung in a vat containing fresh cold water to rinse them off. The hides are taken out 55 one by one, laid on the hairy side and coated on the fleshy side with a thick warm solution of fresh-slaked lime and water. Ordinarily the lime is slaked with cold water and enough cold water added to make the solution about 60 twice as thick as ordinary whitewash. There is but one coating given to the fleshy side of the hides, and as soon as this is done each hide is placed with the hairy side down and piled one on top of the other. They are allowed 65 to remain in this condition about half an hour to an hour. The hides are then taken and put through the old process of depilation, which, as before stated, consists in allowing the hides to soak in several solutions of lime 70 and water, each solution of a different degree of strength from the other. The hides are allowed to soak for a period of three or four days, when they are taken out and put through a machine which takes off the hair. After 75 rinsing, scraping, and fleshing, which are done in the usual manner, the hides are ready for the tanner.

The novel step which I introduce into the old process is for the sole purpose of "rais- so ing" the hide to increase the weight thereof, prevent spoiling of hides during the summer season before they are properly treated, and provide a manufactured leather which will have wonderful suppleness that will resist any tendency to crack. While the coating of the fleshy side of the hides with lime, as stated, does aid the subsequent step, still this is merely incidental to its main object, which is to raise the hide.

Having thus described my invention, what

1. As a step in the method of treating hides, the coating of the fleshy side of the hides with a warm solution of fresh-slaked lime and water 95 while the hair is on the hides, and then piling them one upon the other with the hairy side down and allowing them to remain there in this condition between half an hour to an hour, this step in the process serving to raise 100 the hides and increase the thickness thereof, and preceding the usual steps of the depilating lime-bath, as set forth.

2. The herein-described process of treating

hides, the same consisting in first soaking the hides in water, then "green-fleshing" the hides, then coating the fleshy side of the hides with a warm solution of fresh-slaked lime and water and piling the hides one upon the other with the hairy side down and allowing the hides to remain in this condition for about half an hour to an hour to raise the hides, then soaking the hides in a solution of lime and

water to loosen the hair, and finally finishing to in the usual manner, as herein set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JACOB SCHMITT.

Witnesses:

G. P. FISCHER, W. S. McGown.