## United States Patent Office.

BARTHELEMY PICARD, OF PARIS, FRANCE.

## IMPROVED PROCESS OF TANNING HIDES AND SKINS.

Specification forming part of Letters Patent No. 52,655, dated February 13, 1866.

To all whom it may concern:

Be it known that I, BARTHELEMY PICARD, of Paris, in the Empire of France, have invented certain new and useful Improvements in the Process of Tanning Hides and Skins; and I hereby declare that the following is a full, clear, and exact description of the same.

My invention has for its object the complete tanning of all kinds of skins in a single day, at the same time giving to the leather a toughness and strength superior to that of leather

tanned in the ordinary manner.

The means by which this result is accomplished consists, essentially, first, in the employment of the essence of turpentine as the principal tanning agent, instead of tan-bark; second, in the use of catechu and of sumac as accessory agents; and, third, in the movement of the skins in a fulling-tun or under a fulling-hammer.

To enable those skilled in the art to understand and use my invention, I will proceed to

describe it.

When ready for tanning, the hides for stout leather, instead of being placed in pits, are put into a fulling-tun which contains a decoction of sumac, for the purpose of opening the pores of the hides, and a decoction of catechu, in order to give to the leather the desired color. The tun is then closed hermetically and a rotary motion is given to it for some hours, which causes the coloring-matter to thoroughly penetrate the pores of the hides, and prepares the pores to receive the essence of turpentine. The motion of the fulling-tun is then stopped, the cover is taken off, and the essence of turpentine is poured in. The tun is then again closed and put in motion. While the hides are subjected to this constant agitation the essence of turpentine penetrates their pores, which the sumac has already opened, and which are being colored by the catechu, and acts so powerfully as a tanning agent, with all

the effect of fermentation, that in a period of less than twenty-four hours the hides become thoroughly and completely tanned.

On taking the skins out of the tun they can be washed in lye to remove the smell of the essence of turpentine, and are afterward beaten and treated in the ordinary manner.

For tanning thin hides—such as those of the cow, calf, goat, &c.—the process is essentially the same, excepting that salt is added to the decoction of sumac and catechu.

The respective proportions of the essence of turpentine and of sumac and catechu vary according to the nature of the hides and the degree of tanning and coloring required.

Excellent results are obtained with the following proportions: Hides prepared for tanning, two hundred pounds; essence of turpentine, seven pounds; sumac, ten pounds; catechu, thirty to forty pounds.

This process unites with rapidity and econmy of operation the advantage of obtaining at one and the same working all sorts of hides and leather—a result which is attained by no other known process of tanning.

Having thus described my improvements, what I claim as my invention, and desire to

secure by Letters Patent, is-

The process of tanning hides and skins by the employment of essence of turpentine with sumac, catechn, or other vegetable or mineral coloring essence, in combination with the movement of the hides or skins in a fulling-tun or under a fulling-hammer, substantially as and for the purposes herein set forth.

In testimony whereof I have signed my name to this specification before two subscrib-

ing witnesses.

B. PICARD.

Witnesses:

A. BLÉTRY, EDWARD TUCK.