UNITED STATES PATENT OFFICE.

SAMUEL BLOOM, OF SAN FRANCISCO, CALIFORNIA.

TANNING AND PREPARING LEATHER.

SPECIFICATION forming part of Letters Patent No. 230,225, dated July 20, 1880.

Application filed June 2, 1879.

To all whom it may concern:

Be it known that I, SAMUEL BLOOM, of the city and county of San Francisco, and State of California, have invented an Improved Process for Tanning and Preparing Leather; and I do hereby declare that the following is a full, clear, and exact description thereof.

This invention has relation to improvements in tanning leather; and it consists of the hereinafter-described process, by which the leather is rendered peculiarly soft and pliable, thus rendering it especially valuable for glove, lace, and belt leather.

My process can be applied to the tanning of all kinds of skins, from the very light to the very heavy, and its application is accomplished as follows:

I take the dry or green skins and place them in water, in which I allow them to remain and soak over night. I then take them out and break them on the flesh side, and put them back into water again for a few hours—say over night. I then take them out and hang and sweat them from thirty to forty-eight hours, according to the weather. Any practical tanner will understand this process and its necessities. In very cold weather I use steam in order to sweat the skins; but this is known to all tanners. I then take off the wool and work the skin on both the flesh and grain sides. Lime can be used or not in this part of the process, but I prefer not to use it; and, if desired, the skins can be bated before working, but it is not necessary. I then subject the skins to a pressing process, in order to express or remove the oil contained in them. I then place them in a vat, in a weak liquor or solution composed of alum, salt, and gambier, and a small portion of yellow aniline. The aniline is added to give the skins a nice healthy color. I then put them into a stronger liquor of the same character, and let them lie until they become thoroughly saturated with the solution—the longer the better. I then take them out and soak them in fresh water from three to five hours, to extract a portion of the liquor with which they have become impregnated. I then oil them on the grain side and dry them. Next I dampen them with water and break them, and then soften them. At this stage of the process the skins will have the drawn and crinkled appearance usual to skins which have been put through the tanning process. I then lay them down on a smooth table, with the grain side up, and rub a quantity of what is known as "French chalk" or white soapstone upon them. I then iron them with hot irons and pressure. This not only renders the skins soft and smooth, but forces the chalk or soapstone into the pores of the leather, so as to make it water-proof.

The skins must be free from grease when the hot iron is put on them, or otherwise the leather will be burned; but if the grease is thoroughly removed there is no danger of burning the skin, no difference how hot the iron is. I keep ironing until the leather is uniform in color, flexibility, and finish.

By this process and method the leather is given a smooth gloss and fine finish. It is made soft and pliable, but its fibers are not disturbed, and it is much stronger than ordinary tanned leather. It can be washed with soap or other cleansing substance, and stretched back to its original size and shape without injury. For these reasons it is peculiarly adapted for glove, lace, and belt leather; but it is also useful for all purposes that leather can be used for. The process can be applied to all kinds of skins and hides.

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

The process of tanning and finishing hides for leather which consists in soaking, breaking, resoaking, and then sweating them; secondly, removing the wool, then pressing out the oil, and submerging them in a solution of alum, salt, gambier, and aniline; thirdly, putting them in a stronger solution of the same character, removing them from this and soaking them, and then oiling them on the grain side and drying them; fourthly, dampening them and then breaking and softening them; and, finally, chalking or soapstoning them and ironing them with hot irons, as set forth.

In witness whereof I have hereunto set my hand and seal.

SAMUEL BLOOM. [L. S.]

Witnesses:

W. FLOYD DUCKETT,

D. B. LAWLER.