

UNITED STATES PATENT OFFICE.

BARKER C. YOUNG, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN MODES OF TREATING LEATHER REMNANTS.

Specification forming part of Letters Patent No. **135,615**, dated February 4, 1873.

To all whom it may concern:

Be it known that I, BARKER C. YOUNG, of Boston, in the county of Suffolk and State of Massachusetts, have invented an Improvement in Treating Leather Remnants; and I do hereby declare that the following is a description of my invention sufficient to enable those skilled in the art to practice it.

In the manufacture of boots and shoes a large waste occurs in cutting upper stock, and while very much of this stock might be valuable for linings, it is not fit for such use on account of its black color and the tendency of such color to rub off, and on account, also, of the grease or oil contained in the curried leather. The object of my invention is the restoration of such stock to an uncurried condition, or its conversion into soft, smooth, and pliable stock, free from color and free from oil or grease, and fit for making lining stock, or for similar uses.

In my process I first subject the pieces of leather to the action of a solution of soda in water, with an addition of potash, in a rotating stuffing-wheel, after which they are immersed in a solution of sumac, salt, and alum in water, to color and soften the leather. They may then be washed in acid and water to remove any black color still remaining. The washed pieces are partially dried, and then "set out" with a slicker, while "in temper," to remove all wrinkles and distend the stock, and then completely dried, and are then boarded to make the stock not only soft and smooth but pliable, being then in condition for use. It is in this method of treating and restoring leather that my invention consists.

The specific treatment I prefer is as follows: First, fifty or sixty pounds of stock are placed in an ordinary rotating stuffing-wheel, holding, perhaps, a hogshead, and containing a half barrel of water, to which is added eight pounds of carbonate of soda and a little potash, preferably about one-quarter of a pound. The

wheel is run about an hour at about eighteen or twenty rotations per minute. Then the pieces are removed from the stuffing-wheel to a vat containing a sumac, alum, and salt solution in water, in which liquor they are left immersed, preferably, for three days, being then removed and washed in acid and water. When the leather is placed in the stuffing-wheel it is filled with grease, and covered with black. In the stuffing-wheel this black is mostly loosened and detached by the friction of the pieces and the action upon them of the soda-and-potash solution, which solution also removes the grease, or so far frees it that it is rendered easily removable. In the sumac, salt, and alum solution the leather is softened and colored with a brown oak color. The acid solution removes from the leather all particles of surface color.

After the action of the acid solution the leather is partially dried, and then each piece is taken separately and is set out with a slicker to remove the wrinkles. After this the pieces are thoroughly dried, without heat, and are then taken, one by one, and boarded, and by the boarding each piece is rendered glossy, soft, and pliable, and is ready to be cut up for linings or similar use, they being the very best material and in the very best conditions for linings, having no surface coloring matter, and containing no grease or oil of any kind.

I claim—

The process of treating leather trimmings or remnants, consisting in subjecting them to a solution of soda and potash to extract the color, &c., and then immersing them in a solution of sumac, salt, and alum in water to color and soften the leather, substantially as set forth.

B. C. YOUNG.

Witnesses:

E. B. LITTLE,
WILLIAM AMES.