UNITED STATES PATENT OFFICE.

JAMES C. BOOTH, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN THE MODE OF WHITENING LEATHER.

Specification forming part of Letters Patent No. 1,881, dated December 5, 1840.

To all whom it may concern:

Be it known that I, James C. Booth, of Philadelphia, in the State of Pennsylvania, have invented a new and Improved Mode of Manufacturing, Preparing, Whitening, or making what is termed "Fair Leather;" and I do hereby declare that the following is a full and accurate description.

In order to obtain or put the leather in the state designated, so that it may have the peculiar light-colored and fair appearance which is the object of the invention, I employ it (the leather) in that stage of the manufacture when it is in its moist state after it is finished; or, if it is used when the leather is dry, then in the latter case it must be moistened through with clear water. While it is thus wet I spread, with a sponge, brush, or other suitable article, the following liquid composition over the fair surface of the leather, giving it sufficient dampness to let the pores absorb the liquid.

The liquid to be applied is a solution of the protomuriate of tin in muriatic acid, ether, alcohol, and water, and is composed as follows: Any quantity of the protomuriate of tin is dissolved in about one half of its weight of muriatic acid, and to this solution ether is added in the proportion, by weight, of three times the weight of the protomuriate of tin, and then a quantity of alcohol, by weight, equal to four times the weight of the protomuriate of tin. To this may be superadded clear fresh water in the proportion of three parts, by weight, as compared with the protomuriate of tin.

Recapitulation of proportions: Any quantity of protomuriate of tin according to the amount or quantity of leather to be treated—say, protomuriate of tin, two parts; muriatic

acid, one part; ether, six parts; alcohol, eight parts; water, six parts.

If the leather to be employed under this process is not clear, or is very dark or spotted, then a greater proportion of muriatic acid is to be used—say, an equal quantity, by weight, or twice as much, by weight, as compared with the protomuriate of tin.

Immediately after the application of the above-described liquid composition to the leather I spread over it, in a similar manner, spirits of turpentine, with or without a small quantity of tallow dissolved in it, sufficient to make it pliable, and the leather is suffered to dry in the ordinary way, and the operation is complete. The spirits of turpentine alone will generally be sufficient to give pliability to the leather after the first composition is employed without adding the tallow; but when the leather is stiff or hard or not sufficiently soft the tallow may then be added. The leather after this process will have the required whiteness and fair appearance.

What I claim as my invention or discovery

The use of the protomuriate of tin, dissolved in the manner and by the liquids above described, for the purpose of communicating a light-colored and fair appearance to leather, whether the leather be oak-tanned, barktanned, or hemlock-tanned leather, with its natural or ordinary color.

November 17, 1840.

JAS. C. BOOTH.

Witnesses:

I. H. ROGERS,

P. Benson Delany, Jr.