

UNITED STATES PATENT OFFICE.

EDWIN W. HEWITT, OF LOUISVILLE, KENTUCKY.

TANNING AND DRESSING OLD LEATHER AND ARTICLES OF SAME.

SPECIFICATION forming part of Letters Patent No. 302,132, dated July 15, 1884.

Application filed March 11, 1884. (No specimens.)

To all whom it may concern:

Be it known that I, EDWIN W. HEWITT, a citizen of the United States, residing at Louisville, in the county of Jefferson and State of Kentucky, have invented a new and useful composition and process for tanning old leather and old articles manufactured of leather, and of properly dressing said leather or articles after such tanning; and I do hereby declare that the following is a full, clear, and exact description of such invention, which will enable others skilled in the art to which it pertains to make and use the same.

The object of my invention is to thoroughly cleanse old leather of destructive accumulations, and at the same time to tan it in such a manner that the leather will be restored to its pristine strength, softness, flexibility, and durability, and thereafter to so dress it that the appearance of new leather shall be given.

To carry my invention into effect the following ingredients are to be used, in the proportions named below, and mixed and used as hereinafter directed: sumac, (*Rhus glabra*), upland smooth Pennsylvania sumac, dried and ground, ten pounds; the root of the American water-pepper, (*Polygonum bistorta*), dried and ground, one pound; the flowering stalks and leaves of dog-fennel, (*Achillea millefolium*), dried and ground, one-half a pound; commercial concentrated lye, eight ounces; commercial carbonate of soda, sixteen ounces; soft water, forty gallons.

To make a proper composition of these ingredients for the purpose contemplated in this specification, the following rules should be observed: First, mix thoroughly the sumac, water-pepper root, and dog-fennel, and pour upon them a gallon of boiling water; let stand a few minutes, when pour into eleven gallons of boiling water; let the whole simmer (not boil) over a slow fire for fifteen minutes; second, while the foregoing is simmering, dissolve the concentrated lye and carbonate of soda in one gallon of boiling water; third, into a barrel or other water-tight vessel of rather more than forty-gallon capacity pour twenty-seven gallons of cold soft water; fourth, into the above pour first the alkaline solution, then the decoction of sumac, water-pepper, and dog-fennel. The admixture is then ready for use. Put into the composi-

tion the articles to be tanned and let them there remain twelve hours or more. Very old leather should be left in a longer time. The time necessary can readily be determined by an examination of the articles to see if they are soft and flexible. After removing from the composition, the articles should be thoroughly washed in clear, cold soft water, and then hung up to dry. When half dry, they should be well oiled with neat's-foot oil. Leather which has had a blackened surface should be reblacked, before oiling, with a composition made of one part of copperas (sulphate of iron) dissolved in twelve parts of the tan-liquor hereinbefore described, applied with a brush or sponge, and when the blacking has well dried in, a black oil (composed of one part of fine ivory-black to twenty parts of neat's-foot oil) should be applied. The article should then be carefully wiped (preferably with a woolen cloth) and a solution of gum-tragacanth (in the proportion of one ounce of gum-tragacanth to one pint of water) applied with a sponge. After wiping again, the articles will be ready for use. The gum-tragacanth solution should also be applied to those leather articles which have not had a blackened surface.

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

The process of cleaning, tanning, and dressing old leather, which consists in first immersing the leather in a solution consisting of sumac, ten pounds; root of American water-pepper, one pound; the flowering stalks and leaves of dog-fennel, one-half pound; commercial concentrated lye, one-half pound; carbonate of soda, one pound, and water, forty gallons, mixed as described, until the leather is soft and flexible; second, in washing thoroughly in clear, cold soft water; third, in hanging up to dry; fourth, in oiling with neat's-foot oil when half dry; fifth, in wiping the leather; sixth, in applying gum-tragacanth, and, seventh, in again wiping the leather.

EDWIN W. HEWITT.

Witnesses:

THOMAS MEYNELL,
JOHN MORRIN.