

UNITED STATES PATENT OFFICE.

WILLIAM H. TOWERS, OF NEW YORK, N. Y.

IMPROVED PROCESS FOR TANNING.

Specification forming part of Letters Patent No. 51,762, dated December 26, 1865.

To all whom it may concern:

Be it known that I, WILLIAM H. TOWERS, of the city, county, and State of New York, have discovered a new and useful Mode or Process of Tanning or Curing Hides or Skins; and I do hereby declare that the following is a full and exact description of the said process.

The process of tanning or curing hides or skins for the great variety of uses to which they are applied is of no little consequence in the domestic or mercantile economy; and I claim that my newly-discovered method of reducing untanned skins or hides to practical use is cheap, new, simple, and of great practical utility; and thus I explain.

Rawhide, or the skin of an animal freshly taken off, when it becomes dry, is unyielding, stiff, and unfit for use until it has been subjected to some process which will dissolve or destroy the gelatinous tissue, which constitutes what is called in commerce "glue," contained therein, and this gelatinous tissue or glue is what gives the dry skin its stiffness and rigidity, and hence the variety of ways to render the hide or skin soft and pliable for practical use, either in the manufacture of boots and shoes and the articles connected with them, or in curing furs and like articles, or to whatever purposes skins or hides may be put. These processes often accomplish the object at the expense of the hide or skin by rendering it rotten, and hence of lesser value. They also involve much labor, and that of a disagreeable nature. Now, to accomplish the same object that substances containing tannin, salts, and the various processes of tanning have in view—viz., softening and rendering pliable hides and skins, so that they may be used—I use alcohol or any liquid containing alcohol in sufficient quantity to effect the object. Take a piece of untanned

deer-skin and immerse it in alcohol, and in ten minutes the skin will come out with its gelatinous tissue and oily matter dissolved, and it has become soft and pliable for use; and, moreover, the action of the alcohol upon the skin is such that, instead of rotting and destroying, it preserves that part which gives strength to the hide or skin. The time in which the skins may be tanned or rendered soft by immersing in alcohol of course will depend upon the thickness of the skin. Strips, belting, or shoe-strings cut from untanned hide will become soft in a very few minutes, while skins containing gelatinous tissue in quantity will require a longer period of time. Take a whole hide after the hair is removed and immerse it in alcohol, and in a very short time it will be ready for the process of stuffing or saturating with oil, and thus be ready for making into boots or shoes, or for any purpose desired; but in curing skins retaining the fur or hair on the same my invention or discovery of this new process in tanning is invaluable. In a very short time the skin immersed in alcohol will have become soft for use, and, what is of the greatest consequence to the furrier, the alcohol will remove the oil from the fur itself, thus accomplishing a double purpose and in a short period of time. After the skins or hides, or strips thereof, have been taken from the alcohol they should be stretched or broken up by rubbing.

What I claim as my invention or discovery, and desire to secure by Letters Patent, is—

The process of tanning or curing hides or skins in alcohol, as and for the purpose above set forth.

WM. H. TOWERS.

Witnesses:

J. L. NEWTON,
E. R. DRAKE.