

UNITED STATES PATENT OFFICE.

M. A. STROUVELLE, OF ST. LOUIS, MISSOURI.

IMPROVED BELTING FOR DRIVING MACHINERY.

Specification forming part of Letters Patent No. 69,042, dated September 17, 1867.

To all whom it may concern:

Be it known that I, M. A. STROUVELLE, of St. Louis, in the county of St. Louis and State of Missouri, have invented a new and useful Improvement in Belting for Machinery; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to fully understand and make use of the same.

This invention or discovery relates to a new and improved mode of making belting for machinery; and consists in preparing and curing hides without tanning, in the manner hereinafter described.

The belting made by my improved process of treating hides possesses double the strength of leather belting as ordinarily made by tanning of hides of equal thickness and quality when dry, and the time required for the manufacture does not exceed one month, instead of six or eight months required for tanning. The process is also much cheaper than that of tanning leather belting. It stretches less than either leather or india-rubber belting, works with more regularity and uniformity on the pulleys, and wears much longer.

The method of preparing and curing the hides to manufacture my improved belting is as follows, to wit: First, the hide must be dried by what is termed the "Indian process," without the use of salt, and by a free exposure to the air, so that it shall not undergo any putrefaction before it is thoroughly dried; second, the dry hide is then to be soaked for ten or fifteen days in rain-water or other pure soft water; third, the hair is then taken off mechanically by shaving with a proper knife; fourth, the hide is then carefully stretched and smoothed on the side of a building, or on suit-

able frames, with great force, to extend it in all directions as tight as possible, and it is then thoroughly dried in the shade while in this position; fifth, after being dried, a composition of oil and tallow is applied by rubbing it into the hide thoroughly to soften and render it more pliant.

After this treatment the hide is ready for use as belting, and is sawed into strips of suitable width, which may be coupled together with rivets, in the usual way.

It will be observed that the hide is not allowed to ferment or putrefy, is not treated with alkali or acid, or any other chemical, nor charged with tannin, so that it retains all its gelatinous substance and fibrous tissue unimpaired, and is not deprived of any of its natural strength and tenacity, only the hair and excess of flesh on the inside of the hide being removed by the operation of currying with a proper shaving-knife.

As shown by experiments with my improved rawhide belting, its texture or body is very compact, even, and solid, and possesses immense power of resistance to strain or abrasion—qualities essential in belting for machinery.

Having described my invention or discovery and the means by which it is carried into practical operation, I claim as new and desire to secure by Letters Patent—

Rawhide belting for machinery, as a new article of manufacture, prepared substantially as herein described.

M. A. STROUVELLE.

Witnesses:

H. SCHMARBERG,
FRANK HIGH.