

UNITED STATES PATENT OFFICE.

SAMUEL A. DARRACH, OF ORANGE, NEW JERSEY.

IMPROVEMENT IN PROCESSES OF TREATING RAWHIDE.

Specification forming part of Letters Patent No. **183,377**, dated October 17, 1876; application filed April 12, 1876.

To all whom it may concern:

Be it known that I, SAMUEL A. DARRACH, of Orange, in the county of Essex and State of New Jersey, have invented and discovered a new and useful Material Made from Rawhide, which invention is fully set forth in the following specification.

This invention consists in an improved process of treating rawhide, whereby the same may be molded permanently into any desired shape, and will be unaffected by moisture and changes of temperature, and at the same time possess a high degree of elasticity.

In carrying out my invention I take ordinary rawhide, after the hair has been removed and the hide cleaned in the usual manner, and place it in a solution composed substantially as follows: I make a saturated solution of borax, and add thereto as much shellac as the solution will dissolve at a temperature from about 70° to 100° Fahrenheit. The hide is left in this solution for from twenty to fifty hours, according to its thickness, or until thoroughly penetrated with the solution, care being taken to remove it before its surface becomes soft and pasty. The hide is then removed from the solution, compressed, and is subjected to a heat of about 250° Fahrenheit, for from about twenty to thirty hours, according to its thickness, until it is thoroughly baked and dried, after which it is ready for use.

The hide as thus prepared is peculiarly adapted to the manufacture of all parts of corsets, surgical appliances, and the like, which have hitherto been constructed of whalebone and wood, although it may be employed with advantage as a substitute for whalebone and wood in construction of many other articles.

When it is desired to use the material upon the human body, as in the manufacture of corsets and various surgical appliances, it may be coated with japan or other impervious varnish, to increase its resistance to moisture and atmospheric changes.

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

The process herein described of treating rawhide by saturating it with a solution of shellac and borax, then compressing it and subjecting it to heat, all substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 20th day of September, 1875.

S. A. DARRACH. [L. S.]

Witnesses:

ROBT. E. MILLER,
E. F. KASTENHUBER.