

UNITED STATES PATENT OFFICE.

ISAAC N. TICHENOR, OF NEWARK, NEW JERSEY.

IMPROVEMENT IN IMITATION HAIR-CLOTH.

Specification forming part of Letters Patent No. 122,868, dated January 16, 1872.

To all whom it may concern:

Be it known that I, ISAAC N. TICHENOR, of the city of Newark, in the county of Essex and State of New Jersey, have invented a new and useful Improvement in the Manufacture of Artificial or Imitation Hair Seating, thereby making it approximate in finish very closely to the genuine hair seating made from animal hair, making it a very desirable substitute for it, while, at the same time, my invention and mode of making cheapens the article for public use; and I do hereby declare that the following specification is a full, clear, and exact description thereof.

My invention consists in combining the fiber of the maguey plant (a new species of agave grown in Mexico) with the fiber of the *agave Americana*, or American aloe, better known in commerce under the name of Sisal grass. This combination, or using each separately, with my mode of preparation and finishing, makes my seating come as near genuine hair seating as possible.

My first process with the raw material—that is, the filling the fibers named above—is to cleanse it by an application of jets of steam. It is then hackled; then drawn out to the required length for weaving. It is then put in churns containing borax-water. I would here remark that I have discovered that the borax-water cuts the oil from it that is left in the fibers after drawing it, which is a very essential point gained.

My seating is woven on steam-power looms. The warp is of cotton, the same as the genuine hair seating, and the filling is composed, as above described, of the two fibers named. The manner of weaving is the same as the genuine seating. After it is woven it is dyed as follows: First, the seating or cloth is put in a solution of log-wood chips and boiling water. It remains in this dye all night, or, say, twelve hours. In the second operation, it is put in a

strong solution of chrome. It remains in this ten minutes. The third operation is, to put it in a strong solution of copperas-water, in order to set the dye. It remains in this solution ten minutes. I then immerse it in a solution of lime-water in order to clean it.

The first finishing process is as follows: The seating, after being aired and dried, is first brushed with a stiff horse-hair brush; then folded in press-boards and pressed in hot iron plates, and allowed to remain thus about six hours; then it is shaved with a knife in order to cut off the short or broken fibers; then burnished with a thick piece of glass; then folded again in press-boards and pressed in hot iron plates; to remain six hours.

The second and final finish, which is of the utmost importance, and which I claim as my own discovery or invention, is as follows: First, my seating is coated with a solution of gum-arabic mixed with indigo. Secondly, in order to make it pliable the seating is coated with seedlac varnish mixed with boiled linseed-oil, to be applied with a pad of flannel cloth filled with wool; the seating then is folded in press-boards and pressed in cold iron plates, and allowed to remain thus four hours. The seating is then taken out and is ready for the market.

What I claim as new, and desire to secure by Letters Patent, is—

The invention of an artificial or imitation hair seating, the filling being composed of the fibers above described, in combination or singly, by my mode of manufacture, as herein substantially set forth and described.

This specification signed and witnessed this 15th day of December, 1871.

ISAAC N. TICHENOR.

Witnesses:

JOHN ROSE,
WM. J. MCCARROLL.