

UNITED STATES PATENT OFFICE.

CHARLES E. SACKETT, OF FALL RIVER, MASSACHUSETTS, ASSIGNOR TO
THE OLD COLONY HAT CO., OF FALL RIVER, MASSACHUSETTS.

PROCESS OF RENOVATING OLD HAT-BODIES.

SPECIFICATION forming part of Letters Patent No. 762,000, dated June 7, 1904.

Application filed April 11, 1904. Serial No. 202,662. (No specimens.)

To all whom it may concern:

Be it known that I, CHARLES E. SACKETT, a citizen of the United States, residing in the city of Fall River, county of Bristol, and State of Massachusetts, have invented a new and useful Improvement in Processes of Restoring Old Hat-Bodies by a Chemical Treatment, of which the following is a specification.

This invention relates to the toughening and restoration to flexibility of the fibers of old hat-bodies by means of a chemical treatment, whereby they may be restretched or recontracted in the blocking and shaping processes usual in hat manufacture to make them over into modern saleable goods.

In carrying out this process the hats are first placed in a large cylinder or drum in company with a suitable quantity of damp sawdust, where by a revolving action the sawdust takes up the unclean and dusty matter adhering to or floating among the hat-bodies. The bands, bindings, leathers, and all foreign substances still adhering to the bodies are then removed by hand. The hat-bodies are then treated in a suitable vat to a weak ammonia-bath, in which they remain for at least twenty-four hours. They are then given a bath of warm water and then immersed in a bath of boiling caustic soda. The superflu-

ous water is then extracted by a centrifugal extractor. The hat-bodies are then treated with a bath of weak sulfuric acid, in which they remain immersed until the acid neutralizes the action of the soda and ammonia. The hat-bodies are then soft and pliable, the action of the chemicals having a tendency to toughen the bodies, producing about the same effect as takes place in toughening paper into parchment. They are then capable of being stretched or contracted to an unusual extent without injury and are ready to be treated by the ordinary processes used in hat manufacture to make them into merchantable shapes dyed to any color.

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

The process of chemically treating old hat-bodies, consisting in cleansing them by contact with damp sawdust, treating them in a bath of ammonia, washing them in warm water, immersing them in a bath of caustic soda, extracting the superfluous water, and then treating them with a bath of sulfuric acid, substantially as herein described.

CHAS. E. SACKETT.

Witnesses:

BRONSON S. BURR,
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