UNITED STATES PATENT OFFICE.

A. BANCKER AND C. F. ALVORD, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANUFACTURE OF HATS.

Specification forming part of Letters Patent No. 6,010, dated January 9, 1849.

To all whom it may concern:

Be it known that we, ADRIAN BANCKER and CHARLES F. ALVORD, both of the city of New York, hat manufacturers, have discovered or invented a new and useful Improvement in the Manufacture of Hats, for which we seek Letters Patent of the United States; and that to make the differences plain between our discovery or invention and the means commonly used it is proper to state that it is now the usual practice to stiffen the body with shellac, after it is dry to iron it on the block, and then coat it with a size of glue, after which two coats of seed-lac varnish are applied. When dry the plush or other covering is put on and the hat finished. The inconveniences of the above articles so applied are these: First, to make the hat keep its shape the body must be made very stout and stiff, which is very uncomfortable to the head; second, after the wear of the hat a short time by a person that perspires freely the perspiration from the head will run through the hat and appear on the brim and crown, which destroys the entire beauty; third, if the hat is wet the glue-size will draw to the surface of the plush and stick the nap down, so that its texture and beauty is entirely destroyed. From both the last-named causes the plush will become separated from the body and the hat become soft and lose its shape.

Our invention, discovery, or improvement consists in having practically ascertained the fact that we avoid the above inconveniences by substituting for all the before named ingredients a solution of gutta-percha prepared in

any usual manner, first to stiffen the body, then, when dry and ironed, apply one or more coats, as may be required, of the same material in solution, and when dry finish the hat in the usual manner with any description of plush

or other covering for use.

The hat thus made will be soft and pleasant to the head and retain its original firmness. When wet it will be as firm as when dry, and it will be perfectly impervious to perspiration. It is proper here to state that the gutta-percha varnish is the only varnish that has ever been used for the purpose of sticking the plush to the body without the glue or size with any success, and has so effective an adhesion that the plush will always retain its connection with the body. This also makes a hat much lighter with the same substance than can be made with any material or materials now in use.

We claim-

The application of a solution of gutta percha to the purposes of stiffening hat-bodies and uniting the plush or other cover to the body as a substitute for shellac, glue-size, and seedlac, or other articles hitherto used for such purposes, as described.

In witness whereof we have hereunto signed our names, in the city of New York, this 12th

day of December, 1848.

ADRIAN BANCKER. C. F. ALVORD.

Witnesses: W. SERRELL.

LEMUEL W. SERRELL.