

UNITED STATES PATENT OFFICE.

OLIVER BROOKS AND J. A. SLOAN, OF PHILADELPHIA, PENNSYLVANIA.

IMPROVEMENT IN CASSIMERE HATS.

Specification forming part of Letters Patent No. 2,847, dated November 9, 1842.

To all whom it may concern:

Be it known that we, OLIVER BROOKS and JAMES A. SLOAN, of Philadelphia, Pennsylvania, have invented a new and Improved mode of Making and Finishing Hats; and we do hereby declare that the following is a full and exact description.

Out of a given quantity of fur or other material that may be felted we make the inside body, or, as it is called by hatters, the "shell," either by bowing the fur or other material, or it is wound by machinery. It is formed in the shape of a cone, eighteen or twenty inches from the base to the apex, and fourteen to fifteen inches diameter at the base. After being thus formed it is shrunk to the proper size by the application of hot water—say, fourteen to sixteen by ten to twelve inches. This process is termed "felting," and gives to the body consistency and strength. It is then dried, after which it is stiffened with gum-shellac dissolved in alcohol. It is then put upon a hat-block and formed into the shape of a hat, a string drawn tightly around the band, and the whole put into a heated steamer, which suddenly evaporates the alcohol and leaves the shellac hard and dry. A hot iron is then applied to every part while on the block to smooth and give elasticity to it. It then receives a coat of sizing, and when thoroughly dry another coat of varnish made of the gum-shellac and gum-elemi. Then the shell or inside hat is complete.

The outside or cover which constitutes our improvement is of wool or other material of which wool is a component part. The process of making the cover is, the same as that just described, with this exception, that it contains no stiffening. It is drawn over the shell and caused to adhere to it by the application of a hot iron, and thereby softening the varnish on the shell.

The shell made as described above is the same as is used for silk hats. The difference in covering it with felt and silk consists in putting the felt on in one entire piece and seamless over the whole crown or body of the hat and the upper part of the brim. The under part of the brim is a separate piece, and is united with top cover by the binding at the edge of the brim. The silk hat has a seam

around the edge of the crown, down the side of the crown, around the band, and on the top and under the brim.

The process described above for making the shell is the same as the one used for making the imitation cassimere now in use, the latter requiring more material, time, and labor.

The distinction between the imitation cassimere and our improvement is, first, the imitation is made of Russian hares' fur and ours of the same material as cassimere; secondly, the imitation consists of one body with the stiffening diffused throughout and cleared with a solution of borax-water. The improved one is composed of two bodies, the inner one containing all the stiffening. Thirdly, the compactness of the imitation, together with the stiffening, prevents the dye from penetrating, and the edges of the crown soon wear off and become white. The improvement having a cover less compact and entirely without stiffening, freely receives the dye through and through.

The advantages resulting from our improvements are a better imitation of "cassimere," by which name they are called. They will wear through to the inside body before the stiffening will show, in consequence of the absence of stiffening and the complete penetration of the dye. They will preserve the same appearance until they are worn through. They are as handsome in appearance and will retain their beauty longer for the above reasons, and the whole combined will make them a far more serviceable hat than those now in use, and they can be got up from forty to fifty per cent. cheaper.

What we claim as our invention, and desire to secure by Letters Patent, is—

The above-described method of making cassimere hats by constructing an outside seamless cover made of wool or other material of which wool is a component part, to fit and be attached to a previously-formed shell or body constructed in the usual manner, the whole to be effected in the manner above described, or any other substantially the same.

OLIVER BROOKS.
JAMES A. SLOAN.

Witnesses:

J. A. DONALDSON,
JOHN WOOLSON.