## UNITED STATES PATENT OFFICE.

EDWARD SEALY, OF NEWARK, NEW JERSEY.

## IMPROVEMENT IN FELTED HATS.

Specification forming part of Letters Patent No. 90,198, dated May 18, 1869.

To all whom it may concern:

Be it known that I, EDWARD SEALY, of Newark, in the county of Essex and State of New Jersey, have invented an Improved Hat, which I denominate an "inlaid hat;" and that the following is a full, clear, and exact description and specification of my said invention, and of the manner of making the same.

My inlaid hat is a hat presenting a variegated surface or pattern, produced by inlaying a hat-body of one color with threads or yarns of one or more different colors, which yarns are combined with the hat-body by a felting operation.

As the pattern-yarns are inlaid in the body, they cannot be removed by the finishing-operations to which the hat-body is subjected after felting; consequently the pattern is permanent.

The mode which I have devised of manufacturing my inlaid hats is to wind the patternyarns into the hat-bat as it is formed by winding a fleece from a carding-engine upon the former or block.

In order to carry out this process with economy, and to produce regularity in the design of the pattern, I have improved the forming-machine usually employed in forming wool hat-bodies, by combining with it a spool-stand, which supports a number of spools or bobbins holding the pattern-yarn.

In forming the hat-bodies the fleece of wool from the doffer of the machine and the pattern-yarns are both applied to the hat-former, so that as it revolves the pattern-yarns are wound upon the hat-former in the layers of the fleece, and are thus inlaid in the hat. The vibration of the former causes the pattern-yarns to cross each other in the hat, so as to produce a cross-barred or plaid pattern, which may be greatly varied by varying the number and color of the pattern-yarns and the direc-

tion in which they are guided in passing to the former.

When the hat-bats are formed they are hardened, sized, and finished in the usual manner, and when finished their surfaces present a pattern formed by the pattern-threads upon a ground-work of the color of the woolfleece of which the hat-body has been formed.

Having thus described my improved hat, I declare that I do not claim in this patent the process of making it by winding the patternyarns into the bat, nor the improvement which I have made in the forming-machine for the purpose of manufacturing by that process; neither do I limit the invention set forth in this patent to an inlaid hat produced by such process or machine, as the process of inlaying the pattern-yarn may be varied, and different machinery may be used. Thus, for example, instead of drawing each pattern-yarn from a separate spool or bobbin, the yarns may be formed by weaving or otherwise into net-work, and the sheet of net-work may be wound into the layers of the fleece; or the hat-bat may be formed in the usual way, and the pattern thread or yarn may be inserted in the body after it is formed by means of a needle or otherwise.

What therefore I claim as my invention in this patent is—

The inlaid hat, substantially as hereinbefore described, having a body variegated by pattern-threads inserted in such body and combined with it by felting, the same being a new article of manufacture.

In testimony whereof I have hereto set my hand this 31st day of July, A. D. 1867.

EDWARD SEALY.

Witnesses:

W. T. SEALY, R. W. WILDE.