## F. H. ANDERSON.

HAT LINING.

No. 301,199.

Patented July 1, 1884.

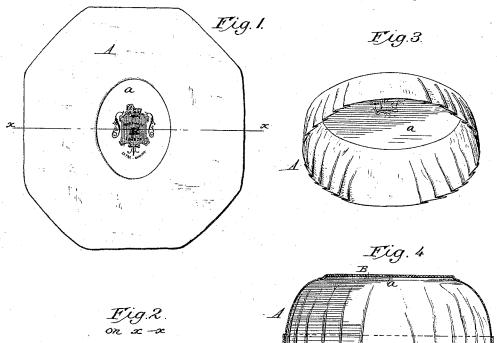
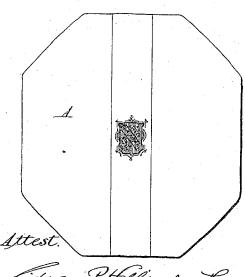
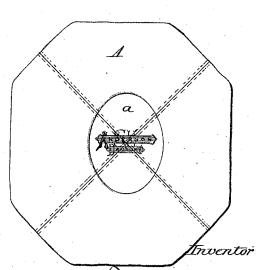


Fig.5.

Lig.6.



Sidney P. Hollingsworts MmH Shipley



F. M. Anderson By his atty. Philip T. Dodge,

## United States Patent

FORD. HITCHCOCK ANDERSON, OF DANBURY, CONNECTICUT, ASSIGNOR OF ONE-HALF TO ALBERT ANDERSON, OF SAME PLACE.

## HAT-LINING.

SPECIFICATION forming part of Letters Patent No. 301,199, dated July 1, 1884.

Application filed March 18, 1884. (No model.)

To all whom it may concern:

Be it known that I, FORDYCE HITCHCOCK ANDERSON, of Danbury, in the county of Fairfield and State of Connecticut, have invented certain Improvements in Hat-Linings, of which the following is a specification.

The aim of my invention is to produce hatlinings at a cost less than is possible under the methods of construction commonly practiced, 10 to avoid handling the material to the extent which is now necessary in order to prevent injury to the surface of delicate fabrics, and to produce linings which may be applied by unskilled labor to hats of different sizes.

To this end it consists, essentially, in a lining composed of a continuous flat sheet having the edges folded or plaited in order to give it the proper form to fit within the hat; also, in a blank embossed or broken at the center 20 by means of a die or its equivalent, and plaited or folded at the edges without being cut, the margin of the embossed portion serving as a guide by which to properly fold or plait the edges.

It further consists in the blank having a plaited portion glued or otherwise attached permanently to a stiffening-sheet on the rear

It further consists in the lining folded as 30 above, with the stiffening-piece extended from front to rear, in order to sustain the same more firmly in position.

Heretofore hat-linings have been variously constructed. The most common mode of con-35 struction was to form an oval or elliptical sheet of small size stiffened on the back, commonly designated the "tip" of the hat, and to stitch to the edge of this tip the gathered edges of the body portion already described. 40 Another method was to form the lining of a number of pieces cut of such forms and stitched together at the edges in such manner as to give the lining a form corresponding with the interior of the hat, or substantially so. Still 45 another method was to paste the lining material to a body of buckram, or equivalent stiffening, and then subject the same to a powerful pressure between corrugated crimpingdies, heat and moisture being at the same time !

applied in order to effect the proper stretch- 50 ing and molding of the material.

The foregoing methods were objectionable on account of their expense, of the material becoming soiled and injured by the great amount of handling to which it was necessa- 55 rily subjected, because of the danger of the fabric being ruptured in the case of stretching; because, also, linings adapted for hats of one size could not be applied to those of a

different size, and because highly-skilled la- 50 bor was required both for the manufacture and insertion of the linings.

Referring to the accompanying drawings, Figure 1 represents a face view of my lining as it appears previous to being folded for in- 65 sertion. Fig. 2 is a cross-section of the same on the line x x. Fig. 3 is a perspective view of the lining as it appears when ready for insertion. Fig. 4 is a cross-section of the same. Fig. 5 is a face view showing the lining with 70 the stiffening material extended from end to end. Fig. 6 is a face view of the lining in one

of its forms in a flat or unfolded condition. In proceeding to construct my lining, I first provide a flat sheet, A, of any suitable mate- 75 rial, and of an elliptical or substantially elliptical form. The center of this sheet I subject to the action of embossing dies, or equivalent devices, which will operate thereon in such a manner as to raise a flat elliptical surface, a, 80 therein, breaking down, creasing, or bending the fiber at the edges of this portion in such manner that it forms a guide from which to fold or plait the edges, as hereinafter described.

When the lining is constructed of light ma- 85 terial, as is usually the case, I apply to the back of the sheet, previous to the embossing operation, a sheet of paper, card-board, or equivalent stiffening material, B, which is glued or cemented firmly thereto, either previous to 90 or during the embossing action. The stiffening thus applied serves to retain the central portion of the blank in a flat form, while leaving the edges in their natural pliable condition, that they may be properly folded.

Having provided the blank, as above, I next plait or fold the edges in such manner as to contract the margin of the sheet and give the

same a concave or cup-like form, corresponding, substantially, with the interior of the hatbody, as represented in Fig. 3. It is to be observed that these folded or plaited edges are not cut, but that the form is secured wholly by lapping the material upon itself. After being thus formed the lining may be inserted into the hat and confined in position by turning the ordinary sweat-band upward over the lower edge of the lining in the ordinary manner, and this without the necessity of previously stitching, gluing, or otherwise securing the folded edges.

The blanks may be sold and shipped in the flat form and folded into shape by the consumer at the time of the application to the hats, the operation being quickly and readily performed by children or other inexpensive labor. If, however, it is desired to manufacture the linings in form for immediate insertion, the plaited edges may have a strip of paper or equivalent material glued to the outer surface, as represented in Fig. 4. This strip, which will serve to retain them in form, may be readily broken, in order to admit of the edges being expanded or contracted to conform to hats of different sizes.

In certain cases it is desirable to make the linings of exceedingly light or thin material or incapable of supporting itself, in which event I propose to continue the stiffening material B from one side of the lining to the other, as represented in Fig. 5. The stiffening thus applied in the form of a narrow strip permits the edges to be treated as in the preceding forms.

If it be desired to construct the lining of fanciful designs or of variegated colors, the

flat blanks may be composed of two, three, or more sections of suitable form united at their 40 edges to form a flat sheet, as represented in Fig. 6. The edges may be united by stitching; but a more convenient plan is to unite them by means of a thin sheet of rubber pressed upon the edges with a hot iron, whereby it is 45 caused to adhere firmly thereto. The sectional blank thus formed will be plaited in the edges, and applied in the same manner as those made in one continuous piece.

Having thus described my invention, what 50 I claim is—

1. A hat-lining consisting of a continuous unbroken sheet having its edges plaited or folded, as described.

2. A blank for a hat-lining, consisting of a 55 flat sheet having an embossed central portion, substantially as described and shown.

3. A hat-lining consisting of a continuous sheet having an embossed central portion and of uncut plaited edges.

4. A hat-lining consisting of a continuous sheet provided with the central stiffening-sheet, the embossed central portion, and the plaited edges, substantially as described.

5. A hat-lining consisting of a continuous 65 sheet having the plaited edges and the stiffening applied centrally thereto and extending from one edge to the other.

6. A hat-lining consisting of a continuous sheet having the embossed center, the uncut 70 plaited edges, and the retaining-strip applied externally thereto.

FÖRD. HITCHCOCK ANDERSON. Witnesses:

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