(No Model.)

D. W. NORTHRUP.

Cap and Process of Manufacture.

No. 241,149. Patented May 10, 1881.

Fig. 1.

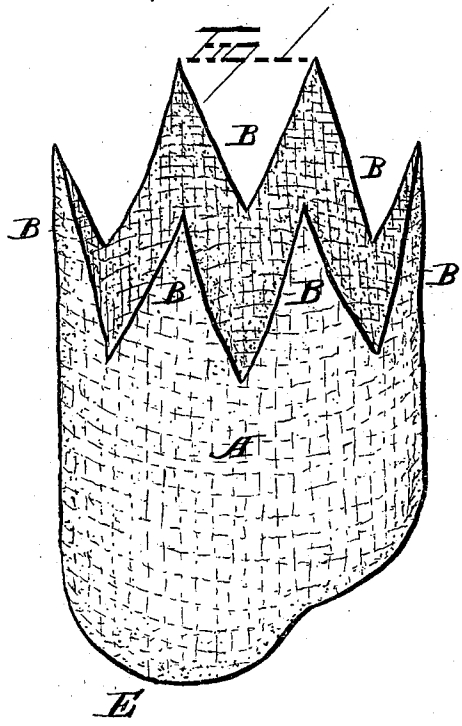


Fig. 2.

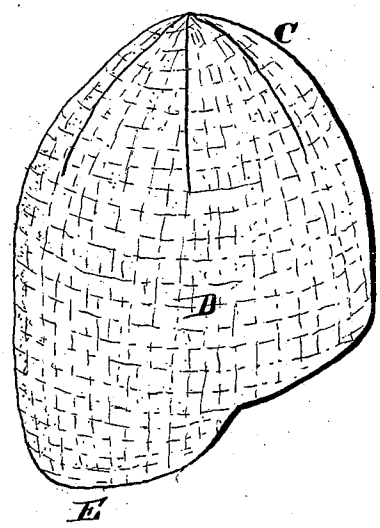


Fig. 3.

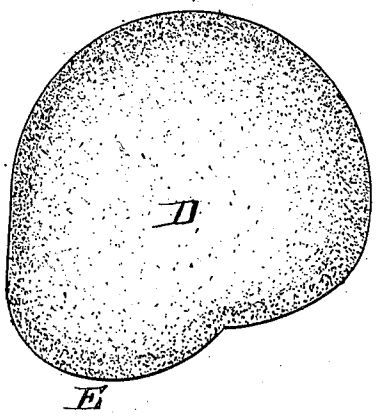
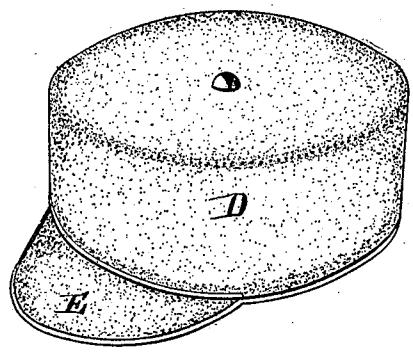


Fig. 4.



WITNESSES

Geo. O. Seymour.

E. Nottingham

INVENTOR

D. W. Northrup.

By Brequett & Brequett

ATTORNEYS

N. PETERS, Photo-Lithographer, Washington, D. C.

UNITED STATES PATENT OFFICE.

DEVILLO W. NORTHRUP, OF UTICA, NEW YORK.

CAP AND PROCESS OF MANUFACTURE.

SPECIFICATION forming part of Letters Patent No. 241,149, dated May 10, 1881.

Application filed April 5, 1881. (No model.)

To all whom it may concern:

Be it known that I, DEVILLO W. NORTHRUP, of Utica, in the county of Oneida and State of New York, have invented certain new and useful Improvements in Caps and in Processes of Manufacture; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to caps, and to an improved process for their manufacture, the object being to produce them out of tubular knitted or woven fabric in such manner that when finished they shall have a texture and appearance resembling felt and show no seams.

With this object in view my invention consists in a process embracing four steps, to wit, pointing the knitted fabric from which the cap is to be formed and sewing the points together to form the crown of the cap, fulling the product of the above-described operation with soap and water to diminish its size, consolidate the mesh, and to obliterate the seams, blocking the article after fulling, and finishing the blocked cap by lining, binding, and trimming.

In the accompanying drawings, Figure 1 represents a section of tubular fabric as pointed and fashioned to adapt it to cover the visor. Fig. 2 shows the same after the points have been sewed together. Fig. 3 represents the article shown in Fig. 2 after it has passed through the process of fulling; and Fig. 4 exhibits the completed cap resulting from blocking, lining, binding, and trimming the article shown in Fig. 3.

A represents a section of tubular knitted fabric woven of any desired fabric that is capable of being fulled. One end of said section A is fashioned to form a series of four, six, or eight points, B, which will form, when sewed together, as seen in Fig. 2, a slightly conical structure, C, destined to be the crown D of the cap. The opposite end of the knitted frabric A is fashioned to form an extending flange, E, which will serve, when the cap is completed, to cover the visor F.

It will be understood that the circumference of the tubular fabric as it comes from the loom is much greater than the circumference of the cap to be formed from it, as the knitted fabric is very much contracted in dimension during the operation of fulling.

After the points B of section A are sewed together, as before explained, the article is subjected to the operation of fulling. During this process the toothed edges of the fibers are interlocked and so intimately associated with each other that the mesh of the fabric by gradual incorporation disappears, the dimension of the tube contracts, while it increases in compactness of texture and thickness, and the seams which join the points are entirely obliterated, and the crown of the cap has the appearance of being formed of a single piece of felt.

The size of the completed caps may be regulated by lengthening or decreasing the duration of the operation of fulling or by varying the size of the tubular fabric employed. After the fulling operation the article, which has now begun to assume the form of a cap, as shown in Fig. 3 of the drawings, is blocked, lined, bound, and trimmed, and emerges as the completed cap shown in Fig. 4 of the drawings.

In caps constructed in accordance with my invention the warmth, durability, and waterproof character of felt is blended with the pliable and elastic character of knitted fabric, the caps readily adapt themselves to the shape of the head, and the heavy and cumbersome appearance of seamed crowns is obviated.

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. As a new article of manufacture, a cap composed of felted, woven, or knitted fabric, substantially as set forth.

2. A cap constructed from a section of tubular woven or knitted fabric by pointing one edge thereof and sewing the points together to form the cap-crown, by fulling the fabric to the required size and texture, and by blocking, lining, binding, and trimming the article after fulling, substantially as set forth.

3. A cap constructed from a section of tubular woven or knitted fabric by pointing one edge thereof and sewing the points together to form the cap-crown, by fashioning one edge to adapt it to cover the visor, by fulling the fabric to the required size, and by blocking

and finishing the article after fulling, substantially as set forth.

4. A process of making caps from woven or knitted fabric, consisting in fashioning the fabric to the required shape, in fulling it to consolidate the mesh and obliterate the seams, and in blocking and trimming the fulled article, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand and seal this 23d day of March, 1881.

DEVILLO W. NORTHRUP. [L. S.]

Witnesses:
W. W. BOUNE,
W. P. CARPENTER.