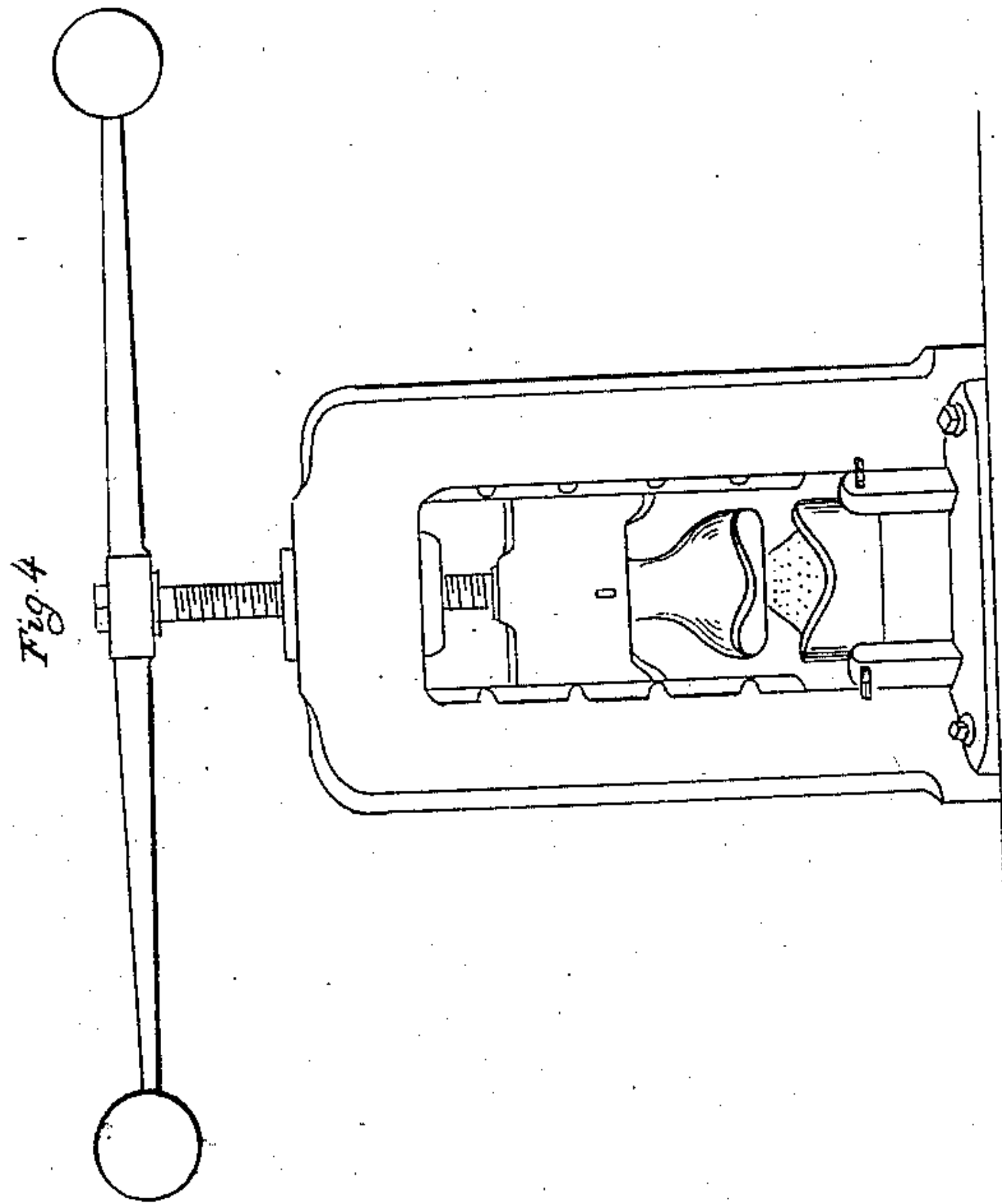


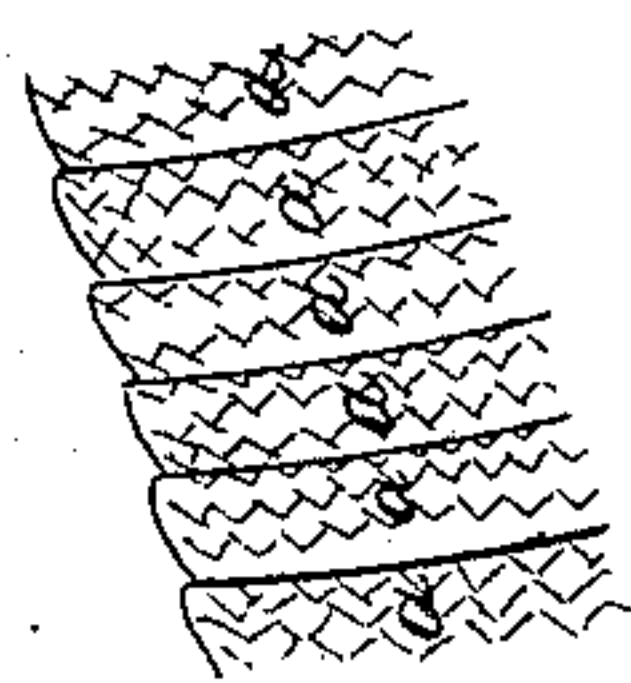
*S. A. Blake.*  
*Pressing Hats.*

*Patented, Dec. 24. 1861.*

*No. 2974.*  
*33.978.*



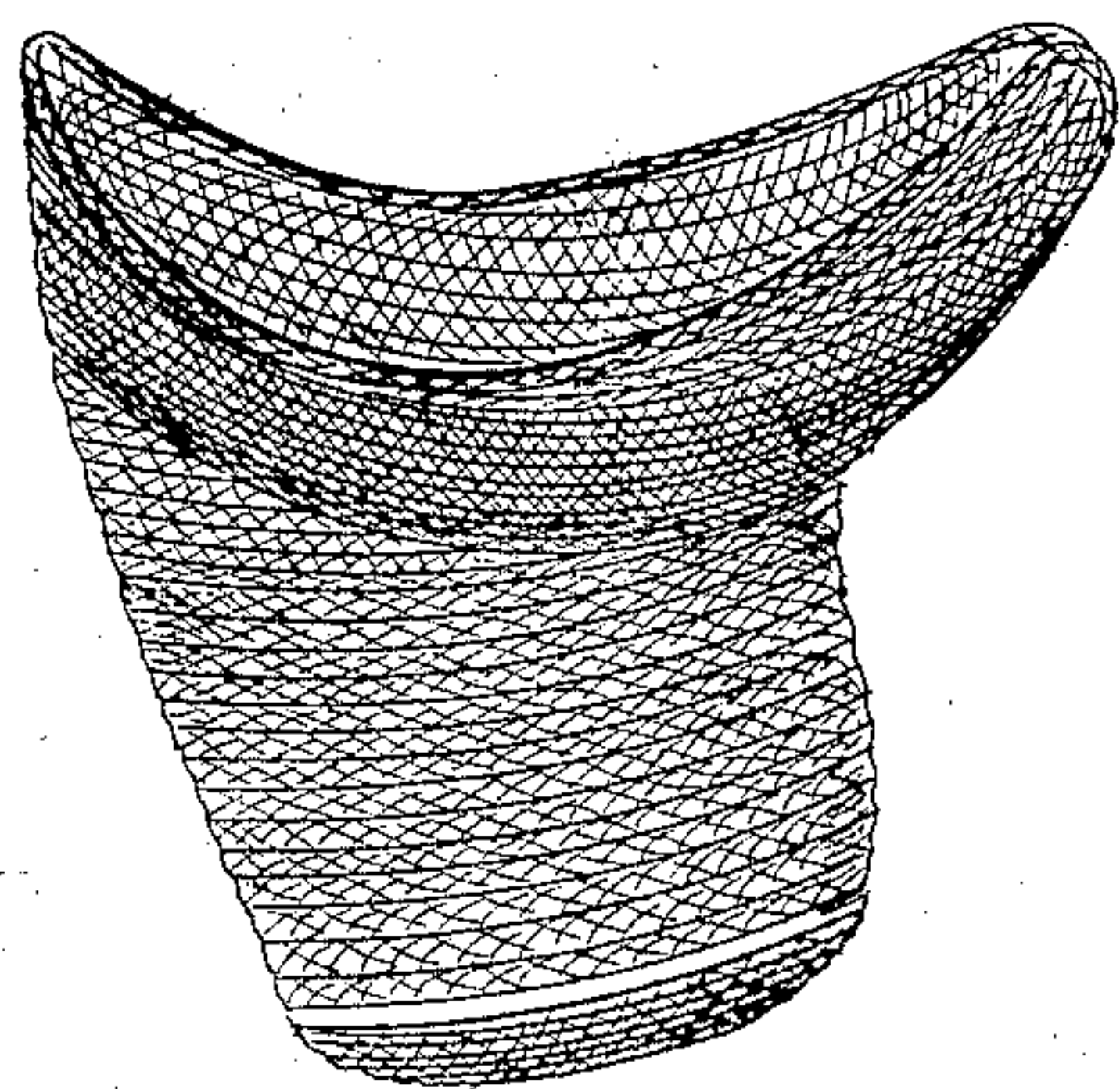
*Fig. 2*



*Fig. 3*



*Fig. 1.*



*Witnesses.*

*James David*

*Inventor.*

*S. A. Blake*

# UNITED STATES PATENT OFFICE.

S. A. BLAKE, OF NEW YORK, N. Y.

## IMPROVEMENT IN BONNETS.

Specification forming part of Letters Patent No. 33,978, dated December 24, 1861.

*To all whom it may concern:*

Be it known that I, S. A. BLAKE, of the city, county, and State of New York, have invented a new and useful Improvement in the Manufacture of Bonnets, Caps, &c.; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a perspective view of a bonnet formed according to my invention. Fig. 2 is a side elevation of a portion of the same in a larger scale than the previous figure. Fig. 3 is a transverse vertical section of the same. Fig. 4 is a front elevation of the press which I use for forming my bonnets, &c.

Similar letters of reference in the several figures indicate corresponding parts.

This invention consists in a bonnet, cap, or other head-covering, the body of which is made of two or more thicknesses of muslin or other suitable fabric united by some adhesive and stiffening substance and shaped and formed into a series of raised stripes by means of suitable dies in such a manner that the sewing together of said stripes is obviated, and that such bonnet, cap, or head-covering is a perfect imitation of the ordinary bonnets or caps made by sewing together a large number of narrow braids of straw or embossed stripes of muslin.

To enable those skilled in the art to make and use my invention, I will proceed to describe it with reference to the drawings.

In order to form a bonnet, I make a sheet by uniting two pieces of muslin or other material by means of starch or other suitable adhesive material. I prefer rice starch for this purpose, as it makes a good stiffening. I then cut from this sheet a single piece or two pieces of proper shape to form the bonnet and tip, and after dampening them and pulling them as nearly as practicable into form over a suitable mold or former I subject them to the action of suitable dies, which may be inserted into a press such as represented in Fig. 4. The female die is provided on its inner surface with a number of creases or grooves formed according to the stripes to be produced on the bonnet. The male die is perfectly smooth on its upper surface, and it is covered with a layer of paper, mill-board, or other suitable material, which when exposed to the pressure of the female die will

readily adapt itself to the inner surface of said die, the whole being arranged similar to the machinery generally used for embossing paper, leather, &c. The blank is now placed upon the male die, and the female die is brought down by means of a screw, so that the fabric assumes the shape of the male die, and at the same time the desired stripes are embossed on its surface. When taken from the press, the surface of the fabric presents a series of stripes *a*, such as represented in Figs. 2 and 3 of the drawings, resembling closely the stripes or braids from which ordinary straw bonnets are made.

In forming a bonnet, cap, or other head-dress by this process it is indispensable that the blank which is to form the body of the bonnet or other head-covering is cut open on one side, in order to place it on the die in such a manner that all its parts are exposed to the action of the dies. The tip, which may be pressed or embossed separately from the body of the bonnet or simultaneously with it, is cut out and inserted after the ends of the body have been joined. The embossing itself gives to the muslin or other fabric the required stiffness, and a bonnet made according to my invention is superior in lightness and in its graceful look to bonnets made according to the ordinary method, and, furthermore, much time is saved, since the sewing together of the several stripes is obviated.

It is obvious that by changing the form of the dies bonnets of different shapes, or caps, or other head-coverings can be made in a manner similar to the one above specified.

I do not claim as my invention the within-described manner of embossing muslin, substantially the same method having been practiced long ago; but,

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

A bonnet, cap, or other head-covering the body of which is made of two or more thicknesses of muslin or other suitable fabric shaped or formed with a series of raised or embossed stripes in imitation of straw or other braid by means of suitable dies, in the manner herein set forth.

S. A. BLAKE.

Witnesses:

M. M. LIVINGSTON,  
JAMES LAIRD.