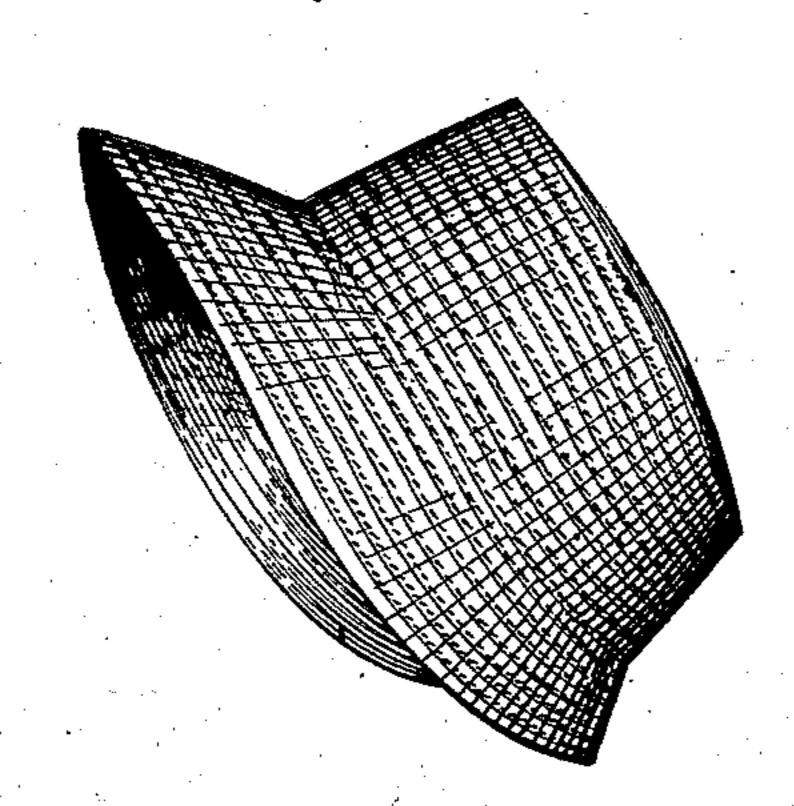
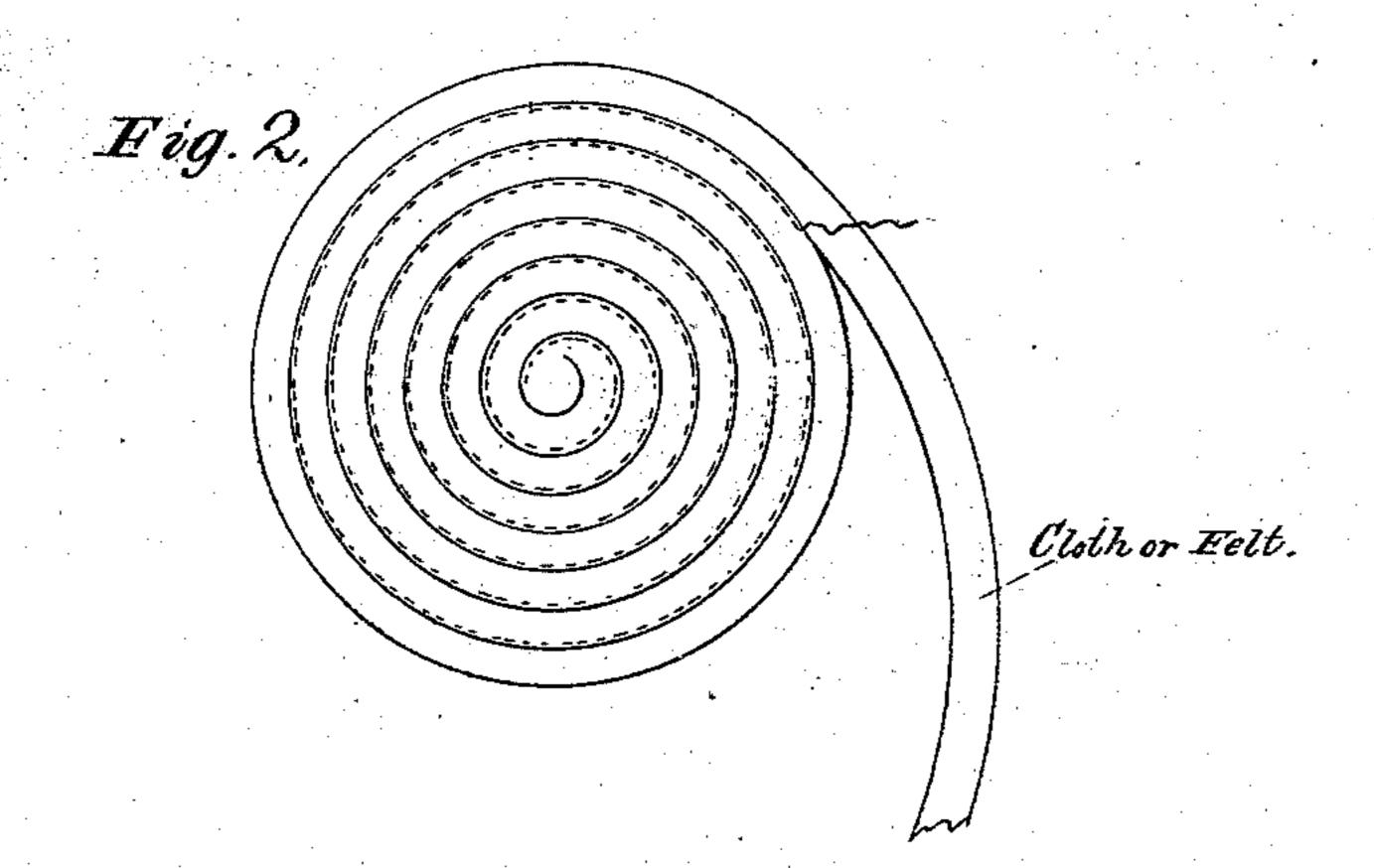
## J. HEIMANN.

Manufacture of Felt or Cloth Hat and Bonnet.

No. 215,275. Patented May 13, 1879.

Fig.1.





Attest: Chas M. Higgmis Johns Havin Inventor. Julius A Einam J. M. Wale, Now Atty

## UNITED STATES PATENT OFFICE.

JULIUS HEIMANN, OF NEW YORK, N. Y.

IMPROVEMENT IN THE MANUFACTURE OF FELT OR CLOTH HATS AND BONNETS.

Specification forming part of Letters Patent No. 215,275, dated May 13, 1879; application filed April 7, 1879.

To all whom it may concern:

Be it known that I, Julius Heimann, of New York city, have invented certain new and useful Improvements in the Manufacture of Felt or Cloth Hats and Bonnets, of which the

following is a specification.

Heretofore, as is well known, cloth or felt hats or bonnets have been formed by pressing sheets of felt on heated dies of the proper shapes. My present invention widely departs from this mode of manufacture; and the novelty of my invention consists in forming felt hats or bonnets from cut strips of cloth or felt sewed concentrically together in the manner of straw goods.

Figure 1 of the annexed drawings represents a lady's felt bonnet, made according to my invention; and Fig. 2 illustrates the mode in which the felt is formed into the hat or

bonnet.

In carrying out my invention I take the pieces or rolls of cloth or felt, and cut them lengthwise into a number of narrow strips, as long as the piece of cloth will allow, and about three-eighths of an inch in width, thus reducing the whole piece of cloth into a large number of narrow strips. These strips are then stitched spirally or concentrically edge to edge, as shown in the drawings, in the same manner as straw goods, either by hand or by machine, and either on blocks or on frames, and in the desired shape of hat or bonnet, as will be understood.

The strips of cloth may, if preferred, be previously embossed with figures or designs of an ornamental character, and the stitching may be of an embroidered nature, and of a different color from the fabric, to give the hats a more fancy appearance, if desired. Moreover, the cloth used may be either a felted or a woven fabric; but a felted fabric is thought'

preferable.

After the hats are sewed, those that have I

been sewed on blocks may be stiffened by an internal surface coating of glue, or by saturating the cloth with a thin size, and finally drying and pressing on blocks. Hats or bonnets that are made on frames, however, will require no such stiffening, as the frame suffices.

It will be understood that in the usual process of making felt bonnets a large portion of the fabric is always wasted; but in my improved mode all the cloth is utilized. In fact, waste pieces of cloth from certain manufactures may be cut up into strips, and utilized for this purpose, provided they are not too short, thus obtaining material very cheaply.

Another advantage of this mode is that the labor required to produce the hats is of a less expensive nature than that necessary for the pressing process, which involves heavy ma-

chines and skilled male help.

Felt hats or bonnets formed in this way constitute a novel and improved article of manufacture, and the hats so formed are much more salable than those produced in the old way, on account not only of the greater cheapness of the new hat, but also owing to their more novel and dressy appearance, which commends them to the taste of the wearer.

What I claim as my invention is—

1. A felt cloth hat or bonnet, formed of narrow strips of cloth or felt, sewed concentrically together in the manner of straw goods,

substantially as herein set forth.

2. The process herein described, for the manufacture of felt or cloth hats or bonnets—viz., first cutting the cloth into long narrow strips, and then stitching these strips concentrically on blocks or frames, in the manner of straw sewing, substantially as herein set forth.

JULIUS HEIMANN.

Witnesses:

CHAS. M. HIGGINS, JOHN E. GAVIN.