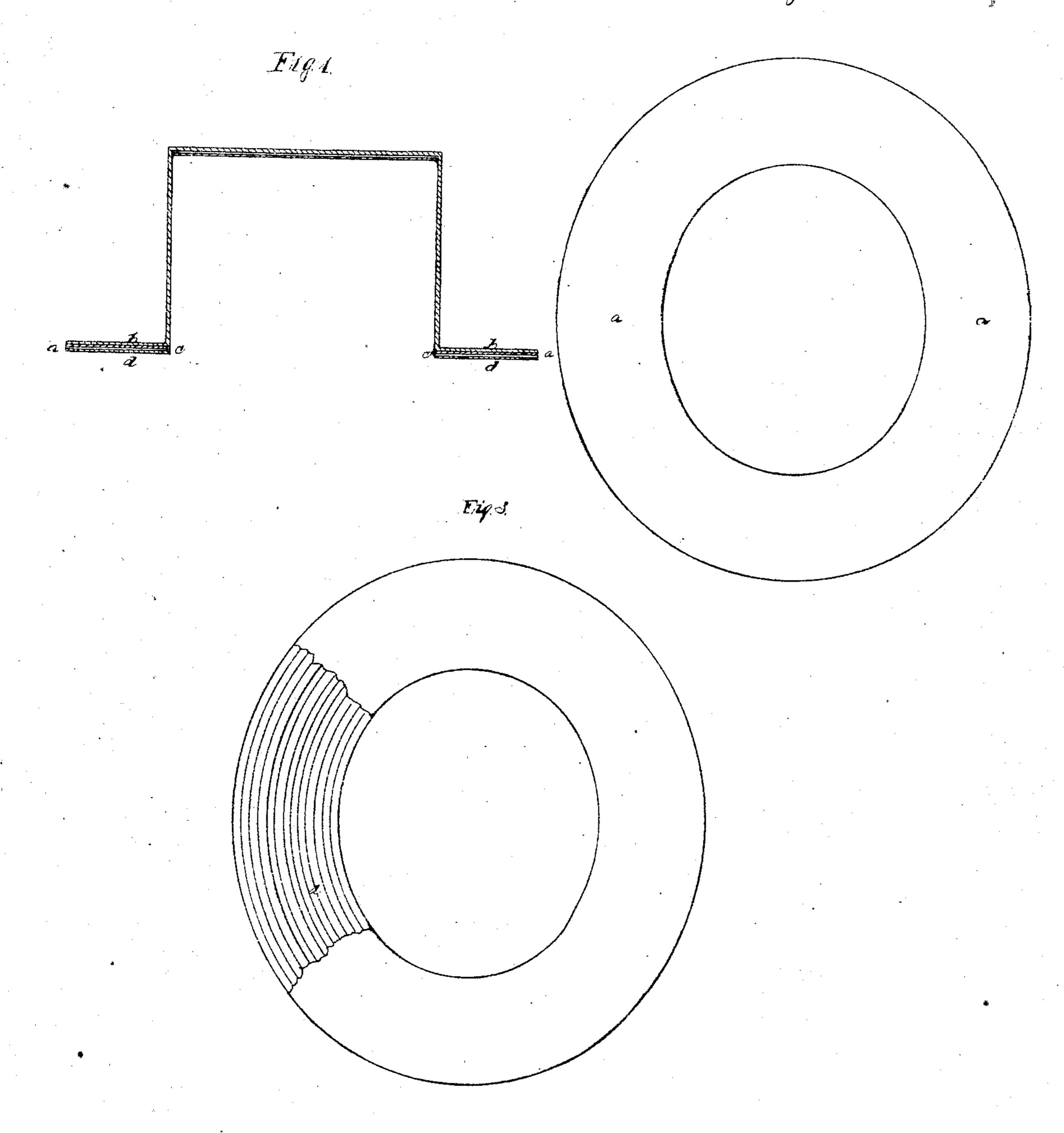
F. Howard. Hats&Caps.

Nº 4/260

Patented Jan. 12, 1864.

Thy.L.



Witnesses.

Holdeland Hearns

Inventor

Frank Howard

United States Patent Office.

FRANK HOWARD, OF BOSTON, MASSACHUSETTS, ASSIGNOR TO VYSE & SONS, OF NEW YORK, N. Y.

IMPROVEMENT IN HATS.

Specification forming part of Letters Patent No. 41,260, dated January 12, 1864.

To all whom it may concern:

Be it known that I, Frank Howard, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Method of Stiffening Hat-Brims and Rendering them Water-Proof; and I hereby declare that the following is a full, clear, and exact description thereof, reference being had 40 the accompanying drawings, making part of this specification, in which—

Figure 1 is a transverse vertical section through a hat constructed after my improved method, the thickness of the brim being exaggerated to show its construction more clearly; Fig. 2, a plan of the paper stiffener; Fig. 3, a plan of the outer covering of paper which is pasted onto the paper stiffener and embossed to imitate the hat.

The nature of my invention consists in providing the under side of the brim of the hat with a covering rendered water-proof and stiffened by suitable preparations. It is intended to be used principally on straw hats, some kinds of which—such as "leghorn," more particularly—have been almost useless by reason of the brims not retaining their proper shape.

To enable others skilled in the manufacture of hats to use my invention, I will proceed to describe my process or way of using it.

I take thick stout paper a, and cut it the proper size and shape to fit the brim, as seen in Fig. 2. I then glue both the hat-brim b and the paper a with a water-proof glue, made as follows: four ounces of best glue and two ounces of isinglass, dissolved in mild ale over a slow fire to the consistence of strong glue; then gradually add one and one-half ounce of

well-boiled linseed oil, and mix the whole together thoroughly, after which it may be made into cakes, which, when used, are to be dissolved in a suitable quantity of ale. The above is the composition which I have found in practice to answer well; but other compositions of water-proof glue may be made to answer the purpose. I then place the paper a on the under side of the brim b, and press the hat in a press of the proper size and shape with steam heat, which renders the paper asoft and allows the straw to be pressed into it, after which I remove the hat and let it dry slowly. I then take two pieces of thin paper, c d, one of which, d, is of the color of the hat, and paste them together with paste, that made of rice flour or starch being preferred, with a little common glue and alum, which, when dry, I dip in a solution of soap and water, with a little glue, and let it remain until it is wet through. I then dip it in a solution of alum and water. After it is dry I varnish that side d the color of the hat with white lac varnish, to give it the required gloss. I then emboss it in imitation of the hat by the use of an electrotype die, as seen in Fig. 3, (a portion only being shown embossed.) I then cut it in shape and put it on the under side like the other.

What I claim as my invention, and desire to secure by Letters Patent, is—

A hat-brim prepared and constructed substantially as herein described.

FRANK HOWARD.

Witnesses:

N. W. STEARNS,

P. E. TESCHEMACHER.