## E. A. WILCOX. STENCIL.

APPLICATION FILED MAR. 11, 1903.

NO MODEL.

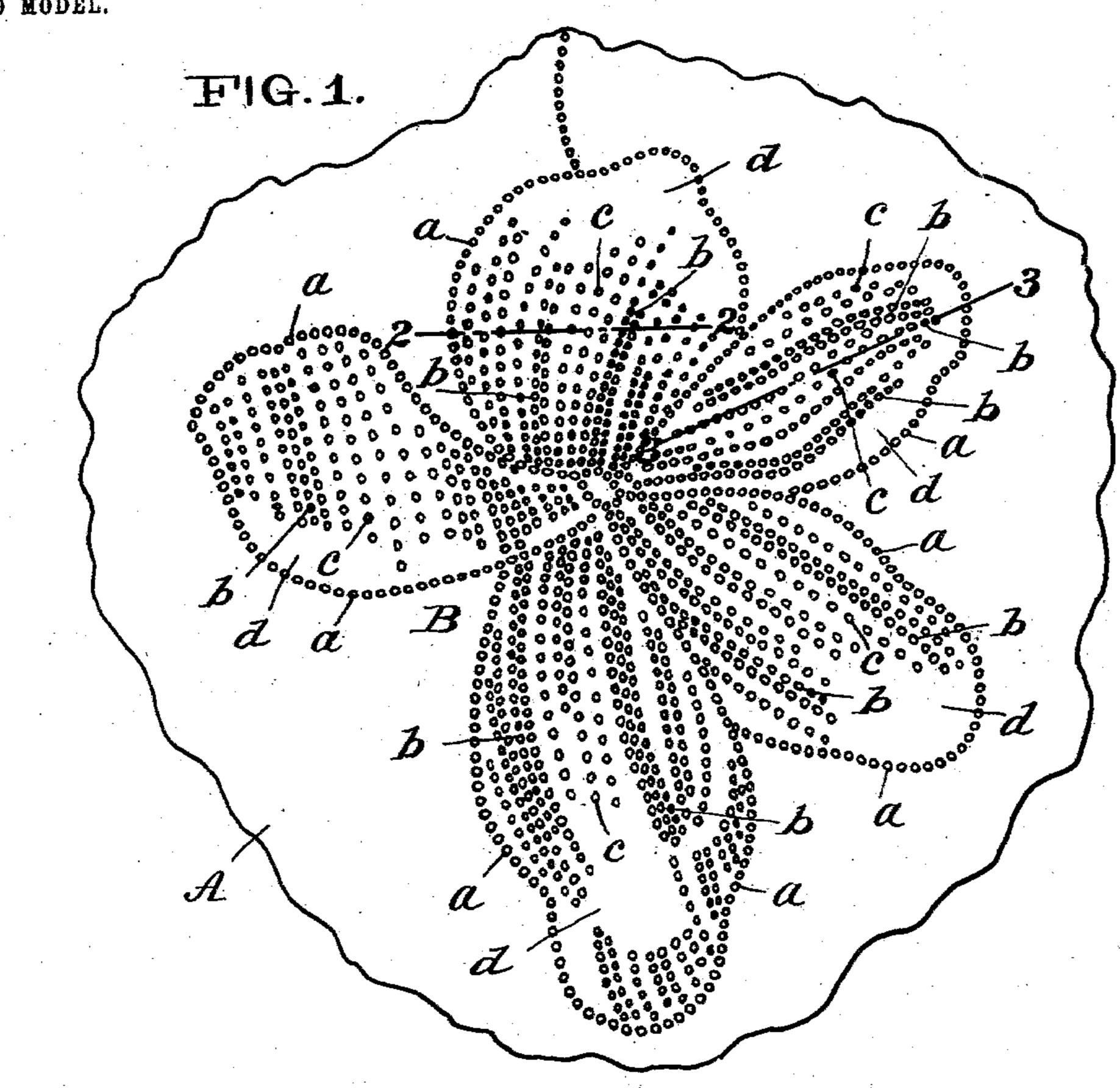
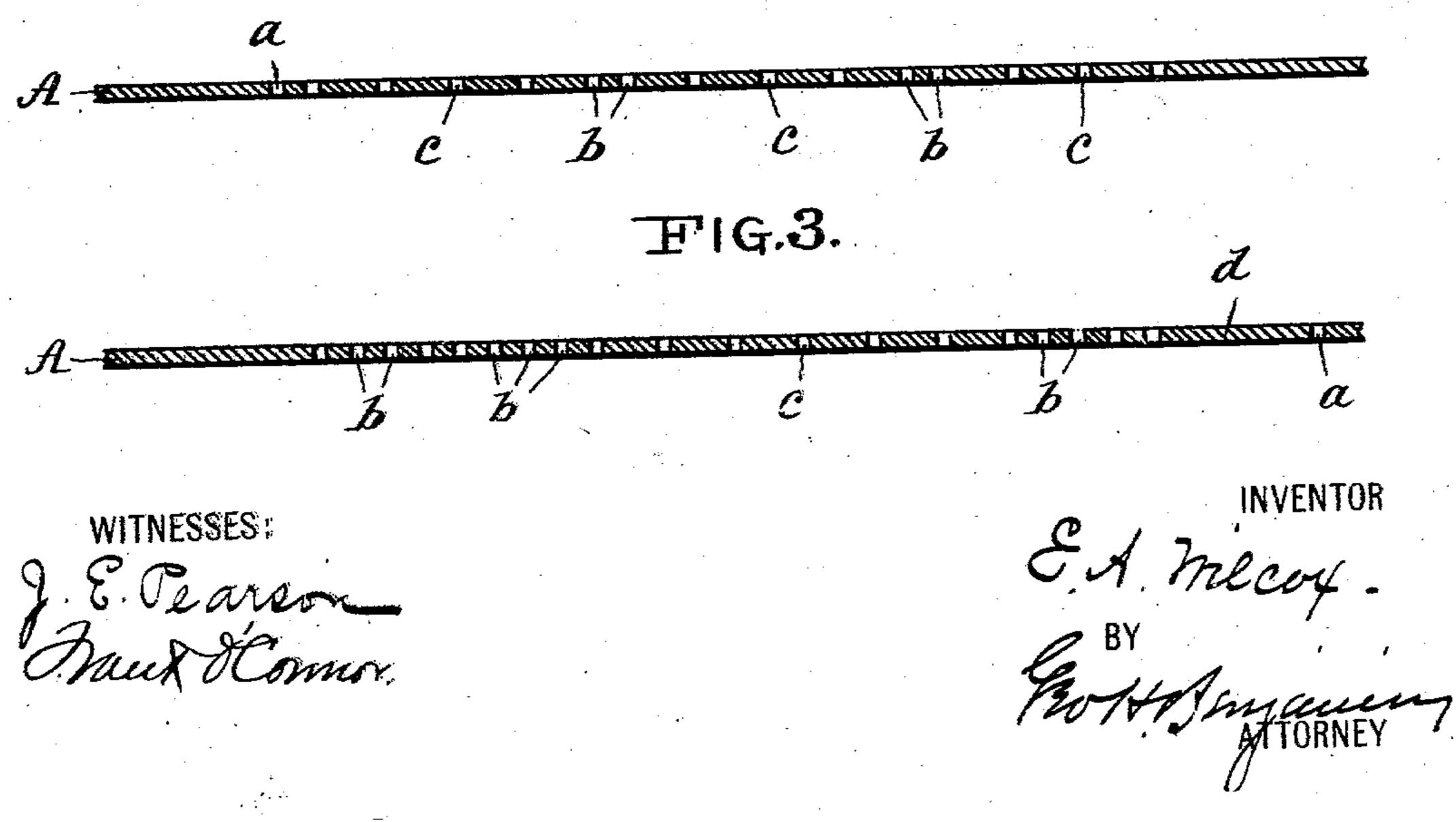


FIG.2.



THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D.C.

## United States Patent Office.

ELIJAH ABBOTT WILCOX, OF NEW YORK, N. Y.

## STENCIL.

SPECIFICATION forming part of Letters Patent No. 740,961, dated October 6, 1903.

Application filed March 11, 1903. Serial No. 147,285. (No model.)

To all whom it may concern:

Be it known that I, ELIJAH ABBOTT WILcox, a citizen of the United States, residing at New York city, county and State of New 5 York, have invented a new and Improved Stencil, of which the following is a specification.

My invention relates to a new and improved stencil by means of which a design of one to or more colors may be applied to a porous fabric.

A most important object of the present invention is to provide a stencil of such construction as to adapt it to produce upon the 15 fabric a design having a shaded effect; and another object of the invention is to provide a stencil capable of producing a shaded design upon a fabric and so construced that the edges of the design of the stencil are not 20 liable to curl up, so as to cause or permit the color to flow under the cut edges of said stencil and produce a design which is irregular and ragged on the edges and smeared.

In short, the present invention has for its 25 purpose the provision of a stencil by the use of which designs may be economically and practically produced on fabrics in one or more colors and having sharp and clear outlines and shaded bodies, thus producing perfect 30 figures and most artistic effects for the guidance of an embroiderer, for example. This object is well accomplished by the construction shown in the accompanying drawings, in which—

Figure 1 is a plan view of a stencil constructed in accordance with my invention, and Figs. 2 and 3 are sections on the lines 2 2 and 33, respectively.

The stencil consists, essentially, of a body 40 A, of paper or other suitable fabric. The design which it is desired to apply is formed through said stencil by perforating it with varying minute perforations, (indicated as a whole by B.) The perforations which are 45 shown in the drawings are very much larger than they are made in the practice of this invention and are exaggerated in size and relative arrangement for clearness of illustration.

Attention is called to the fact that the outline of the design is produced by perforations

that the perforations in the body of the design vary, being either at different distances from each other or are of different sizes. By 55 thus varying the perforations a shaded effect is produed in the design. It will be understood that the lines of perforations indicated by b, being closer together or larger than the perforations c, will produce a shade of a 60 darker appearance than that which is produced by said perforations c and that the imperforate sections d of the stencil will leave corresponding uncolored or unprinted portions within the body of the design. Thus 65 by properly positioning the perforations with relation to each other or varying the sizes of the same most artistically-shaded designs may be produced upon fabric in a simple and thoroughly practical way. Moreover, as 70 the perforations are very minute and as the contour of the figure as well as the body thereof is produced by perforations the stencil will be of a very durable construction and the design will be sharp, clear, and unblurred 75 on its edges as well as in its body.

In case a design is to represent several colors—as, for instance, a vine with green leaves and a violet—a plurality of stencils is preferably employed, each stencil complement- 80 ing the other and each containing that portion of the design which is to be produced in one color.

To use the stencil, it is applied over a porous fabric made of cotton, linen, or other 85 suitable material and the color is rubbed over the surface of the stencil. The color passes through the perforations and is absorbed by the porous material, with the result that the color passing through the mi- go. nute perforations coalesces to a greater or less extent in accordance with the relation of the perforations to each other or the sizes thereof, so that the design upon the fabric is indicated by a solid color, but, however, of 95 different shades, except where an appreciable imperforate section of the design appears in the stencil, which of course remains uncolored in the design and adds to the shaded effect.

Having thus described my invention, I claim100

1. A stencil consisting of a body in which a and to the further and very important fact is formed a number of varying minute per-

forations, said perforations being relatively such as to produce a shaded effect in the

body of the design.

2. A stencil consisting of a body in which 5 is formed a number of varying minute perforations, said perforations being so arranged as to produce a sharp outline of the design and relatively such within said outline that when the color is applied to the surface of to the stencil the resultant design will have a shaded body.

3. A stencil consisting of a body in which FRANK O'CONNOR.

is formed a number of varying minute perforations, said perforations being relatively such that when the color is applied to the 15 surface of the stencil the resultant design will have a sharp outline and a body partially solid and partially shaded.

In testimony whereof I affix my signature

in the presence of two witnesses.

ELIJAH ABBOTT WILCOX.

Witnesses:

J. E. PEARSON,