

No. 736,635.

PATENTED AUG. 18, 1903.

W. RUMPF.

WOVEN FABRIC AND METHOD OF PRODUCING SAME.

APPLICATION FILED AUG. 1, 1902.

NO MODEL.

Fig. 1.

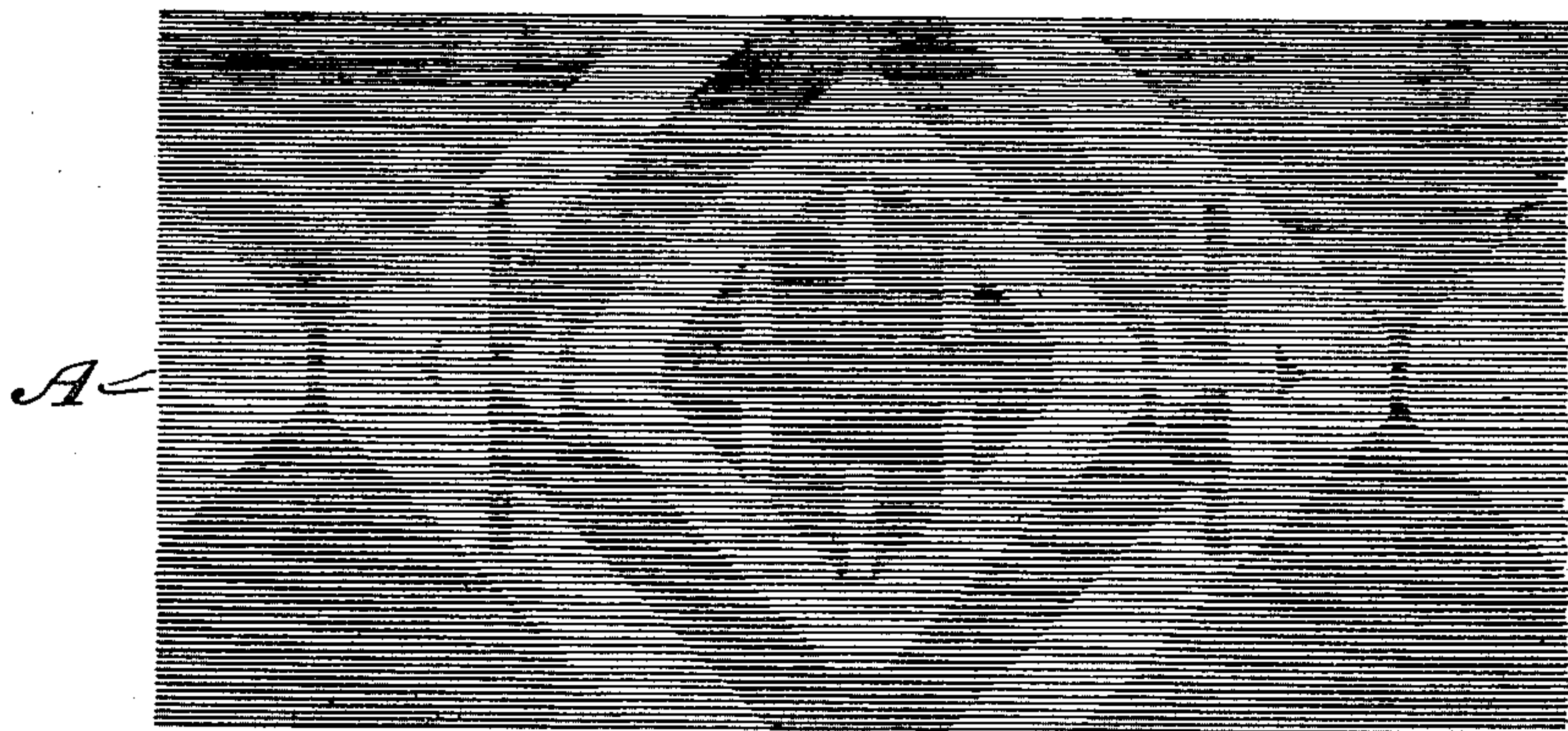


Fig. 2.

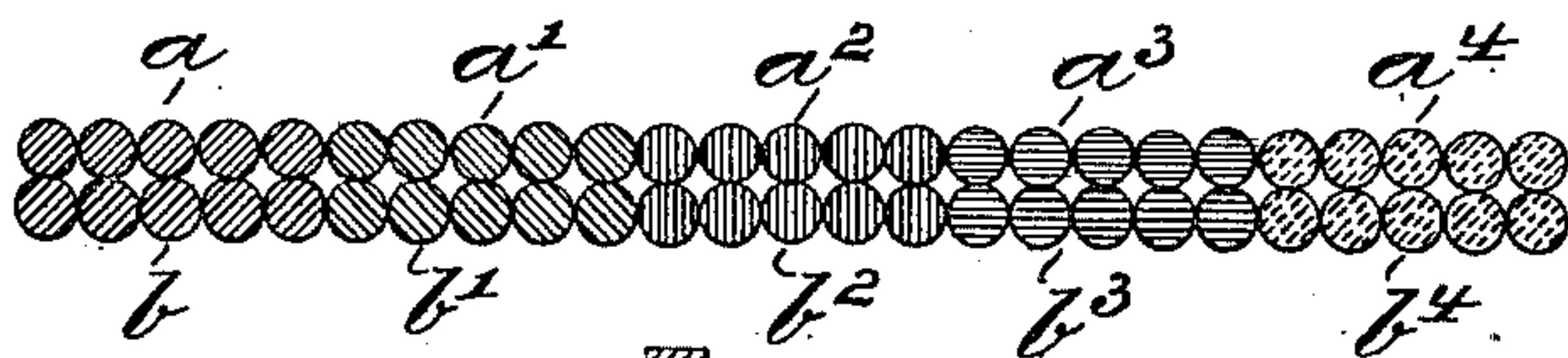
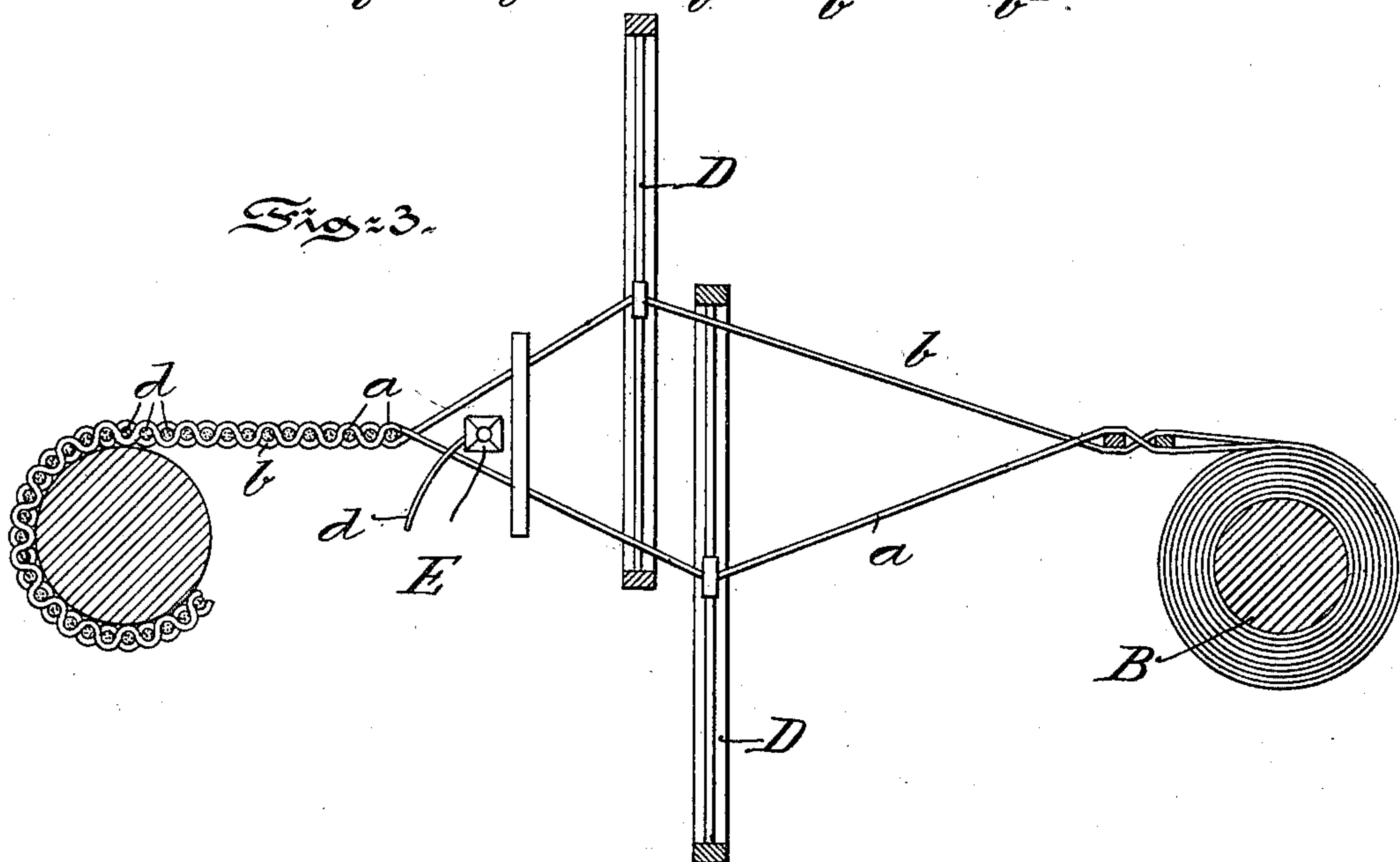


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

WILLIAM RUMPF, OF EDEN, PENNSYLVANIA, ASSIGNOR TO HIMSELF AND
FREDERICK RUMPF, JR., TRADING AS FREDERICK RUMPF'S SONS, OF
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WOVEN FABRIC AND METHOD OF PRODUCING SAME.

SPECIFICATION forming part of Letters Patent No. 736,635, dated August 18, 1903.

Application filed August 1, 1902. Serial No. 117,930. (No specimens.)

To all whom it may concern:

Be it known that I, WILLIAM RUMPF, a citizen of the United States, residing at Eden, in the county of Bucks and State of Pennsylvania, have invented certain new and useful Improvements in Woven Fabrics and Methods of Producing the Same, of which the following is a specification.

My invention has relation to a colored and figured woven fabric and to the method of producing the same, and in such connection it relates to a fabric wherein the pattern and colors are printed upon the warp direct prior to the interweaving of the weft therewith.

The principal object of my invention is to provide a colored and figured fabric in which the colors and pattern are alike on both faces of the fabric and in which the warp-threads are arranged in two or more planes and each plane being colored or printed with the design before beaming in the loom and prior to the interweaving of the weft-threads therewith, said printed warp-threads appearing upon both faces of the fabric and inclosing or burying the said weft-threads.

The nature and scope of my present invention will be more fully understood from the following description, taken in conjunction with the accompanying drawings, forming part hereof, in which—

Figure 1 is a top or plan view of the warp-threads of the fabric having stenciled or printed upon the threads the particular design or pattern and colors for the fabric. Fig. 2 is a cross-sectional view, enlarged, of a portion of the warp-threads of Fig. 1; and Fig. 3 is a diagrammatic view illustrating the weaving of the fabric.

Referring to the drawings, A, Fig. 1, represents the warp-threads of the fabric upon which the design or pattern in colors has been imprinted or stenciled in such a manner that on both planes of the two-ply warp appears the colored pattern. As indicated in cross-section in Fig. 2, after the coloring or stenciling the warp-threads lie in planes, and in each plane they are side by side and in groups of colors corresponding in detail to the design in the fabricated article. At each part of

the pattern the group of warp-threads *a* of one plane is of the same color as the warp-threads *b* of the other plane lying directly beneath the warp-threads *a*. In the same manner groups *a'*, *a''*, *a'''*, and *a''''* overlie and correspond in color with the groups *b'*, *b''*, *b'''*, and *b''''* of the other plane of warp-threads.

In weaving the fabric each plane or layer of warp-threads which is to enter into the fabric is first printed or stenciled separately, so that when spread flat the designs or figures in the various colors appear complete upon the layer or plane of warp. Each layer or plane of warp is a duplicate, so far as designs or figures are concerned, of the other layers or planes used in the fabric. After being so printed or stenciled the layers or planes are beamed in such a manner that corresponding designs or figures register throughout all the layers, as clearly illustrated in Fig. 2. The warp-threads *a* and *b* are then manipulated by the heddles D, and the weft-threads *d* thrown in by the shuttle E, so that in the finished fabric the warp-threads *a* and *b* appear upon both faces of the fabric and inclose or bury the weft-threads *d*. This manipulation of the warp-threads *a* and *b*, with the design previously printed thereon, results in the production of a fabric wherein the design or pattern is not so distinct as it would appear upon the warp-threads; but the pattern and colors are, however, mellowed and blended to give to the fabric a rich or oriental appearance, of course to some extent controlled by the different colors employed, without, however, effacing the general outlines of the design or defined pattern of the fabric.

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

1. The improvement in the art of weaving colored and figured fabrics, which consists in first arranging the warp-threads in separate planes, then printing the pattern or design upon each plane of warp-threads separately, and finally weaving the wefts between the warp-threads, substantially as and for the purposes described.

2. A colored and figured woven fabric, comprising planes of warp-threads registering with each other, each plane having the design or pattern of the fabric printed or stenciled in colors thereon and a set of weft-threads interwoven with both planes of patterned warp-threads so that said weft-threads are inclosed or buried by said patterned warp-threads. 15
3. A colored and figured woven fabric, comprising two planes of warp-threads superposed and registering with each other, each plane having the design or pattern of the fabric printed or stenciled in colors thereon and a set of weft-threads interwoven with the patterned warp-threads so that said weft-threads are inclosed or buried by said patterned warp-threads. 20

In testimony whereof I have hereunto set my signature in the presence of two subscribing witnesses.

WM. RUMPF.

Witnesses:

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