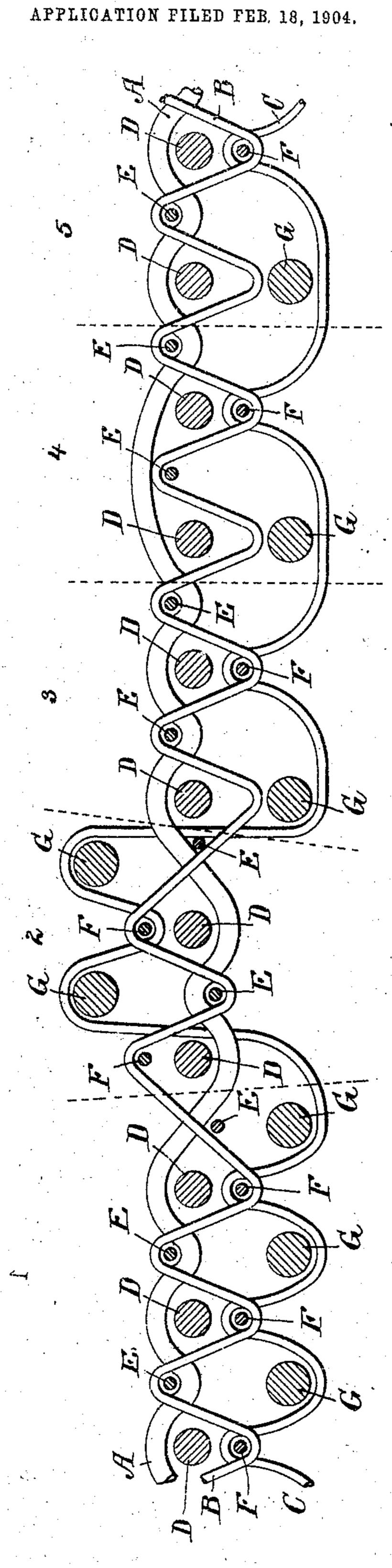
## J. ELIAS.

DOUBLE FACED WOVEN FABRIC.

NO MODEL



Witnesses: Minnesses: William Billarks. Inventor: Insepte Elias he Handing + Handing alter.

## United States Patent Office.

JOSEPH ELIAS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIM-SELF, SOLOMON SELIG, AND MORRIS A. KAUFMAN, OF PHILADELPHIA, PENNSYLVANIA, TRADING AS THE MOSS ROSE MFG. CO.

## DOUBLE-FACED WOVEN FABRIC.

SPECIFICATION forming part of Letters Patent No. 772,709, dated October 18, 1904.

Application filed February 18, 1904. Serial No. 194,218. (No specimens.)

To all whom it may concern:

Be it known that I, Joseph Elias, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Double-Faced Woven Fabrics, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, which forms a part of

10 this specification.

The object of my invention is to produce a double-ply and homogeneous fabric suitable for curtains, couch-covers, draperies, or the like having one ply formed of figuring-warp, 15 binder-warp, and stuffer-weft and binderweft, a type of which construction is a single-faced tapestry. On the other ply are figuring-weft, preferably of chenille or of a similar pile nature, and binder-warp, the two 20 plies being secured together to form a homogeneous double-ply fabric by means of an intermediate binder-weft, around which the binder-warp of each face passes. In practice I can use intermediate weft equal in number 25 to the stuffer-weft, or I need only use intermediate weft equal in number to the figuring or pile weft where the pile or figuring weft are less in number than the stuffer-weft.

The construction of my improved fabric 3° may be readily understood by reference to the accompanying drawing, which shows a section on the line of a set of the warp.

This fabric on one ply is composed of the figuring-warp A, the stuffer-weft D, the binderswarp B, and the binder-weft E, which construction in sections 1, 3, 4, and 5 appears on the top or upper ply, as shown, while in section 2 it appears on the lower ply, as shown. In sections 1, 3, and 5 a ground effect is shown, while in section 4 the figuring-warp A floats to form the figure. So far this is descriptive of a tapestry fabric. The other ply of this fabric is composed of a heavy figuring-weft G, preferably of chenille or similar pile nature, and the binder-warp C forming, if chenille be used, a chenille fabric. In sections 1, 3, 4, and 5 this chenille or similar pile weft

appears on the lower ply, as shown, while in section 2 it appears on the upper ply, as shown. In order to form a homogeneous dou- 50 ble-ply fabric from the two plies described, I employ the intermediate wefts F. Wherever these wefts appear or are thrown, the shed is so formed that they lie between the binderwarp B and the binder-warp C, so that at 55 these points the binder-warp from each face passes around said intermediate weft, forming the fabric into a homogeneous double-ply fabric. In sections 1 and 2 I show intermediate weft F used equal in number to the 60 stuffer-wefts D, while in sections 3, 4, and 5 I show the intermediate weft equal in number to the pile-weft G, which are in number one-half that of the stuffer-weft D.

As may be seen, with this fabric I am en- 65 abled to produce a chenille or pile effect entirely upon one face and a tapestry effect upon the other face, or by at different points transferring from face to face I can produce on one face a countersunk tapestry effect contiguous 70 to the pile effect and on the other face a raised pile effect contiguous to a tapestry effect.

Of course the sections shown in the drawing are illustrative sections illustrating the capacity of my improved fabric. My im- 75 proved fabric is independent of the precise number of intermediate wefts F or their numerical relation either to the stuffer-weft D or pile-weft G. My fabric is also independent of whether the pile construction appears 80 thrown up on one face and the tapestry construction on the other face throughout the fabric or whether there is at different points a transference of pile and tapestry constructions from one face to the other.

Having now fully described my invention, what I claim, and desire to protect by Letters

Patent, is—

1. A homogeneous double-ply fabric having in one ply figuring-warp, binder-warp, 90 stuffer-weft and binder-weft, and in the other ply figuring-weft, and binder-warp, and intermediate binder-weft around which the binder-warp of each ply passes.

2. A homogeneous double-ply fabric having in one ply figuring-warp, binder-warp, stuffer-weft and binder-weft, and in the other ply figuring-weft and binder-warp, and intermediate binder-weft, equal in number to the figuring-weft, around which the binder-warp of each ply passes.

3. A homogeneous double-ply fabric having in one ply figuring-warp, binder-warp, stuffer-weft and binder-weft, and in the other ply pile-weft and binder-warp, and intermediate binder-weft around which the binder-

warp of each ply passes.

4. A homogeneous double-ply fabric hav-

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ing in one ply figuring-warp, binder-warp, 15 stuffer-weft and binder-weft, and in the other ply pile-weft and binder-warp, and intermediate binder-weft, equal in number to the pile-weft, around which the binder-warp of each ply passes.

In testimony of which invention I have hereunto set my hand, at Philadelphia, on this 15th

day of February, 1904.

JOSEPH ELIAS.

Witnesses:

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M. M. Hamilton, William B. Marks.