

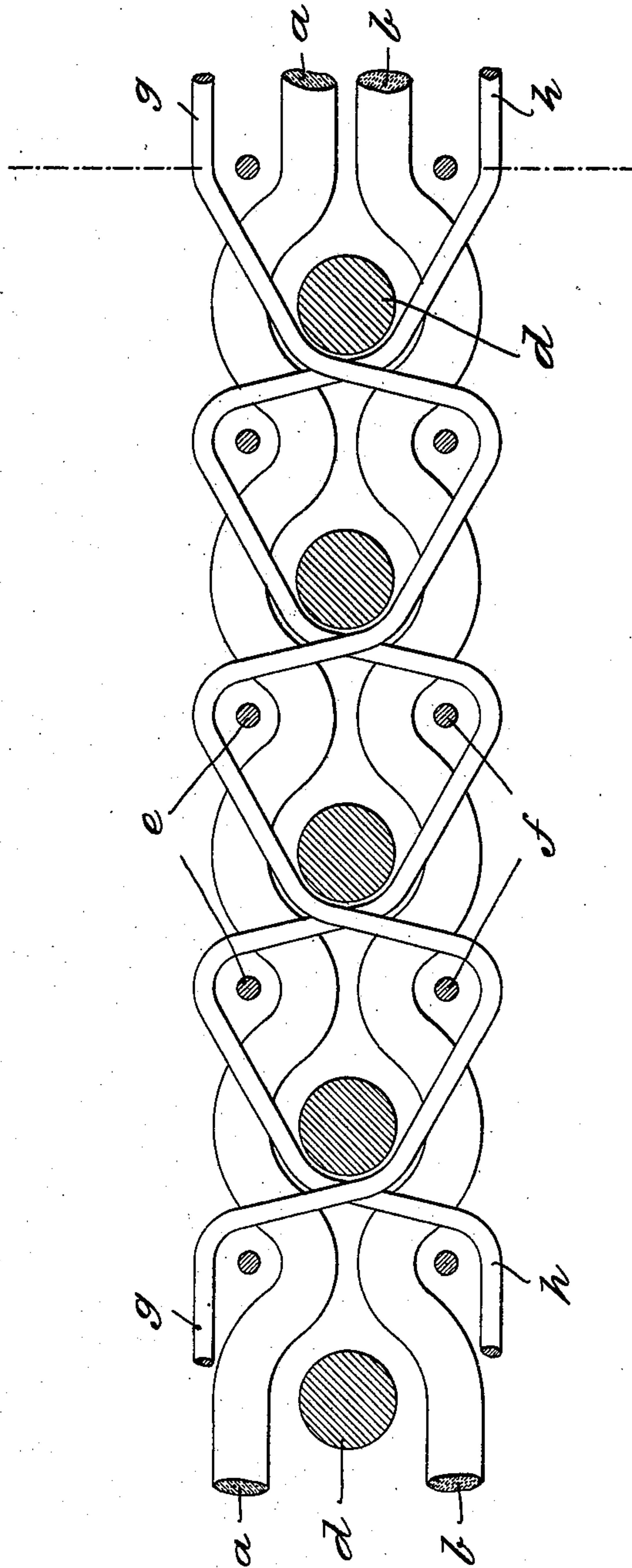
No. 657,940.

Patented Sept. 18, 1900.

R. JOHNSTON.  
WOVEN FABRIC.

(Application filed June 29, 1900.)

(No Model.)



Witnesses:  
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# UNITED STATES PATENT OFFICE.

ROBERT JOHNSTON, OF PHILADELPHIA, PENNSYLVANIA.

## WOVEN FABRIC.

SPECIFICATION forming part of Letters Patent No. 657,940, dated September 18, 1900.

Application filed June 29, 1900. Serial No. 22,023. (No specimens.)

*To all whom it may concern:*

Be it known that I, ROBERT JOHNSTON, a citizen of the United States, residing at the city of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Woven Fabrics, of which the following is a specification.

My invention has relation to a woven fabric, and in such connection it relates particularly to the structure and to the arrangement of the warps and wefts to constitute the fabric of my invention.

The principal object of my invention is to provide a thick double-faced and homogeneous fabric suitable for portières, couch-covers, and the like, in which both faces are ornamented or figured by heavy warp-threads, one set of the figuring warp-threads remaining in one plane to constitute the figure for one face only of the fabric and the other set remaining in a parallel plane to constitute the figure for the other face of the fabric, and said figuring warp-threads being used in conjunction with weft-threads of alternately heavy and light texture, the heavy or stuffer weft-threads remaining always during the weaving of the body of the fabric between the two sets of figuring warp-threads, while the light weft-threads are arranged in sets of two, one in each set being shot above the upper heavy figuring warp-thread, while the other in each set is shot below the lower heavy warp-thread, said warp and weft threads being combined or united by two light binder warp-threads, which inclose one heavy or stuffer weft and one set of two light weft-threads in a single set.

My invention, stated in general terms, consists of a woven fabric having the structure and with warps and wefts arranged in substantially the manner hereinafter described and claimed.

The nature and scope of my invention will be more fully understood from the following description, taken in connection with the accompanying drawings, forming part hereof, illustrating in sectional view a fabric embodying the main features of my invention, the section being taken parallel to the warp-threads of the fabric.

Referring to the drawing, *a* and *b* are respectively the upper and lower heavy figuring warp-threads, each of which, as shown, remains constantly in one plane to constitute the figure or ornamentation of respectively the upper and lower faces of the fabric. Between these two warp-threads *a* and *b* and in the body of the fabric is arranged a series of heavy stuffer weft-threads *d*. Above the upper warp *a* and below the lower warp *b* are arranged, respectively, the upper and lower light weft-threads *e* and *f*, which constitute together a set of light wefts, between which the two warps *a* and *b* are located. These sets of light wefts are arranged in series and alternate with the series of heavy stuffer-wefts *d*. A set of light wefts *e f* and one stuffer-weft *d* are tied together in a single set by two light binder-warps *g* and *h*, and when so tied the wefts serve to bind the warp-threads *a* and *b* into a homogeneous structure.

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

A double-faced, homogeneous woven fabric having both faces figured or ornamented by heavy warp-threads, the said fabric consisting of two sets of heavy figuring warp-threads, one set remaining in one plane of the fabric and the other set remaining in the other or parallel plane, a series of heavy stuffer weft-threads shot between the two sets of heavy warp-threads, a series of light weft-threads arranged in sets of two and shot into the fabric in alternate series with the heavy stuffer-wefts, the two weft-threads being arranged respectively above the upper figuring heavy warp-threads and below the lower figuring heavy warp-threads, and two light binder-warps inclosing one heavy stuffer-weft and one set of two light weft-threads to bind the warps and wefts into a homogeneous structure, substantially as and for the purposes described.

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

ROBERT JOHNSTON.

Witnesses:

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