

No. 746,298.

PATENTED DEC. 8, 1903.

T. DAFFIN.
WOVEN CARPET FABRIC.
APPLICATION FILED JULY 25, 1902.

NO MODEL.

Fig. 1.

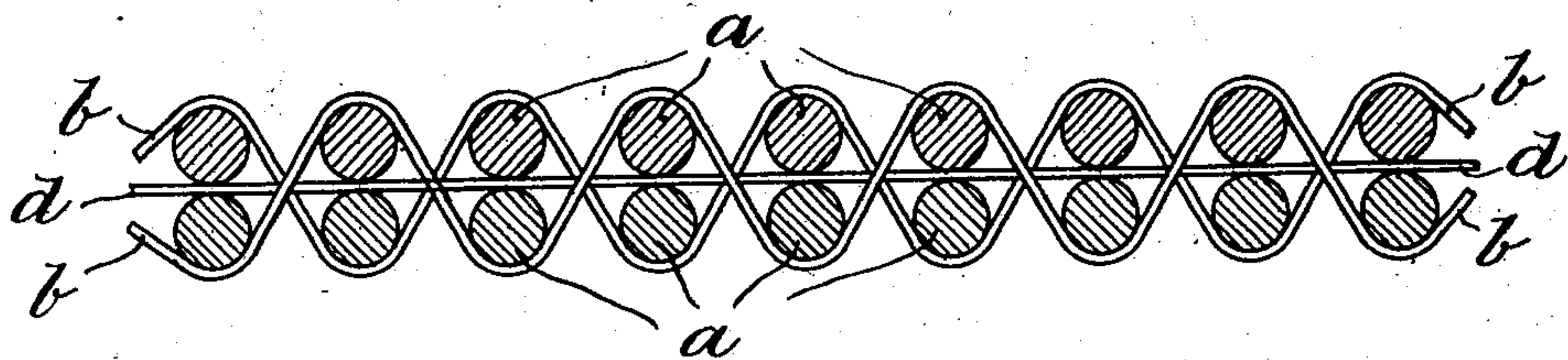


Fig. 2.

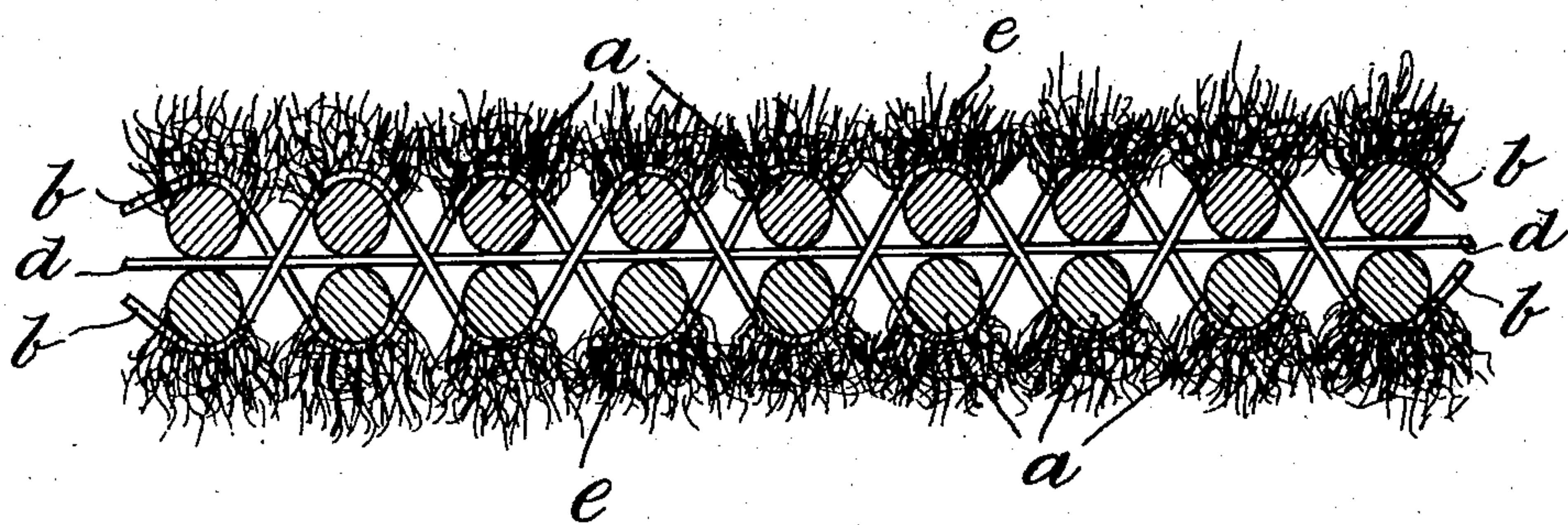
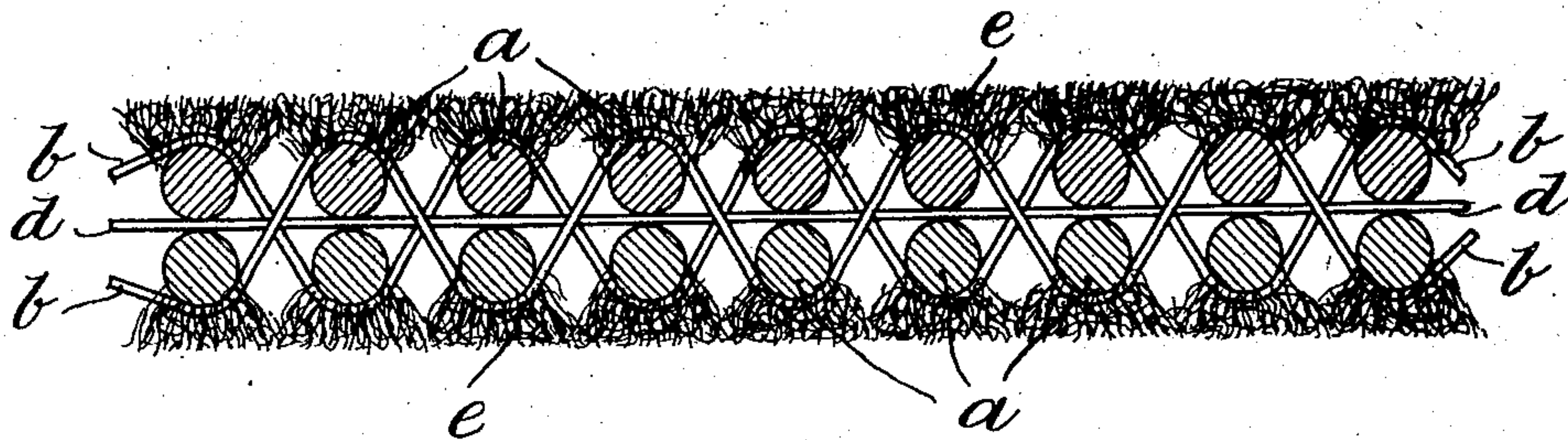


Fig. 3.



Witnesses:
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UNITED STATES PATENT OFFICE.

THOMAS DAFFIN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO ROBERT T. HOGG, OF FRANKFORD, PHILADELPHIA, PENNSYLVANIA.

WOVEN CARPET FABRIC.

SPECIFICATION forming part of Letters Patent No. 746,298, dated December 8, 1903.

Application filed July 25, 1902. Serial No. 116,947. (No specimens.)

To all whom it may concern:

Be it known that I, THOMAS DAFFIN, 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 Carpet Fabrics, of which the following is a specification.

My invention has relation to a carpet fabric formed of interwoven fibrous threads having a velvety face formed of a pilous layer napped or raised from the body of the interwoven threads, the interwoven threads forming coloring and pattern effects and the pilous layer mellowing and blending the coloring and pattern effects of the interwoven threads.

Heretofore in closely-woven carpets, such as ingrain or the cheaper qualities of Brussels, the interweaving of twisted warp and weft threads has given to the finished product a harsh and striated appearance. This was particularly noticeable in fabrics in which the pattern and color effects appeared upon one or both faces and in which both weft and warp threads were used for figuring and coloring effects and in which either the weft-threads or the warp-threads were relatively thin with respect to the warp-threads or weft-threads.

By my present invention the face or body, or both, threads of the fabric—such as body Brussels, tapestries, ingrain, or analogous fabrics—are first raised or napped into a pile from the fibers of the threads, and thereafter the pilous face or layer is sheared to form a face or layer of substantially uniform surface and thickness, as required, in either one or both faces of the woven fabric.

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, in which—

Figure 1 is a sectional view of an ingrain carpet fabric, the section being taken at right angles to the weft-threads and illustrating the fabric before treatment. Fig. 2 is a view similar to Fig. 1, but illustrating the napping or raising of the fibrous weft and warp threads into a pilous layer upon both faces of the fabric; and Fig. 3 is a view similar to Fig. 2, but illustrating the finished carpet fabric.

Referring to the drawings, Fig. 1 illustrates, for example, an ingrain carpet fabric formed of the weft-threads *a*, binder warp-threads *b*, and stuffer-threads *d* in the usual manner. This fabric, as shown, has two faces, and hence in the carrying out of my invention it is desirable to treat both faces of the fabric. The first step in this treatment is to raise or nap the fibers of both weft *a* and warp *b* into a pilous layer *e* on both faces or on one face only, as occasion requires. This pilous layer *e* is relatively long and thick, so as to effectually conceal when ingrain carpet is treated the crossing of the warps and wefts *a* and *b* and to fill in the spaces between adjacent warps *a* and adjacent wefts *b*. The layers *e* of pile are then cut or sheared to a uniform surface, as illustrated in Fig. 3. The operation of forming the pile *e* and in shearing the same not only fills in the spaces between warp and weft, but gives to the fabric an appearance of increased thickness and of a velvety nature. The colors of the warp and weft threads are also more effectively blended and toned down, so that the fabric has a handsomer and richer appearance than before treatment. The invention can be applied also to cheaper grades of Brussels carpet, tapestries, or the like, in which instance the surface threads are raised or napped and then sheared, and the treatment will be found to not only make uniform the surface, as well as thickness of the fabric, but also mellow the pattern and color effects of the same.

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

A carpet fabric formed of interwoven fibrous threads having a velvety face formed of a pilous layer napped or raised from the body of the interwoven threads, said interwoven threads forming coloring and pattern effects, and said pilous layer mellowing and blending the coloring and pattern effects of said interwoven threads.

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

THOMAS DAFFIN.

Witnesses:

J. WALTER DOUGLASS,
THOMAS M. SMITH.