

J. ALLINSON.  
CARPET FABRIC.

No. 180,515.

Patented Aug. 1, 1876.

Fig. 1.

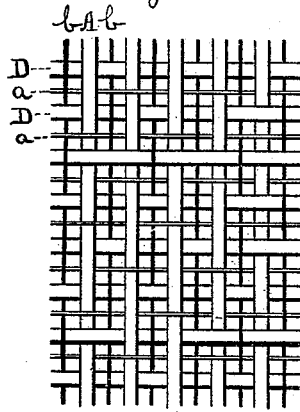


Fig. 2.

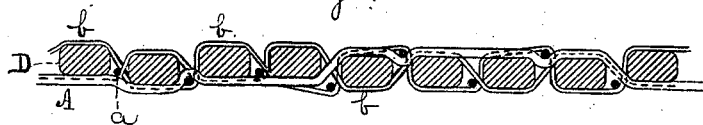


Fig. 3.



Witnesses:

Lewis F. Brown,  
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Inventor:

James Allinson,  
by John A. Dierschlein  
Atty

# UNITED STATES PATENT OFFICE.

JAMES ALLINSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF HIS RIGHT TO HUGH S. KERR, OF SAME PLACE.

## IMPROVEMENT IN CARPET FABRICS.

Specification forming part of Letters Patent No. **180,515**, dated August 1, 1876; application filed June 14, 1875.

*To all whom it may concern:*

Be it known that I, JAMES ALLINSON, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Carpet Fabrics; and I do hereby declare the following to be a clear and exact description of the nature thereof, sufficient to enable others skilled in the art to which my invention appertains to fully understand, make, and use the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a view of the face of the fabric. Fig. 2 is a sectional view of my carpet when woven with one coarse or thick warp and with two fine warp-threads. Fig. 3 is a sectional view of my carpet when woven with two coarse warps, but not shown in the model.

Similar letters of reference indicate corresponding parts in the several figures.

My invention consists of a carpet fabric in which parts of the pattern are formed by the figuring warp-threads, twilled, and the other parts on the same face are formed by carrying the figuring warp-threads to the opposite face, and bringing up the figuring weft-threads woven plain.

Referring to the drawing, A represents the warp-threads; D, the thick weft or filling threads; *a*, the fine wefts, and *b* fine warp-threads, introduced for a purpose explained hereinafter.

In ordinary damask carpet fabrics the thick weft or filling threads are entirely concealed from sight, being embedded between the warp-threads which form the front and back of the fabric, so that the production of a two, three, or four ply pattern requires the employment of a like number of sets of warp-threads.

I attain the effect of an additional ply without the use of an extra set of figuring warp-threads by carrying, by means of a jacquard, all the said warps from one face of the fabric to the opposite face in certain parts of the pattern, and in these parts bringing the thick weft-threads to the face to aid in forming the pattern.

The warp-threads A are controlled both by a jacquard apparatus for lifting the proper

threads to form the pattern prior to the introduction of the thick weft-thread D, and by a set of ordinary harness, by which the threads are lifted in alternate sets after each insertion of the thick wefts, for the insertion of the fine weft-threads *a*.

To prevent the "floating" of the thick weft-threads D, where they are brought to the surface, and to bind the whole fabric firmly together, I employ, in the present instance, two sets of fine warp-threads, *b*, which are lifted alternately prior to the insertion of the said weft-threads D.

One of the fine warps *b*, after passing over the weft D, passes over the fine weft *a*, and then under the weft D and under the weft *a*, and the other fine warp *b* passes in reverse order, the effect being to bind the threads D to the backing-threads, and to form a compact fabric.

It will be seen that parts of the pattern are formed by the figuring warp-threads, twilled, and the other parts on the same face are formed by carrying the figuring warp-threads to the opposite face, and bringing up the figuring weft-threads woven plain, and that the fabric will not bag, is quite light in construction, and saves much material in warp and filling.

It will also be seen that on the face of the fabric the figure is damask in construction, and the ground is similar to ingrain.

It will be evident that, although I have illustrated and described my invention as applied to a two-ply fabric, it may be applied with good results to fabrics having three or more sets of warp-threads, and that it may also be applied to shawls or other fabrics.

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

A carpet fabric in which parts of the pattern are formed by the figuring warp-threads, twilled, and the other parts on the same face are formed by carrying the figuring warp-threads to the opposite face, and bringing up the figuring weft-threads woven plain, substantially as and for the purpose set forth.

JAMES ALLINSON.

Witnesses:

JOHN A. WIEDERSHEIM,  
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