

S. HUNTER & W. KERR.

Carpet-Fabric.

No. 129,829.

Patented July 23, 1872.

FIG. 1.

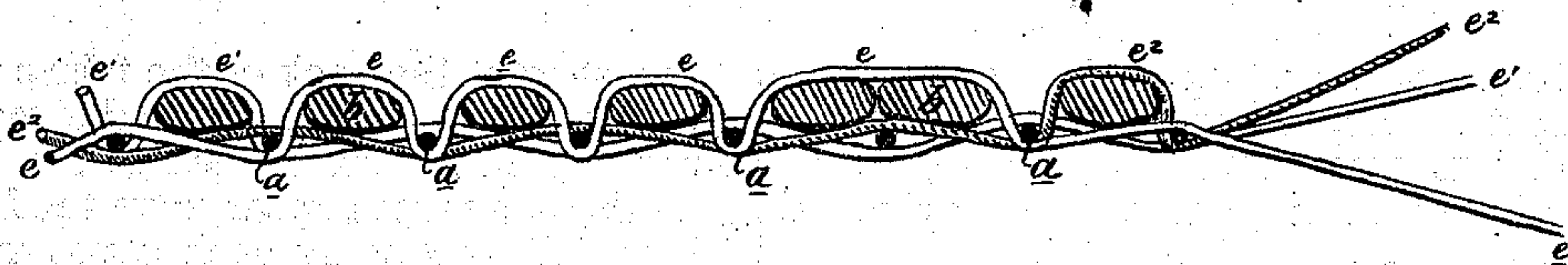


FIG. 3.

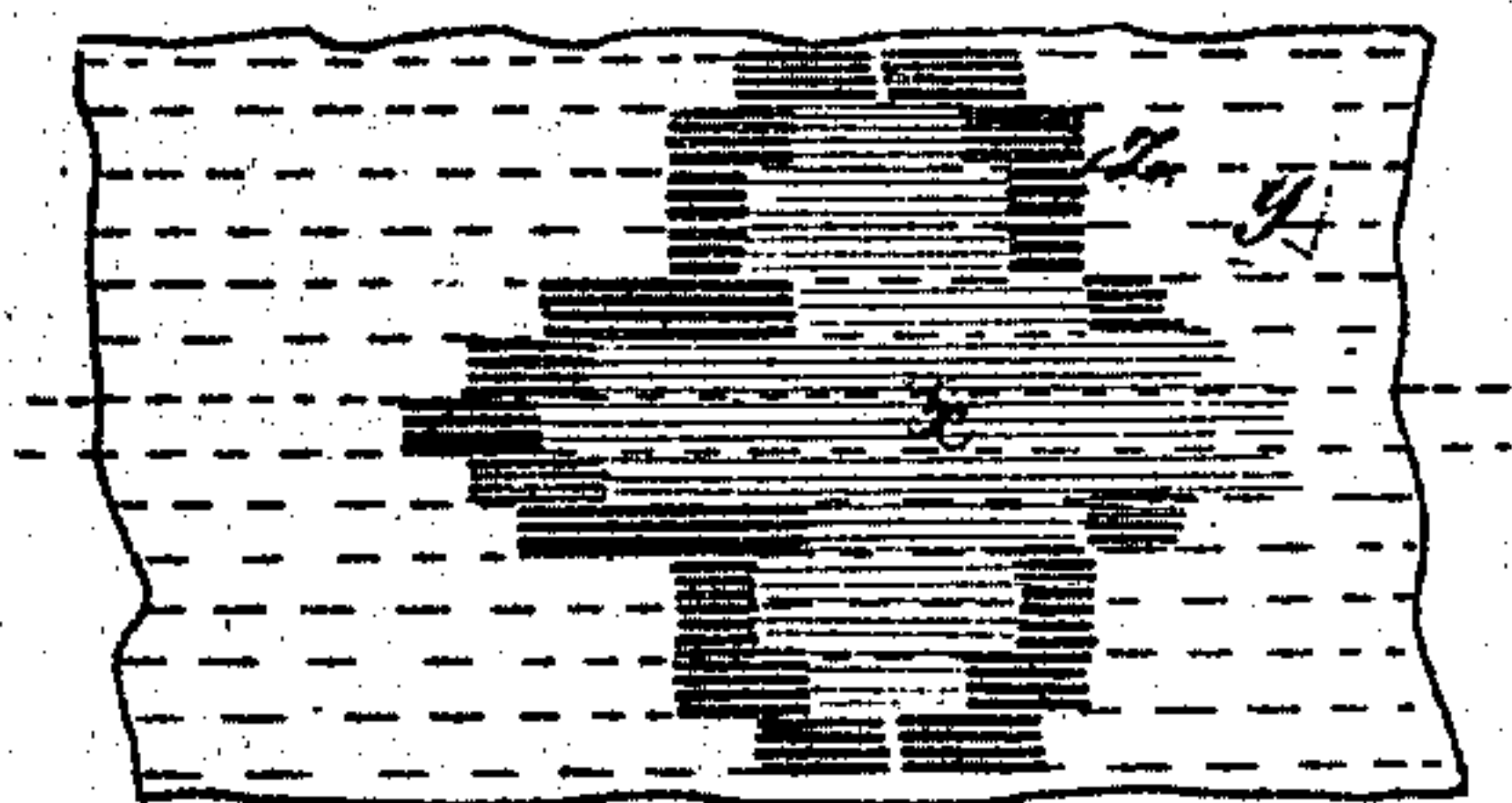


FIG. 4.

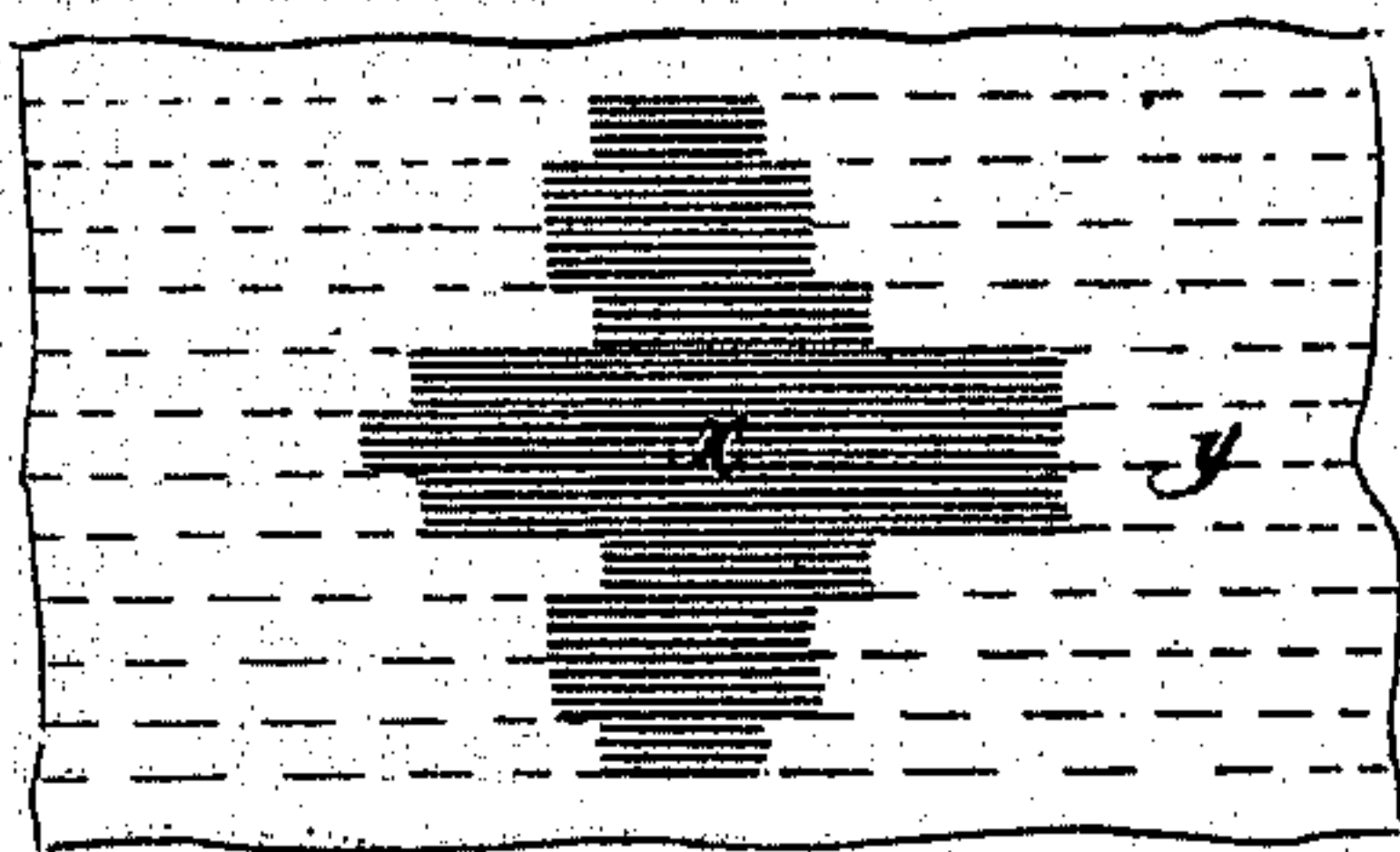
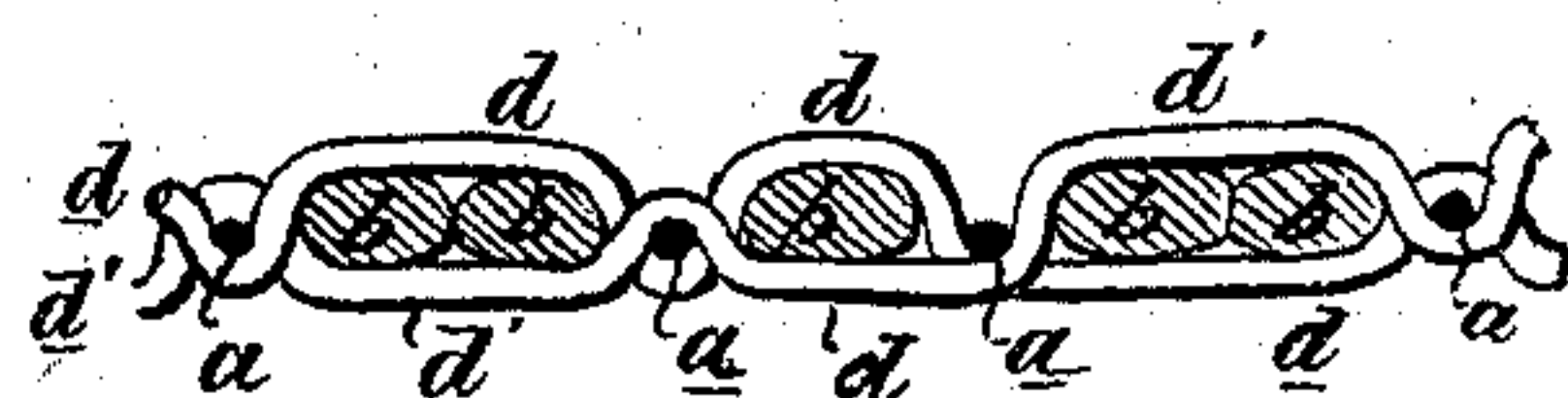


FIG. 2.



Witnesses.

John Parker
John Rupertus

Samuel Hunter and
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by their Att^{ys}.

Howison and Son

UNITED STATES PATENT OFFICE.

SAMUEL HUNTER AND WILLIAM KERR, OF PHILADELPHIA, PENNSYLVANIA,
ASSIGNORS TO WILLIAM HUNTER & SONS, OF SAME PLACE.

IMPROVEMENT IN CARPET FABRICS.

Specification forming part of Letters Patent No. 129,829, dated July 23, 1872.

Specification describing an Improved Damask Carpet Fabric, invented by SAMUEL HUNTER and WILLIAM KERR, both of the city and county of Philadelphia, State of Pennsylvania.

Improved Damask Carpet Fabric.

Our invention consists of a damask carpet fabric in which warp-threads of different shades and colors are arranged in sets of three or more threads each, and are interlocked with coarse and fine weft-threads, in the manner fully described hereafter, so as to enable the whole number of shades or colors of each set to be displayed on the same longitudinal line upon the face of the fabric; the main object of our invention being to enable a greater variety of colors to be employed and more intricate patterns to be produced than with ordinary damask carpets, in which but two shades or colors can appear upon the same longitudinal line.

In the accompanying drawing, Figure 1 is an enlarged sectional view, showing the arrangement of the threads in our improved carpet fabric; Fig. 2, a sectional view, showing the arrangement of the threads in an ordinary damask carpet; Fig. 3, a view representing a portion of the face of our improved fabric; and Fig. 4, a view of part of the face of an ordinary carpet.

In an ordinary damask carpet the warp-threads only appear upon the surface, the weft-threads, some of which are coarse and others fine, forming the filling, and being entirely concealed upon both sides of the fabric by the warp-threads. The latter are arranged in sets of two threads each, one of which must always be at the back of the fabric when the other appears upon the face, and the desired pattern is produced by alternating the two threads of each set upon the face and back of the fabric; consequently but two shades or colors can appear upon the same line in the direction of the length of the fabric upon either side of the latter. For instance, in Fig. 2, a , a , &c., represent the fine weft-threads; b , the coarse weft or filling; and d and d' , the two threads of one set of warps of an ordinary damask carpet. If the threads d be red and the threads d' blue it will be observed that, from the manner in which they pass around and are interlocked with the filling-threads, the blue threads d' must be un-

dermost or at the back of the fabric when the red threads d appear upon the face, while, when the latter are carried to the back, the blue threads must appear upon the face of the fabric. In producing such a pattern, therefore, as shown in Fig. 4, with threads of these two colors, if, upon one side of the fabric, the figure x be composed of red threads, the body y must be blue, while upon the opposite side the same figure will appear, but the colors will be reversed. No opportunity is afforded, therefore, in a fabric thus produced to introduce a third color into the fabric on the same longitudinal line with the remaining two colors. In our improved fabric, however, which we will now proceed to describe, the warp-threads are so arranged in sets, and are so interlocked with the filling-threads, and interlaced with each other at the back of the fabric, that the whole number of threads of each set can be displayed upon the face of the fabric in the direction of the length of the latter. We are enabled, therefore, by employing threads of different colors, to produce such patterns as illustrated in Fig. 3, where x represents a figure of one color; y , the body, of another color; and z , a border surrounding the figure, and of a color differing from that of the latter and of the body. Where three shades or colors are to be thus displayed upon the same longitudinal line, the warp is arranged in sets of three threads each, of different colors or shades, as shown in Fig. 1, where e , e^1 , and e^2 represent the threads of one set of warps; a , the fine weft-threads; and b , the coarse weft or filling threads. The warp-thread, which is to be displayed upon the face of the fabric, is carried over the coarse filling-threads b and tied down between the latter by the fine threads a , as shown by the thread e in the central portion of the figure, the remaining warp-threads e^1 and e^2 of the set being interlaced with the fine filling-threads at the back of the fabric and at the rear of the coarse filling-threads b , as plainly shown in the drawing. If the thread e^1 is to be displayed upon the face of the fabric, as shown at the left-hand side of Fig. 1, it is carried over the coarse filling-threads, while the threads e and e^2 are interlaced with the fine filling-threads at the back of the latter, and in like manner, when the thread e^2 is brought up, as shown at the right-

hand side of Fig. 1, the threads *e* and *e*¹ must be carried to the back and there interlaced.

If more than three colors or shades were to be displayed upon the same line, there would have to be as many warp-threads in each set as there were colors required; and in such case the method of weaving would be the same as with three threads—that is, but one thread at a time would appear upon the face of the fabric, while the remaining threads would be interlaced at the back of the latter with the fine filling-threads.

We claim as our invention—

A damask carpet fabric in which warp-threads, of different shades or colors, are ar-

ranged in sets of three or more threads each, and are interlocked with coarse and fine weft-threads in the manner described, so as to enable the whole number of shades or colors of each set to be displayed on the same longitudinal line upon the face of the fabric.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

SAMUEL HUNTER.
WILLIAM KERR.

Witnesses:

JAMES H. KERR,
JOHN K. RUPERTUS.