

W. WALKER.  
WOVEN FABRIC.

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932,198.

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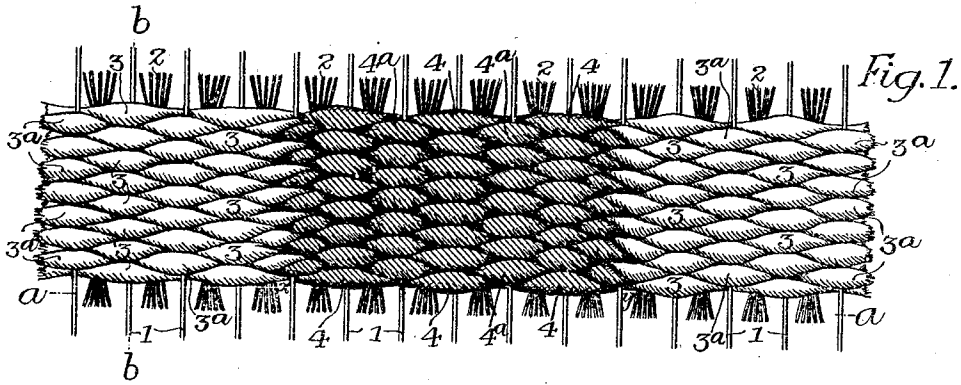


Fig. 2.

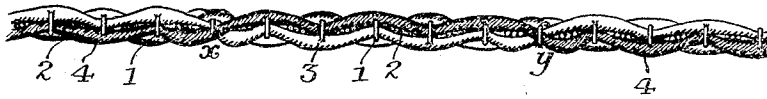


Fig. 3.

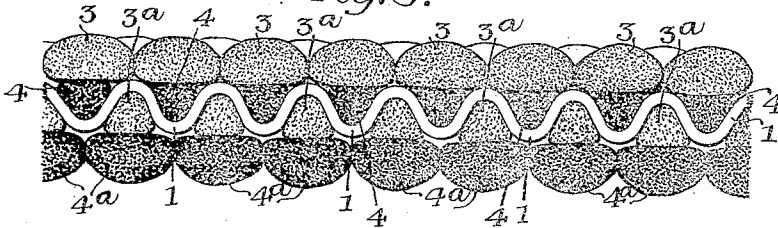
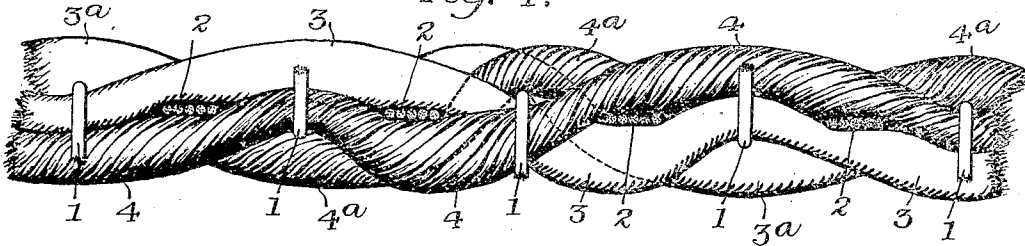


Fig. 4.



Witnesses:  
Augustus B. Cooper  
Wills H. Burrows

Inventor  
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by his Attorneys:  
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# UNITED STATES PATENT OFFICE.

WILLIAM WALKER, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO CHARLES L. FETTERLY,  
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## WOVEN FABRIC.

932,198.

Specification of Letters Patent.

Patented Aug. 24, 1909.

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*To all whom it may concern:*

Be it known that I, WILLIAM WALKER, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Woven Fabrics, of which the following is a specification.

My invention relates to the manufacture of textile rugs especially adapted for use upon porches and other exposed places.

The object of my invention is to make a heavy and substantial rug in which the weft threads cover all the warps, which will be soft and pliable, and in which two color designs can be produced. This object I attain in the following manner, reference being had to the accompanying drawing, in which:—

Figure 1, is a plan view of a portion of my improved rug; Fig. 2, is a section on the line *a—*a**, Fig. 1; Fig. 3, is an enlarged transverse section on the line *b—*b**, Fig. 1; Fig. 4, is an enlarged view showing change of surface colors.

Referring to the drawing, 1 represents the binder warp threads which are widely spaced and, in this case, made of a strong linen yarn. The stuffer warps are indicated at 2 and the weft or filling at 3, 3<sup>a</sup>, 4, 4<sup>a</sup> of two colors; for convenience we will call 3, 3<sup>a</sup> gray and 4, 4<sup>a</sup> red.

The weft threads are very soft spun and are very thick or low count yarn and it is the quality of this weft thread that determines the surface of my rug, because by having widely spaced binder threads and soft spun weft threads of great diameter I am able to crowd the weft threads so that neither the binder nor stuffer warps will be seen on the surface. This is an advantage for several reasons. First. Binder threads, owing to their function, have to be tough and hard wound and their presence on the surface of a rug for the purpose above set forth would tend to make it harsh and unpleasant to the feet. Second. The presence of binder warps on the surface breaks the solid color effect of the design when said design is produced by the weft threads. Third. Where the binder has to tie in all the weft threads throughout the entire thickness of the cloth more binder warp is necessary and as this yarn is costly, owing to its texture, fabrics thus woven are expensive.

Referring to the drawings the gray weft threads 3 alternate under and over the binder

warps 1 until they reach the point of change in design or color (shown at *x*) where they pass to the other surface and continue as surface threads. The weft threads 3<sup>a</sup> differ from the threads 3 in the fact that they go over the binder threads which the weft threads 3 go under and it is this that allows the interlaying or dovetailing of the weft threads that causes the covering of the binder and stuffer warps. Upon another change of color design as at *y*, Figs. 1 and 2, the wefts 3 and 3<sup>a</sup> return to the upper surface. In Fig. 1, up to *x* the red weft 4 is directly under the gray weft 3, where it changes and is directly above until it reaches change *y* where it returns to the other surface of cloth again. I preferably make these weft threads of linen and hair with a small percentage of wool, and as there are few binder threads I can afford to make them out of a good linen thread.

The stuffer warp may be made of any material and float between the two layers as clearly shown at 5, Figs. 2 and 4.

I claim:—

1. A woven fabric particularly adapted as a floor covering, consisting of widely spaced binder warps, stuffer warps and loosely woven weft threads, said weft threads being made of linen and hair with a small percentage of wool and being considerably larger in diameter than the warp threads and loosely spun so that when beaten up they produce a solid surface, covering all warps under the surface.

2. A double-face fabric having a design interwoven and particularly adapted as a floor covering consisting of widely spaced binder warp threads, stuffer warp threads arranged in groups and alternating with said binder warp threads, two series of soft loosely spun weft threads of greater diameter than the warp and beaten up so as to completely conceal all the warp threads, each face of the fabric having its design motive produced by one of said series of weft threads and its design ground by the other.

3. A double-face fabric having a design interwoven and particularly adapted as a floor covering consisting of widely spaced binder warp threads, stuffer warp threads arranged in groups and spaced between said binder warps, two series of soft loosely spun weft threads of greater diameter than the warp

threads, said design being formed by the weft threads and being the only threads visible on the surface.

4. A double-face fabric, having a design  
5 interwoven and particularly adapted as a  
floor covering, consisting of widely spaced  
binder warp threads, stuffer warp threads arranged in groups and spaced between said  
binder warps, a plurality of series of soft spun  
10 weft threads of greater diameter than the

warp threads, said weft threads forming the design and being the only threads visible on the surfaces.

In testimony whereof, I have signed my name to this specification, in the presence of 15  
two subscribing witnesses.

WILLIAM WALKER.

Witnesses:

AUGUSTUS B. COPPES,  
WM. A. BARR.