W. G. STEWART.

WOVEN FABRIC.

APPLICATION FILED NOV. 16, 1914.

1,141,665. Patented June 1, 1915.

Fig. 1.

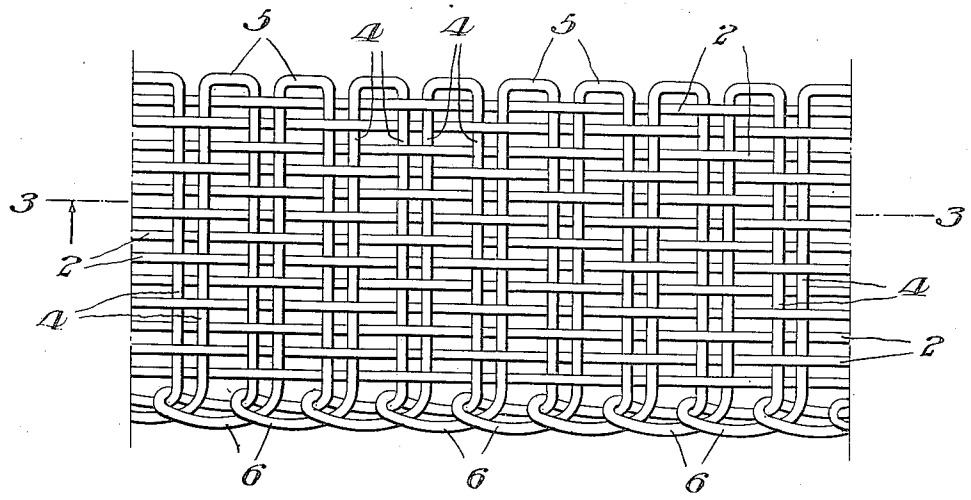


Fig. 2.

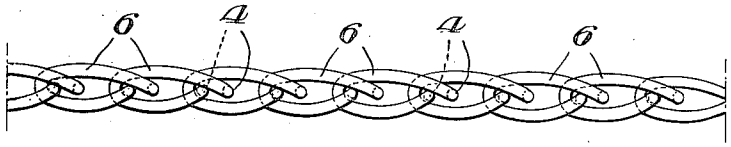
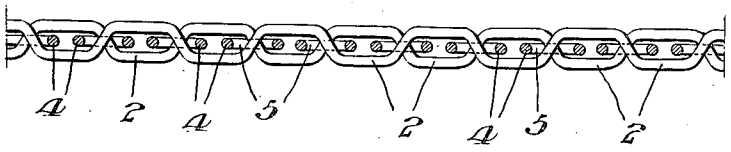


Fig. 3.



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WOVEN FABRIC.

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To all whom it may concern:

Be it known that I, WILLIAM G. STEWART, a citizen of the United States, residing at Chester, in the county of Delaware and State of Pennsylvania, have invented certain new and useful Improvements in Woven Fabrics, of which the following is a specification.

My invention relates to improvements in woven fabrics and particularly to that general class of narrow woven fabrics commonly called tape and braid, used for various purposes.

The object of my invention is to provide a novel woven fabric which may be produced more rapidly than heretofore and which will possess many novel and advantageous characteristics, including the interweaving of the threads in such manner, first, that the threads connecting the weft threads at one edge of the fabric shall be more numerous than the threads connecting the weft threads at the other edge of the fabric, secondly, that the weft threads shall be arranged in pairs and connected at each edge of the fabric, thirdly, that the weft threads of the different sheds shall lie parallel to each other, and fourthly, that the weft threads shall be connected at one edge of the fabric by a chain of knitted stitches.

With this object in view my invented fabric consists of the threads interwoven, arranged and connected in the novel manner hereinafter fully described and claimed.

In the accompanying drawings, illustrating my invention: Figure 1 is a plan view of my improved fabric. Fig. 2 is an edge view of the fabric, showing the chain of knitted stitches. Fig. 3 is a longitudinal section through the fabric, on line 3—3 of Fig. 1.

Referring to the drawings, 2 designates the warp threads and 4 the weft threads of my new fabric. The weft threads 4 are interwoven with the warp threads 2, the weft threads 4 being arranged in pairs and the successive pairs of weft threads being inclosed in the successive sheds of the warp threads, as shown.

The pairs of weft threads 4 are connected at each edge of the fabric across the spaces between the adjacent pairs thereof; and, as herein illustrated, at one edge of the fabric, the pairs of weft threads 4 are connected by single threads and, at the other edge of the fabric, the pairs of weft threads 4 are connected by double threads; that is to say, at one edge of the fabric, each weft thread 4 of a pair is connected to one weft thread of the next adjacent pair by a thread 5, as shown; and, at the other edge of the fabric, each pair of weft threads 4 is connected to the next adjacent pair of weft threads by a double thread, forming a loop 6, the successive loops 6 forming a chain of knitted stitches, as shown. The two sides of each loop 6 form continuations of the two weft threads 4 of a pair, and each loop 6 surrounds or incloses a pair of weft threads 4 and connects the pair which it incloses with the pair of which it forms a continuation.

The weft threads 4, connecting threads 5 and connecting loops 6 are all formed of one continuous thread, as clearly shown in the drawings.

By connecting the pairs of weft threads 4 across the spaces between them at each edge of the fabric 1 provide a very strong and durable tape or braid; and the provision of the loops 6 or double threads at one edge of the fabric has the advantages of being not only ornamental but also exceedingly strong and durable.

I claim:

1. A fabric comprising interwoven warp and weft threads, the weft threads having portions forming a chain of knitted stitches connecting the weft threads of the different sheds.

2. A fabric comprising interwoven warp and weft threads, the weft threads being formed of one continuous thread extending from shed to shed and having portions forming a chain of knitted stitches connecting the weft threads of the different sheds.

3. A fabric comprising interwoven warp and weft threads, the weft threads being arranged in pairs in different sheds, one pair in a shed, the said pairs of weft threads being connected at one edge of the fabric by single threads each of which connects one thread of one pair with one thread of the next adjacent pair, and the said pairs of weft threads being connected at the other edge of the fabric by double threads each of which connects the two threads of one pair with the two threads of the next adjacent pair.

4. A fabric comprising interwoven warp and weft threads, the weft threads being arranged in pairs in different sheds, one pair in a shed, and each pair forming part of a loop which incloses the next adjacent pair.

5. A fabric comprising interwoven warp and weft threads, the weft threads being arranged in pairs in different sheds, one pair in a shed, said pairs being connected at one edge of the fabric by threads each of which connects one thread of one pair with one thread of the next adjacent pair, and each of said pairs forming part of a loop which incloses the next adjacent pair at the other edge of the fabric.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM G. STEWART.

Witnesses:
A. V. GROUPE,
S. I. HARPER.