

No. 821,441.

PATENTED MAY 22, 1906.

W. M. STEVENSON.
WOVEN FABRIC.

APPLICATION FILED AUG. 4, 1905.

Fig. 1.

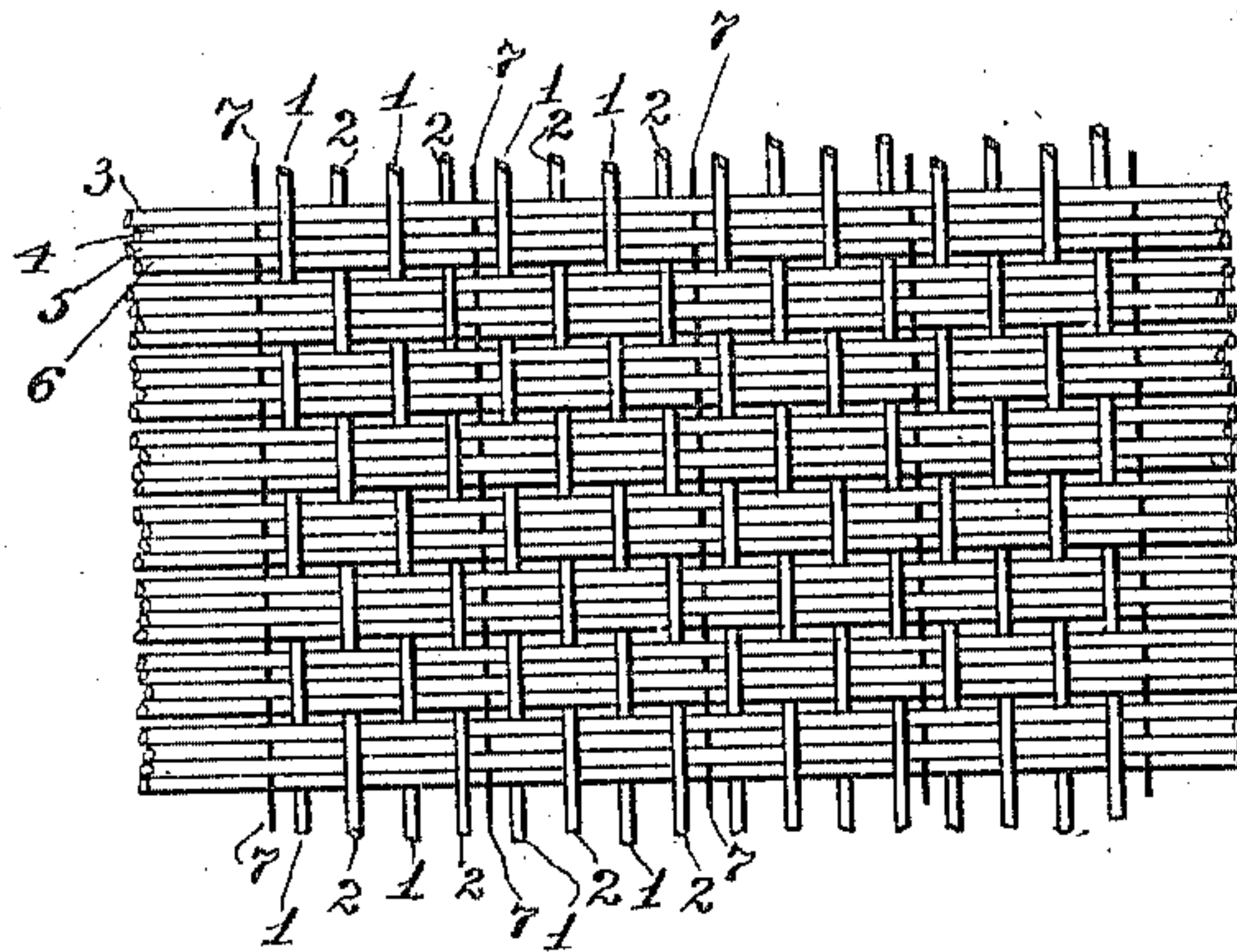
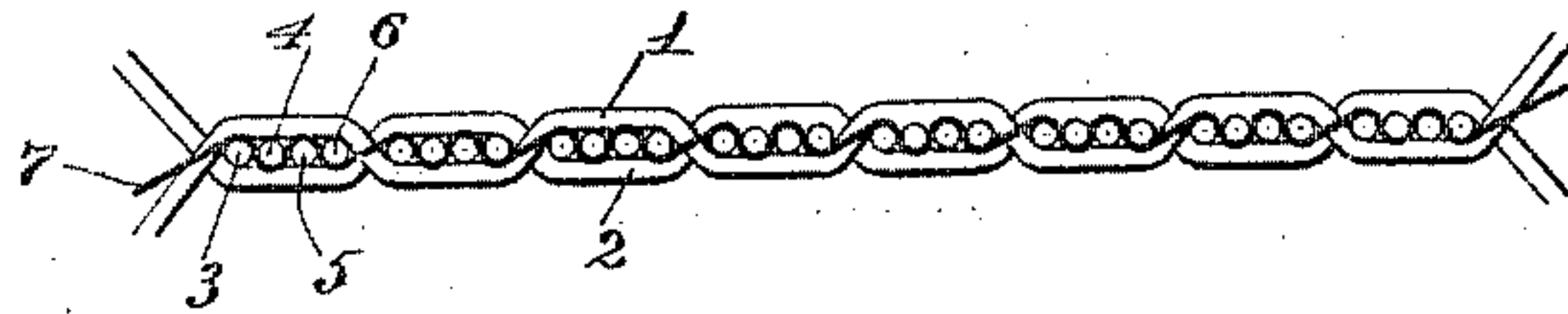


Fig. 2.



Witnesses
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WILLIAM M. STEVENSON, OF INDIAN ORCHARD, MASSACHUSETTS,
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WOVEN FABRIC.

No. 821,441.

Specification of Letters Patent.

Patented May 22, 1906.

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To all whom it may concern:

Be it known that I, WILLIAM M. STEVENSON, a citizen of the United States, residing in Indian Orchard, Massachusetts, have invented certain Improvements in Woven Fabrics, of which the following is a specification.

My invention relates to that class of woven fabrics having multistrand weft-threads—that is to say, weft-threads each consisting of a plurality of separately-introduced strands contained in one and the same shed of binding warp-threads—so as to have the effect of a single heavy weft-thread.

The object of my invention is to cause these successively-introduced weft-strands to retain their proper relation one to another in the group, whereby in the event of their being differently colored the proper disposal of the colors in the group of strands will be maintained throughout the entire extent of the weft-thread.

In the accompanying drawings, Figure 1 is an exaggerated face view of a piece of fabric embodying my invention; and Fig. 2 is a section of the same, taken in the direction of the warp.

In the fabric shown in the drawings each shed of the binding-warps 1 and 2 contains a composite weft-thread consisting of four strands 3, 4, 5, and 6, these four strands being shot successively into one and the same shed of binding-warps 1 and 2 and the latter being then changed prior to a repetition of the operation. In weaving fabrics of this class difficulty has been experienced in causing the weft-strands to maintain their proper relation to each other and where the strands are differently colored this is a serious defect. For instance, in the weft-thread shown in the drawings, which is composed of two white

strands and two colored strands introduced alternately, the colored strands are in the absence of any restraining influence liable to override one or both of the white strands, or vice versa, in some portions of the length of the weft-thread, thus producing in such portions either a preponderance or an absence of color. In order to overcome this objection, I use in addition to the binding warp-threads 1 and 2 special warp-threads 7, which are interwoven with the individual strands 3, 4, 5, and 6 of each composite weft-thread, as shown, so as to tend to cause such strands to lie flatwise, and thus preserve at all times their proper relation to one another. The use of the special warp-threads 7 also reduces the tendency of the fabric to ravel at the edge if cut in the direction of the weft, since the strands are compelled to ravel singly, whereas in the absence of the warp-threads 7 a whole group of strands comprising a weft-thread could move at once.

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

A woven fabric, in which binding warp-threads are combined with weft-threads each consisting of a plurality of strands interwoven as a unit with said binding warp-threads, separate strands of each weft-thread being also interwoven with warp-threads independent of said binding warp-threads, substantially as specified.

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

WILLIAM M. STEVENSON.

Witnesses:

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