

No. 742,468.

PATENTED OCT. 27, 1903.

N. H. MERRIAM.
WOVEN FABRIC.

APPLICATION FILED APR. 30, 1903.

NO MODEL.

Fig. 1:

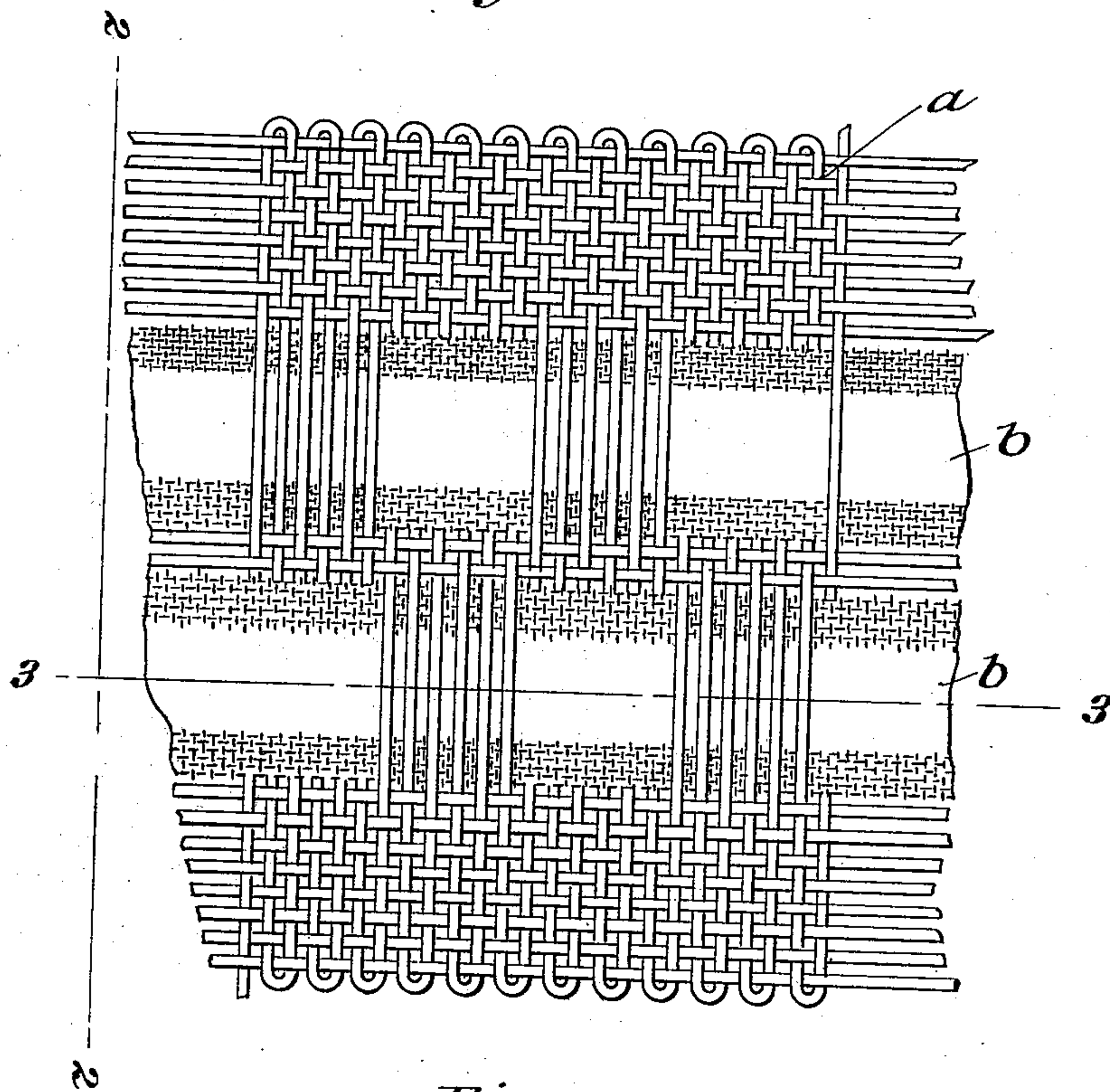
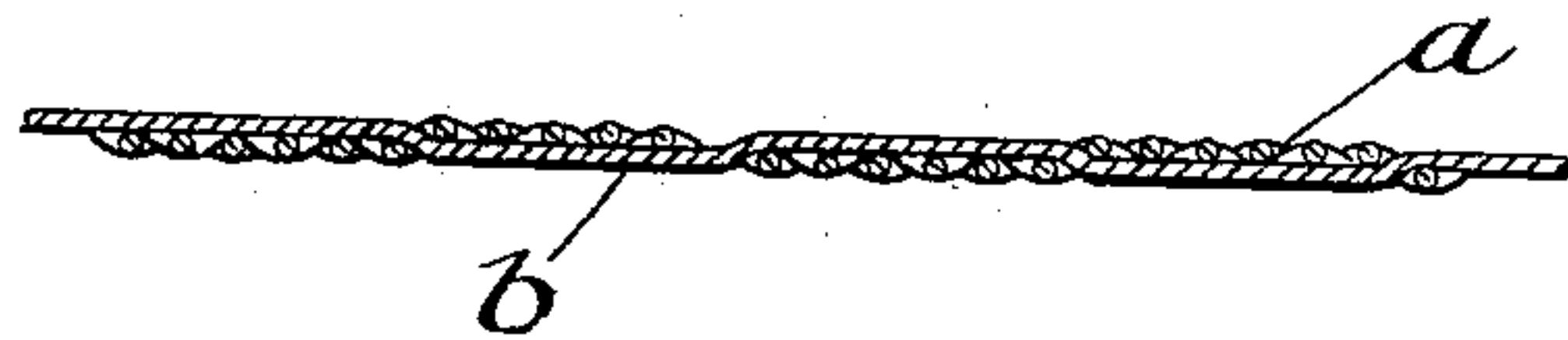


Fig. 2:



Fig. 3:



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UNITED STATES PATENT OFFICE.

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WOVEN FABRIC.

SPECIFICATION forming part of Letters Patent No. 742,468, dated October 27, 1903.

Application filed April 30, 1903. Serial No. 154,983. (No specimens.)

To all whom it may concern:

Be it known that I, NATHANIEL H. MERRIAM, a citizen of the United States, residing at Lexington, in the county of Middlesex and State of Massachusetts, have invented an Improvement in Woven Fabrics, of which the following description, in connection with the accompanying drawings, is a specification, like letters on the drawings representing like parts.

My invention aims to produce a novel woven fabric in which is incorporated a strip, which may be called "decorative" and which is wider or presents a greater exposed surface area than the warp or weft threads of which the fabric proper is made, said strip passing over and under, respectively, such fabric threads as it crosses.

The nature of my invention will best be understood from the description of a specific embodiment thereof, illustrated in the accompanying drawings, wherein—

Figure 1, on a greatly enlarged scale, illustrates a fabric made in accordance with my invention; Fig. 2, a transverse section of Fig. 1 on the dotted line 2 2, and Fig. 3 a longitudinal section of Fig. 1 on the dotted line 3 3.

In the particular embodiment of my invention selected for illustration herein and shown in the drawings my improved fabric comprises a woven-fabric foundation *a* and one or more decorative-fabric strips *b* incorporated therein. I call the strip or strips *b* "decorative" for want of a better term and because by reason of the manner in which they are incorporated in the fabric *a*, as will be described, they are necessarily decorative in the sense that they change the appearance or effect of the fabric as compared with a fabric having throughout the weave or character of the foundation fabric *a*. As a matter of fact, however, the strip or strips *b* will usually be intentionally decorative in the sense that they will be of contrasting or different colors from the foundation fabric or of different material, so as to produce an intended fanciful, ornamental, or otherwise special decorative effect.

The foundation fabric *a* may be of any suitable or desired character, both as to the threads of which it is composed and as to the

nature or character of its weave. It will ordinarily have the usual selvage edge *a'*.

The inserted strip or strips *b* are shown as and preferably will be also of woven fabric in strip form and cut or stripped from a full piece or cut of fabric woven in usual or desired manner and presenting any desired color or colors and character of weave or appearance—as, for instance, satin. Because cut or stripped from a full piece or cut of fabric the strips *b* in the embodiment of my invention shown in the drawings have raw edges, using the term "raw" in contradistinction to a selvage or otherwise protected edge, which will not unravel.

The strip or strips *b*, as will be seen, are passed over and under in desired order the crossing threads of the fabric *a*, herein the weft-threads of said fabric, and where a plurality of strips is employed a checkered effect may be obtained, as illustrated in Fig. 1. Obviously by varying the number of strips *b* and the particular crossing threads above and below which they are passed almost any desired effect may be produced.

In making a fabric such as illustrated in the drawings each strip *b* is, in effect, a woven-fabric warp, forming a part of the woven-fabric foundation *a*. These woven-fabric warps *b* are threaded through the heddles of of the loom, properly shaped and adapted therefor, precisely as are the remaining warps of the fabric *a*, and are raised and lowered by the harness motion precisely as are the other warps and in the required order to produce any desired exposure thereof at the face or at the back of the fabric *a*, said fabric warps *b* being bound or incorporated into the fabric *a* by the passage across the same of the usual weft or filling thread or threads. By producing my novel fabric in this manner the cost of production is scarcely greater than that of plain fabric *a*, thus bringing highly ornamental or decorative fabric within a field for use which is entirely new to fabrics of an ornamental nature such as this. Furthermore, the use of strips *b*, having raw edges, is not only entirely practicable, because the ordinary warp-threads of the foundation fabric *a* serve as guards or walls to prevent the warps of the strips *b* from unraveling; but

raw-edged strips *b* are, in fact, preferable to selvage-edged strips, because the latter introduce into the body of the foundation fabric a hardness, inflexibility, and unpliability which is objectionable. Raw-edged strips *b* may be introduced in any desired number without in the least adding to the stiffness, inflexibility, and unpliability of the fabric as a whole, since the warp and weft threads of the strips *b* have the same capacity to work upon each other and to give as do the warp and weft threads in the body portion of the foundation fabric *a*.

In the drawings for clearness I have greatly enlarged the weave of the fabric and have shown both the threads and the spaces between the same much larger than in actual practice.

My invention is not restricted to the particular embodiment thereof herein shown by way of illustration, and particularly is my invention not limited to the material, kind, or character of the strip or strips *b* which are employed.

Having described my invention and with-

out limiting myself as to details, what I desire to secure by Letters Patent is—

1. An article of manufacture comprising a woven fabric one or more of the warps of which is or are also of woven fabric, said woven warp or warps passing over and under the weft-threads in desired order and fashion. 30

2. An article of manufacture comprising a woven fabric, one or more of the warps of which is or are of woven, raw-edged fabric. 35

3. An article of manufacture comprising a woven fabric having usual warp and weft threads woven in usual manner and order and one or more warps of woven fabric interarranged with said usual warp-threads and passing over and under the weft-threads in desired order and fashion. 40

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

NATHANIEL H. MERRIAM.

Witnesses:

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EVERETT S. EMERY.