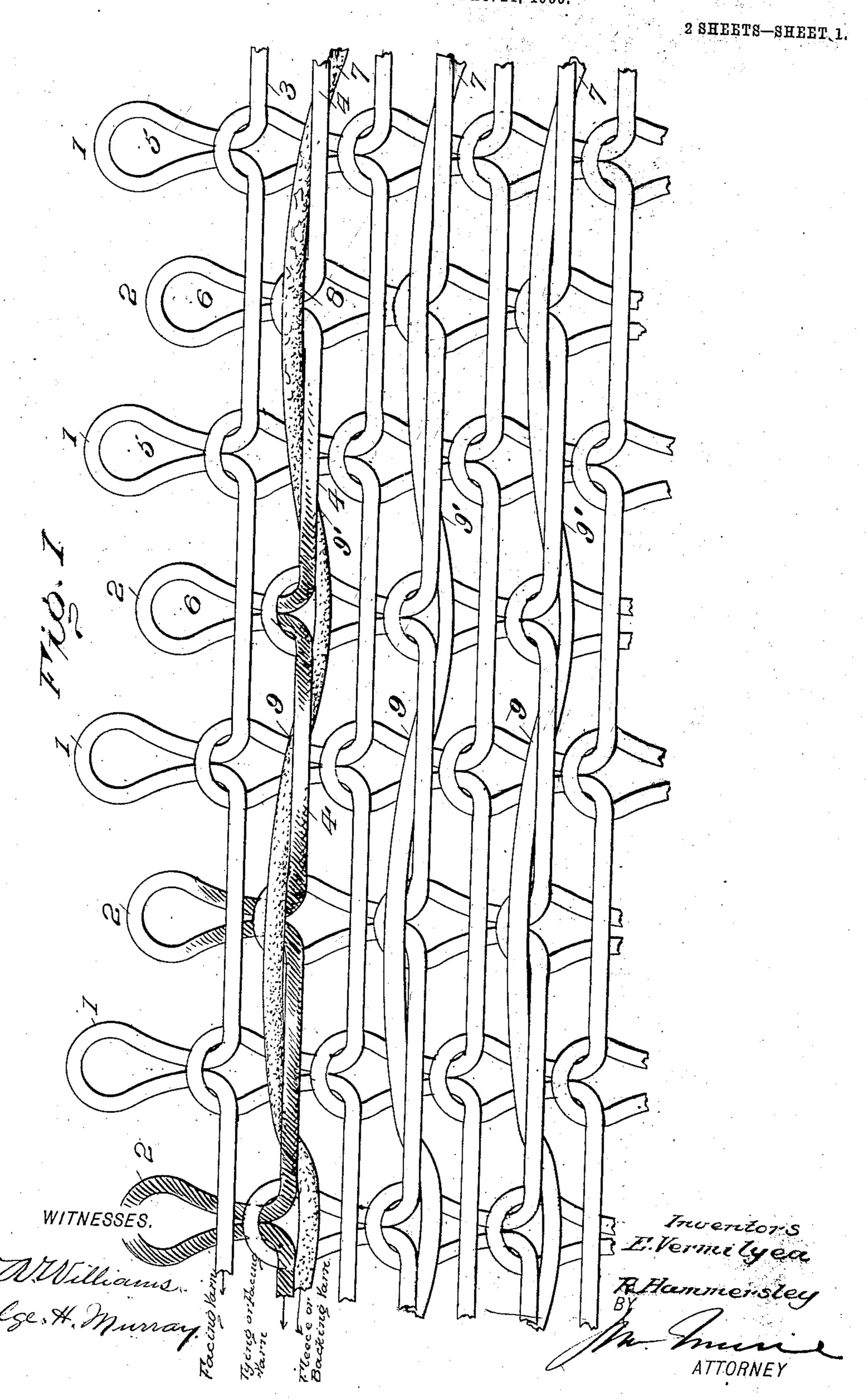
# E. VERMILYEA & R. HAMMERSLEY.

### FABRIC.

APPLICATION FILED DEC. 24, 1906.



No. 876,750.

PATENTED JAN. 14, 1908.

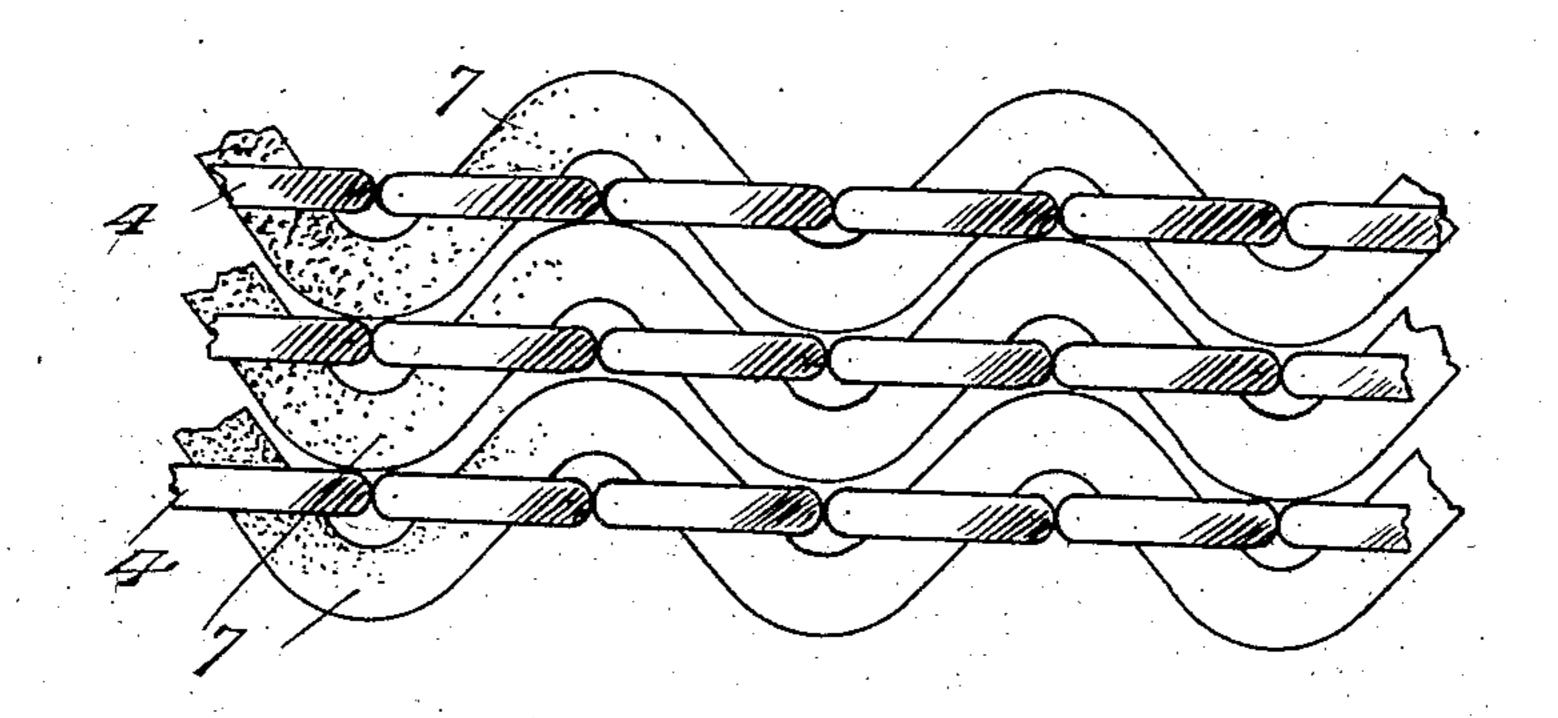
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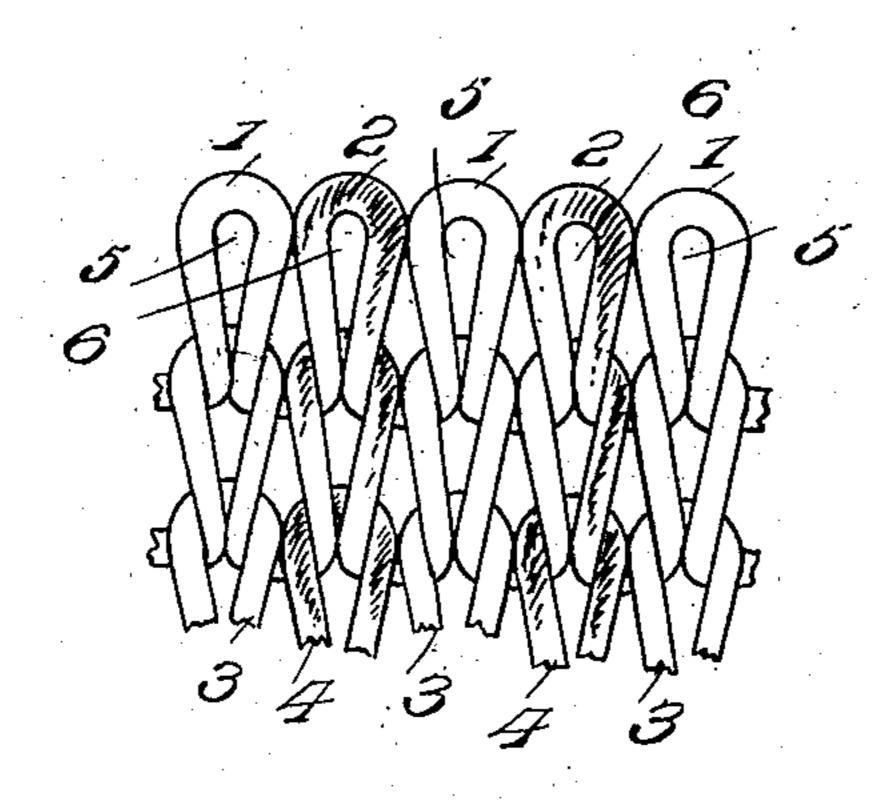
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2 SHEETS-SHEET 2

Tig.2



Mig. 3



WITNESSES

Helge H. Murray.

E. Vermilyea

R. Hammersley

M. Muit

EUGENE VERMILYEA AND RALPH HAMMERSLEY, OF WATERFORD, NEW YORK.

#### FABRIC.

No. 876,750.

Specification of Letters Patent.

Patented Jan. 14, 1908.

Application filed December 24, 1906. Serial No. 349,347.

To all whom it may concern:

Be it known that Eugene Vermilyea and RALPH HAMMERSLEY, citizens of the United States, residing at Waterford, in the county 5 of Saratoga and State of New York, have invented certain new and useful Improvements in Fabrics, of which the following is a specification.

This invention relates to improvements in 10 fabrics, wherein three yarns are employed, producing in effect parallel rows of different sized ribs, lined on the inner side with a layer

or backing.

In the arrangement of the various yarns, 15 the backing is woven between the facing yarn, and the tying yarn used for holding the backing yarn in place, and is not visible from the face of the fabric. In addition to tying the backing yarn, the tying yarn is also used as a 20 part of the facing of the fabric.

Broadly speaking the prime object of our invention is f: provide a fleeced lined fabric formed by three distinct yarns, the fleece yarn not being visible except on the inner

25 face of the fabric.

In the accompanying drawing—Figure 1, is a diagrammatic view showing the arrangement of the yarns for forming our improved fabric, and looking from the inner side. Fig. 30 2, is an inside view on an enlarged scale, of a piece of our fabric. Fig. 3, is an enlarged view looking at the face of the fabric.

The fabric consists of parallel rows of ribs 1 and 2, the former being somewhat larger and 35 considerably looser than the latter to present a pleasing effect. For the purpose of clearness, the yarn forming the ribs 1, will be hereafter referred to as the facing yarn 3, while the yarn forming the ribs 2, will be referred to 40 as the tying and facing yarn 4. The loops 5 and 6, of the ribs 1 and 2, are of the usual formation and specifically form no part of our invention. It is therefore not deemed necessary to describe them in detail.

The fleecing or backing yarn 7, is the essential feature of our improvement, and the particular manner in which it is interwoven between ribs 1 and 2, without exposing it on the face of the fabric, is, so far as we are aware

50 novel in this art.

The fleecing or backing yarn 7, is passed over the shank of a loop or rib 2, as shown at 8, then over the adjacent rib 1, and under the tying or facing yarn 4, and over the loop of

the next row of ribs 2, and under the tying or 55. facing yarn 4, again and over the loops of the ribs 1, as indicated at 9, then over the loop of the third row of ribs 2, and so on throughout the whole body of the fabric. It will thus be seen that the fleecing yarn appears on the 60 back of the fabric first on one side and then on the other side of the connecting legs into which it engages. In thus placing the fleecing yarn, it is tied in the fabric by the tying or facing yarn at the points 9, and 9' or 65 twice between every three rows of ribs 2, and skips all the ribs 1.

The tying or facing yarn as it is drawn into place, tightens on the inner side, and as the fleecing or facing yarn covers a greater sur- 70 face in proportion it will be apparent that one side (inner side) of the fabric will present substantially a fleece lined effect, while the opposite (outer side) presents parallel rows of ribs of different proportions, the fleecing 75 or backing yarn being covered on one side by the ribs. The ribs 1, being loose, are therefore more prominent than the ribs, 2, and provide sufficient elasticity which is essential in this class of fabrics.

The ribs 1, may be made loose enough to entirely cover the ribs 2, if desired, as the yarn from which they are formed does not in any manner interlock with the backing or fleecing yarn.

We are aware that fabrics have been made with three yarns, but in each instance, the third yarn is utilized solely as a tying medium, and we, therefore, disclaim this generic principle, our invention residing primarily in 90 utilizing three yarns, one of which is solely employed as a backing.

The two rows of ribs may or may not be of the same color and material having different characteristics for producing various designs 95

may be substituted for yarn. Our improvement is one which can be readily understood by those skilled in the art to which it appertains. Its simplicity greatly reduces the cost of manufacture, in- 100 asmuch as we dispense with the complex machinery necessary in the manufacture of fleece lined fabric, and at the same time preserve the essential characteristics of ribbed fabric.

Inasmuch as the fleecing yarn is laid in, and it is our purpose to make it comparatively tight, we hereby disclaim a fabric hav-

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ing loops of fleecing yarn held in the backing and substantially projecting in loops beyond the face of the fabric.

What we claim is—

5 1. A knitted fabric, comprising three yarns two of which constitute the base fabric and are formed into two sets of looped ribs, and the third yarn being tied twice only between three rows of one set of said ribs and 10 entirely free from the other set of said ribs, said third yarn being substantially parallel with the floats of the ribs of the base fabric where not tied thereto.

2. A fabric knit from two yarns, all of the 15 knit loops of which appear in wales upon one face, loops of each yarn being drawn through loops of its own kind, and a fleecing yarn on the opposite face, said fleecing yarn being laid in substantially taut between certain of 20 the connecting legs of the knit stitches so as to appear on the back, first on one side and then on the other side of the connecting legs

into which it engages.

3. A fabric knit from two yarns, all of the 25 knit loops of which appear in wales upon one face, loops of each yarn being drawn through loops of its own kind only and having a fleecing yarn laid in substantially straight between certain of the connecting legs of the knit stitches on the opposite face.

4. A fabric knit from a series of yarns, all of the knit loops of which appear in wales upon one face, loops of each yarn being drawn through loops of its own kind only and having a fleecing yarn laid in substantially 35 straight between certain of the connecting legs of the knit stitches on the opposite face.

5. A fabric knit from two yarns in wales of loops of different sizes, all of the knit loops of which appear in wales upon one face in 40 rows of alternate sizes, loops of each yarn being drawn through loops of its own kind only and having a fleecing yarn laid in substantially taut between certain of the connecting legs of the knit stitches on the opposite face. 45

In testimony whereof we have signed our names to this specification in the presence of

two subscribing witnesses.

EUGENE VERMILYEA. RALPH HAMMERSLEY.

Witnesses:

WILLIAM J. O'CONNOR, JOHN J. DUFFY.