No. 709,828. Patented Sept. 23, 1902.

R. W. SCOTT.

RIBBED KNITTED FABRIC.

(Application filed Feb. 26, 1902.)

(No Model.)

Fig. 1.

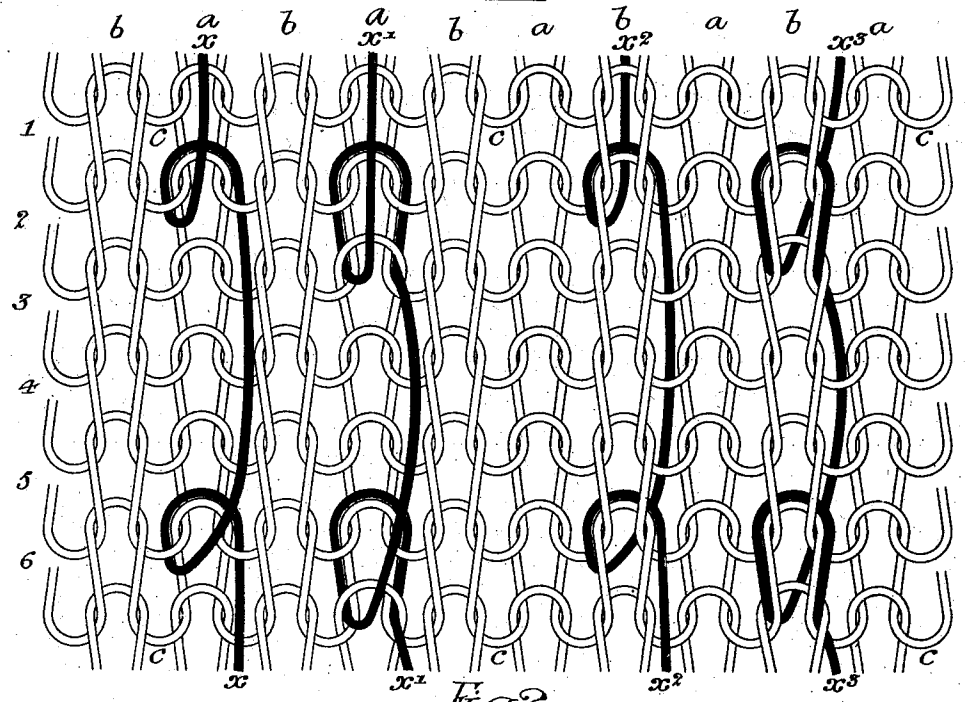
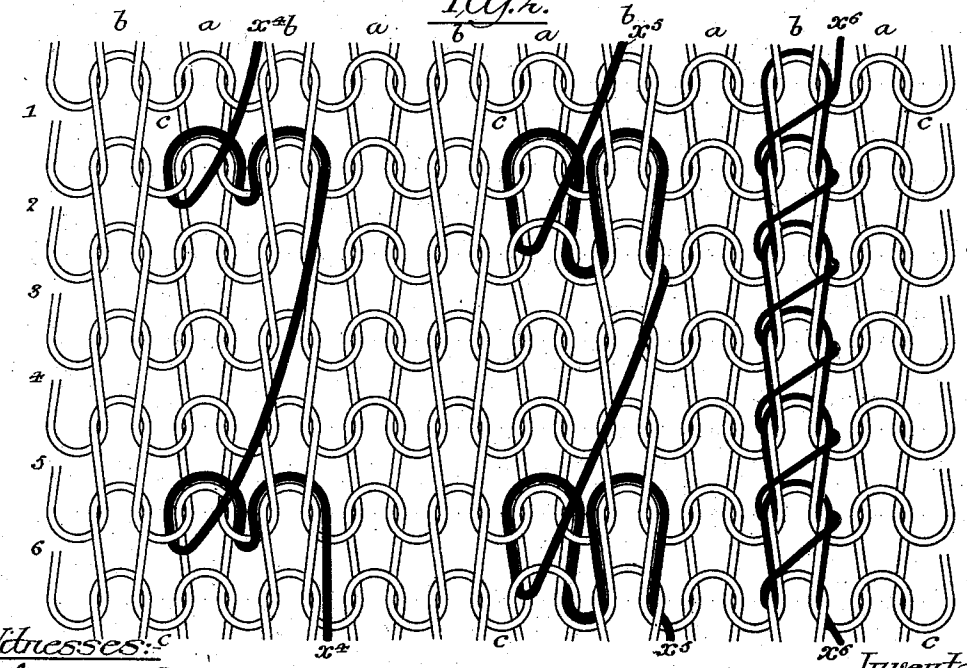


Fig. 2.



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UNITED STATES PATENT OFFICE.

ROBERT W. SCOTT, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO LOUIS N. D. WILLIAMS, OF ASHBOURNE, PENNSYLVANIA.

RIBBED KNITTED FABRIC.

SPECIFICATION forming part of Letters Patent No. 709,828, dated September 23, 1902.

Application filed February 26, 1902. Serial No. 95,786. (No specimens.)

To all whom it may concern:

Be it known that I, ROBERT W. SCOTT, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Ribbed Knitted Fabrics, of which the following is a specification.

My invention relates to that class of ribbed knitted fabrics in which a fleecing-yarn is introduced in such manner as to form loops projecting from one or both faces of the fabric, which loops can be brushed to form a fleece without injury to the yarn of which the fabric is composed, the object of my invention being to so construct such a fabric that a number of independent fleecing-yarns can be employed, which yarns may be of different color or otherwise distinguished from each other, so that, if desired, striped effects can be produced upon the fleeced face of the fabric.

The figures in the accompanying drawings represent exaggerated views of pieces of ribbed knitted fabric having fleecing yarn combined therewith in accordance with my invention.

1, 2, 3, 4, 5, and 6 represent successive courses of stitches of the fabric interlooped so as to form alternating needle-wales *a* and *b* and sinker-wales *c*, the stitches in the needle-wales *a* being drawn in one direction or to one face of the fabric, those in the needle-wales *b* being drawn in the other direction or to the opposite face of the fabric, and the sinker-wales extending from wales of one face of the fabric to those of the other face, as is usual in the production of ribbed knitted fabric.

Usually in introducing the fleecing yarn or yarns into a fabric of this class said yarn extends in a direction parallel or substantially parallel with the courses of fabric and is united in various ways to wales of the course in which it is to be introduced, those portions of the yarn between the engaging portions forming loops projecting beyond one or both faces of the fabric, so that they can be brushed to form a fleece without injury to the knitting-yarn forming the stitches of the fabric. In carrying out my invention, however, I dispose the fleecing-yarn in a direction parallel or substantially parallel with the wales of the fabric, each fleecing-yarn forming a loop or stitch-engaging wales of one or both faces of the fabric and between its engaging points forming a floating loop constituting the portion which is to be fleeced. In the drawings some of these projecting loops are shown as on one face of the fabric and some as on the other face, the loops being produced upon either face, as desired. The fleecing-yarn x (shown in Figure 1) forms loops engaging with a wale *a* of the fabric, the fleecing-yarn x' forms stitches in said wales *a*, the fleecing-yarn x^2 forms loops engaging with a wale *b* of the fabric, and the fleecing-yarn x^3 forms stitches in a wale *b*, and in the fabric shown in Fig. 2 the fleecing-yarn x^4 forms first a loop in the wale *b* and then a loop in the wale *a* of the fabric, the fleecing-yarn x^5 forms first a stitch in the wale *b* and then in a wale *a* of the fabric, and the fleecing-yarn x^6 forms stitches in successive courses of the wale *b*, the yarn in each case floating in the form of a surface loop *y* from one point of attachment to the next.

A machine for producing my improved fabric may be provided with one or more yarn guides or feeders for the knitting yarn or yarns and with a fleecing-yarn guide or feeder for each of the needles or groups of needles on which the loops or stitches of fleecing-yarn are to be produced, said fleecing-yarn guide being so manipulated in respect to the needle or needles that the latter will draw either loops or stitches of the fleecing-yarn in those courses of the fabric wherein it is desired to engage the fleecing-yarn with said fabric, as will be readily understood by those skilled in the knitting art. The fleecing-yarn need not necessarily follow a course parallel with the wales of the fabric, as it may be disposed in a diagonal or zigzag course, engaging first one wale of the fabric and then an adjoining wale. In fact the number and disposition of the points of engagement of the fleecing-yarn with the fabric may be varied in accordance with variations in the character of the fabric and in the purpose for which it is intended. By using fleecing-yarns differing in character or color striped effects may be produced upon the fleeced surface, although my invention is not limited to the production of such stripes, but embodies a novel method of combining

fleecing-yarn with a knitted fabric. Some of the features of the invention, moreover, are applicable as well to plain knitted fabrics as to ribbed fabrics.

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

1. A knitted fabric having fleecing-yarns combined therewith, each of said fleecing-yarns engaging first a wale in one course of the fabric and then a wale in another course of the fabric above or below the said first course, and forming between said points of attachment a loop projecting above the surface of the fabric, and floating over a plurality of courses of the fabric, substantially as specified.

2. A ribbed knitted fabric having fleecing-yarns combined therewith, each of said fleecing-yarns engaging first a wale in one course of the fabric and then a wale in another course of the fabric above or below the said first course, the yarn floating in the form of a projecting loop over a plurality of courses of the fabric between its successive points of engagement with the fabric, substantially as specified.

3. A knitted fabric having fleecing-yarns combined therewith said fleecing-yarns extending in a direction parallel with the wales of the fabric, engaging with wales in separate courses of the fabric, and forming between successive points of attachment loops projecting above the surface of the fabric, and floating over a plurality of courses of the fabric, substantially as specified.

4. A ribbed knitted fabric having fleecing-yarns combined therewith, said yarns extending in a direction parallel with the wales of the fabric, engaging with wales in separated courses of the fabric, and forming projecting loops between their points of engagement, said loops floating over a plurality of courses of the fabric, substantially as specified.

5. A ribbed knitted fabric having fleecing-yarns combined therewith, each of said yarns engaging wales of both faces of the fabric, first in one course of said fabric, and then in a course above or below said first course, and forming projecting loops between successive points of engagement, which loops float over a plurality of courses of the fabric, substantially as specified.

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

ROBERT W. SCOTT.

Witnesses:
F. E. BECHTOLD,
JOS. H. KLEIN.