

R. W. SCOTT.
RIBBED KNITTED WEB AND MAKING SAME.
APPLICATION FILED APR. 28, 1910.

1,062,367.

Patented May 20, 1913

2 SHEETS—SHEET 1.

Fig. 1.

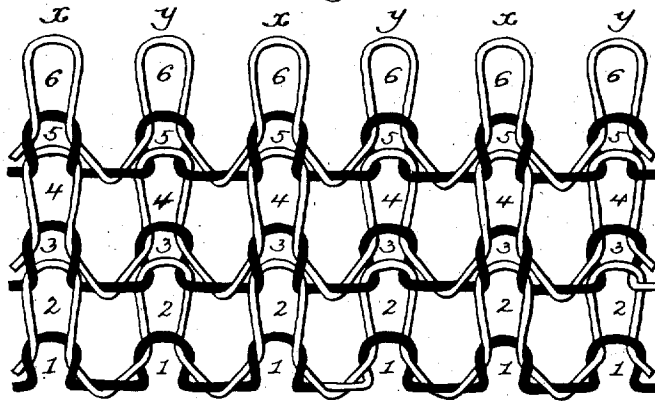
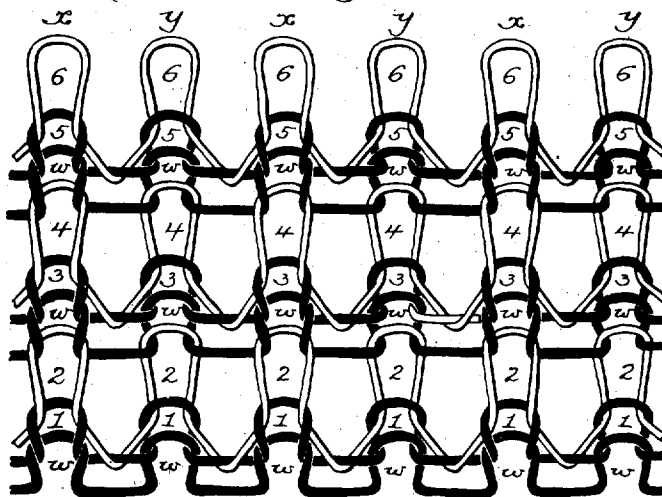


Fig. 2.



Witnesses
Harry L. Smith
Hamilton D. Turner

Inventor
Robert W. Scott
by his Attorneys
Muth & Meyer

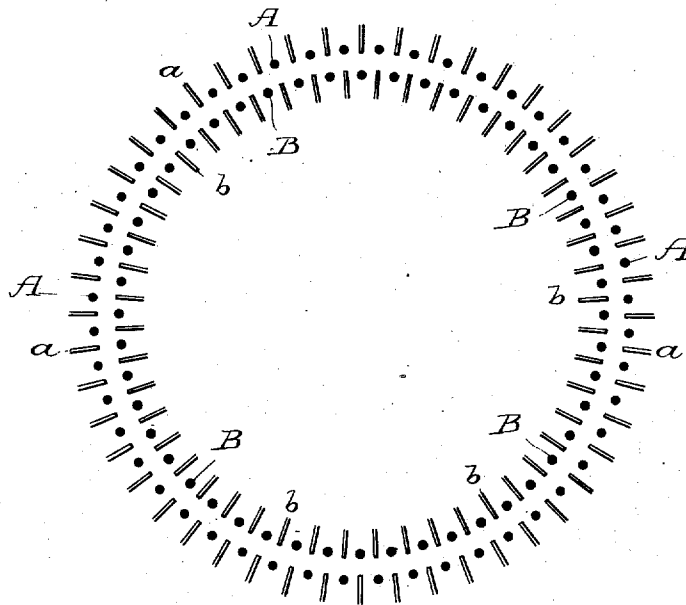
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Fig. 3.



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UNITED STATES PATENT OFFICE.

ROBERT W. SCOTT, OF LEEDS POINT, NEW JERSEY, ASSIGNOR, BY DIRECT AND MESNE ASSIGNMENTS, TO SCOTT AND WILLIAMS, INCORPORATED, OF CAMDEN, NEW JERSEY, A CORPORATION OF NEW JERSEY.

RIBBED KNITTED WEB AND MAKING SAME.

1,062,367.

Specification of Letters Patent.

Patented May 20, 1913.

Application filed April 28, 1910. Serial No. 558,223.

To all whom it may concern:

Be it known that I, ROBERT W. SCOTT, a citizen of the United States, residing in Leeds Point, Atlantic county, New Jersey, have invented certain Improvements in Ribbed Knitted Webs and Making Same, of which the following is a specification.

The object of my invention is to produce a ribbed knitted web having a novel disposition of the sinker wales between adjoining needle wales, an object which I attain in the manner hereinafter set forth, reference being had to the accompanying drawing, in which—

Figure 1 is an exaggerated view of a piece of ribbed knitted web produced in accordance with my invention; Fig. 2 is a similar view illustrating another form of ribbed knitted web embodying my invention, and Fig. 3 is a diagram illustrating the disposition of the knitting instrumentalities in a circular machine for producing my improved web.

The essential feature of my present invention is the interlocking of the sinker wales between adjoining needle wales of the web.

In Fig. 1 of the drawing, 1, 2, 3 and 4 represent successive courses of ribbed web, x representing the needle wales on one face of the web and y the needle wales on the other face of the web, and it will be noted that the sinker wales between the successive needles wales in courses 2 and 4 instead of passing directly from one needle wale to another, as in an ordinary knitted fabric, pass under the sinker wales of courses 1 and 3, respectively, so as to effect an interlocking of the sinker wales of the courses 2 and 4 of the web with courses 1 and 3 of the same. In the fabric shown in Fig. 2 ordinary courses w alternate with the interlocking courses. In producing these webs I use a machine having two sets of needles A and B, the needles A being carried by a needle cylinder, needle bed, or other carrier, and the needles B being carried by a needle dial, needle bed, or other carrier, as in an ordinary rib knitting machine, it being understood that my invention is applicable to straight knitting machines or to circular knitting machines, and to machines having either spring beard or latch needles, each set of needles being combined with the usual

mechanism for operating the same so as to cause the needles to knit. Alternating with the needles A are a set of points, pins or other loop-retaining devices a , and alternating with the needles B are a similar set of points, pins or loop-retaining devices b , these devices being combined with mechanism whereby they may be projected so as to receive the knitting yarn or so as to transfer the loops which have been applied to them to the corresponding needles of the other needle carrier, the loop retainers of one needle carrier being, by preference, in line with the needles of the other needle carrier.

In producing the fabric shown in Fig. 1, the yarn is first applied to the loop-retainers a and b in the same manner as to the needles in an ordinary rib knitting machine, and these loops are retained while yarn is applied to the needles A and B in the same manner as to needles of an ordinary rib knitting machine, and is knitted by said needles, the loops upon the loop-retainers a and b being then transferred to the needles A and B respectively, and said needles being operated so as to knock over on said loops the stitches previously formed on said needles, and the operations being then repeated.

In producing the fabric shown in Fig. 2 a course of stitches is first knitted upon the needles A and B, yarn is then applied to the loop-retaining points a and b and is retained thereby while another course of stitches is being produced upon the needles A and B, the loops being then transferred from the points a and b to the needles A and B, respectively, and the stitches upon said needles then knocked over on said loops. The stitches which are produced from the loop of yarn laid directly upon the needles differ in size from the stitches made from the transferred loops, thus providing for the alternation of large and small stitches in the wales of the web.

In order to facilitate production, I prefer to provide the machine with a plurality of yarn feeds, the yarn which is applied to the loop-retaining points being different from the yarn applied to the needles, although my improved fabric can be produced with one and the same yarn by retreating the loop-retainers while the yarn is

being applied to the needles and retiring the needles while the yarn is being applied to the loop-retainers, and although I prefer to use transfer points or pins for the purpose of receiving and transferring the loops, transferring needles, such for instance as those shown in my Letters Patent No. 834,763, dated October 30, 1906, may be substituted for the transfer points or pins, if desired.

The fabrics shown in the drawing are what is termed "one-and-one" rib, the ribs of each face of the web being formed by single needle wales, but it will be evident that other forms of rib may be produced by alternating the transfer points with groups of needles in either carrier, depending upon the character of rib desired.

I claim:

1. A ribbed knitted web having sinker wales of some of the courses passing downwardly behind, upwardly beneath and upwardly in front of sinker wales of other courses.
2. A ribbed knitted web having successive courses produced with different yarns and having the sinker wales of some of the courses passing downwardly behind, forwardly beneath, and upwardly in front of sinker wales of other courses.

3. A ribbed knitted web having sinker wales of some of the courses passing downwardly behind, forwardly beneath, and upwardly in front of sinker wales of other courses whose stitches differ in size from those of the courses first mentioned.

4. A ribbed knitted web having sinker wales of some of the courses passing downwardly behind, forwardly beneath, and upwardly in front of sinker wales of other courses, the latter courses being composed of different yarn from the courses first mentioned, and having stitches differing in size from those of said first mentioned courses.

5. The mode herein described of producing a ribbed knitted web, said mode consisting in forming a course of loops disposed alternately in different faces of the web, knitting a course of stitches alternating with said loops, and drawing loops in one face of the web through stitches in the other face of the same.

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

ROBERT W. SCOTT.

Witnesses:

KATE A. BEADLE,
HAMILTON D. TURNER.

Correction in Letters Patent No. 1,062,367.

It is hereby certified that in Letters Patent No. 1,062,367, granted May 20, 1913, upon the application of Robert W. Scott, of Leeds Point, New Jersey, for an improvement in "Ribbed Knitted Webs and Making Same," an error appears in the printed specification requiring correction as follows: Page 2, line 22, for the word "upwardly" read *forwardly*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 17th day of June, A. D., 1913.

[SEAL.]

C. C. BILLINGS,

Acting Commissioner of Patents.

being applied to the needles and retiring the needles while the yarn is being applied to the loop-retainers, and although I prefer to use transfer points or pins for the purpose of receiving and transferring the loops, transferring needles, such for instance as those shown in my Letters Patent No. 834,763, dated October 30, 1906, may be substituted for the transfer points or pins, if desired.

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3. A ribbed knitted web having sinker wales of some of the courses passing downwardly behind, forwardly beneath, and upwardly in front of sinker wales of other courses whose stitches differ in size from those of the courses first mentioned.

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