

No. 670,880.

Patented Mar. 26, 1901.

W. H. JACKSON.

KNITTED FABRIC AND METHOD OF PRODUCING SAME.

(Application filed Aug. 19, 1899.)

(Specimens.)

Fig. 1.

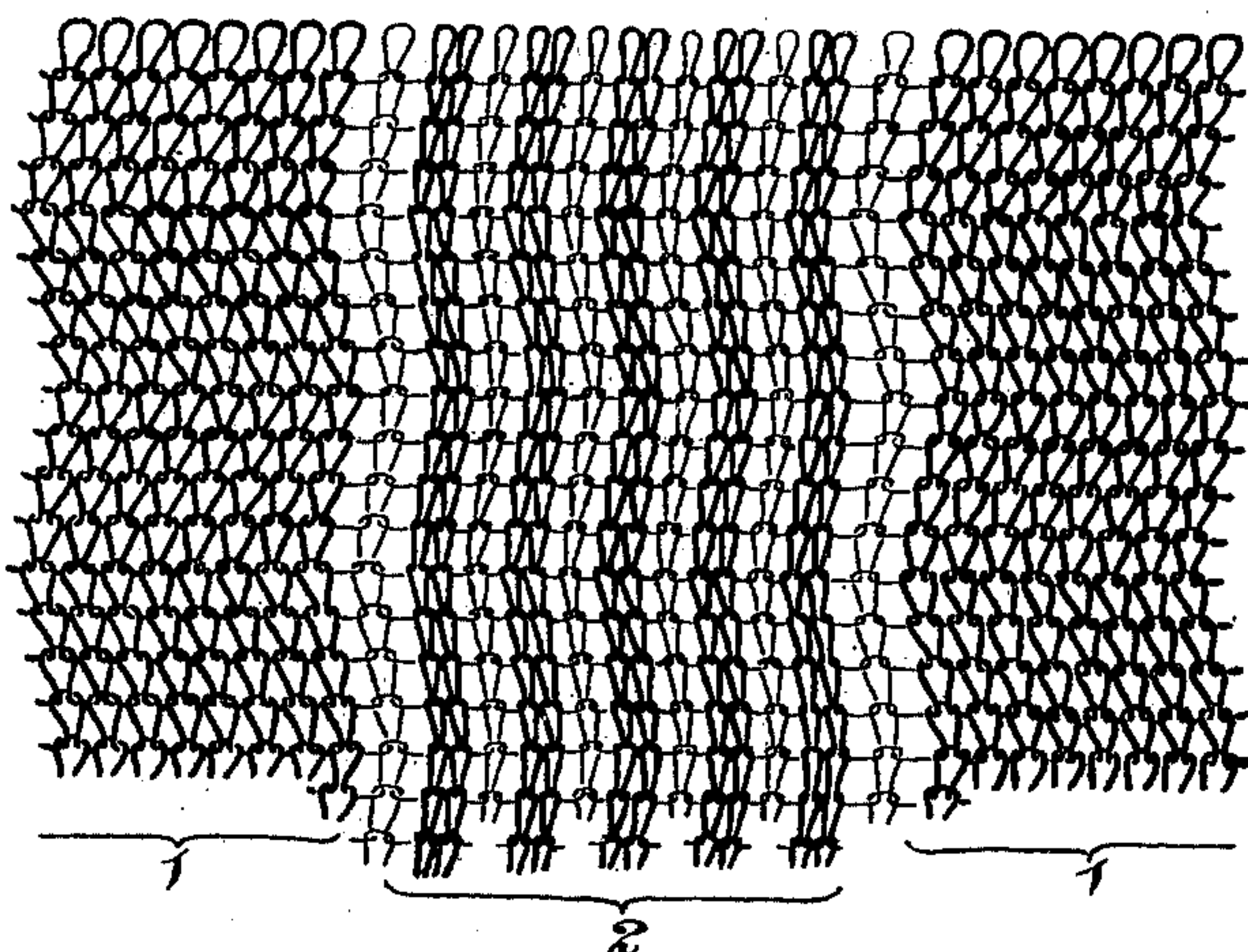
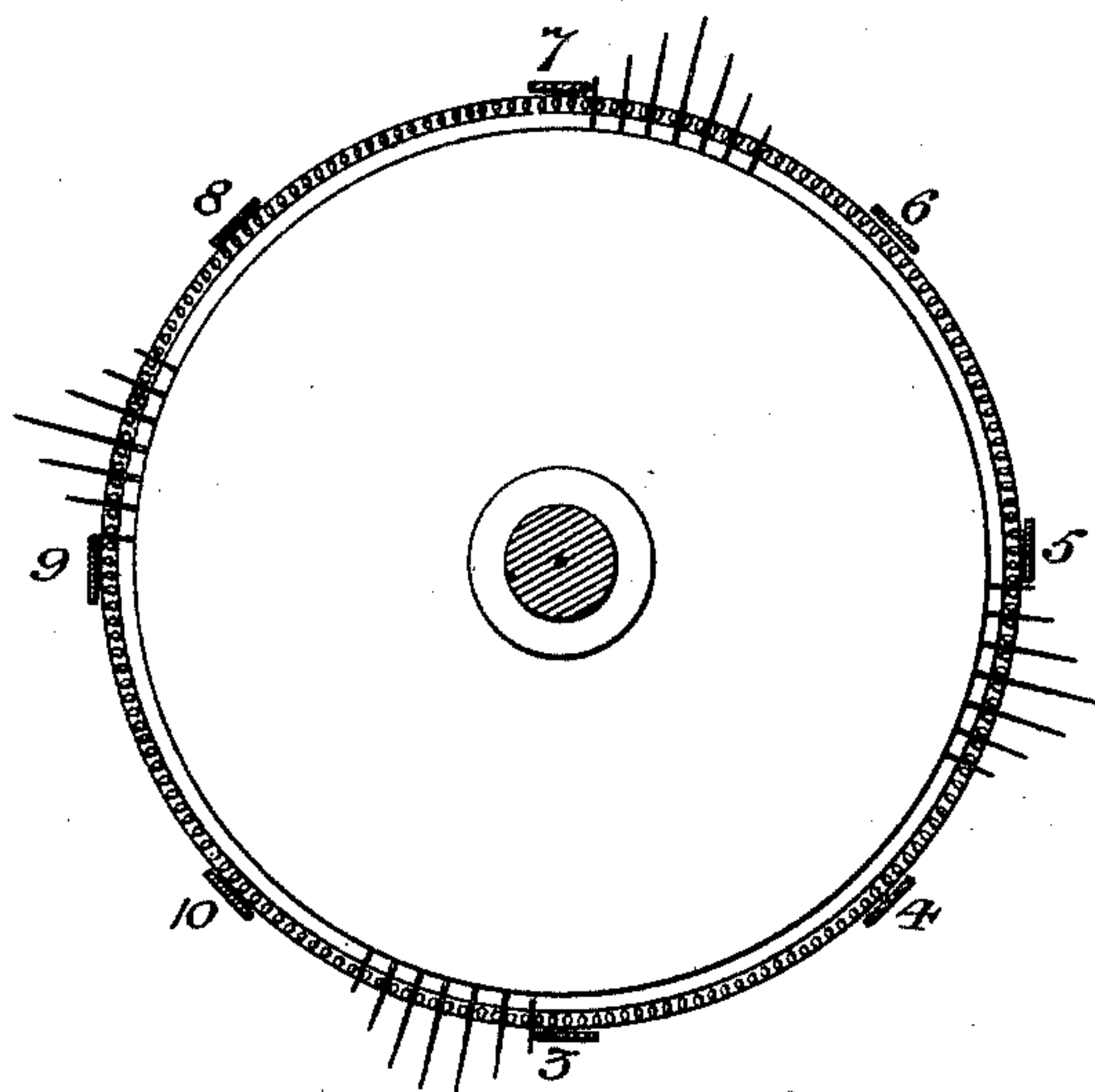


Fig. 2.



Witnesses:-

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UNITED STATES PATENT OFFICE.

WILLIAM H. JACKSON, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF TWO-THIRDS TO EDWARD BLOOD, OF SAME PLACE, AND JOHN BLOOD, OF LEWISBURG, PENNSYLVANIA.

KNITTED FABRIC AND METHOD OF PRODUCING SAME.

SPECIFICATION forming part of Letters Patent No. 670,880, dated March 26, 1901.

Application filed August 19, 1899. Serial No. 727,834. (Specimens.)

To all whom it may concern:

Be it known that I, WILLIAM H. JACKSON, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Knitted Fabrics and Methods of Producing the Same, of which the following is a specification.

The object of my invention is to produce in a knitted fabric, without any increase in the cost of production, ornamental, crinkled, or wave-like effects, and this object I attain in the manner hereinafter set forth, reference being had to the accompanying drawings, in which—

Figure 1 is an exaggerated view of a piece of fabric made in accordance with my invention, and Fig. 2 is a diagram representing sufficient of a knitting-machine to illustrate the method of producing my improved fabric.

The main distinction between my improved knitted fabric and an ordinary fabric is that the knitted wales instead of being straight are waved or zigzag. Thus, as shown in Fig. 1, the wales change their direction with every four courses of stitches, thereby imparting the crinkled or wave-like appearance to the fabric and providing for the production of many attractive effects, especially when plain knitting, such as represented at 1, is alternated with rib-knitting—such, for instance, as represented at 2. The zigzagging or irregular course of the knitted wales is produced by supplying the yarn-feeders of the machine with yarns, some of which have a right-hand twist and others a left-hand twist. Thus in producing fabric such as shown in Fig. 1 I may use any form of rib-knitting machine constructed to produce alternate bands of plain and ribbed fabric and having eight feeders, (represented, respectively, at 3, 4, 5, 6, 7, 8, 9, and 10,) a group of four successive feeders—say those represented at 3, 4, 5, and 6—receiving yarn having a right-hand twist and the other group of feeders 7, 8, 9, and 10 receiving yarn having a left-hand twist, so that four successive courses will be inclined in one direction and the next four successive courses will be inclined in a reverse direction.

Of course each group of feeders with like

twisted threads may comprise more or less than four, or single feeders may replace the groups, depending upon the pattern required, and any desired combinations of plain and ribbed work may be employed without departing from my invention, or the fabric may be wholly plain or wholly ribbed, if desired.

It will be evident that fabric made in accordance with my invention can be produced without any increase in cost, the direction of the twist in the knitting-yarn having no effect upon the price of the same.

Although I have illustrated one form of machine for carrying out my invention, it should be understood that it is not limited thereto, as either circular or straight machines employing either latch or spring-beard needles may be used.

I do not herein claim a fabric in which a row or course of stitches formed with yarn having a right-hand twist alternates with a row or course of stitches formed with a yarn having a left-hand stitch, or vice versa, as this construction, while effective for preventing twisting or distortion of the fabric, will not effect the result at which I am aiming—namely, the production of a zigzag or waved effect, the latter necessitating the formation of two or more successive rows or courses of stitches formed with yarn having a right-hand twist alternating with two or more successive rows or courses of stitches formed with yarn having a left-hand twist, or vice versa.

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

1. Knitted fabric having waved or zigzag wales, the courses of stitches forming those portions of the wales which are inclined in one direction being composed of yarn having a right-hand twist and the courses of stitches forming those portions of the wales which are inclined in the other direction being composed of yarn having a left-hand twist, substantially as specified.

2. The mode herein described of producing waved or crinkled effects in knitted fabrics, said mode consisting in feeding to the needles of the knitting-machine by means of a feeder

or group of feeders, yarn having a right-hand twist and by a succeeding feeder or group of feeders, yarn having a left-hand twist, substantially as specified.

5 3. A knitted fabric having a plurality of rows or courses of stitches formed with yarn having a right-hand twist, alternating with a plurality of rows or courses of stitches formed with yarn having a left-hand twist or vice
10 versa, whereby a waved or zigzag effect is produced.

4. A knitted fabric having a plurality of rows or courses of stitches formed with

strongly-twisted yarn having a right-hand twist alternating with a plurality of rows or 15 courses of stitches formed with strongly-twisted yarn having a left-hand twist or vice versa, whereby a waved or zigzag effect is produced.

In testimony whereof I have signed my 20 name to this specification in the presence of two subscribing witnesses.

WILLIAM H. JACKSON.

Witnesses:

F. E. BECHTOLD,
R. A. KIRKPATRICK.