(Specimens.)

R. M. APPLETON.

KNIT FABRIC.

No. 395,942. Patented Jan. 8, 1889.

Fig. 1.

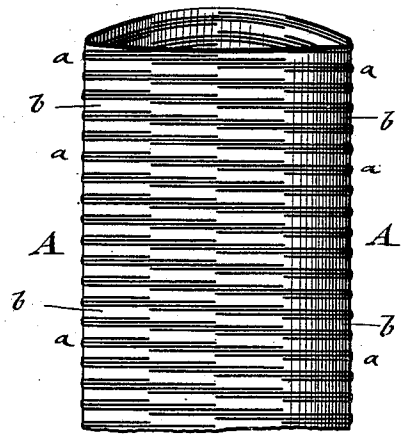
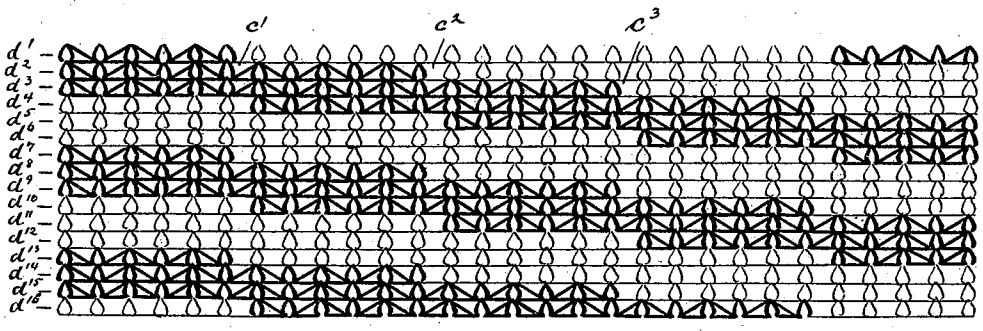


Fig. 2.



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KNIT FABRIC.

SPECIFICATION forming part of Letters Patent No. 395,942, dated January 8, 1889.

Application filed September 18, 1885. Serial No. 177,443. (Specimens.)

To all whom it may concern:

Be it known that I, ROBERT M. APPLETON, of Lake Village, in the county of Belknap and State of New Hampshire, have invented certain new and useful Improvements in Knit Fabrics, of which the following is a specification.

This invention has reference to an improved knit fabric which is made on circular-knitting machines driven by power and used either for circular or seamless articles of underwear or cut into proper shape and sewed up.

Knit fabrics have heretofore been made either in plain-stitch knitting or in tuck-stitch knitting throughout the body of the fabric, or combinations of these stitches have been made so that alternating stripes of knitting of one kind and of the other kind are obtained. This alternating striping of the fabric, however, is connected with considerable expense, as it requires a change of presser-wheels by hand when a change of knitting is required. It can therefore only be applied to goods in which this change occurs not too frequently, but is not suitable when the alternating stripes are narrow, so that the change of presser-wheels has to be made often.

The invention consists in a seamless knit fabric composed of alternating stripes of plain and tuck stitch knitting, said stripes extending spirally around the fabric, and part of the stitches of each circumferential row of stitches being tuck-stitches and the remaining part of the row plain stitches, the ends of the tuck-stitch parts of the rows forming offsets in the contour or edges of the stripes.

In the accompanying drawings, Figure 1 is a perspective view of a tubular piece of my improved knit fabric. Fig. 2 is an elevation or face view of a part of the same on a larger scale.

Similar letters of reference indicate corresponding parts.

A in the drawings represents a seamless knit fabric, which is made on a well-known power knitting-machine of any desired size. A spiral stripe, *a*, of tuck-stitch knitting extends circumferentially around the fabric A and forms with the intermediate, also spiral, stripe, *b*, of plain-stitch knitting seemingly horizontal alternating circumferential stripes.

In Fig. 2, d' d^2 d^3, &c., to d^{16} represent sixteen rows of loops or stitches. In the first row, d', there are six tuck-stitches in succession, the tuck-stitch knitting extending to the point c', where it changes to plain-stitch knitting of eighteen successive stitches, and then again changes to the tuck-stitch knitting. In the second row, d^2, there are twelve tuck-stitches in succession, which extend to the point c^2—that is, six tuck-stitches beyond the point c'—then there are eighteen plain stitches in succession, and then tuck-stitches again, and so on. In the third row, d^3, there are eighteen tuck-stitches in succession, then eighteen plain stitches, and so on, the tuck-stitches extending to the point c^3—that is, six stitches beyond the point c^2. In the fourth row, d^4, the tuck-stitches begin at a point in line with the point c' and extend for eighteen stitches, when the stitch changes to plain-stitch knitting. In the fifth row, d^5, the tuck-stitch begins at a point below the point c^2 and extends for the length of eighteen stitches in succession, and then changes to plain stitch. In the sixth row the tuck-stitches begin at a point below the point c^3 and extend for the length of eighteen stitches, and then change to plain stitch, and so on. In each row in the completed stocking groups of eighteen successive tuck-stitches alternate with groups of eighteen successive plain stitches. In the spiral stripes of tuck-stitch knitting there is an offset at the top and bottom at every sixth stitch. Instead of making the offset at every sixth stitch it can be made after any desired number of stitches. The width of the spiral stripe of tuck-stitch may be, as shown, equal to three rows of stitches, but may be made of two rows or more rows, but not less than two rows.

The circular-knit fabric thus obtained is either used in its circular seamless shape or it is cut up and sewed together, according to the kind of underwear to be made from the same. Articles of underwear can thus be made with alternating stripes of plain-stitch knitting and tuck-stitch knitting, of which the plain-stitch knitting has the tendency to draw in the body of the fabric, while the stripes of tuck-stitch knitting admit of the drawing out of the fabric, whereby the same is rendered more elastic.

Articles of underwear made from my improved fabric have a characteristic appearance and are more comfortable, as they furnish a better fit on the body.

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

A seamless knit fabric composed alternately of continuous stripes of tuck-stitch and plain-stitch knitting extending spirally around the fabric, said stripes being formed of circumferential rows of stitches, part of which are tuck-stitches and part plain stitches, the tuck-stitch parts forming offsets in the contours of the stripes and the plain-stitch parts likewise forming offsets corresponding to those of the tuck-stitch parts, substantially as herein shown and described.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

ROBERT M. APPLETON.

Witnesses:
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E. H. BLAISDELL.