

[54] **KNITTING METHOD**  
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*Primary Examiner*—Wm. Carter Reynolds  
*Attorney*—Sidney Greenberg

[52] U.S. Cl. .... **66/172 R, 66/189**

[51] Int. Cl. .... **D04b 3/02**

[58] Field of Search..... **66/169, 1 A, 170,  
66/198, 1, 172, 2, 183, 189**

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[57] **ABSTRACT**

Method of knitting garments by hand is carried out by casting-on the desired number of stitches on one needle, and thereafter forming the successive rows by knitting through each stitch twice before removing it from the needle, whereby the successive stitches are drawn closely together and the loops formed by each stitch are transverse the plane of the work. A dense, shape-retaining knitted texture is obtained.

**6 Claims, No Drawings**

**KNITTING METHOD**

The present invention relates to a method of knitting, and particularly to a hand knitting method of making knitted garments or other knitted products.

It is an object of the invention to provide an improved knitting method and knitted product.

It is another object of the invention to provide a knitting method for making knitted garments and other products of relatively dense texture, increased warmth without increased bulk, and improved shape-retaining properties.

Still another object of the invention is to provide a knitting method of the above type wherein different sized needles may be used while still providing the same number of stitches per unit length of the knitted rows.

Other objects and advantages will become apparent from the following description and the appended claims.

In a typical knitting process for practicing the present invention, the yarn is cast-on in conventional manner on one of two needles to be used in the knitting procedure, the number of stitches cast-on depending on the desired width of the knitted product. The casting on of these stitches may be done by forming a slip knot in the yarn and placing it on one of the needles, inserting the other needle through the loop on the first needle and knitting a stitch without removing the loop from the first needle, transferring the thus knitted stitch on the second needle to the first needle, knitting through the latter stitch without removing it from the needle, transferring the thus knitted stitch from the second needle to the first needle, and then repeating the last two steps until the desired number of stitches are cast on.

Thereafter, in accordance with the invention, the step of knitting through each stitch twice is carried out before transferring the stitch to the other needle. This step is not to be confused with the procedure of "knitting two together" which is conventionally used for decreasing stitches in a row. In the step of "knitting through each stitch twice," also referred to hereinafter as "double knitting," the successive stitches are pulled closer together and the loops formed by each stitch are transverse the plane of the work, as contrasted with conventionally knitted products in which the knit loops extend along the plane of the work.

By "knitting through each stitch twice" is meant inserting a first needle through two stitches on a second needle and working through both stitches (i.e., either knit or purl through both) and thereafter removing from the second needle the stitch of these two stitches which is nearest the working point of the second needle, and repeating these steps. As a result, each stitch that is thus removed has been worked through twice.

As used herein, the expression "working" a stitch means either "knit" or "purl," as will be understood by those versed in the knitting art.

The following are particular methods which may be employed in accordance with the invention to provide different knit patterns:—

**Double front knit:**— Insert first needle in front of the work through the second and the first stitch on a second needle and knit through to form a new stitch which remains impaled on the first needle. Remove the first stitch from the second needle. Knit through the first two stitches now on the second needle in the same manner and remove only the first stitch from the sec-

ond needle. The new stitch on the first needle remains impaled thereon as a new stitch is drawn through two more stitches on the second needle. Continue to the end of the row and slip the last stitch.

**Double back knit:**— Insert the needle in the back side through the first stitch and then the second stitch and knit through. Remove the first stitch from the needle. Knit through the first two stitches now on the needle in the same manner and remove only the first stitch from the needle. Continue to the end of the row and slip the last stitch.

**Double purl:**— Insert needle in front side through the first and then the second stitch and purl through. Remove the first stitch from the needle. Purl through the first two stitches now on the needle in the same manner and remove only the first stitch from the needle. Continue to the end of the row and slip the last stitch.

Any of the above stitches may be used in any combination with each other to obtain the desired pattern and variation in tightness.

The following are examples of patterns which may be obtained using the method of the invention:

**Herringbone pattern:**— Formed by double back knitting across one row and double purling back the next row.

**Silhouette pattern:**— Formed by double front knitting across one row and double purling back the next row.

**Braid pattern:**— Formed by double front knitting across one row and double front knitting back the next row. This can be varied to provide different types of braids by double back knitting one row and double front knitting the next row. This difference is denoted mainly by whether a herringbone pattern or a silhouette pattern is desired between the rows of braid.

A completely different braid pattern is derived when one row is double purled across and the next row is double purled back.

Instead of using a conventional method of casting-on the stitches as described above, the following "double knit" cast-on method may be employed in accordance with another feature of the invention:

Form a slip-knot and place on needle A. Insert needle B through the loop on needle A and knit a stitch through the loop on needle A but do not remove the loop from needle A. Transfer the thus knitted stitch on needle B to needle A. Insert needle B through the two stitches on needle A and knit a stitch through the two stitches, leaving them on needle A. Transfer the worked stitch on needle B to needle A. Continue the described steps of knitting through the first two stitches and placing the resulting stitch on needle A until the desired number of stitches have been obtained. It will be understood that instead of knitting the stitches they may be purled, or a combination of knit and purl stitches may be used.

By using the foregoing double knit cast-on method, the cast-on row will be uniform in gauge with the remainder of the work knitted in accordance with the invention. This affords the advantage that the ultimate width of the finished work can be immediately determined from the width of the cast-on row.

To increase the number of stitches at the beginning of a double knit row, the following procedures may be used. If working in back of the stitch, knit in back of the first stitch, and without removing it from the needle, work a double back knit stitch. If working in front of

the stitch, knit in front of the first stitch, and without removing it from the needle, work a double front knit stitch. When working a double purl row, purl through the first stitch, and without removing the stitch, double purl through the first two stitches.

To increase in the middle of a row, work double stitches, as described above, across the row to the point of increase. Work a double stitch and instead of removing the first stitch, work through that first stitch again and then remove it from the needle.

To decrease the number of stitches, work through three stitches and remove two stitches.

An advantage afforded by the invention in connection with increasing and decreasing stitches as described is that the regions where the increase or decrease operations are effected are not readily distinguishable from the rest of the work, due to the arrangement of the double knit stitches produced by the invention.

To bind-off the work produced by the described double knit method, work the first three stitches in the pattern used, and pass the first stitch worked over the other two stitches, thereafter work one stitch in the pattern used and repeat the described pass-over step, and then repeat the last two steps until the end of the row. Should a very loose bind-off be desired, the known method of binding-off by passing one stitch over one stitch may be used.

Although in a typical procedure for knitting through each stitch twice the needle is inserted through two consecutive stitches, it is also within the scope of the invention to insert the needle through two stitches separated by one or more stitches, and then knitting through the next corresponding pair of stitches.

Where appropriate or desired, more than two stitches may be knit through at a time, in order to obtain a more tightly knit product. Thus, if three stitches are worked through at a time, and one stitch is removed from the needle, and these steps are repeated with successive stitches, each stitch will have been worked through three times. It will be understood, therefore, that while "double knit" and "double purl" stitches are referred to above in connection with procedures of working through each stitch twice, a more general designation for stitches provided in accordance with the invention is "multiple-knit," or "multiple-purl," or more generally "multiple-worked."

The knitting method of the invention and the knitted product resulting therefrom afford numerous advantages in addition to those already mentioned. A wide variety of novel knitted patterns such as those described above and many others may be obtained by the disclosed knitting method. The stitches produced by the described procedure are such that a run in the article so knitted will not be caused even if a stitch is dropped. If a stitch is pulled, it will not cause the adjacent stitches to tighten, and when the pulled stitch is released, it will return to its original size and place. Pat-

terns may be cut out of fabrics so knitted without unravelling of the knitted work. Buttonholes can be made by snipping the desired number of stitches and binding off the loops resulting from the removal of the snipped stitches. The knitted work produced in accordance with the invention has a much firmer, closer knit with more stability and less stretch than conventionally knitted products. By virtue of the close knit, the knitter can use a much smaller yarn on larger needles than in usual knitting methods.

While the knitting method described is particularly applicable to a hand knitting procedure, the invention may also apply to the operation of knitting machines constructed and arranged to carry out the method of the invention and produce the knitted products resulting therefrom.

While the present invention has been described with reference to particular embodiments thereof, it will be understood that numerous modifications may be made by those skilled in the art without actually departing from the invention. Therefore, it is intended herein to cover all such equivalent variations as come within the true spirit and scope of the invention.

What I claim as new and desire to secure by Letters Patent of the United States is:

1. In a method of knitting, the step of casting-on stitches on a first needle which comprises placing a yarn loop on the needle, working a stitch on said loop with a second needle, transferring the thus worked stitch to said first needle, working a stitch through both stitches on the latter needle, and repeating the last two steps until a predetermined number of stitches are cast-on said first needle.

2. A method of knitting comprising casting-on stitches on a first needle as defined in claim 1, and thereafter providing at least one row of multiple-worked stitches by working each stitch on said first needle with said second needle a plurality of times and removing at least one of the thus worked stitches from said first needle.

3. A method of knitting comprising casting-on a row of stitches on a first needle as defined in claim 1, thereafter knitting a plurality of rows, and binding-off the last of said rows.

4. A method as defined in claim 3, wherein said binding-off step comprises forming a plurality of multiple-worked stitches, passing one of said stitches over adjacent ones of said stitches, and repeating said last two steps.

5. A method of knitting as defined in claim 2, and binding-off the last row of multiple-worked stitches.

6. A method of knitting as defined in claim 5, wherein said binding-off step comprises forming a plurality of multiple-worked stitches, passing one of said stitches over adjacent ones of said stitches, and repeating said last two steps.

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UNITED STATES PATENT OFFICE  
CERTIFICATE OF CORRECTION

Patent No. 3,750,427 Dated August 7, 1973

Inventor(s) Lee D. Gilchrist

It is certified that error appears in the above-identified patent and that said Letters Patent are hereby corrected as shown below:

In the heading, the inventor's address should be:  
P.O. Box 1  
Becket, Mass. 01223

Col. 1, line 30, "switch" should be - stitch -

Col. 4, line 53, "a" should be - as -

Signed and sealed this 17th day of September 1974.

(SEAL)  
Attest:

McCOY M. GIBSON JR.  
Attesting Officer

C. MARSHALL DANN  
Commissioner of Patents