FIG. 6
A shaped article, such as a garment, comprising three or more tubular portions, is integrally knitted on a machine by knitting one or more of the tubular portions then rearranging the stitches on the needles of the machine into a different group or groups, and knitting onto each such group a further tubular portion. By widening or narrowing, tubular portions knitted simultaneously parallel to each other can be caused to be at a desired angle to each other in the finished article.

This invention relates to a knitting method, and is concerned with the knitting of garments and other shaped articles on a knitting machine. Flat bar V-bed machines are mainly concerned, but as is well known, various configurations of knitting machine can be used to perform some similar operations, and the performance of the invention on other types of machine is envisaged.

There are two known methods of producing shaped articles in knitted fabric. In one of these methods flat or tubular knitted fabric is simply cut into suitable shape or shapes for one or more pieces to be secured together to form the article, usually by stitching together the edges of the piece or pieces. In the other method the component piece or pieces is/are knitted to the shape required by suitable increase or decrease of the numbers of stitches in the various courses—the process known as "fashioning"—and then again the edges of the piece or pieces are secured together, usually by stitching.

In both these methods considerable labour is involved in "making up," or securing together the edges of the shaped piece or pieces, and the seams produced are sometimes unsightly. Also in the first mentioned process a considerable quantity of fabric is usually cut to waste, sometimes as much as 40 percent of the total fabric used.

To reduce the amount of seaming it has been proposed to extend the second-mentioned process to produce all the component pieces for a garment in a single length of fabric, the pieces being joined by courses of waste knitting which are cut away when the length is made up into a garment.

According to the invention a method of machine knitting a shaped article comprising a first part including a tubular portion which, at a particular course of stitches, merges into another part comprising discrete second and third tubular portions, comprises knitting that part of the article disposed on one side of the said particular course of stitches on the needles of a knitting machine to provide the desired tubular configuration of the article in that part thereof, rearranging the stitches at the said particular course on the needles of the machine to conform to the tubular configuration of the part of the article disposed on the other side of the said particular course and then knitting the last-mentioned part of the article to said changed tubular configuration, that part of the article which comprises said second and third tubular portions being knitted with simultaneous formation of the second and third tubular portions.

By this method a complete shaped article, such as a garment, can be integrally knitted virtually to its final shape so that little or no seaming is required, and the invention includes such a garment. The wastage of cutting out shaped pieces and the labour of making up are thus substantially avoided.

Particularly where the shaped article is a garment, one or more of the tubular portions may be narrowed and/or widened before and/or after rearranging the stitches so that wales of tubular portions knitted parallel to each other will tend to lie at an angle to each other in the finished article.

The method of the invention can conveniently be carried out on a flat bar V-bed latch needle machine with a needle selecting mechanism, which can be arranged to produce tubular fabric by knitting on one bed in one direction of movement of the cam carriage and on the other bed in the other direction of movement of the cam carriage. Such a machine can be provided with two or more yarn carriers so that two or more tubular pieces may be knitted simultaneously. By use of the method, for example, a jersey could be knitted in one piece by knitting three tubular portions with at least one spare needle between each pair of adjacent tubes to give clearance for the yarn carriers. The outer two tubular portions are of suitable diameter for sleeves and the middle portion of suitable diameter for the body and after a sufficient length of each tubular portion has been knitted to reach the under-arm position two of the yarn carriers can be removed, and the stitches may be rearranged, those of the two outer tubular portions being transferred inwardly by two or more needles so that at least their innermost stitches are received on the outermost needles carrying the middle tubular portion. Further knitting with the single remaining yarn carrier then continues, to produce the shoulder region of the garment as a further single tubular portion. In order to obtain the desired angular relation between the courses of the sleeves and body of the garment, the stitches which originally formed the sleeve portions may be transferred inwardly by one or more needles at suitable intervals in successive courses during this further knitting. This also provides suitable reduction of the shoulder region to the neck diameter.

The rearrangement of the stitches where the tubular portions merge may comprise the inclusion of additional stitches by needle introduction as well as, or instead of, stitch transfer between different needles.

The invention will now be described with reference to the accompanying drawings, which illustrate examples of the use of the method for producing garments. In the drawings:

FIGURE 1 is a diagrammatic elevation of a jersey showing the method of construction by use of the present invention.

FIGURE 2 is a diagrammatic representation of the needles and stitch form on a machine for producing ribs at the ends of the body and sleeve portions of the jersey shown in FIGURE 1.

FIGURE 3 is a diagrammatic representation of the needles and stitch form on the machine during knitting of the body and sleeve portions of the jersey.

FIGURE 4 is a view similar to FIGURE 3 showing the sequence of joining of a sleeve portion with the body portion.

FIGURE 5 is a diagrammatic elevation of part of a different style of jersey.

FIGURE 6 is a diagrammatic elevation of part of another style of jersey.

FIGURE 7 is a diagrammatic front elevation of part of another style of jersey.

FIGURE 8 is a diagrammatic rear elevation of the jersey part shown in FIGURE 7.
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FIGURE 9 is a diagrammatic elevation of part of a further style of jersey.

FIGURE 10 is a diagrammatic representation of the needles and stitch form on a machine during the sequence of joining a sleeve portion and the body portion of the jersey shown in FIGURE 9.

FIGURE 11 is a diagrammatic representation of the needles and stitch form on a machine during the sequence of widening the article or part thereof.

FIGURE 12 is a diagrammatic representation of the needles and stitch form on a machine during a three-dimensional shaping operation.

FIGURE 13 shows an alternative method of producing ribs for the ends of the tubular portions of garments or other articles, and

FIGURE 14 shows another method of producing ribs.

Referring first to FIGURE 1, the jersey comprises a central tubular portion 1 forming the body and two outer tubular portions 2, 3 forming the sleeves. The ends of the tubular portions are formed with short lengths of rib knitting 4 as will be described. The tubular portions 1, 2, 3 are knitted simultaneously on a twin flat bar machine, parallel to each other up to the under-arm region 5, and if knitting continued in this manner the sleeve portions 2, 3 would lie in the positions 2', 3' respectively, as shown dotted line in the Fig. However, by using a stitch transfer in the manner which will be described the sleeve portions 2 and 3 are caused to lie at an angle to the body during knitting of the shoulder region, and the shoulder region is reduced to the narrow diameter of the neck opening 6, and the final position of the sleeve portions 2 and 3 is as shown in full lines.

Since both needle beds of the machine are required to produce 1 x 1 rib fabric, the short lengths of rib knitting 4 cannot be produced in tubular form but are knitted separately as two flat strips for each of the tubular portions, one flat strip being knitted first and then retained on alternate needles of one bed whilst the other flat strip is knitted and retained on the alternate needles of the other bed. This process is illustrated by FIGURE 2 in which line A shows stitches laid on odd needles of the rear bed (shown uppermost in each line of the figure) and even needles of the front bed (shown lowermost). The needle selection is set for knitting and a few courses 10 are knitted for the purpose of fabric take down. A French welt is then produced, a draw thread being inserted if desired, and an appropriate number of courses of 1 x 1 rib is knitted. The front needle bed is then displaced to bring its even needles opposite the odd needles of the rear bed as shown in line B and all the stitches are transferred to the needles of the rear bed as shown in line C. The whole process is then repeated as shown in lines D, E and F, laying stitches originally on the even needles of the rear bed and the odd needles of the front bed, and finally transferring all the stitches to the odd needles of the front bed. The operation illustrated in FIGURE 2 is carried out for each of the three tubular portions 1, 2, 3, using a separate carrier for each.

At this stage there are six strips of rib knitting 4 carried in pairs opposite to each other on the front and rear beds. The cam system is set for tubular knitting, to knit on the front bed needles in one direction of traverse and on the rear bed needles in the other direction. Knitting is then commenced as shown in line A of FIGURE 3, each pair of rib strips being knitted on as a tube, producing the three tubular portions 1, 2 and 3 from the respective yarns 7, 8 and 9, knitted on the rear bed needles on the left to right traverse and on the front bed needles on the right to left traverse.

A suitable number of courses is knitted simultaneously in each of the tubes for the desired length of the body portion 1 and the sleeve portions 2 and 3 up to the under-arm region 5 (as shown in FIGURE 1). Different lengths may be knitted for the body and sleeves if desired by stopping either the carrier 7 or the carriers 8 and 9 and putting the respective needles out of action whilst the other carrier or carriers continue knitting. In FIGURE 1 for example the carrier 7 has been stopped so that the body portion 1 have been put out of action when the body portion has attained the desired length of the under-arm region 5 whilst the carriers 8 and 9 have knitted additional courses to make the sleeves longer than the body. The body portion 1 and/or sleeve portions 2 and 3 may be widened or narrowed during knitting, as will be described. FIGURE 1 shows sleeves which have been progressively widened along their inner edges throughout their length, and to provide for this it will be understood that at the original casting on of the rib portions a number of spare needles would be left between those for the sleeve portions 2 and 3 and those for the body portion 1, so that when widening has been completed and the under-arm region 5 has been reached there is still at least one spare needle between the body portion 1 and each sleeve portion 2 and 3. This is necessary to provide for the widening of the carriers at the edge of each portion without fouling the needles carrying the next portion. These spare needles are indicated at 11 in FIGURE 3 line A.

When the under-arm region 5 has been reached in both body and sleeve portions, the stitches are rearranged on the needles of the machine. The loops of the sleeve portions are rearranged along the lines 2 and 9 in FIGURE 3 so as to be knitted laterally inwardly so that the innermost loops are placed over the needles carrying the outermost loops of the body portion 1. This is illustrated in line B of FIGURE 3, the yarn carriers 7 and 8 having been removed and the sleeve portions 2 and 3 having been transferred inwardly by two needles so that their innermost loops 15 are placed upon the needles 14 which already carry the outermost loops 15 of the body portion 1. The remaining yarn carrier 9 is then caused to traverse the whole width of the three portions so that the garment is continued as a single tube 12 which forms the shoulder region, as shown in line C of FIGURE 3.

If desired the sleeve portions may be transferred inwardly so that more than one pair of loops are placed upon needles already carrying loops of the body portion, but it is necessary that at least one pair of loops is so transferred since otherwise a hole would be produced at the under-arm region 5. An alternative method of rearranging the stitches to avoid such a hole, by needle introduction without such transfer of loops, will be described later.

To provide the necessary narrowing of the shoulder region, and the desired orientation of the sleeves to the body in the final garment, as shown in FIGURE 1, the loops of some or all of the wales which originally formed the sleeve portions 2 and 3 are transferred laterally inwardly by one or more needles after each course or number of courses of knitting.

The number of loops transferred, and the manner in which they are transferred depends upon the style of sleeve formation required. For the "Raglan" style shown in FIGURE 1 the wales which originally formed both the body and sleeve portion should be reduced as the shoulder portion is knitted. For this purpose, at successive narrowing stages, which may be after each course or after two or three courses, according to the gauge of the knitting and the degree of shaping required, the number of sleeve loops transferred is reduced, and the number of wales originally forming the body portion 1 is also reduced by transferring the outermost loop or loops of these wales inwardly to the next needle. The reduction of the sleeve and body portions may be carried out simultaneously in the same courses, or individually in different courses. FIGURE 4 illustrates one example of such reduction, and shows four successive cycles of narrowing (A, C, E, G) a part of the body portion 1 and one sleeve portion 3 being shown. Line A is the original line B of FIGURE 3, and shows the condition immediately after the sleeve loops have been transferred inward-
To join the sleeve portion to the body portion. The needles are identified by letters a to o and it will be seen that the loops of the wales which originally formed a part of the body portion are carried on needles a to h and the loops of the wales which originally formed the sleeve portion are carried on needles h to o, needles h each carrying one body loop and one sleeve loop. A single course is then knitted as shown in line B, each needle then carrying only a single loop. The loops on needles h to o are then all transferred inwardly by one needle pitch so that they are carried on needles g to a, as shown in line C. It will be seen that by this operation the number of wales in the body portion has decreased two, while the number of wales in the sleeve portion retains its original number of wales but is transferred inwardly by one further needle pitch. Another course is knitted as shown in line D. All but the innermost of the loops of the original sleeve portion wales are then transferred inwardly by one needle pitch as shown in line E so that again the number of wales in the body portion has been reduced by two. A further course is knitted as shown in line F. The same number of loops is then again moved inwardly by two loops. And on this occasion the number of loops is reduced by two, the body portion being again reduced by two wales but the sleeve portion retaining the same number of wales as in line E, and a further course is knitted as shown in line H. Thus it will be seen that in the four courses A, C, E and G shown in FIGURE 4 the fashioning point, at which loops are superimposed, has been moved inwardly by two needles on each bed, the overall width having been reduced by the three wales each bed and the width of the original sleeve portion having been reduced by one wale on each bed. This form of fashioning and joining is continued until the total number of wales has been reduced to that required for the start of the opening, and produces on the garment an inclined substantially straight line 16 (see FIGURE 1) of fashioning points in a position corresponding to the seam of a Raglan sleeve in a conventional made-up garment. By changing the sequence in which the loops are transferred and the number of loops transferred at each stage various different effects and styles of sleeve can be produced. For example, if the number of wales of the original body portion is retained constant and only the loops of the original sleeve portions are transferred inwardly then the effect produced will be as shown in FIGURE 7. In this figure line points are substantially in line with the sides of the body portion, giving the appearance of an attached sleeve. Alternatively again, reduction of both the body and sleeve portions may be carried out over a part of the shoulder region in the manner described in relation to FIGURE 4 and during the remainder of the shoulder region only the sleeve portion wales may be reduced giving the effect illustrated in FIGURE 6. It will be understood that by suitable arrangement of the transfer, almost any shape of fashioning line may be produced, and the angle of the fashioning line, and the angle at which the sleeves will lie to the body in the finished garment, will depend upon the frequency with which loops are transferred and the number of loops transferred. Also, by making different loops transfer on the front needles and the rear needles, the appearance of the junction between sleeve and body of a garment may be made different at the front and back. FIGURE 7 illustrates such a garment in which the transfer at the front needles has been as described in relation to FIGURE 4, producing the appearance of a Raglan sleeve with the fashioning line 16, whilst on the rear needles the initial reduction has been mainly of the body loops producing an inclined fashioning line 18, and then over the next few courses the number of body wales has been maintained constant producing the fashioning line 19 parallel to the length of the garment and finally to complete the shoulder region the number of remaining sleeve wales has been maintained constant and further reduction of the body wales has taken place producing the line 20.

FIGURES 9 and 10 illustrate an alternative method of rearranging the stitches for joining tubular portions of a garment or other articles with loops by laterally transferring the loops, but using needle insertion. FIGURE 9 shows a jersey knitted by this method from parallel tubular body and sleeve portions 1, 2 and 3 similar to those described in relation to FIGURE 1. In this case the wales in the sleeves and body portions continue parallel to each other in the shoulder region of the garment. The fashioning or fashioning of the garment is produced by reducing the wales progressively along the outside edge of the shoulder region. The body and sleeve portions 1, 2, 3 are knitted parallel to each other up to the under-arm region 5 in the manner described in relation to FIGURE 1, and at this point there is one spare needle between the body portion 1 and each sleeve portion. FIGURE 10 shows in line A the needle and stitch form of a part of the body portion 1 and a part of one sleeve portion 3 at this course, the spare needles being indicated by letter s. The two tubes could be joined by transferring the loops of the sleeve portion laterally inwardly by one needle pitch, so that the needle r carried the innermost loops of the sleeve portion 3, and then changing to tubular knitting, but this would leave a hole at the under-arm junction, as described. To avoid this, before commencing the first course of tubular knitting with one carrier, during which the stitches on the machine are rearranged, the needle beds are moved to bring the needles into staggered relation. In the course along each bed, the needles s are introduced to receive loops, and tuck stitches are formed on the two adjacent needles r and s of the opposite bed. This is shown in lines B and C of FIGURE 10, the former showing the traverse from left to right, and the latter showing the traverse from right to left. The beds are then moved back to bring the needles opposite to each other, and the next course is knitted fully in tubular knitting, there being loops on all the needles throughout the traverse, the truck stitches being formed in with the body and sleeve loops, as indicated in line D of FIGURE 10. In successive courses the outer loops at each side of the garment are progressively transferred inwardly to the next needle to reduce the width, the transfer being of one or more loops in each course or every few courses. In the garment illustrated in FIGURE 9 one pair of loops is transferred inwardly at each end of the traverse on every course until all the wales of the original sleeve portions 2 and 3 have been transferred, giving the fashioning line 21, and over the remaining reduction to the neck opening 6 one pair of loops is transferred at each end of every course, giving the more rapid reduction of the fashioning line 22, the fashioning lines of course, appearing on the outside edge of the shoulder region.

When widening is required for shaping an article knitted by the method, this is done by needle introduction in a manner similar to that described in relation to the needle introduction for joining tubular portions illustrated in FIGURES 9 and 10. FIGURE 11 illustrates such widening, which is usually required for shaping sleeve, leg or body portions of a garment, and as shown in FIGURES 1, 5, 6, 7, 8 and 9, needles being introduced on one bed only in each traverse.

In FIGURE 11, line A shows the loops and needles of a portion of an article which is to be opened at the end of the yarn carrier traverse. Line B is the same diagram expanded to duplicate the two needle beds, for convenience. Line C shows the first stage of widening during the left to right traverse of the yarn carrier, knitting on the rear bed. As the last needle in this bed carrying a loop is passed the two beds are moved to staggered relation as shown, and a tuck stitch is made on the ad-
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The movement of the beds temporarily for producing the second course the operation is repeated on the front bed, making a loop on needle c and a tuck stitch on the adjacent needle b on the rear bed, as shown in line D, and a further course of knitting covers both the introduced needles b′ and c′, as shown in line E.

Three-dimensional shaping, for example for producing figure fitting garments or other shaped articles, can also be produced, by increasing the number of courses knitted in one part of the article compared with the number knitted in the remainder of the article. FIGURE 12 illustrates the production of a roughly lozenge-shaped area in a tubular portion of a garment with up to 100 percent increase in the number of courses in the area over the number in the adjacent part of the article. This causes the area to stand out from the plane of the remainder of the knitted fabric which is applicable to a bust form on a jersey or like garment. In the drawing the needle tricks are indicated by the letters a to p, and twenty courses or part courses of knitting are shown, indicated by the letters A to T. The shaping is to be produced on the front of the article, on the needles e to t of the first course, shown in line A, the yarn carrier traverse is complete along the rear bed needles but on the return traverse along the front bed, needles a to g are selected not to knit, and the traverse is stopped when the loop on needle h has been knitted, leaving the loops of the previous course retained on the front needles a to g. The selection is then set so that needles a to f will not knit, and the carrier is reversed so that needles g to p are knitted on the front bed, and a complete traverse is again executed along the rear bed, as shown in line B. On the next traverse along the front bed, shown in line C, needles a to i are selected to knit, and the remaining needles i to p not to knit, and the carrier is reversed after knitting the loop on needle h, and needles a to i are selected to knit, as shown in line D. This process is repeated, taking in one further needle on each successive part traverse of the front bed needles before reversing until the maximum desired width of the lozenge-shaped area has been attained, in lines J to M.

In subsequent courses the reversal takes place successively one needle earlier in each direction of traverse until in line S the reversal is made after knitting the loop on needle j, and in the reverse traverse knitting is on needles a to i as shown in line T. The lozenge-shaped area is indicated by the chain dotted line X and it will be seen that within this area there are twenty courses knitted on the front bed needle h, which is in the centre of the lozenge-shaped area, whilst only ten courses are knitted on the front needles a to d and i to p in the adjacent part of the article.

Instead of producing strips of rib fabric separately by half gauging, as described with reference to FIGURE 2, two strips of fabric of any conventional stitch form can be produced simultaneously side by side on a machine and then transferred one to each bed. The beds can then be racked to bring the strips opposite to each other, and knitting can be continued in tubular form as previously described. FIGURE 13 shows in line A two strips of 1 x 1 ribbing produced side by side on a machine with two yarn carriers 23, 24, and each using all the needles in the appropriate part of both beds. When a sufficient length has been knitted the beds are racked to bring the front and rear needles in alignment with each other and all the rear bed loops of one strip (in this case the left hand) line A. On the next course, however, the adjacent needles and all the front loops of the other strip are transferred to the rear bed needles, as shown in line B. The beds are then racked to bring the two strips 25, 26 opposite to each other, or alternatively all the loops of one strip are transferred laterally to place the two strips end to end, and knitting is then carried on in tubular form. All the rib strips required for an article could be produced simultaneously in side by side relation by this method and then be transferred either by racking the beds or by loop transfer to bring the respective strips opposite to each other.

FIGURE 14 shows yet another method of producing rib strips, using a machine with two needles in each trick. Line A shows one rib of 1 x 1 knitting produced on the odd needles in the tricks of the rear bed and the even needles on the front bed. After a suitable length has been knitted all the loops are transferred to the odd needles of the rear bed as shown in line B. A further 1 x 1 rib is knitted as shown in line C on the even needles of the rear bed and the odd needles of the front bed, and this is subsequently transferred to the odd needles of the front bed as shown in line D. Tubular knitting then proceeds as before.

The scope of the invention for producing shaped articles is very wide indeed, extending to all kinds of garments and many other articles such as for example reinforcing fabrics for plastic structures. A complete body enveloping garment, such as a "cat suit" can be knitted in one piece, for example, by starting with four parallel carrier portions knitted simultaneously, the inner two to form the legs of the garment and the outer two to form the sleeves. Knitting would be stopped on the sleeve portion, and their needles taken out of action when a suitable length had been knitted, and when the leg portions had been knitted to a sufficient length they would be merged by rearranging the stitches to form the crotch of the garment and continued as a single tube for the torso portion, after which the process would be similar to that described above for the production of a jersey. Sock-like ends can be produced on the leg portions, glove-like ends on the sleeve portions, and an integral hood could be knitted on at the neck of the garment.

Openings, such as neckline shaping, or fastening openings to enable the garment to be donned by a wearer, can be provided by reversing the yarn carrier and carriage at an intermediate part of their traverse when the transfer is required, in both directions of travel on one bed, and the opening can be shaped as desired by lateral transfer of stitches or by needle introduction in the manner already described for other purposes.

It will also be understood that a single tubular portion may be divided, to continue knitting as two or more sub portions, or the stitches of two or more tubular portions may be rearranged, by transferring some of the loops laterally to provide at least one spare needle, and introducing a further yarn carrier or carriers to knit the transferred loops on as one or more tubular portions, whilst those loops on their original needles are knitted on as a separate tubular portion. Thus a trouser-like garment could be knitted either by starting at the ends of the legs, knitting two tubes which are joined at the crotch, or by starting at the waist band, knitting a single tube, which is divided into two separate tubes.

Likewise, a jersey or similar garment could be started at the neck opening. The tubular knitting would be widened to form the shoulder region and the stitches be rearranged on the needles of the machine to provide a central group for the body and two side groups for the sleeves. Two further carriers would then be introduced and these groups be knitted on to form body and sleeve tubes.
When the garment or article is finished the only making-up operation necessary is to stitch together the edges of the rib strips such as 4 in FIGURE 1 or the fabric strips such as previously described, and to add any fastenings or neckline finishing strips or the like. A machine may be controlled automatically to repeat the sequence of operations for a garment or article, inserting a draw thread or knitting a strip of waste fabric between the end of one article and the commencement of the next. Several machines may be controlled from the same control means to operate in synchronism, producing similar articles.

Machines operating in accordance with the method may be arranged to provide patterning and fancy effects by the use of tuck and float stitches and other known methods that are associated with single jersey knitting.

What we claim is:

1. A method of knitting on a machine with needles a shaped article comprising a first part comprising a tubular portion, which at a particular course of stitches, merges into a second part including a continuation of said tubular portion and at least two discrete tubular portions, said method comprising the steps of:

knitting the first part of the article on the needles to provide the desired tubular configuration of the article in the first part thereof,

knitting the second part of the article on the needles with the two tubular portions parallel to each other to provide the desired tubular configuration of the second part, and

shaping a tubular portion of at least one of said parts by re-arranging the stitches on the needles of the machine in courses of that tubular portion to be shaped whereby wales of a tubular portion of the second part will be caused to be at an angle to the wales of the other tubular portion of the second part in the finished article.

2. The method claimed in claim 1 wherein the stitches are rearranged by transferring groups of them to other needles of the machine.

3. The method claimed in claim 1 wherein the stitches are rearranged by introducing needles between groups of needles carrying stitches and forming new stitches thereon.

4. The method claimed in claim 1 including the initial step of forming two flat strips of rib knitting for a tubular portion, arranging the stitches of the strips on opposite needles of the machine and knitting on to these stitches in tubular form.

5. The method claimed in claim 1 for producing an article including a further part comprising a plurality of discrete tubular portions merged with one of the said parts at a further particular course of knitting comprising the step of rearranging the stitches on the needles of the machine at the said further particular course.

6. The method claimed in claim 1 for producing an article including a further part comprising a plurality of discrete tubular portions merged with the first of said parts at a further particular course of knitting, the method further comprising knitting the said further part to provide the desired tubular configuration of the article in this part.

7. A method of machine knitting a garment having a body and two sleeves and comprising first and second parts divided from one another by a particular course of stitches at the underarm position in the garment, said method comprising the following two steps irrespective of order, knitting said first part of the garment on needles of the knitting machine to provide a configuration of a body tube and two sleeve tubes knitted simultaneously,

knitting said second part of the garment on needles of the knitting machine to provide a single tube configuration from the underarm position to the neck of the garment, and said method also comprising the step of shaping said tube of the second part by rearranging stitches in courses thereof whereby wales of the sleeve tubes knitted simultaneously parallel to one another are caused to lie at an angle to one another in the finished garment.

8. The method claimed in claim 7 wherein said rearrangement of stitches in said tube of said first part is carried out in courses spread from the neck of the garment to said particular course of stitches.

9. The method claimed in claim 7 wherein said rearrangement of stitches is carried out adjacent lines constituting the divisions between wales connecting with the sleeve tubes of said second part and said body tube of said second part.

10. A method of machine knitting a garment having a body and two sleeves and comprising first and second parts divided from one another by a particular course of stitches at the underarm position in the garment, said method comprising:

knitting said first part of the garment to provide a configuration of a body tube and two sleeve tubes knitted simultaneously in the direction from waist and cuffs towards said particular course of stitches, subsequently knitting said second part of the garment in the direction from the particular course of stitches to the neck of the garment to provide a single tube configuration in this part of the garment, and narrowing said tube of said second part by rearranging stitches in courses thereof whereby wales of the sleeve tubes knitted simultaneously parallel to one another are caused to lie at an angle to one another in the finished garment.

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