April 12, 1938. P. LEIMBROCK 2,113,763

PRODUCTION OF TOP PIECES FROM RIBBED GOODS

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Fig. 2.

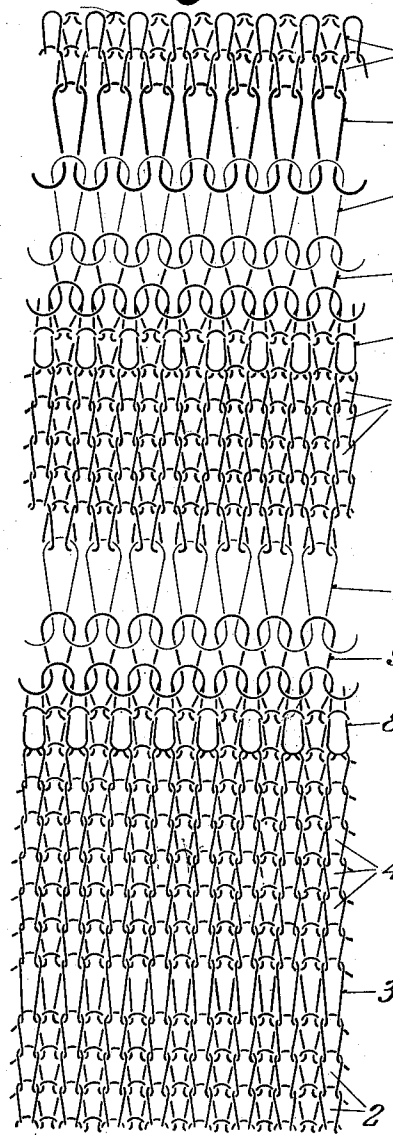
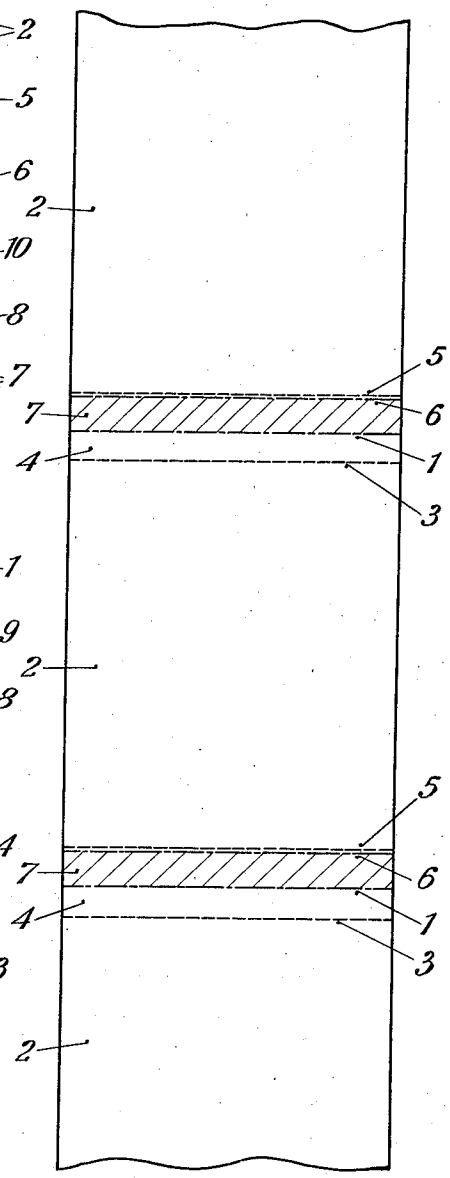


Fig. 1.



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PRODUCTION OF TOP PIECES FROM RIBBED GOODS

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1 Claim. (Cl. 66—24)

This invention relates to a method of producing top pieces consisting of ribbed goods.

It is known to transfer knit goods to the needles of a knitting frame, transferring device or looping machine by means of additional courses disposed above the transferring course and to separate these additional courses after the transfer by unravelling them except in cases of irregular transferring. As ribbed goods cannot be unravelled from the selvage, i. e., the edge coming first from the machine during production, it has been impossible hitherto to transfer ribbed goods at the initial edge in this manner. For example, if stockings provided with tops consisting of ribbed material are made, it is desirable to produce the top in the form of a welt, particularly for the reception of a rubber ring, so that besides the end edge of the goods, whose additional courses can be ravelled without trouble, the initial edge of the goods has to be transferred to the needles of the machine working on the leg. As far as they cannot be removed by cutting, the additional courses of this initial edge will thus remain at the transferring point and impart an inferior appearance to the stocking, which has always been considered a very serious drawback.

The invention has for its object to provide means for separating also the additional courses of a transferred edge of ribbed goods in a perfectly regular manner, and it attains its end by working, during production of the top pieces, the additional courses of the initial course to be transferred onto the initial edge of the top pieces by means of a separating course consisting only of the loops of one side of the goods, so that after transfer of the initial edge to the needles of, say, a knitting frame the additional courses will drop off when the separating course is drawn out.

To further facilitate the transfer of top pieces directly at the initial edge the latter is worked into loops on the needles of only one needle row.

Separating courses have always been used for transversely subdividing ribbed goods, but only for separating top pieces continuously produced in band form on a ribbing machine after removal of the band from the machine. According to the invention, however, a separating course serves for separating additional courses at the initial edge of the top piece to be transferred, which courses are required for transferring this edge. By connecting the additional courses with the aid of a known separating course to the initial edge of the top pieces a transfer of ribbed material at the initial edge insuring proper removal of the additional courses becomes possible for the first time.

One form of the invention is illustrated in the accompanying drawing, in which Figure 1 shows several top pieces of stockings arranged in the form of a band and consisting of ribbed material produced on a flat ribbing machine; and Fig. 2 shows on an enlarged scale a diagram of mesh formation of a portion of the joint of two adjacent top pieces. In both instances the goods are shown as they come from the machine, i. e., with the initial edge of the individual top pieces turned down.

Contrasted with top pieces produced in band form on a ribbing machine where the band is separated by cutting, the structure shown refers to a band of top pieces provided at the separating points with a separating course 1 of known type. By withdrawing the courses 1 the individual top pieces 2 become separated in a most convenient manner.

To be able to produce welts from the top pieces 2 the end edge thereof is fitted in known manner with a slack course 3 above which the additional courses 4 are disposed which can be ravelled. On their initial course the top pieces 2 are provided with a course 5 consisting exclusively of the meshes of one side. This course 5 constitutes the transferring course of the initial edge and the slack course 3 that of the end edge, and is indicated in Fig. 2 by two broken lines. By means of a separating course 6 corresponding to the separating courses 1 the additional courses 7 (hatched in Fig. 1) of the initial edge are hung into the transferring course 5, so that after transfer at their transferring course 5 the additional courses 7 will drop off when the separating course 6 is drawn out. Before the separating courses 1, 6 a tuck course 8 is provided to prevent the formation of ladders from the plain separating course to the double-sided goods.

A top piece band of the kind described at the joints of two top pieces 2 is produced as follows:

In front of the end edge of each top piece 2 the double-sided goods are provided with the usual slack course 3 connecting with the additional courses 4, whereupon the tuck course 8 and then another additional course 9 are knit. Now comes the separating course 1 for separating the top pieces 2, which is worked in known manner with a particularly plain thread on the two needle rows and finally knocked over from the frame needles so as to consist only of meshes formed on the machine needles. As a result thereof the meshes of the tuck course 8 hanging on the frame needles will be free also and occupy the position shown in Fig. 2. After completion of the separating course

4 the additional courses 7 for the initial edge of the next top piece 2 are started and terminate again in a tuck course 8 and a subsequent plain course 10 followed by the separating course 6 which is worked like the separating course 4 and has the same effect upon the preceding tuck course 8. Onto the separating course 6 the transferring course 5 is worked which forms also the initial edge of the top piece 2. The transferring course 5 is produced like the separating courses 4, 6 by working a thread on both needle rows and finally knocking over or pressing off the meshes hanging on the frame needles so as to have a plain course, whereupon the material of the top piece 2 concerned is worked.

Since the transferring course 5 possesses only half as many meshes as a regular ribbed goods course, it is necessary to provide only every second needle of, say, a transfer bar with a mesh of this course or to hang each mesh on two needles.

It is immaterial whether a top piece for stockings or a piece of ribbed goods intended for other purposes is provided with separable additional courses 7 in the manner described.

Transferring of the top pieces at the initial edge could of course be effected in the course following the latter and formed as slack course for this purpose, so that the provision of the transferring course 5 could be dispensed with.

The invention can further be utilized also in the production of top pieces on a circular rib top machine.

Insofar as the production of the top pieces are concerned, in accordance with the present invention to transfer them to the leg machine the following may be carried out.

The top pieces (Fig. 1) from the ribbing machine are worked so that the separating courses 6 are formed, whereby the band will separate into single band pieces. These single band pieces are placed on the comb of a suitable machine by means of their slack course 3 and also their transferring course 5. In this way the additional courses are separated from the slack course in a suitable manner, while the additional courses 7 of the transferring course 5 are separated by pulling out the separating course 6. Finally the transfer of these courses on the courses 3 and 5 takes place. On the two courses 3 and 5 the leg parts of the stocking are now prepared.

I claim:—

A method of making top pieces of ribbed wear connected together in the form of a band, comprising, on beginning a new top piece, first knitting a number of additional courses and then a tuck course, then knitting a plain course on the needles of one row only, fabricating a separating course and then forming a transfer course which is the actual beginning edge of the top piece which is also knitted on the needles of one row only, then fabricating the actual top piece which ends with a slack course to which are joined further additional courses which are terminated by a tuck course, a course consisting of the stitches of only one side of the wear, and a separating course.

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