

UNITED STATES PATENT OFFICE

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METHOD FOR KNITTING PANTS OR LIKE ARTICLES OF CLOTHING

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The present invention relates to an improved method for knitting pants or like articles of clothing on parallel knitting machines with two needle beds.

According to a known method for knitting pants the knitting is started at the body piece and is continued towards the legs which are completed by narrowing same at predetermined intervals for obtaining the desired shape. This method, however, necessitates an additional operation to be carried out by hand, viz. the formation of a mesh seam (maschennaht) in the gusset, which takes considerable time, particularly when the loops are very fine, and moreover demands highly skilled operators.

The invention has for its object to do away with such detriments and to provide a method for knitting pants and the like articles whereby in a single, uninterrupted and purely mechanical cycle of operations pants may be produced, which are entirely without a seam, even in the gusset, so that the manufacture of such articles is considerably quicker, simpler and cheaper than of the known articles, which moreover are not seamless, not so comfortable and not as strong as the new article.

According to the invention, when knitting pants or the like fabrics the knitting is started at the bottom of the two legs simultaneously and after same have been completed by widening up to the widest part, an additional number of unoccupied needles in both needle beds, corresponding to the width of the gusset, is put into operative position whereupon with the aid of such needles a rand ("netzreihe") is knitted to close the gusset and the body piece is finished.

In carrying into effect the new method, after the legs of the pants have been completed up to the widest part, one of the thread guides is put out of action and the unoccupied needles of both beds situated between the two legs, are brought into operative position by means of a mechanical lifting apparatus. Through the medium of an auxiliary cam, arranged on the ordinary cam of the rear bed of the knitting machine and cooperating with the above-mentioned unoc-

cupied needles of the rear bed, which for this purpose are provided with an additional foot, a rand is knitted in the usual manner for closing the gusset. At the ends of the needle bed the auxiliary cam is automatically put into or out of action. By means of a so-called comb the loops of the middle needles are drawn off, so that the body piece of the pants may be finished unhindered.

What I claim is:—

A method of knitting seamless pants on flat knitting machines with two needle beds and provided with widening means, characterized by the distinctive feature that the knitting of the pants is started in the known manner with the lower ends of both leg portions simultaneously and the leg portions are completed by widening up to their widest part whereupon a number of needles corresponding to the width of the gusset are put into operative position on both beds, a row of meshwork is knitted with these needles and then the body portion is circularly knitted to a finish.

In testimony whereof I affix my signature.
JOZEPHUS ANTONIUS PETRUS KRAMER.

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