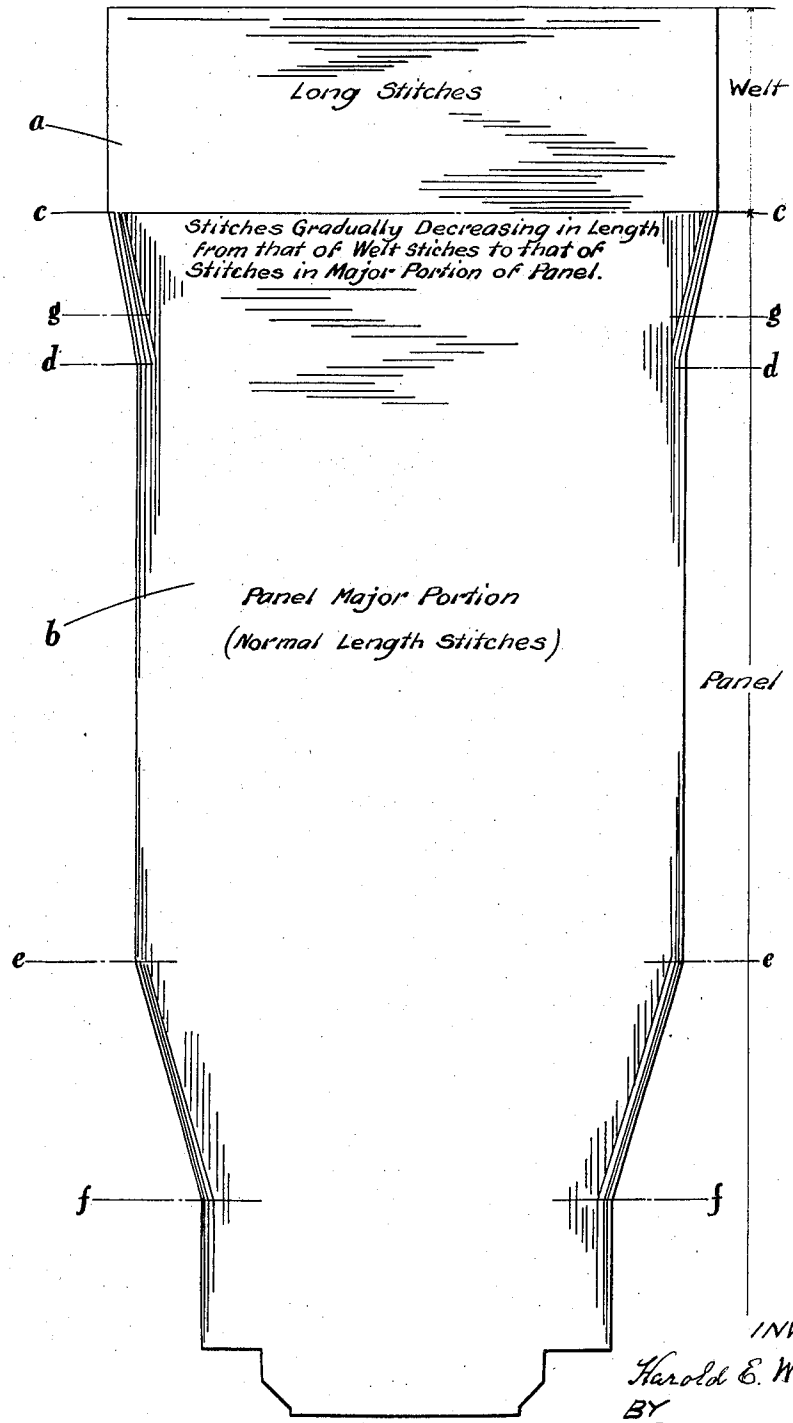
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STOCKING AND IN THE METHOD OF PRODUCING SAME

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STOCKING AND IN THE METHOD OF PRODUCING SAME

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This invention comprises improvements in stockings and in the method of producing same. The invention refers to stockings of the fully fashioned type provided with a welt, such stockings being usually knitted on a Cotton's Patent or other straight bar knitting machine.

In this class of stocking it is customary to knit the welt, usually a turnover or folded welt, with comparatively coarse and/or strong yarn (e. g., cotton) and the panel or leg with comparatively fine yarn (e. g., silk); and in order to provide maximum elasticity in the welt which is required to encircle the thigh of the wearer, the welt fabric is knitted slacker than the fabric of the leg or panel. The top part of the panel adjoining the welt has also to accommodate a comparatively thick part of the wearer's leg or thigh, and by virtue of the fact that the fabric at this part is knitted of comparatively fine or weak yarn and possesses considerably less extensibility or elasticity than that of the welt, an excessive strain is frequently exerted upon said top panel portion when the stocking is being worn by a person having generous or excessively large thighs, as it will be appreciated that the considerable disparity in extensibility between the welt fabric and the adjoining panel fabric results in the tighter panel fabric being unduly strained and distorted, the said panel fabric in fact restricting the expansion of the lower portion of the welt. This results in frequent yarn breakage or splitting of the fabric near the welt.

To overcome the above disadvantage the present invention provides a stocking wherein that part of the leg or panel adjoining the welt is knitted sufficiently slack to provide said fabric with a degree of elasticity equal or substantially equal to that of the adjoining welt fabric. It will, however, be appreciated that it is impossible to continue the comparatively slack knitting throughout the leg or panel, as by so doing the fabric so knitted would have a coarse appearance. It will also be appreciated that the production of a band of fabric of uniform slackness at the top of the panel adjoining the welt would be equally objectionable as same would obviously detract from the appearance of the stocking, and produce an unsightly line where the stitches of the last course of slack stitches join the comparatively tight stitches in the panel.

This invention, however provides a stocking wherein liability to breakage at the top of the panel adjoining the welt is eliminated or minimised without in any way impairing the appearance of the stocking, and to this end the present invention provides a full-fashioned stocking with welt in which extensibility or elasticity of the fabric at the panel top adjoining the welt gradually or progressively decreases by stitch variation from the welt to the normal panel fabric.

For the purpose of more fully describing the nature of this invention reference will now be made to the accompanying drawing, wherein the figure illustrates a fashioned stocking blank with welt produced in accordance with the present invention.

Referring to the stocking blank illustrated in the drawing, *a* is the welt and *b* the panel. As is customary in this type of blank the welt *a*, which is preferably a folded welt, is produced from comparatively coarse yarn and is knitted slacker, i. e., with longer stitches than the fabric of the panel *b*. The upper part of the panel adjoining the welt is shaped by narrowing (known as thigh narrowings) in the well known manner from the position *c*—*c* to *d*—*d*, the major portion of the panel from *d*—*d* to *e*—*e* being parallel, and narrowing being again effected from *e*—*e* to the ankle at *f*—*f*. So far as above-described the knitting is in accordance with the customary practice on a Cotton's Patent machine. Previously, however, the whole of the leg or panel from the position *c*—*c* adjoining the welt has been produced from fabric of uniform stiffness or elasticity, that is to say stitches of uniform size. In this invention, however, the initial stitch course adjoining the welt *a* or a predetermined number of successive courses is or are knitted with comparatively long or slack stitches of the same or substantially the same length as the welt stitches which afford a degree of elasticity equal or substantially equal to that of the adjoining welt fabric, and the length or size of the stitches in the immediately subsequent courses is slightly reduced at intervals until the required stitch size and elasticity or extensibility of the fabric for the panel is reached when knitting of the panel is continued without stitch variation. In the example illustrated the graduated stiffening takes place from *c*—*c* to *g*—*g* after which stitches of uniform size or stiffness are produced throughout the blank.

It will be seen that the graduated stiffening terminates a short distance before the thigh narrowings terminate.

By way of example, in the welt *a* there may be 33 courses of stitches per inch of fabric produced, the stitch formation being uniform througout the depth of the welt, and at the junction between the welt and panel, i. e., at the line *c*—*c*, the stitch size may be slightly reduced

to say 38 courses per inch, and thence to the position *g*—*g* 24 further stitch changes may be effected at equal intervals at the rate of approximately a half course per inch until the stitch size is reduced to 50 courses per inch. The graduation of the stitches is then discontinued and uniformity maintained throughout the knitting of the blank.

Heretofore in knitting stockings with a turnover or folded welt it has been customary to transfer from the cotton or other coarse yarn of the welt to the silk or comparatively fine yarn at the commencement of the panel. In the present invention, however, knitting with the silk yarn may with advantage be commenced before completing the knitting of the welt. For example, one side or fold of the welt may be composed of fabric knitted from cotton or other comparatively coarse or thick yarn, while at a suitable position in the depth of the other side or fold of the welt, said cotton or like fabric is joined to the silk or other comparatively fine fabric from which the panel is knitted. It thus follows that each loop of the first course of the panel will be looped through a combined silk and cotton loop instead of through two cotton loops as heretofore. Hence the usual line of holes produced at the joint of welt and panel is rendered very much less conspicuous, and in use it is found that the strength of the article at such joint is increased. In the finished stocking the join between the cotton and silk advantageously occurs at the outer side of the welt.

I claim:

1. A fully fashioned stocking comprising a welt and a single ply panel, characterized in that a portion of said panel adjoining the welt is composed of stitches which gradually decrease in length from the welt to the main portion of the panel, whereby the elasticity or extensibility of the panel top decreases progressively from the welt to the main panel portion.

2. A fully fashioned stocking having a welt and a single ply panel adjoining the same, wherein the stitches of the fabric at the commencement of the panel immediately adjoining the welt are equal or substantially equal in length to the stitches of said adjoining welt and that the stitch length decreases progressively down the panel from the welt to the normal stitch length of the panel.

3. A fully fashioned stocking having a leg or panel section of single ply fabric and a welt, the latter being composed of stitches which are larger than those of the leg or panel, and having the stitch length in that area of the panel which adjoins the welt graduated down from the long stitches at the welt to the normal-length stitches of the leg.

4. A fully fashioned stocking having a single ply leg or panel section and a welt, the latter being composed of stitches which are longer than those of the leg or panel, and having immediately below the welt an area of the leg or panel section which is narrowed, in which area the stitch length decreases progressively down from the welt to the leg, the stitches of which are of normal length.

5. A method of producing a fully fashioned stocking having a welt and a single ply panel, which comprises knitting the welt, knitting at least one course of the single ply panel adjoining the welt with slack stitches, gradually reducing the stitch length over the succeeding courses until a predetermined normal length is attained, and then knitting the remainder of the panel with stitches of uniform normal length.

6. A selvedged blank for a fully fashioned stocking, comprising a single ply leg or panel section knitted of comparatively fine yarn, and a welt knitted of comparatively coarse yarn, the stitches thereof being slacker than those of the major portion of said leg or panel section, said section having a band immediately below the welt in which the stitch length and degree of slackness gradually decreases from that of the welt at the junction of the band therewith to that of the major portion of the panel section at its junction therewith.

7. A knitted full-fashioned stocking comprising a welt section composed of relatively long stitches of uniform length walewise of the stocking fabric and uniformly spaced coursewise thereof, a calf section composed of relatively short stitches of uniform length walewise of the stocking fabric and uniformly spaced coursewise thereof and a single ply section intermediate the welt section and the calf section composed of succeeding courses of stitches of such length that the long stitch length of the welt section is gradually reduced to the short stitch length of the calf section.

8. A fully fashioned stocking comprising a welt section composed of stitches of a predetermined length, and a single ply panel section, the major portion of which is composed of stitches of uniform length which is less than that of said welt stitches, said panel section having a portion intermediate its main portion and the welt composed of stitches which gradually increase in length from said main portion to said welt.

9. A fully fashioned stocking comprising a welt section composed of stitches of a predetermined length, and a single ply panel section a major portion of which is composed of stitches of uniform length which is less than that of said welt stitches, said panel section having a portion intermediate its main portion and the welt, knitted from the same yarn as said main portion, the stitches of which intermediate portion adjacent the welt are at least approximately of the same length as said welt stitches, which length gradually decreases to that of said main panel portion.

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