March 5, 1940. A. E. PAGE ET AL 2,192,798

KNITTED FABRIC

Original Filed April 8, 1936

Fig. 2.

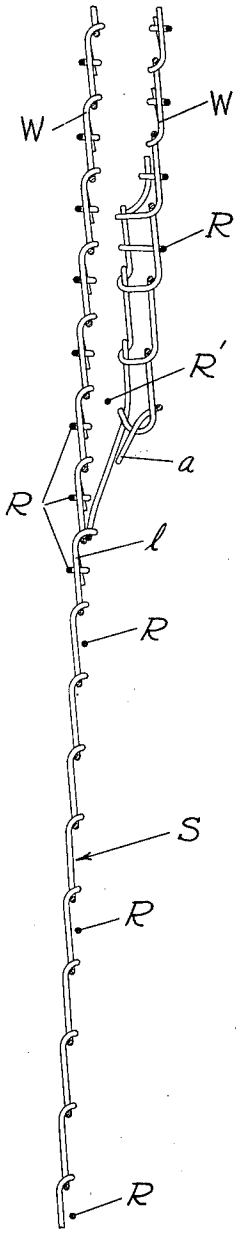


Fig. 3.

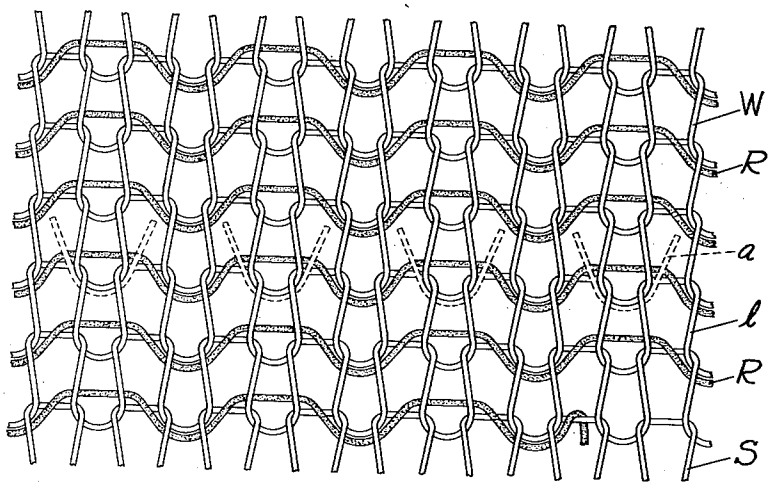
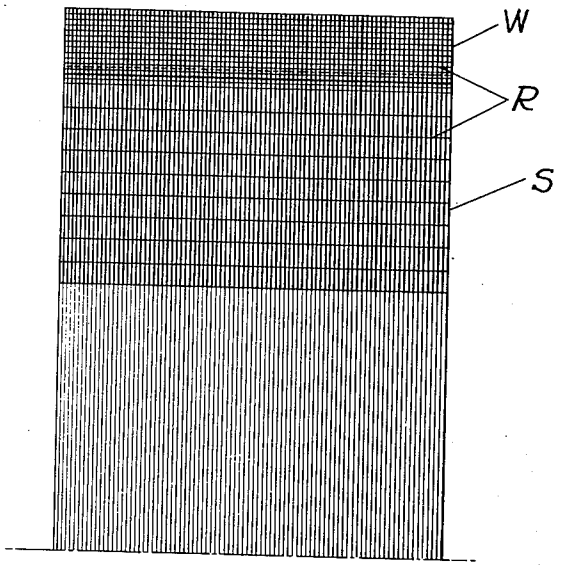


Fig. 1.



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KNITTED FABRIC

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Original application April 8, 1936, Serial No. 73,376. Divided and this application January 13, 1938, Serial No. 184,890

7 Claims. (Cl. 66—173)

This invention relates to knitted fabric and more particularly to fabric knit on circular knitting machines and it is an object of this invention to provide a fabric of the class described forming a stocking welt and top and having an elastic thread incorporated in the fabric during the knitting thereof and it is a further object of this invention to provide a stocking welt and top knit on a circular knitting machine and having an elastic thread incorporated in the welt, in the fabric of the transfer course by which the welt is joined to the top and in the stocking top.

In the drawing:

Fig. 1 is a view in elevation of the upper portion of a stocking having a welt and top in accordance with this invention;

Fig. 2 is a partial view in section, drawn to an enlarged scale and showing the relation of the elastic thread to the loops of the fabric shown in Fig. 1; and

Fig. 3 is a diagrammatic plan view showing the relation of the elastic thread to the loops of a number of courses of the welt and top adjacent the transfer course, the elastic thread being shown as without tension.

In Fig. 1 there is shown the upper portion of a stocking having fabric in accordance with this invention forming a top portion S and a welt W, preferably double-walled, having an elastic thread R engaged with the loops of the fabric during the knitting of courses of the loops forming the fabric so the elastic thread is incorporated in the finished fabric, a preferred construction of a machine for making the fabric and incorporating the elastic thread therein and the manner of its operation being shown in our copending application Serial No. 73,376, filed April 8, 1936, of which application this application is a division.

The fabric is knit preferably beginning at the course *a* of the welt and loops of the first course of the welt are held by the transfer bits until sufficient courses of the welt are knit, the loops of the first course being then transferred to the needles to be joined with the loops of the last course of the welt in the knitting of the transfer course *l*. Where the machine is not provided with a cutter and clamp mechanism for cutting and holding the elastic thread when withdrawn from the needles the elastic thread is introduced soon after the starting course of the welt is knit but for a revolution or so the needles are not operated to engage the elastic thread with the fabric loops so that upon completion of the welt there is a length of the elastic thread lying between the two walls of the welt W but not incorporated in the fabric of either wall, as at R' of Fig. 2. After the elastic thread has been introduced for a revolution or so the needles are operated to interlace the elastic thread with the needles in any desired arrangement so as to engage the elastic thread with the loops of the fabric and incorporate the elastic thread therein. When a cutter and clamp mechanism is used the elastic thread is not presented to the needles as soon as where a cutter and clamp mechanism is not used and when the elastic thread is presented the needles are operated to interlace the elastic thread with the needles so as to incorporate it in the fabric.

In the drawing the elastic thread R is shown as being engaged with the fabric at alternate wales, the result of being interlaced in front of alternate needles and in back of the remaining needles but it is to be understood other arrangements of the needles may be used in the interlacing of the elastic thread with the needles. The elastic thread is also shown as incorporated in all courses of the welt after incorporation therewith is started and also in the transfer course *l* and one or more of the courses of the top S, the relation of the elastic thread to the loops of the fabric being the same throughout. After the elastic thread is incorporated in one or more courses of the top S immediately succeeding the transfer course *l* the elastic thread is withdrawn from the needles and thereafter presented to the needles and interlaced therewith in spaced courses throughout all or as much of the length of the stocking top S as desired. The arrangement of the needles for interlacing the elastic thread therewith in the knitting of the top S may differ from the arrangement used in interlacing the elastic thread with the needles in the knitting of the welt and the elastic thread may be placed in back of every fourth needle, for example, and in front of the remaining needles instead of in front of alternate needles and in back of the remaining needles.

We claim—

1. In a stocking having a double-walled welt comprising loops of a body yarn in courses of plain fabric, a rubber yarn having an initial portion lying between the walls of said welt and a subsequent portion interlaced with the loops of said welt at spaced wales in a plurality of courses.

2. In a stocking having a double-walled welt comprising loops of a body yarn in courses of plain fabric, a rubber yarn having an initial portion lying between the walls of said welt and a subsequent portion interlaced with the loops of

said welt at spaced wales in a plurality of successive courses.

3. In a stocking having a double-walled welt comprising loops of a body yarn in courses of plain fabric, a rubber yarn having an initial portion lying between the walls of said welt and a subsequent portion interlaced with the loops of said welt at alternate wales throughout said welt.

4. In a stocking having a double-walled welt comprising loops of a body yarn in courses of plain fabric, a rubber yarn having an initial portion lying between the walls of said welt and a subsequent portion interlaced with the loops of said welt at spaced wales in a plurality of courses of the welt and stocking top.

5. In a stocking having a double-walled welt comprising loops of a body yarn in courses of plain fabric, a rubber yarn having an initial portion lying between the walls of said welt and a subsequent portion interlaced with the loops of said welt at spaced wales in a plurality of courses of the welt and stocking top, the spacing at which said rubber yarn is interlaced being different in said welt and stocking top.

6. In a stocking having a double-walled welt comprising loops of a body yarn in courses of plain fabric, a rubber yarn having an initial portion lying between the walls of said welt and a subsequent portion interlaced with the loops of said welt at spaced wales in a plurality of courses of the welt and stocking top, said rubber yarn being interlaced through the transfer course where welt and stocking are joined.

7. In a stocking having a welt and a top comprising loops of a body yarn in courses of plain fabric, said welt having both of its end courses interlooped with a course of the stocking top, a continuous rubber yarn interlaced with the loops of the body yarn in courses of the welt and top and in the transfer course where the welt and top are joined.

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