

March 3, 1942.

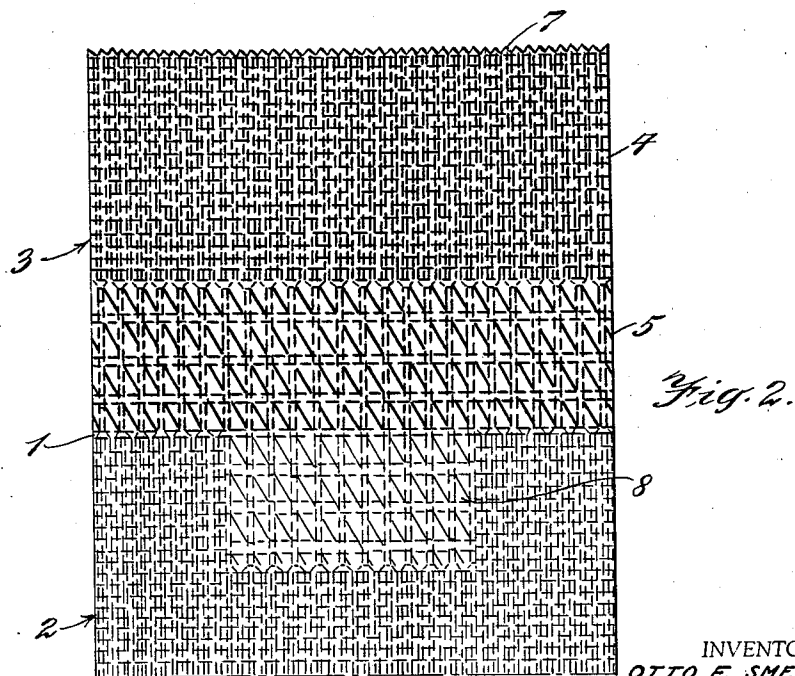
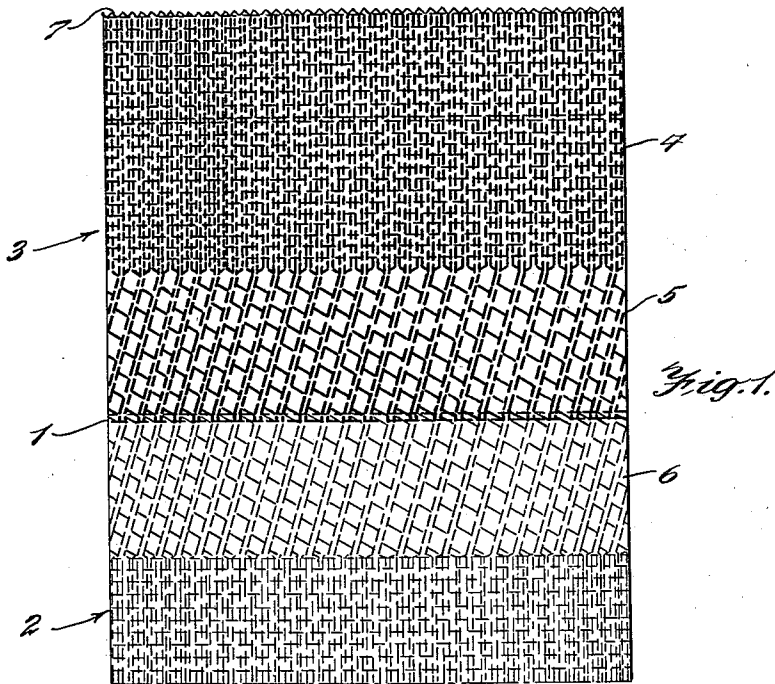
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2,274,812

STOCKING

Filed July 18, 1940

3 Sheets-Sheet 1



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3 Sheets-Sheet 2

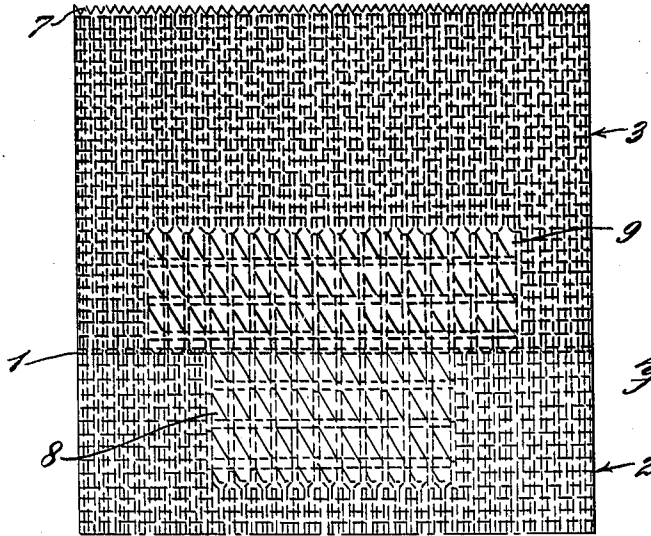


Fig. 3.

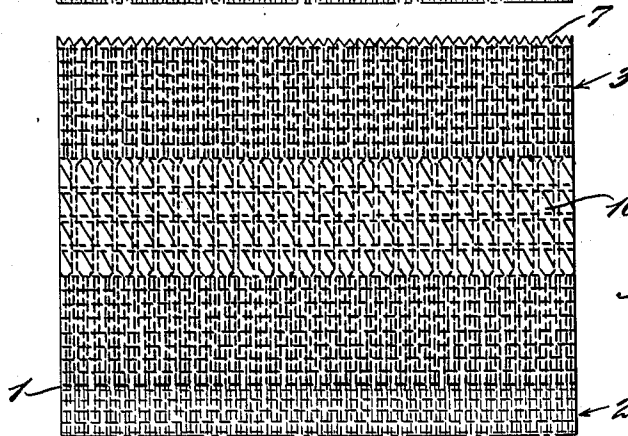


Fig. 4.

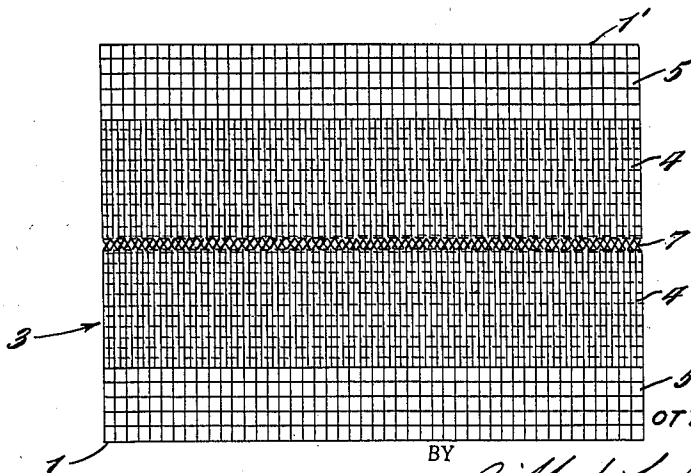


Fig. 5.

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3 Sheets-Sheet 3

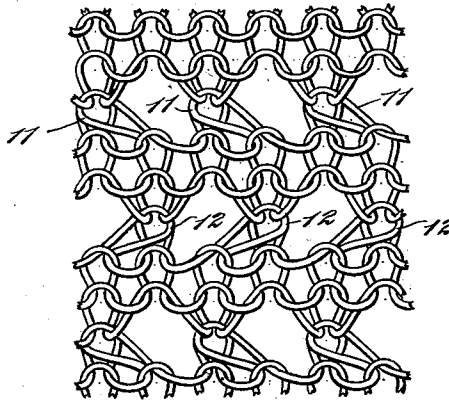


Fig. 6.

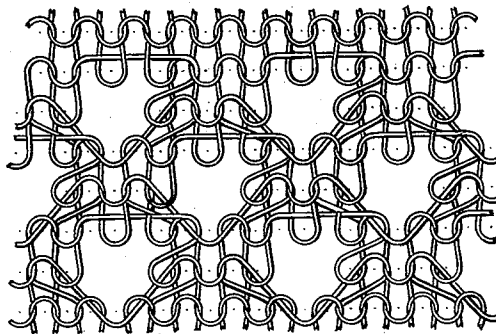


Fig. 7.

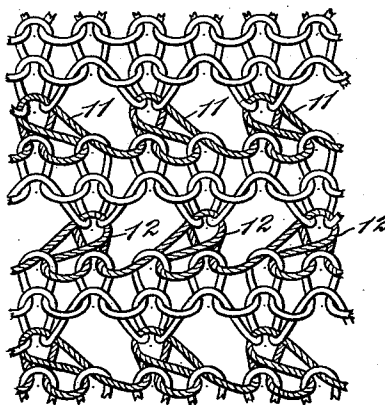


Fig. 8.

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UNITED STATES PATENT OFFICE

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STOCKING

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Application July 18, 1940, Serial No. 346,080

4 Claims. (Cl. 66—173)

This invention relates to a novel and improved form of stocking, the novel features of which will be best understood from the following description and the annexed drawings, in which I have illustrated several embodiments of the invention and in which:

Fig. 1 is a view of the upper portion of a stocking having one embodiment of the invention incorporated therein;

Figs. 2, 3, and 4 are views similar to Fig. 1, but showing other embodiments of the invention;

Fig. 5 is a view showing the two layers of a welt opened out;

Figs. 6, 7, and 8 are views illustrating different forms of stitches which may be used with the invention.

My invention finds particular utility in flat knit stockings and these stockings usually have the leg formed of a single layer of knit fabric and then at the top of the leg is what is usually termed a welt which is formed of two layers of knit fabric. Various attempts have been made in knitting stockings of this character to provide for stretch of the stocking at or above the knee. Those attempts, however, have all been in the form of fabrics which have been subject to certain objections known to the trade and some of which will be discussed later. The principal objections are overcome by my invention.

Referring first to Fig. 1, the numeral 1 designates the welt line separating the leg 2 from the top of a welt 3. As noted above, the welt is usually in the form of two layers and, according to my invention, I provide the welt with a section 4 of fabric knitted with a conventional or standard stitch and preferably made of silk. The leg 2 will likewise be knit with the standard stitch except as described below. Extending along the welt line 1 and immediately above it, the welt has a section 5 in which both layers are formed of knitted fabric having a lace stitch therein. This lace stitch will provide a substantial amount of stretch to the fabric and, by having both layers of the welt formed with such a stitch, the resulting elasticity of the fabric is greatly increased so that the stocking will give freely throughout the section 5, both lengthwise and circumferentially of the stocking.

In Fig. 1, the section 5 is shown as extending throughout the periphery of the stocking, and the upper part of the leg immediately below and lying along the welt line 1 has a section 6 likewise formed with a lace stitch. It is assumed in Fig. 1 that both sections 5 and 6 are formed with silk or other yarn of the kind usually con-

sidered as non-elastic as compared with a rubber strand or a thread having rubber therein. The section 6 likewise is shown as extending throughout the periphery of the stocking and the result is that the stocking may yield readily when placed on the leg of the wearer and when subjected to strain from a garter engaging the section 4 of the welt.

Preferably, the section 5 is made narrower, as measured lengthwise of the stocking, than the section 4, although this is not absolutely necessary. However, it is desirable that there should be enough fabric formed with the standard stitch to hold the shape of the stocking. The term "plain" is used in the claims to indicate so-called regular or Jersey fabric, i. e.; the commonest type of knitted fabric, and also to indicate stitches or courses of stitches such as those making up regular or Jersey fabric. The lace stitch will give and permit the stocking to yield and accommodate itself to the shape of the leg and to the flexing of the knee of the wearer without distorting the shape of the stocking and, when the strain on the stocking is released, as by straightening the knee or removing the stocking, the stocking will resume its usual form.

Referring to Fig. 5, I have shown very diagrammatically the way in which a welt is formed. Although the welt is shown as of less height than in Fig. 1, nevertheless it will be assumed that Fig. 5 is generally knit so as to form the construction shown in Fig. 1.

In Fig. 5, the welt line 1 is shown and then above that is the section 5 formed with a lace stitch and then above that section is one layer of the section 4 terminating in a joint 7 which connects that layer with the other layer of the section 4 of the welt, this other layer being designated 4'. Then above the section 4' is another part designated 5' which forms one layer of the section 5 and this ends in an edge 1'. When the welt is formed as known in the art, the fabric shown in Fig. 5 is folded at 7 so that the line 1' coincides with the line 1 and the stocking is stitched along that line so as to form the two layered welt. Fig. 5 is intended to emphasize the fact that both layers of that welt are formed with the lace stitch at the section 5, whereas the section 4 is formed of the standard knitted stitch.

In Fig. 2, I have shown another embodiment of the invention having the section 5, as before, formed of a lace stitch in both layers of the welt and extending along the welt line immediately above that line. In the leg of the stocking, however, is a narrower section 8 knitted with a lace

stitch and preferably much narrower than the periphery of the stocking. This section 8 is preferably located above or, if desired, over the knee of the wearer. Usually, however, this section 8 will be above the knee, but, being in that location, will take up the strain imposed on the stocking by the bending of the knee.

The embodiment shown in Fig. 3 forms generally what is shown in Fig. 2 except that here the section 9 of the welt which is formed of a lace stitch in both layers of the welt does not extend throughout the periphery of the welt, but nevertheless is wider than the section 8 in the leg, which section is formed with a lace stitch.

In Fig. 4, I have shown a single band 10 formed with a lace stitch in both layers of the welt and extending throughout the periphery of the welt.

In Figs. 6, 7, and 8, I have shown certain stitches which may be used as the lace stitches referred to above. Ordinarily, the lace stitch itself may be formed of silk or other usual yarn, but I have found the invention as particularly useful in a stocking where the body of the stocking is formed with silk yarn. In such a stocking, the lace stitch may be formed with silk yarn also. However, the invention may also be used where the lace stitch is formed with an elastic yarn having rubber incorporated therein, for example a yarn of the type sold under the trade name of Lastex.

In Fig. 6, I have shown a lace stitch in which the yarn in the lace is the same as in the rest of the stocking. There I have indicated a lace stitch as being formed by transferring every other loop 11 in one course laterally for one needle and then, after knitting two more courses, every other loop 12 in the next course is transferred to one needle in the opposite direction from the loops 11. This form of lace stitch is one well known in the art and is formed by the alternate transfer of loops in opposite directions in courses which are spaced apart by one or more courses formed in the usual way.

In Fig. 7, I have shown another form of lace stitch which is not deemed necessary to describe in detail, but it might be noted that in Fig. 7 each opening in the lace is what is usually called a two-needle opening instead of a one-needle opening as in Fig. 6. The form of stitch shown in Fig. 7 is well known in the art and no further detailed description is deemed necessary.

In Fig. 8, I have shown the same form of lace stitch as in Fig. 6 except that here the yarn forming the lace stitches, including the loops 11 and 12, is shown as an elastic or rubber yarn. It will be understood that similarly in Fig. 7 the lace may be formed by transferring loops of an

elastic yarn and in fact this may be done no matter what the form of lace stitch may be.

Certain advantages of the invention have been noted briefly above and others will be apparent to those skilled in the art. It may be noted, however, that when using the form of the invention shown in Fig. 3, for example, where the lace stitched section does not extend all the way around the periphery of the stocking, the stretch is concentrated in the section formed with the lace stitch, whereas the rest of the stocking is not stretched so much. Therefore when the strain on the stocking is released, the lace stitched section or sections may resume their usual shape, whereas the part of the stocking knit with the usual or standard stitch has not been materially distorted and will help to maintain the shape of the stocking. When in addition the lace stitch is formed with an elastic yarn, this yarn is not stretched to its maximum amount when the stocking is put on the leg, because the part of the stocking formed with the standard stitch will yield enough to conform to the contour of the leg. Then when any additional strain occurs, such as caused by the garter or by flexing of the knee, there is still enough resilience in the section formed with the lace stitch so as to take up the additional strain.

From the above it is believed that those skilled in the art will readily understand the invention and further discussion thereof is not deemed necessary. While I have shown selected embodiments of the invention, it is to be understood that detailed changes may be made without departing from the scope of the invention as defined in the appended claims.

I claim:

1. A flat-knit stocking having a double-walled welt, the upper part of each wall of the welt consisting of plain knitted fabric and the lower part of each wall, consisting of lace fabric, at least over the knee portion of the stocking, whereby increased elasticity is imparted to the knee portion of the stocking.

2. A stocking as in claim 1, the lace part of said stocking extending down below the welt line at the front of the leg.

3. A stocking as in claim 1, said stocking having in its lace portions plain courses of textile yarn interspersed with lace courses of elastic thread.

4. A stocking as in claim 1, the lace part of said stocking extending down below the welt line at the front of the leg, said lace part including plain courses of textile yarn interspersed with lace courses of elastic thread.

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