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ARTICLE OF HOSIERY AND METHOD OF MAKING THE SAME

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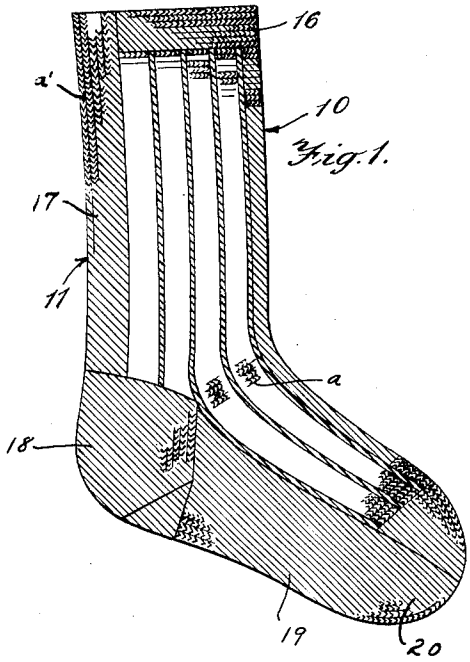

Fig. 1.

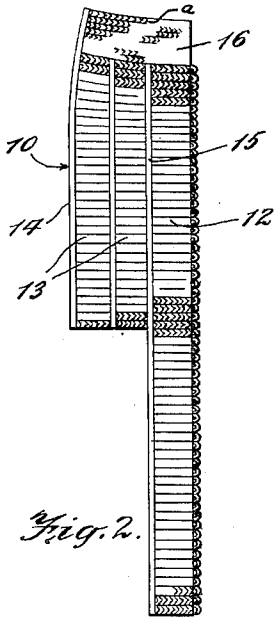

Fig. 2.

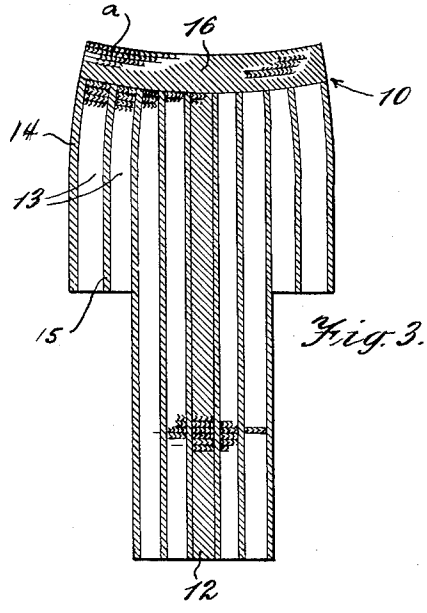

Fig. 3.

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ARTICLE OF HOSIERY AND METHOD OF MAKING THE SAME

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10 Claims. (Cl. 66—178)

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This invention relates to improvements in articles of hosiery and method of making the same and relates more particularly to a multi-colored knitted sock and to a method of constructing it.

Multi-colored socks have heretofore been knitted with the courses running circumferentially of the leg or toe, which direction will hereinafter be referred to as "horizontally." The wales in a normal sock therefore would be described (using the selected terminology) as running vertically. The normal method of knitting a multi-colored sock is therefore a modification of the method for knitting a mono-colored sock. The modification is that a separate ball of yarn must be used for each color desired and these balls must all be available at the same time. This is inconvenient, time wasting and confusing. Moreover as is well known, a knitted sock will stretch to a greater extent in the direction of the courses than in the direction of the wales. Thus, the normal sock has sufficient horizontal stretchability to compensate for various leg sizes, but has insufficient vertical stretchability to compensate for varying toe lengths or for normal foot flexure while walking.

This invention provides a multi-colored sock which is simple and rapid to construct and which has a two-way stretchability to allow for comfort and easy fitting.

The sock embodying this invention utilizes separate panels of knitted material which are knitted together, with a backing portion, to form a complete sock. The panels and backing portion are so shaped and arranged, that the courses in the panels run vertically and the courses in the backing portion run horizontally, whereby the sock, when completed, has adequate stretchability in all directions.

The panels, if a multi-colored sock is desired, are each constructed of a single color but different colors are used for different panels. In this way a novel, multi-color effect is achieved and it will be noted that the knitting will be simple and rapid, since each panel will be knitted with a single ball of yarn. Those adjoining panels which have their courses running vertically, are successively knitted, the loops from the preceding panel being knitted into the first course of the next panel. In this way the sock is completed except for a backing portion in which the courses run horizontally. The backing portion forms the rear of the leg, the heel and sole of the foot and may be knit by setting up a series of stitches which will complete the upper circumference of the sock and then completing the backing portion on this set of stitches by knitting back and forth in the usual manner. The heel and toe of the sock may be formed in the conventional manner and when the backing portion and the panel portion are joined at their adjoining edges, a completed sock is formed.

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It is, thus, seen that a sock is provided which is easy to knit, ornamental, and has both vertical and horizontal stretchability.

The invention having been generally described, a specific embodiment is described below, and for illustration, reference may be had to the attached drawings in which:

Fig. 1 shows a side view of the sock;

Fig. 2 shows the panels in the process of assembly; and

Fig. 3 shows a further step in the process.

In a sock, such as illustrated, in Fig. 1, there are interconnected loops of thread or yarn forming courses and wales therein. The sock may be knit in two portions which are joined together with the courses in one portion extending at right angles to the courses in the other portion. In the illustrated embodiment of the invention, there is a front portion or section 10 forming the sides and front of the leg and the top of the foot which is composed of a number of rectangular panels in which the courses run vertically and a backing portion 11 forming the back of the leg, the heel and sole of the foot in which the courses run horizontally. In the section 10, the wales of the vertical courses are indicated at a and in the backing portion 11, the wales of the horizontal courses are indicated at a'.

The section 10 is composed of central panels 12 which form the front of the leg and top of the foot and side panels 13 which form the sides of the leg and are considerably shorter than panels 12. Vertical borders 14 may be provided along the side edges of the sides of the leg and the panels 12 and 13 may be separated by ornamental borders or stripes 15. However, these details will be a matter of choice depending on the particular design or effect that is desired. A cuff portion 16 in which the courses run vertically may also be provided at the top of the section 10 and extending across the horizontal width thereof. The two portions, the section 10 and backing portion 11 are sewn together along their adjoining edges as will be hereinafter described, and in the resulting sock, the vertical courses of the section 10 provide good vertical stretchability in the sock while the horizontal courses of the backing portion 11 provide good horizontal stretchability in the sock.

The method of knitting the sock will now be described in some detail. The length of the leg portion and the size of the foot portion of the finished sock may, of course, be arbitrarily chosen. The length of the leg portion determines the length of side panels 13 while the length of the over-all sock determines the length of the central panels 12. This having been decided, the number of panels and their color may be selected to suit the tastes of the knitter. In Fig. 1 a sock is shown having nine panels consisting of five central panels 12 and four side panels 13.

The vertical border portion 14 is equal to the vertical height of the cuff plus the length of the panels 13 and is knitted first and may consist of one or more vertical courses. The knitter then continues by knitting a vertical course which continues from the cuff into the first panel and is of a length equal to the length of the cuff 16 plus the length of the first panel 13. The colors of the yarn and also the style of knitting may be changed in passing from cuff to panel. This is repeated until the number of courses desired in the first panel 13 are completed. The sock may then be continued by knitting the following vertical courses of the same length, but with a different color of yarn for the next panel which is interknit with the panel just finished. In the embodiment shown herein, however, the ornamental border 15 consisting of one or more vertical courses is knitted onto the finished panel and the new panel 13 is added thereto. The border 15 may be so knitted as to be upraised with respect to the panels on either side and so will present a ribbed effect.

When the selected number of side panels 13 for one side of the leg are finished, the next border portion 15 is continued down to what will be the lower extent of the central panels 12. The central panels 12 are then knitted in the same manner as the side panels 13, but of a greater length. When the required number of central panels 12 for the front of the leg and the top of the foot have been completed, the side panels 13 for the other side of the leg are knitted onto the last knitted border 15 of the central panels, so that a symmetrical arrangement of side panels 13, central panels 12 and borders 15, is made, the last knitted side panel ending in the vertical border portion 14.

The backing portion 11 is then knitted with horizontal courses. At the outset, these courses are of the proper length to complete the circumference of the sock when combined with the leg portion of the panel portion 10. The back 17 of the leg is completed in this manner, and similarly, the heel 18 and sole 19 of the foot portions are added, being knitted in conventional style, with the exception, of course, that the courses forming the heel and the sole of the foot continue only until they are of sufficient length to complement the width of the top of the foot of the panel portion 10 at any particular position, so that together the two portions will form a sock of the desired size.

After the sole 19 of the foot is completed, the toe 20 may then be knitted in the conventional manner by forming the necessary loops on three needles. In order to avoid a sewn seam across the top of the toe which might be uncomfortable to the wearer, the loops extending horizontally along the lower end of the panel portion 10 may be placed on the needles used in knitting the toe so that the toe will continue from these loops. It will be understood in this connection, however, that the two portions forming the front and back of the leg and the foot of the sock are knit separately and may be secured together at their adjoining edges in any suitable manner.

To summarize, briefly, the sides and front of the leg and instep (or top of the foot) are knitted on two needles to form the section 10 in which the courses run vertically. The backing portion 11 comprising the back of the leg, the heel and the sole of the foot in which the courses run horizontally is then knitted on two needles as a separate piece. The two pieces with courses extending in opposite directions may then be joined together and the toe then finished in the usual way by knitting it on three needles. Thus, when the toe has been finished and the two portions are joined together along their adjoining edges, the complete sock is formed.

It is, thus, seen that there is provided a sock having a leg portion whose side and front sections have vertical stretchability and whose back section has horizontal stretchability. Similarly, the sole of the foot has circumferential (herein called horizontal) stretchability and the instep or top of the foot has longitudinal (herein called vertical) stretchability.

In knitting a sock in accordance with the present invention, it is possible to use several colors in a design without using bobbins and excepting the toe, it is a two-needle sock. This simplifies the knitting and makes it very easy for a beginner who otherwise might be afraid to attempt the knitting of fancy designs. Also, leftover wools may be used for any of the various panels.

It will be understood that various modifications may be made in the embodiment of the invention illustrated and described herein without departing from the scope of the invention as defined by the claims appended hereto.

I claim:

1. A knitted sock comprising a leg, a heel and a foot in which courses are formed by interconnected loops of yarn that is characterized by courses in the sides and front of the leg and the top of the foot extending in one direction and courses in the back of the leg, the heel and sole of the foot extending in a direction at right angles to the first-mentioned courses.

2. A knitted sock as defined in claim 1 wherein the courses in the sides and front of the leg and the top of the foot extend longitudinally and the courses in the back of the leg, the heel and the sole of the foot extend circumferentially.

3. An article of hosiery comprising a series of rectangular panels joined together to form front and side portions of a leg and a top portion of a foot and a back portion which forms a back of the leg, a heel and a sole portion of the foot, said panels and back portion being joined together at their adjoining edges and having courses therein formed by interconnected loops of yarn with the courses in the panels extending at right angles to the courses in the back portion.

4. An article of hosiery comprising a series of rectangular panels joined together to form front and side portions of a leg and a top portion of a foot and a backing portion which forms a back portion of the leg, a heel and a sole portion of the foot, said panels and backing portion being joined together at their adjoining edges and having courses therein formed by interconnected loops of yarn with the courses in the panels extending longitudinally and the courses in the backing portion extending circumferentially.

5. The method of forming a sock which includes the steps of knitting a series of connected rectangular panels of such a length as to form front and side portions of a leg and a top portion of a foot, then knitting a backing portion to form a back of the leg, a heel and a sole portion of the foot, said panels and backing portion being knit, respectively, with interconnected loops forming courses and wales therein and then joining the backing portion to the rectangular panels along the adjoining edges thereof with the courses in the backing portion extending at right angles to the courses in the rectangular panels to form tubular portions of the sock.

6. The method of forming a sock as defined in claim 5 wherein the backing portion is knit with the courses extending widthwise thereof, and the rectangular panels are knit with the courses therein extending lengthwise thereof.

7. In a method of knitting a sock having a leg and a foot, the steps of knitting a portion with courses extending lengthwise thereof, said portion forming the front of the leg and the top of the foot, then knitting a second portion with courses extending widthwise thereof, said second portion forming the back of the leg and the heel and sole of the foot, and then joining the two said portions along their side edges to form a tubular sock with the courses in the one portion extending at right angles to the courses in the other portion.

8. A knitted sock comprising two portions, said portions being joined together along their side edges and forming a tubular leg of the sock, one

of said portions having courses extending vertically with respect to the leg and the other of said portions having courses extending horizontally with respect to the leg.

9. A knitted sock as defined in claim 8 wherein the portion of the leg having vertical courses forms the front of a leg and the portion having horizontal courses forms the back of the leg.

10. A knitted sock having a leg and a foot comprising two knitted portions joined together along their side edges, one of said portions forming the front of the leg and the top of the foot, said portion having courses extending vertically with respect to the leg and foot, the other of said portions forming the back of the leg and the heel and sole of the foot, said last-mentioned portion having courses extending at right angles to the courses in the first mentioned portion.

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