

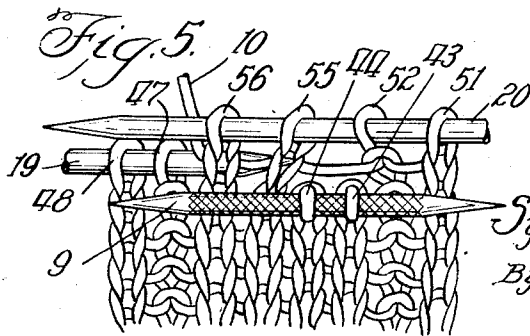
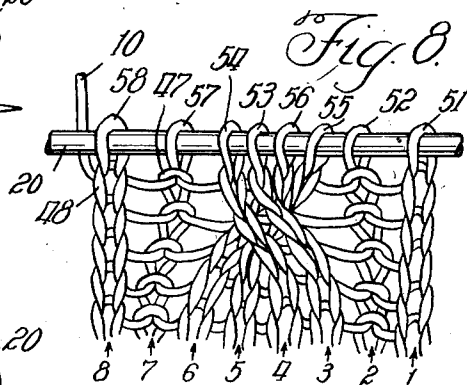
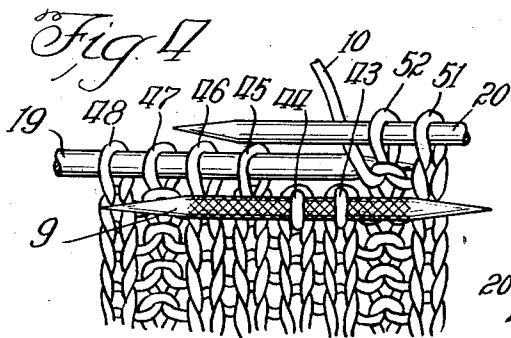
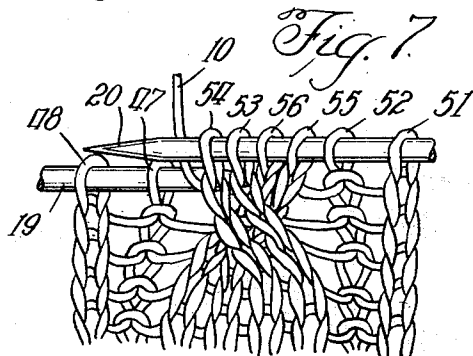
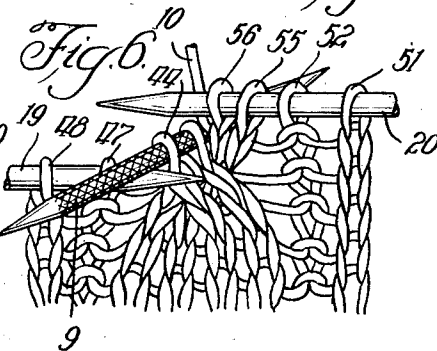
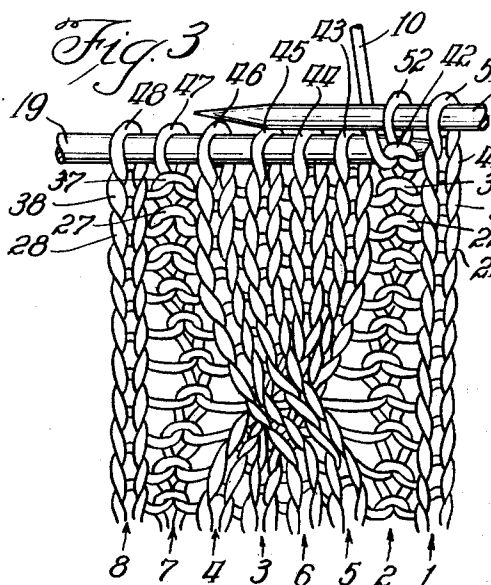
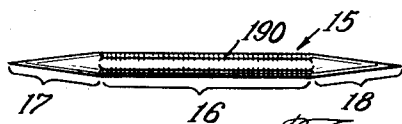
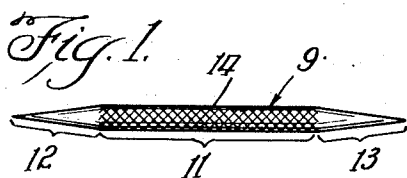
Dec. 12, 1944.

S. E. PALLISER

2,364,649

CABLE NEEDLE FOR KNITTING

Filed June 11, 1942



*Inventor:*  
*Sylvia E. Palliser*  
*By Mann, Brown & Co*  
*Att'ys.*

## UNITED STATES PATENT OFFICE

2,364,649

## CABLE NEEDLE FOR KNITTING

Sylvia E. Palliser, Chicago, Ill.

Application June 11, 1942, Serial No. 446,556

7 Claims. (Cl. 66—117)

This invention relates to knitting, and particularly to knitting the fancy stitch known as a "cable stitch." In the cable stitch two or three files or columns of stitches cross over or under the adjacent two or three columns or files of stitches at regular intervals, producing an effect which resembles the twist of a rope or cable. Hence the name of the stitch.

In making a cable stitch, it is necessary to remove two or three stitches from the left needle and hold them while the next two or three next stitches are being knitted from the left needle to the right needle and then to knit onto the right needle the stitches which were previously removed from the left needle. Up until the present time, these stitches have been removed and generally placed on an ordinary double pointed needle such as is employed in knitting circular garments or stockings, but this practice has the disadvantage that, while the next stitches are being knitted from the left needle to the right needle, the third needle often slips out, causing dropped stitches. Another procedure which may be followed is to remove the stitches from the left needle and place them on a stitch holder while the following stitches are being knitted onto the right needle, then to replace the stitches from the stitch holder onto the left needle and knit them onto the right needle. When proceeding in this way, there is less danger of dropping stitches, but the additional operation of transferring the stitches back from the stitch holder to the needle is involved and has to be repeated many times while knitting a garment.

The principal object of this invention is to provide an improved knitting needle of special design for holding the stitches which cross over or under to form the cable while the other stitches are being knitted from the left needle to the right needle, the improved needle being designed so that it will not fall out of the stitches which are being held upon it. I have named this improved needle a "cable needle."

Other objects and advantages of the invention will appear from the following description and accompanying drawing, in which

Fig. 1 shows one of the preferred forms of the invention;

Fig. 2 shows another form of the invention; and

Figs. 3 to 8 show successive steps in the use of the invention.

The form of the invention shown in Fig. 1 comprises a needle 9 having a straight substantially cylindrical portion 11 and tapered or pointed ends

12 and 13. The central portion 11 of the needle is formed with knurling 14, which is made deep enough so that stitches will not slide freely along the needle but, nevertheless, can be pushed along the needle with the fingers. The needle 9 should be quite short compared to ordinary knitting needles, and I have found that a length of between three and four inches is most satisfactory. The diameter of the cable needle should be about the same as the diameter of the other needles with which the knitting is being done, but it may be greater or smaller. Because no stitches are formed onto the cable needle 9, its diameter does not determine the size of the stitch and it, therefore, need not be the same as that of the other needles. It may, in fact, be better to have the diameter of the cable needle 9 slightly larger than the diameter of the other needles as this will cause the stitches held on the cable needle 9 to grip it a little more tightly and lessen the danger of the cable needle slipping out of the stitches.

The cable needle 9 may be made of any material which has been found suitable for knitting needles, such as steel, aluminum or other metals, plastics, or wood, but the harder materials are preferable because there is less likelihood of the knurling 14 wearing smooth with said materials.

The form of the invention shown in Fig. 2 is of the same general shape and size as the form of invention shown in Fig. 1, and it comprises a substantially straight central portion 16 and tapered or pointed ends 17 and 18. The central portion 16 in this form of the invention, however, is hexagonal instead of round, and its edges are provided with small notches or teeth 19 to prevent the needle from sliding freely through the stitches being held on it.

The manner in which the cable needle is used is illustrated in Figs. 3 to 8, which show the successive steps in forming a cable in a portion of a piece of knitted fabric. In these figures, the fabric has been shown as stretched or pulled out, so that the different stitches can be more easily distinguished and so that the parts of the stitches at the back of the fabric can also be seen. The piece of fabric shown in these figures consists of eight columns or files of stitches numbered 1 to 8. The stitches near the top of column 1, for example, are numbered 21, 31, 41, and 51 in succession up the column, 51 being the last or top stitch in the column and the one which is on the right needle 20. The stitches in the rank or row starting with stitch number 41 are numbered 41, 42, 43, 44, 45, 46, 47, and 48 in succession across the

row, and this system of numbering the stitches is followed throughout the figures.

In Fig. 3, the work is shown as the process of forming a cross-over or a cable, as it is called, is about to begin. There are two stitches 51 and 52 on the right needle and the stitches 43 to 48 in the following columns or files are on the left needle 19. The first step is to remove the first two stitches 43 and 44 on the left needle 19 and place them on the cable needle 9, as shown in Fig. 4. The next two stitches 45 and 46 on the left needle 19 are then knitted onto the right needle 20, forming two new stitches 55 and 56, as shown in Fig. 5. The right end of the cable needle 9 is then twisted around in back of the right needle 20 and the stitches 55 and 56 which have just been made, as shown in Fig. 6, and the two stitches 43 and 44 on the cable needle 9 are knitted onto the right needle 20. The two new stitches 53 and 54 thus formed are now on the right needle 20 to the left of the stitches 55 and 56, as shown in Fig. 7, and the cross-over or cable has been formed. Knitting then proceeds in the regular way, stitches 47 and 48 being purled and knitted from the left needle 19 onto the right needle 20, as shown in Fig. 8.

After the cross-over or cable has been made as described above, the knitting of the garment proceeds in the regular fashion for a predetermined number of rows of stitches, this number generally being an even number such as 6, 8, or 10, and the process of forming a cable as described above is repeated. This causes a group of files or columns of stitches to cross over the adjacent group at regular intervals and produces the cable effect which is desired.

In the example described above, each half of the cable is two stitches wide, but the process may obviously be carried out with a different number of stitches, such as three or four in each half of the cable. Also, the cable made as described is a left-handed cable in which the columns of stitches cross over from the right to the left, but a right-handed cable, in which the columns of stitches cross over from the left to the right, may be made. This is done by placing the cable needle 9 and the stitches 42 and 44 upon it behind the other needles 19 and 20 and the rest of the work, instead of in front of them as shown in Fig. 4, when the stitches 55 and 56 are about to be knitted. Also, the cable needle 9 may be employed in making more elaborate forms of cable stitches than the one which has been illustrated above, such as, for example, a stitch in which the columns of stitches are divided into three groups instead of only two so as to give the effect of a cable or rope having three strands instead of a cable or rope having only two strands.

While I have shown only two best forms of my invention, it will be understood that modifications may be made, such as threading the central portion of the needle instead of knurling it, or by providing it with circumferential ridges, and that the knurling, threads or ridges need not extend the full length of the central portion of the needle but may, indeed, consist of only a single circumferential thread, groove, or ridge. My invention, therefore, includes not only the preferred forms

which I have shown but any form coming within the terms of any of the following claims.

I claim as my invention:

1. A short knitting needle rigid throughout its length and comprising a rigid central portion of a constant cross-sectional area throughout its length, smooth tapered end portions, and having its entire central portion roughened to such an extent as to restrain the sliding of stitches along the needle.
2. A knitting needle materially shorter than the conventional knitting needle and rigid throughout its length and having tapered end portions whose surfaces are surfaces of revolution, and having a central portion of non-circular cross-section the surface of which has been roughened to such an extent as to prevent the needle from accidentally sliding from the stitches while in use as a temporary stitch retainer in association with one or more longer knitting needles.
3. A short knitting needle rigid throughout its length and having tapered end portions whose surfaces are surfaces of revolution and having a central portion whose surface diverges circumferentially from a surface of revolution at a plurality of places, said diverging surfaces being roughened to such an extent as to restrain the needle from accidentally sliding from the stitches while in use as a temporary stitch retainer in association with one or more longer knitting needles.
4. A knitting needle materially shorter than the conventional knitting needle and rigid throughout its length and having round tapered ends and a generally cylindrical central part, said central part being knurled throughout its circumference for restraining the needle from accidentally becoming disengaged from the stitches during the knitting operation.
5. A knitting needle shorter than the conventional knitting needle and rigid throughout its length and having round tapered ends, and a central part of polygonal cross-section with notched corners for restraining the needle from accidentally becoming disengaged from the stitches during the knitting operation as a temporary stitch retainer in association with one or more longer knitting needles.
6. A stiff knitting needle less than five inches long to serve as a temporary stitch retainer for use with one or more longer conventional needles, rigid throughout its length, and comprising smooth tapered end portions and a central portion having at least a portion of its circumferential surface roughened to such an extent as to prevent the sliding of stitches therefrom during the intervals said needle is idle while being used in knitting fancy stitch fabrics by the use of conventional knitting needles.
7. A short knitting needle rigid throughout its length and comprising a central portion of uniform cross-sectional area throughout its length, smooth tapered end portions, said central portion being knurled, the knurls being so constructed as to restrain the needle from normally sliding from the stitches while in use.

SYLVIA E. PALLISER.