

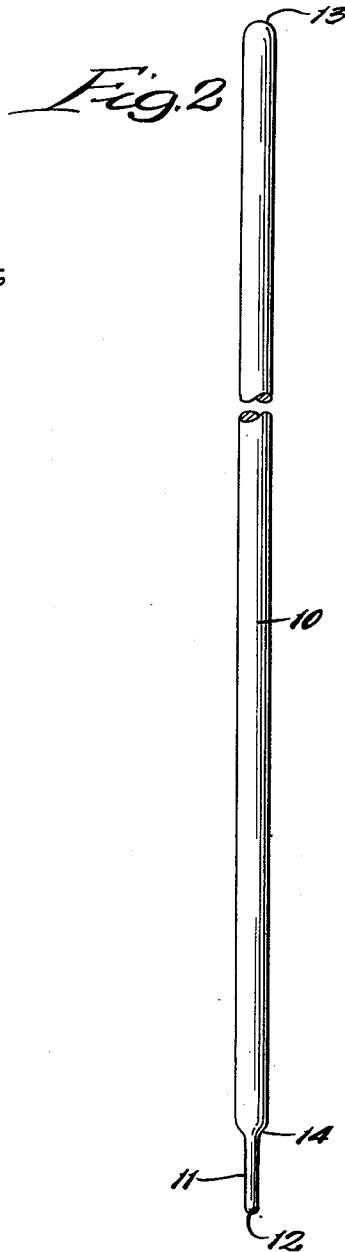
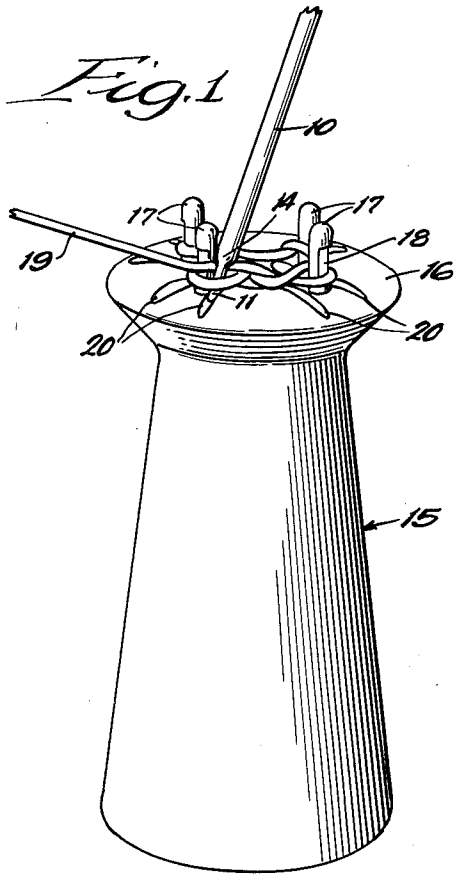
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G. A. CARLSON

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KNITTING PIN

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INVENTOR:

Gustav A. Carlson,
BY
Dawson & Orms,
ATTORNEYS.

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KNITTING PIN

Gustav A. Carlson, Des Plaines, Ill., assignor to
The Boye Needle Company, Chicago, Ill., a corporation of Illinois

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This invention relates to a knitting pin useful for various types of knitting.

In ordinary knitting operations, it is customary to have a knitting pin with a downwardly-sloping point, the point being employed for engaging the stitches, and the stitches are slipped along the inclined point onto the enlarged shank or body of the pin. Sometimes, the forward point of the pin is made slightly concave. In all of these structures, the gradual inclination of the point causes the stitches to slip readily from the point onto the shank and the knitter is often hardly aware of the location of the stitch, not knowing whether the stitch is still on the point or on the shank of the pin.

In many stages of knitting, it is desired to have the point of one needle cooperating with the point of another needle in forming the stitches and knitting at this stage is carried on more effectively when the stitches are of a reduced size and engage only the point portions of the needle. Because, however, of the gradual inclination of the points, it is difficult for the operator to keep the stitches on the point alone and the stitches are constantly slipping over the shank of the pin.

In a specific form of knitting, in which stitches are formed about a tubular member having projecting posts, a knitting pin is used for engaging a lower stitch and drawing it over the post. In this well-known form of knitting, the ordinary knitting pin is difficult to employ because the stitch slips along the pin when an effort is made to slide the stitch over the post and there is no means for holding the stitch at a desired point on the pin when the stitch is looped over a post.

An object of the present invention is to provide a knitting pin which overcomes the above-described disadvantages. A further object is to provide a knitting pin which may be employed with other pins for carrying on the knitting operation with the stitches, etc. being formed on projections of reduced diameter carried by such pins, while eventually drawing the completed stitches upon the main shank of the pin. A further object is to provide a knitting pin with a forwardly-extending beak portion of reduced diameter while providing a shoulder between the beak portion and the main shank of the pin. A further object is to provide in such a structure, a shoulder providing a smooth sweep forming a concave taper from the shank of the pin to the point portion of the pin. Other specific objects and advantages will appear as the specification proceeds.

The invention is shown, in an illustrative

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embodiment, by the accompanying drawing, in which—

Figure 1 is a broken perspective view of a knitting pin embodying my invention shown employed with a post knitting device; and Fig. 2, a broken top plan view of the knitting pin structure.

In the illustration given, the knitting pin is provided with a shank portion 10 of enlarged diameter and, at its forward end, with a beak or projecting portion 11 of reduced diameter having a rounded point 12. Similarly, the rear end portion 13 of the shank 10 may be rounded, if desired.

Connecting the beak portion 11 which may be of substantially uniform diameter and the enlarged shank portion 10 is a tapered shoulder providing with the beak 11 a concave joint thus forming a smooth sweep from the enlarged shank 10 and along a concave taper to the beak portion 11, the forward end of the beak being rounded as at 12.

The diameter of the beak 11 is relatively small compared with the diameter of the shank portion 10 and may be about one-half the diameter of the shank 10. The shoulder portion 14 is preferably short, providing an inclination in the order of 10° to 20° from the horizontal. The relatively steep pitch of the shoulder prevents stitches from passing readily from the beak 11 to the shank 10, while at the same time providing a concave point of junction between the shoulder and the beak which enables the stitches to be shifted when the operator makes a conscious effort to do so. The shoulder portion 14 is further useful in the operation for shifting a stitch over a post in a post knitting device.

In Fig. 1, 15 designates a tubular member provided at one end with a flange 16 to which are secured knitting posts 17. The knitting posts 17 may be provided with cut-out portions or notches 18 on their outer sides. A yarn thread 19 is passed around the posts in a well-known manner and loops are drawn by the beak portion 11 over the adjacent post 17. In this operation, the shoulder portion 14 is effective in holding the stitch after engagement by the beak and enabling the stitch to be readily slipped over the post. If desired, the flange or head 16 may be provided with grooves 20 for receiving the point of the needle and guiding it under the stitch, as illustrated best in Fig. 1.

While the needle 10 is effective in the post stitching operation as described above, it will be understood that it is useful also in ordinary knitting, permitting the loops to be engaged by the beaks of cooperating needles and the stitching

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operation to be carried on solely by the beaks of the pins. Later, after stitches have been formed in interlocking relation, they may be shifted by conscious effort of the operator from the beaks 11 to the shanks 10. There is an important new result achieved in that the completed portion of the knitting when thus drawn to the enlarged shank 10 tends to clip the shank 10 rather uniformly over its area and to remain in the post where drawn upon the shank. In ordinary stitching operation, where the stitches are passed almost immediately onto the shank, the stitches are thus expanded in the latter operation and remain loosely and sometimes irregularly formed upon the shank. By first forming a number of stitches on the extremely small beak portion and then passing the stitches thus uniformly formed of a small size up the sharply-inclined shoulder portion 14 and onto the enlarged shank 10, the stretched stitches tend to clip the shank 10 and remain thereon at the positions to which they are moved.

While in the foregoing specification I have set forth a specific structure in considerable detail, it will be understood that such details of structure may be varied widely by those skilled in the art without departing from the spirit of my invention.

I claim:

1. A knitting pin having a shank portion of relatively large diameter terminating at its forward end in a sharply-and-downwardly-pitched joint, and a beak portion of substantially uniform

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diameter extending beyond said joint, said joint merging with said beak portion and providing between the shank portion and the beak portion a shoulder having a forwardly-facing concave portion merging with said beak portion.

2. A knitting pin having an elongated shank portion of relatively large diameter and an elongated knitting beak portion at its forward end, said beak portion being for the most part of a substantially uniform and reduced diameter throughout and terminating in a rounded end, and a relatively sharply-inclined forwardly-facing concave shoulder portion substantially shorter than said beak portion and connecting said beak portion to said shank portion.

3. A knitting pin having an elongated shank portion and being equipped at one end with a beak portion of reduced and substantially uniform diameter, and a shoulder joining said shank portion and beak portion and being sharply inclined and forwardly facing whereby a concave joint is provided.

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