PUBLISHED

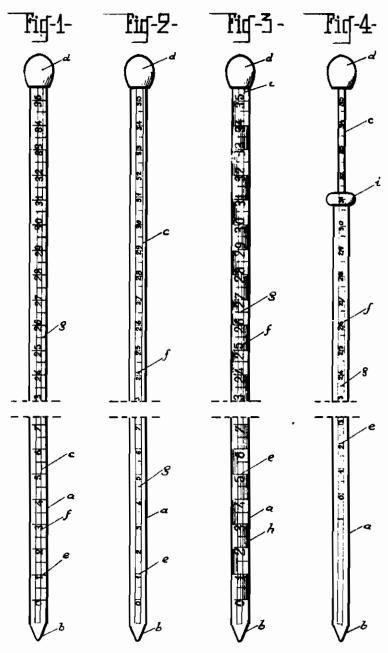
H. FOSSE ET AL

Serial No. 459,324

JUNE 1, 1943. BY A. P. C.

HAND KNITTING NEEDLE

Filed Sept. 22 1942



Inventors:

H. Fosse,

J. Palou, and

L. Lacombe

By youn, Energy Ylongun

Ally

## ALIEN PROPERTY CUSTODIAN

## HAND KNITTING NEEDLE

Henriette Fosse, Jean Palou and Louis Lacombe. Avignon, France; vested in the Alien Property Custodian

Application filed September 22, 1942

As is known, anyone engaged in hand knitting work to produce hosiery articles such as socks, sweaters or bodices should vary the number, shape and arrangement of the stitches to suit the particular interknitting process, the number and shades of mesh rows and wales that are called for by any given category of knitted article so far as length, width, decreases of size, skew arrangements of meshes and similar factors are concerned. In view of this, the person who is 10 disclosure. knitting must often stop her work and take measures or make calculations, this being usually done by means of a tape measure, lest the proper number of meshes to be knitted is exceeded and must be undone and afterwards re- 15 scale to be on the needle shank. knitted. All such disadvantages involve an important waste of time and curtail the amount of knitting work which can be effected by a person single-handed.

An object of the present invention is to provide 20 as a new article of manufacture a novel or improved needle or needle attachment for hand knitting so constructed as to obviate the foregoing disadvantages while enabling the work to be facilitated and accelerated.

Another object of the invention is to provide a hand knitting needle as aforesaid incorporating a measuring scale enabling the person who is knitting to effect proper measurements and size comparisons on the fabric being knitted without resorting to an extraneous tape measure or like instrument or gage.

Yet another object of the invention is to provide a hand knitting needle as aforesaid wherein the measuring scale is engraved, affixed or otherwise provided on a core stem so removably held, for example by friction, through the transparent shank or body of the needle as to be readily disengageable therefrom, thereby enabling 40 fitted at one extremity with a projecting head d quick and easy measurements to be taken on the fabric being knitted while it is still carried on the needle shank or otherwise.

A further object of the invention is to provide colored means so associated with the indices constituting the measuring scale as to enhance their legibility by awarding them greater striking effect for the user's eyes.

A still further object of the invention is to 50 provide a hand knitting needle as aforesaid having parts such for example as the pointed tip end and at least some of the indices forming the measuring scale made of a phosphorescent or luminescent substance so as to be visible in an 55 work to be carried out. Advantageously the nu-

attenuated light or in darkness and to render knitting feasible under such light conditions.

With these and such other objects in view as will incidentally appear hereafter, the invention comprises the novel construction and combination of parts that will now be described hereafter with reference to the accompanying diagrammatic drawing exemplifying four different embodiments of the same and forming a part of the present

In the drawing:

Figure 1 is a fragmentary elevational view of a hand knitting needle constituting a first embodiment of the invention, assuming the measuring

Figure 2 is a fragmentary view similar to fig. 1 showing a second embodiment of the knitting needle, assuming the measuring scale to be provided on a core stem engaged through a hollow shank and visible through the latter owing to its transparency.

Figure 3 is a fragmentary view similar to fig. 1 showing a third embodiment of the knitting needle, assuming colored spots or patches on the shank to be associated with the measuring scale.

Figure 4 is a fragmentary elevational view of a hand knitting needle constituting a fourth embodiment of the invention, assuming the core stem 30 bearing a measuring scale to be partly disengaged from the hollow shank.

Like reference characters designate like parts throughout the several views.

Reference being first had to fig. 1, the needle comprises a shank a made of any suitable flexible or so-called plastic and preferably transparent material such as horn, celluloid, synthetic resin or the like. The shank a has a pointed tip end b and is hollow to accommodate a core stem cof bulbous shape abutted and held on the edge of the open end of said shank a. Intermediate the tip end b and the head d the shank a is provided at regular intervals with index lines e referenced a hand knitting needle as aforesaid embodying 45 by consecutive numerals f so as to form a measuring scale.

> The distance between each index line e and the following one is divided by sub-index lines such as g and may be equal to any common linear unit such as a centimeter or an inch. No limitation is, however, involved in this since, as will be understood, any fine and/or coarse graduation may be provided on the needle for coping with the particular kind or fineness of the knitting

merical value of the figures f grows from the tip b of the needle towards its head d.

The index and sub-index lines e, g as well as the numerals or figures f may be produced in any suitable way on the needle shank, for example 5 by a cutting, engraving or painting process. However, as the surface of the needle shank must be as perfectly smooth as possible to prevent the fabric meshes from being caught up or scratched, an advantageous way of producing said indices 10 and numerals consists in engraving them on the shank and then in covering the latter with a transparent film or varnish or other coating capable of drying or setting to proper smoothness.

Moreover, the indices and numerals may ex- 15 tend at right angles to the major axis of the needle as shown or obliquely thereto, for example along convolutions of a helix whose pitch may be equal to say one centimeter, a straight line parallel to the needle generatrix intersecting said convolutions to elearly define the scale divisions.

In the modification shown in Fig. 2, the index lines c, reference numerals f and sub-index lines g are provided on the core stem c and are visible through the transparent hollow shank a of the needle. The stem c may be held either permanently or removably (for example by friction) in the hollow shank a.

In order to permit the knitting to be more easily effected in an attenuated light or even in darkness, the tip b of the needle may be covered with a phosphorescent or luminescent substance of any known composition so as to remain visible under such light conditions. Such a substance may be provided also, when required, on other parts of the needle, for example on the shank or the core stem at intervals capable of enhancing legibility of the indices. Alternatively the indices or numerals may be so made as to be phosphorescent in an attenuated light.

In the other modification shown in Fig. 3, the index lines e, sub-index lines g and numerals f are provided on the needle shank a which is also furnished with spaced colored spots or patches such as h. The color of such spots is conveniently so chosen as to strikingly contrast with the ground color of the needle shank a. The spots may differ in color from any one to the successive one.

By way of example, blue spots may be associated with the odd numerals and red spots with the even numerals while the index lines and numerals themselves may be made green on a yellowish or tan colored shank a.

In the other modification shown in Fig. 4, the core stem c which carries the index lines e, numerals f and sub-index lines g is removably held, for example by more or less tight friction, in the hollow transparent shank a which is provided with a bead t adjacent its open end. Said bead forms an abutment for the stem head d when the stem is fully driven home. An advantage of this arrangement is that at any time in the course of the knitting process and while the fabric meshes are still engaged by the tip b, the stem c may be disengaged and used separately for measuring purposes whereafter the stem c may be re-engaged into the shank a which then protects it as a sheath.

The invention relates primarily to newly made knitting needles but it is not restricted to them. It is within the ambit of the invention to provide an attachment for hand knitting needles having similar characteristics for indexing and measuring purposes. Such a needle attachment may be made advantageously in the form of a sheath or sleeve bearing indices as above described and frictionally engageable over and holdable to a plain knitting needle of the usual type.

As a further development of the foregoing, a hand knitting needle may be furnished, e. g. sold in the trade with a plurality of such sheath-like indexed attachments, the indices of the several attachments being different from one another so as to permit miscellaneous uses to be ascribed to one and the same needle by a mere association thereof with changing attachments. This will permit the set made up of a needle and its several differently indexed attachments to be used for various knitting tasks.

The invention is applicable of course to all types of known needles used not only for ordinary knitting but also for crochet, embroidery or other kinds of hosiery or intermesh work.

HENRIETTE FOSSE, JEAN PALOU. LOUIS LACOMBE.