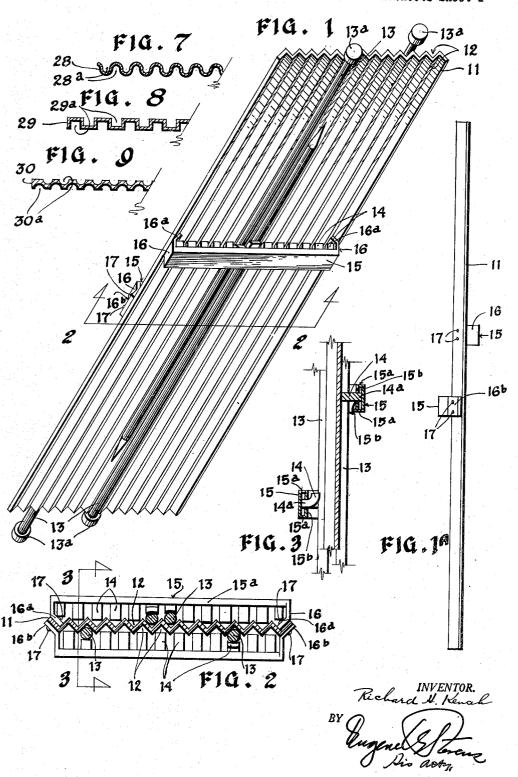
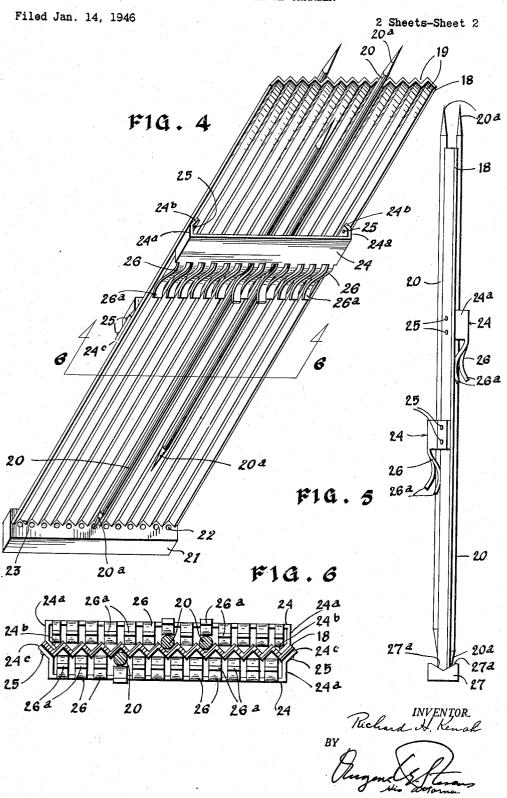
KNITTING NEEDLE CARRIER

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2 Sheets-Sheet 1



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KNITTING NEEDLE CARRIER

Richard H. Kenah, Vienna, Va.

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7 Claims. (Cl. 211-60)

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My invention relates to improvements in carriers for knitting needles and the like and it has for one of its primary objects to provide a device for this purpose which provides a very convenient means for storing a large number of knitting needles in such a manner as to keep them straight and usable, while at the same time leaving them open to view so that they may be readily kept arranged in "sets" and readily removed or replaced.

The invention furthermore contemplates a device of this kind which is very light in weight, is capable of carrying or storing a very large number of needles or similar articles in proportion to size, and which, at the same time is of such size and proportions that it may be easily carried in a woman's handbag.

A further object is to provide a knitting needle carrier or the 1 ke which is particularly adapted to quantity production from a wide variety of 20 materials, without necessitating any complicated manufacturing process, thus enabling the device to be produced and sold for a very low price.

More specifically, it is an object of the invention to provide novel securing means involving 25 portions individual to the respective needles carried by the device so that the removal of one needle or the like will not tend to reduce the retaining pressure on adjacent needles.

The foregoing and other objects of the inven- 30 tion are attained by certain novel features of construction, combination and arrangement of the various parts of the preferred examples of my inventive concept which are illustrated in the accompanying drawings, in which,

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Fig. 1 is a perspective view illustrating one form of the invention;

Fig. 1a is a side elevational view of the device disclosed in Fig. 1;

Fig. 2 is a cross sectional view taken on the 40 limit movement of the needles in one direction. In carrying out the invention as illustrated in

Fig. 3 is a fragmentary longitudinal sectional view taken on the line 3—3 of Fig. 2, and showing the needles securing means;

Fig. 4 is a perspective view disclosing a modi- 45 fied form of the invention;

Fig. 5 is a side elevational view of the device illustrated in Fig. 4, but showing a modified form of needle point engaging stop at one end of the panel-like body;

Fig. 6 is a cross sectional view through the device taken on the line 6—6 of Fig. 4:

Figs. 7, 8 and 9 are fragmentary cross sectional views through modified form of panel-like bodies which may be employed.

Referring specifically to the drawings, by reference characters, it being observed that similar reference characters have been used to designate the same parts throughout the several views, numeral ii, in the Figs. 1–3 form of the invention, designates an elongated panel-like body which is lineally corrugated throughout its length to provide opposite surfaces with needle receiving grooves 12.

As illustrated, the needle-receiving grooves 12 are V-shaped in cross section and have an effective depth which is preferably less than the diameter of the needles 13, it being noted that the grooves at one side of the panel 11 are offset with respect to the grooves 12 at the opposite side. Thus, when the needles 13 are provided with heads 13a, at one end, the heads of needles in adjacent grooves on opposite sides of the device will not tend, through engagement with one another, to unseat the needle shanks from their grooves 12.

The panel-like body 11 may be made of a variety of materials, such as metals, plastic, glass, or even wood, and, of course, the manufacturing process may be a rolling process, a stamping process, or may involve milling or cutting. Any of the aforenoted processes can be availed of in the production of the lineally corrugated body 11.

By lineally corrugating the body 11 to provide the grooves 12, it will be apparent that the body 11 may be made quite light and thin and still have the requisite thickness to prevent bending which would produce distortion of the shanks of the needles 13.

The form of device illustrated in Figs. 1-3, inclusive, is particularly adapted for needles having heads 13a in that it is free of any abutment at each end, the heads 13a being adapted to engage the adjacent end of the panel like body 11 to limit movement of the needles in one direction.

In carrying out the invention as illustrated in Figs. 1-3, inclusive, I provide an individual needle retaining finger arranged in opposition to each of the grooves 12 and preferably normally dipping slightly thereinto as illustrated at 14 in Fig. 2. The needle engaging fingers 14 are preferably made of rubber, although they may be made of felt or in fact any springy yielding material, and Fig. 3 illustrates such fingers as being disposed perpendicularly to the associated groove 12 and preferably dipping slightly thereinto. Such fingers have their rear ends 14a (which, by the way, may take the form of a carrier or backing strip from which the fingers are cut), received 55 in a lineal groove provided at the inner face of

a relatively stiff transversely disposed holder 15.

The holder 15, while preferably made of metal, may be made of other materials, and has its ends turned inwardly as at 16 to close the ends of the finger-receiving groove which is defined by the inturned portions of the holder member sides 15b, which are carried by the right angularly bent side portions 15a-all as illustrated in Fig. 3.

The terminals 16a of the ends 16 of the finger holder 15 are, in one instance, bent inwardly as 10 at 16a, and riveted or otherwise secured to the inner wall surfaces of the outermost grooves 12. In the other instance, namely, the holder 15 at the back of the panel-like body II, as viewed in Fig. 1, the ends 16b of the walls 16 are bent out- 15 wardly and are secured to the outer surfaces of the groove providing walls which carry the attaching portions 18a of the first mentioned finger holder 15.

Rivets, pins or the like 17 may be availed of 20 for securing the holders to the panel like body and it will be obvious that said finger holders 15, in addition to carrying the fingers 14, also provide transverse stiffening for the panel like body 11, so that same may be made extremely 25 thin and still have the requisite stiffness to prevent transverse bending.

Turning to the retained rear ends 14a of the flexible needle engaging fingers 14 it will be noted that they preferably abut the inner surface of the needle holder 15. It is also to be borne in mind that the spacement of the walls 15b of the finger receiving groove is less than the thickness of the fingers 14 so that the latter will be efficiently clamped in place and will not be likely to 35 become detached in service. Nevertheless, it will be appreciated that the arrangement mentioned lends itself to ready replacement of the fingers 14, 14a as occasion may require.

Fig. 3 illustrates how the fingers 14 will bend as a needle 13 is inserted in the related groove and passed beneath the needle. Obviously, a very fine friction retaining action is had so as to obviate likelihood of the loss of a needle.

Turning now to the form of invention which is illustrated in Figs. 4, 5 and 6, the panel like body 18 is the same as that illustrated at 11 in Fig. 1, and has the V-shaped grooves 19 for receiving the needles 20, which in the present instance are illustrated as pointed at each end as $_{50}$ indicated by reference character 20a.

Here, the panel like body 18 is shown as carrying at one end an abutment 21 in the form of the rectangular block having in its inner side, holes 22 aligned with each of the grooves 19 and adapted to receive and protect the pointed ends 20a of the needles. The block 21 may be secured to the panel like body 18 in any preferred manner, as for instance by cutting a zig-zag groove in the hole provided surface for receiving the adjacent end of the panel like body 18. Of course various other ways of attaching the abutment block 21 to the body 18 may be availed of.

The Figs. 4-6 form of the invention differs from that illustrated in Fig. 1, in another particular, namely, in the form of needle retaining means employed.

Instead of the perpendicularly disposed rubber or other flexible fingers 14 illustrated in Fig. 1, 70 I employ in this second form of the invention, elongated compoundedly curved fingers 26 individual to each of the grooves 19 and extending lengthwise thereof. The free ends of the fingers

may be readily lifted to facilitate withdrawal of a needle 20 from the associated groove 19.

In carrying out the invention as illustrated in Figs. 4-6, inclusive, I provide the rear ends of the fingers 26 with a transverse carrier strip 24. This strip 24 is of relatively stiff material and is preferable integral with the fingers 26. As in the case of the finger holder 15 of Fig. 1, the strip 24 provides transverse reinforcement for the panel like body.

The finger carrying and panel-like body reinforcing strip 24 has its ends bent inwardly as at 24a, and in the case of the strip 24 in the foreground in Fig. 4, its terminals 24b are bent inwardly at an angle and are secured to the inner surfaces of the outer walls of the outermost grooves 19 by means of rivets 25 or the like.

However, in the case of the finger carrying strip 24, at the back of the device, as viewed in Fig. 4, the end walls 24a of said strip have their terminals bent outwardly as at 24c, and are secured to the outer surfaces of the same walls which carry the attaching terminals 24b of the companion finger carrying strip 24.

Fig. 5 is the same in all respects as Fig. 4, except that instead of employing a needle abutment block 21, having apertures, I employ a block 27 having its inner longitudinal surface rabbeted as at 27a to provide inwardly slanting recesses at opposite sides of the panel 18 for receiving and protecting the points of the needles 20. The block 27 may be secured to the panel 18 in any preferred fashion, such as by a zig-zag groove, as mentioned in connection with Fig. 4, and designated by reference character 23.

In addition to the needle point protection function of the block 21 of Fig. 4, and the block 27 of Fig. 5, it will be appreciated that such blocks also serve to prevent transverse bending of the panel like body 18. And while on this subject, it is very desirable to space the finger carriers 15 (Fig. 1) and the finger carrier or strip 24 (Fig. 4), lengthwise of their carrying panels so as to provide stiffening means at different points in the length of the carrying panels. This enables me to make the panels of lighter material than would otherwise be practical and still afford requisite protection for the needles or similar articles carried thereby.

From the foregoing description, taken in connection with the accompanying drawings, it will be readily appreciated that I have provided a very light, compact and efficient device for carrying knitting needles. Although knitting needles have been particularly referred to, it is within the scope of the invention to carry any analogous or similar articles.

The form of panel employed may be varied considerably. For instance, in Fig. 7, I disclose a panel wherein the groove-providing corrugation takes the form of a series of curves, so as to provide grooves 28a from a panel 28, which will be curved. Thus, if the device is made of metal, there is no chance of sharp points marring the 65 surface of a table.

In Fig. 8, the grooves 29a, formed from the panel 29, are square or rectangular in cross section, and, of course, there will be flat surfaces for engagement with the table or other supporting surface, so that the device will have the same advantage as mentioned in connection with Fig. 7.

In Fig. 9, the panel-like body 30 is not strictly corrugated and lends itself especially to molding from plastic in the provision of a carrier body 26 are turned upwardly as at 26a so that they 75 having needle-receiving grooves 30a. Of course, all of the panel-like bodies may be made of plastic and, in fact, of the various materials mentioned in the earlier portion of this specification.

Having thus described my invention, what I claim is:

1. A holder for knitting needles or the like comprising a panel like body having lineally extending grooves on opposite sides, individual retaining means for needles or the like carried in said grooves, transversely disposed body stiffening members at opposite sides of said body and offset laterally of one another and secured to said body at least at the sides thereof, and said body stiffening members carrying said needle retaining means.

2. A holder for knitting needles or the like comprising a preferably elongated body having a plurality of adjacent lineally extending needlereceiving surface grooves, an individual yielding needle-retaining means overlying each of the 20 several grooves, each of said individual needleretaining means comprising a compressible and flexible finger disposed substantially perpendicular to and in approximate engagement with its groove, a tránsverse stiffening member extending across said grooves and secured to the body at opposite sides thereof and providing a carrier for said needle-retaining fingers, said combined carrier and stiffening member having an inner surface groove rather narrower than 30 the thickness of said fingers and receiving the same, whereby the side walls of said groove compress the fingers and retain same in place.

3. A holder for knitting needles or the like comprising an elongated panel-like body, said body having lineally extending needle-receiving grooves in opposite sides thereof, the grooves in one surface of the body being staggered with respect to the grooves in the opposite surface thereof, transversely extending needle-retaining means disposed at each side of said body, said needle-retaining means having yielding needleengaging portions, and a stiffening abutment carried at one end of said panel-like body and having portions extending outwardly to close the 45proximate ends of said grooves and serve as an abutment and stop for the needles.

4. A holder for knitting needles or the like comprising a relatively thin panel-like body having lineally extending needle-receiving surface grooves in opposite sides thereof, yielding fingerlike needle-retaining members individual to each of the grooves, a rigid carrier for said fingers, securing means for said carrier engaged with said body at the side edges thereof, and said needle-retaining fingers comprising resilient flexible members disposed substantially perpendicularly to the associated needle-receiving groove. and said carrier comprising a transversely disposed body having a lineal inner surface groove receiving the rear ends of said fingers, the width of said groove being narrower than the thickness of said fingers whereby to fixedly retain the same in place, and means at the ends of said carrier and secured to the side edges of said panel-like body whereby to retain the body and carrier assembled.

5. A display holder for knitting needles or the like and adapted to support and expose the same throughout substantially their entire lengths, 7 said holder comprising an elongated flexible body of thin stock having at opposite sides laterally spaced lineally extending stiffening ribs providing needle-receiving grooves therebetween and extending throughout the length of the body, the 75

grooves and ribs at one side being offset with respect to the grooves and ribs at the other side whereby to allow space to accommodate needle heads at one end of the body without bringing same into engagement to thereby distort the flexible needles, a transversely extending stiffening brace extending across the body at each surface whereby to prevent bending of the body along the line of said grooves, and needle-retaining portions incorporated in each stiffening brace and extending into the respective grooves.

6. A display holder for knitting needles or the like and adapted to support and expose the same throughout substantially their entire lengths, said holder comprising an elongated flexible body of thin stock having at opposite sides laterally spaced lineally extending stiffening ribs providing needle-receiving grooves therebetween and extending throughout the length of the body, the grooves and ribs at one side being offset with respect to the grooves and ribs at the other side whereby to allow space to accommodate needle heads at one end of the body without bringing same into engagement to thereby distort the flexible needles, a body stiffening member secured to said body at one end and coextensive in width with same, said member having portions closing the ends of said needlereceiving grooves whereby to provide stops for adjacent needle ends, and yieldable body-carried needle retaining means disposed transversely of the body at opposite sides thereof whereby to retain the needles in said grooves.

7. A display holder for knitting needles or the 35 like and adapted to support and expose the same throughout substantially their entire lengths, said holder comprising an elongated body of thin stock having lineally extending stiffening ridges projecting from at least one surface, said ridges being laterally spaced to provide needlereceiving surface grooves in at least one surface of said body, a transverse stiffening brace secured at least at its ends to opposite sides of the body, yielding needle-retaining means carried by said transverse brace and urged into contact with the needles or the like in the respective grooves, a transverse abutment providing a receiving recess into which one end of the body is insertable whereby to stiffen same and provide an abutment closing the adjacent ends of said grooves, said body providing lineally extending ridges and grooves at opposite sides, the respective ridges and grooves at one side being staggered with respect to those at the opposite side and there being a transverse stiffening brace at opposite sides of the body with needle-retaining means carried by each, said stiffening braces being offset with respect to each other, and said body-receiving abutment projecting beyond each side of the body to close the ends of each set of grooves.

RICHARD H. KENAH.

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