April 24, 1962 TAIJI ENOMOTO 3,030,719

FLOWER RIBBON STRIP

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Fig. 1.

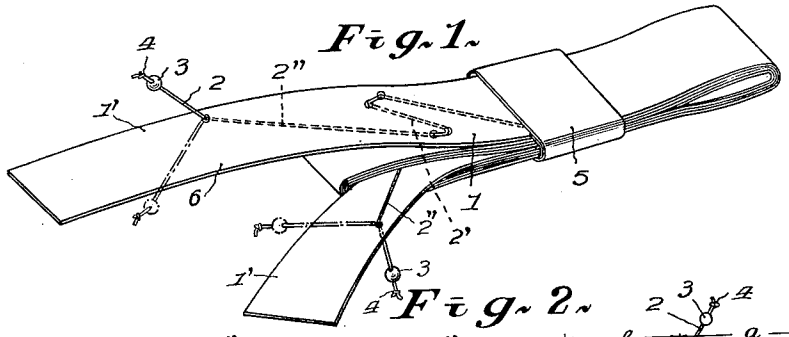


Fig. 2.

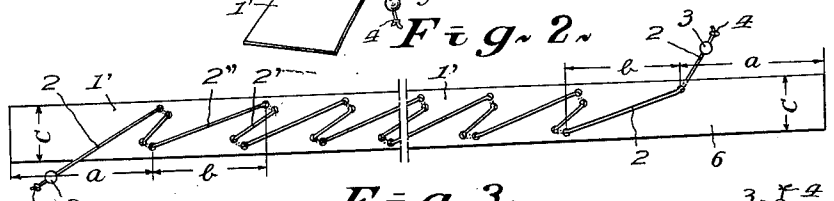


Fig. 3.

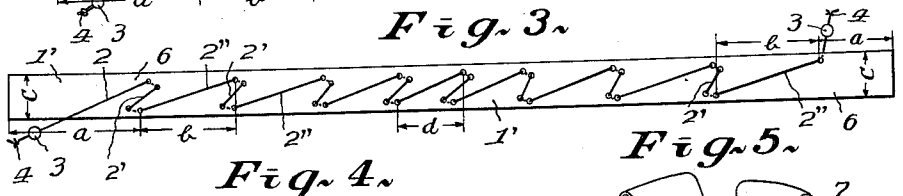


Fig. 4.

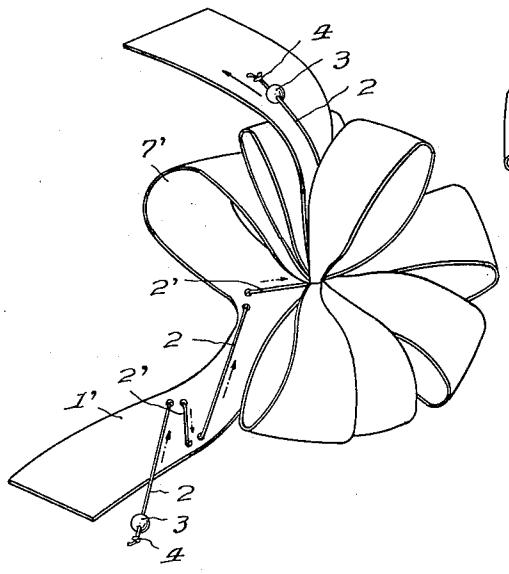
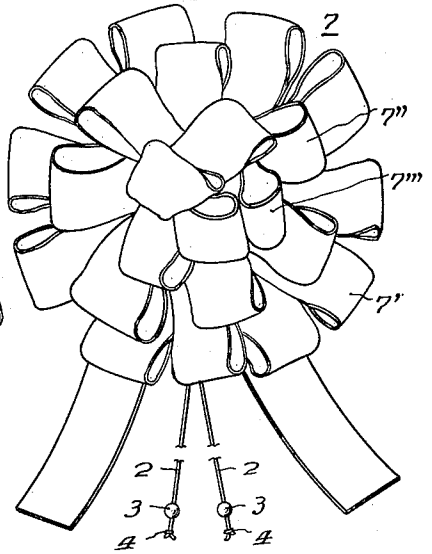


Fig. 5.



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Fig. 6.

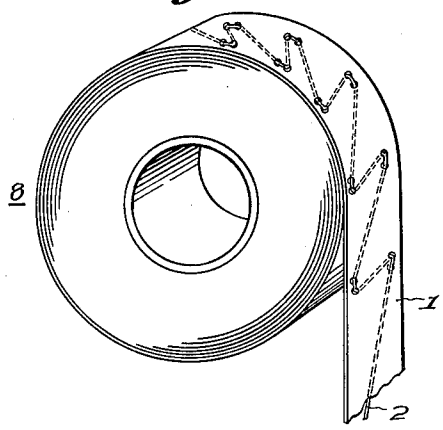


Fig. 7.

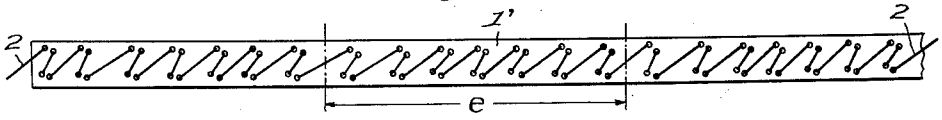
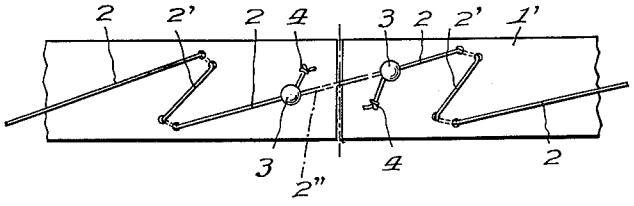


Fig. 8.



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Fig. 9.

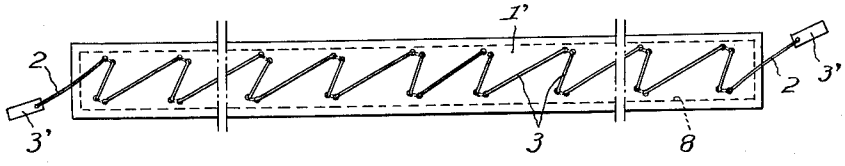


Fig. 10.

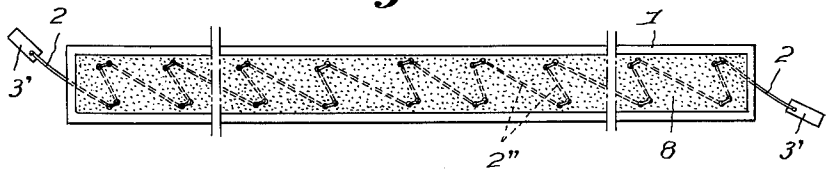


Fig. 11.

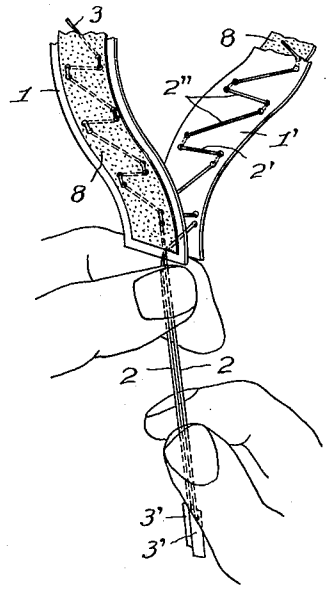
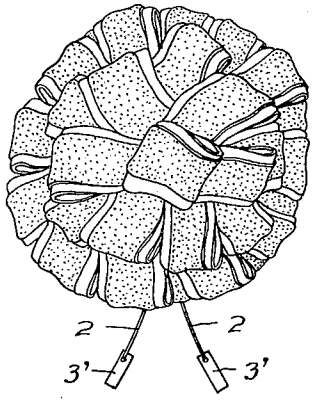


Fig. 12.



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Fig. 13.

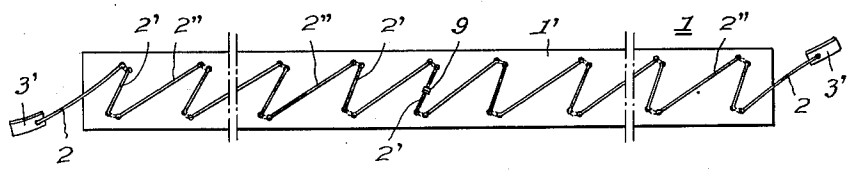


Fig. 14.

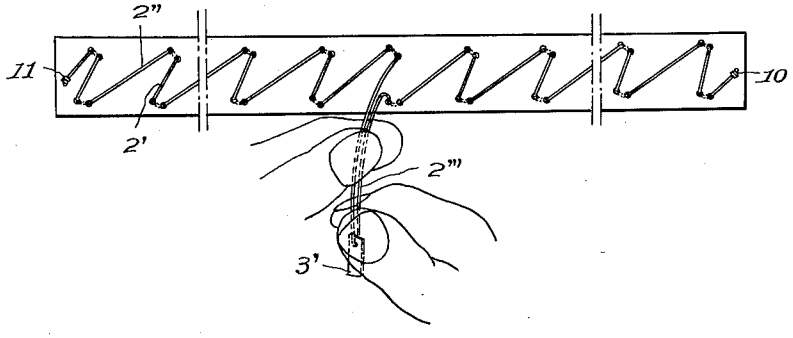


Fig. 15.

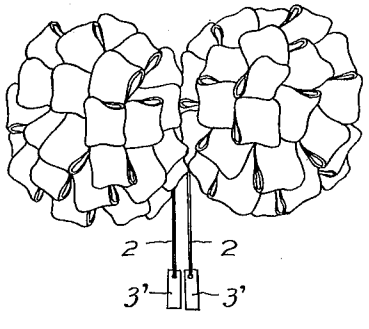
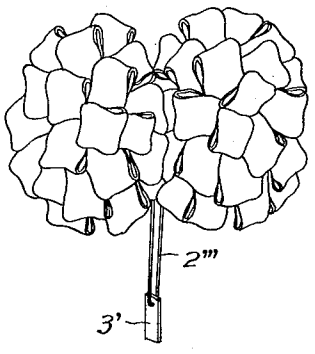


Fig. 16.



United States Patent Office 3,030,719 Patented Apr. 24, 1962

3,030,719

FLOWER RIBBON STRIP

Taiji Enomoto, 3–15, Hamacho, Nihonbashi, Chuo-ku, Tokyo-to, Japan

Filed Aug. 11, 1959, Ser. No. 833,097
6 Claims. (Cl. 41—10)

The invention relates to a strip, from which at least a flower ribbon is made, each time by manually pulling the opposite ends of a binder yarn stitched on the strip.

The main object of the invention is to provide a ribbon strip of the kind above referred to, which provides the desired flower ribbon in its accurate shape through easier and simpler manipulation by the user thereof.

Another object of the invention is to provide a ribbon trip of the above kind, which is shaped in a long, continuous band, adapted to be preserved in a stack or in a roll, and usable by the user, to produce a complete ribbon each time she desires to do so, by cutting a proper length of element off the strip and by pulling the attached binder as usual.

Still another object of the invention is to provide a ribbon strip, from which a flower ribbon having a plurality of two-tone color flower leaves can be produced in the similar way.

Still further object of the invention is to provide a ribbon strip, from which a double flower ribbon can be produced at a single manipulation of the strip.

Various further and more specific objects, features and advantages of the invention will appear from the description given below, taken in connection with the accompanying drawings illustrating by way of example several preferred embodiments of this invention.

In the drawings:

FIGURE 1 shows a perspective view, illustrating a stack comprising a ribbon strip according to the invention, having just a length as necessary to produce a flower ribbon only, the opposite ends of said strip being somewhat drawn out in order to show the initial stitches of the binder yarn attached to the strip;

FIGURE 2 illustrates the back side of the ribbon strip developed in an extended band on a plane from the stack shown in FIGURE 1, part of which is, however, cut away in order to show the opposite end portions of the strip more in detail;

FIGURE 3 shows equally, but somewhat diagrammatically, the back surface of a complete strip above illustrated;

FIGURE 4 is a perspective view, illustrating an intermediate step to produce a flower ribbon from the above shown strip, by pulling the binder yarn at its ends by hand;

FIGURE 5 illustrates a thus finished flower ribbon, having a substantially three circular series of flower leaves;

FIGURE 6 is a perspective view of a roll of ribbon strip, containing a number of flower sections;

FIGURE 7 shows the back side view of a continuous ribbon strip shown in FIGURE 6;

FIGURE 8 is an enlarged view of part of a continuous ribbon strip shown in FIGURE 7, the binder yarn thereof being, however, shown as attached at each end with a grip ball or bead as well as an end knot, after cuttion the strip at a proper place between adjoining flower sections;

FIGURE 9 shows the back side view of a ribbon strip according to a still other embodiment of the invention, from which a flower ribbon having a plurality of two-layer or two-tone colored flower leaves may be easily produced;

FIGURE 10 represents the right side of the strip;

FIGURE 11 illustrates how to produce a flower from the strip shown in FIGURES 9 and 10;

FIGURE 12 shows a flower ribbon thus completed;

FIGURE 13 is a still further embodiment of the invention, wherein the ribbon strip contains two flower sections and is adapted to produce at one manipulation thereof two flower ribbons, simultaneously;

FIGURE 14 is a somewhat modified ribbon strip from that shown in FIGURE 13, and equally able to provide two flower ribbons simultaneously.

FIGURES 15 and 16 are perspective views of double-flower ribbons, produced from the strips shown in FIGURES 13 and 14, respectively.

Now, referring to FIGURES 1–8, the first embodiment of the invention will be described. In these figures, **1** denotes the right side of a strip of fabric, lighter or heavier, as the case may be, from which a flower ribbon shall be produced, while **1'** represents the other side of the strip. The strip is provided at its rear surface with a saw-teeth like yarn work as shown, especially, in FIGURES 2 and 3. This yarn work has been completed as follows: First, take up a yarn **2**, stick it through the strip from the right to the opposite side thereof at a position separated from the starting end a certain distance denoted by reference character "*a*" and in the neighborhood of the upper edge of the strip, and stick it back through in the opposite manner and in close proximity to the first stuck point. Next, lead the yarn backwards and in an inclined manner as shown by reference number **2** nearly from the upper to the lower edge of the strip, to form a sharp acute angle with the latter edge, and stick it through strip in the first mentioned and then in the reverse direction as in the first closest stitch. Then, lead the binder in an upwardly inclined manner to a place, which is distant from the just above mentioned second closest stitch a distance equal to "*b*," where in the same manner as before a further closest stitch is made in the neighborhood of the upper edge of the strip, said distance "*b*" being selected to be about two times the length of an outermost flower leaf **7'** of the completed ribbon, the mode of production of which will be described in detail hereinafter. Further, in order to shape the second saw-tooth, lead the yarn backward and in an inclined manner, equally as in the preceding case, nearly from the upper to the lower edge of the strip. This backwardly inclined location of yarn is again denoted by the same reference number **2'**. In this manner, a number of saw-teeth like zigzag yarn stitches are produced substantially whole length of the strip, as will be clearly seen from the diagrammatical representations, especially illustrated in FIGURES 2 and 3, the height of each saw-tooth extending within substantial part of the width "*c*" of the strip. Assuming, however, that the horizontal length of each saw-tooth is "*d*," the distance is not constantly fixed, but rather varied in such a way that the above mentioned distance, or the pitch of the teeth in effect will gradually be decreased, until the teeth extend from the leading end of the strip to the middle zone thereof, which corresponds to the inner series of flower leaves **7''** and **7'''** of a completed ribbon, said inner leaves being normally made shorter than those belonging to the outermost series. Within the middle zone, the tooth pitch is preferably constant, but beyond the zone the pitch is gradually increased, until the teeth extend substantially to the opposite end of the strip. It will thus be seen from the foregoing, that the arrangement of teeth, in view point of their pitch, is symmetrical over whole length of the strip. The last inclined forward stitch **2** seen on the back surface of the strip has a length "*b*" just the same as already described, and the last stuck point thereof lying in the neighborhood of

the upper edge is distant from the opposite end of the strip a predetermined length "*a*," as in the case of the leading end of the strip already described.

The binder yarn is provided at each end thereof with grip means such as a small ball, bead or the like, as well as an end knot preventing the latter from slipping out from the binder yarn.

When it is required to produce an artificial flower from the strip shown in FIGURES 1, 2 and 3, the user grips one end of the binder yarn by its attached bead or small ball **3** with her hand, places a couple of fingers of her opposite hand upon the back as well as the right surface of the strip at the first stuck-through point **6** with a slight pressure, respectively, and then draws out the yarn at a stroke and with a strong muscular effort. Then, the opposite ends of the first region "*b*" comprising the first forward-inclined stitch **2''** and corresponding to one of the outermost flower leaves are drawn to each other, thus forming a bent leaf **7'**. Next, under the action of drawn-out stitch **2'** extending at the forward end of the above mentioned region "*b*" in the inclined backward direction the strip is subjected to a torsion and the already formed flower leaf **7'** is bound at its root portion. Successively, in the same manner, a plurality of flower leaves are produced and bound firmly at their roots, as shown in FIGURE 4, which illustrates an intermediate stage of the flower-making operation. Finally, the desired complete flower is made, which is provided with an outermost series of relatively longer flower leaves **7'**, corresponding to longer saw-tooth lengths "*b*," as well as with an inner series of leaves having relatively smaller heights **7''** and **7'''**, on account of shorter tooth lengths "*d*," as shown in FIGURE 5. The thus completed flower is provided with a group of shortest flower leaves as denoted by reference number **7'''**, which seem as if they were a group of pistils. In this way, the user can produce, rapidly at one stroke, a beautiful flower ribbon having a number of leaves substantially successively different arranged around a small group of pistil-like leaves.

During the above described flower-shaping operation, the stopper means **3** serves to prevent the binder from slipping-in. After completion of the flower-making, the stoppers at the opposite ends of the strip are preferably advanced to the grouped roots of the flower leaves, thus improving the binding and positioning function of the binder.

Under circumstances, the binder **2** may be drawn out in the opposite directions simultaneously, instead of being pulled at its one end in the manner mentioned above. By this alternative measure, the user may make the same flower at a more rapid speed, but otherwise with equal results. In some instances, the beads **3** are left staying at both ends of the binder as shown in FIGURE 5. In this case, the beads serve to show clearly the ends of the binder **2** and at the same time as beautiful accessories to the finished flower.

As shown in FIGURES 6, 7 and 8, the ribbon strip may be prepared in the shape of a long continuous band, which comprises a number of sections, each corresponding to a flower. In this case, a forwardly inclined stitch **2''** of the continuous binder **2** is cut at each place between a couple of adjoining flower elements, one of which is denoted by "*e*" in FIGURE 7, and a bead **3** or the like stopper or grip means is provided at each end of the binder. Each of the cut ends is preferably provided with an end knot **4** from the time of preparing the ribbon strip. Such knots may be also made at the time of use of each ribbon strip element, if necessary. As will be easily seen from the foregoing, the user cuts one or more strip elements off the strip roll as shown in FIGURE 6, each time she desires to produce and use a flower ribbon or ribbons, the cutting line being illustrated by chain lines in FIGURES 7 and 8. In this case, the beads **3** show to the user clearly where she should cut the strip by means of her scissors.

FIGURES 9 and 10 show a strip, from which the user can produce a flower ribbon having a number of double or two-tone color leaves, according to a further embodiment of this invention. This main difference of the present embodiment from the first one shown in FIGURES 1–5, resides in an additional strip, having a different color from that of the normal strip, and stuck on the right or upper surface of the latter. The additional strip **8** has naturally a somewhat shorter width than that of the normal and is stuck along substantially whole length of the normal strip **1**. The stopper or grip means **3'** in this embodiment is also somewhat modified from that in the preceding embodiments. The mode of flower production in this case, is somewhat different from the foregoing. In the present embodiment, as shown in FIGURE 11, the user is drawing out the binder yarn **2** by gripping the both ends thereof together by her one hand. FIGURE 12 illustrates a flower ribbon thus completed. It is preferred to use a lighter or more flexible fabric as the additional strip so as to make the flower-making operation lighter and smoother. Although not shown, two or more differently colored additional strips may be equally employed instead of one only. In this case, the widths of thus overlapped additional strips may be varied as the occasion may desire.

FIGURE 13 shows a ribbon strip according to a still further embodiment of this invention to produce a double flower ribbon at one stroke. This strip is a combination of two strip elements, the backwardly inclined stitch **2'** extending therebetween being provided with a knot **9**. As will be seen from the foregoing, a double flower ribbon shown in FIGURE 15 can be produced by pulling out the binder yarn **2** at its opposite ends at a stroke with relatively stronger muscular efforts. In a somewhat modified combination strip shown in FIGURE 14, the binder yarn **2** is provided with knots **10** and **11** and an intermediate slackened and extended stitch **2''** is provided with a grip piece **3'**. When the user pulls the binder by gripping the grip piece **3'** with her hand, a double flower ribbon as shown in FIGURE 16 may be easily prodced at one stroke. If wanted, the double flower ribbon may be multi-colored by employing multi-layer strip as already described in connection with FIGURES 9–12.

Although the invention has been described in considerable detail in the foregoing for the purpose of illustration, it is to be understood that such detail is solely for this purpose and that variations can be made therein by those skilled in the art without departing from the spirit and scope of the invention except as set forth in the claims.

I claim:

1. An improved flower ribbon strip assembly for making ribbon flowers, comprising in combination: a strip of textile ribbon having a predetermined length necessary to produce a ribbon flower and a continuous binder yarn having opposite ends stitched on the back of said strip in the shape of a series of saw-teeth beginning with an end of the binder yarn hanging loose at one end of the ribbon strip and ending at the other end of the strip with the other end of the binder yarn hanging loosely therefrom, the pitch of said saw-teeth being variable in such a way that it gradually decreases in its length from the starting end of said strip to the middle zone thereof and gradually increases in its length from said zone to the opposite end of said strip, said pitch within said zone being preferably kept constant and the forward edge of each of said saw-teeth being formed by a backwardly inclined stitch making an acute angle with the edges of said strip, said binding yarn and its progressively increasing pitch of saw-tooth stitching from the center zone of said ribbon to the ribbon ends for providing progressively increasing lengths of the flower petals from short center petals to longer outer petals formed when the opposite ends of said binder yarn are pulled, thereby providing a

ribbon flower with petals of different lengths as occurs in real flowers, and said backwardly inclined stitches for causing said flower petals to lay more flat than vertical thereby more closely conforming the petal structure to that of a real flower.

2. An improved flower ribbon strip as described in claim 1 wherein a grip means is loosely mounted on each end of said binder; and an end knot shaped on each end of said binder and serving as means to prevent the corresponding grip means from slipping out from said binder.

3. A continuous flower ribbon strip, as set forth in claim 2, wherein said binder yarn grip means is slidably mounted on each end of the yarn part.

4. A flower ribbon strip assembly as described in claim 1, wherein said ribbon strip comprises a plurality of multicolored strips of textile fabric, each having a predetermined length necessary to produce a flower ribbon, said strips as a whole being superimposed on one another whereby multicolored ribbon flowers are formed when said binding yarn ends are pulled.

5. An improved flower ribbon strip assembly adapted to produce a double-flower ribbon comprising a strip of textile fabric having predetermined length elements necessary to produce two artificial flowers; a continuous binder yarn having opposite ends stitched on the back of said strip in the shape of a series of acute angle saw-teeth, and a knot provided at an intermediate portion of a backwardly inclined stitch of said binder, which lies on the boundary between said two adjoining strip elements; the

pitch of said saw-tooth stitching being variable in such a way that it gradually decreases in its length from the starting end of each of strip element corresponding to a flower to be made therefrom to the middle zone thereof and gradually increases in its length from said zone to the opposite end of said strip element, said pitch within said zone being preferably kept constant and the forward edge of each of said saw-teeth being formed by a backwardly inclined stitch making an acute angle with the lower edge of said strip; and grip means provided at each end of said binder yarn for preventing the binder yarn from unstitching and for ease in pulling said yarn ends.

6. A flower ribbon strip, as set forth in claim 5, wherein said ribbon strip comprises a plurality of differently colored elementary strips superimposed on one another.

References Cited in the file of this patent

UNITED STATES PATENTS

2,763,080	Welch	Sept. 18, 1956
2,826,225	Hagenbuch	Mar. 11, 1958
2,849,821	Doig	Sept. 2, 1958

FOREIGN PATENTS

1,058,683	Germany	June 4, 1959

OTHER REFERENCES

Needlecraft Encyclopedia by A. Carroll, copyright 1947, by Hearst Magazines Inc., Kingsport, Tenn.