FINGER WEAVING

Part 1

by Richard Conn

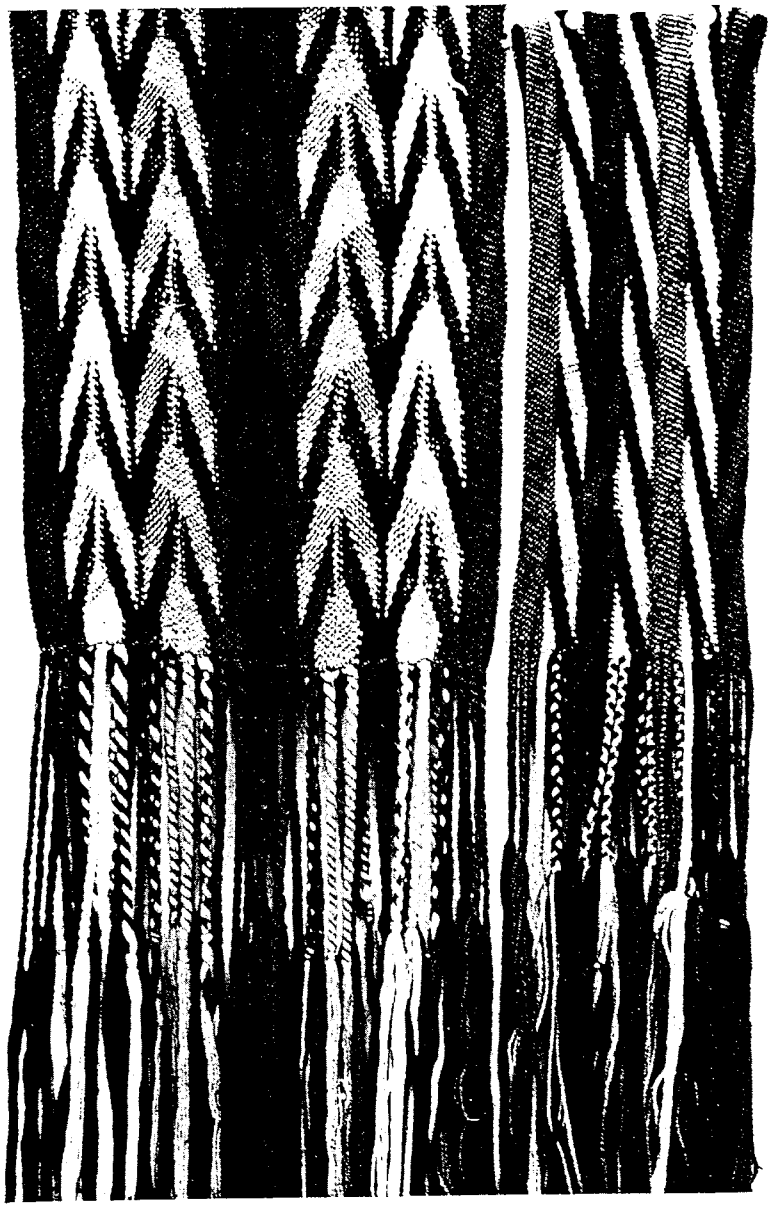


Fig. 1 Two finger-woven sashes, Winnebago (left) and Menomini (right). Both designs are variations of the basic technique. Photo courtesy of the Museum of the American Indian.

Some years ago, I began a series of articles in "American Indian Tradition" on the various kinds of braided sashes. Unfortunately, this magazine went out of business after the first article was published, and the others were never printed. In the time since, people have written to ask for instructions on the material that was to be covered in the unpublished articles. So far I have had to disappoint them. Now, "American Indian Crafts & Culture" has made it possible to start again and, hopefully, to finish. Let's hope this series doesn't prove a jinx to Mr. Stewart. This first article will cover the basic details - how to calculate the amount of yarn, how to arrange it, etc. - and the simple chevron pattern. The next will be concerned with arrow pattern and the process of braiding several bands simultaneously. The final article will explain the flame and reflex patterns and some ways of treating fringe.

The first step in making a piece of finger weaving is, obviously, to figure out your pattern and then plan how much yarn you will need. I except you will work out the actual design from pieces you have seen, whether in photographs or in the flesh. After you have worked out the pattern and the colors, you should make a full-sized sketch of one unit; that is, one full repeat of the design. With this sketch, you will be sure of what you're going to make and it will also help you figure the yarn correctly.

Most sashes and garters are woven of sweater-weight knitting yarn that comes in hanks of a specified number of yards, marked on the

wrapper. Measure your sketch to see how wide your project is to be, and multiply this by twenty-four (since sweater-weight yarn will work out at about twenty-four strands to the inch of width). If you are using finer yarn, you may have to make a practice piece to determine the strand width count. Next, decide on the length of the braided section and add 10% for the "take up" or length you will lose by the strands' lateral movement in braiding. Then add extra length for the fringes on either end and you have the total length. Using your sketch, work out the number of strands required for each color on the basis of twenty-four to the inch. Multiply this by the overall length and you will know how much yarn of each color is required. Then, it's off to the yarn shop.

Many Indians like Red Heart brand yarn, and it does work up well. You should get wool yarn, as both cotton and all-synthetics aren't very elastic. But, you don't need to buy an expensive wool yarn like Shetland or Argyle. Something from Woolworth's will do very well.

Having your yarn, you are ready to set it up for work. You must find two winding posts and set them the proper distance apart; that is, the overall sash length you figured out before. The winding posts must be two solid objects around which you can wind yarn without slipping. You might clamp two sticks to the edge of a work table, or use two ladderback chairs, or anything else suitable. Tie an end of yarn to one post and start winding back and forth until you have enough strands of the first color. Although it sounds silly to mention it, don't forget that each round trip between posts gives two strands. I have seen people wind off yards of yarn without realizing they had counted only one side. End at the first post, untie your original knot, tie it to the other end and cut off the excess. Repeat for the other colors. Don't worry about having the colors in proper sequence yet.

After the yarn is all wound off and tied, it must be set in order. At the second winding post (the one opposite the knots), insert the head tie string as shown in Fig. 2. This should be a piece of strong cord about two yards long. Then go to the first winding post, untie the knots and cut all the yarn loops open. Then tie a second heavy cord around this yarn bundle as shown in Fig. 2. Next you have to find a

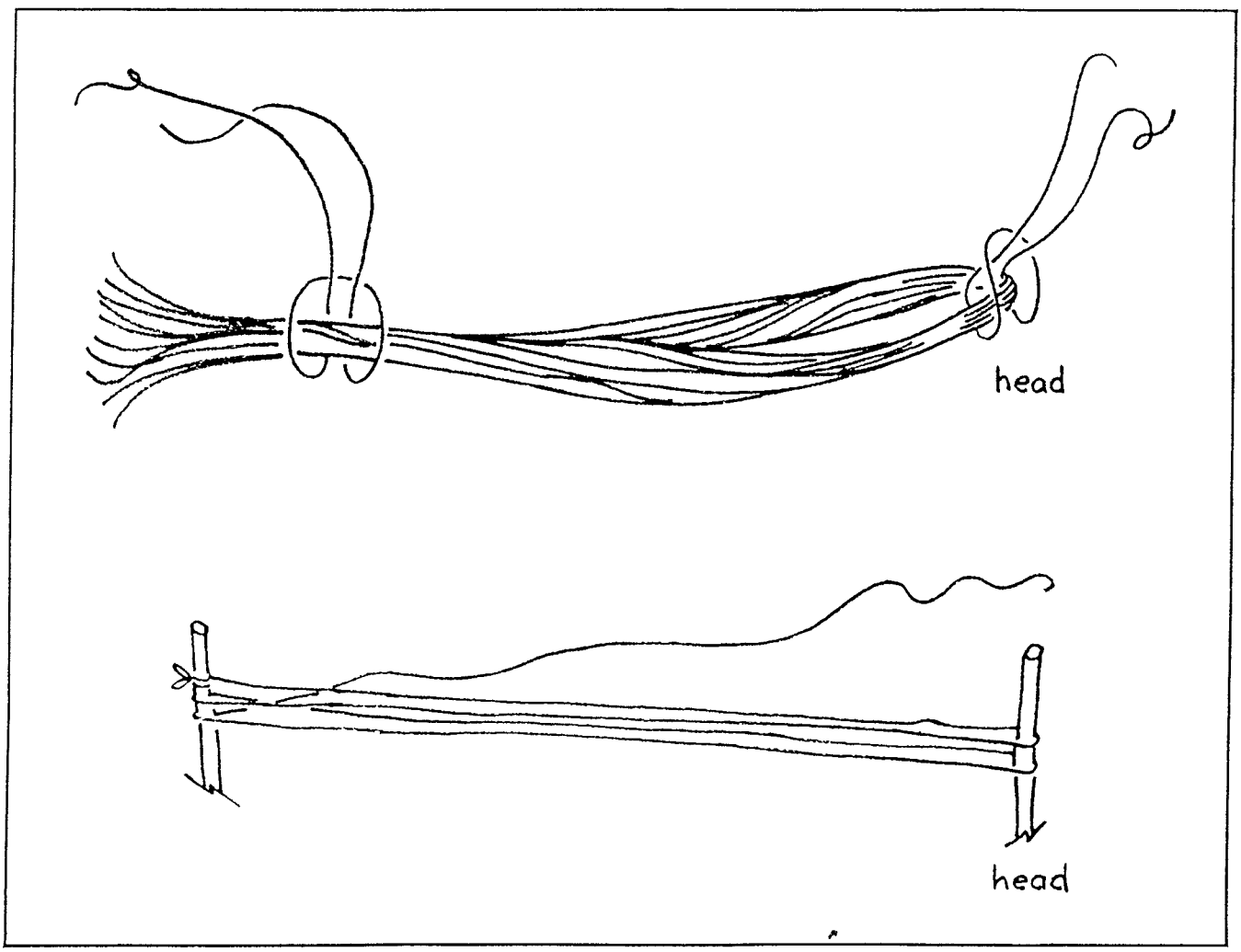


Fig 2 Top: How to insert the head and bottom tie strings. Bottom: How the yarn is wound.

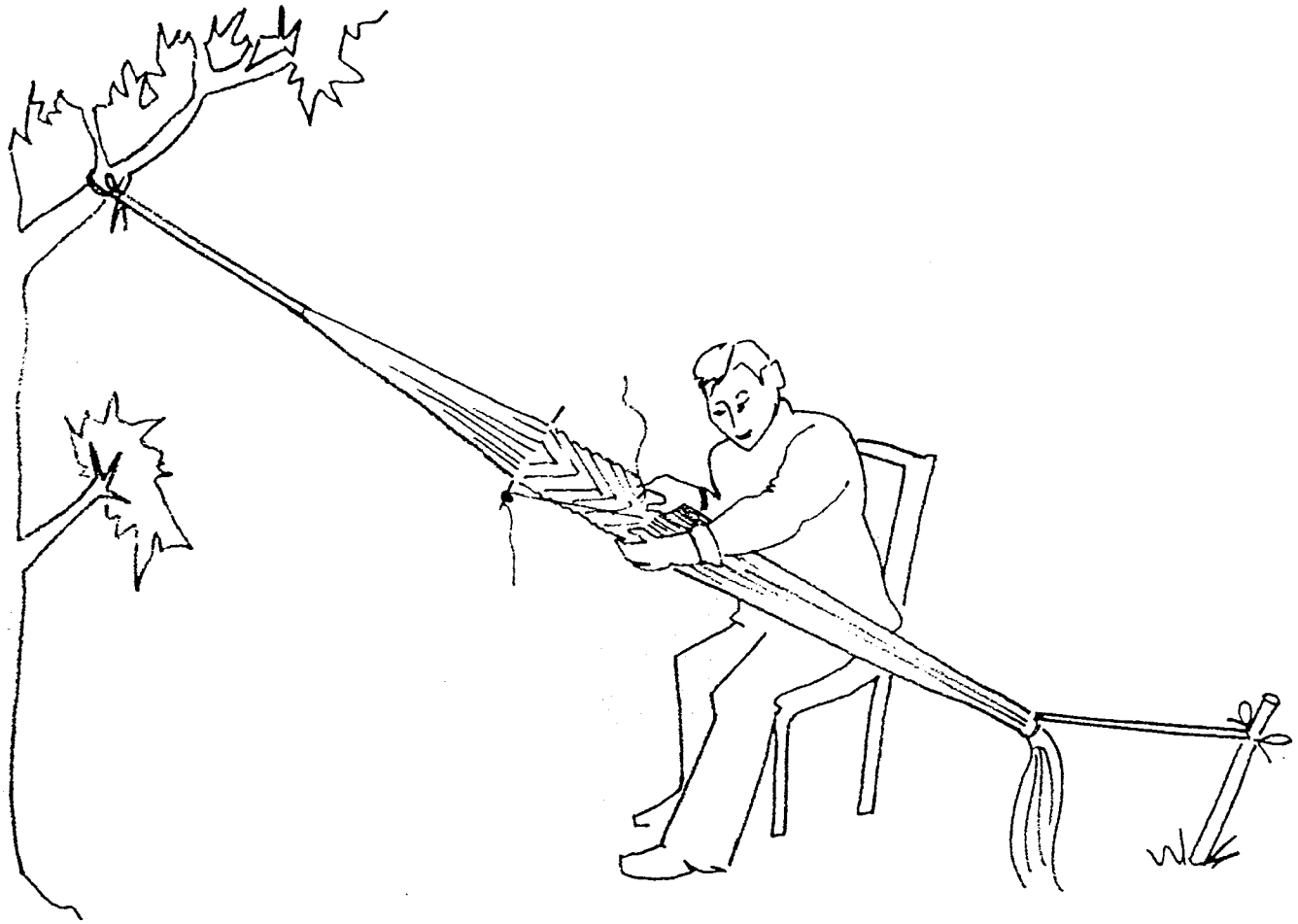


Fig. 3 How to arrange the yarn bundle for working.

convenient place to set up the yarn bundle and work. Personally, I like to work with the yarn at about a 45 degree angle as shown in Fig. 3. Others prefer it more nearly vertical or horizontal.

With the yarn arranged comfortably, you must insert the headstick. This may be a peeled willow shoot, a piece of dowel, or something similar. It should be about three-eighths inch in diameter and eight inches longer than the braiding will be wide. Lift up one strand of the color that goes in the center, measure down from the upper tie a distance equal to the fringe of one end, and loop this strand around the head stick. Continue looping the center color strands around the stick and then check the distance again. Fig. 4 shows how these loops are made. Continue looping the rest of the strands onto the head stick, working alternately on both sides, and arranging the colors in proper order. When all are in place, be sure the head stick is square, and push the strands tightly together.

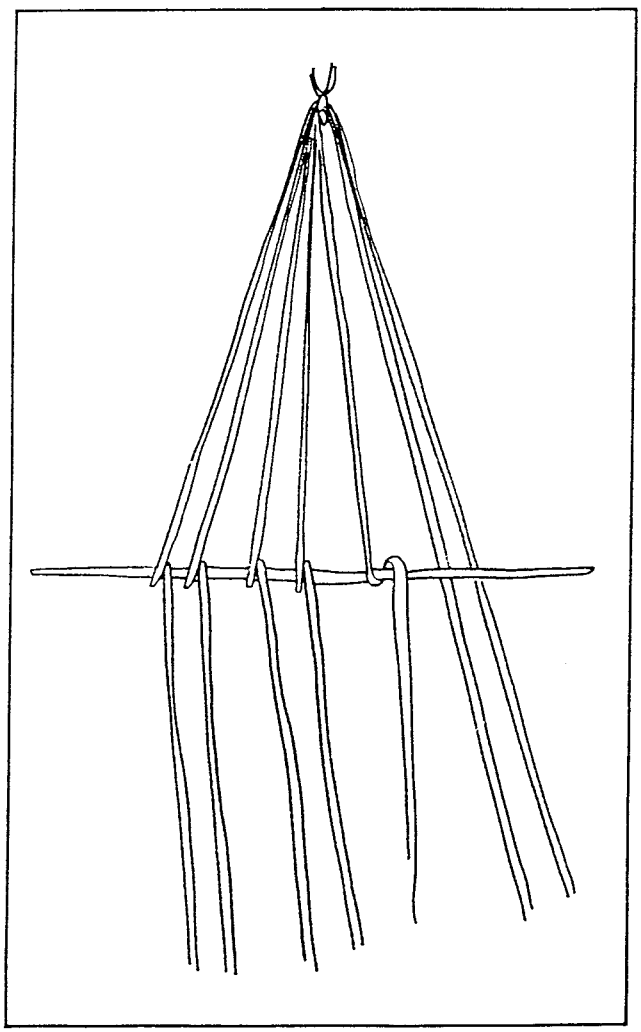
Finally, check the tension of the yarn bundle. Each strand should be taut, so that it does not sag, but not tight. You should be able to raise or lower any strand several inches without difficulty. Now, you're ready to begin braiding.

At this point, let me ask a favor. Finger weaving is great fun, and the whole point of these articles is to let you in on the enjoyment. But, almost everyone who wants to learn the process is thinking of making an arrow sash. The arrow process isn't easy at first, and you will have more luck with it if you do some practicing with the basic method first. Let me urge you to do one or two pieces in the basic chevron pattern in order to get the feel of the technique before going on to the more complicated patterns. I've seen enthusiastic people insist on beginning with an arrow design, make a mess of it, and give up. This is like learning to drive a diesel truck - too much for the first lesson.

First, then, you should try a single band

of plain braiding. With your yarn in order, pick up an edge strand, pull it loose from the bottom tie, and simply weave it through the rest, going alternately over and under. As it comes out at the other edge, wrap it several times around the head stick. Then go back to the starting point, pick out the next edge strand and do the same. This time, be sure you've alternated with the course above; that is, you are now going over the strands you went under before and vice versa. At the end, unwrap the first working strand from the head stick, and turn it over the second working strand. The first strand must re-enter the work in proper alternation also - if the second working strand went under the last taut strand, the first working strand must go under it as it re-enters the yarn bundle. Wrap the second working strand around the head stick and tuck the first into the bottom tie. Fig. 5 diagrams how this basic weave should look. Just continue the process above, picking up each new working strands at the same

Fig. 4 How to loop strands around the head stick.



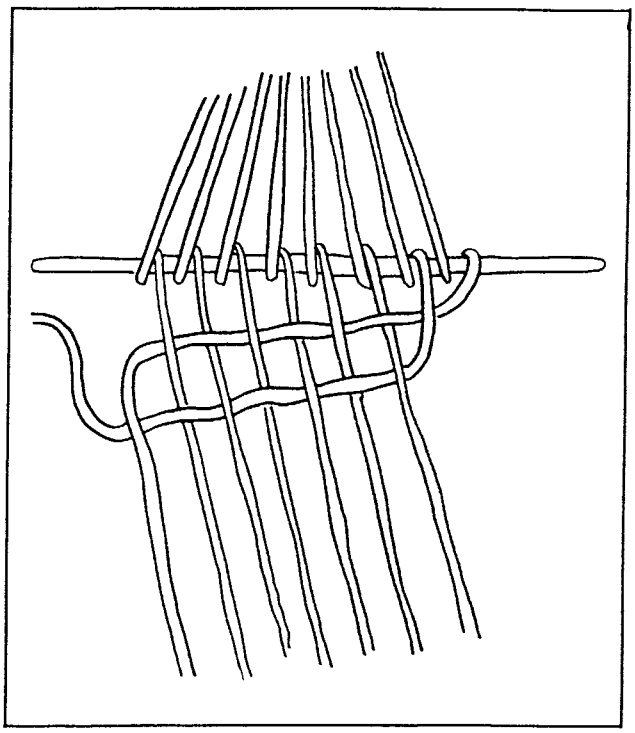


Fig. 5 The single band braiding process. In actual practice, the strands are tight together. Here and in the following figure, they have been opened up for clarity.

edge and putting each old working strand back into the bundle properly, and in a little while, you'll see a pattern forming. Because you are taking up yarn from one side and replacing it on the other, your pattern will have diagonal stripes as in Fig. 1, right.

This single band braiding is very easy. The only problem is making sure the strands alternate correctly. If you do get one strand going the wrong way, your mistake cannot be righted two or three courses later and will only get worse. If you do make a mistake, you must go back and straighten it out.

The next step is a band of double-band braiding - the kind that will make chevron designs. Now you must work with an even number of strands, since the work begins from the center and each half must have the same number of strands. Find the center point and pick up the strand on one side of it - either side. Weave this strand through the opposite side, going over and under and so on until you wrap the strand around the head stick. Then, turn the head stick 180 degrees. The weaving you just did will now be opposite its original place. Take the strand that was on the other side of the first center (it will now be in the same position as the first one you picked up) and weave it through the side opposite it, being sure to pass it under the first taut strand.

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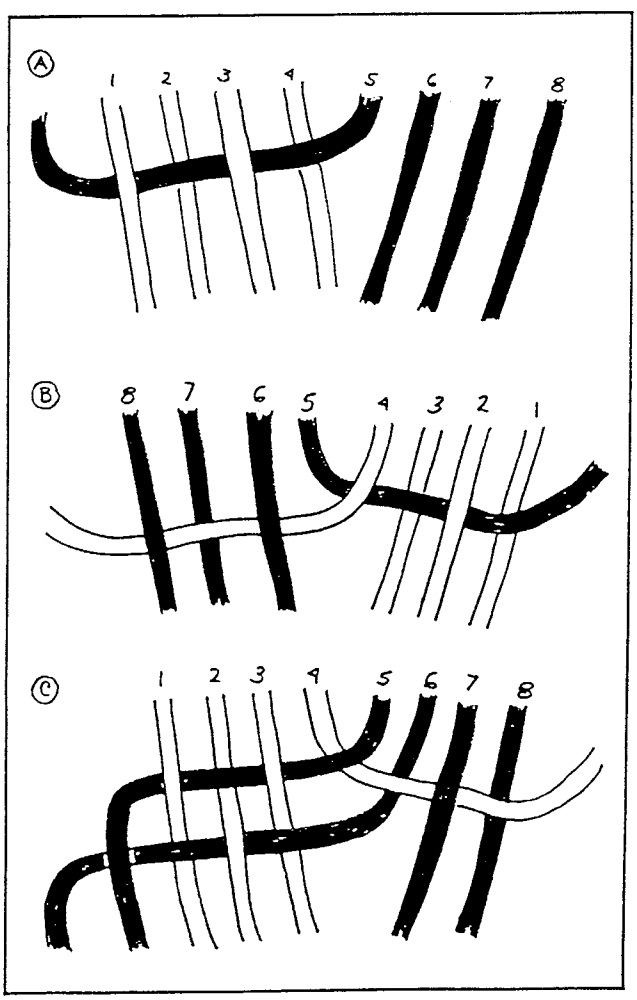
FINGER WEAVING

continued from page 5.

Fig. 6 shows how this looks. I've made one side dark and one light to clarify the operation. Turn the head stick back to its original position, pick up the next center strand from the first side and weave it through the second side; that is, this third working strand goes along just below the first one you did. The fourth will go below the second, and so on. By the way, each crossing of a band with one or more working strands is called a course of weaving. In this case, working strands 1 and 2 are a course since together they crossed the whole band. After the third working strand is in place, the first is turned over it and back into the yarn bundle as before. Again, you must be very careful to get a proper alternation of taut strands as you go. From this point, the process goes on weaving in first one side and then the other of each course. After

Fig 6 A, First half of the first course. B, Second half of the first course. Note that the work has been reserved. C, First half of the second course. The work has been reversed again.



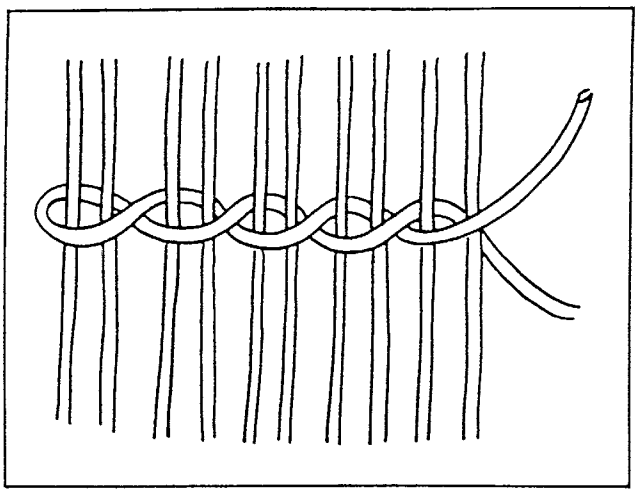


Fig. 7 How to make the twining stitches.

you have done several courses, untie the bottom string and slip all the loose ends back into the yarn bundle.

When you stop work for the evening, it is necessary to hold the last row of weaving tight. For this, you make a tenter bar which can be a stick about one inch in diameter and split lengthwise in two, or it could be two flat sticks of the same size. Place the halves of the tenter bar over the working edge and clamp them together firmly with string or rubber bands. Then untie both ends of the work, roll it up, and it will hold itself securely until you're ready to work some more.

When you have finished your piece of braiding, insert a row of twining stitches at both ends to keep it from unravelling. Fig. 7 shows how these stiches are done. You may use a short piece of yarn, doublt it around one edge of the sash, twine, and tie at the other edge. You may also use two long pieces and let them add to the fringes at both sides. Some people prefer to do the twining stitches at the upper end right after inserting the head stick. Whether you do or not, be sure to put them in both ends before releasing the tension on the taut strands. With twining in place, untie the yarn and cut open the loops at the upper end.

The basic process makes chevron-like designs. You can vary these according to the colors you choose and by varying the size of the chevrons. For example, one chevron might be ten strand wide, another six, and so on. You may also make chevrons half one color and half a second. To do this, just set up an equal number of the two colors exactly opposite each other on the head stick. The colors will alternate as you braid, so that if you started with color A on the left, it will come out on the right next time, then back to the left, etc. You may also vary chevrons with striping. Here you set up strands of two colors in adjacent pairs. Suppose you wanted a striped chevron eight strands wide. In each half of the work, you would arrange eight strands of the two

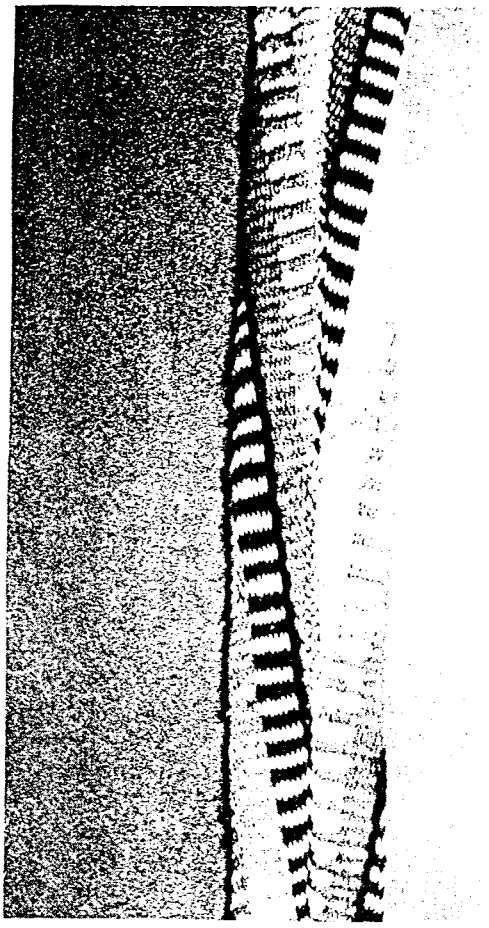


Fig. 8 Chevron sash with striped designs.

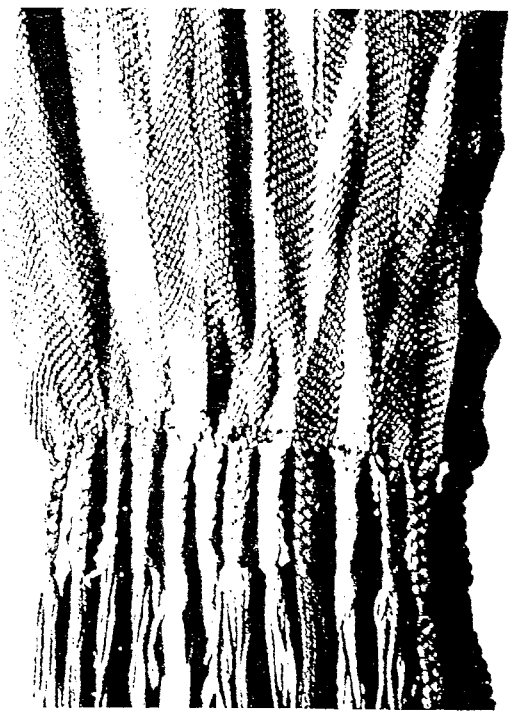
colors thus: ABABABAB, making sure the same color was nearest the center on both sides. As you work all of color A will show on the surface in one course and all of color B the next time. Fig. 8 shows how this striping looks.

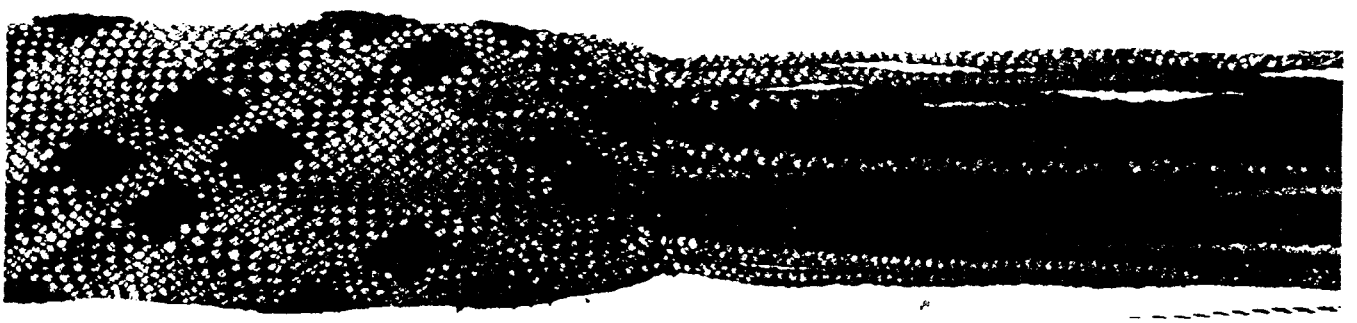
The preceding directions make what is called a warp-face braid, which means that the working strands hardly ever show on the surface. This is caused by pushing the strands closely together on the head stick before braiding and by keeping the yarn bundle taut. There is another kind of plain finger weaving in which the working strands do appear on the surface and the work resembles Monk's cloth woven diagonally. This is the process used to made the Iroquois sashes and the beaded edges of Osage arrow sashes. Fig. 9 shows an example of this plain-face braiding. To do this kind of finger weaving, space out the strands on the head stick so they just touch and no more, and loosen up the tension on the yarn bundle so the strands hang a little slack. As you work, push each working strand up against the preceding one as tightly as you can. This plain-face braiding is harder to master than the warp-face variety. Tension is the problem, and you will have to practice a bit to get the feel of it.

In the next article, we will take up the arrow pattern. Again, let me urge you to practice the basic process and familiarize yourself with it before attacking the more involved arrow designs. ■

Fig. 9 Sauk & Fox plain-face sash. Note the checkerboard appearance caused by letting the working strands show. Photo courtesy Museum of the American Indian.

Fig. 10 Ojibwa chevron sash of several bands woven together. Photo courtesy Milwaukee Public Museum.





Part 2

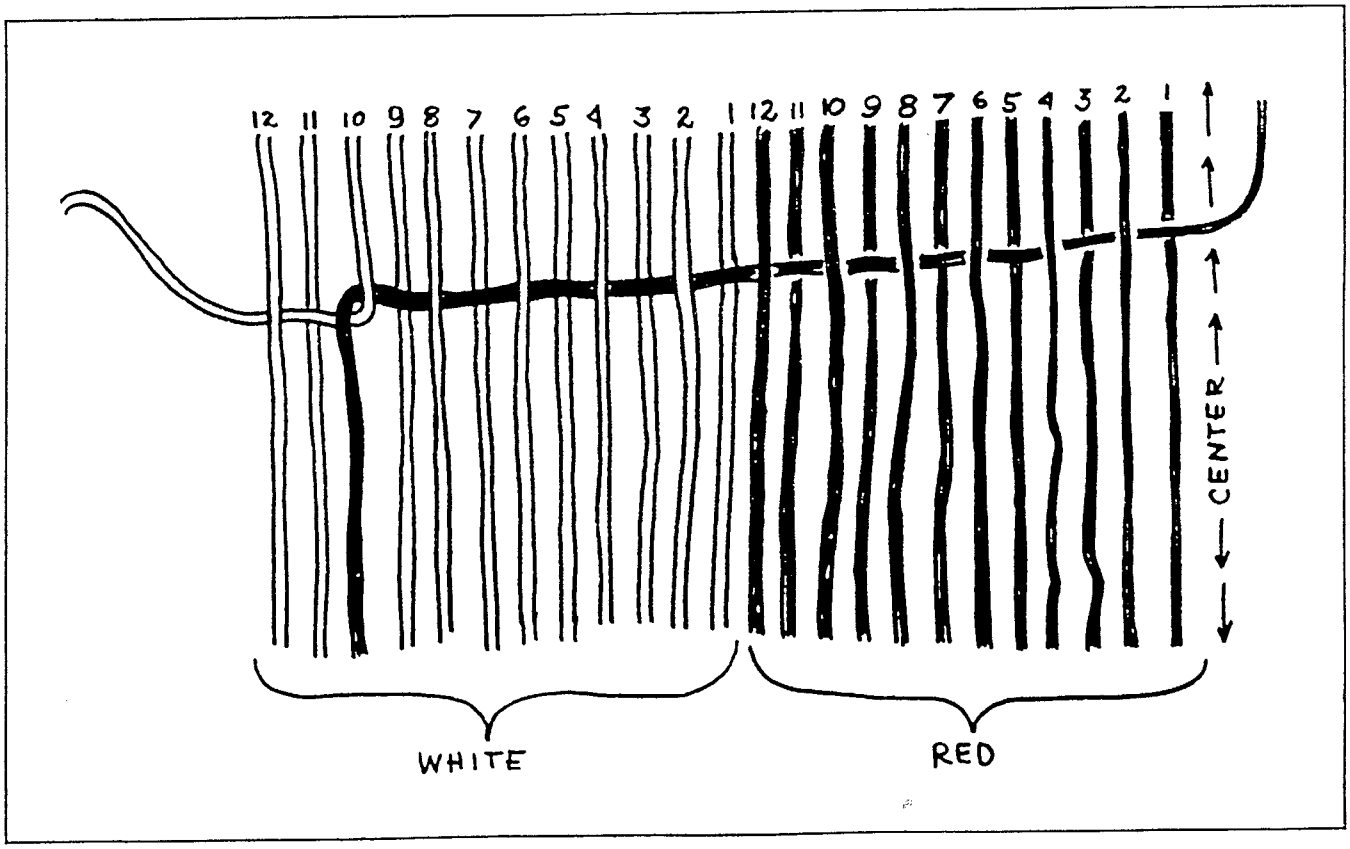
FINGER WEAVING

by Richard Conn

The first article in this series gave the basic directions for measuring yarn, for arranging it in order, and for the basic braiding process. To that information this article will add the additional instructions you will need to make the arrow pattern. So, before starting you should be familiar with those basic directions and hopefully you should have made one or two practice pieces in the basic braid.

The first thing you will need to know is how to figure your yarn for the arrow pattern and how to set up the colors on the head stick. Let's say you want to make a red arrow two inches wide on a white background. Remembering that there are about twenty-four strands to the inch, you will take half the width for the arrow color and the remainder for the background; that is, twenty-four strands of each color. Set these up with all the red in the center and with half (twelve in this case) the white on each side. All arrows are examples of double-band braiding, so you must have even numbers of strands, but you can vary the number to make your arrows small or large. Arrows narrower than one inch will not show up well, though, unless you're using very fine yarn.

Fig. 2: The basic twist of working strands to begin the arrow barb.



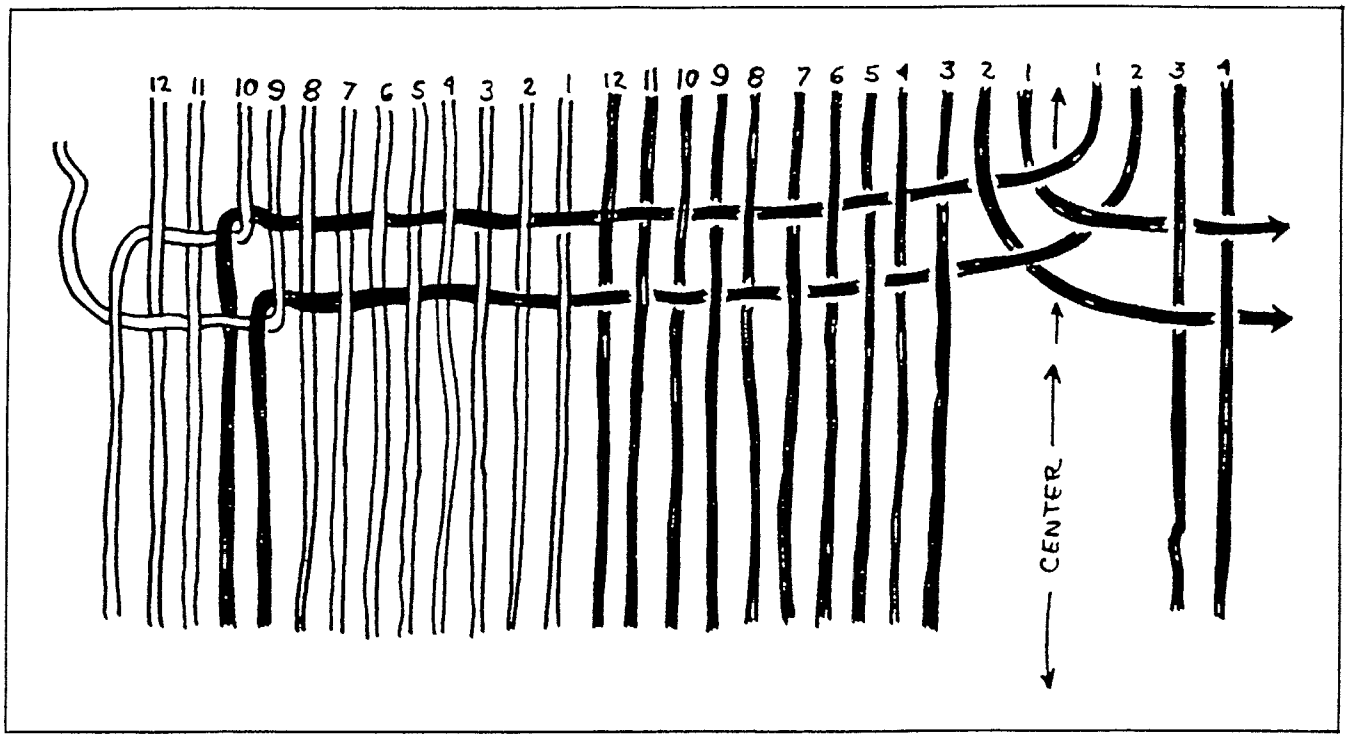


Fig. 3: The basic twist, second weaving course. Notice that each succeeding working strand must twist with the white strand just inside the previous twist point. This action makes the back edge of the arrow point.

Now, having set the colors in proper order, you're ready to start. Find the center and pull a strand on one side of it loose. Either side will do, but we'll call this side A. This will of course be a red strand. Weave it through side B as you did in the basic braid, but this time be sure to go over the first strand of side B and continue the over-under alternation until you come up underneath the tenth white strand. Check to be sure this is the right one. Then twist these two strands together so the red one turns back over the white and on down into the yarn bundle while the white turns toward the outside edge. Fig. 2 shows how this twist should look. Study it a minute because this twist is an essential part of the arrow pattern. The white strand now goes through the remaining two white strands, over no. 11 and under no. 12 to be wrapped around the head stick. What you have done is to change the color of the working thread in order to start the arrow barb. Now turn the head stick 180 degrees and pick up the first red strand from side B nearest the center. Weave it through side A, being sure that this working strand passes under the first red strand of side A so it will come up underneath the tenth white strand of this side. Make the twist of white no. 10 and the red working strand as before, carrying white no. 10 on to the edge and tucking the red strand into the yarn bundle. Turn the head stick back to its first position and take up the red strand from side A that is now closest to center. Weave it through side B as before, but this strand should come up underneath white no. 9, the one just inside that with which you twisted in the first course (see fig. 3). Turn these two as before and tuck the red strand into the yarn bundle. Weave white no. 9 on out to the edge, turn white no. 10 over, it, tuck it into the yarn bundle, and finally wrap white no. 9 around the head stick. Turn the work over and repeat to complete the second course. Be sure you bring white no. 10 on both sides back into the work in the proper alternation with white no. 12, and that you continue to do this as you go.

As you continue to braid, you will keep twisting red working strands with the white strand just inside the one you displaced in the previous course; that is, in the third course, you'll twist with white no. 8, no. 7 in the fourth course, etc. This twisting action builds up the back edges of the arrow, while the long front edge is made by the natural diagonal lines the braiding assumes. When you come to the point where all the red strands are back together and the whites are all on the edges again, you begin another arrow by carrying the red working strand out to twist with white no. 10 again. At this point your first arrow will be half finished. Its point will be completed as you make the barbs of the second arrow.

This is the basic arrow process. The problem is keeping your strands in order at all

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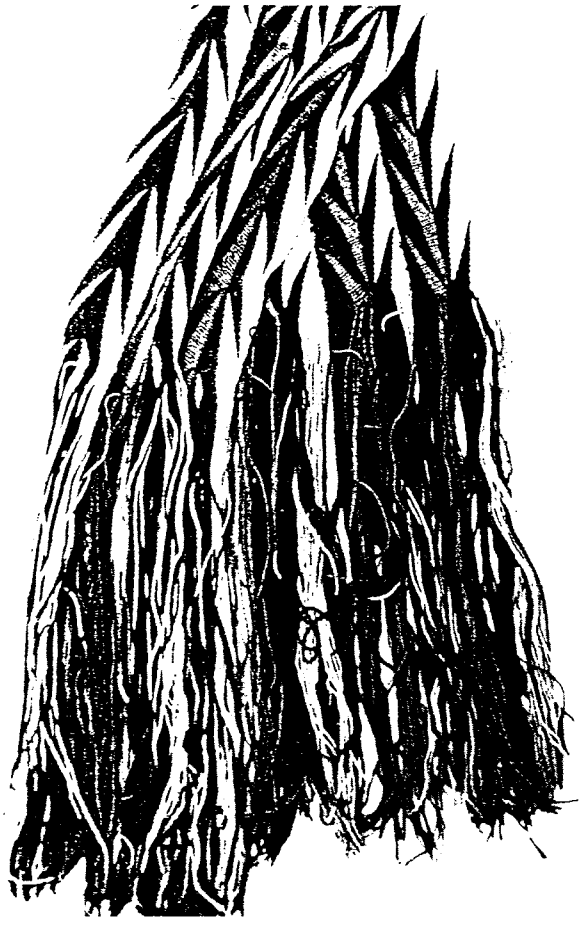
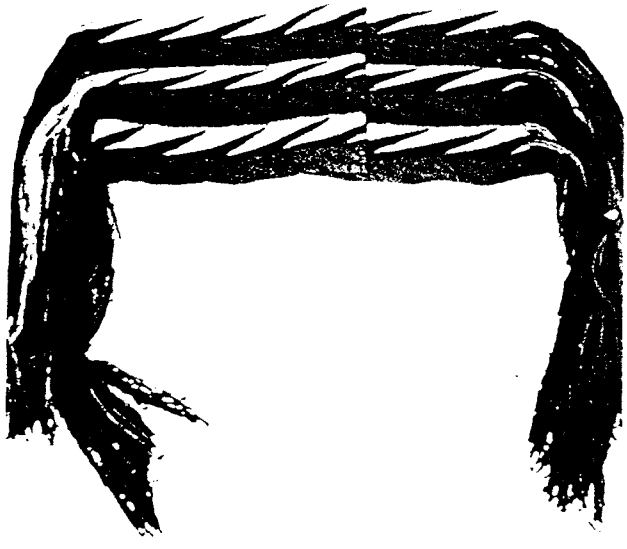


Fig. 1: Sash made of three interlocking arrow bands. Courtesy Lowie Museum of Anthropology.

Fig. 4: Another view of the sash shown in Fig. 1. Courtesy Lowie Museum of Anthropology.



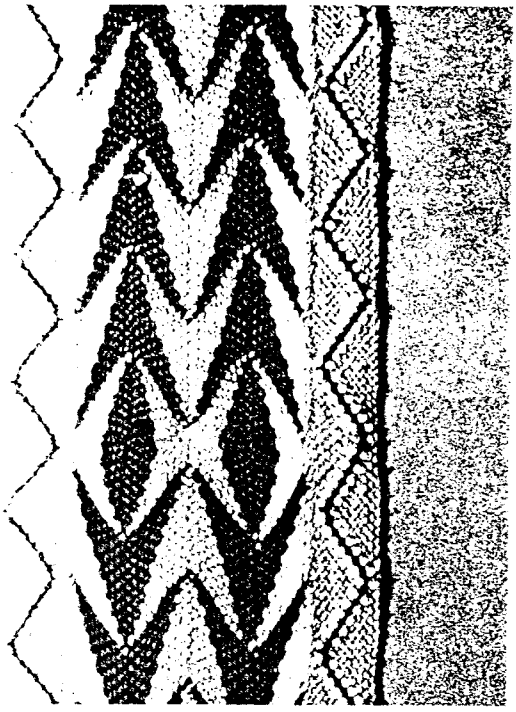
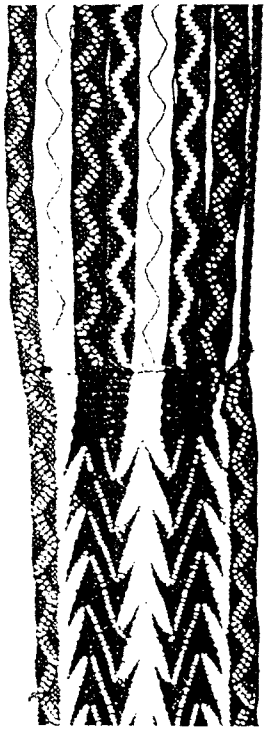


Fig. 5: Osage arrow sash, private collection. Notice that the backgrounds are different on either side of the arrows. The edge bands are plain-face single-band braiding and are braided separately.

Fig. 8: Osage sash, private collection. Backgrounds of different colors give the impression of arrows pointing in both directions. Note the beaded edges of most arrows.



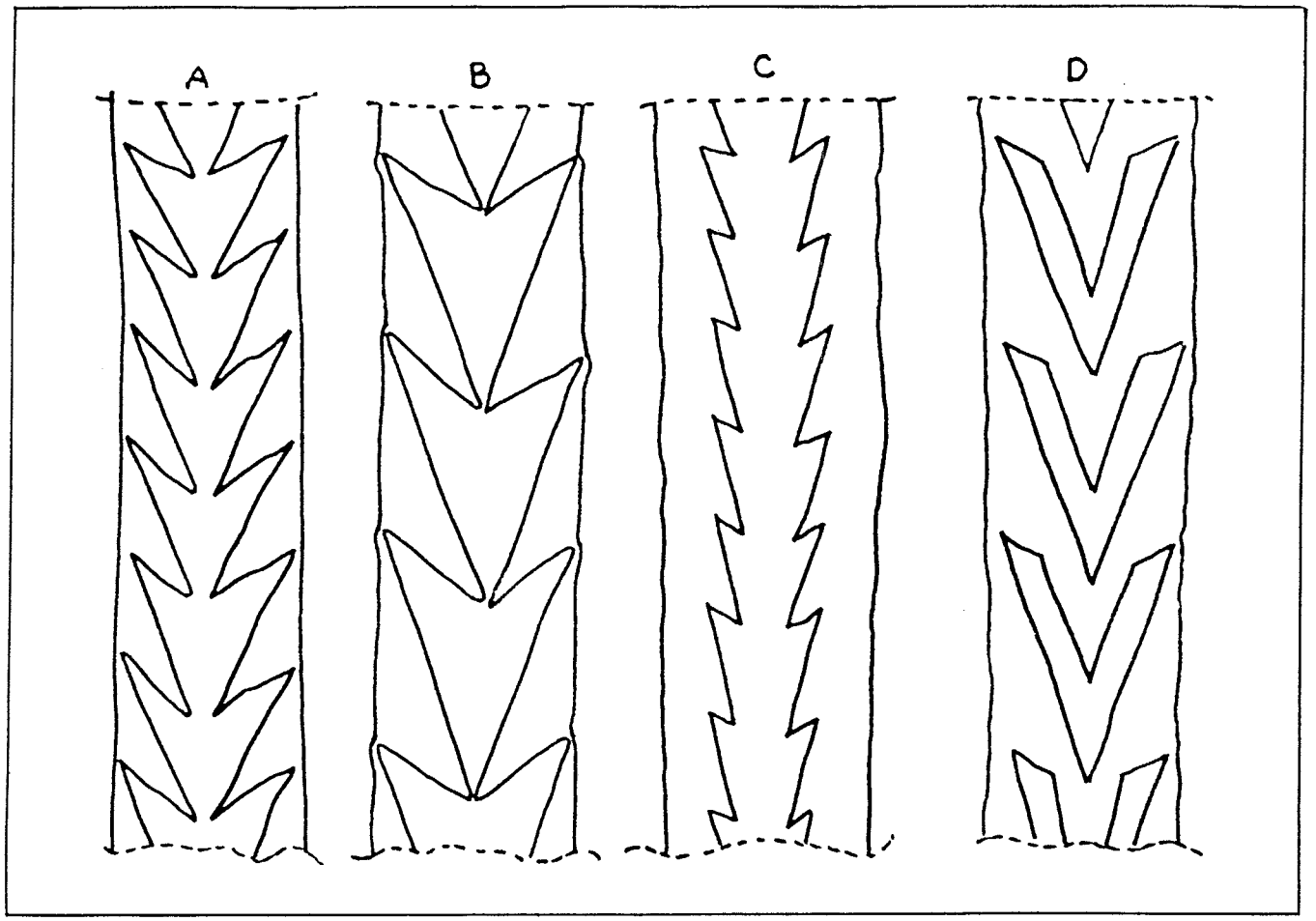


Fig. 6: Four variations of arrow pattern. A, the arrows resulting from instructions in this article. B, what would result if the first working strand twisted with white no. 12. C, what would happen if the first working strand twisted with white no. 6 or no. 8. D, this pattern results from setting up eight red and sixteen white strands on either side and then twisting red no. 1 with white no. 14.

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times and being sure you are doing the over-under alternation correctly. You must also keep an even tension on every strand, and be sure to reset tension on the strands as you tuck them back into the yarn bundle. If the tension does get off, everything starts to come out lopsided. You can adjust this by pulling or slackening the strands until the arrow is even again.

There are several ways you can vary the simple band of arrows by changing the basic color arrangement. Arrows are often done in two colors as in figs. 1 and 4. This is done by setting up an even number of strands of color 1 on side A and the same number opposite them on side B. This made an arrow half one color and half another. As you work, the colors will alternate in each succeeding arrow point. You may also make the backgrounds of different colors as in Figs. 5 and 8. And, you can make either the arrows or the backgrounds striped described in the first article.

The shape of the arrows can be changed somewhat. By weaving with very tight stitches, the arrows will come out shorter, while looser weaving makes them longer. In the example above there were twelve red strands and the first was carried out only to the tenth white one. This will make arrows that don't quite reach the band edge and whose points blend into the notches of the next ones. If the first red working strand were carried clear to the edge and twisted with white no. 12, it would make arrows that filled the bands and with the points just touching the next ones. If the first red strand twisted with white no. 8 or no. 6, it would make a band of compressed arrows resembling a red line with barbed edges. And, finally, if you set up more white strands than red and carried the first red strand over more white ones than you had red, it would make a series of hollow arrows resembling V's. Fig. 6 shows how some of these variations might look.

Most arrow sashes are really two or more parallel bands. As a rule, these are woven

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simultaneiously. It is possible to braid each band out separately and then lace them together. The plain-face braided edges of Osage sashes are often made separately (see fig. 5) and sewn on later. However, it is very difficult to do this with two or more bands of arrows since there is apt to be a different tension in each band and they may not go together without puckering.

It is far better to braid the whole sash at one time, and really no more work in the long run. To do this, set up all the strands on the head stick and find the center of each arrow band. Obviously, each parallel band of arrows must have the same strand count so the parallel arrows will be the same size. Supposing, then, you want to braid two bands at once and that you work from right to left. Beginning at the center of the left-hand band, pull out the first red strand to the right of center. Weave this through the left-hand side, twisting with a background strand at the proper place and carrying the two on to the yarn bundle and head stick respectively. Next, find the center of the right-hand band and do the same thing. Carry the background strand just to the edge of the right-hand band and wrap it on the left end of the head stick, right over the first strand wrapped there. If you were doing three or more bands, you would repeat again, weaving the left side of each band and wrapping the edge strands over each other on the left end of the head stick. It is necessary to be very careful not to weave

Fig. 9: A sash made of six half arrows. Each band is single-band braiding with the twisting that makes a half-arrow pattern.

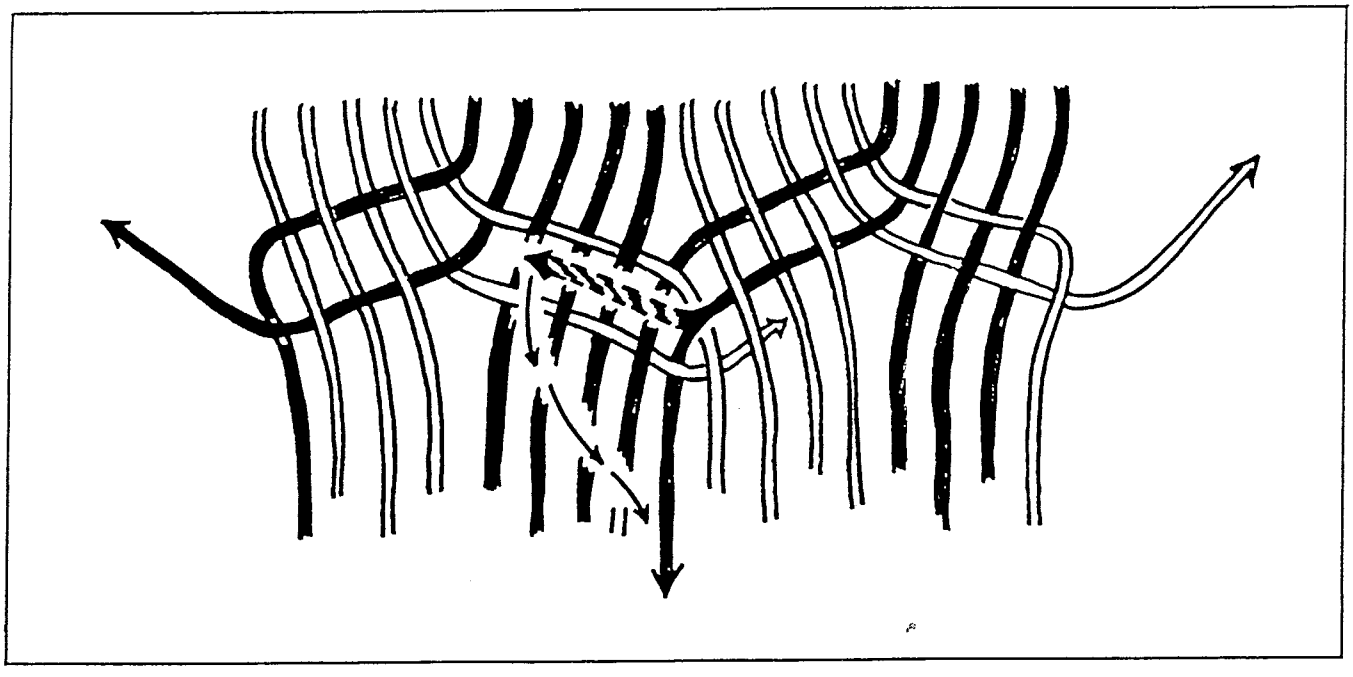

Fig. 7: How to interweave adjacent bands. The dotted arrow shows the edge strand as wrapped around the head stick before it is returned to the yarn bundle.

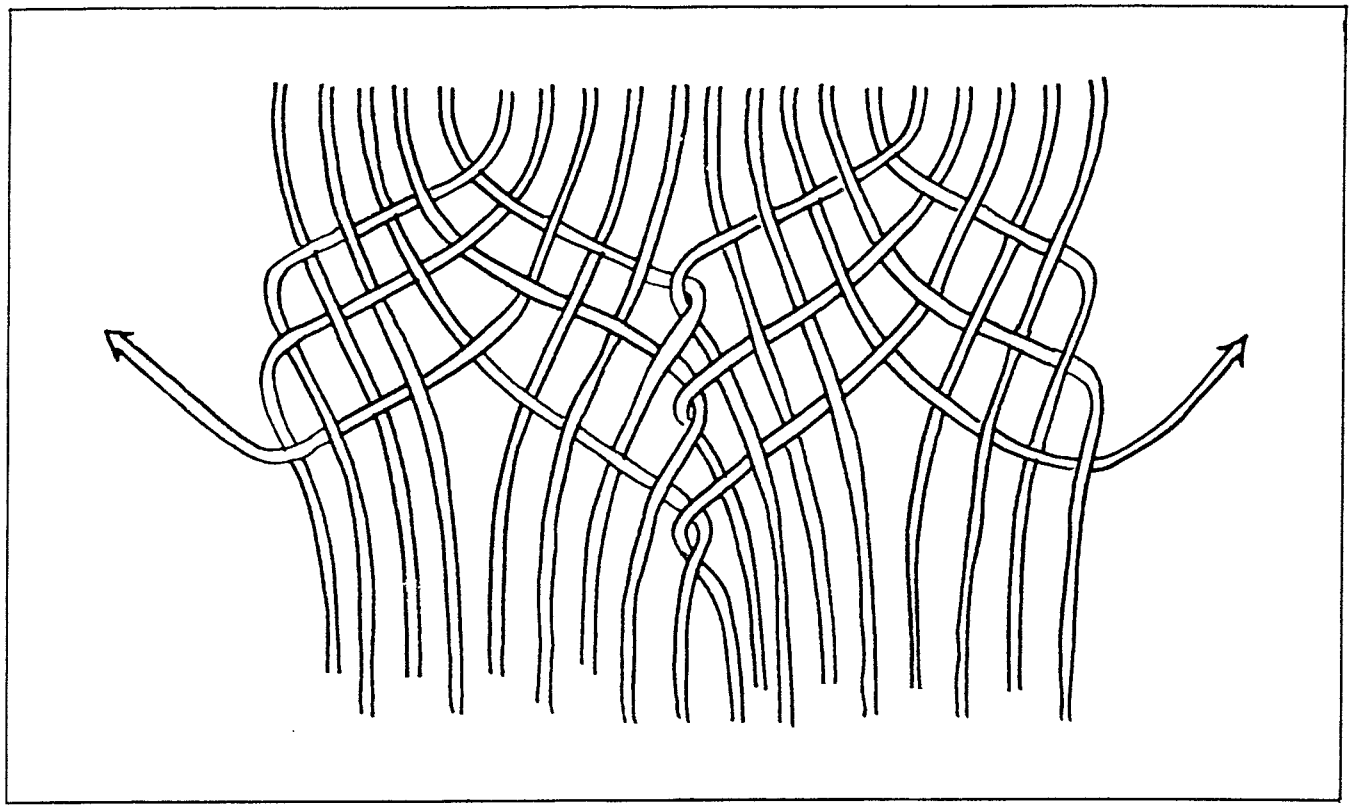

Fig. 10: How to interlock adjoining bands, so as to keep the background colors separate.

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into the right edges of any band but to stop at the right point. Next, turn the head stick over and weave out the second half of each band as before. Then, turn the head stick back to its first position. Unwrap all the strands from the head stick except the one on the left edge and tuck them back in the yarn bundle. The left-edge strand will be replaced as you weave in the next course below it. Weave out the left-hand side of the second course and turn the stick. Unwrap all the strands except the right-edge (now seen on the left) one and replace them. Then weave the remainder of the second course and continue. This method causes the adjoining bands to interweave and gives you a strong fabric. This method also gives you more design possibilities, since you could make different background colors in adjoining bands alternate with each other. Fig. 7 shows visually what this interweaving is.

A second method of joining two or more bands during construction is similar to the first. The only difference is that you make sure each edge strand is turned back into its own band by tucking them back into the correct side of the yarn bundle. This means that the edge strands of each course merely interlock instead of crossing each other. By this method, the background colors of an arrow band stay constant. Fig. 10 shows this method.

Arrow sashes often have large white beads inserted to outline the designs. The beads are usually strung on the outside strand of the arrow color - that would be white no. 10 in the example above. To make beaded edges just string the beads on the right strand. It often helps to wax the strand end and twist it to a point. Then, after you make the initial twist, push the first bead into place just below it. After each subsequent course, push another bead into place just below the working strand.

The last article in this series will cover the flame and reflex patterns as well as some ways to finish fringes. If you are thinking of making a flame sash, it would be well to practice on arrow first, since flame is really a more complicated version of the arrow pattern.

FINGER WEAVING

Part 3

by Richard Conn

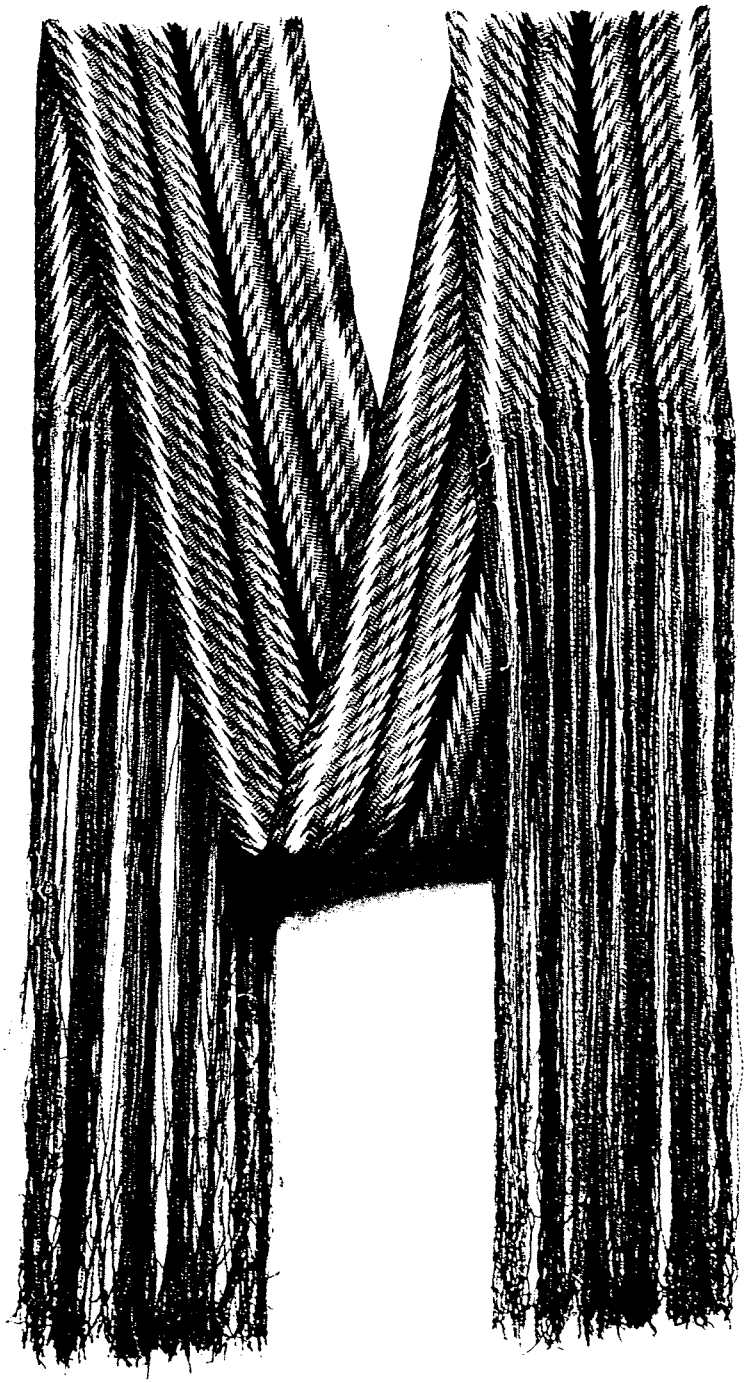


Fig. 1 A French-Canadian Flame Sash. Photo courtesy of the Museum of the American Indian.

The second article in this series contained directions for the basic arrow pattern. Since the last two patterns that will be explained here are merely variations of the arrow pattern, I will refer back to the second article for the basic details.

Flame pattern sashes are best known to us through the very fine examples - the Assomption sashes - made by the French Canadians. Fig. 1 shows a handsome example from the Museum of the American Indian. It was collected among the Iroquois, but was surely made by a French-Canadian woman somewhere in southeastern Quebec. There are comparatively few examples of flame sashes made by Indians today, although one sees some nice ones in old collections. Finger weaving, by the way, seems to have been unknown in France, and there is little doubt that the French immigrants learned the technique from their Huron neighbors. The French-Canadian sashes are closely similar to Indian flame sashes, but differ in being made with a very fine yarn.

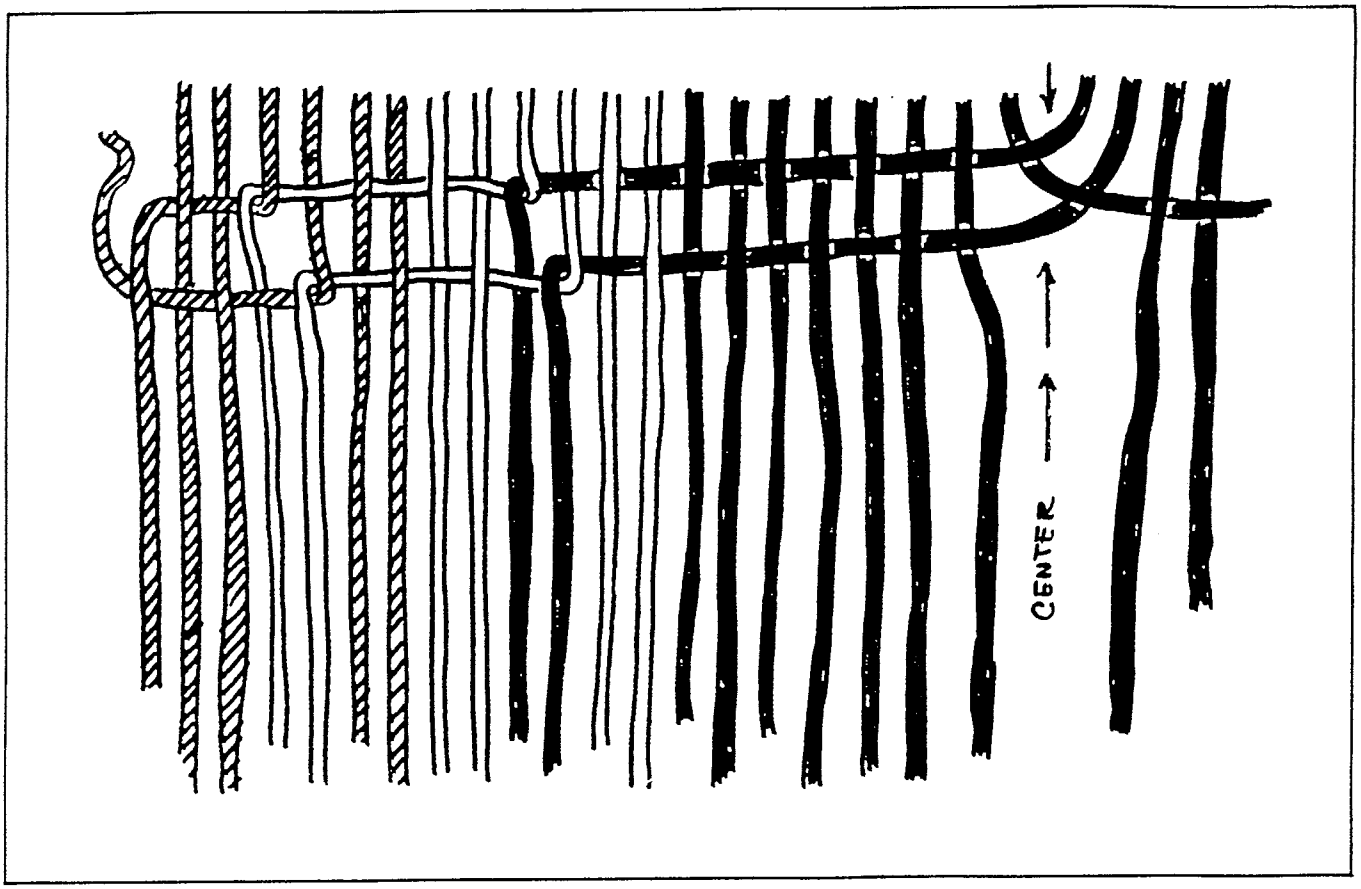


Fig. 2 The process of braiding flame design.

Flame pattern is actually just a set of arrows overlapping laterally, or to put it another way, it is like making arrows inside one another. To begin, the colors must be set up in a special manner. First there is generally an arrow chain in the center with rather small arrow barbs that will determine the size of the flames. Please refer to the illustration of the arrow chain in Part 2. Let's say the central arrow chain is to be twelve strands wide on either side and that you plan to make your arrow barbs six strands wide. You would then set up eight or ten strands of the second color. That is, enough strands to cover the six-strand displacement the arrow barb will cause plus two or four more strands to make the connecting line between the "flames". Then you would set up a number of strands of the third color equal to those of the second and so on for as many "flames" as you want. So far, then, you have a "heart" of twelve strands, and several flames each containing the same number of strands - eight or ten in this case. Indian sashes usually have five or six flames. Finally, the edge is set up. This should have a few more strands than the flames - perhaps from twelve to twenty in this example. The wide edges serve as a background to show the jagged flame designs.

When all the colors are set on the head stick in proper order, the work begins as usual by taking one strand next to the center and weaving it through the opposite side the over one-under one alternation. The working strand must come up under taut strand six of the second color, with which it will twist. This latter strand now becomes the working strand and comes up under the sixth strand of the third color where it twists, and so on until the sixth strand of the edge color comes out and is wrapped around the head stick. As before, turn the head stick and braid out the second half of this course. As in the simpler patterns, you must be careful to keep an even tension on all the taut strands and to tuck the strands back into the yarn bundle with the right tension. Fig. 2 shows how the flame process looks. Notice that the second course is laid in as before, with the twist places coming just inside those of the previous course. As you can now see, you are actually making a series of arrow halves side by side. If you have already tried braiding some arrow designs, there should be no problem making flame design - it's just more work.

There are two possible variations in the basic flame pattern. The first is called "flechees nettes" by the French-Canadians. Fig. 3 shows how it looks. To make this pattern carry the working strand further so that it twists with the last strand of the second color, which in turn twists with the last strand of the third color, etc. This eliminates the connecting bars between the flame points and makes the

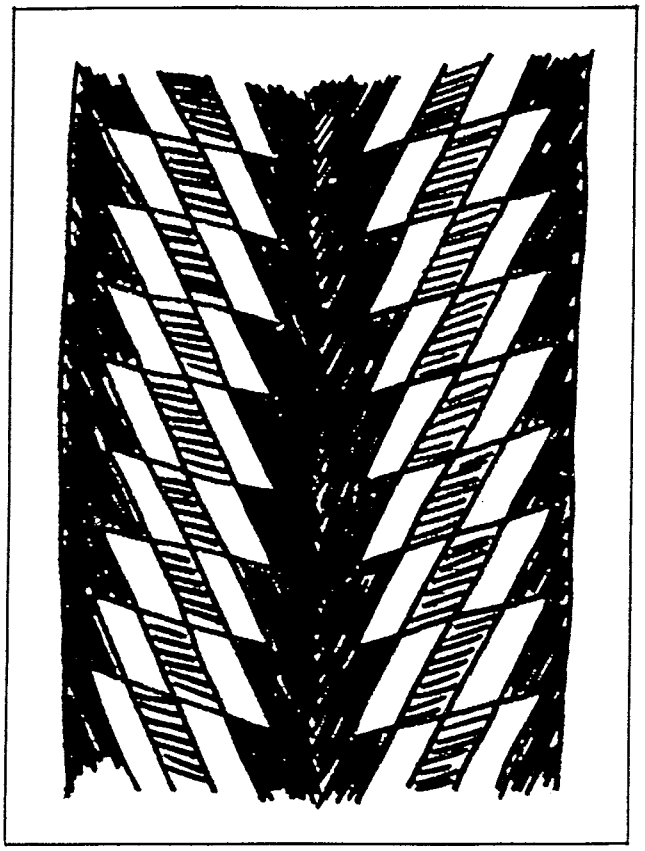


Fig. 3 Flechees Nettes, a variant of flame design.

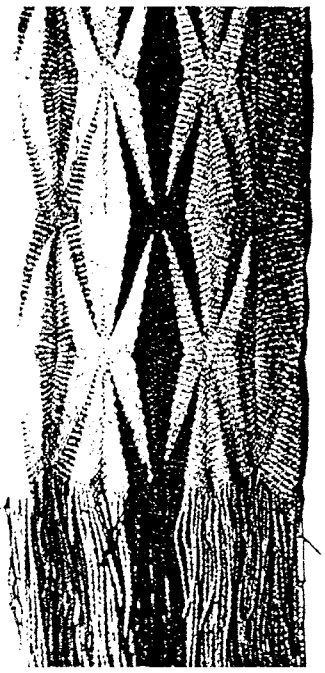
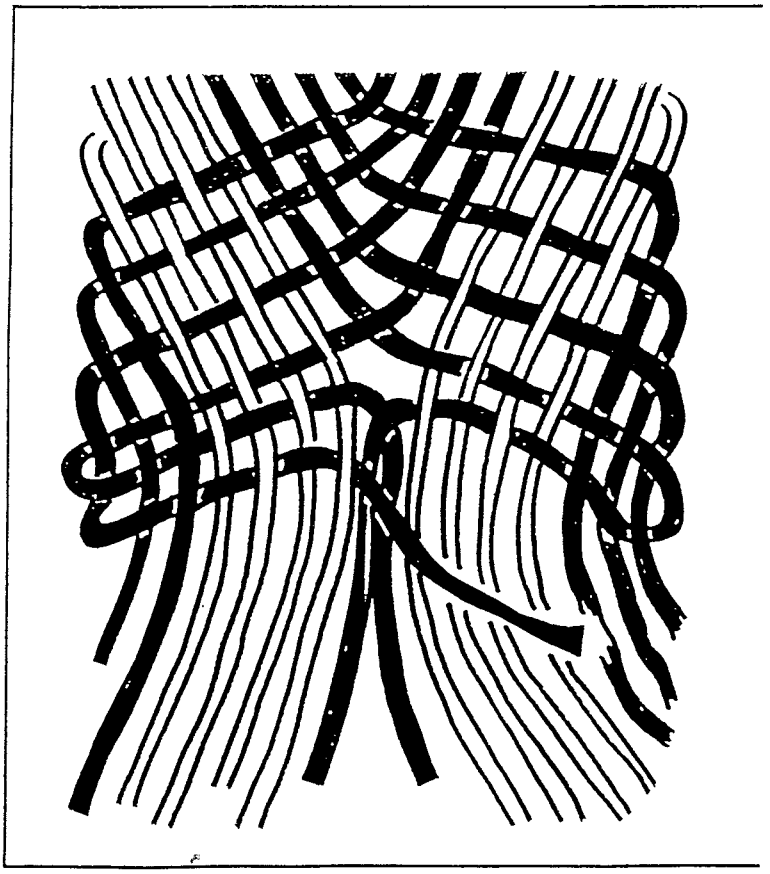


Fig. 4 The reflex arrow design. Photo courtesy of the Wisconsin State Historical Society.

Fig. 5 The process of braiding reflex designs. Note that the last working strand from the first design unit reverses and reenters the work beginning at the edge.



pattern of diamond shapes.

The second variation is color. That is, using all your ingenuity to make the most attractive combinations of flame colors. You may also make striped flames, using the instructions in Part 1. Most French-Canadian flame sashes have two or even three striped flames on each side. Apart from these variations, the flame pattern is pretty regular.

The least common pattern seen in Indian finger woven sashes is the reflex or reverse pattern. Fig. 4 shows a fine old reflex arrow sash. It is possible to apply this method to any finger-woven design, and there are handsome examples of reflex chevron as well as of arrow. It would even be possible to make reflex flame sashes, although I can't recall having seen any. Probably this would be an unnecessary amount of work for the results you'd get.

To make a reflex design, braid out one unit of the basic pattern. If a chevron, this means braid until the original edge strands have met at the center. If an arrow, work until all the arrow-color strands are back in the center and you are ready to begin the second pair of arrow barbs. Then reverse by braiding from edge to center. The last working strand from the first unit goes back into the work moving opposite its previous direction. Note that it must turn around the edge strand so as to alternate properly with its last course, and that it ends at

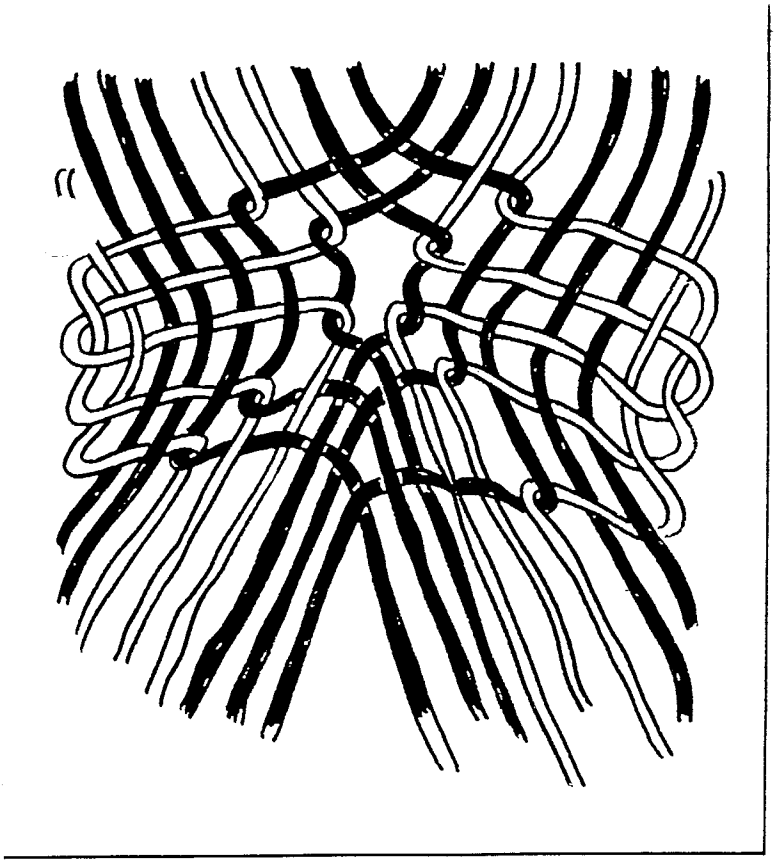


Fig. 6 Part of the process for making reflex arrow designs. Note that when the working strands reverse, the twists are made from the center and work out in each succeeding course.

center, from which point you wrap it around the opposite end of the head stick. Fig. 5 shows how this reverse is made. When you have finished the first reverse course and turn the head stick back to begin the second, unwrap the first working strand from the head stick and tuck it back in the yarn bundle, just as you did in interweaving bands as explained in Part 2. Remember that the working strands, meeting in the middle now, will go on to become taut strands in the opposite sides - just as in the interweaving process. The reverse weave continues until you have finished the next unit. In effect, you will have made a mirror image of the first unit. Then the working strand reverses itself and begins moving toward the edges again as you make the third unit. As you are finishing each reverse unit, your work will tend to pucker up in the center. Don't worry if this happens, since it's almost unavoidable.

Reflex arrows present one more problem, that of making the twists correctly in the reverse units. In the last course of the first unit, you should have twisted off the last strand of background color inside the barb and the course should have brought all the arrow-color strands back together. As you begin the first course of the reflex unit, your working strand (which will be background color) twists back into place with the same strand that replaced it in the preceding course. Then, in each following course of reflex, the twist place falls one strand <u>out-</u>

<u>side</u> the previous one. In other words, in the reflex units you make the arrow barbs backward, starting at the notch and finishing at the tip. Figs. 6 and 4 show how this is done and how it is supposed to look. Reflex pattern sashes are very nice, very rare, and well worth the trouble they will require you to take. Anyone who can do them is obviously a master of the art. But, they are hard to do, and you will be well-advised to leave them until you've had plenty of experience with the simpler patterns.

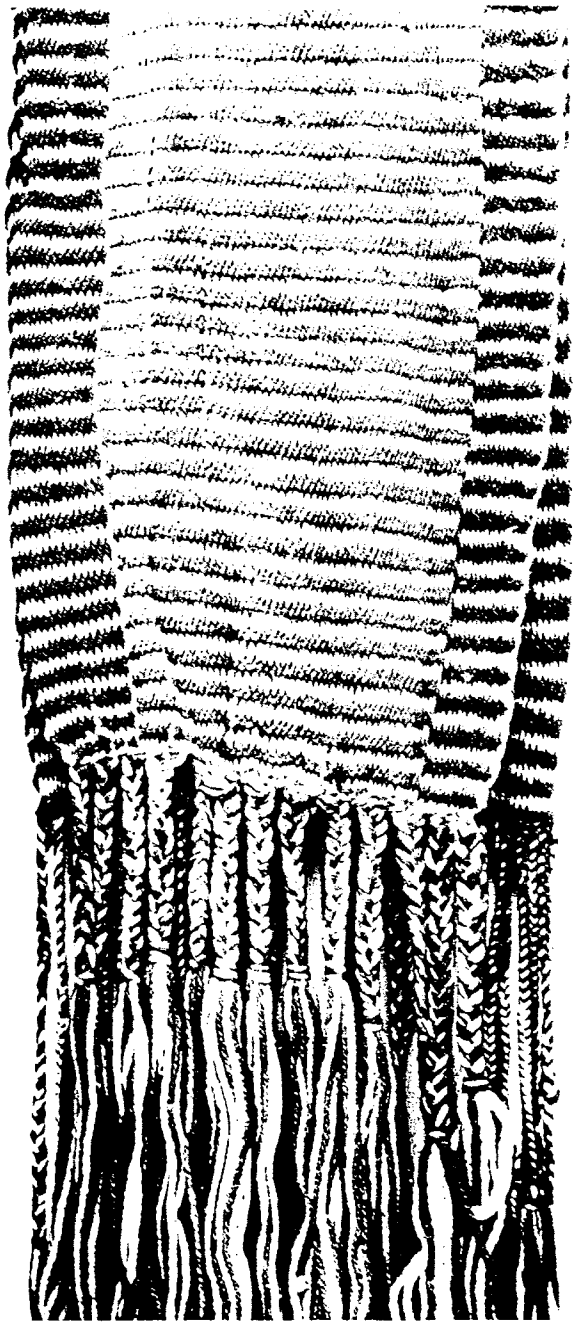


Fig. 7 Plain fringe with a short section of four-strand braid at the top. Photo courtesy of the Museum of the American Indian.

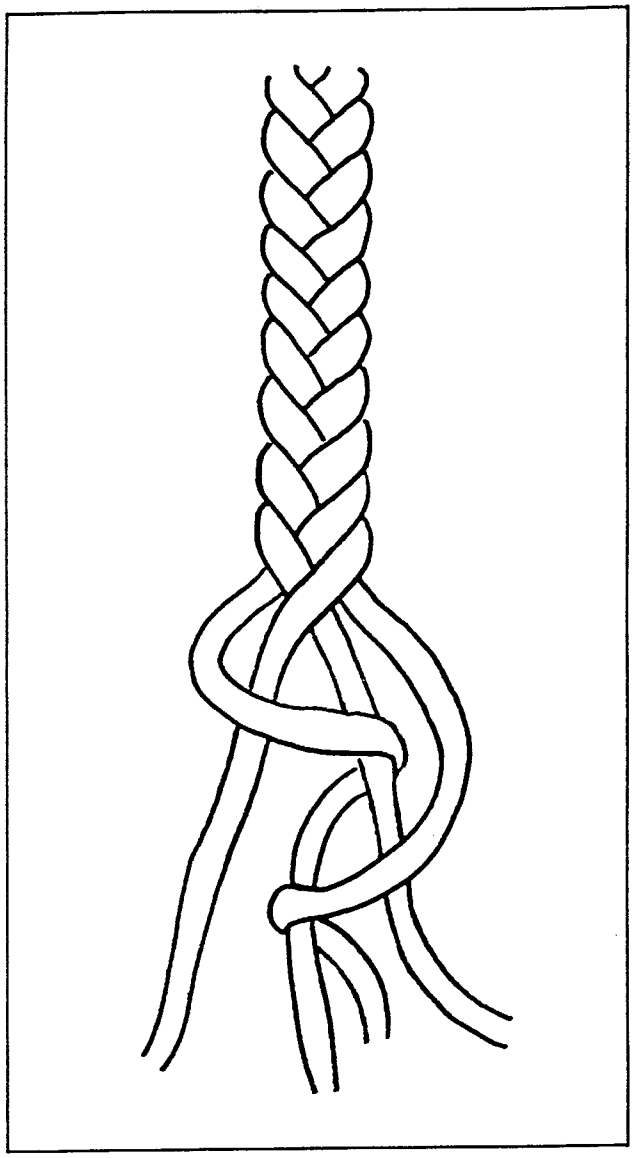


Fig. 8 Four-strand braid. Note that each working strand comes from the edge, passes over two strands and back under one.

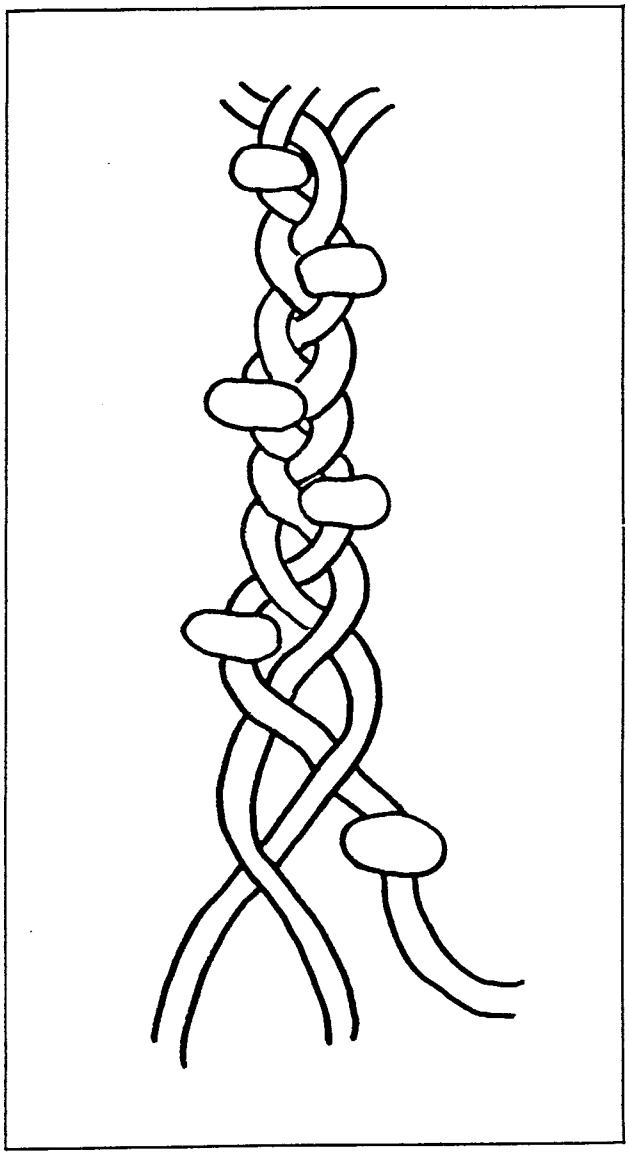


Fig. 9 Three-strand fringe with beads. In this example the beads are all carried on the same strand.

The final thing to consider with any sash is the fringe and how to finish it. When you have completed the braiding, you put in one row of twined stitches at each end to keep the sash from unravelling. Part 1 showed how to make this twining. Next, straighten the sash and trim the fringe ends even. You can just leave the fringe plain, like the fringes of the sash in Fig. 1. However, most sash fringes have had something further done to them. Fig. 7 shows one common treatment. The fringes have been gathered into bunches and braided for a few inches. In this case, the worker made a simple three-strand braid, using two or more strands for each of the three braid elements. After braiding for three or four inches, she fastened the work in a loop knot and let the balance hang plain. Three-strand braiding is the kind we all learned in kindergarten - the method used to braid hair.

Another possibility is four-strand braid. This method, less familiar to most of us, is shown in Fig. 8. Here you line up four braid elements (which may consist of two or more yarn strands each) and braid them as follows: take an element from one side and cross it over two elements and back under one. Take the element from the opposite side and repeat. If any of you ever made a whistle lanyard with plastic strip, this is the method you were using. Generally, fringes are braided only for the the top three or four inches only. The balance is left plain, or twisted into two-ply cord as described below. However, sometimes Osage

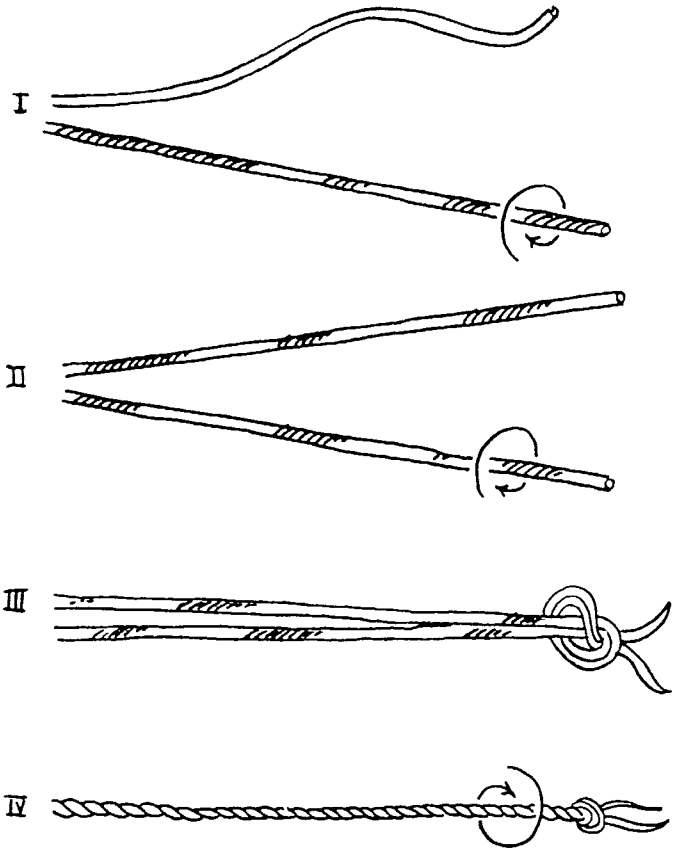


Fig. 10 Making twisted fringe - (1) one strand is rolled tightly. (2) holding the first strand tight, the second is rolled to the same tension. (3) still held tight, the two strands are tied in a simple loop knot. (4) the tension is released, allowing the two strands to twist around each other.

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sashes have units of three-strand braiding (with single-strand elements) as part of their fringes. These can have beads woven in, as shown in Fig. 9.

Fringes are often spun or twisted into two-ply cord as shown in Fig. 10. To do this, take out two adjacent fringe strands and roll one on your thigh or a flat surface until it's very tight and starts to knot up if you release the pressure. Then holding this first strand tight so it won't untwist, roll the second one until the tension on both is equal. Still holding both strands tight, tie a loop knot near their free ends and release the pressure carefully. They will twist round each other into an even two-ply cord.

The most elaborate fringe treatments are those of the Osage sashes, where there is usually a combination of several kinds of fringing. Fig. 11 shows an Osage fringe made up entirely of single finger-woven bands. It is more common to see one or two finger-woven bands together with some twisted and three-strand braided fringes, however.

So, there you have it! Finger weaving is certainly lots of fun and very rewarding. Good luck, and may your sashes always take first prize!

Fig. 11 An Osage sash with complex fringe made of single braided bands. Photo courtesy of Eckford DeKay. In other Osage sashes, these single bands combine with plain or twisted fringe elements.

YARN-WORK DETAILS

By Jerry Smith

In an expertly written three part series for AICC, Richard Conn relates all the techniques of finger weaving and explains each pattern, a classic work. Perhaps you have experimented with one or more of these patterns and having your tension just right feel that you would like to make a "set" of yarn-work, tabs and garters for a straight dance suit as pictured. The dimensions and numbers presented here will help you complete your project.

Chevron, arrow, reflect arrow, and single brand braid (diagonal pattern) are four common patterns used to fashion present-day yarn-worksets. The dimensions given apply to any of these patterns.

Side Tabs

Side tabs or sashes and garters are constructed in the same fashion. Each has a middle band of work that splits into two sections on either side. The weaver starts in the center of the middle band and works to one end then to the other. Twining stitches (Part I, page 14) are always taken before the work is split in two.

Side tabs are usually fashioned from 64 strands of 100% wool yarn. For chevron patterns the number of strands per color may vary but for a two color arrow or reflect arrow pattern it will be 32 of each color. For a 3 color arrow pattern the 32 strands of one tab would be: 8 maroon, 16 lt. green, 8 purple, for a lt. green arrow bordered with maroon on one side deep purple on the other. 8 strands per color is needed for a 4 color arrow pattern of maroon, yellow, turquoise blue and deep purple for example.

As shown in Fig. 1 the 5" middle section if folded over to form a belt loop and the loop can be machine sewn in place over the twining stitches. The belt or tie that is looped through the pair of side tabs is worn under the shirt hidden from view. The length can vary from one set to the next somewhat with the dancers height though 36" is a standard adult length. Allow 10-15% take-up in working yarn.

Garters

Hidden under the bells, the casual observer does not realize the middle band of the garter exists, but it does function to partially protect the ribbon-work from the rub of the bell revet and leather. The 14" middle band is then designed to approximate the circumference of the leg just below the knee. Garters are fashioned from 48 strands of 100% wool yarn. The number of strands per color are proportioned as those for the side tabs.

The garter ties in Fig. 2 are foot long ends of the twining strands used in the twining stitches with the center of another 2 ft. strand added when the twining stitches are knotted. These resulting 4 strands are then braided in 4-strand braid or made into a twist fringe (Part III pages 6 & 7) knotted at the end.

Figure 3 indicates how the garters are tied in place on the leg of the dancer. The missing $1\frac{1}{2}$" on the garter tabs of Figure 2 allows the ends to hang evenly. Another tribute to the genius of the Indian craftsman. The shortened tab must be on the opposite side of the garter ties.

Referrence

Conn, Richard; "Finger Weaving, Part I,II,III," AICC, Vol. 7 Dec., Jan., Feb. 1972

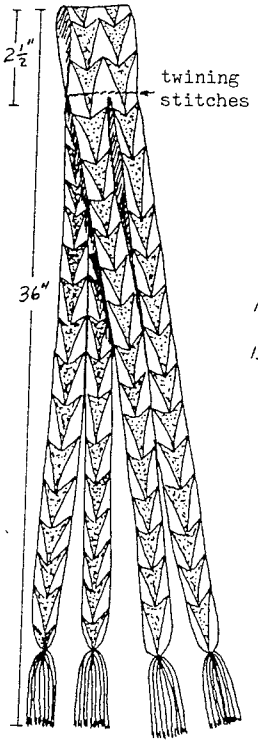

FIG. 1

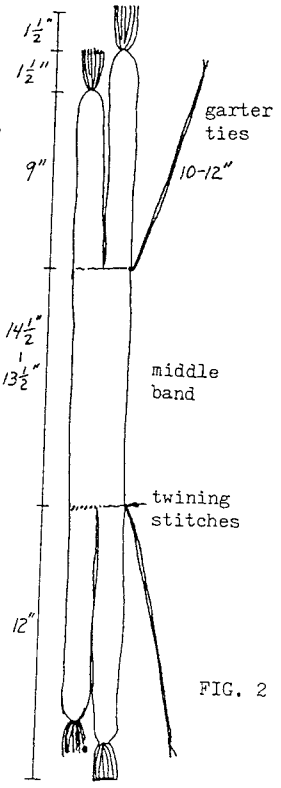

FIG. 2

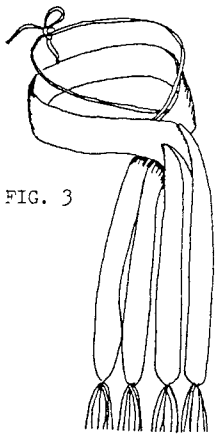

FIG. 3