

American Indian Flat Dance Fan Construction

By Rex Reddick

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The flat fan is a favorite object that has been carried by the American Indian for many years and is found in a number of different styles over a wide region of the United States. It is most commonly carried by both male and female dancers and other powwow participants, as well as being used for religious purposes. It is also a very practical item for use in cooling its owner on a hot, summer day. This style fan has gone through many refinements and reached its peak of development among the tribes of Oklahoma, the Northern Plains and the Northwest, where it is most popular today.

Unfortunately, the best feathers for a fan of this type are the tail feathers of the golden eagle or one of the many varieties of hawks, which are federally protected and unavailable. For this reason, I will describe how to use readily available imitation eagle feathers to make an excellent quality fan that is a very close facsimile of the real thing.

In order to achieve the finest quality finished fan, only the very best materials should be used. The best imitation eagle feathers available are the "hand-painted" variety, which are sold by most Indian craft suppliers. These are generally trimmed and straightened and can be purchased in matched sets, especially designed for making fans. The next best feathers to use are standard, dip-dyed imitation eagle which can be trimmed and straightened to make them look much more like the real thing. It is very important to remember that a modern fan should be a thing of beauty, with the handle being rather delicate and

balanced in size to the feathers being used. The main feathers should be set so as to give them a completely natural look, just as the tail would appear when on the bird. Look at the photographs in this article as well as fans found in museums. The internet is an excellent tool that has opened up hundreds of museum and other websites which post photographs of some of the finest material in the country and most are quite easily accessed for research.

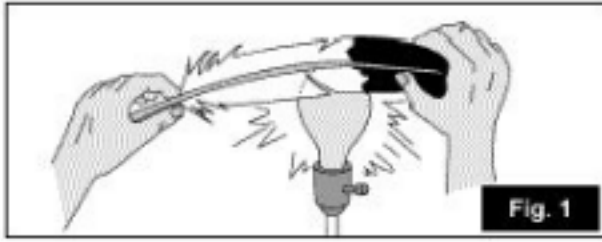
If you are using hand painted feathers which have already been matched, straightened and trimmed, normally you can skip Steps 1-3 and begin with Step 4; however, sometimes it might be necessary to do a small amount of straightening or trimming on these feathers as well.

1. Sorting the Feathers

First, determine which feathers are 'lefts' and which are 'rights'. Spread them out with the shiny sides up and you will see that each one curves naturally to the right or left. Separate them in this way, leaving the longest and straightest one for the center feather. The idea is to use an odd number of feathers; usually five to seven, but occasionally as many as eleven are used.

2. Straightening the Feathers

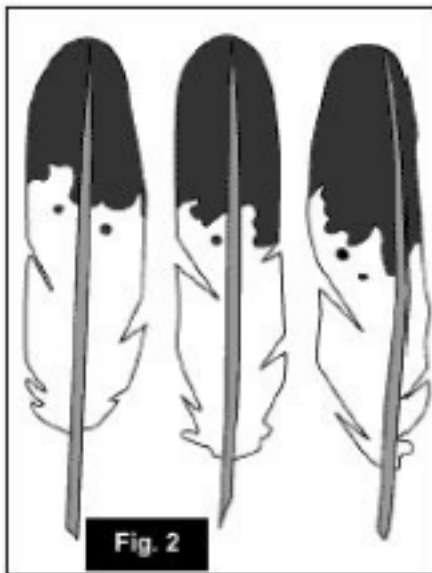
Straighten the feathers by running the quill over an exposed light bulb as shown in Figure 1. Protect your eyes with sunglasses. Gently apply a steady pressure to the quill until it softens and begins to bend to the desired shape. Do not force it too quickly or it might crimp and be ruined.



As the feather is being heated, turn it over from time to time to ensure an even distribution of heat. Also, you will probably have to over-bend it somewhat in order for it to maintain the desired shape. For a faster job, use your thumbnail to simply crimp the quill every 1" or so. This may be necessary in addition to the heat treatment, as a combination of these two methods works quite well and slightly crimped feathers tend to retain their shape better than those that have only been heated.

3. Trimming the Feathers

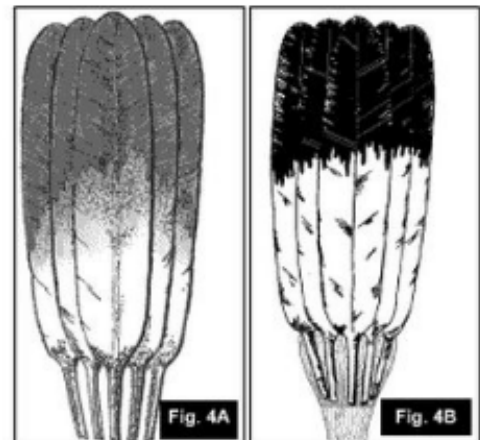
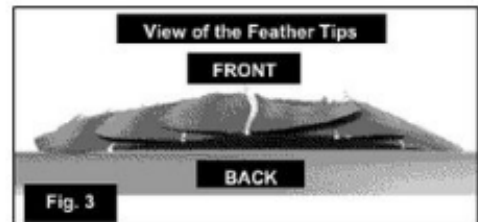
For a more realistic look, carefully trim the black ends of your feathers with a pair of sharp scissors. First, cut the flimsy tip off of each feather so there is about 3" of black remaining. Next, cut these to resemble the eagle tail feathers shown in **Figure 2**. The desired shape is more like the tip of a butter knife than the extreme point of the turkey feather. The center feather should have about the same amount of vein on each side and be slightly more pointed than the others. Look at photos of real eagle feathers for reference.



4. Positioning the Feathers

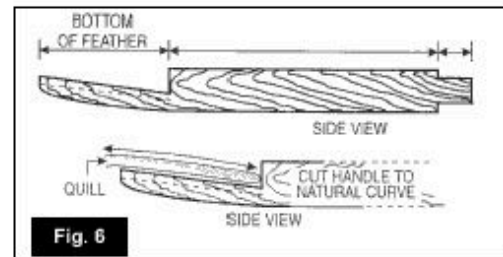
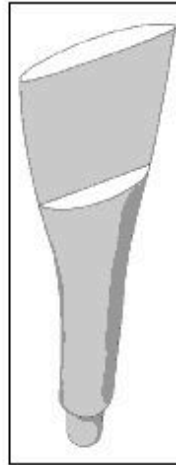
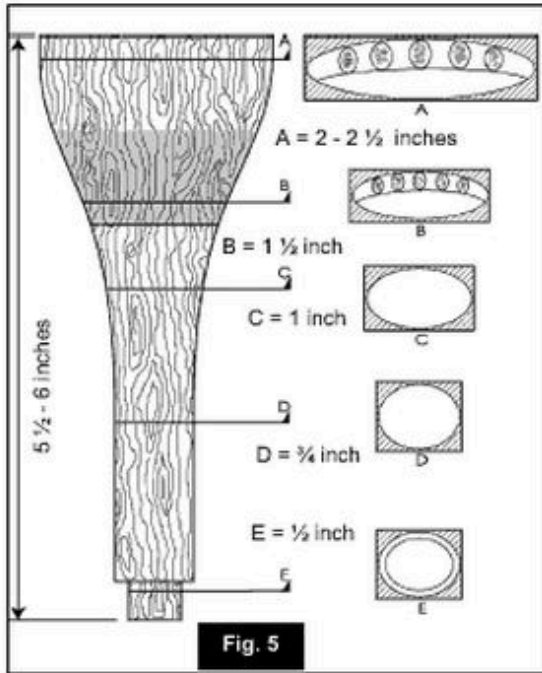
Carefully lay out the feathers, as shown in **Figures 3 & 4A-B**. Begin with the two outside feathers first; with two more on top of these until you wind up with the center feather in place. Make any adjustments that are necessary to achieve the desired shape and then hold all the feathers in position by pressing gently down on them. Trace around the

outside of the base of the quills. Use this as a guide to draw the shape of your handle, leaving it approximately 1/8" wider than the feathers on either side. A typical shape is shown in **Figure 5**, but this will vary with individual differences in the way the feather quills lay. Overall length can be 5" to 6" long, depending on personal taste and the size of your hand.



5. Making the Handle

Any soft wood can be used for a handle, but white pine or cedar is recommended, as it is readily available and easy to carve. Cut the handle to its rough shape with a coping saw and finish with a carving knife & wood rasp. Many different shapes can be made, but I have found that the gentle taper as shown in **Figure 5** is easiest to bead and is also an attractive shape. Sand carefully to achieve a smooth, even surface, as any irregularities will be visible even under the beadwork.

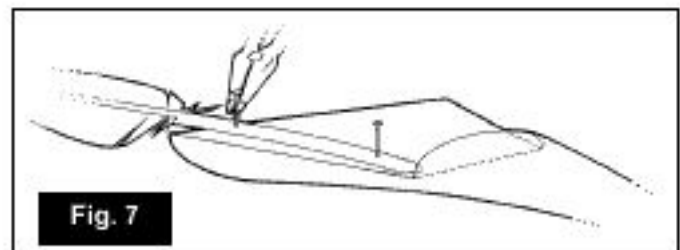


6. Shaping the Handle

Cut the base of the handle so that it will accept the fringe, removing only an amount of wood equal to the thickness of one fringe. Next, remove the front portion of the top of the handle and carve it out so it will fit the natural curve of the feathers. Remove only enough wood to equal the thickness of the quills, as shown in **Figure 6**. A small, tapered wood rasp is very helpful for this process. The back side of the handle should taper in at the top so that it meets the quills of the main feathers at its top edge.

7. Setting the Feathers

Set the two outside feathers in place, then using a pair of needle nose pliers and 2 or 3 straight pins per feather, pin them into position as shown in **Figure 7**. These pins allow great flexibility in setting each feather exactly as you want it and each one can be easily adjusted at any time prior to gluing. Finish pinning the other feathers in place, carefully adjusting each one so that they are evenly spaced and all edges blend into the next feather.

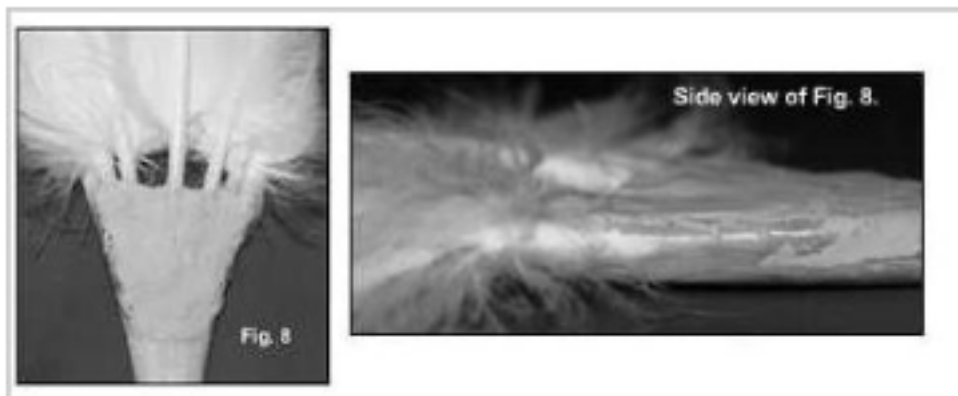


This is accomplished by moving the feathers from left to right and rotating it on the axis of the shaft. Pay particular attention to the tips of the feathers, making certain they are flat as shown in **Figure 3**. To check this, look at the tips of the feathers and make sure there are no gaps between them.

8. Finishing the Handle

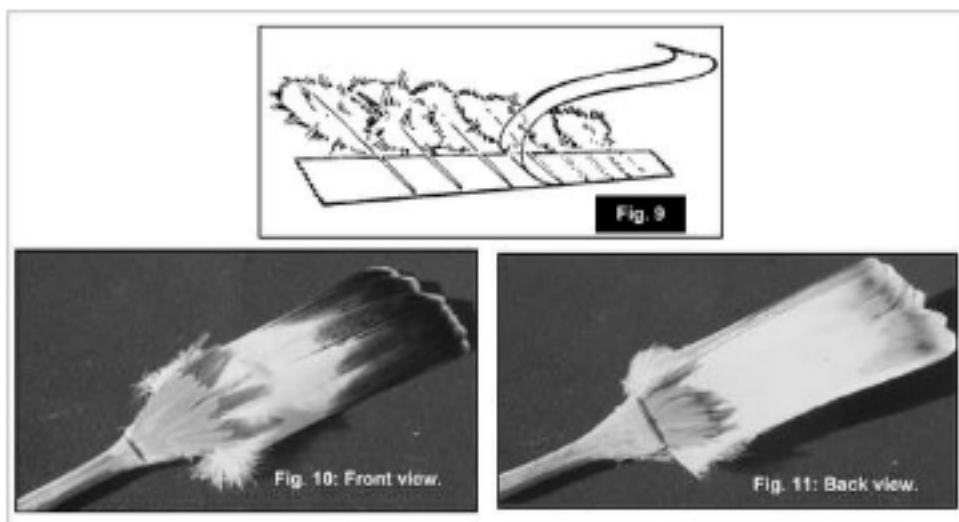
Completely cover the bottom 1-1/2" of the quills with epoxy glue, allowing it to dry for 12 to 24 hours. The pins can then be removed by twisting slightly with pliers and then carefully pulling them out. Finish forming the handle by building it up with plastic or auto body filler, such as "Bondo", as shown in

Figure 8. Put on enough to make the handle symmetrical and only bring it up as high in front as it is in back. Let this dry, then shape it and smooth it using your rasp and sandpaper.



9. Placing Decorative Feathers

Trim feathers should now be added at the top of the handle in front and back. You may use hackles and/or small coverlets from pheasants, macaws, parrots, etc. A simple technique for placing these is to use a piece of masking tape or double stick tape to lay these on and then covering with another piece of tape (**Figure 9**). This "unit" can then be glued to the fan. One or more fluffs are usually placed on the back of the fan, in the same configuration as they grow on the bird. Other decorative feathers can also be added here and are very attractive. See **Figures 10 thru 12** and the accompanying photos.



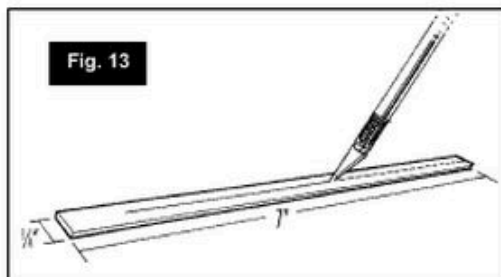
10. Buckskin Fringe

Approximately 12 to 20 hand-rolled, white buckskin fringes can be added to the fan handle which must be made before attaching to the handle. Begin by cutting a piece of buckskin into 12 to 16 strips 1/4" wide by 7" to 10" long. The width of these strips as well as the thickness of the buckskin will determine the thickness of your fringe and you may wish to cut strips that are narrower or somewhat wider. It is important to cut these as evenly as possible in order to make the finished fringe an even diameter. If the thickness of the buckskin you are using varies along its length, the thinner end may need to be cut slightly wider than the thicker end, so you will need to experiment a little with this in order to get it right. Next, split each strip up the center to within 1/2" of its end, thus leaving a small tab as shown in **Figure 13**. This can be done with scissors or using a straight edge and an X-acto knife or razor blade.

The next step can be done with the fringe either wet (damp) or dry, so try it both ways and use the method that works best for you. First, completely saturate the buckskin strip with water. Then squeeze out the excess water by running your fingers down the length, stretching it gently at the same time so as not to break it. Each piece should be treated uniformly so the fringe is evenly sized and not too thin or too thick when it is finished.

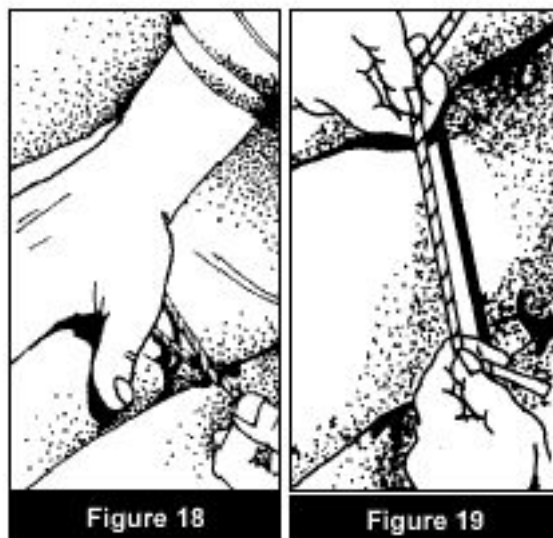
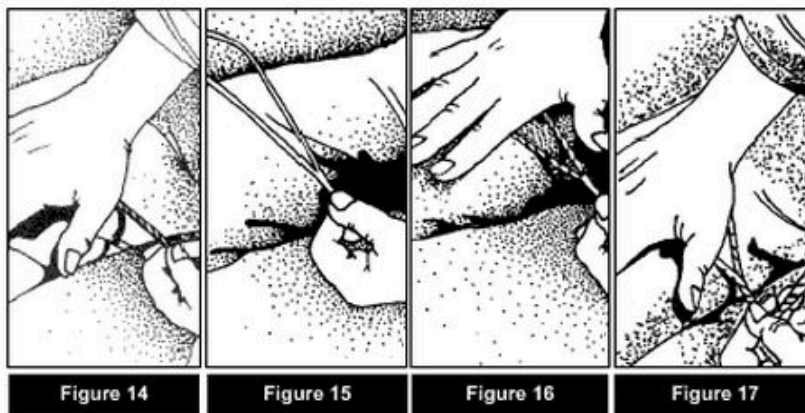
Grasp the tab of the fringe with the fingers of your left hand and lay the 2 "legs" of the fringe on your right thigh (Figures 14-19). With your right palm, begin rolling both pieces down your leg at the same time. As you do this, the end in your left hand will begin to twist by itself. Help it along and continue to roll with your right hand until the entire length is twisted and looks like a small rope. Move your left fingers down to just above the untwisted area with each roll and this will help you guide the twist and keep it from unrolling. When finished, roll the fringe back & forth under a smooth, flat object such as a cassette tape box and on a hard surface, such as a desktop, so as to give it a smooth, even shape. This will also help make it soft and pliable and thick areas can actually be thinned down a little bit using this trick.

I recommend wearing a clean pair of old blue jeans and keeping your hands very clean while doing this so that the fringe will remain nice and white. If necessary, white liquid shoe polish can be added for a bright white color or a "slick" look if you so desire.



"I recommend wearing a clean pair of old blue jeans and keeping your hands very clean while doing this so that the fringe will remain nice and white."

"Grasp the tab of the fringes with the fingers of your left hand and lay the two "legs" of the fringe on your right thigh (Fig. 14)".



10-A. Alternate Method of Rolling Buckskin Fringe*:

Another excellent method of making rolled buckskin fringe is the same as that used for making sinew bow strings (**Figures 20-22**). I suggest that you try both methods and use the one that works best for you. This method is not difficult, although like the other technique, it will take a little practice to twist both halves of the buckskin evenly. Simulated sinew is a good item to use to practice this method before using actual buckskin, as it rolls in a similar manner and is very inexpensive.

Assuming you are right handed, hold the tab (the end that is not split apart) between the thumb and forefinger of the left hand. Grasp the upper side of the buckskin piece between the fingers of your right hand, within a couple of inches of your left hand, and twist it clockwise as shown in **Figure 20**. When it is tight, hold it between the thumb and forefinger of the right hand, and using the little finger and ring finger of the same hand, reach under and grasp the other side of the fringe piece as shown in **Figure 21**. Twist your right hand counterclockwise and use the fingers of the left hand to secure the twist that is put into the fringe as in **Figure 22**. Repeat the process with the other half of the fringe, and so on until it is completely twisted. Quite simply, what is being done is to twist the individual halves clockwise, and to twist them around each other counterclockwise. This wraps them upon themselves so they will not unravel.

After you have completed the twisting all the way to the end, it is usually not even necessary to secure the ends, although you might want to put a small dab of white glue on to keep them together while you smooth and size them as described in **Step 11**.

* Adapted with permission from Jim Hamm, *Bows & Arrows of the Native Americans*, Bois d'™ Arc Press, Goldthwaite, TX, 1989.



Figure 20. Twist one of the ends of the buckskin fringe tightly between the thumb and forefinger of the right hand.

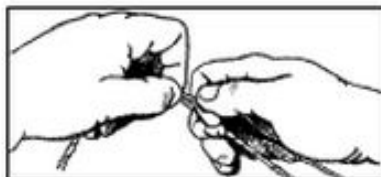


Figure 21. Reach under with the fingers and grasp the other side of the fringe.



Figure 22. Turn the entire hand counterclockwise, thus wrapping the two halves of the fringe together. Then move the thumb and forefinger of the left hand up to hold the latest wrap.

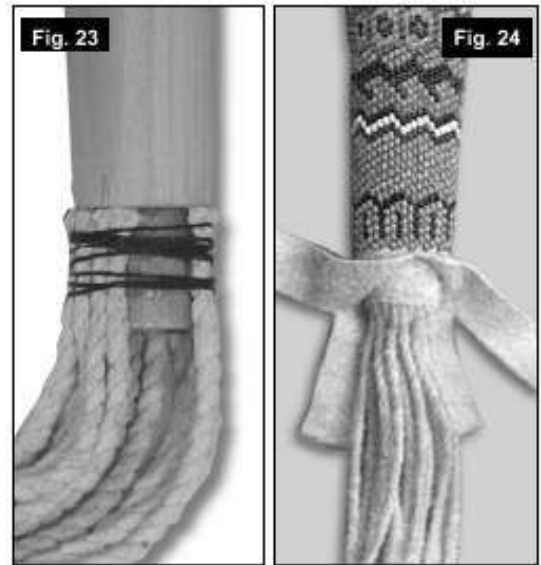
11. "Chalk Line" Fringe:

As an alternative to rolling buckskin fringe, a twisted cotton cord is sometimes used as an inexpensive

substitute. This is made from 1/8" "chalk line", which is available at most home improvement centers or lumber yards. Cut the cotton cord equal lengths anywhere from 6' to 8' in length. This should be in proportion to the size of the fan you are making and is normally an inch or two longer than the handle section. Next, dip the tip ends into white glue to prevent them from unraveling. Allow the glue to dry and then if desired, you can lightly paint the fringes with white liquid shoe polish to whiten it up and make it look more like real buckskin.

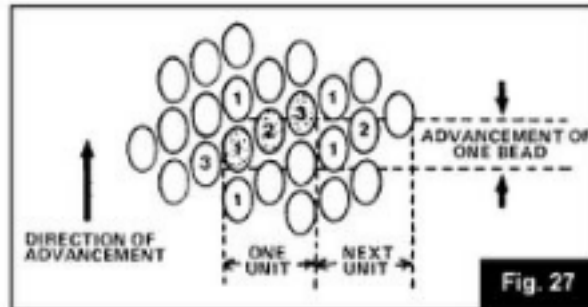
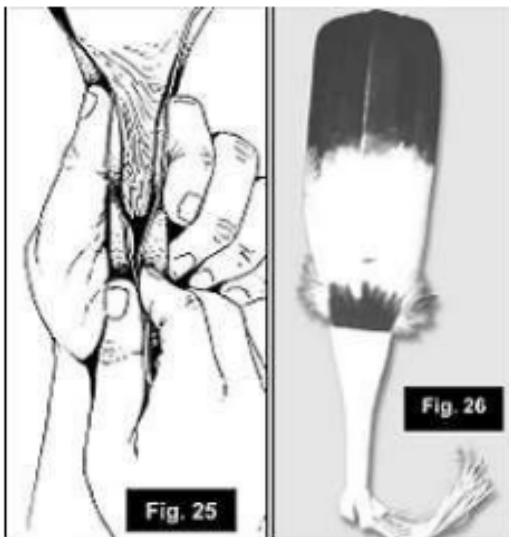
12. Attaching the Fringe:

The fringe can be attached to the handle at this time; however, you may prefer to wait until you are almost finished with the beadwork in order to avoid the fringe tangling with the beading thread as you work. First, cut all fringe to the same length, but be sure to cut from the loose end so that the tab ends all match. These tab ends hang down and keep the fringe from unrolling. Next, put a small amount of contact glue on one side of the loose end of each fringe and on the cut-out area at the bottom of the handle. After the glue is thoroughly dry, place the fringe uniformly around the handle and wrap it with thread to build this area up so that it is even with the rest of the handle. See **Figures 23 and 24**.



13. Covering the Handle:

Cover the entire fan handle with leather by cutting roughly to fit and gluing with white glue. While the glue is still wet, pinch the ends of the leather together in back to ensure a snug, smooth fit (**Figure 25**). Any extra leather should be trimmed off with scissors after the glue dries. **Figure 26** shows the front of a handle that is covered with buckskin and ready to bead.



14. Beading the Handle: Gourd Stitch

You are now ready to proceed with beading your fan handle. The method used for covering fan and gourd handles is known as 'gourd stitch' or 'peyote' beadwork. In choosing beads, I recommend size 13/0 seed beads or smaller, and Czech 'Cut' Beads are ideal because of the reflective flat areas on each bead. Other beads are acceptable and Indian craftsmen often mix regular seed beads with 'cuts' if they wish to use a color that is not available in cut beads. There are 3 different gourd-stitch techniques which are used on fan handles, and I will describe the most common, which consists of repeating units of 3 beads, as shown in **Figure 27**.

Before picking up any beads, it is important to understand that the beads used must be carefully selected so as to fit together evenly and neatly, almost like bricks in the wall of a building. If the beads are uneven, the design will not be uniform and the work will appear 'lumpy' instead of smooth.

On the other hand, irregular beads can be used to advantage when adding beads, as described below.

In order to begin beading, you must first determine how many beads will be required to go completely around the handle at a point close to the bottom edge, where you will begin the beadwork. Anchor your thread to the buckskin, as shown in **Figure 28**, 'Starting the Unit' $\hat{\Delta}$, and wrap a string of beads around the handle so that they fit snugly against one another. Do not begin exactly at the bottom edge of the handle, as the beads and thread will tend to slip off.

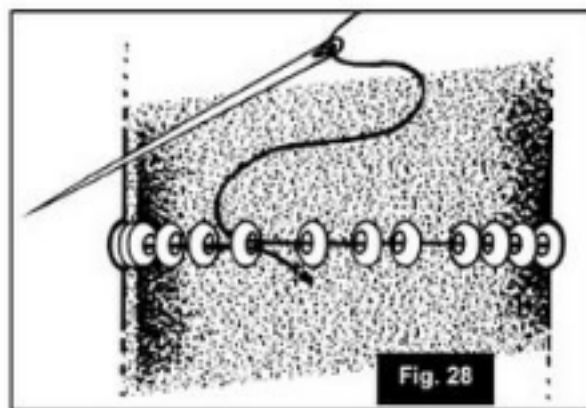


Fig. 28

For this technique, you should use a number divisible by 6; however, sometimes the diameter of the handle does not allow this. If a multiple of 6 will not work, then you must use a number that is divisible by 3. If divisible by 6, there will be an even number of 'units' $\hat{\Delta}$ that will best adapt themselves to some of the design elements used in this technique; however, a number divisible by 3 can be used if necessary. A slight bit of space between the beads is preferable to having too many beads, as the work will then be too loose and tend to slide around on the handle. After determining the number of beads the handle will accommodate, remove 1/3 of them. For example, if you have 30 beads around the handle, take off 10 and keep them separate, as you will soon need to put them back on.

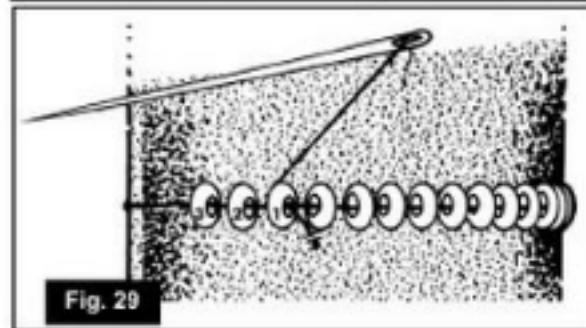


Fig. 29

To begin the actual beading, run your needle through the first bead for a second time, pulling it snugly against the knot. See **Figure 28**. Push all but the first 3 beads back around to the right so as to keep them out of the way for now, as shown in **Figure 29**. Pick up one of the 10 beads you removed previously, and going over the top of the second bead, run your needle through the 3rd bead on the string. Pull these 3 beads

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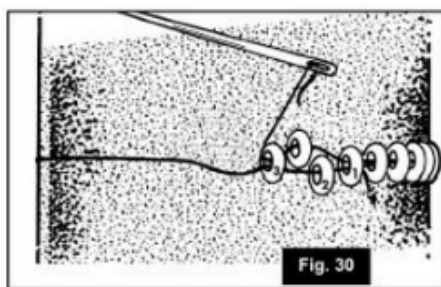


Fig. 30

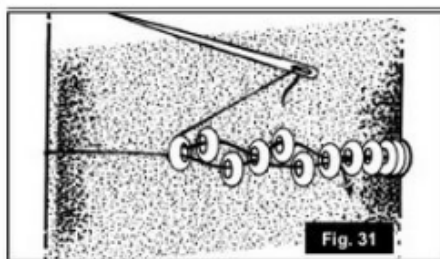


Fig. 31

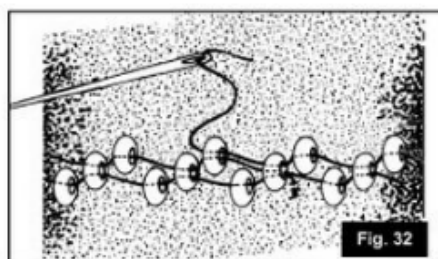
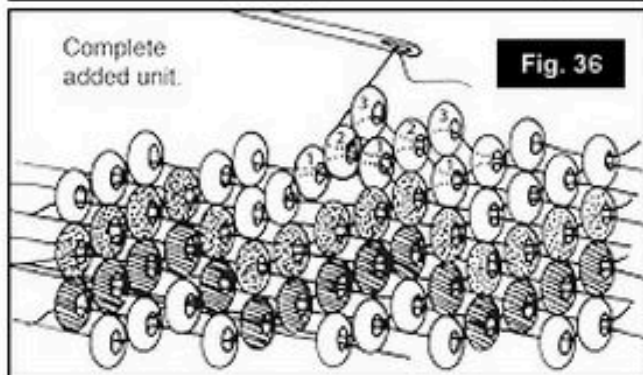
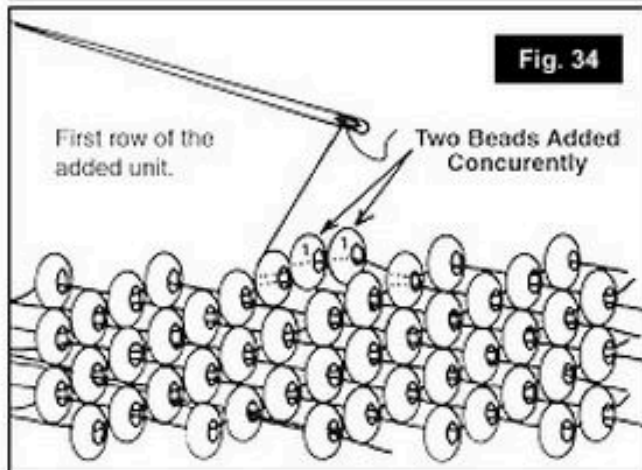
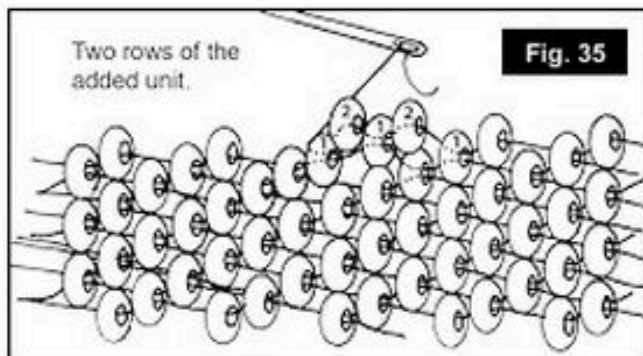
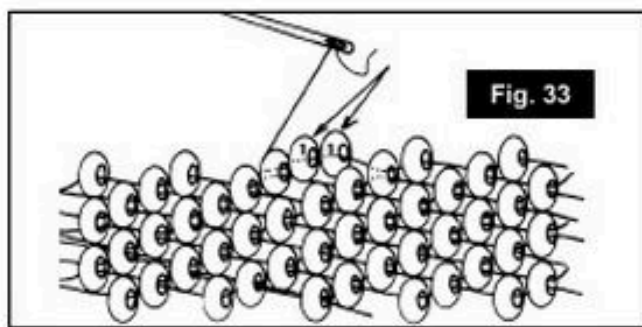


Fig. 32

snugly together, by pulling the thread in the opposite direction of needle travel, as shown in **Figure 30**. This new bead should be located between the original 2nd and 3rd beads on the string, in a 'stair-stepped' configuration. Next, pick up a new bead, skip the next bead, and run the needle through the following one, as shown in Figure 31. Repeat this process of adding a new bead, skipping one, and going through the next one, until all 10 beads have been added back to the work, which completes the first row. You should now examine the work carefully to be sure that all the beads are correctly positioned. See **Figure 32**.

To advance to the second row, simply run your needle through the first bead of the row just completed.

Pick up a new bead, and go through the second bead of the completed row, as shown in **Figure 32**. As beads are put on, each time around the handle adds 1/3 of the total number of beads around. Three times around adds a complete row of units. Continue in this manner as you add successive rows, going through the first bead of the row a second time as you begin the next one.



As the beadwork moves up the handle to the tapered area, the beads will tend to spread further and further apart. Beads must be added to fill in this extra area and this technique is shown in **Figures 33 thru 35**.

Extra beads are actually added one at a time, by first placing 2 beads where one would normally go, and so on, but the idea is to add a complete unit on each side in order for the design to remain balanced, and three passes around the handle are required to add a complete unit.

One of the tricks to expanding the work is add these units in the background color of the work rather than in the design area. This is not always possible, but it can often be done. It is also helpful to add beads on the sides of the work; thus making them almost inconspicuous from the front or back of the fan.

While it is extremely important to select uniformly sized beads in order to produce fine quality gourd stitch, 'thicker' or 'thinner' shaped beads can be used to advantage when adding units. As the handle begins to taper outward, the beads tend to spread apart as you progress up the handle. This can be overcome to a degree by using slightly 'fat' beads in some places, normally on the sides of the work where they are not so obvious. Then, when there is enough space to allow two beads to fit into the place of one (often just above one of these fat beads), thinner beads can be selected so as to fit in a little easier, thus making for neater work with fewer 'holes' and a more even appearance.

Decorative Ideas

I highly recommend that you study photos, books, magazine articles and museum pieces for ideas on beadwork designs and colors. You will also find many ideas for handle shapes, trim feathers and all sorts of little 'extra decorative touches' and fancy feather work that individual craftsmen use when making fans.

Acknowledgments

The methods described here have been developed over many years of experience and with the advice and help of several highly experienced fan makers, including Ben Stone, John Panther, Joe Rush, James Chasenah, Dick Past and Tyrone Stewart. Many varied techniques are used by other craftsmen, and as you proceed, you may well develop a few tricks of your own.

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