

Experience the thrill of watching folk-art and ethnic designs emerge from the simple act of turning cards. Choose from Native American, African, Asian, Scandinavian motifs on pottery, rugs, wood-carvings, and clothing. These double-faced pieces are completely reversible.

A monkey from a Nazca shirt, interlaced motifs from Bushongo raffia cloth, spirals from ancient Pueblo pottery, images from a 5th century Swedish picture



stone and a 19th century American cookie cutter—what do they have in common? All are bold and beautiful designs that you can weave!

LINDA HENDRICKSON

BY

Designs from every continent are adaptable to the technique of 'double-faced' tablet weaving. Practice with a sample band (see p. 40) and then try a necklace!

Turning the tablets and reading the graph

The technique consists of turning the tablets two turns Forward and two Backward (FFBB), inserting a weft after each turn. The structure is over three, under one for two threads of each tablet, and under three, over one for the other two threads. Warp twining occurs where individual tablets are manipulated to interchange the colors; see bibliography, p. 41.

The tablets are moved back and forth between two packs: the background pack and the design pack. The background pack consists of the tablets closest to the fell. The design pack consists of tablets moved out of the background pack as indicated by the filled-in rectangles on a design graph (see *Figure 2*, p. 40, *Figure 3*, p. 41). The background pack is turned as indicated on the design graph, the design pack is always turned in the opposite direction.

Each rectangle on the design graph indicates one tablet and two picks. The letters L (Left) and R (Right) indicate the threading direction for the tablets. F (Forward) and B (Backward) indicate the turning direction for the background pack. Fine diagonal lines in the graph indicate the twining direction if there is a color interchange.

A grid beside the design with numbers in alternating dark and light squares is an aid to arranging the tablets for weaving each row. The number in each dark square indicates tablets that must be in the design

1. Positions for turning the cards in double-faced tablet weaving

A-B lines to begin an F row



Ready for 1st turn Forward



Ready for 2nd turn Forward

A-B lines to begin a B row



Ready for 1st



Ready for 2nd turn Backward

Position of the A-B line in the turning sequence for double-faced designs (FFBB). Background threads are in the two adjacent holes connected by the line. Design threads are in the other two holes. The design pack always turns in the opposite direction of the background pack.

pack; each white square indicates tablets that must be in the background pack. Before beginning the sampler, review the steps for preparing a '10-minute warp' for tablet weaving in 'Weaving with a Twist, Get Ready to Flip, Rotate, Turn,' Weaver's, Issue 31, pp. 46-49.

Preparing the sampler warp

- Equipment. 24 tablets, two 3" C-clamps, warping wand, warp spreader, 3" x 5" index card, knife-edge belt shuttle, 4 film cans filled with coins to weight selvedge threads.
- Materials. Warp: 4 balls 5/2 or 3/2 pearl cotton, 2 dark and 2 light, 25 yds ea. Weft: same as dark warp.
- Set up the C-clamps 36" apart. Be sure each tablet has a bold A-B line drawn on both front and back, and put the tablets in a stack so they are all arranged the same way. Make a continuous warp with the light (background) threads in A and B and the dark (design) threads in C and D.
- Arrange the tablets. First put all the A-B lines on the top. The light threads will be on the top of the shed; if a tablet is out of position, you will see a dark thread. Then

flip the tablets so the threading alternates (right, left; repeat), with the tablet nearest you threaded to the right. Distribute the warp threads evenly on a warp spreader to a width of about $2\frac{1}{2}$ ".

Begin weaving

Weave with the band on your left. Cut the index card to make two pieces 1½" x 5"; place one strip in the shed. Turn the tablets Forward; insert the other strip; turn tablets Forward again. Place the first weft in the shed and weave three picks turning Forward. These three picks determine the width of the band. For smooth selvedges, leave a weft loop at the edge; beat; pull the loop firm.

You are now ready to weave some background before beginning the square motif in *Figure 2*, p. 40. The tablets are in position for a Backward row. Since the selvedge tablets must always turn Forward, slide the two tablets on each side forward so that there is about 3" between packs. Turn the background pack Backward and the selvedge tablets Forward for 2 picks. The position of the

DOUBLE-FACED TABLET WEAVING

selvedge tablets helps keep track of the turning direction. The selvedge tablets stay in the background pack when the background pack is turning Forward. When the background pack is turning Backward, the selvedge tablets must move to the design pack. Weave 2 more rows background turning FFBB.

Weave the four motifs in the sample

.

The square design begins with a Forward row. Arrange the tablets so the first 7 are in the background pack, the next 10 in the design pack, and the remaining 7 in the background pack. Weave 2 picks turning the background pack Forward and the design pack Backward. For the next row, slide the 2 selvedge tablets on each side to the design pack. Weave 2 picks turning the background pack Backward and the design pack Forward. To weave the square, once you have the tablets for the square in the design pack, all you have to do is move the selvedge tablets for each graph row so they always turn Forward. Continue to complete the square.

To help clear the shed, spread open the shed between the packs with your fingers. Put your other hand in the shed between the background pack and the fell, and slide it toward the fell. Put the shuttle in the shed before removing your hand. Beat hard to square the designs: squeeze the weft in with one hand on each side of the shuttle.

A twist will eventually build up on the selvedge threads. Weight these threads and push out the twist as necessary.

Avoiding and Correcting Errors

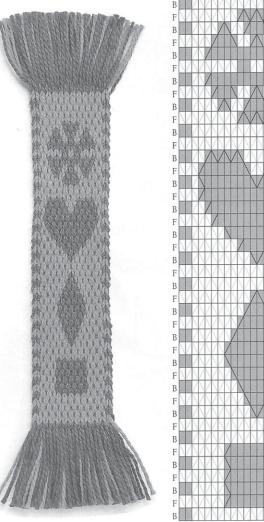
Here are some possible mistakes and suggestions for avoiding and correcting them.

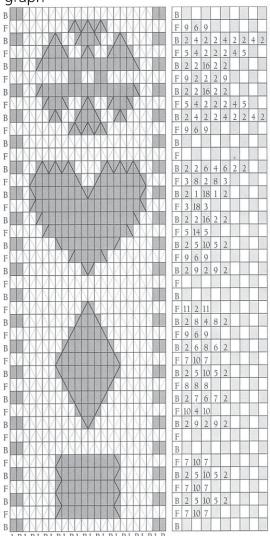
Weaving only 1 pick and then rearranging the tablets. Check the A-B lines on the outermost tablet in both packs before you start each row. They should be in the same position—both on the right or both on the left. If one is on top and one on the bottom, you've only completed 1 pick.

Turning one or both packs in the wrong direction. Floats occur where the tablets were turned the wrong way. Follow the graph carefully.

Getting the A-B line of one or more cards into the wrong position. This can happen when sliding tablets or turning

2. Sampler and design graph





the packs. Move 2 or 3 tablets at a time and keep tablets in a pack together as you turn them.

Getting yarn from one or more tablets caught around other tablets. Locate the offending strand of yarn and figure out whether you have to push it up or down to get it back in place. Make sure your tension is even and tight enough and that the threads are in order in the warp spreader.

The shed is not clear. For a clear shed: turn the packs slightly further than a complete turn, so they are almost on their points (halfway into the next turn), and then put them back into position. Wiggle the packs, pull the tablets apart in several quick motions, or hold one hand under each pack and smack the top a time or two. Don't drag the tablets back and forth along the warp after each turn; this is hard on the warp yarns.

If you're in a real mess, push all the tablets together. Use the blunt end of a needle and pull out enough weft at one edge so you can grab onto it. Then, holding the west on both sides of the band, force it up about an inch from the fell. It won't go far since you have twisted warps holding it back. Then go tablet by tablet, rotating each one as necessary to free the weft. Once you have the weft free, look at the A-B lines. If they're all on the top and bottom, you're in the middle of a row. You can match the pattern of the A-B lines to the correct row in the graph. If the A-B lines are all on one side, carefully compare the weaving to the design. Arrange the tablets the way you think they should be for the row, and try to unweave. Keep rotating tablets and unweaving until you get back to a row that unweaves perfectly.

A Double-Faced Necklace

Once you have mastered the double-faced technique, you can complete this necklace in about three hours.

- Equipment. 48 tablets, two 3" *C*-clamps, warping wand, warp spreader, a 3" x 5" index card, knife-edge belt shuttle.
- Materials. Warp: 4 balls 10/2 pearl cotton (4200 yds/lb), 2 black and 2 cream, 50 yds ea. Weft: 10/2 pearl cotton, black.
- Set up the C-clamps 36" apart, thread the cards and make the warp as for the sampler. Arrange the cards so that they are alternately threaded and the AB lines are on the bottom (the dark threads will be on top of the shed).
- Distribute the warp threads evenly on warp spreader to about $2\frac{1}{2}$ ".
- · Weave with the band on your left. To begin weaving, place the index card in the shed. Lay a 6" scrap of yarn in the same shed with the card. Turn the tablets forward once and move the card so the edge nearest the tablets is 8" from the clamp. The 8" of unwoven warp will later be twisted into the fringe of the necklace. Tie the scrap yarn in a loose knot around the dark threads only. This keeps the dark and light threads separated so they will be ready to ply for the fringe later. Insert the first weft, leaving an 8" tail. Weave 2 picks turning Forward, carefully adjusting the weft to establish a weaving width of 11/2". You will have a row of twining at the beginning of the weaving for a stable bottom edge.
- Weave four rows (8 picks) of background. The tablets are in position to
- turn Backward (all A-B lines on the right). Since the selvedge tablets must always turn Forward, move the two selvedge tablets on each side out of the background pack (they will be the only tablets in the design pack at this point). Turn the background pack Backward and the selvedge tablets Forward for 2 picks. Then slide the selvedge tablets back into the background pack and weave 2 picks turning the entire pack Forward. These 4 picks (BBFF) complete two rows. Weave two more rows (4 picks, BBFF).
- Follow the graph to weave the motif, reading from bottom to top. Notice that the design begins with a Backward turning row; the tablets show all of the A-B lines on the right.

- Row 1. Slide 2 tablets up to the design pack (the selvedge tablets, which always turn Forward), leave 8 in the background pack, slide 10 up, leave 8, slide 10 up, leave 8, and slide 2 up (the other selvedge tablets). Neaten up the tablets in both packs. Turn the background pack Backward and the design pack Forward. Clear the shed for the first pick between packs and then between the background pack and the fell. Beat, insert weft. Turn the packs again—the background pack Backward and the design pack Forward. Clear the shed all the way to the fell, beat, and insert the second pick.
- Row 2. Now that you have two packs, just move the tablets that need to change packs to match the count in the graph. Turn the background pack Forward and the design pack Backward for 2 picks. Continue weaving the rest of the graphed design. The last row is a Backward row.

End the weaving with four rows (8 picks) of background turning FFBB. Then turn all the tablets Backward so the weaving ends with a row of twining. Beat but do not insert weft. The A-B lines will be on the bottom, and all the dark threads on the top of the shed. Insert a scrap of yarn in the shed and tie as at the beginning of the weaving. Cut the weft, leaving a 28" tail which will become part of the plied cord that goes around the neck. Remove the warp spreader. Cut the warp at the clamps and remove the tablets.

Finish the necklace by plying the yarn for the neck cords and fringe. Decide which side of the necklace you consider

the 'right' side, a dark image on a light background or a light image on a dark background (as shown). Place the weaving right-side up on the table with the longest warps hanging over the edge. Lay a clean piece of scrap wood on top with the edges of wood and weaving parallel and about 1/8" of weaving showing, and clamp to the table (the wood distributes the pressure of the clamp and protects the weaving). Separate the dark and light threads and remove the scrap yarn. Divide the warp in half. For the right half, twist the dark and light warps separately, turning to the left until they start to kink. Put them together and turn to the right. Do the same with the left half but twist in the opposite directions. This will give an attractive Vshape of the background-colored warp threads at the center on the 'right' side of the necklace. Wrap the ends —a knot is too bulky.

For the plied fringe, divide the yarn into eight equal groups and ply. Wrap or knot the ends. Trim all ends.

Bibliography

Collingwood, Peter. *The Techniques of Tablet Weaving*, 320 pages, Robin & Russ Handweavers, 1996. See pp. 169-236 for information on double-faced tablet weaving.

Hendrickson, Linda. Double-Faced Tablet Weaving: 50 Designs from Around the World, 120 pages, self-published, 1996.

3. Design graph for project necklace

