

SWATCH PAGE

DOUBLE WEAVES WITH 4, 6, AND 8 HARNESSES

by Paul O'Connor

D. Tubular Weaving

I suppose that Jean Stamsta is the weaver best known for woven tubular forms but quite a few other weavers have used this type of weaving in a variety of ways. If both selvages in double weave are joined, a tube is created. Only one shuttle is required and the secret lies in the treading sequence. The threading and skeleton tieup are the same for weaving separate layers or for double width cloth. However there is one difference. To weave tubes correctly, an odd number of warp threads should be used. The extra thread can be in either the top or bottom layer and it can be threaded in a separate dent or in the same dent with two other warp threads. The weave structure in Figure 1 shows why this extra warp thread is required. (The extra thread is indicated on harness #1 and is in the top layer.) The treading sequence is 1; 134; 3; 123, and repeat. If the treading sequence 1; 123; 3; 134 is used, there will be two threads in the same shed at each selvage as shown in Figure 2.

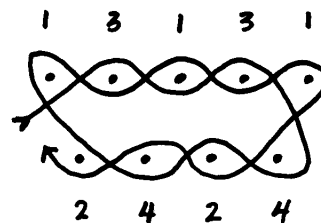
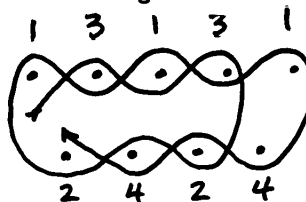


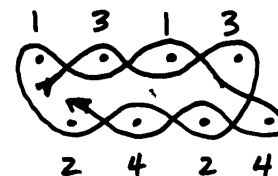
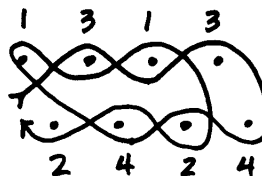
FIGURE 1. WEAVE DIAGRAM FOR TUBULAR DOUBLE WEAVE

FIGURE 2. TREADING ERROR IN TUBULAR DOUBLE WEAVE



What happens if you have an even number of warp threads? Figure 3 shows the weave diagrams for the two treading sequences given above. The first treading sequence gives a double warp thread at the right selvage and the second gives the double warp thread at the left selvage. It is possible to pull out one warp thread after you take the piece from the loom (or you could even leave it in).

FIGURE 3. WEAVING ERRORS WITH EVEN NUMBER WARPS.



This is a good place to summarize what we have said about double weaves in these three articles. *The treading sequence is the only difference between weaving separate layers, double width cloth, and tubular weaving (plus meeting two shuttles for weaving separate layers).* Table I will let you compare the three forms of double weave. Skeleton tieup and full tieup treading sequences are given.

Table I. Double woven forms

Type	Treading sequences	
Separate layers	1, 123, 3, 134 or 1, 2 + a, 3, 4 + a	Two shuttles
Double width	1, 123, 134, 3 or 1, 2 + a, 4 + a, 3	One shuttle
Tubular weaving	1, 123, 3, 134 or 1, 2 + a, 3, 4 + a	One shuttle

There are many examples in Shuttle Spindle and Dyepot where tubular weaving has been used in one way or another. Jacquetta Nisbet has made a light sculpture (Fall 1973), Ena Marston gives instructions for a tubular dress (Spring 1975), and a number of Joan Russell's works are presented in the Fall 1974 issue. One of Jean Stamsta's hangings called "Tarzan's Rope" from the Cleveland fiberworks show is on page 34 of the Fall 1977 issue and of course Onagi's "A Red Glove" from the 8th International Tapestry Show seems to be a gigantic tubular double weave (Winter 1977).

Tubular weaving is one of the ways to weave pockets. These can be left open at one end to make pillow cover or to make a small purse or glasses case or the pockets can be stuffed on the loom for a three dimensional hanging. Here are instructions for each of these and I am sure that you can think of more ways to use tubular double weave.

Pillow covers. Figure 4 shows you you might weave a pillow. About an inch of tabby is woven, then the tube is woven for the length desired. Use some hemstitching technique to hold the weft threads in place before cutting the weaving from the loom. It might be wise to machine sew the top opening of the tube. Then turn the pillow cover inside out so that the tabby edge is inside, slip in the pillow, and use an embroidery stitch to close the pillow cover.

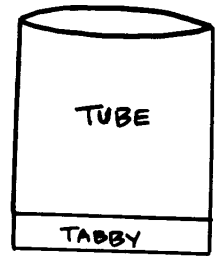


FIGURE 4. PILLOW COVER

Small purse or glasses case. Figure 5 diagrams how you might weave this article. You would proceed in the same manner as weaving a pillow cover but after weaving the tube to the size you want, weave only the lower layer to make a flap that would be folded over to close the purse. Of course there will be warp ends that must be finished perhaps by weaving them back in after you take the purse off the loom. Or perhaps you would prefer to make some kind of a warp fringe.

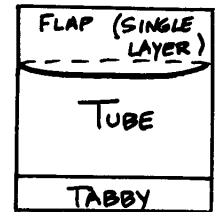
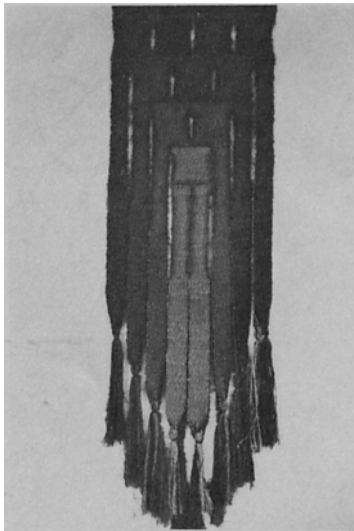


FIGURE 5. PURSE OR GLASSES CASE

Pockets stuffed on the loom. It is quite easy to weave tubes that can be stuffed while the material is still on the loom. Weave a section of tabby, then double weave in tubular fashion for the length you want and poke in the stuffing material (dacron, thums, . . .). Now weave two shots of tabby to close the pocket. This gives a stronger closure for the pocket than simply interchanging the two layers. You are ready to weave another tube, stuff it, and close again with tabby. The tabby closure will be almost invisible. One of Mary Temple's wallhangings is shown in the photograph, and several double weave techniques have been used, including stuffed pockets.



Padded Double Weave Hanging by Mary Temple.

Winter cap, dolls. Why not weave a tube and make it into a winter cap? Or make a doll and stuff it on the loom? In the Winter 1977 issue of SS&D, Betsy Finch gives detailed instructions for weaving "Floppy Dolls" using four harness tubular double weave. Figure 6 is a simplified diagram of her ideas but I would urge you to read her article for some interesting ways to handle the warp ends.

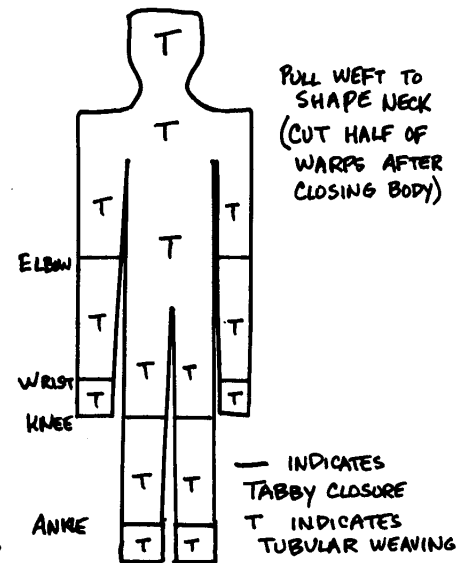


FIGURE 6. "FLOPPY DOLL".
TUBULAR STUFFED WEAVING