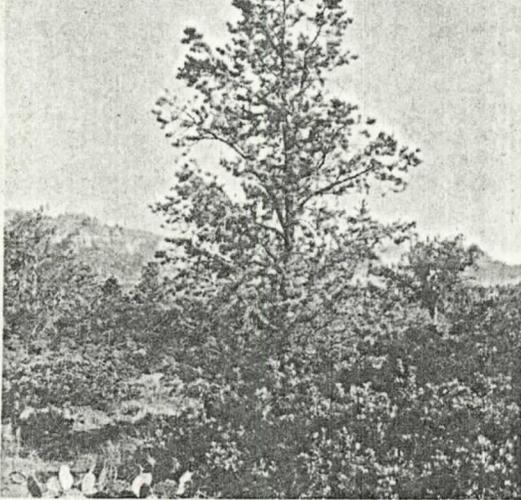




Editor's note: The Looming Arts has top priority in studio activities. We are working on several issues at once but there is a lot of work to an issue and it takes time. We wish to assure everyone, particularly the new subscribers who may not be familiar with reasons for late publishing dates, that each will receive six issues for a year's subscription. We wish to keep the dates, volume numbers and events in chronological order. We appreciate the patience most of our subscribers have shown and hope to have our publication up to date by the end of the year. In the meantime, don't let the date on each issue disturb you. Your volume and issue number tells you if you have missed a copy.

* A STICKY PROBLEM



"Bubbling" may not sound like a weaving term but it certainly is. We "bubble" when we want to get a lot of weft in the shed and cover the warp completely. It is used a great deal in rug making, tapestry, etc.

If you have heard and know what "bubbling" is, you may not know that you can do it two ways. The most common way to "bubble" is to put your weft through the shed and then with your finger or point of your comb (weaving fork) you form scallops before you beat the weft into place. See drawing No. 1. I'm sure many of you have done this.

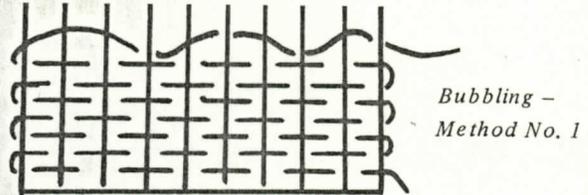
You can also "bubble" by "peaking" the yarn. You must have a wide weaving space if you want to do this on a wide warp. Put your weft through the shed. With one hand on the shuttle put a little tension on the weft. With

STATEMENT OF PUBLICATION AND SUBSCRIPTION RATES

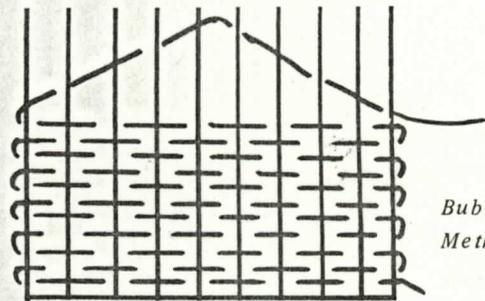
The Looming Arts is published bi-monthly beginning January 25 of each year. Subscription rates: United States and possessions: Issue with 4-harness designs and samples \$4.50 a year or \$1.00 single copy; above issue plus an additional multi-harness design \$6.00 a year or \$1.35 single copy. Pan American and foreign - \$1.00 per year extra. Mary Pendleton, editor and publisher. Business office: Box 233, Jordan Road, Sedona, Arizona 86336. Phone: Code 602-282-3671.

the other hand push a finger through the center of the warp into the shed, lift the weft up towards the beater forming a peak. See diagram No. 2. How high this peak should be depends on the width of the project and how much weft you need to cover warp. A little experimenting will tell the story. When the peak is made, close the shed and beat.

The "peaking" way of bubbling is the fastest way but it only works on looms where you have a wide beater. Doesn't work when beating over a small area with a comb.



Bubbling -
Method No. 1



Bubbling -
Method No. 2

*Pinon Pine - grown at 4000 to 7000 foot elevation. These trees come in two species, double and single leaf - double leaf or *edulis* being the most common in Arizona. It is a dwarf tree that grows to a height of 30 feet but is generally less than 15 feet, bushy and wide as it is tall and generally found in large areas of semidesert woodlands chiefly in Arizona, New Mexico, Utah and Colorado. These trees bear pinon nuts in cones that require two years to mature and have long been a source of food of the Navajo Indians. They are eaten raw or ground on a metate and eaten as a cake patty or bread.

YARNS SELECTED FOR YOU

Our sample this issue is the beautiful 16/2 cotton yarn that we are now stocking. The colors are exquisite. Fast color, washable. Use it for warp and weft for many things including dress fabrics, table mats, curtains, just to name a few. Send self-addressed, stamped envelope for samples of other colors available.

16/2 cotton, fast color
5,600 yds. per lb.
Put up: Approx. 8 oz. skeins
40¢ per oz. plus postage/ins.

We also have on hand the Willamette yarn and Asbo-rya yarn used in the multi harness design. Also the 2-ply fine wool and 8/4 natural carpet warp used in the 3-harness design. Willamette - 90¢ per 2 oz. tube of 700 yds., Asbo-rya yarn - \$1.50 per 3/4 oz. skein of 135 yds., 2-ply fine wool - \$1.32 per 4 oz. skein of 275 yds. and 8/4 natural carpet warp - \$1.07 per 8 oz. tube of 800 yds. Check must accompany orders. Be sure to add plenty for postage and insurance. Any overage will be refunded in stamps. Order from The Pendleton Shop, Box 233, Sedona, Arizona 86336.

The Looming Arts "vol 7, No. 2 MA 1972" Mary Pendleton

DOUBLE WEAVING, the simple, complicated weave

This is the first of five articles on double weaving. We thought a detailed discussion of this weave would be of interest since so many weavers ask about it in our workshops.

Most weavers feel that double weaving is very complicated. After reading some of the explanations in the books, it sounds that way. Double weaving is really a very simple set up. You can do it on any four harness loom. Anyone can plan a double weave threading and tie-up without referring to a book if you analyze what you wish to accomplish. Even the beginners should be able to work this out. Follow with me step by step. Directions given are for weaving on a jack type or rising shed loom.

It takes two harnesses to weave a plain weave cloth and so for two cloths it takes four harnesses. You weave one cloth on top of the other.

Refer to diagram 1 — a threading draft and tie up for a fabric on two harnesses. With this threading you use treadles 1 and 2 alternately to weave a plain weave fabric.

Since we want to do two plain weave cloths, we will put together two threadings like in Diagram 1. We will need four harnesses for the two cloths. See Diagram 2. We now have a four harness threading and tie-up. At this point one harness is tied to each treadle. This is called a direct tie up.

Time to make a decision. Which two harnesses will weave the top fabric and which two the bottom fabric? Decision made. Harnesses 3 and 4 will be the top fabric, 1 and 2 harnesses the bottom fabric.

Now before you can weave you must add something to the tie-up. Let's analyze what we want to accomplish. We want to weave two fabrics, one on top of the other. By referring to diagram 1, we know how to weave each fabric individually; that is, alternating the two treadles that raise the harnesses. Therefore, to weave the top fabric we just alternate the treadles 3 and 4 and the warp threaded on harnesses 3 and 4 weaves on top of the warp on harnesses 1 and 2 which is just laying there inactive so far. Now to weave the bottom fabric.

We know if we alternate treadles 1 and 2 that raise harnesses 1 and 2, we will be weaving a cloth *but* we want to weave it *under* the top fabric warp. To do this we must hold the warps for the top fabric up out of the way so we can weave underneath of them. Since the top fabric warps are on harnesses 3 and 4, we tie these two harnesses to the two treadles that weave the bottom fabric; like so; see Diagram 3, the solid circles. As we depress treadles 1 and 2 to weave the bottom fabric, the top fabric warp is held up so we are weaving under it.

You now have the formula:

1. Always begin writing your tie-up by showing each harness tied to a treadle . . . a direct tie-up. 2. Tie the top fabric harnesses to the bottom fabric treadles. This will make three harnesses tied to two of the four treadles. That's all there is to it.

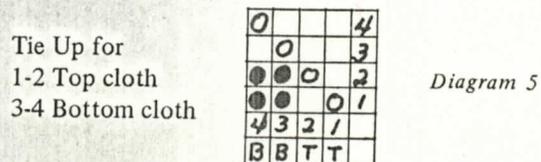
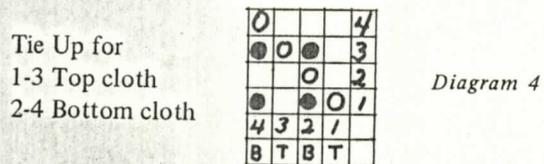
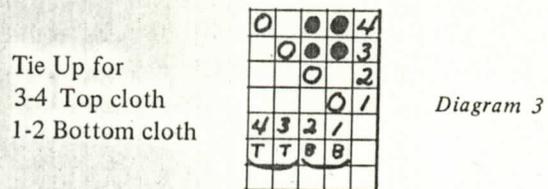
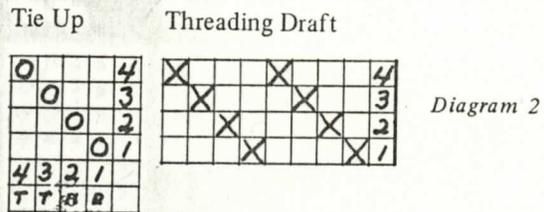
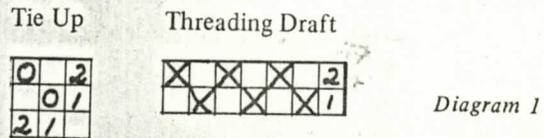
Let's try out our formula on another arrangement. Let's decide that harnesses 1 and 3 will be the top fabric and 2 and 4 the bottom fabric. Begin with your direct tie-up (open circles). Now tie harnesses 1 and 3 to treadles 2 and 4. See Diagram 4. To weave alternate treadles 1 and 3 for the top fabric and 2 and 4 for the bottom fabric.

Diagram 5 shows a tie-up making harnesses 1 and 2 the top fabric and 3 and 4 the bottom fabric.

You can make any pair of harnesses weave the top fabric and any pair the bottom fabric. Just arrange your tie-up accordingly.

I hope now you think of the double weave as a simple UN-complicated weave.

Next issue: Planning a double weave warp and order of treadling for tubular weave and double width cloth.



o = Direct tie-up for jack type loom

● = Top warp harnesses

T = Treadle that controls top cloth

B = Treadle that controls bottom cloth

MORE ABOUT THREE HARNESS SAMPLE

This three harness weave is very intriguing. You get started and you can't stop. Like eating popcorn. If you are inventive at all, you will be able to create many different arrangements of color and design. To get you started, here are a few using two colors. Use the same tie-up as shown elsewhere in this issue.

Sample 1

Treadle 1-2-3 with dark weft - 6 times
Treadle 1-2 with dark weft, 3 with light weft - 6 times
Treadle 1 dk., 2-3 lt. - 6 times
Treadle 1-2 dk., 3 lt. - 6 times
Treadle 1-2-3 dk. - 6 times

Sample 2 - reverse of 1.

Treadle 1-2-3 lt. 6 times
Treadle 1 dk., 2-3 lt. 6 times
Treadle 1-2 dk., 3 lt. - 6 times
Treadle 1 dk., 2-3 lt. 6 times
Treadle 1-2-3 lt. 6 times

Sample 3

Treadle 1-2-3 dk., 1-2-3 lt. 3 times
Treadle 1 dk.
Treadle 3-2-1 lt., 3-2-1 dk. 3 times
Treadle 3-2-1 lt., 3 dk.
Treadle 1-2-3 lt., 1-2-3 dk. 3 times
Treadle 1-2-3 lt. 6 times

Sample 4

Treadle 1-2-3 dk. 4 times
Treadle 1 lt., 2 dk., 3 lt., 1 dk., 2 lt., 3 dk. Repeat as desired. Treadle 1-2-3 dk. 4 times.
In this sample you are alternating the light and dark weft on a 1-2-3 treadle sequence.

Sample 5

You will be doing two lt., two dk. going across warp and back with each color. If you begin lt. on right and dk. on left, it will be easier to remember treadles and colors.

Treadle 1-2 lt., 3-1 dk., 2-3 lt., 1-2 dk., 3-1 lt., 2-3 dk. Repeat as desired. Treadle 1-2-3 dk. 4 times.

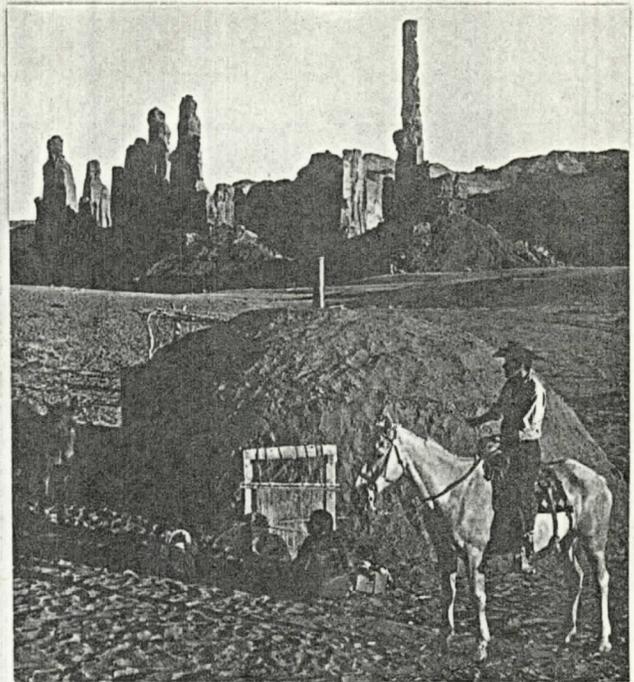
Sample 6

Treadle 1-2-3 lt. 4 times
*Treadle 1-2 lt., 3 dk. 5 times
Treadle 1-2-3 dk.
Treadle 1-2 lt., 3 dk. 4 times
Treadle 1-2 dk., 3 lt. 5 times
Treadle 1-2-3 lt.
Treadle 1-2 dk., 3 lt. 4 times
Repeat from *.

Sample 7

Treadle 1-2 lt., 3 dk. 4 times
Treadle 1-2 dk., 3 lt. 4 times
Repeat as desired.

If I say to quit now, I'll bet you can't. Just like popcorn.



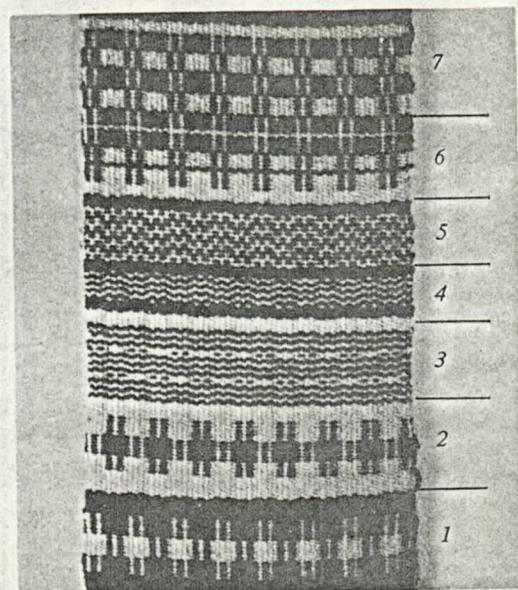
This typical Navajo family lives in Monument Valley near the Yeibichai Dancer and Totem Pole formations. The horses, mud hogan and rug weaver are common sights on the Navajo Reservation in Arizona, Utah and New Mexico.

SO YOU WON'T MISS US

Studio Hours:

Tuesday through Saturday 10:30 to 5:00.

Closed Sunday and Monday except during Pendleton Fabric Craft School.



A few ideas for design variations with two colors on the three harness threading discussed elsewhere in this issue.