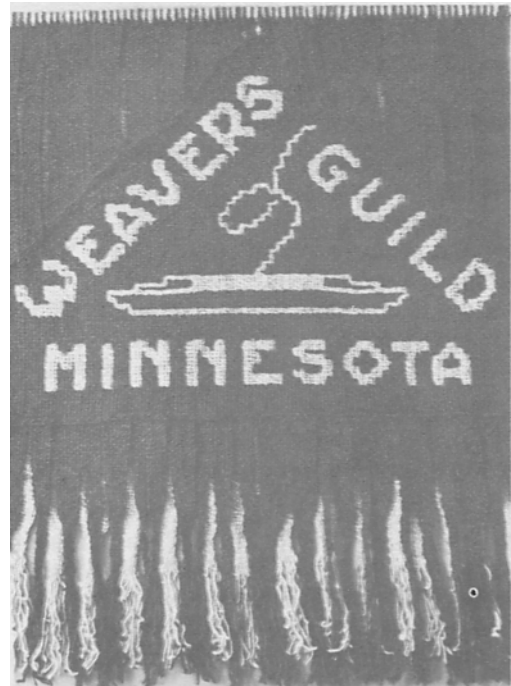


SWATCH PAGE

Double weave pickup by Adele Cahlander.



DOUBLE WEAVES WITH 4, 6, and 8 Harnesses

by Paul O'Connor

Four harness pickup in double weave

Pickup techniques allow you to weave any design that you want in double weave, bringing the lower warp threads to the top layer as you need them for the design and dropping them back to the lower layer when you want background. I hope all of you have seen the hanging at the build where double weave pickup techniques have been used to develop the Guild's name and the symbol of a shuttle. This weaving by Adel Cahlander is shown in the photograph.

Harriet Tidball gives five different ways for pickup techniques in her monograph "The Double Weave, Plain and Patterned". Frankly it is difficult for me to understand her discussions and I will present only one way of doing double weave pickup in this article. You should read her monograph for the other methods. Although at first pickup seems very slow and confusing, the design develops after a few picks and the whole process becomes much easier. Trust me for the moment!

Your loom should be threaded as for other double weaves: straight draw twill threading on four harnesses; the sett is twice what you would use for single layer weaving; skeleton tieup is assumed; and dark threads (background) will be threaded on harnesses 1 and 3 and light threads (design) on harnesses 2 and 4. You will probably find it helpful to have a strong contrast between the design and background warp threads. This not only makes it easier to decide which threads are to be picked up but also makes the final woven design bolder. Here is something that may help you see what is taking place.

When you pickup some of the **light** warp threads to create a design, they are held up out of the way while you weave the **dark** warp. And similarly when you pick up the **dark** warp threads, they will be held up out of the way while you weave the **light** warp.

At first this seems confusing because you work carefully to pick up certain warp threads but then they are not involved as you weave.

There are four steps for four harness pickup double weave. The text will run down one side of the page with the weave diagram next to it to show what is happening. You need a flat pickup stick 1 - 2" wide, preferably with a pointed end. The pickup stick should be several inches longer than the width of your warp. Also notice before we begin that the warp is always picked up in pairs. (This automatically insures that pairs are split at each side of the design which will give you a sharp outline.) In these diagrams the heavy line indicates the pickup stick and dotted lines indicate weft threads.

Procedure

1. Raise harnesses 1 and 3 (the **dark** background warp threads). Use the pickup stick to pick up the areas that you want to be in **dark** weave. Push the stick back to the reed.

2. Turn the pickup stick on edge, raise harness 2 and throw **light** weft. Turn pickup stick flat and beat lightly. Turn the pickup stick on edge, raise harness 4 and throw **light** weft. Remove pickup stick and beat. These two weft shots weave the **light** warp threads.

3. Raise harnesses 2 and 4 (**light** warp). Use the pickup stick to pick up areas that you want to be in **light** weave on the top side of the fabric. Push the stick back to the reed.

4. Turn the stick on edge, raise harness 1 and throw **dark** weft. Turn pickup stick flat and beat lightly. Raise harness 3 and throw **dark** weft. Remove pickup stick and beat. These two weft shots weave the **dark** warp threads.

Repeat steps 1 - 4.

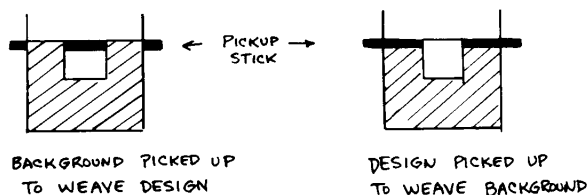
This may seem confusing at first but as the design begins to develop, it is much easier to pick out the design. Then the weaving goes much faster. The final weave structure of the fabric is shown here.

There are a number of variations that you may find give you a better looking weaving. The first is to alternate light and dark weft shots which doubles the number of steps (but beats each weft shot in separately). The procedure would be:

1. Raise harnesses 1 and 3; pick up background; raise harness 2 and weave **light** weft; remove pickup stick and beat.
2. Raise harnesses 2 and 4; pick up design; raise harness 1 and weave **dark** weft; remove pickup stick and beat...
3. Raise harnesses 1 and 3; pick up background; raise harness 4 and weave **light** weft; remove pickup stick and beat.
4. Raise harnesses 2 and 4; pick up design; raise harness 3 and weave **dark** weft; remove pickup stick and beat.

Some weavers prefer to transfer the pickup threads behind the beater. This of course means that you must have two pickup sticks. The advantage is that you get a better shed and the beating may be more regular.

It would be wise to prepare your design on graph paper before you start weaving. Remember that the design must be in terms of pairs of warps. Finally I would like to present a diagram to illustrate what is happening in double weaves. This is taken from Susan Guagliumi's article in the Spring 1978 issue of *Shuttle Spindle and Dyepot* (on 6-harness triple weave pickup). It is the best visual presentation of what is happening in double weave pickup that I have seen. I hope it helps you.



In the first articles in this series, I have presented ways to do double weave with four harnesses (two layers; double width cloth; tubular weaves; and pickup double weave). The next articles will move on to 6 and 8-harness double weaves.

Diagram

