SOME VARIATIONS
ON AN ANCIENT FOUR BLOCK DOUBLE WEAVE.

The photograph above is of a four block 8 harness double weave pattern described by Cornelia Stone of Kankakee, Ill, in the Weaver of August 1941. It is with her kind permission that I am repeating the material here. And adding some of our own experiments both with the 8 harness loom and the four harness loom as well.

Miss Stone writes that the weave came from an ancient book, "Instructions for Weaving in all of its Various Branches" by Abseam Hecht, printed in Baltimore in 1849, nearly 100 years ago. It was my privilege in 1940 to see a very handsome red and white linen drape which was woven by Miss Stone using this method. She used 25/2 Knok linen set at 40 threads to the inch for the warp and weft. This is about the same weight as the special linen which was offered to News subscribers in the Sept-Oct number 1945. This pattern is given at Figure No. 1 on the next page with the method of weaving and the tie-up. This is a very rare form of weaving. I hope you will try it out.

Suitable threads for this weave. Color is an important part of this weave, and 2 colors of warp are necessary. This warp can be strongly contrasting, as blue and white or light blue and a darker blue. The last is a little more subtle in effect. Or two closer shades may be used. The weft should be of the same size as the warp if the effect of the weaving is to be the same as in the ancient weaving. But in some of our experiments we used one heavy weft and one very fine weft. In this case the weft does not show at all. No. 3 mercerized cotton for both warp and weft makes a very firm and close, durable fabric, slightly stiff, which makes excellent heavy bag materials or for upholstery. Set this 30 threads to the inch, or 2 through each dent of a 15 dent reed. Carpet warp can be set at the same number of threads to the inch, or even could be set at 40 threads to the inch. Fine warps such as No. 70 mercerized cotton would probably need to be set about 60 threads to the inch. The effect would be quite handsome in this material for place mats.

Threading Draft: 8 harness four block. Figure No. 1 is for the pattern of Miss Stone's piece as shown above. Thread harnesses 1, 2, 3, 4 with white warp threads. And harnesses 5, 6, 7, 8 with blue warp threads throughout. An analysis of the draft shows the pattern blocks to be 5 & 1; 6 & 2; 7 & 3; and 8 & 4. To weave each pattern block, repeat the tie-up for 4 shots, one shot on each shed, for each of the pattern blocks. The tie-up draft is numbered 1, 2, 3, and 4 meaning the corresponding pattern blocks.

Figure No. I (A) Basic four harness threading draft for double weave

8 harness
Tie-up

The above threading draft is the basis for the eight harness draft for the double weave pattern shown on Page 1. This is woven as any four harness pattern and is not the double weave. Compare the threading draft at No. I (B) below to see how this is written from the basic threading draft above.

Figure No. I (B) 8 harness 4 block double weave threading draft

One unit of the 8 harness double weave draft is 4 threads. The figures 1,2,3,2,3,2,1,4,3,2,3,2,3,2 are the pattern blocks order of weaving. Numbers 12, 42, 14, etc. on the draft are the number of times each 4 thread unit is repeated in the threading and also the number of times that block is repeated on the tie-up to make the woven pattern. One repeat of the threading draft is 254 warp threads. Thread harnesses 1, 2, 5, and 4 with white or light warp threads and 3, 6, 7, and 8 with blue or dark warp. Use the same colors for alternate weft shots.

Note: (A to C is \( \frac{1}{2} \) the repeat.)

Figure No. II. (A). Another 4 harness draft for (B).

Figure No. II. (B) Full threading draft - 8 harness double weave.

To weave, use the 8 harness tie-up above. Block I. Treadle 1, 2, 3, 4.
Block II. Treadle 6, 7, 8.
Block III. * 9, 10, 11, 12.
Block IV. * 13, 14, 15, 16.

On Figure No. II (B) the full repeat is from A to C and then reverse back to the beginning. For instance end at C with 1, then 2. Then begin back to the beginning in reverse to thread 6, 3, 7, 2, 6, 3, 7, 4. This was set up on a warp of blue No. 3 mercerized cotton and light red brown, with weft of the same. Warp was set at 30 to the inch, or 2 in each dent of a 15 dent reed. This makes a very firm close fabric, excellent for bags or upholstery material. The pattern is entirely reversible. It comes up in blue plain weave on one side and red brown plain weave on the other. In this heavy thread the back ground weave resembles a twill, but it is not a true twill. Any four block pattern can be written up for this type of weaving and offers a splendid field for those who like to do original 8 harness patterns.

For the weaving of the pattern at No. II (B) use the same tie-up as for No. I (B) but the order of the pattern blocks is slightly different. Use them the same as the pattern is written namely - 1, 2, 3, 4, 1, 2, 3, 4, 1, 4, 3, 2 centpr, reverse back in same order to the beginning. The figures above the tie-up drafts for the 8 harness weave are 3 pattern blocks. Use one shot on each shed and 4 shots for one repeat of each unit of the threading draft. And use two colors of weft.

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Figure No. III. (B) Threading Draft for the Basic threading shown at I (A).

Figure No. III. (A) Regular Tie-up. Note on the tie-up that harnesses are tied to rise. From now on all tie-ups will be this way.

Figure No. III (B) is the pattern written from the basic threading plan at III (A). The numbers written on this threading draft at III (B) are dark threads and the X's are the light warp threads. Thread from A to C, and then reverse back to the beginning for the complete. Use the regular tie-up as given above. The numbers on the order of weaving below indicate rising harnesses on the loom. Thread yellow and brown carpet warp singly through the heddles, sley 2 threads through each dent of a 15 dent reed or 30 threads to the inch.

The following weaving instructions are the results of an experiment on this threading draft carried on by Miss Meatrie Carrothers, an active Guild member, in the weaving group this past fall. We hope you will also find this material of interest.

No. I. Weave with weft of yellow Enterprise cotton for the light weft and No. 20 brown mercerized cotton for the fine weft. L refers to the light or yellow weft in these directions, and D is the dark or brown weft.

(A) 23 L repeat 2x
14 D repeat 2x
34 L " 2x
12 D " 2x
14 L " 2x
23 D " 2x
12 L " 2x
34 D " 2x
(B) Repeat all of A to B 2x.
then
23 L repeat 2x,
12 D center, reverse back in same order to A for complete repeat.

Try the same order using brown softspun carpet warp alternately. And use the pairs only once instead of 2x. The effect is quite different.

For this use heavy Rug Filler for the dark weft and carpet warp for the fine weft of light color. One shot on each shed.

No. II.

For this use yellow raffia for all of the pattern shots. One shot on one harness alone.

No. III.

1 alone
2 alone
3 "
4 "
1 "
2 "
3 "
4 " center, reverse back to the beginning in same order.
The raffia only shows on the top side of the piece, the back is entirely of warp skips. A most unusual effect.

No. IV. For this use heavy rug filler, or soft-spun cotton doubled to make a very heavy weft thread. Brown was used for this weft color. Heavy rug wool used for weft on this would make good upholstery materials. The warp shows almost entirely on the back, the weft but very little. One shot of weft on each shed. Order of weaving is, 3 alone, 4, 1, 2, 3, 4, 1, 2, 3, 4, 3, 2, 1, 3, 4, 3, 2, 1, 4, 3, 2, 1, 4, 3, for the complete repeat.

We think these are something out of the ordinary, and hope you will enjoy using them.

This year the News will be sent out two months at a time, but it will arrive about the 15th, instead of around the first week of the month. Please note this change.