

DRAFTING WEFT-FACED PATTERNS: FOUR-HARNESS TWILLS

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In this article some of the patterns that can be obtained when weaving weft-faced straight draw twills on four harnesses will be discussed. The next article will discuss what happens when broken twill threading is used.

The threading, tieup, treadling and drawback are given in figure 1 for a straight twill when woven as a balanced weave. What happens when this is woven as a weft-faced fabric? Let's go back to a diamond grid graph paper and the rules that were discussed in the first article of the series.

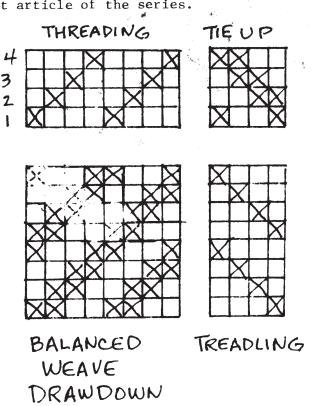


Fig. 1

Figure 2 shows how the first four weft shots show up. Remember that each weft floats over two warp threads, then under the next two. This means that the diamond is larger than was true when weaving plain weave.

Figure 3 shows where shot #1 shows up (down to the right of shot #4) and also the shot number directly above shot #1 (equals 1 + #1 harnesses or 5).

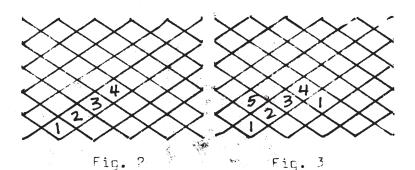


Figure 4 gives the numbering sequence for the entire grid. Don't worry that things skew up to the right. This is an artifact resulting from the way the diamond grid is drawn. The final weaving squares up.

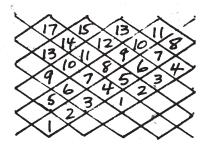
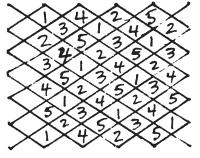
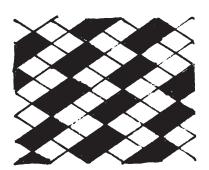


Fig. 4

It is always easier to remember the grid according to the number of shots in the repeat of the pattern that is used. This has been done for figures 5,6 and 7 which give the patterns for a 5, 7 and 8 repeat respectively. Weft A is white and weft B is black in all these diagrams.



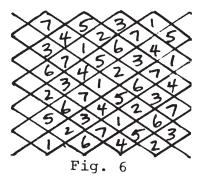


AAABB

Fig. 5

Fig. 5

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AAABABB

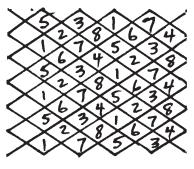
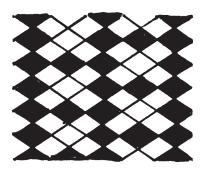


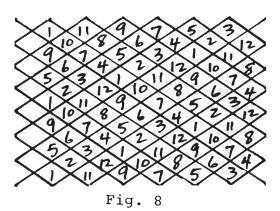
Fig. 7



AAABABAB

Fig. 7

One of the most interesting patterns that can be obtained with straight draw threading is one of the possible 12 shot sequences. This is shown in Figure 8. It is also shown as Plate 52 in Collingwood's bood. Plates 47-51 give further examples of weft-faced weaving with a straight 2/2 twill.



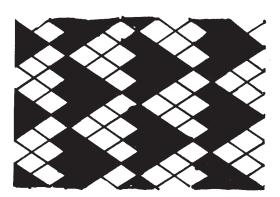


ABB AAB AAA BBB

