Barley Corn

Emery Classification

There are several structures that use this name. The one discussed here is a **Weave Compounded** by Adding Sets of Elements, Supplementary: one warp, two wefts, one of which is not needed for the integrity of the cloth.

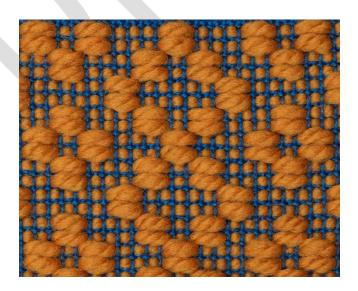
Weaving Category

Supplementary Weft Float Weave: the supplementary element is an additional weft which forms solid blocks of weft that are not needed for the integrity of the cloth. Barley corn is based on a rectangular float weave, spot Bronson (see entry).

Barley Corn on Four Shafts

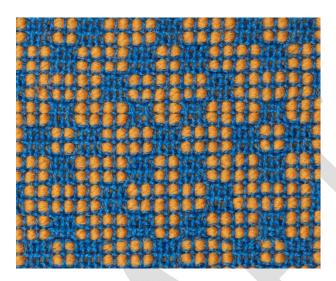
Fabric Characteristics

Below is the front of the fabric with three blocks; they are solid supplementary weft and they overlap by one thread, as a result of the shared thread on shaft 1, a characteristic of spot Bronson. The background is half-tones, showing both the supplementary weft and the ground warp and weft interlacing.



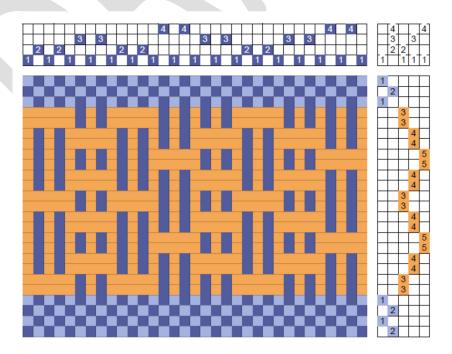
The motif is part of "Flowers of Caanan" from Davison's book (see reference).

The back of the fabric below shows the plain weave behind the blocks and the half tones for background.



Drawdown

Below is the sinking shed drawdown for the three blocks organized in the motif used to weave the sample above.



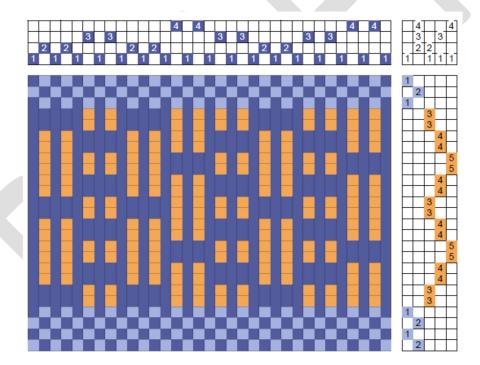
Every other warp thread is on shaft 1, and thus shared by the three blocks. A block starts on shaft 1 and alternates with a single pattern shaft as long as desired. At the end of the block, the thread on shaft 1 that is the beginning of the adjacent block is shared.

Plain weave can be woven across the fabric by treadling the tabbies, shaft 1 (tabby a) vs. all other shafts (tabby b).

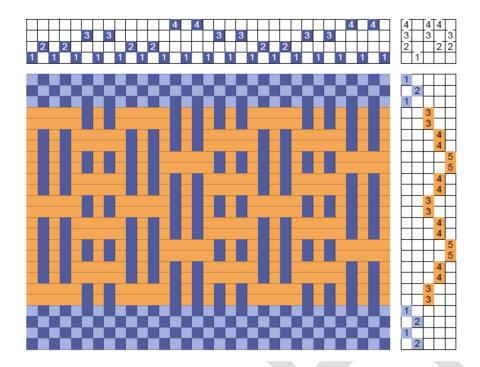
Not shown in the drawdown is that *each pattern pick* used in treadling order *is followed by one of the tabbies*; they intersect with the warp to form the ground cloth.

Each block is treadled by one pattern pick, shaft 1 plus the pattern shaft. It is repeated to square the block or as long as desired.

Below is the reverse side of the cloth, obtained from the *rising shed* drawdown.

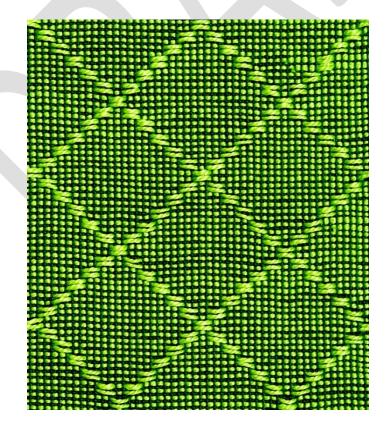


The *sinking shed* drawdown that follows is to weave weft floats on the top of the fabric.

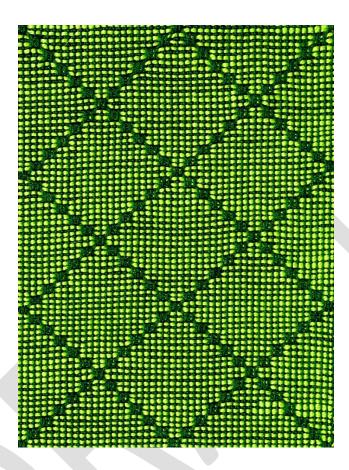


Barley Corn on Eight Shafts

Fabric Characteristics



The prior photo of the fabric sample shows the weft blocks on the front. The one below, the back of the fabric, shows blocks of plain weave, not warp floats.



The background is plain weave with the pattern weft showing through.

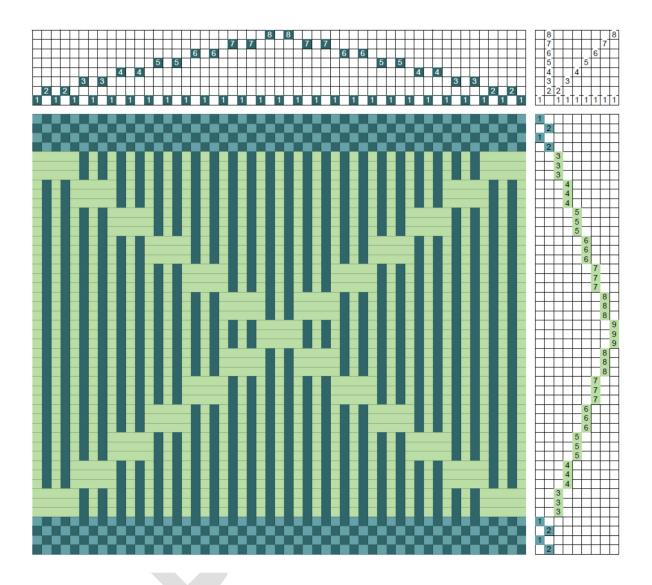
Drawdown

The *sinking shed* drawdown that follows was used to weave the fabric sample just shown.

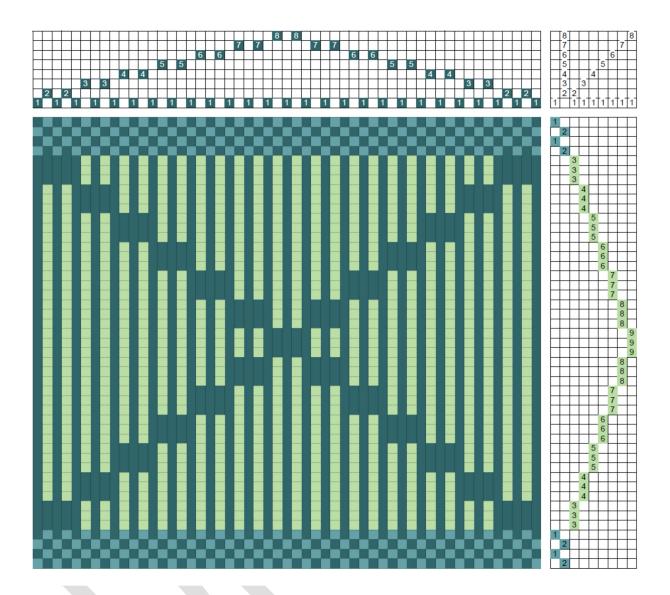
There are seven blocks possible on eight shafts, one block per pattern and shaft 1 shared by all. The threading of a block starts on shaft one, followed by the pattern shaft. At the end, the thread on shaft 1 is shared between the two adjacent blocks.

The tabbies for treadling are as in the four-shaft version: tabby a is shaft 1 vs. tabby b, all pattern shafts.

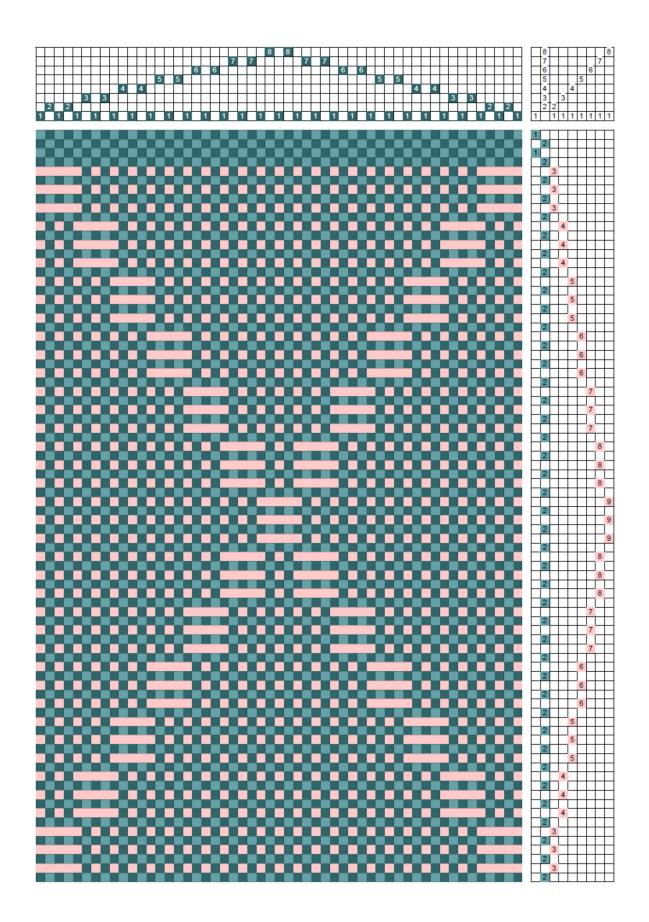
Each block is woven by treadling one pattern pick, shaft 1 plus the pattern shaft; it is repeated as long as desired. Each pattern pick alternates with tabby b.



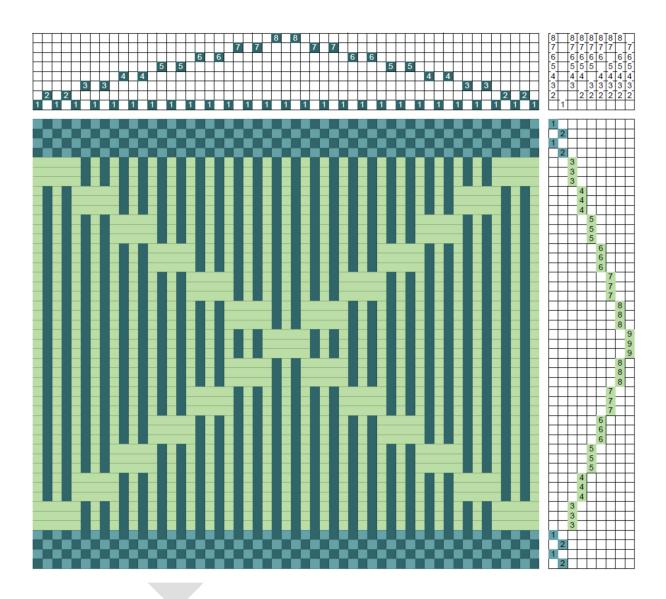
The next is a *rising shed* drawdown, the reverse side of the fabric with plain weave blocks.



To better visualize the background, the next *sinking shed* drawdown shows the block pick alternating with the tabby, using the motif of the previous drawdowns.



The next *rising shed* drawdown is to weave the weft blocks on the top of the fabric. This may be one case when weaving the fabric upside down would be worthwhile since there are so many shafts to lift for each treadling step.



Function

The double weft makes the fabric hefty, so it is ideal for blankets, pillows and similar household textiles.

Sett

To allow room for the supplementary weft, the sett should be more open than the one for plain weave. The sample was woven using 10/2 mercerized cotton sett at 18 epi, more open that the 24 epi I may use for plain weave.

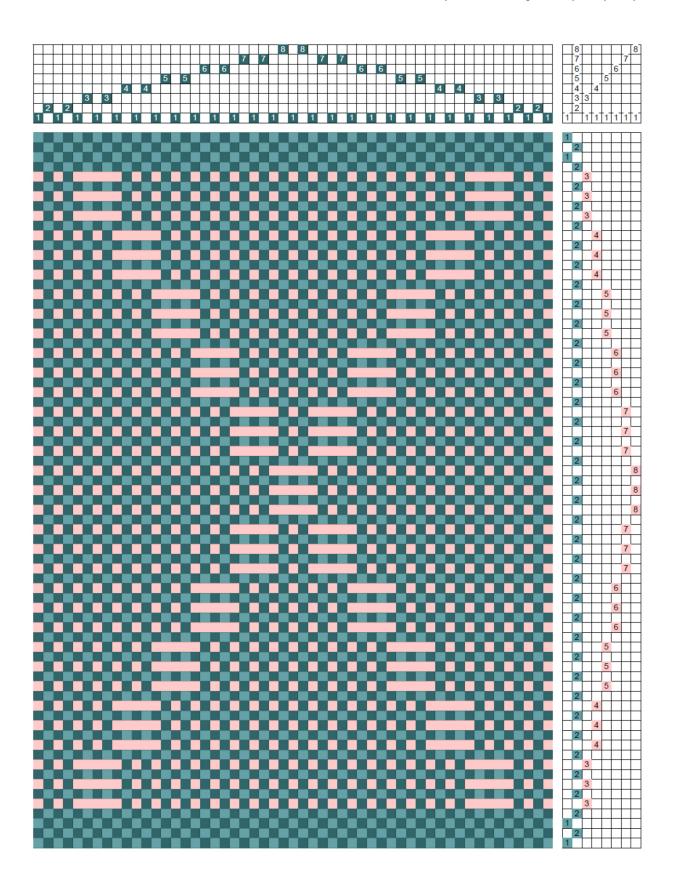
Width of Blocks

The block is not fixed, it can be as long as desired. The weft float covers all the threads of the block, plus the thread on shaft 1 that is shared with the adjacent block.

Number of Blocks Available

Shaft 1 is shared with all the blocks. Each additional shaft provides one additional block. Thus, there are three blocks on four shafts and seven on eight shafts.

However, if a plain weave selvage down the length of the fabric is needed, one block can be sacrificed. If not treadled, plain weave will result, as shown in the *sinking shed* drawdown that follows. Where block A was in the previous drawdown, here is it plain weave because the treadling of block A has been eliminated. This can also be done on the four shaft version.



References

Black, Mary E. *New Key to Weaving*. New York, NY: MacMillan Publishing Co., Inc., 1945, 1975 printing.

Davison, Marguerite Porter *A Handweaver's Pattern Book*. Swarthmore, PA: Marguerite P. Davison, 1994.

Emery, Irene. The Primary Structure of Fabrics. Washington, D.C.: The Textile Museum, 1980.