

Log Cabin: Color-and-Weave Plain Weave

Emery Classification

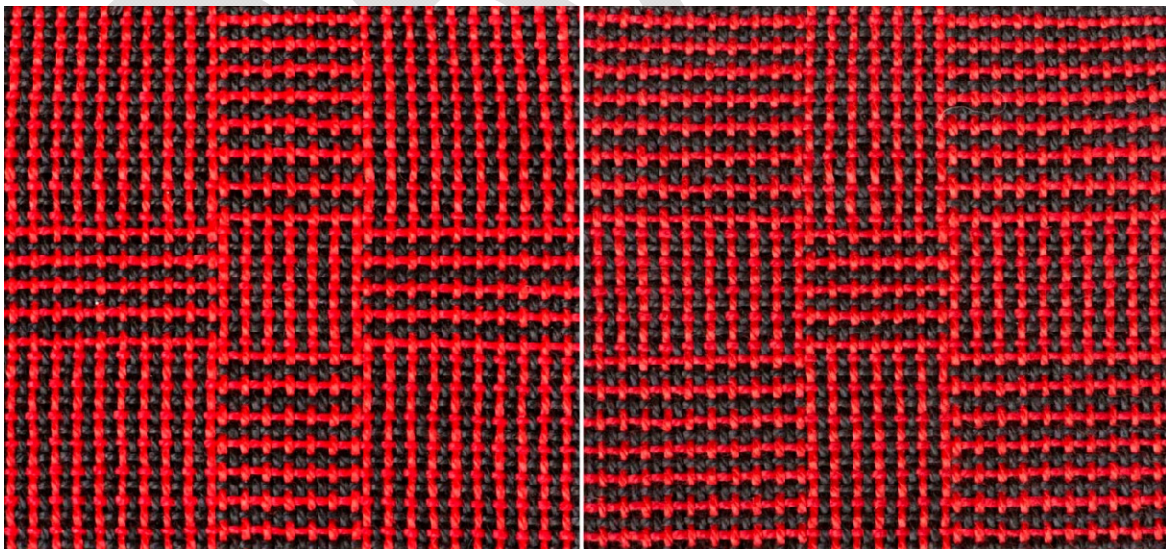
Plain Weave is a **simple weave** with the maximum intersections of warp and weft possible. A simple weave has two elements, a warp and a weft; although in this case there are two different color threads in the warp and in the weft, all warp threads perform one function and thus are considered an element; the same is true for the weft.

Weaving Category

In true color-and-weave, the structure and the color arrangement form an optical illusion that blurs the structure. Good contrast is needed between the two colors used to see the optical illusion well. While other structures may form color-and-weave blocks, log cabin is the quintessential example.

Fabric Characteristics

In the fabric sample below, we see blocks of vertical and horizontal stripes that obscure the plain weave that forms the fabric.



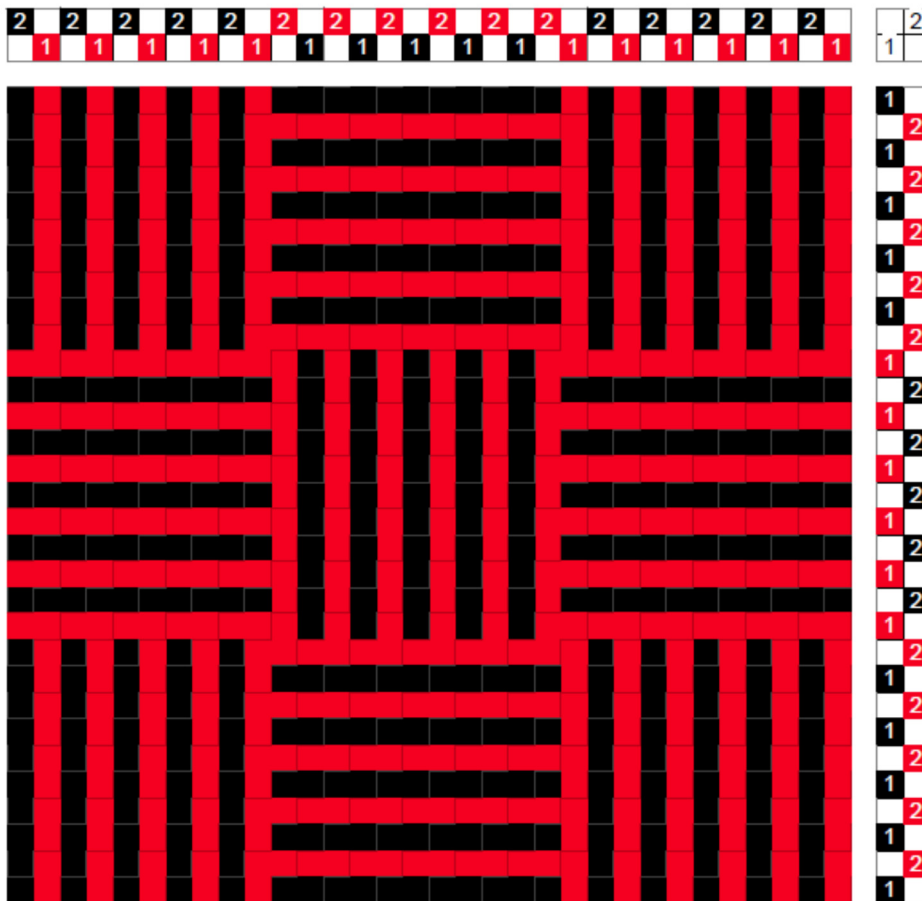
The photo is of the two sides of the fabric. When one side has a block of vertical stripes, the other side has horizontal stripes and *vice versa*.

Drawdown

The drawdown allows us to analyze the fabric. The threading is of plain weave on two shafts, but of course, any odd vs. even threading is equally possible.

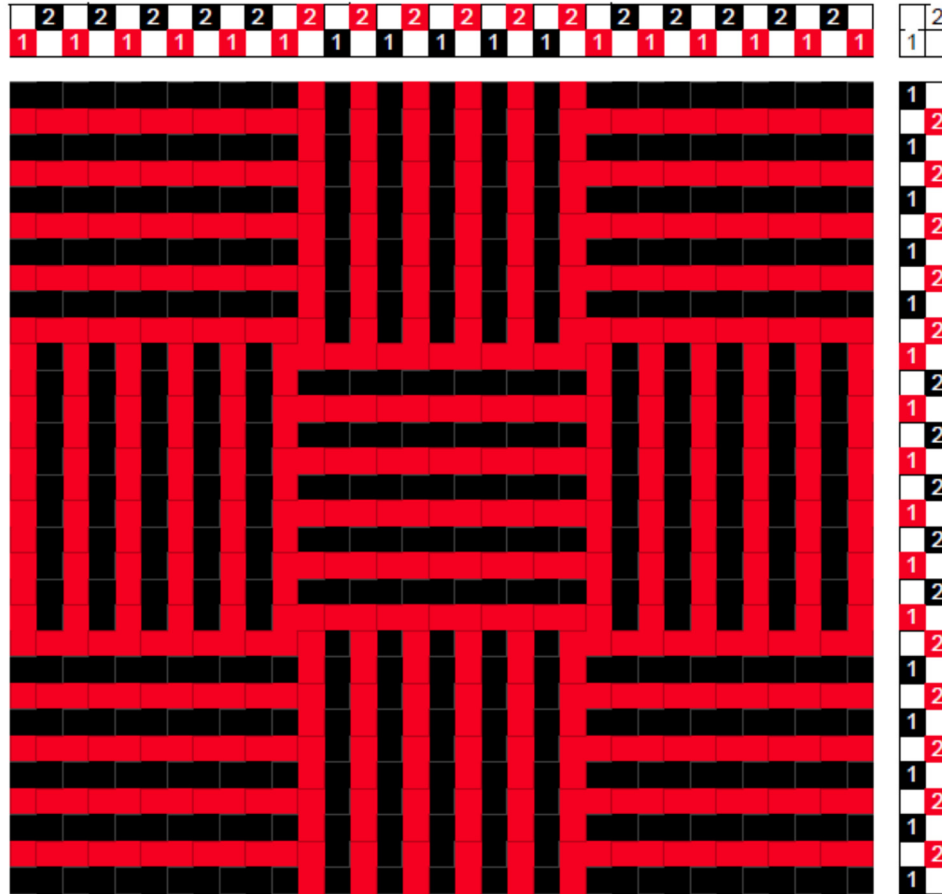
The two colors alternate in the warp and in the weft. Where the two colors are switched in the threading, the stripes change directions. Similarly, when the colors are switched in the treadling, the stripes change direction.

The drawdown is *rising shed*. There are two blocks in the threading, one starting with red, the other starting with black. When the warp and weft start with different colors, the stripes are vertical. For example, the block on the top right starts with the red threading; it has vertical stripes when the interlacement starts with the black weft. When the warp and weft start with the same color, the stripes are horizontal. The top middle block has a threading and treadling that start with black, and it has horizontal stripes.



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The other side of the fabric is the opposite. Horizontal stripes are formed when the threading and treading start with different colors. The *sinking shed* drawdown below shows the other side of the fabric as is usually the case.



Function

Plain weave fabric is very versatile. The log cabin design may influence the choice of final project: large blocks may be good for a blanket, small ones for a scarf.

Sett

The sett for plain weave for any given yarn is the appropriate one.

Width of Blocks

The width of each block is controlled by the number of threads alternating colors until the colors are switched as can be seen from the drawdown. Blocks do not have to be the same size.

Similarly, the length of the treadling before switching colors determines the height of the block.

In the fabric samples some of the blocks are squares, other rectangular.

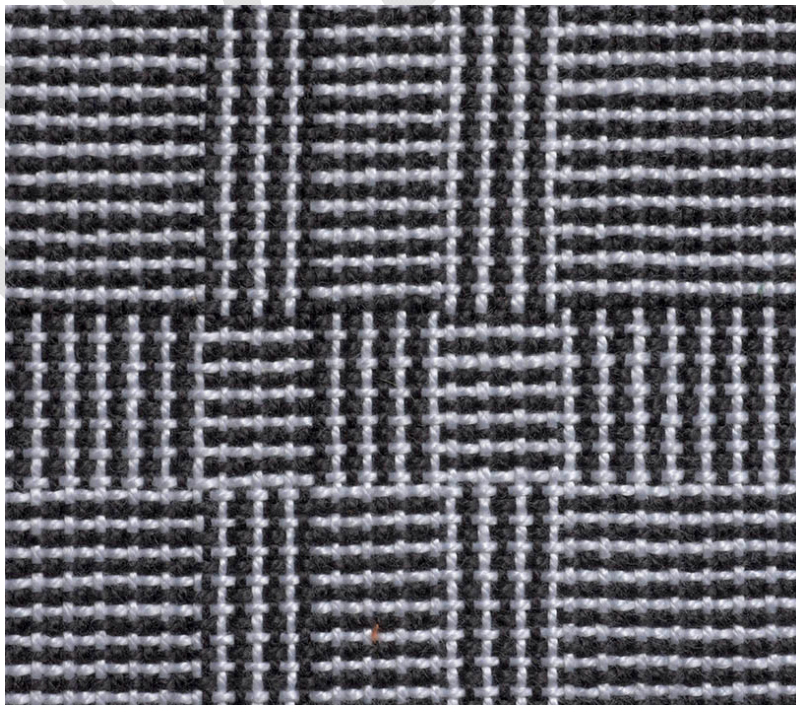
Number of Blocks Available

Two shafts are needed for two blocks. Log cabin traditionally needs two shafts. It can be woven on a rigid heddle loom.

Other Options

The fabric sample above used red for the transition for all blocks. If black had been used, the fabric would look different.

In the black and white sample below, sometimes black is used to change blocks, other times white. Which is preferred is a matter of personal aesthetics.



References

Petrini, Marcy. *Right from the Start: What Makes a Fabric Color-and-Weave?* *Shuttle Spindle & Dyepot*, 183: 20-25, Summer 2015.

Sutton, Ann. *Color-and-Weave Design. A Practical Reference Book*. Asheville, NC: Lark Books, 1984.

Windeknecht, Margaret and Windeknecht, Thomas. *Color-and Weave*. NY: Van Nostrand Reinhold Company, 1981.

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