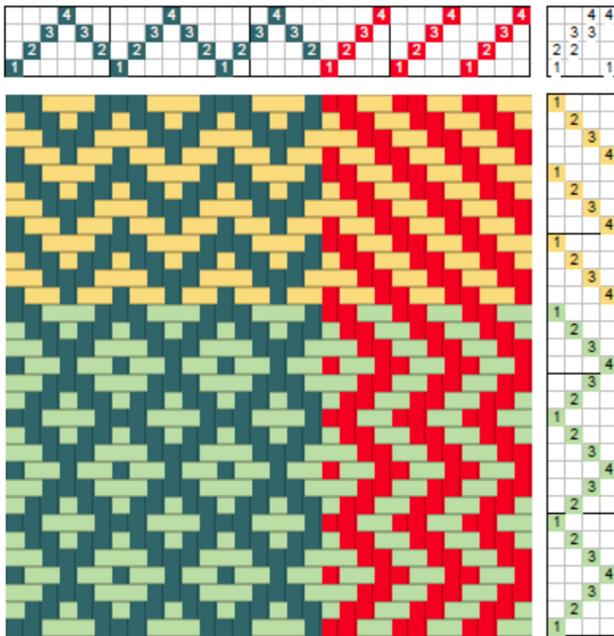


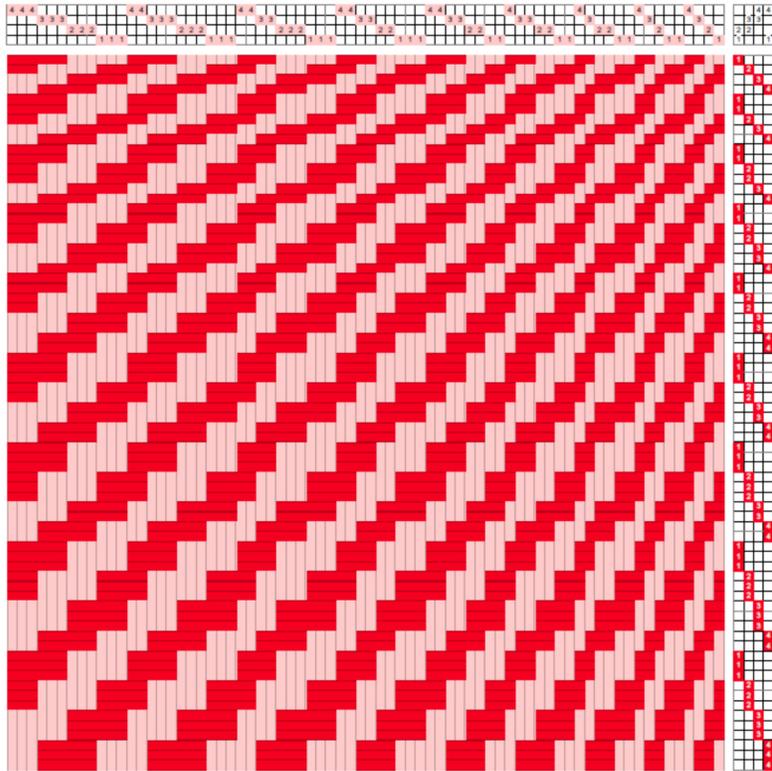
## Month # 2: Twills

Chances are that, if you have woven for any length of time, you have woven a twill. But have you woven them all?

- The most common twills are straight, pointed, bird's eye, and broken; are there any you haven't woven? The threading and treadling can be mixed and matched as shown below for the straight (red warp, yellow weft) and pointed (greens) in the drawdown. Try a twill gamp.

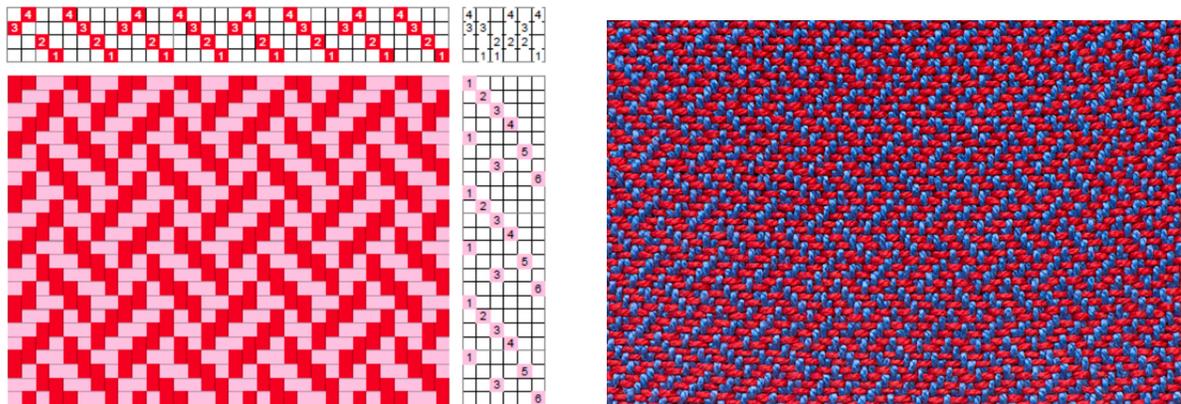


- Another possibility is an undulating twill; an example of a fabric is on the left, the drawdown on the next page. The threading sequence is long, the drawdown shows just one repeat, but it is easy to remember; starting with the straight twill 1, 2, 3, 4, we increase the threads on the shafts, in this case as follows: 1, 1, 2, 3, 4, 1, 1, 2, 2, 3, 4, etc. In general, we can repeat one or more shafts,

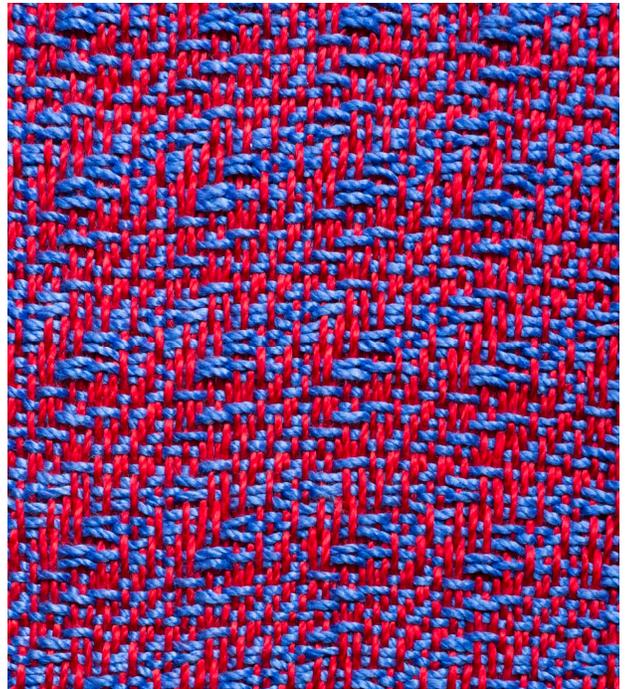
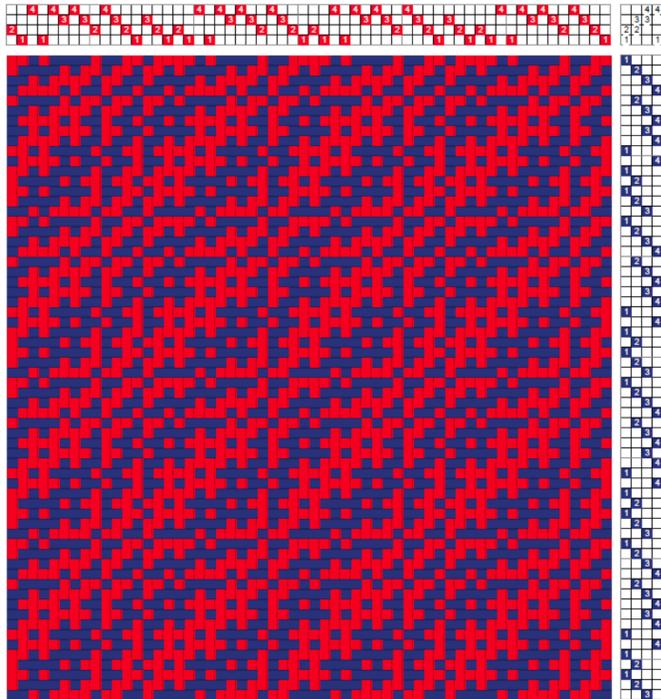


we can repeat a shaft once or more times, there are no specific rules; we have to be mindful of the length of the floats and adjust the sett so we don't have stiff areas next to unstable ones. The treadling shown is "tromp as writ", that is, it follows the threading, but a straight twill treadling could be used.

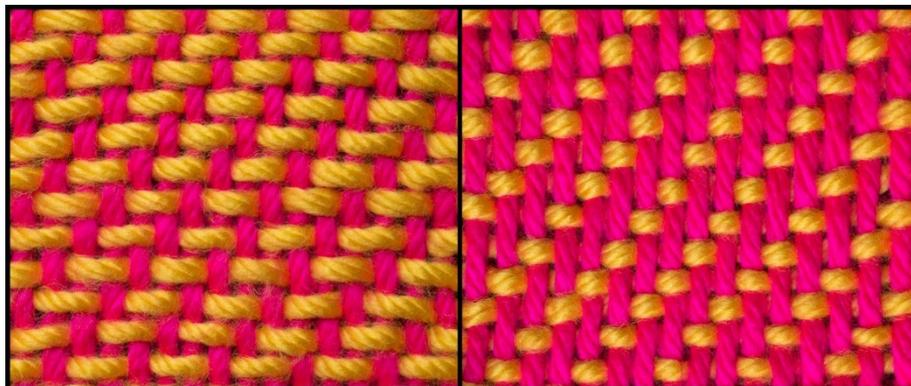
- Plaited twills are often woven on more than four shafts because there are many possibilities, but below we have a plaited twill on four shafts, drawdown and fabric:



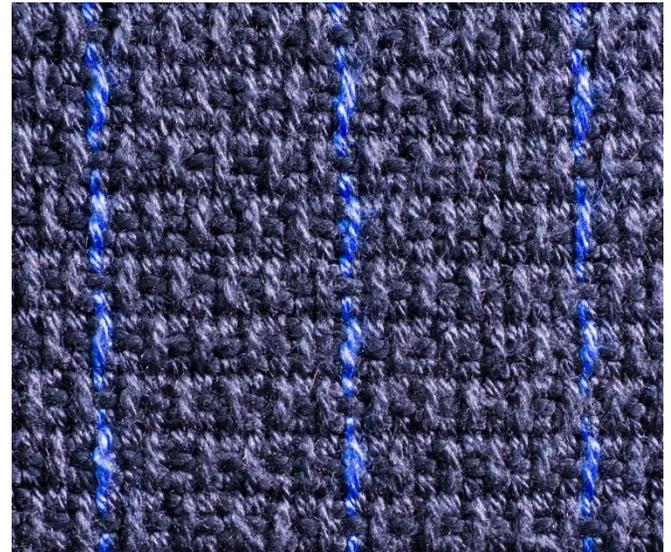
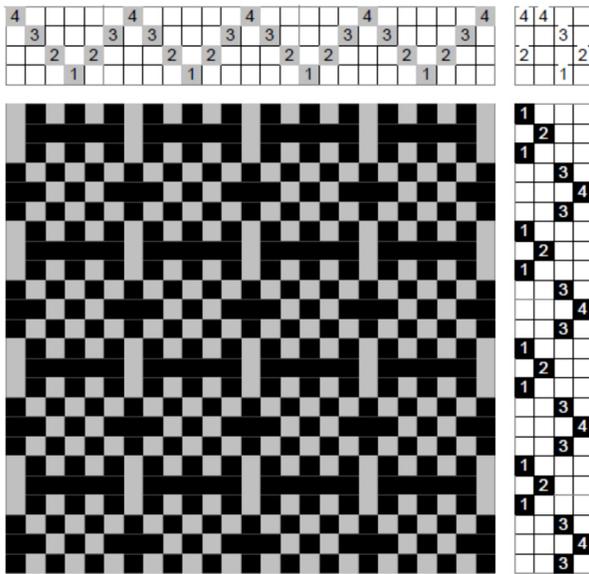
- Advancing twills also have a long repeat. On four shafts, we start with three, then we drop the first shaft and add the next; for example: 1, 2, 3, 2, 3, 4, etc. The straight twill is a good place to start, as shown in the drawdown and fabric on the next page, but other twills could also be used.



- All of those twills are 2/2 twills, meaning that in treadling, threads on two shafts come up while threads on the other two stay down; they are balanced twills; we can also weave unbalanced twills 3/1, which is the reverse of 1/3. Several of the twills can be woven this way. The combination of a broken twill treadled 1/3 is sometimes called false satin, which will be our subject later in the year.
- We can weave twills on 3 shafts, and those are unbalanced since there is an odd number of shafts. Below is the front and the back of a 3-shaft twill.



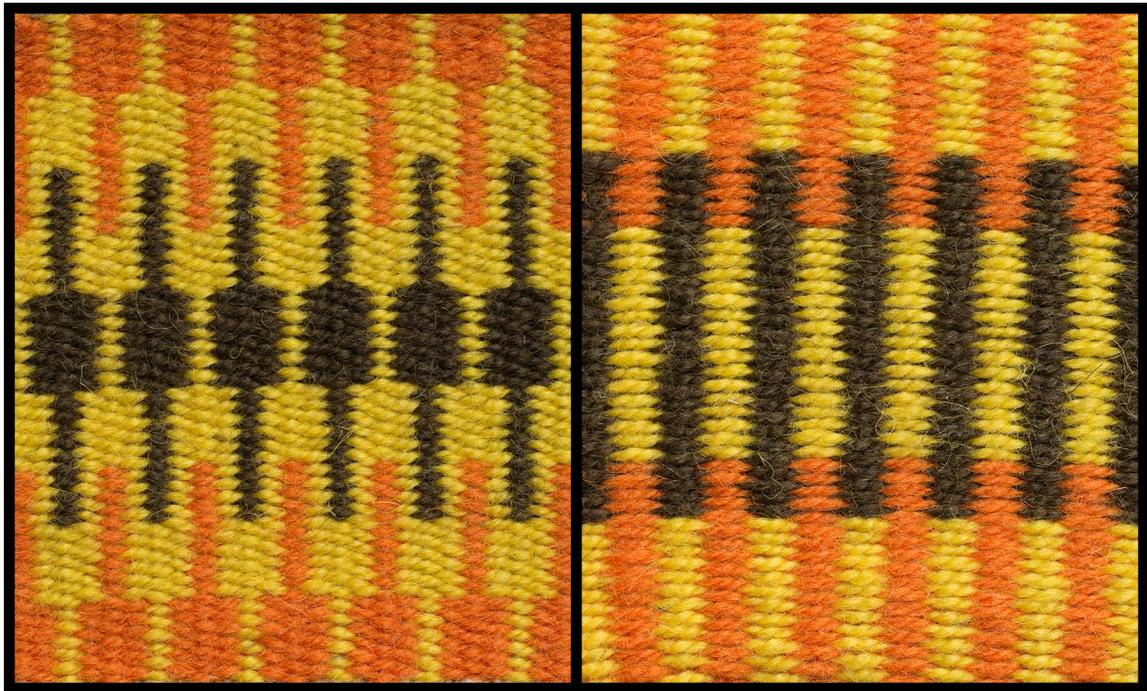
- When a twill is described with the ratios, 2/2 or 1/3, it means that every step of the treadling sequence follows that ratio and the twill is called “regular”. But what if the sequence is mixed? We call those irregular twills, sometimes referred to as “fancy twills.” There are many options for these, and here is an example: with drawdown and the corresponding cloth.



- Ideas for fiber? The staggered floats on the twill make for a fabric with a lot of drape, which can be enhanced by the use of slick fibers: traditionally silk, but also Tencel® and other regenerated fibers. They make wonderful accessories, scarves and shawls.
- On the opposite side of the spectrum, we can use twills with an open sett and a lofty weft for a weft-faced fabric, sturdy and firm enough for a rug. Here are two examples with a straight twill threading and treadling, but with different color sequences; on the left: **orange, orange yellow, yellow**; on the right: **orange, orange, yellow, orange, orange, yellow, yellow, yellow, yellow**.



- Krogbragd is a three-shaft pointed twill woven as a three-shaft straight twill. It has characteristic columns of colors, made more prominent with the use of contrasting colors: dark (D), in the sample below brown; medium (M), in this case orange; and light (L), yellow here. The sample shows the various combinations of columns; in this case there is a right side (left in the photo) and a wrong side (right) of the fabric. Attractive motifs are formed in the front, solid floats in the back.



What twill will you explore this year?

## More Ideas for Month 2

You have woven twills many times, so why should you take a whole month to study twills? Just how well do you know twills? There is an easy way to find out, take a test:

<https://www.marcypetrini.com/marcy-s-blogs/299-blog-081-twill-test>

The answers are the following month, but no cheating!

If you are comfortable weaving twills, try combining them, at least two. The challenge is to balance the number of threads in the repeat of your fabric with the combination of your twill sections. I am enclosing a spreadsheet that I use for such calculations with a handout that shows some examples. And, yes, I am tricking you into starting to design.

Following is a list of resources from my website. Of course there are tons of other resources.

### **Twill Entries in the Pictionary**

<https://www.marcypetrini.com/index.php/pictionary>

Advancing Twill

Birds' eye Twill

Broken Twill

Crepe Twill

Dornick twill

Extended twill

Goose eye

Interlocking twill

Irregular twill

M's & W's Twill

Plaited twill

Pointed Twill

Reverse pointed twill

Ribbed Twill

Rosepath  
Shadow Twill  
Steep twill  
Straight twill  
Three-shaft straight twill  
Twill Blocks on Four Shafts  
Twills  
Unbalanced twills  
Undulating Twill

## **Blogs on Twills**

<https://www.marcypetrini.com/index.php/marcy-s-blog-posts/blog-menu-index>

Undulating Twills December 2015  
Treadling Undulating Twills January 2016  
Plaited Twills January 18, 2016  
Advancing Twills February 2016  
Four and Eight Shaft Twills June 2016  
Four and Eight Shaft Twills II June 13, 2016  
Convergence Yarn and the Plaited Twill September 2016  
The Finished Plaited Twill Shawl April 2017  
Twill Blocks on 4 shafts November 2018  
How Well Do You Know Your Twills? August 2020  
Twill Test Answers September 2020

I would suggest that you do not use unbalanced twills for this month since we will study them along with satins. And twill blocks generally are made with unbalanced twills, so that's an option for next month. Also, we will take on treadling methods later because there are tons of it and they can be applied to twills or a number of other structures.

Have fun!