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#1 Extended Twill 4

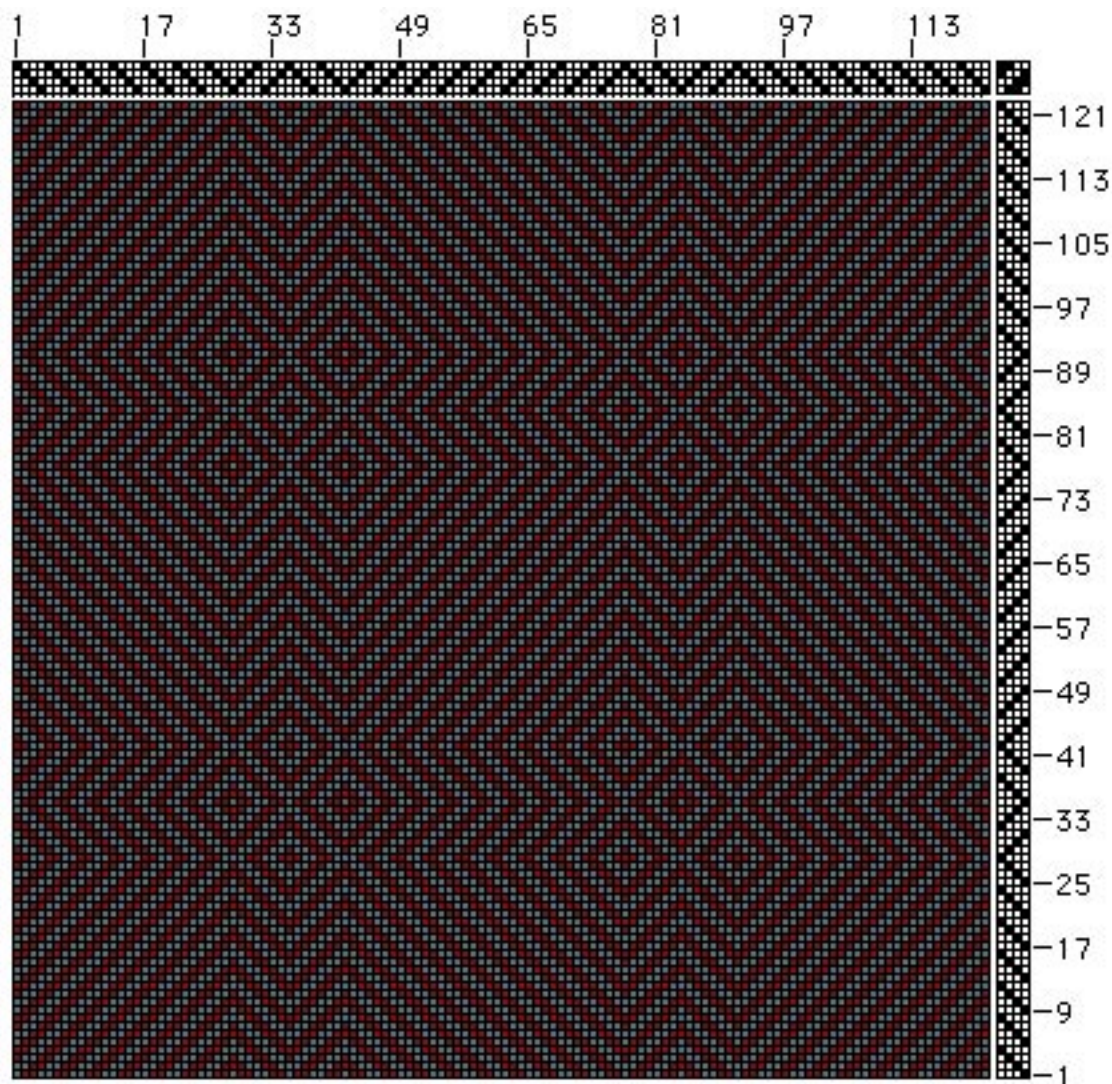
122 threads, 122 picks

Warp: 2/4 Fine wool 10 epi

Weft: same as warp but in different color if desired—or—use a yarn that has approximately the same size as the warp.

For variety, divide the drawdown into sections on which you would use different colors. Try alternate treadlings. Brush the finished piece. Experiment with contrasting yarns as well as closely blending ones.

Partial view of sample
when woven



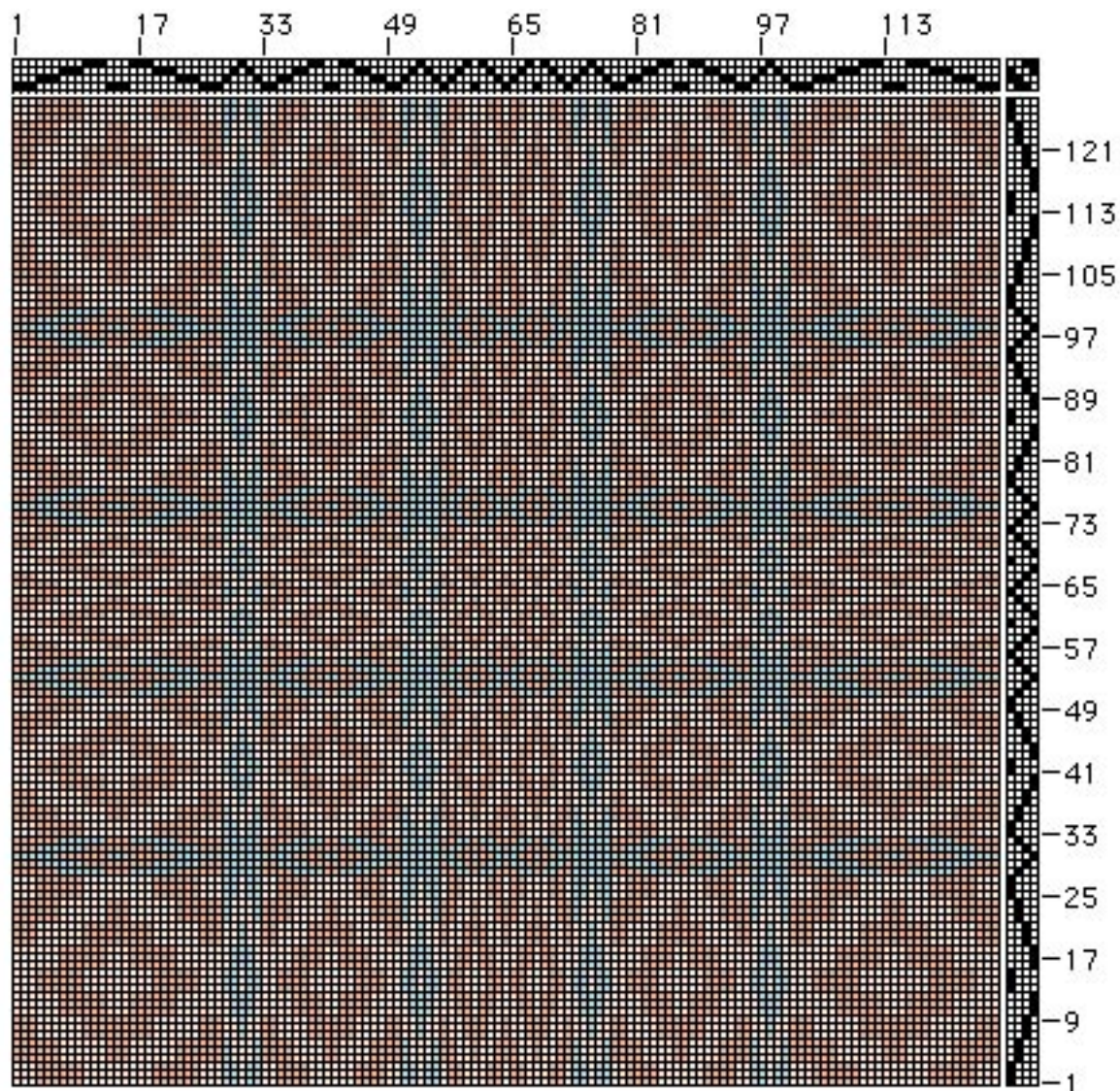
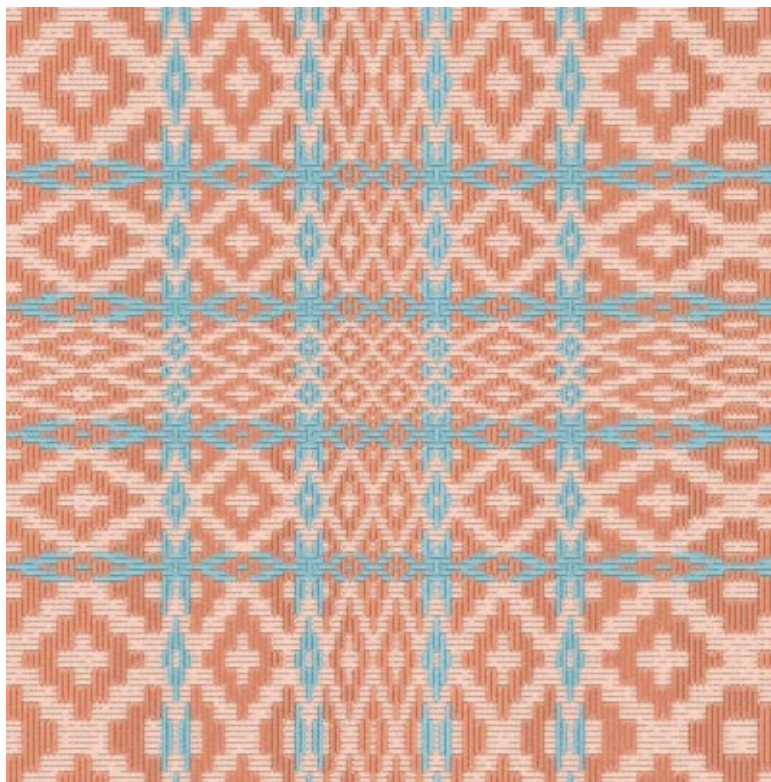
#2 Undulating Twill 4

Warp: 10/2 cotton 24 epi (a closer set would produce a heavier fabric with skips that are not as long)

Weft: same as warp color “as drawn in”

A basic rosepath threading with a couple of “points” added was the inspiration for this design. The individual threads were then expanded to three and two threads on the same shafts to produce this undulating twill.

Ideas for a change in the weft might be to try a heavier thread for the accent where desired or try all one color, whether contrasting or matching.



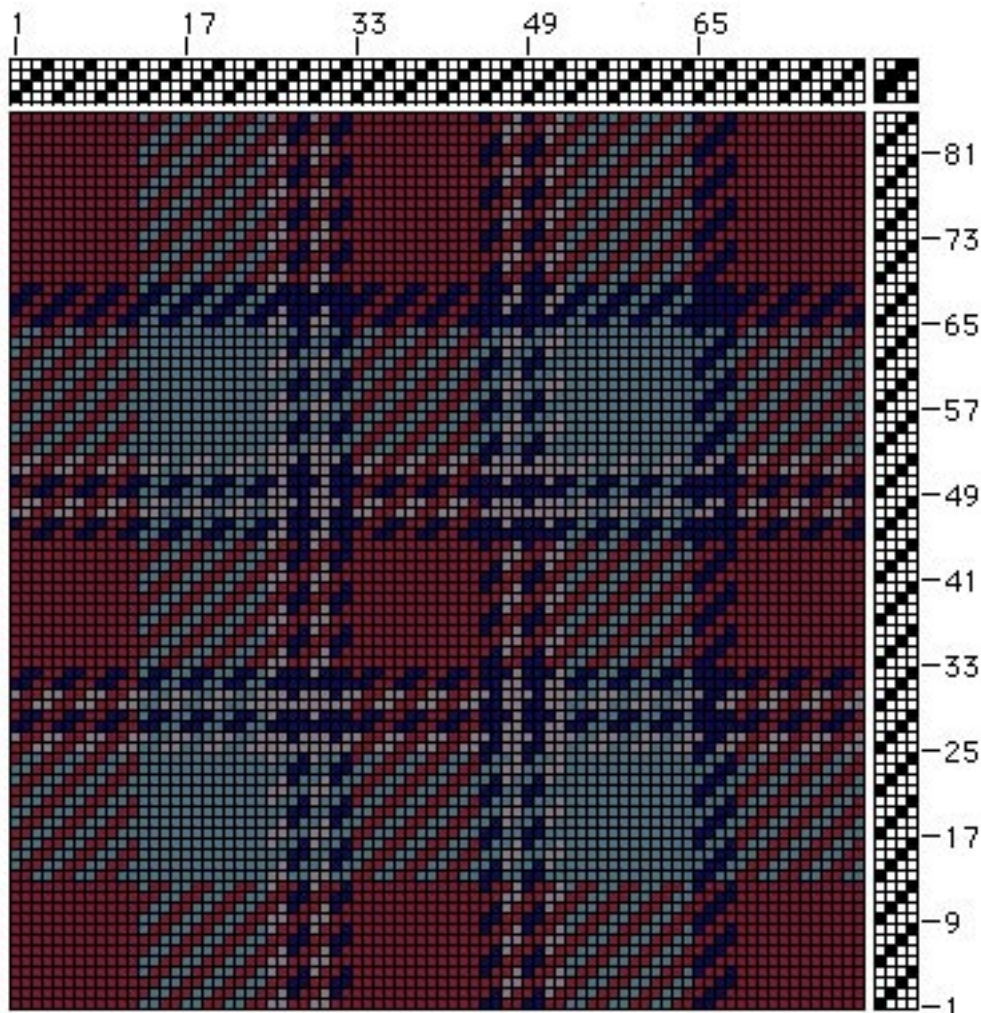
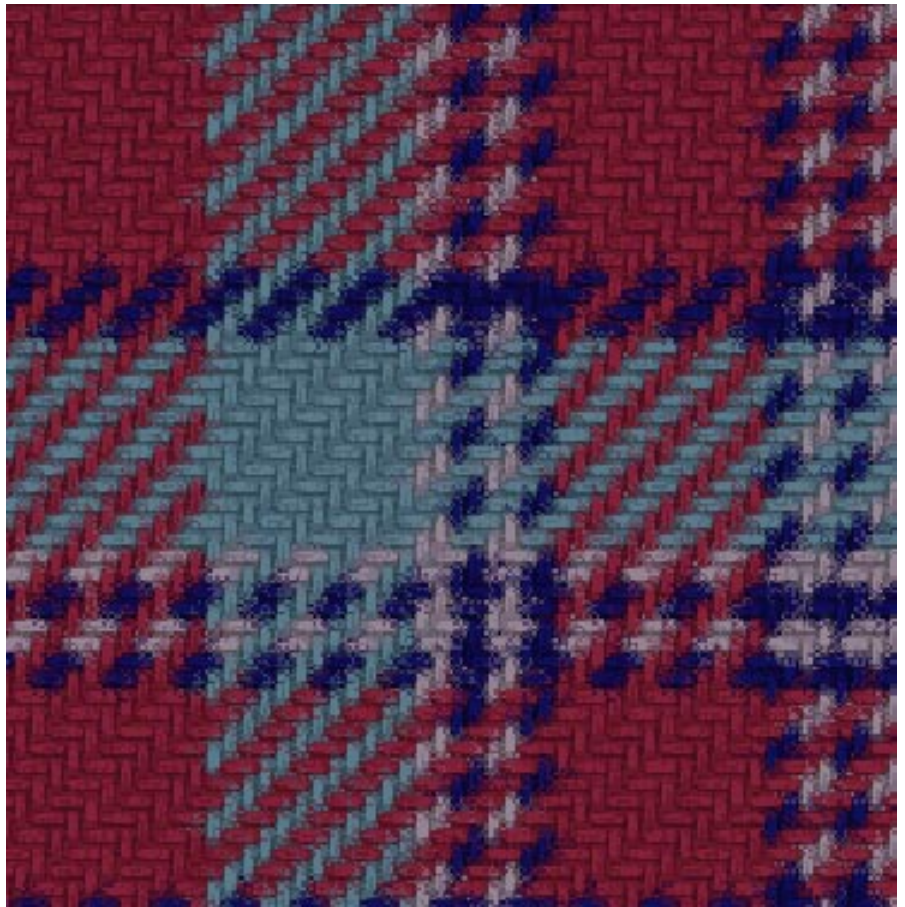
#3 Tartan Color Twill 4

Warp: 2/4 Fine wool 10 epi

Weft: same as warp color as drawn in

One of the best sources for authentic Scottish tartan setts is *The Setts of the Scottish Tartans*, recorded by Donald Calder Stewart. Color places of the setts of most of the major tartans are found in this book.

The Tartan Color Weave of this sample is not an authentic sett, but one that has been designed for use as a blanket. This fabric is best when machine washed and brushed while damp. It becomes quite thick and soft to touch as the wool still retains much of the grease in it and needs the finishing to bring out its beauty.

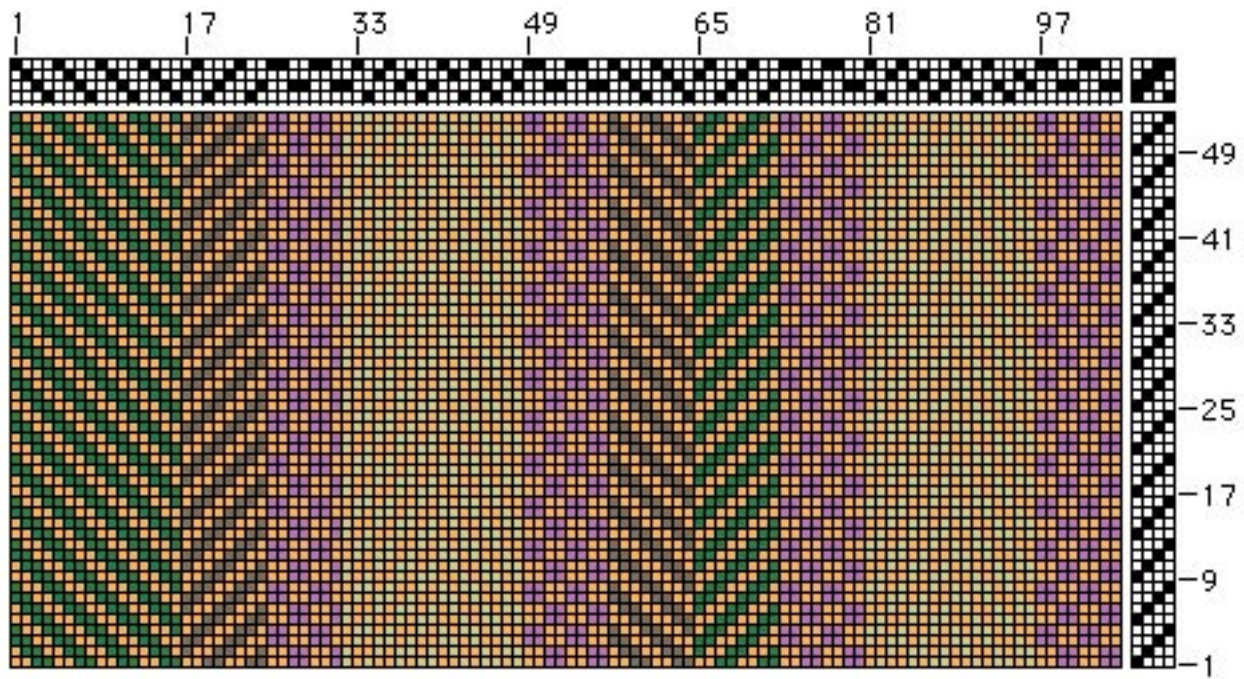


#4 Combinationr Twill 4

Warp: 10/2 cotton at 24 epi. in a 12 dent reed

Weft: same as warp but only one color for background

One of the best sources for This twill combines straight, broken, basket and alternating. It could be used for almost any purpose if properly set with the proper yarns. A completely different effect can be done in different colors of yarns. Substitution of different yarns on the computer or paper is a good exercise in color blending to test the effect of color combinations.

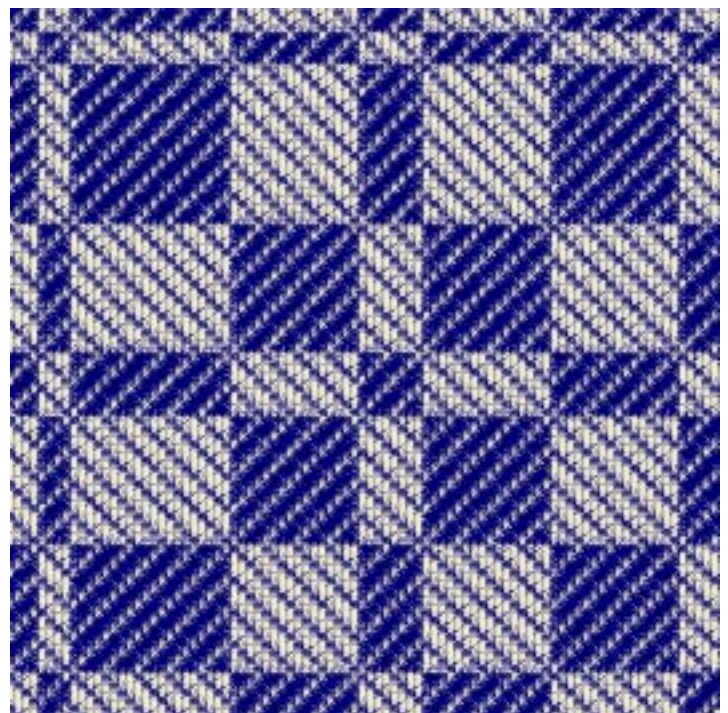
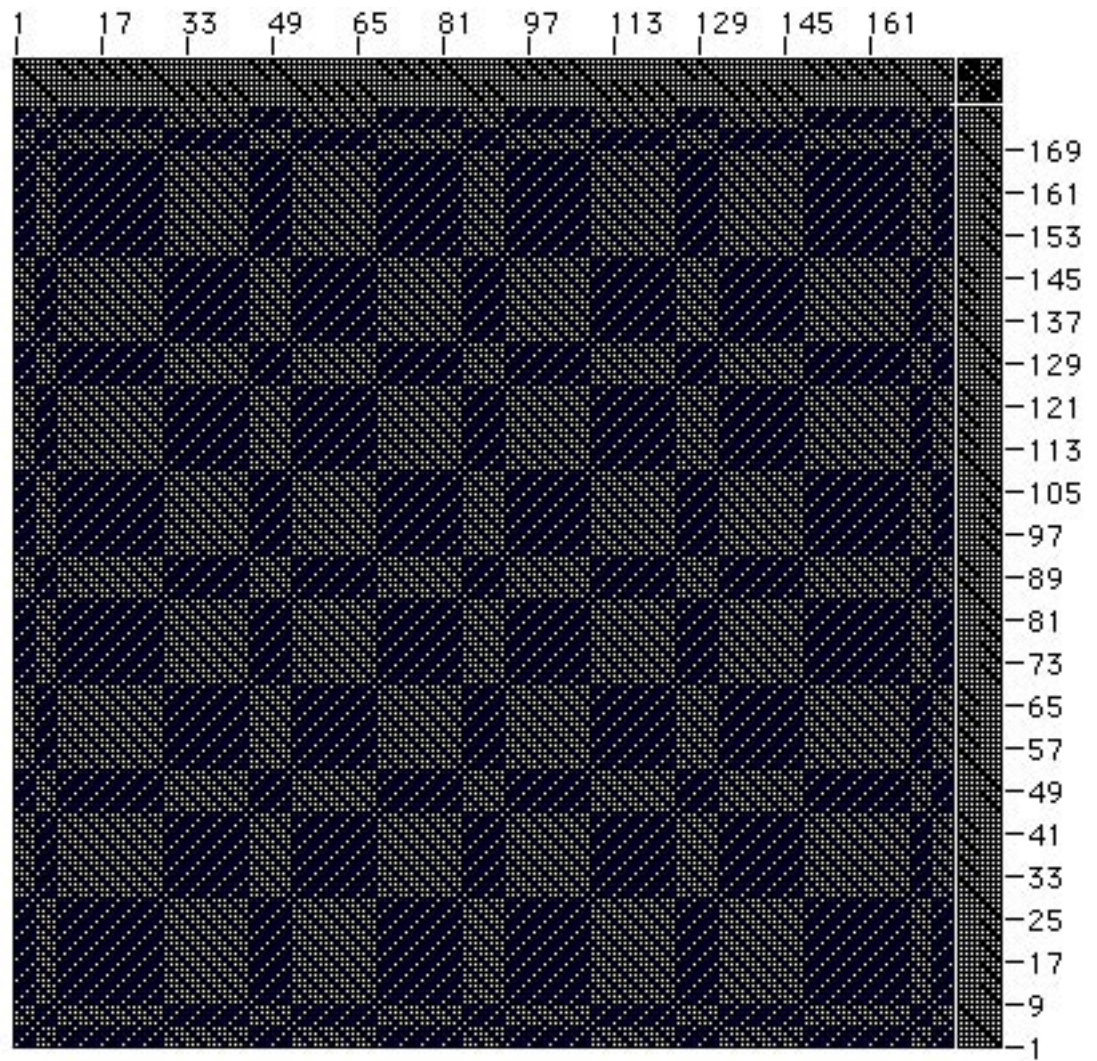


#5 Diaper Twill 8

Warp: 10/2 cotton at 24 epi. in a 12 dent reed

Weft: same as warp but only one color for background

An old favorite in Colonial America as well as Europe, was the diaper twill. Used in all sorts of ways—whether coverlets or linens, this weave has also been called “false damask.” True damask requires a minimum of 5 shafts per block. If more than 8 shafts are available it is possible to design some warp faced and weft faced twills combined in more intricate patterns. Just remember the basic rule of the herringbone—the angle of the twill changes at the intersection of the warp and weft. See pages 48 and 49 of Holmes’, *Manuscript Notes on Weaving*.



Partial views of samples when woven

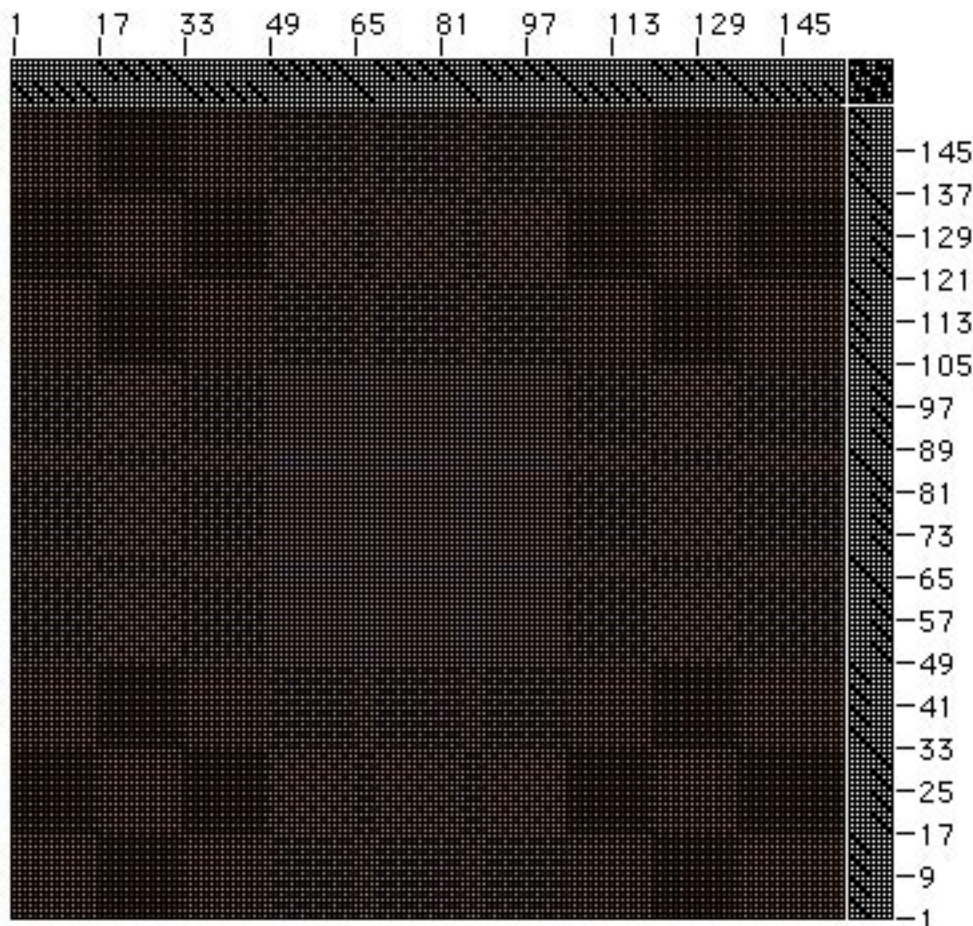
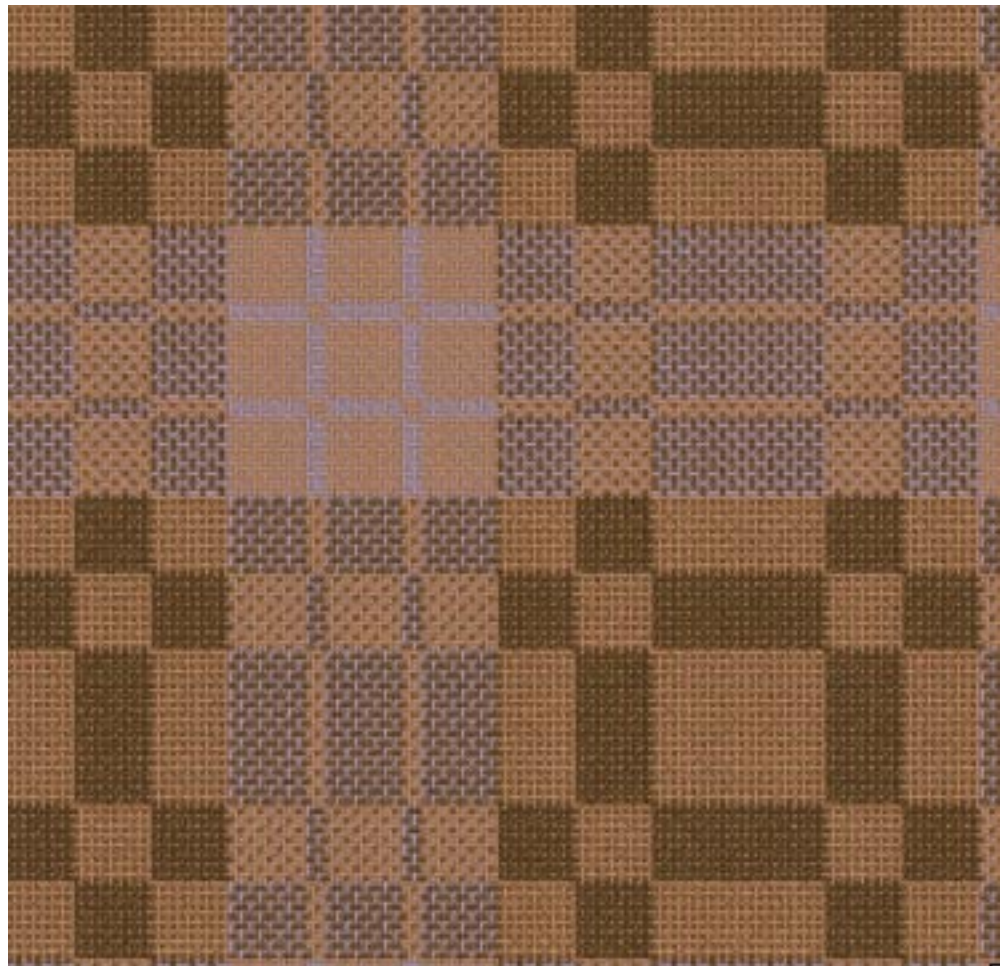
#6 Double Weave 8

(note that the threading and treadling only are in twill formation, the weaving is actually double plain weave)

Warp: 10/2 cotton at 40 epi. in a 10 dent reed—4 colors with 2 each alternating for the length of each block

Weft: same as warp

The traditional double weave done in Colonial America was done using two contrasting colors woven so that solid blocks of color produced the design. In Wales, a double weave has become famous—Welsh Tapestry. This type of weaving employs several



colors in both warp and weft and produces some areas in “muted” colors where two different colors of yarn interlace with one another as well as the solid blocks formed by the interlacement of the same color.

Experiment using different sequences of yarns on different treadling blocks to see what effect may be obtained.

Dyeing one’s own yarns can be a fascinating project when done with double weave—especially if you have access to a multi shaft loom.

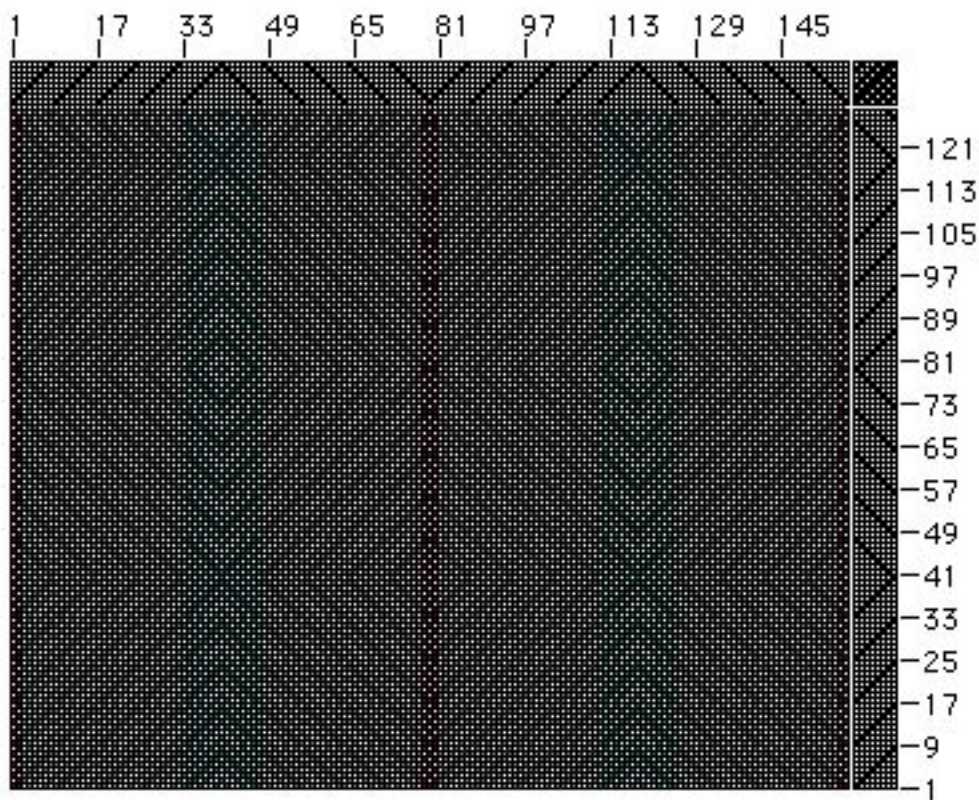
#7 Point 8

Warp: 12/2 cotton at 20 epi. in a 10 dent reed—background and contrasting colors

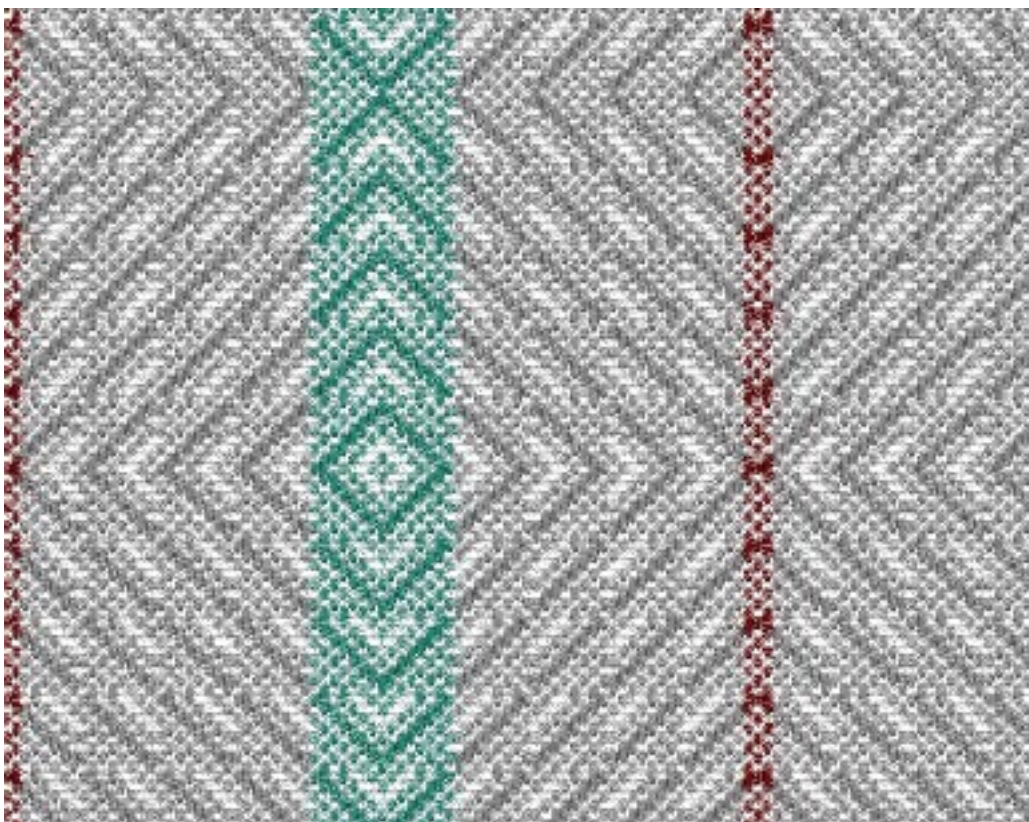
Weft: same as warp

This point twill has been extended to produce a larger pattern. This can be done by repeating the straight twill 1>8 shafts before making the points. Certain sections were selected to place the contrasting yarns with the doubled yarn chosen to give a spotted effect for the vertical stripe.

If a “solid” stripe or pin stripe is desired it would be necessary to place the individual threads on separate shafts to avoid the dotted line.



For a complete vertical stripe effect, eliminate the **weft** insert on the 8>1>8 point treadling.



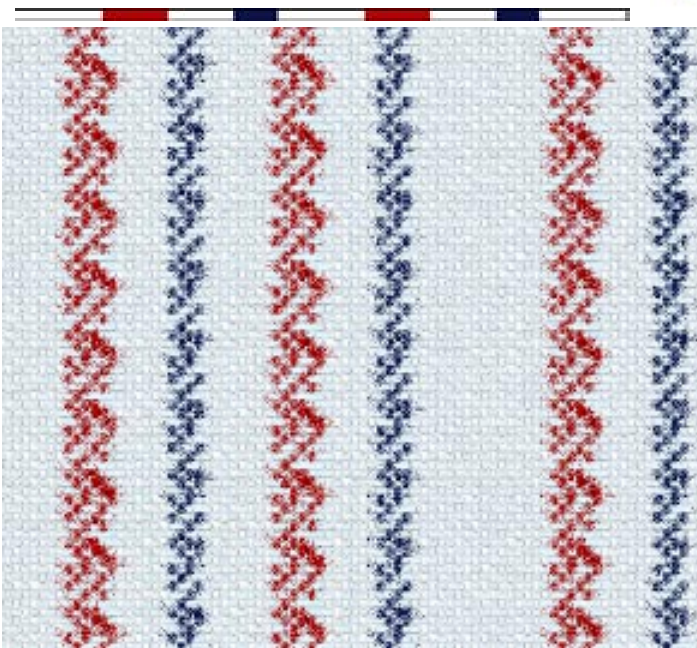
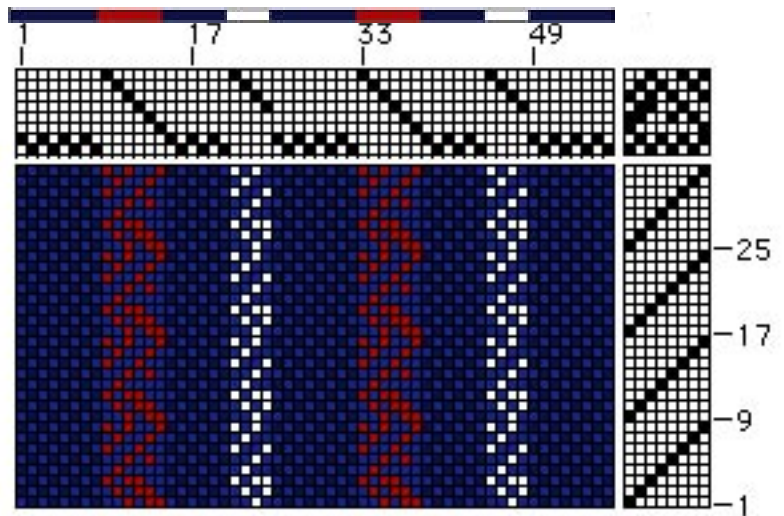
#8 Combination 8

Warp: 12/2 Merino wool at 20 epi. in a 10 dent reed—background and contrasting colors

Weft: same as background warp

This sample shows how to combine a plain weave stripe with a patterned twill to produce stripes. This technique has been described very well in Holmes, *Manuscript Notes on Weaving* starting on page 10 under Oxford Shirtings. A progression of this method on page 14 describes Harvard Shirtings.

In our sample, two shafts have been reserved for the plain weave and six for the warp twill stripe. Try designing your own 6 shaft pattern tie up while keeping the first two shafts free for the plain weave. This would be excellent woven in cotton for a summer textile.

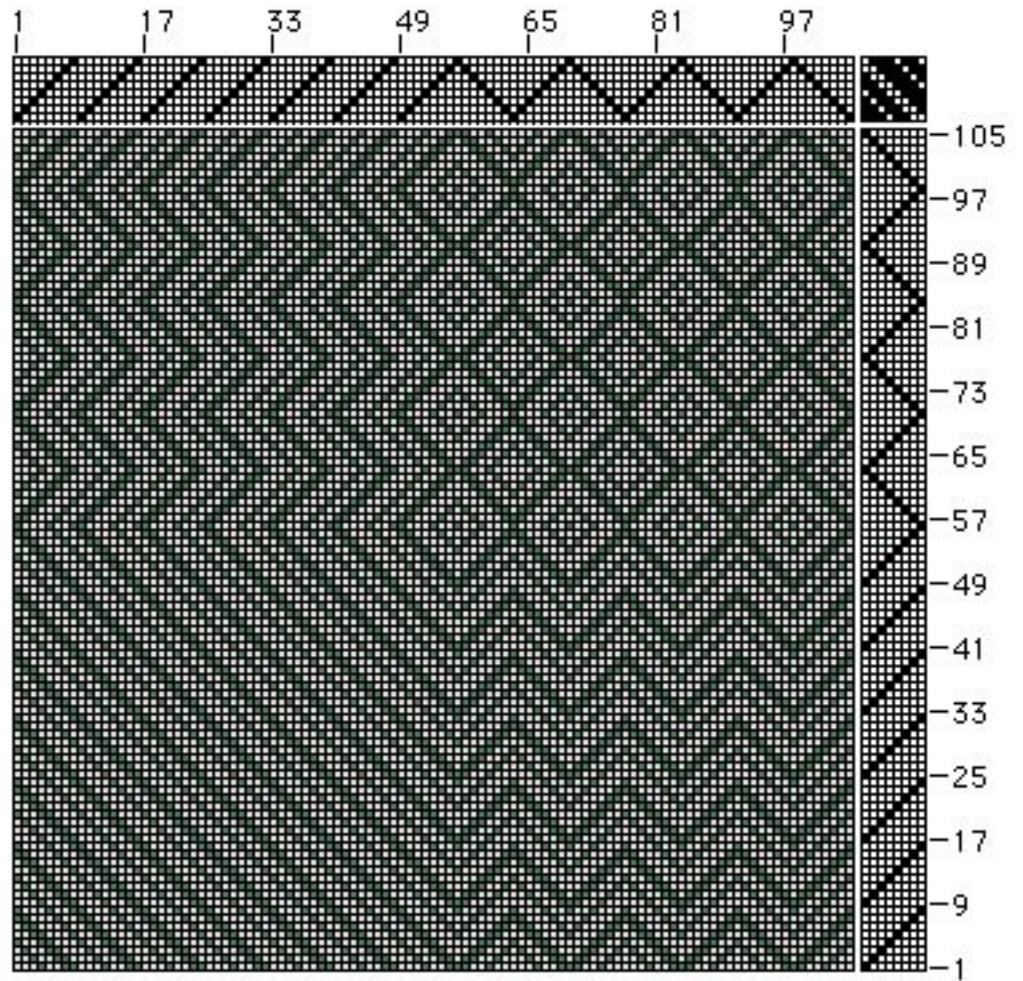


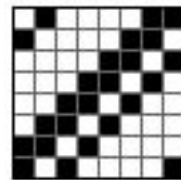
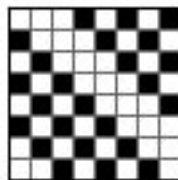
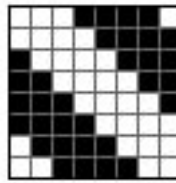
#9 Straight & Point Twill 8

Warp: 10/2 cotton at 24 epi.
in a 12 dent reed

Weft: same as warp using de-
sired weft choice of color or
an alternate choice as desired.

This sample has been de-
signed to show how a straight
twill line compares with a
point twill when woven with
different tie ups. The tie ups
are enlarged and place to the
right of the drawdowns. Try
one of these or design one of
your own. Note that a diago-
nal does not have to be the ba-
sis of the tie up design. Spots
surrounded with plain weave
or asymmetrical tie ups might
be ideas to try. Remember
that by repeating the thread-
ing, blocks of pattern will be formed so that
four different types will result—straight
twill, vertical and horizontal wavy twill and
a diamond twill if you stick to a diagonal
twill tie up as in the first drawdown.



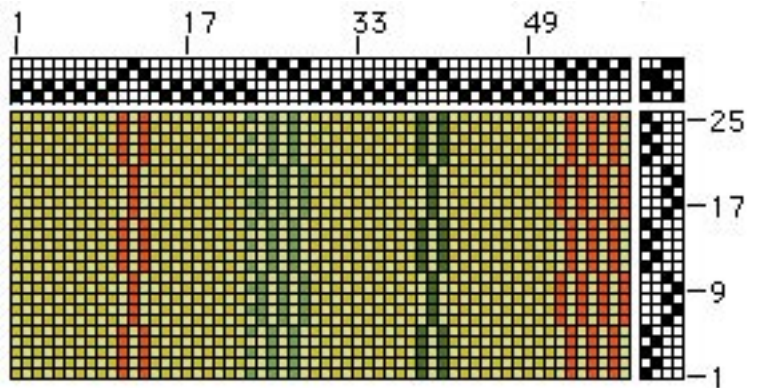
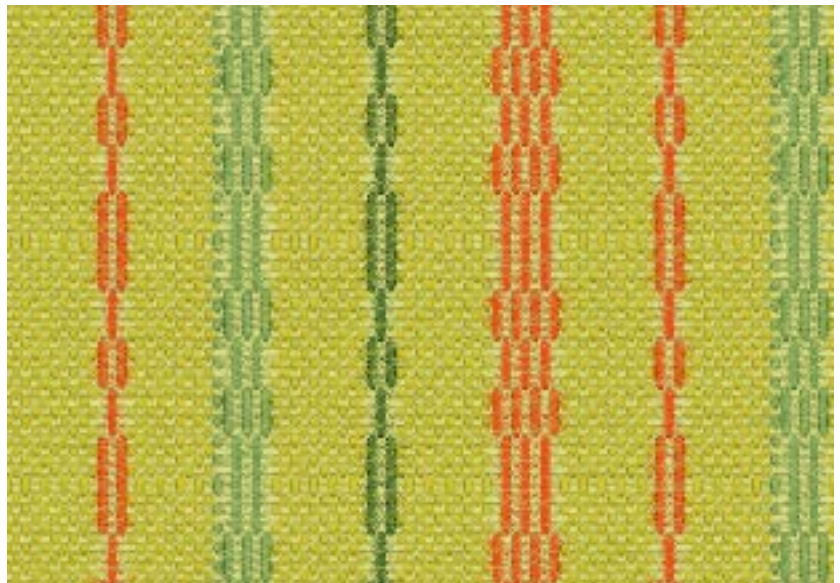


#10 Warp Color 4

Warp: 10/2 cotton at 20 epi. in a 10 dent reed

Weft: same as warp using desired weft choice of color

Although the use of the embroidery floss gives this weave a lovely sheen, it would be necessary to plan ahead on a large project as the small skeins of floss make it necessary to knot the warp threads even in a warp length such as this one—3 yards. And this of course is a “no-no” in weaving! Pearl cotton could be substituted in a 5/2 or even 3/2 or you might be fortunate in obtaining your color selection in coned yarns.



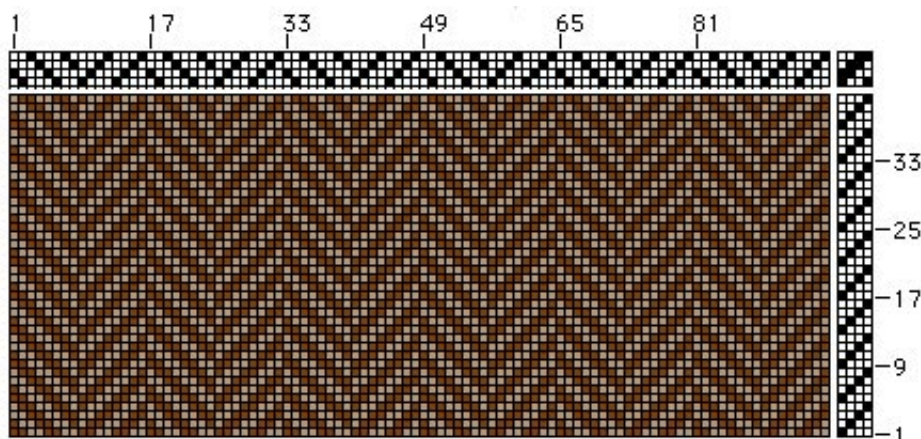
#11 Herringbone 4



Warp: 2/12 Merino wool at 16 epi. in a 8 or 16 dent reed

Weft: same as warp using desired weft choice of color

The Callaway Textile Dictionary defines herringbone twill weaves as “A term rather loosely applied to any twill weave composed of vertical sections which are alternately right-hand and left-hand in direction. More correctly the term should be restricted to certain types of broken twills that stitch or cut perfectly where the weave breaks or changes direction. One of the most popular of all twills and widely used in many types of fabrics, especially suiting and coatings.”

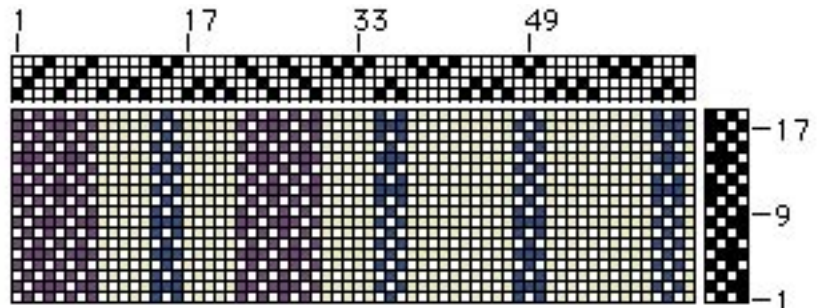


#12 Huck Twill Combo 4

Warp: 5/2 cotton, 10/2 cotton doubled for accent colors

Weft: 5/2 cotton

This delightful combination of huck and twill would be most attractive for drapes, place mats, upholstery, etc. One of the good things about it is the speed that can be obtained when weaving with the one shuttle that is required. The accent colors may be changed to suit one's taste or match room accents. You might wish to experiment with the treadling for a different appearance.

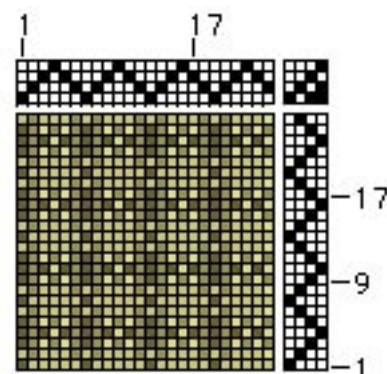


#13 Waffle 4

Warp: 12/2 Merino worsted spun 18 epi in 9 dent reed at 2 ends per dent or 3 ends per dent in a 6 dent reed

Weft: Same as the warp

This waffle weave makes a lovely baby blanket. It probably would not be advisable to use the wool yarns that have been used here as many mothers do not appreciate having to wash an item such as this separately and many babies suffer from allergies that may be triggered by the wool. Consider placing a variety of yarns or a variety of colors in the warp and weft to produce a more textured appearance and bring out the dark and light tones produced by the depth of the pockets.

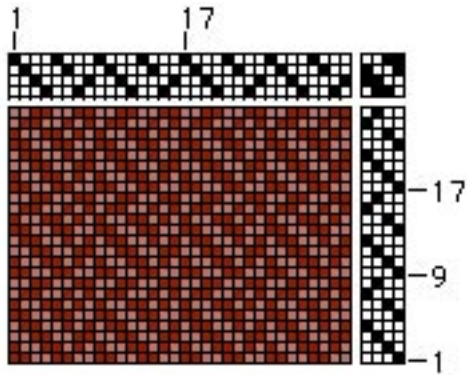


#14 Mixed Twill 4

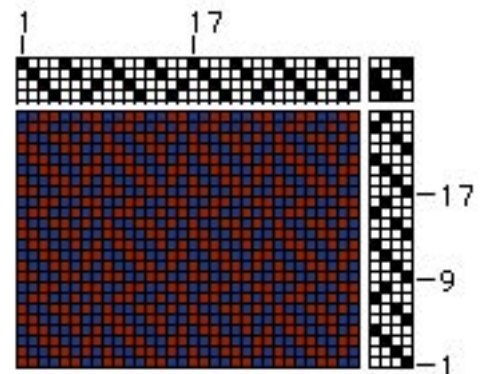
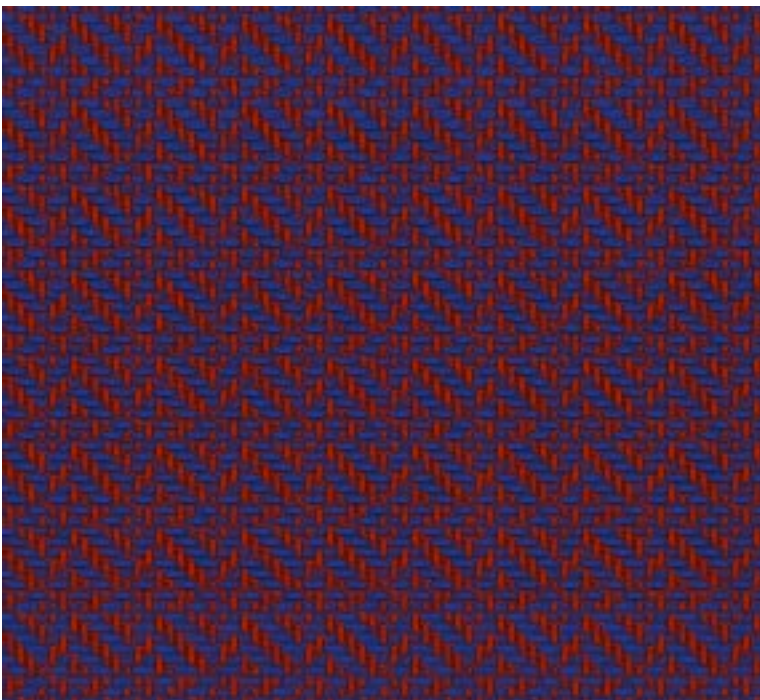
Warp: 12/2 Merino worsted spun 18 epi in 9 dent reed at 2 ends per dent or 3 ends per dent in a 6 dent reed

Weft: Same as the warp or desired weft that will not vary in size enough to distort the weave.

The purpose of this weave is to produce a textile that will resemble a crêpe weave and/or use colors for the weft that will change the appearance of the weave in some way. Some of these changes might be made by using color combinations from the color wheel—contrasting or



blending to change the color effect—same color for texture appearance. You might like to try alternating colors in the weft...or stripes.

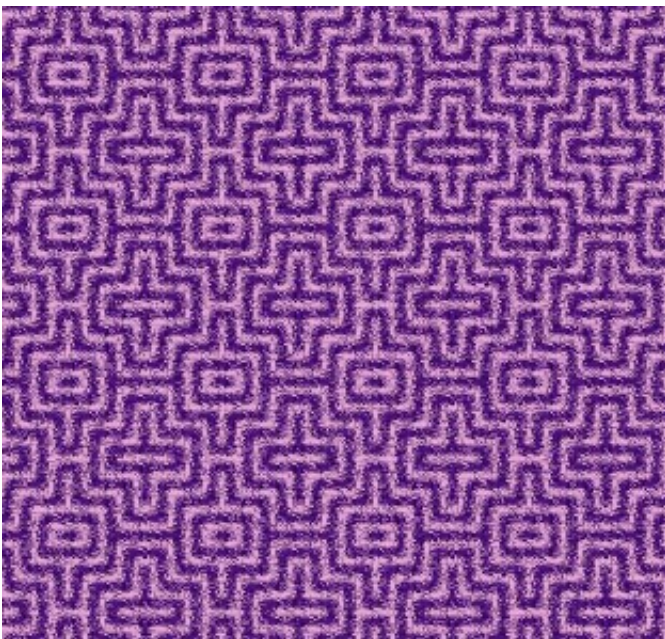
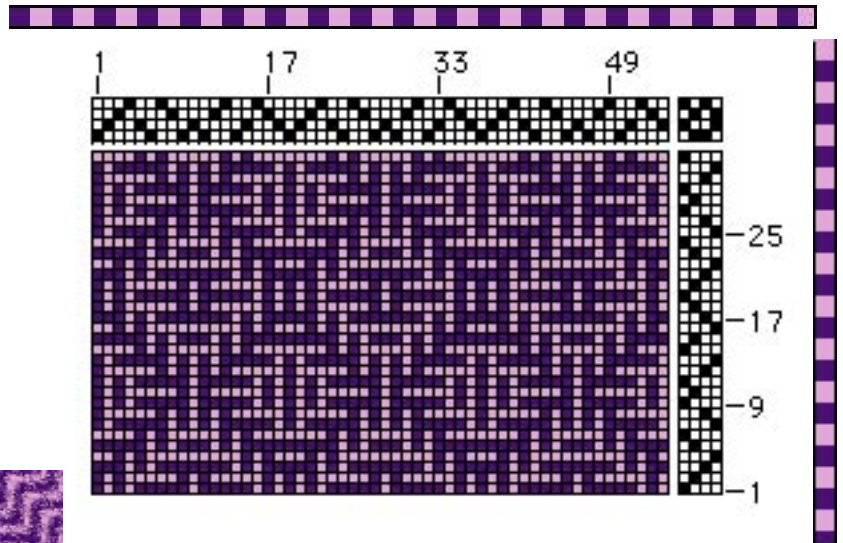
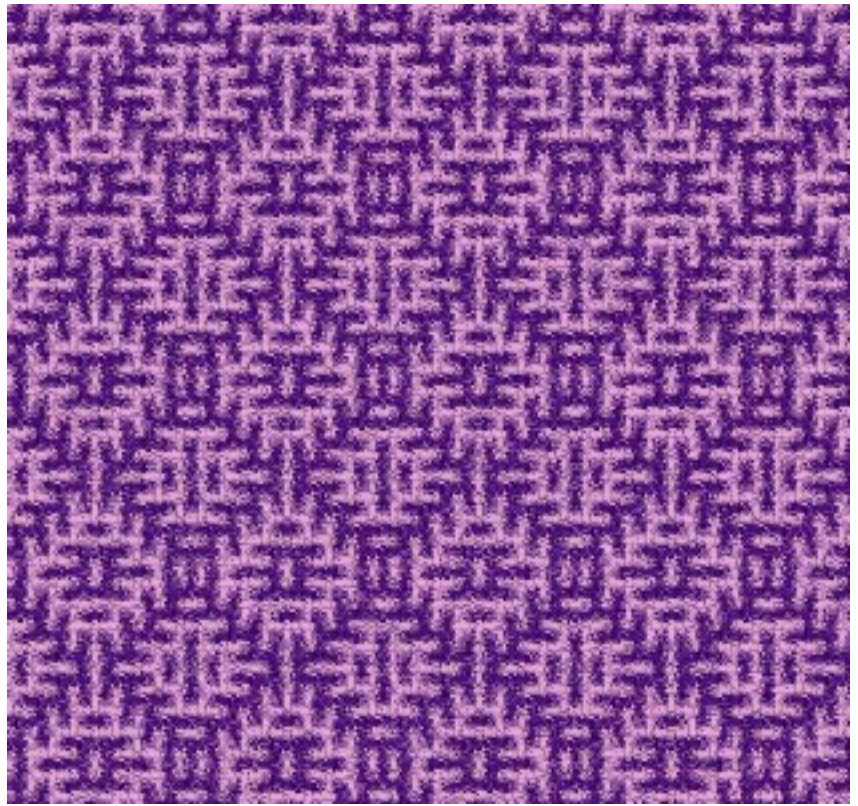


#15 Shadow 4

Warp: 12/2 Merino worsted spun 18 epi in 9 dent reed at 2 ends per dent or 3 ends per dent in a 6 dent reed—alternating dark and light colors

Weft: Same as the warp .

Shadow Weave is produced by contrasts in yarn—dark and light—which are arranged to lie beside each other thus creating a “shadow.” To retain the original basic pattern it is necessary to treadle in combinations of opposites—1,3 against 2,4 or 1,4 against 2,3, but treadle “as drawn in.” Try using a 2/2 tie up and see what happens. Did you get a Chinese maze design? You might want this. The drawdown shows what would happen if the colors were not alternated dark and light in either warp or weft (alternate drawdown.)



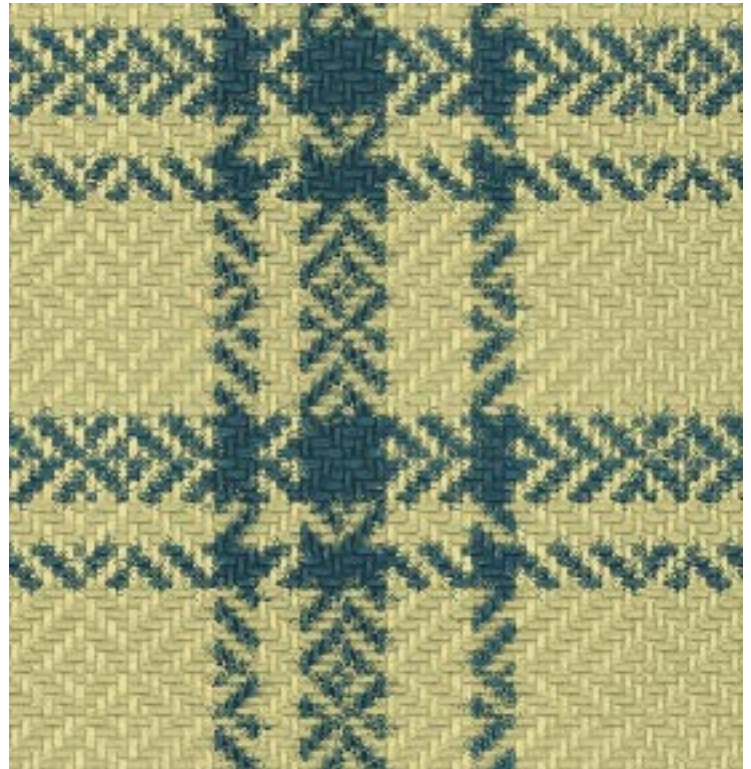
#16 Mixed Twill Check 4

Warp: 12/2 Merino worsted spun 18 epi in 9 dent reed at 2 ends per dent or 3 ends per dent in a 6 dent reed—alternating dark and light colors

Weft: Same as the warp .

There are two mixed twills in the samples. One uses solid color warps and the other a mixture of colors. This uses the mixture so that blocks of color with a variation in the weave pattern produce quite different effects than the solids of the plain warp.

You might like to experiment with crossing the colored warp areas with closely allied shades for added interest. Or you might like to try one color only for weft and/or treadle “straight”—1,2,3,4,1,2,3,4, etc. It is necessary to vary the warp threading pattern when working with 4 shafts to obtain “fancy” patterns. With most multi shaft work it is only necessary to thread to a straight draw, then design the tie up which will govern the pattern of the weave.

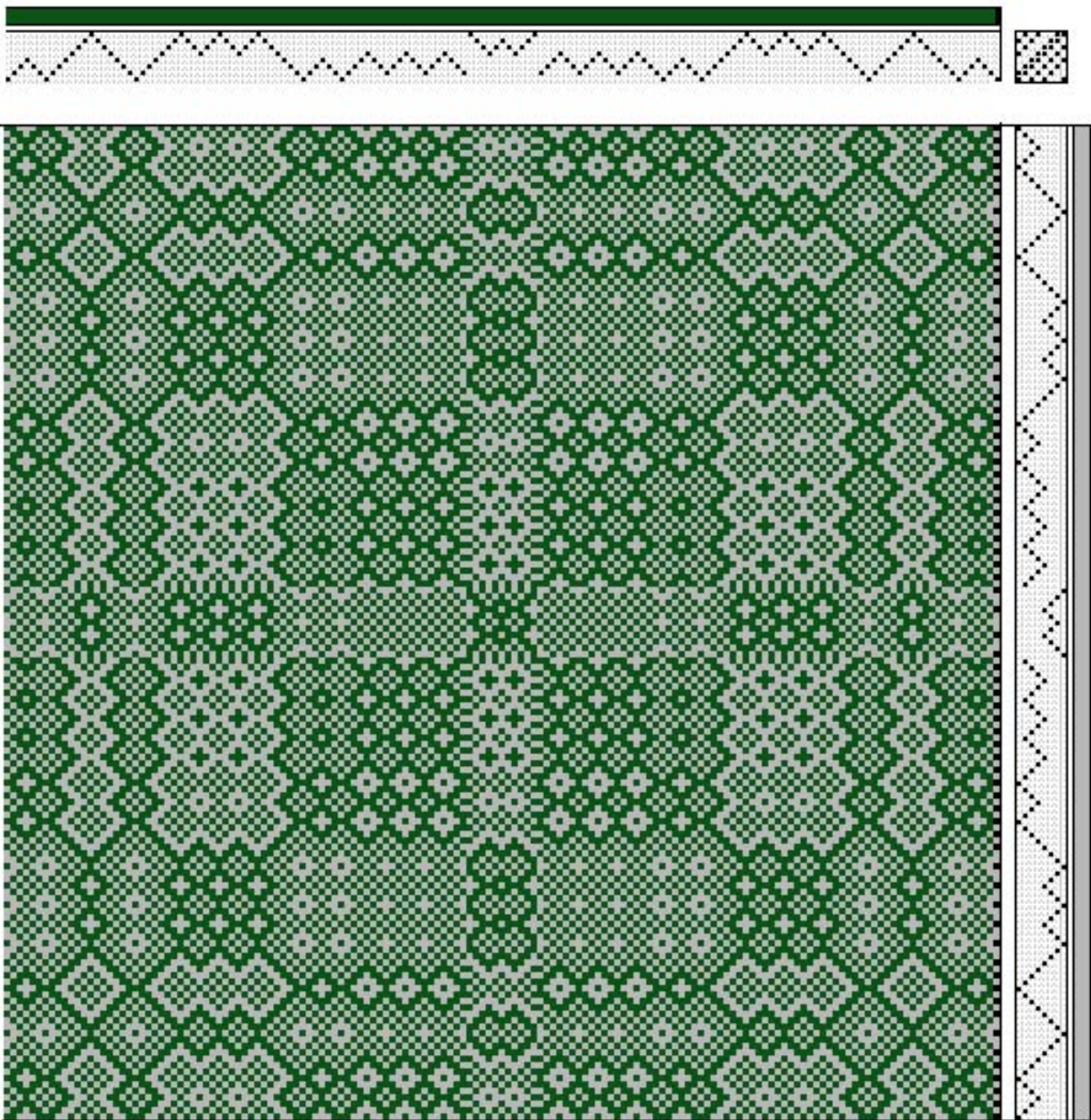


#17 Fancy Twill 8

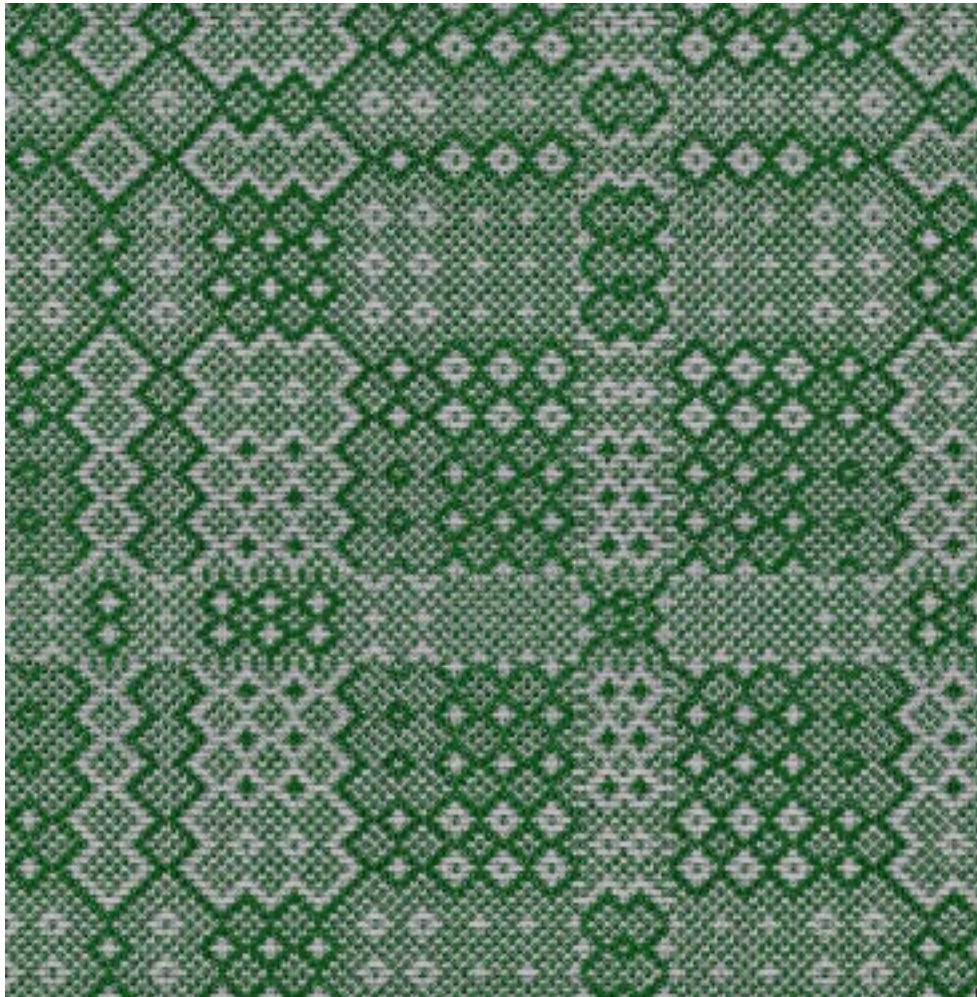
Warp: 10/2 at 24 ends per inch

Weft: Same, or any choice which does not differ too greatly in size with the 10/2 cotton.

A tie up has been chosen for this fancy twill, but you are at liberty to design your own. If you plan to weave this pattern “as drawn in”, it is probably better to keep your tie up fairly simple as a complicated one will confuse the eye with too much design. A recommended tie up would one that is designed on the diagonal. This is a 2/2/1/1/1/1—that is 2 up, 2 down, 1 up, 1 down, 1 up, 1 down. A warp face tie up would consist of most of the warp showing—thus greater numbers being in the “up” position. Conversely, a weft face would have the greater numbers “down”. What would an even distribution of warp and weft be? In designing the tie up, remember that if the skips are too long, the fabric may not be suitable for its purpose.



One other item of interest is the use of two closely related shades in the warp. A depth of color is attained by using this lending more interest to the fabric. A similar effect may be produced by alternating two shades of thread by thread in the warp.



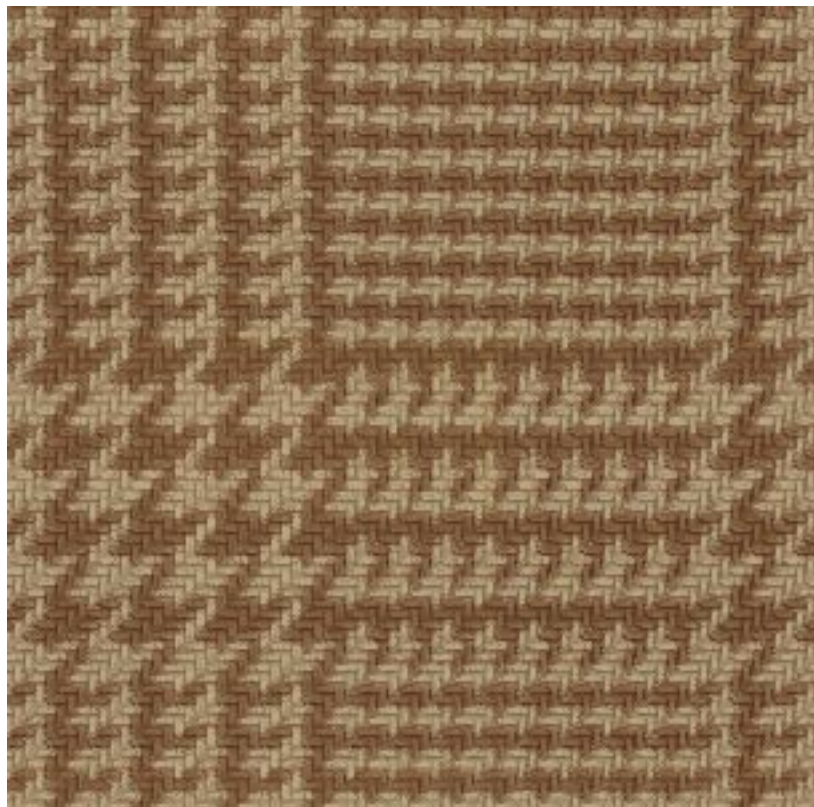
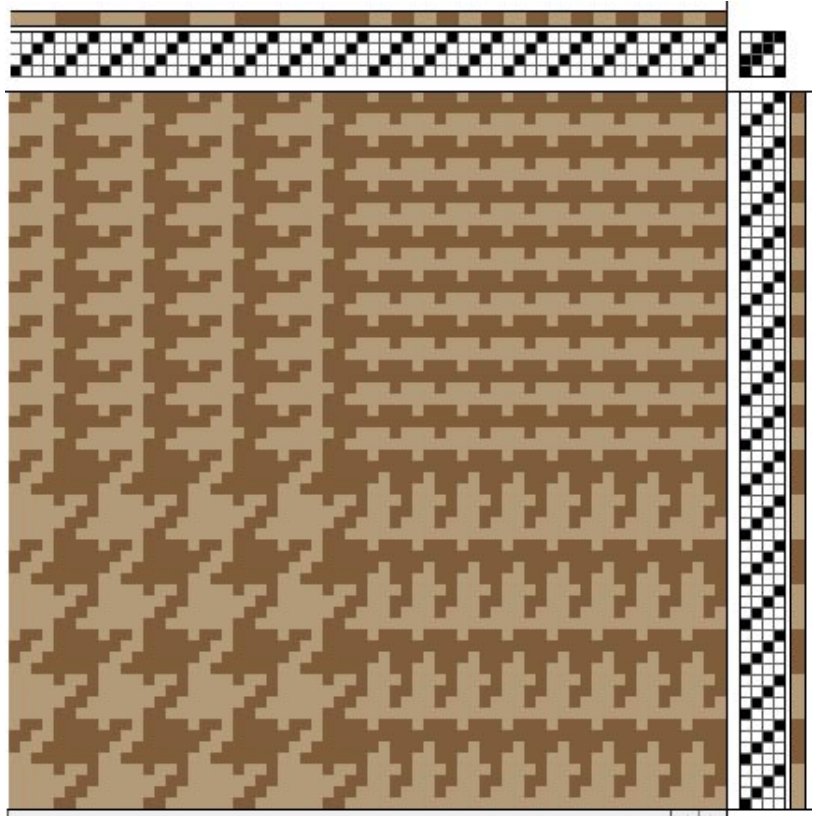
#18 District Check 4

Warp: Wool singles at 18 epi.

Weft: Same.

The district checks are ever popular and originate from the “uniforms” worn to identify the Scottish Estates. In many cases it is not ethical to copy the exact colors and patterns so this sample is a creation based on the District Check system. For an interesting and well illustrated description of the checks, refer to E. S. Harrison’s, *Our Scottish District checks*. Another publication for general reference is *Scottish District Checks* by Mary E. Snyder—a compilation of 91 checks. Compare this sample with the Balnakeilly on page 133 of the Harrison book. Usually the Lowlanders wore District Checks while the Highlanders wore Tartan kilts.

Note: Compare sample #19, the Shepherd’s Check—the simplest of the District Checks. There is a crossover with many tartans, but the main thing to remember is that the colors may change, the sets may change but it is the “proportion of the different colors that is important.”

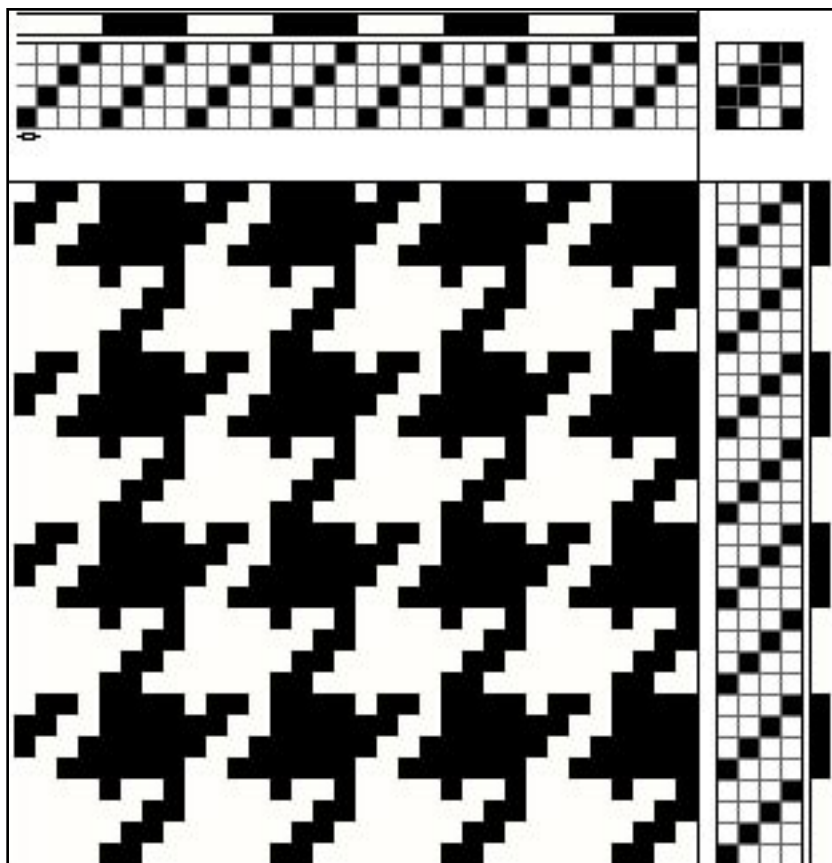
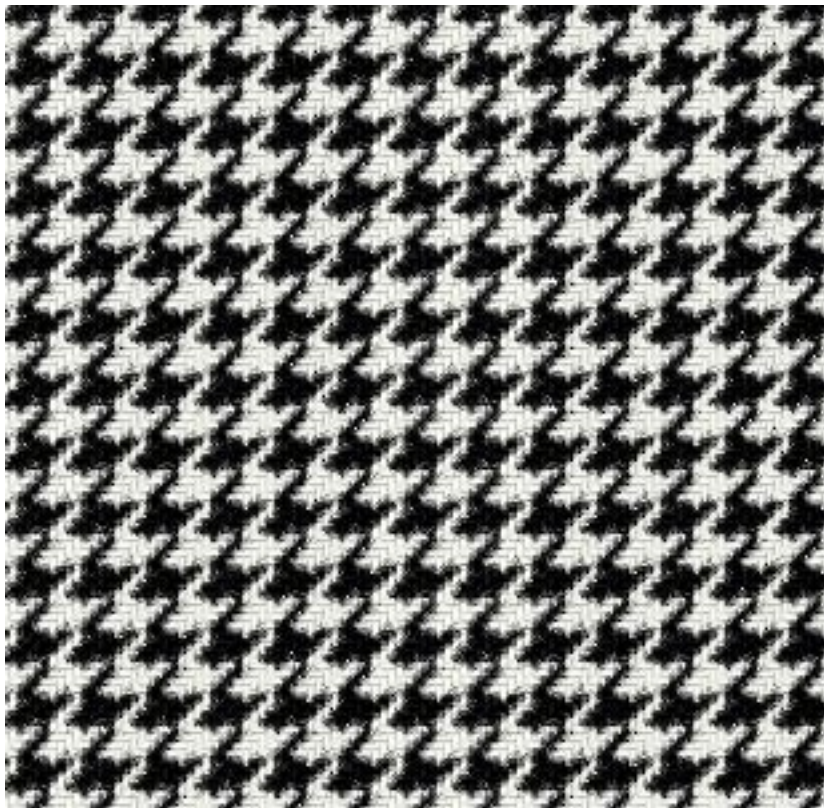


#19 Shepherd's Check 4

Warp: 2/20 Botany Tartan yarn at 24 ends per inch

Weft: Same.

The set for this fabric differs from the Tartan Stripe #21 so you can compare the finished products. If this fabric is washed from 3 to 5 minutes in the machine, it will full into a good thickness for most clothing items. You might wish to weave a scarf somewhat softer than you would wish a skirt to be. Experimentation will be your best method of obtaining the results that you want. The set for weaving kilts or tartan skirts using this yarn was recommended by the Scottish suppliers. Do not be dismayed if your fabric looks sleazy on the loom. To quote Stephen Simpson of Llangollen Mills—”it should look bloody awful.”



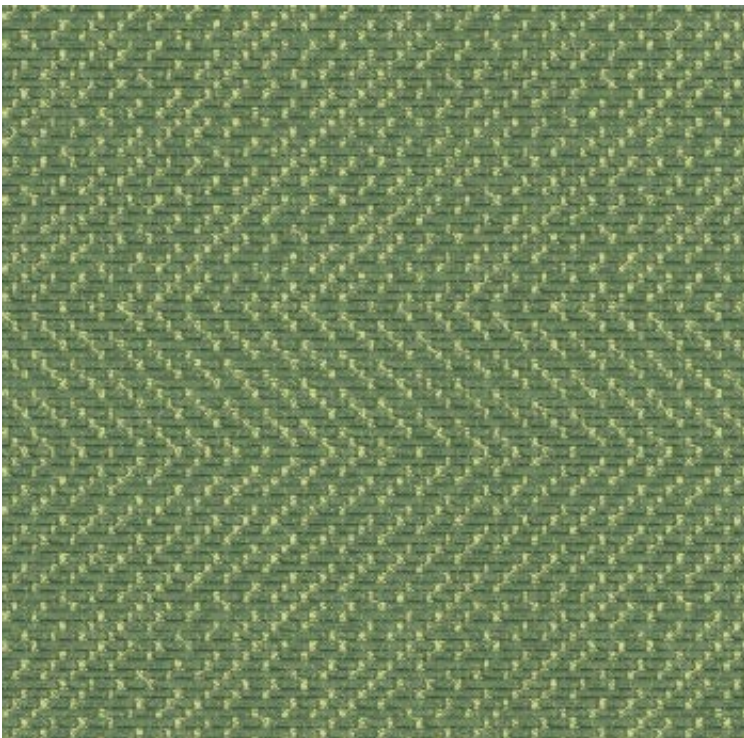
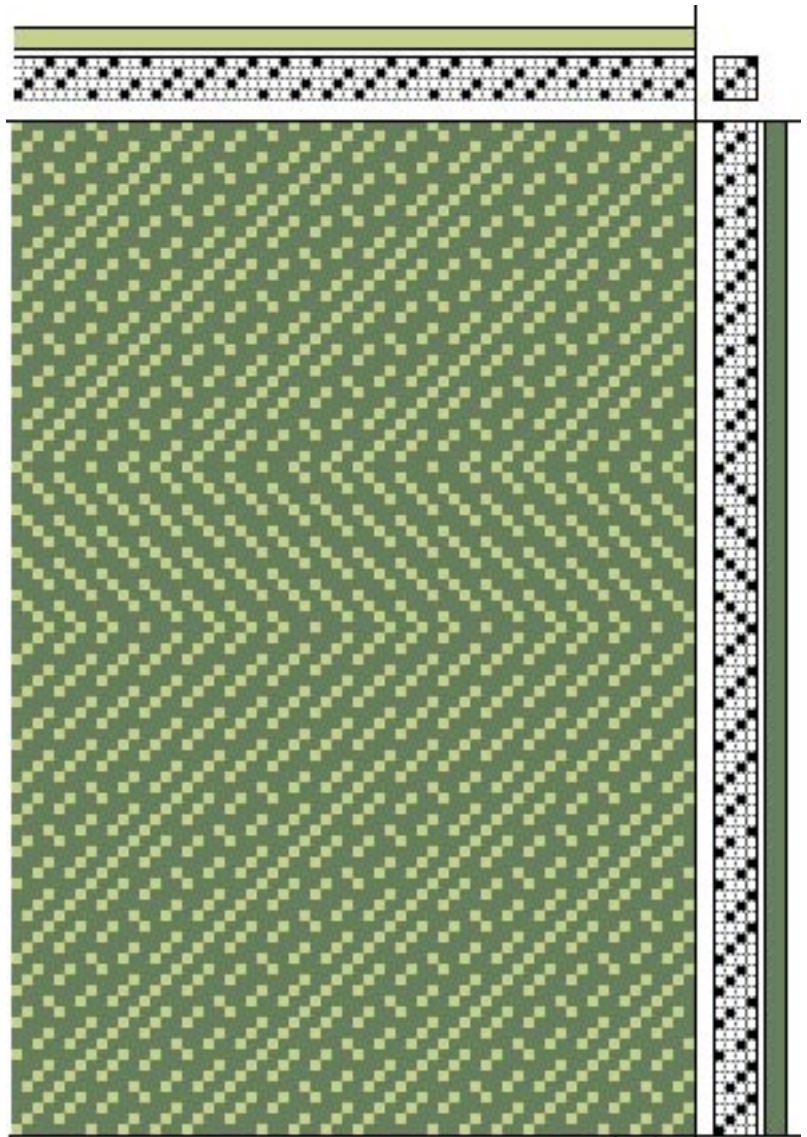
#20 Intermittent Twill 4

Warp: 5/2 cotton at 16 ends per inch

Weft: Same.

An intermittent twill is governed by the order of the threading draft. In Oelsner and Dale's *A Handbook of Weaves* page 7 it is explained by establishing a certain number of threads broken by a skip over a certain number of shafts. The direction of the twill may change but the established order of threads combined with skipped shafts should remain constant. For more details consult the book.

Variations in the treadling have been done. Either take your pick or try them all. Try one of your own.



#21 Tartan Stripe 4

Warp: 2/20 Botany wool in a 16 dent reed @ 2 ends per dent=30 ends per inch

Weft: Same.

This pattern has been adapted from an idea used in a very expensive couturier skirt. Only one repeat of the tartan pattern is placed in the fabric, so a vertical stripe is woven until the position of the horizontal stripe (or tartan motif) is found. Only one repeat of the horizontal tartan pattern is woven for the front of the skirt. The back has a horizontal stripe matching the front but there is no vertical stripe as there is no warp stripe in the back. The remainder of the fabric is woven with the background warp color (white.)

The fabric is woven in a 2/2/ twill with tartan stripe “woven as drawn in”. Note the direction of the stripe. In the early days in Scotland, most weaving knowledge was made available to other weavers BUT one secret was kept as many cook leave out one ingredient in a recipe that they “gladly” give away—in the case of the tartans, the secret is that the right side was woven down so when the fabric was finished, the line of the twill goes from bottom left to top right.

