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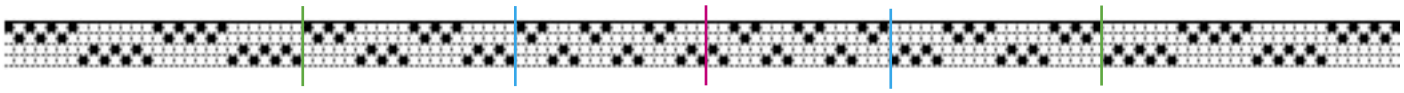
Huck Weave Workshop

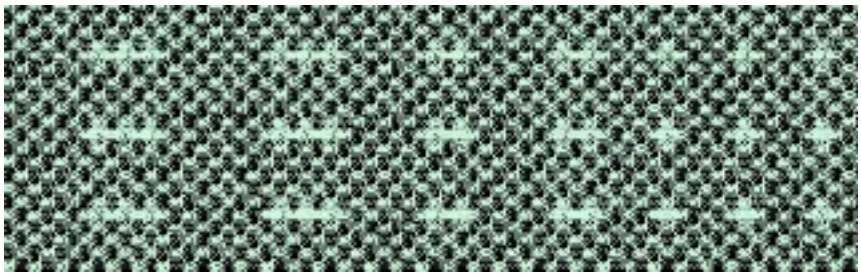
Huckaback, according to S. A. Zielinski comes from the German hükkebak and originally designated wares carried on the back by travelling merchants, then towelling sold by them, and finally the weave used for making towels, etc.

Threading for huck may vary, but essentially two adjoining harness combinations (e.g. 1-2) will be used to form one "spot"; (e.g. 3-4) will be used to form the other spot. (e.g. 3,4,3,4,3 or 3,4,3 etc. and 1,2,1,2,1 or 1,2,1)
Other combinations might be:
3,4,3,4,3; 2,1,2,1,2 or 4,1,4; 3,2,3



For the workshop sample, the base threading will be:
4,3,4,3,4,3,4—1,2,1,2,1,2,1} 2x = 14 threads x 2 = 28 threads for Block A;
4,3,4,3,4—1,2,1,2,1} 2x = 10 threads x 2 = 20 threads for Block B;
4,3,4—1,2,1} 3x = 6 threads x 3 = 18 threads for Block C

There are 66 threads in the base threading but the threading may be reflected in which case there would be 131 threads in the warp. The expanded warp would give a good width for a guest towel (5/2 set at 15 ends per inch = 8.7" wide.) If one yard is reserved for the workshop sample, estimate how much more warp would be needed to weave towels. Don't forget the loom waste which might be between 18" to one yard depending on the type of loom.

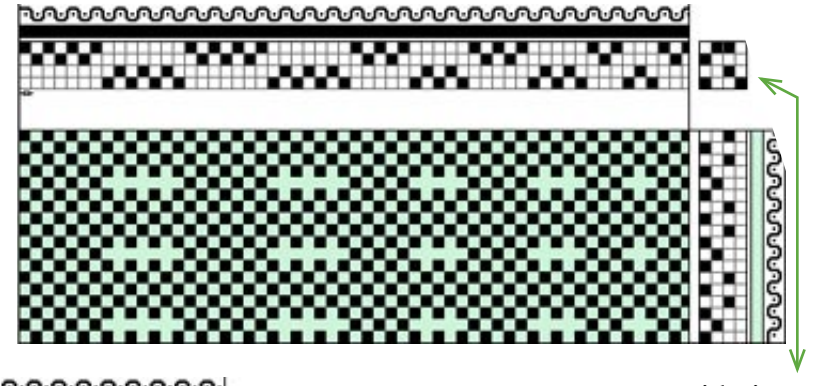


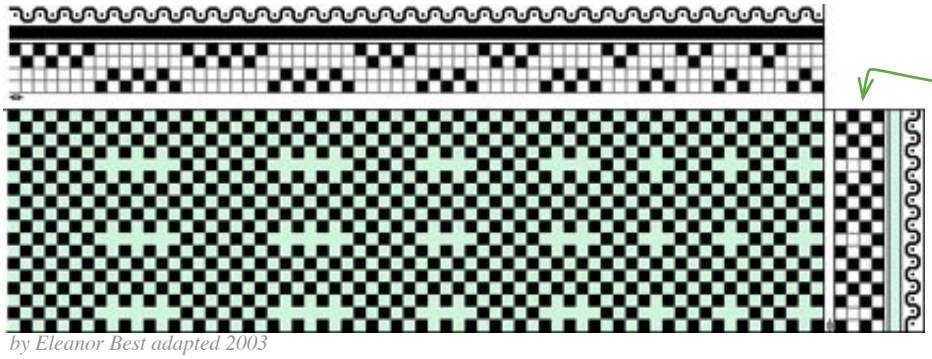
Ways of Weaving Huck:

1. Weft Spots

Block A 1-3, 4, 1-3} 3x
Block B 2-4, 1, 2-4} 3x

Separate the types of huck with plain weave. The types of huck will stand out better if alternated with contrasting colors. The thread interlacement is shown only for the first weft shot which is plain weave, 1 up and 1 down.

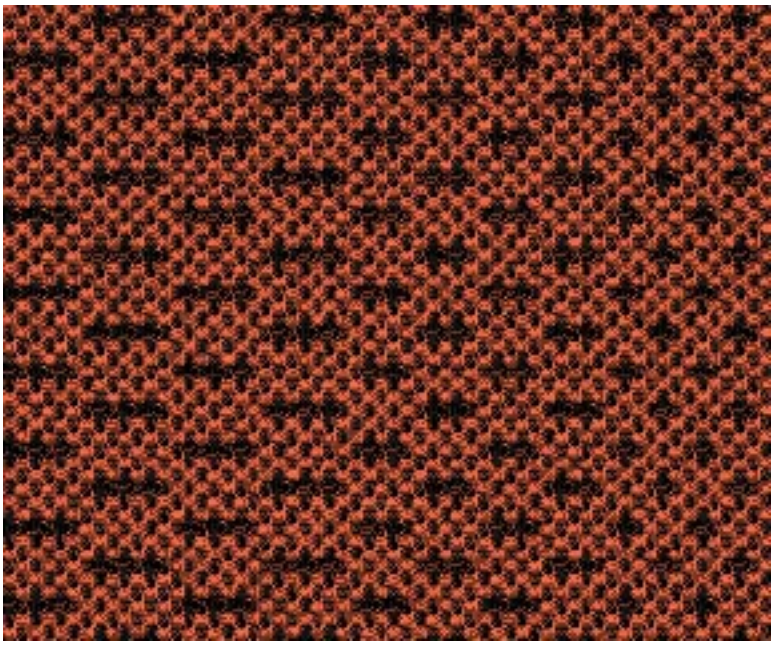




by Eleanor Best adapted 2003

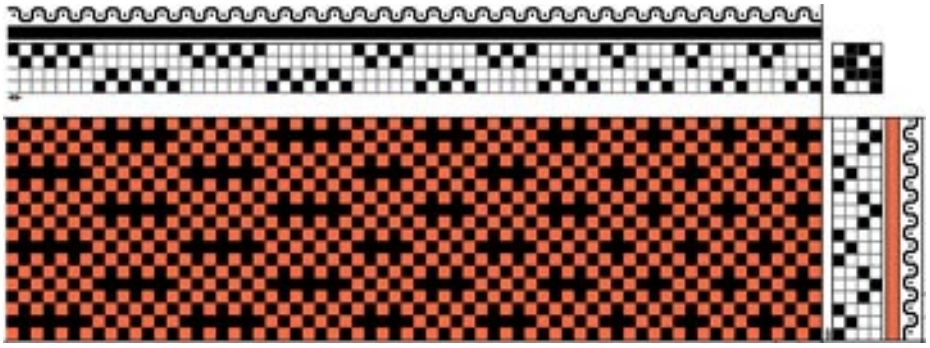
2. Warp Spots

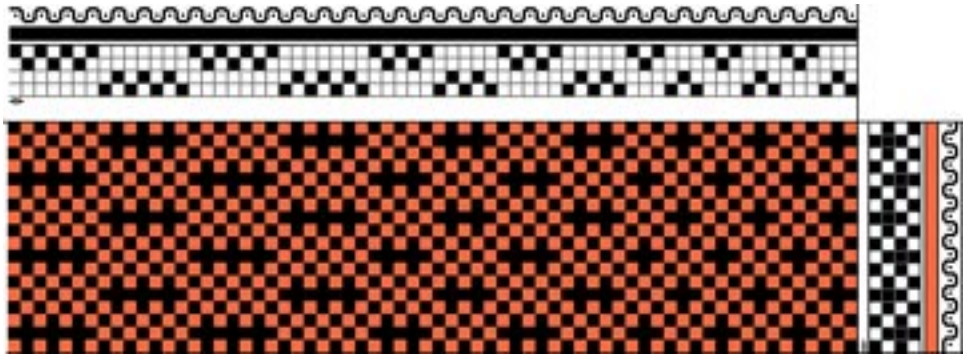
Block A 1-3, 2-3-4, 1-3} 3x
Block B 2-4, 1- 2-3, 2-4} 3x



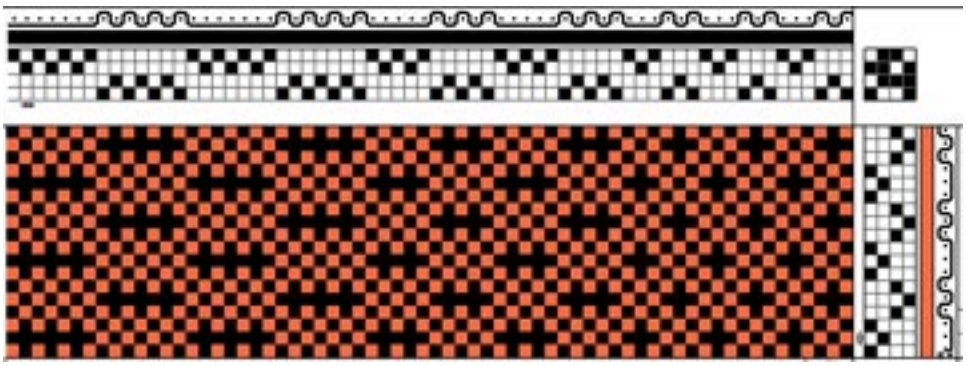
The warp thread is **black** as it was in the diagrams for weft spots, but because #1 showed **weft spots which appeared in light green as horizontal skips** but in the **warp spots the skips are black** as it is the warp showing this time, not the weft.

In the three drawdowns appearing below, the first one shows the tie up version with the tabby or plain weave thread interlacements. The second is the same only a pegplan or lift plan is used. The third differs in that the second warp thread and the second weft thread show the interlacement actions. It is handy to know what is going on as the skips may be too long to make a stable fabric. The thread size may need to be changed or the pattern scaled down to accommodate this problem. This is why sampling is necessary to test a small piece before investing in the time needed to set up a large project.





2 The majority of hucks are done in the same color weft as warp but this is not a rule. Again experimentation is necessary to find the result that is satisfactory.



Usually huck is set to a 50/50 plain weave. That is, according to the size of thread that is used an average number of warps per inch will be calculated so that the same number of wefts per inch may be placed to produce the 50/50 weave. To estimate the ends per inch, wrap the thread around a ruler, or better still a template showing the spaces per inch. Wrap one thread per space so there is no crowding, then count the wraps.

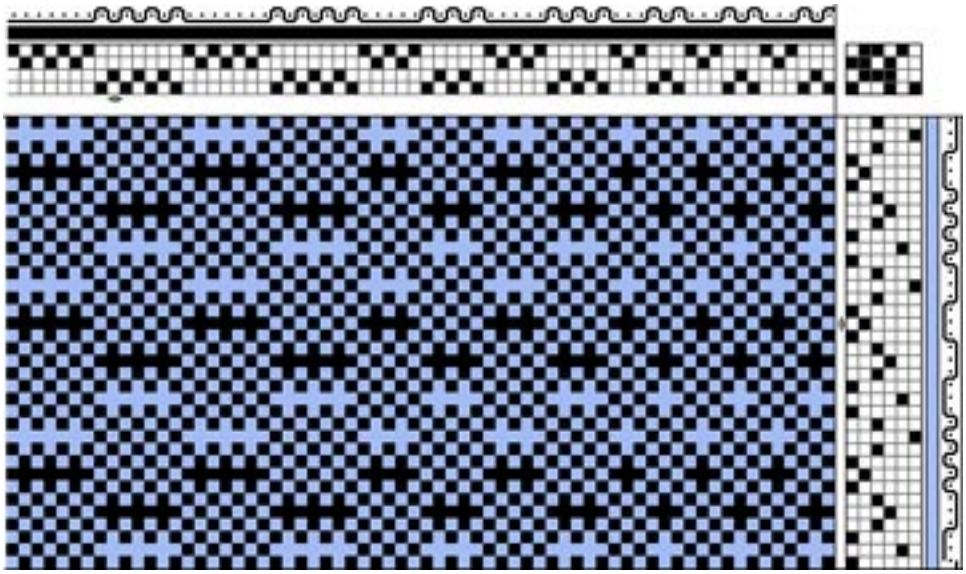
3

3. Turned Spots

Block A = weft spots
Block B = warp spots

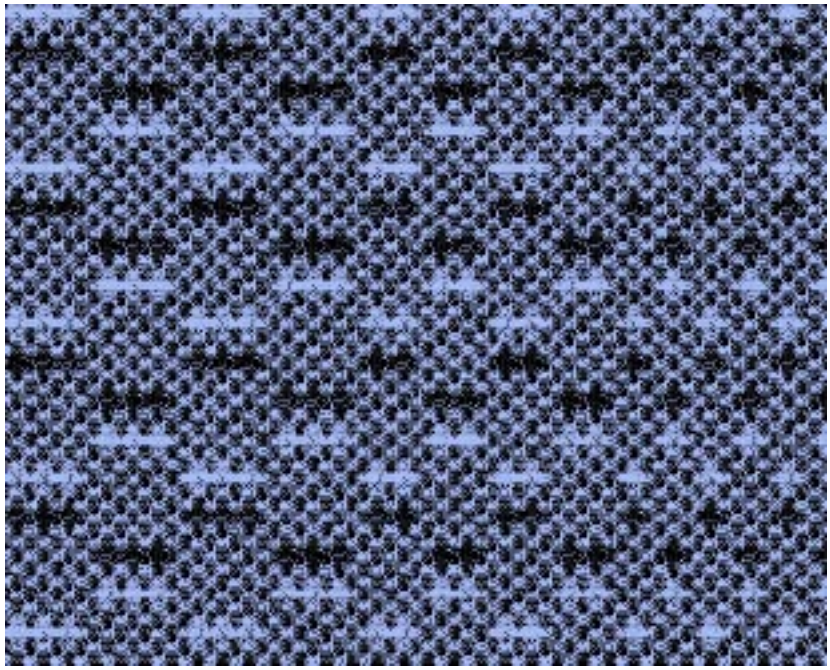
Weave:

Block A	1-3, 4, 1-3 (weft spots)	} 3x
Block B	2-4, 1-2-3, 2-4 (warp spots)	
	and	
Block A	1-3, 2-3-4, 1-3 (warp spots)	
Block B	2-4, 1, 2-4 (weft spots)	

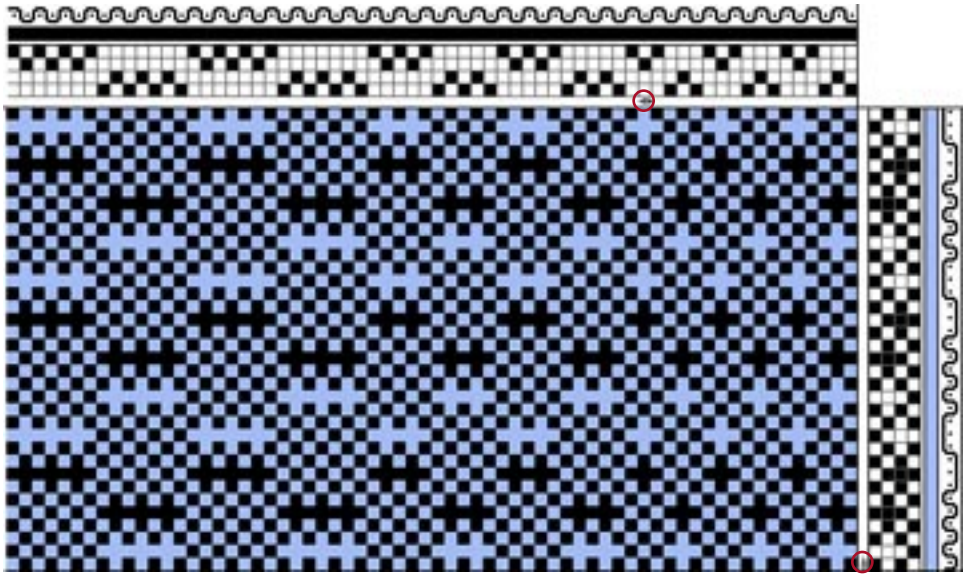


Combining spots can be done by mixing A blocks with B blocks for weft floats that come beside each other or can be grouped to form patterns within the fabric. Similarly the threading can be mixed but once chosen and the loom threaded is more difficult to change as the loom would have to be rethreaded. By making plans prior to starting a project, it is usually much easier to design a pleasing pattern than to proceed by "ad libbing."

Designing can be done on paper but it is much harder to change and shaft pattern elements than when it is done on the computer. A good weaving program will allow the designer to "click" on areas in the drawdown and those changes will instantly be reflected by changes in the treadling area. Some programs also allow for changes in the threading but this gets into the area of weave analysis, so is not done as frequently.



The drawdown diagrams show both tie up and lift plan methods as well as a different position for checking the thread interlacement. Look for the small marks (shown in the drawdown diagram surrounded by red circles) under the warp and beside the weft. Another interesting way to view a pattern is to look at its 3-D appearance. Look at the length of the skips in relation to the plain weave



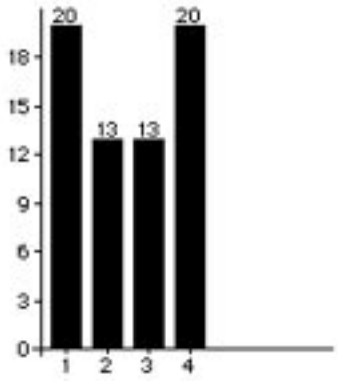
areas. The view below is only a portion of the pattern repeat but gives an idea of what the textile will look like when placed on a flat surface. This becomes quite important if tableware such as placemats are being planned.

WeaveMaker weaving computer program has a feature when turned on of showing the length of the skips by using blue, green and red markings indicating the length of the skips and where they can be found in the drawdown. Although it is possible to see long skips in a conventional hand drawn drawdown, it is very easy to miss some of the warp skips as the eye naturally looks for the weft skips.

An occasional "too long skip" is often the cause of disappointment in a pattern when a simple tie thread is all that is needed to fix it.

Count heddles before beginning to thread the loom

Why should you do this? It is recommended that the heddles be balanced when threading the loom. This helps to keep an even beat and allows the beater to be held in the center. The other reason is that too many weavers run out of heddles on some shafts and most looms do not take kindly to having heddles added after the warp is threaded. You can make and insert auxiliary heddles, but this not a handy process either. SO, count your heddles before starting to thread the loom and divide them in half or "center" them ready for threading. Add extras if necessary before starting to thread.



A handy table is available in some computer programs so you do not have to calculate how many heddles are used in a pattern.

4. Double Huck

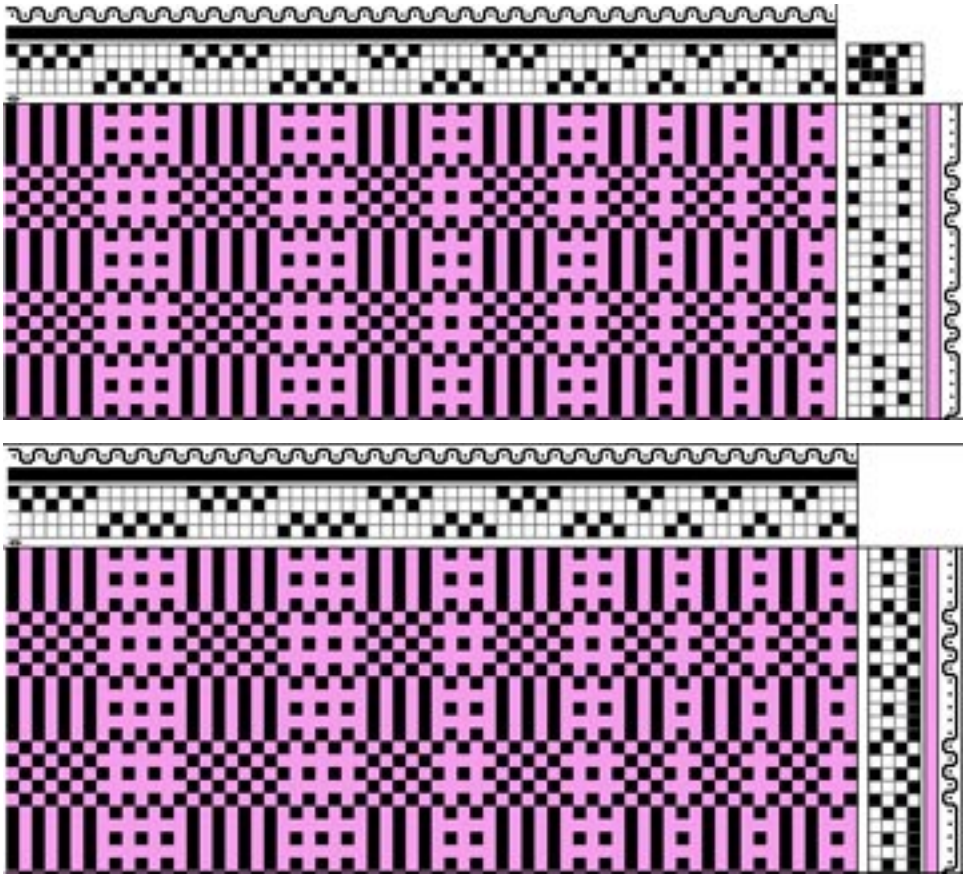
Weave:

1-3, 4, 1-3, 4, 1-3
1-3, 1, 1-3, 1, 1-3

2-4, 1, 2-4, 1, 2-4
2-4, 4, 2-4, 4, 2-4

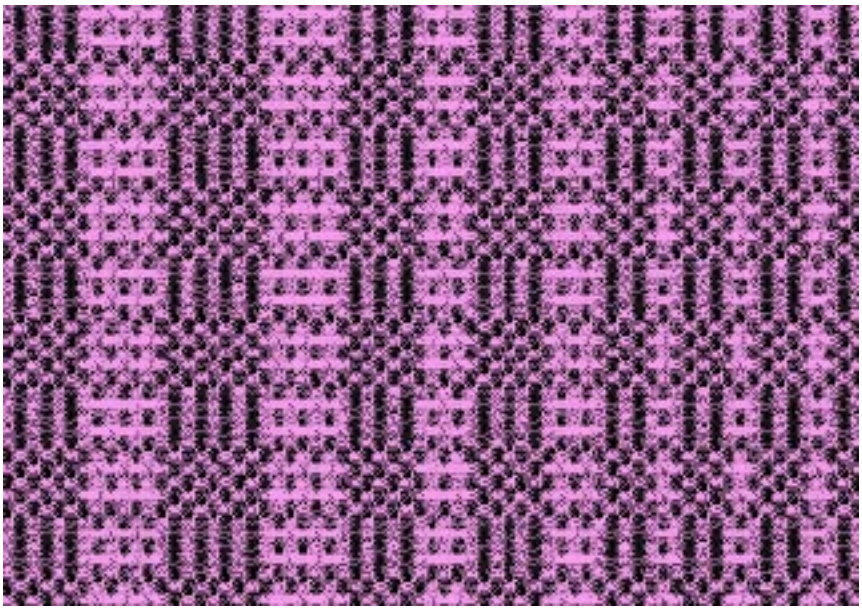
} 3x

Think in blocks



By now you have probably started referring to each weft shot by either tabby a or tabby b and the remaining shots by the term pattern A or pattern B. It is probably easier to weave each pattern by thinking of block combinations as the same tabby is woven for each block and is then changed to the opposite tabby for the following block. This is a definite deviation from the usual alternation of tabbies used in overshot or other patterns that need a stabilizer between the pattern shots.

Notice now, that the skips are consistently longer than found in the turned spots. Are they to be used in a fabric that will be used frequently and would be subject to pulled threads if they became snagged? Huck is wonderful for a baby blanket but it must be woven close enough that it will not be affected unduly by washing or rough usage.



Traditionally, the preferred fiber for weaving huck is linen. Although other fibers may be used, they should be considered for their suitability to the end use. Wool or cotton for bedding such as afghans or light throws would be more appropriate. Linen wears and looks elegant through constant usage for table usage as it usually is found in pieces that are meant to lie on a flat surface.

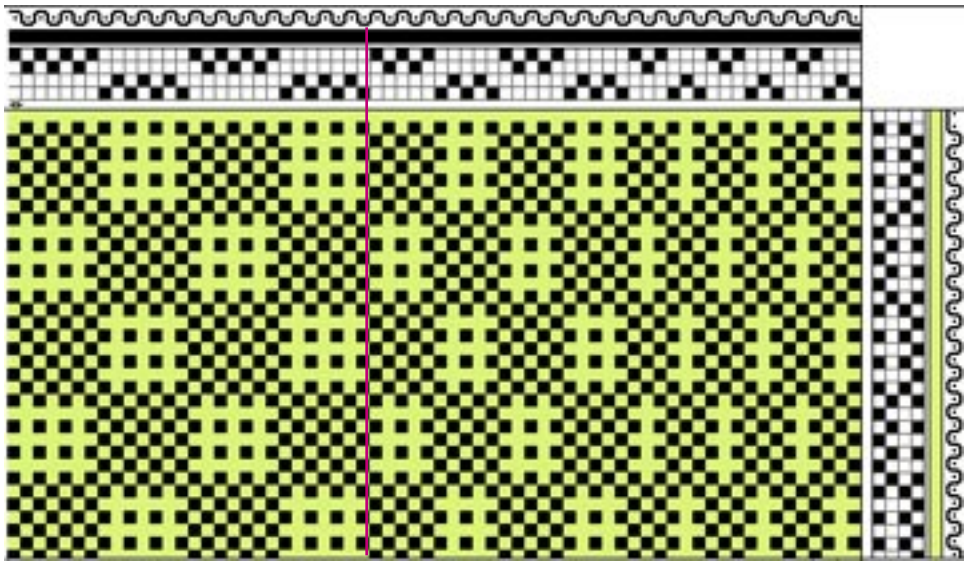
5. Triple Huck

Weave:

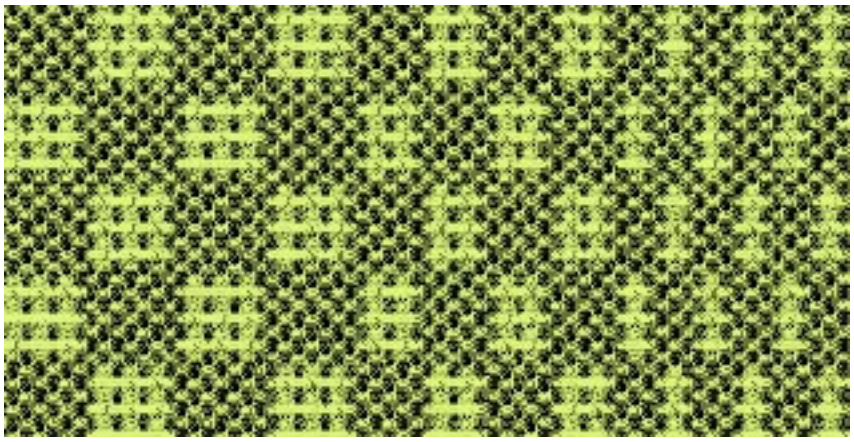
1-3, 4, 1-3, 4, 1-3, 4, 1-3
1-3, 1, 1-3, 1, 1-3

2-4, 1, 2-4, 1, 2-4, 1, 2-4
2-4, 4, 2-4, 4, 2-4, 4, 2-4

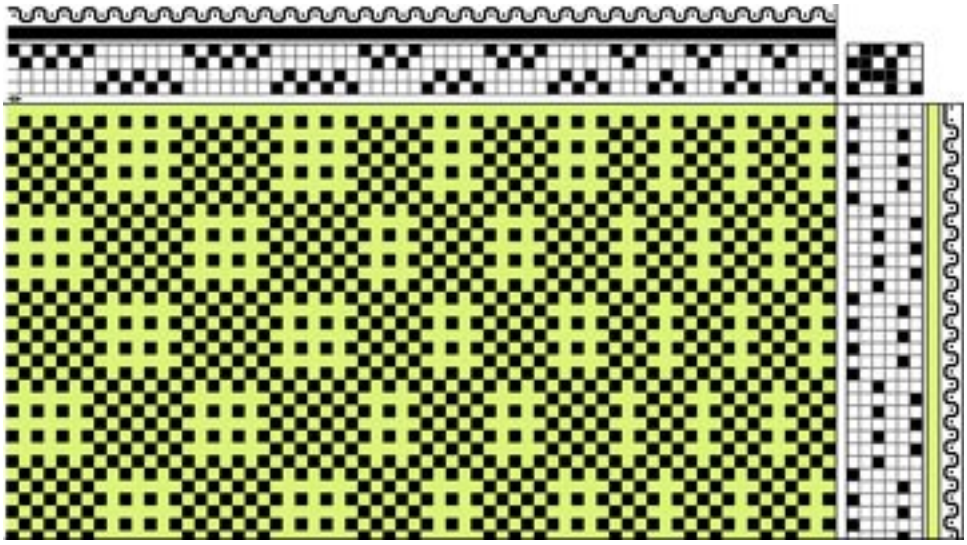
} 3x



Triple huck is formed by repeating the sequence of one block three times. Note that the threading to the left of the red line is also tripled in the number of pattern threads in one group or block. This forms a "squared" block which may be desirable if you are trying to form a design which may be symmetrical or part of a whole that is not disturbed by forms that are longer than they are wide or vice versa.



As there are only two blocks available when a four shaft loom is being used, the possibilities for creating more elaborate designs is limited. Plain weave can be done to create a separation or border around a design. To have a vertical line of plain weave, thread the warp only on the shafts that will produce plain weave (1 and 4 in this threading.) Similarly use only the 1-3 and 2-4 sheds to weave the weft plain weave.

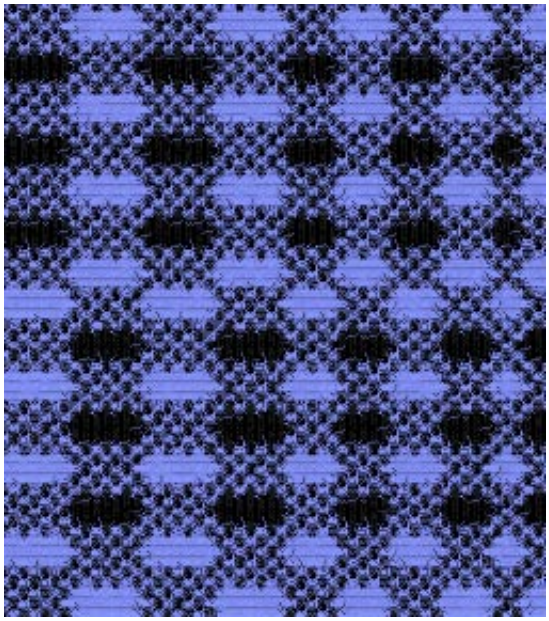


When using multi shaft looms, an extra block may be added for each shaft over the two pattern shafts available on a four shaft loom. Two shafts are reserved for plain weave and the rest can be used for pattern= 2 + number of shafts available for multi shaft looms.

Exercises

1. Weave a single Block A weft spot alternating with a single Block B weft spot repeated 3 times.
2. Weave a double Block A warp spot alternating with a double Block B warp spot repeated 3 times.
3. Weave a triple Block A weft spot alternating with a triple Block B warp spot 3 times.
4. Design your own patter keeping in mind that tabby shots may be used to separate blocks horizontally if desired **and that** Block A must always be used alternately with Block B. Any combination of single, double or triple may e used. *Please record your pattern.*
5. Design your own pattern using a mixture of pattern shots, e. g. instead of 4 alone use 3 along against spots using 2 instead of 4—**don't forget the tabby shots.**
6. Use a heavier, perhaps textured yarn for pattern shots, then design your own pattern. **OR** use a finer, perhaps shiny yarn. Use your imagination!

Other weaves that may be produced with a huck threading.

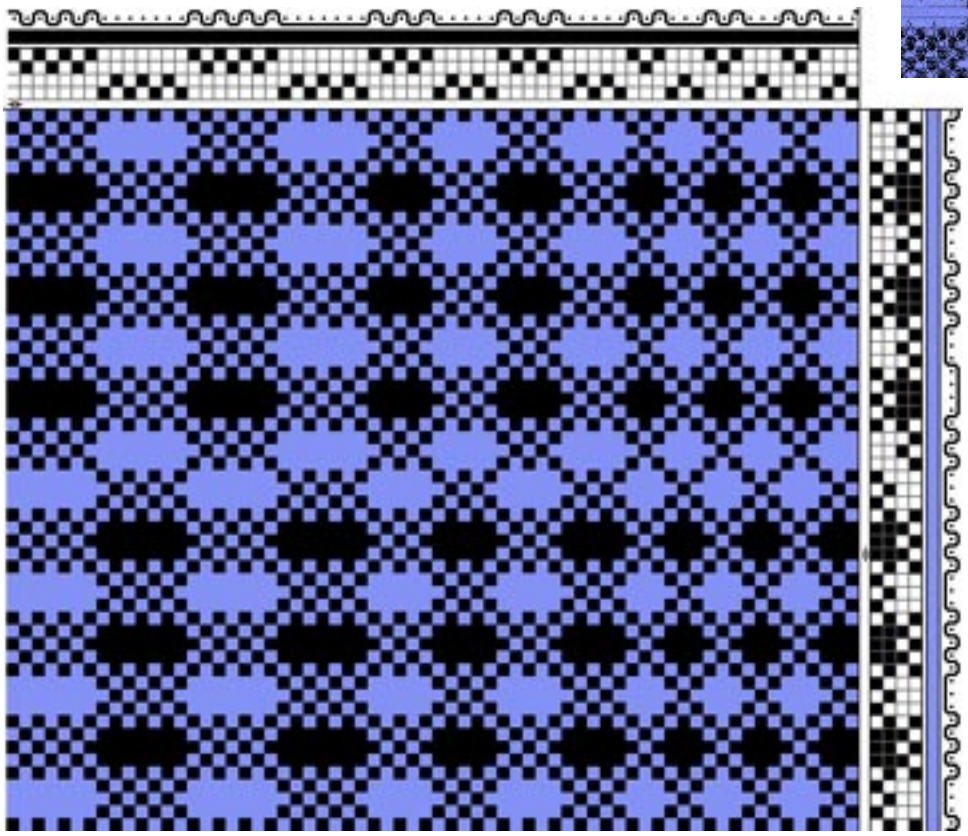


1 Waffle

2-4, 1, 2, 1, 2-4, 1-2-3, 1-2-4, 1-2-3 repeated 3 times, then end with 2-4, 1, 2, 1

4, 3, 4, 1-3, 1-2-3, 1-3-4, 2-3-4 repeated 3 times, then end with 1-3, 4, 3, 4, 1-3

It is difficult to show the pockets formed by a waffle weave as the dimensional quality does not show adequately in computer generated drawdowns or the textile renditions. Sometimes, also the skips are longer than is practical so a more satisfactory result can be had by using the traditional waffle threading as well.

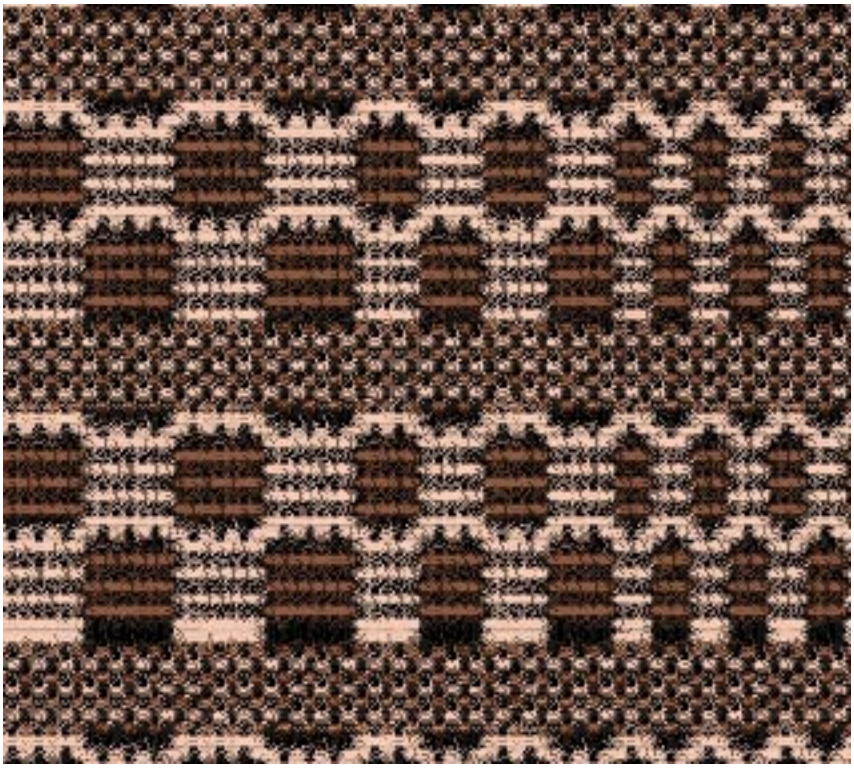


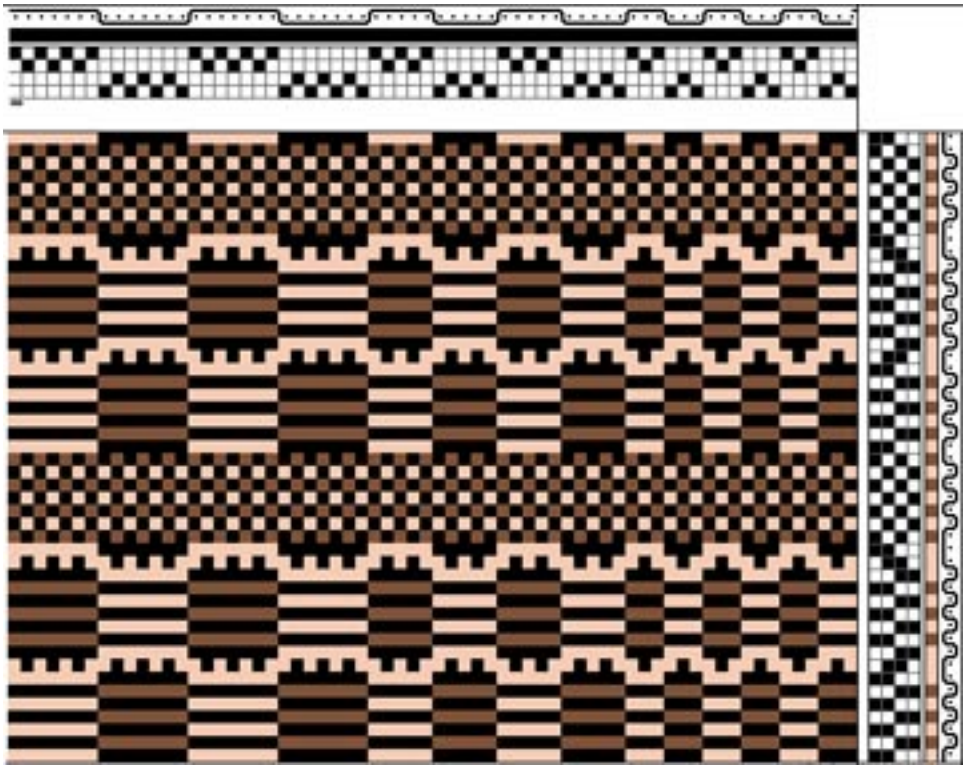
Only a liftplan or pegplan drawdown is given here. To turn the diagram into a tie up plan, find out all of the different weft combinations that have been used and mark them in a tie up area. Only one square needs to be filled in per weft shot as the information is found in the tie up. Can you find out how many treadles would be needed for this pattern? Hint, is it nine or ten?

2 Opposites

1-2 light, 3-4 dark, 3x
1-2 , 2-3 light, 3-4 light, 1-2 dark,
3-4 light, 3x
2-3 light
alternate colors using tabby for 3/4",
then repeat sequence.

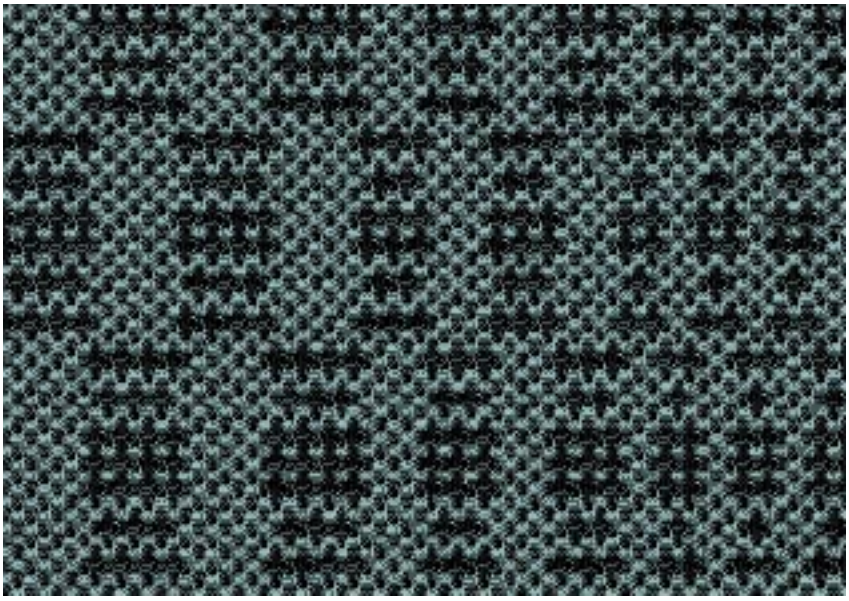
The color choices and the sequence of their use can be varied to suit the weaver. Also the sequence of the treadling for the blocks can be varied as the combinations will give any number of choices and resulting effects.





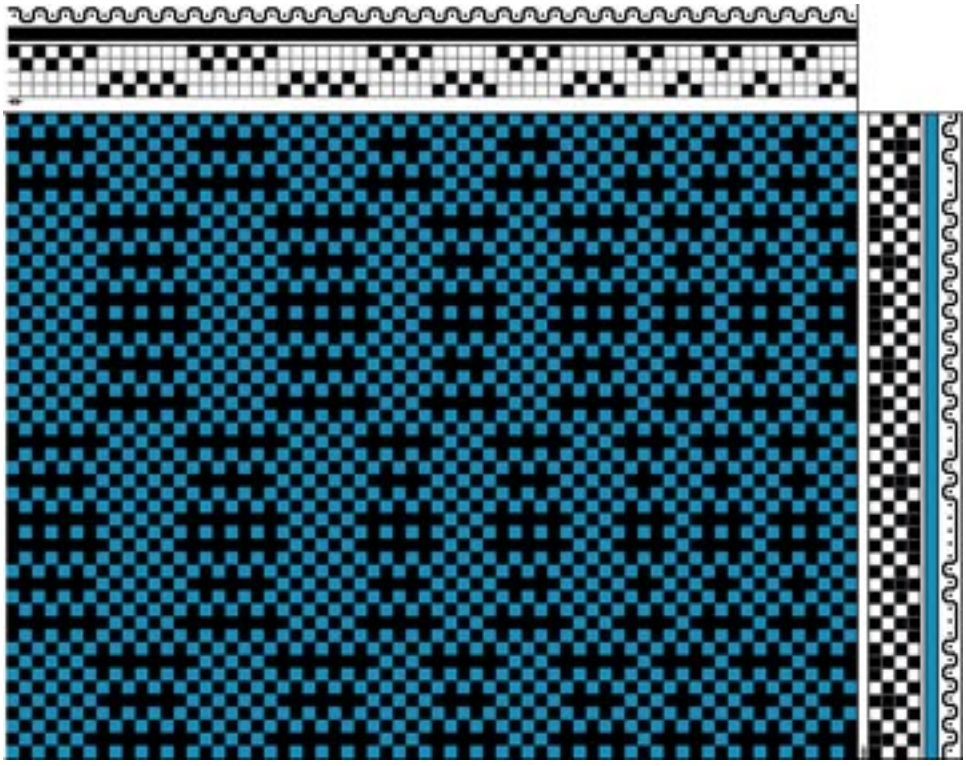
3 Lattice

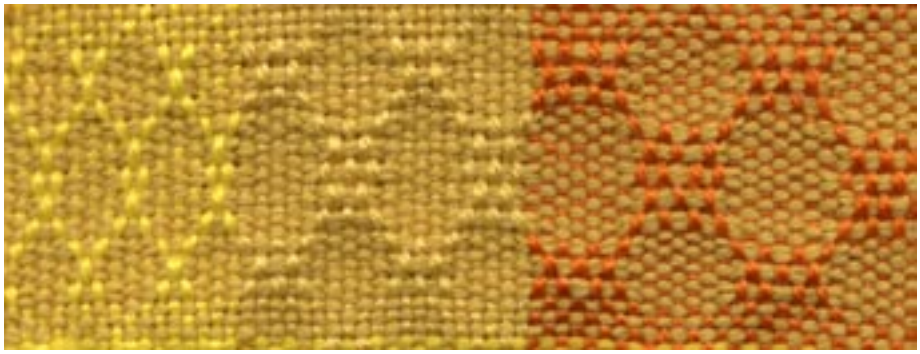
1-3, 1-2-4, 1-3	A
2-4, 1-2-3, 2-4	B
1-3, 1-2-4, 1-3	A
2-4, 1-3-4, 2-4	C
1-3, 2-3-4, 1-3	D
2-4, 1-3-4, 2-4	C
1-3, 2-3-4, 1-3	D
2-4, 1-3-4, 2-4	C
1-3, 1-2-4, 1-3	A
2-4, 1-2-3, 2-4	B
1-3, 1-2-4, 1-3	A



This pattern does not show up as nicely as when it is woven. By using the same or very nearly the same color as the warp, the weft appears to by under the raised portions of the warp and gives a good textured appearance. It looks best in the single areas of the lattice with the two thread block coming in a second and the three thread a distant third.

The back has a series of long skips which do not present an attractive appearance.





actual woven sample

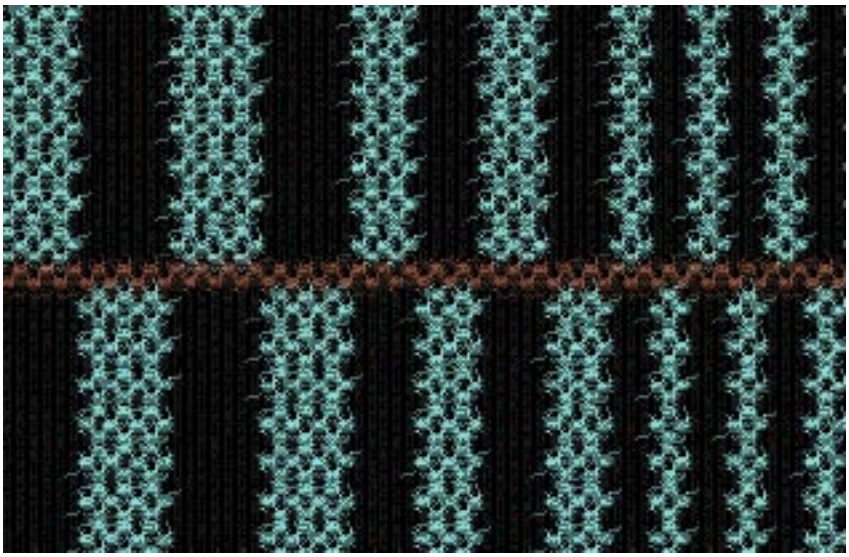
4 Honeycomb

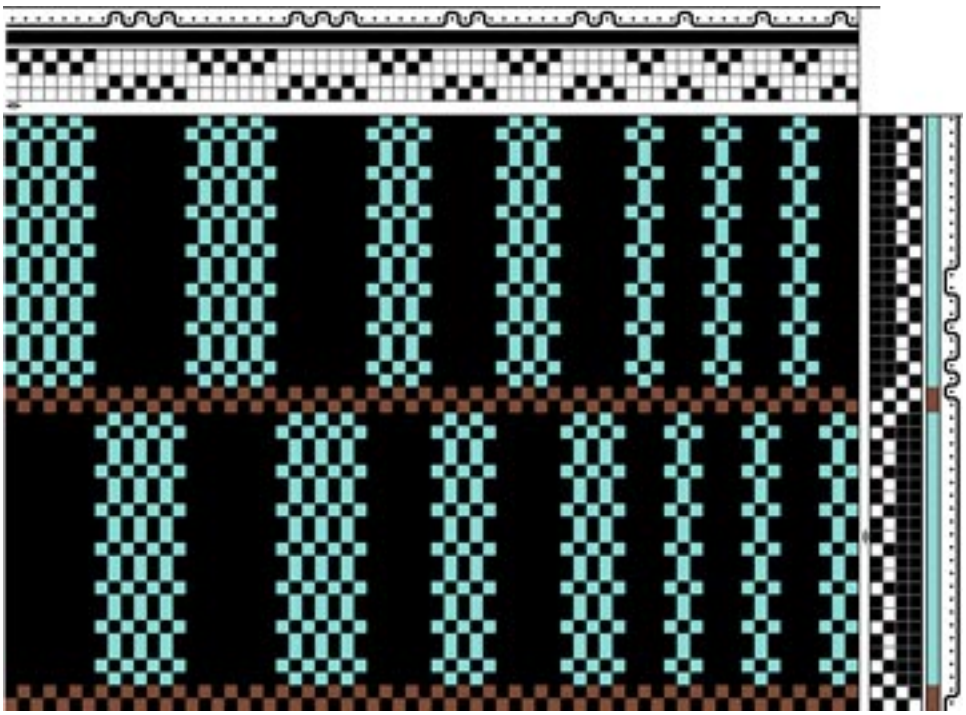
1-3
2-4
} soft heavy thread (warp thread may be used

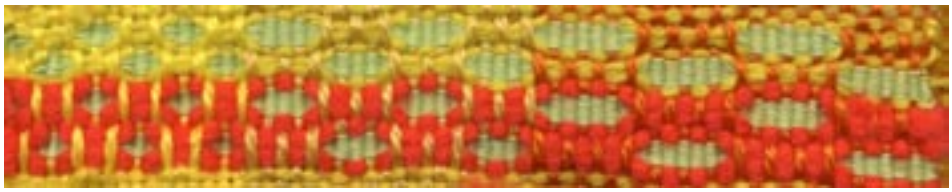
1-3-4
2-3-4
1-3-4
} fine thread 7x

2-4
1-3
} soft heavy thread (warp thread may be used

1-2-4
1-2-3
1-2-4
} fine thread 7x





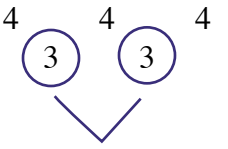


actual woven sample

5 Supplementary Warp

Choose certain warp theads within patterns and insert contrast yarns to substitute for warp threads already there, then weave using the same sequence of threads as in warp for weft, or any sequence desired.

e.g. Substitute



Notes on threading:

1. To have *plain weave sections* separating spots, thread desired width 3,2 3,2 (or 2,3 2,3 in even numbers and to preserve twill progression) then thread spots 1's & 2's or 3's & 4's as desired between the plain weave areas. Remember a border may be achieved also using this method. (see also page 7)

2. Grouped denting may be done to achieve lacy effects.
   e.g. Instead of one end per dent, take a group of three threads, i.e. 4,3,4 or 1,2,1 and put them all in one dent. You may wish to leave an empty dent for an even more open effect. The denting may be done in any order or combination of threads you wish but usually "blocks" of threads do not respond well to being split. They like to be grouped as threaded..

3. Blocks may be threaded using two threads adjacent in the same heddles, i.e. 2 threads in 2 heddles on shaft #2 or 2 in #3 etc. Threading would follow a system such as,

2 2 44
1 1 or 3 3 etc.

One of the best reference books on Huck is:
Four Harness Huck by Evelyn Neher, 203 Boston Street, Guilford, CT 06437

Some patterns generated by the cornucopia tool in WeaveMaker weaving program for the computer.