

# **Turning a Draft**

## **Month 8 Challenge**

**Weaving Year of Wonder Study Group**

**Marcy Petrini**

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# Why Turn a Draft?

- To reduce the number of shafts
- To simplify the treadling
- To change a horizontal design to vertical
- To change a two shuttle weave to one shuttle weave
  - This is this month's challenge

# Turning a Profile Draft

- **If we start with a profile draft, we have to do the following extra steps:**
  - **Decide on a structure**
  - **Convert the profile to a threading draft**
  - **Decide on a suitable treading**

# The Challenge

| # of Ties | # of Pattern Shafts | Possible Blocks                         | Unit Weave   |
|-----------|---------------------|---|--|
| 1         | 1                   | 6 blocks (8 shafts -1 tie – 1 repeated) | Bronson Lace (hybrid)  |
| 2         | 1                   | 6 blocks (8 shafts – 2)                 | Summer and Winter, single, 2-ties unpaired with 1:1 ratio  |
| 3         | 1                   | 5 blocks (8 shafts – 3)                 | Single unpaired 3 ties with a 1:1 ratio, “half satin”; more than one option by threading ties other than a straight draw |
| 4         | 1                   | 4 blocks (8 shafts – 4)                 | Single unpaired 4 ties with a 1:1 ratio, more than one option by threading ties other than a straight draw               |

- Take 1 of the 3 choices of unit weaves (1 warp, 2 wefts) and expand it to the profile draft
  - Do just the ascending portion: A, B, B, C, D, D
  - Some have more than one choice, just pick one
  - Be mindful of the number of treadles!
- Turn the draft
  - The warp becomes the weft, the two wefts become a warp and a supplementary warp
  - I have step-by-step directions of my blogs
  - DO NOT USE software, do it by hand

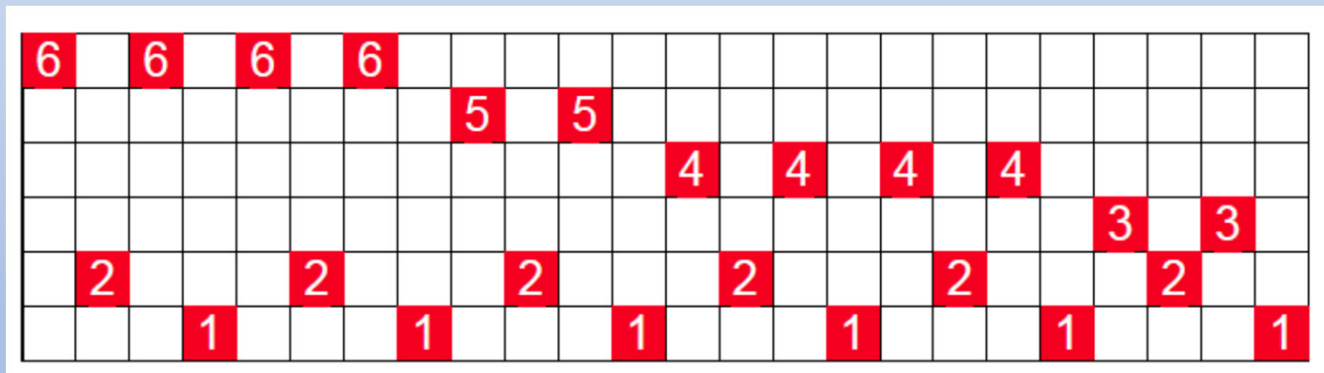
# Starting with a Profile Draft

- We have this profile draft
- We will use summer and winter as the structure:
  - Block A: 1, 3, 2, 3
  - Block B: 1, 4, 2, 4
  - Block C: 1, 5, 2, 5
  - Block D: 1, 6, 2, 6

|   |   |   |   |   |   |
|---|---|---|---|---|---|
| D | D |   |   |   |   |
|   |   | C |   |   |   |
|   |   |   | B | B |   |
|   |   |   |   |   | A |

# The Threading Draft

Here is the profile draft converted to a summer and winter threading draft:



# Deciding on a Treadling Sequence

The simplest treadling sequence is to weave each pattern shaft first with one tie, then the other, called “singles”:

**Block A: 1 & 3; 2 & 3**

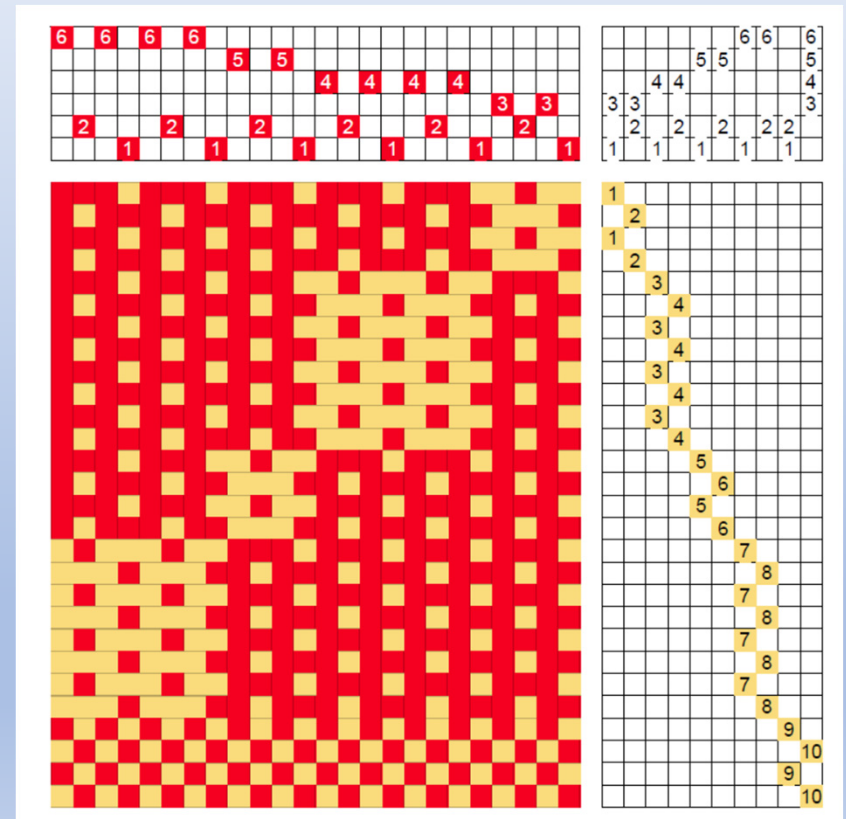
**Block B: 1 & 4; 2 & 4**

**Block C: 1 & 5; 2 & 5**

**Block D: 1 & 6; 2 & 6**

# The Treading Sequence

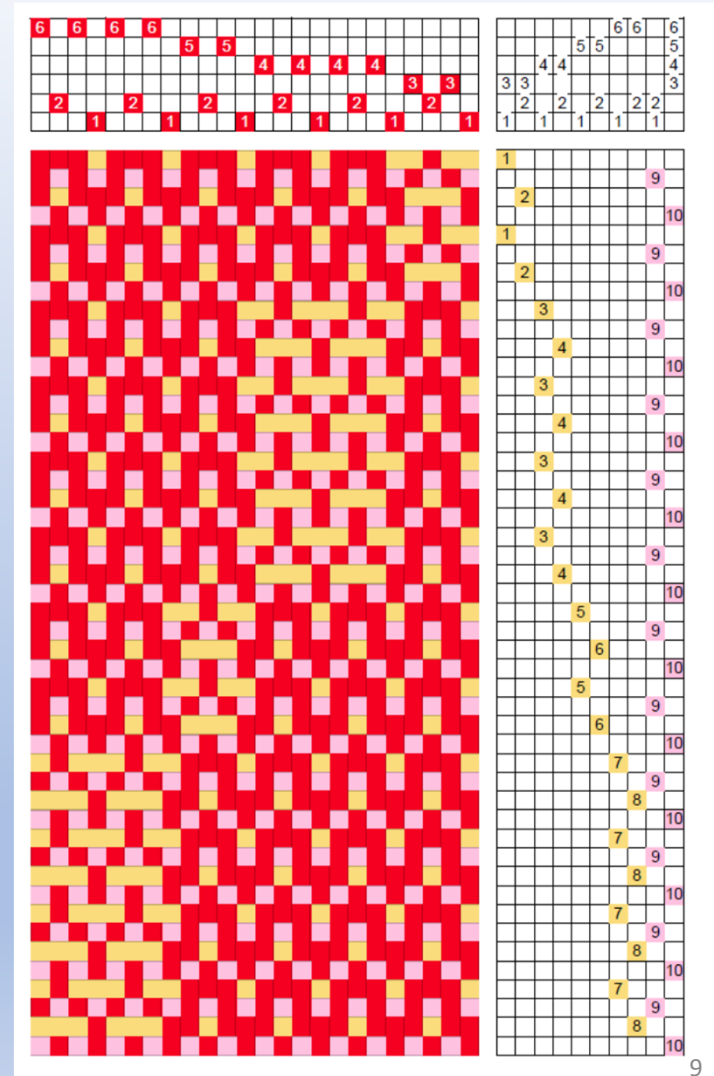
- Each block has a pattern sequence of 4 shots, since there are 4 threads in the threading, double blocks have 8
- When the tabbies are shown separately, as they are in this case, we know that in weaving we alternate them
- We draft only the pattern picks to make the pattern more visible





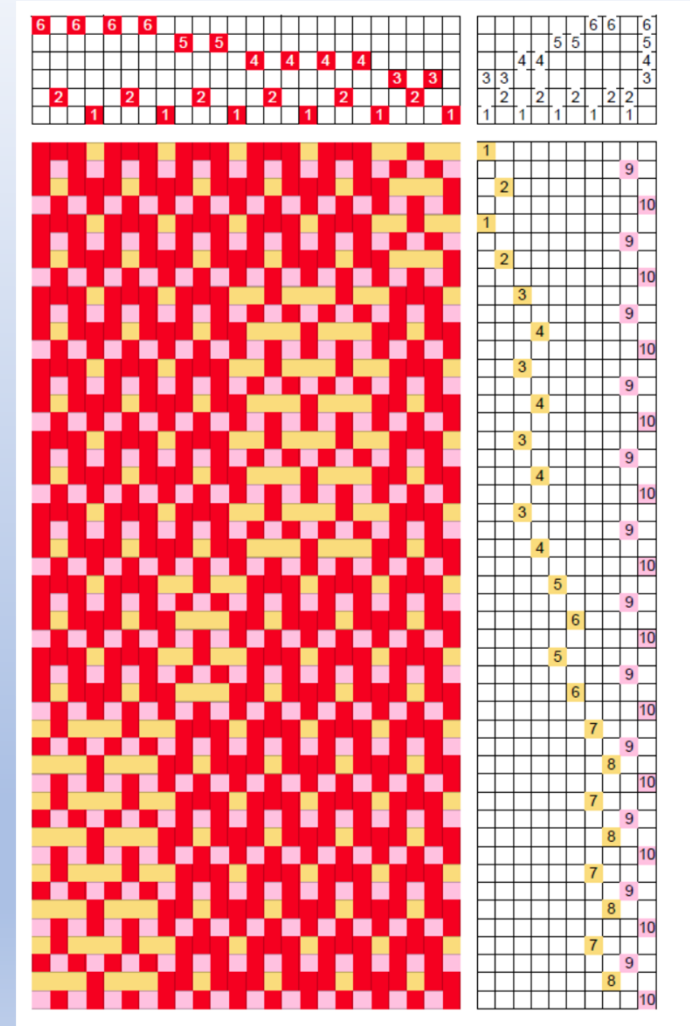
# Adding the Tabbies

- But we need all of the treadling steps in order to turn the draft
- On the right, the tabby is shown in pink, but in weaving our tabby is traditionally the same yarn as the warp



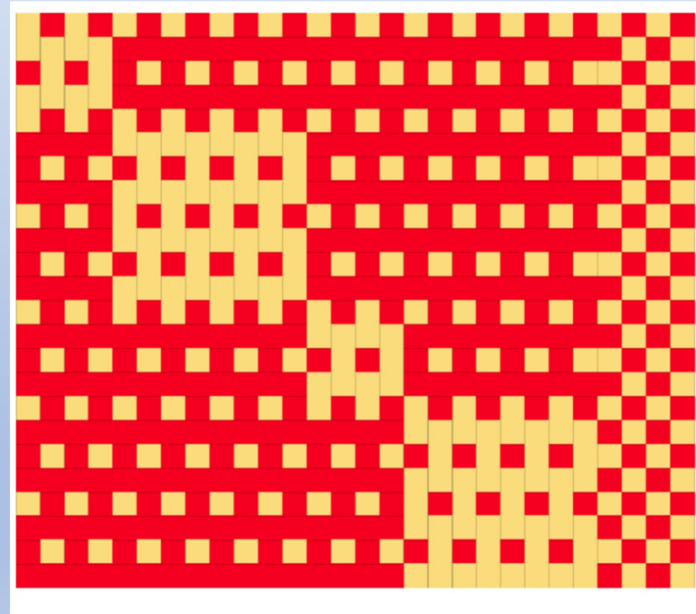
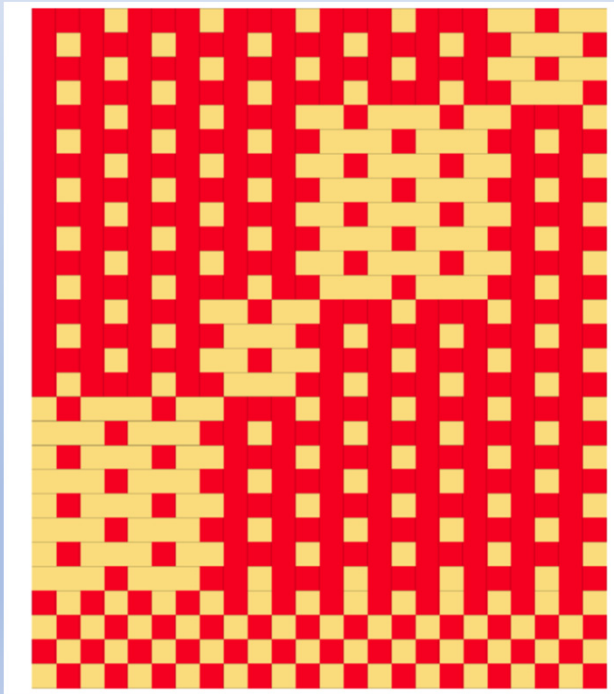
# Turning the Draft

- The treadling becomes the threading
- The threading becomes the treadling
- The tie-up needs to be adjusted
- In this case, we will need 10 shafts and 6 treadles
- We will discuss what to do if we don't have enough of either



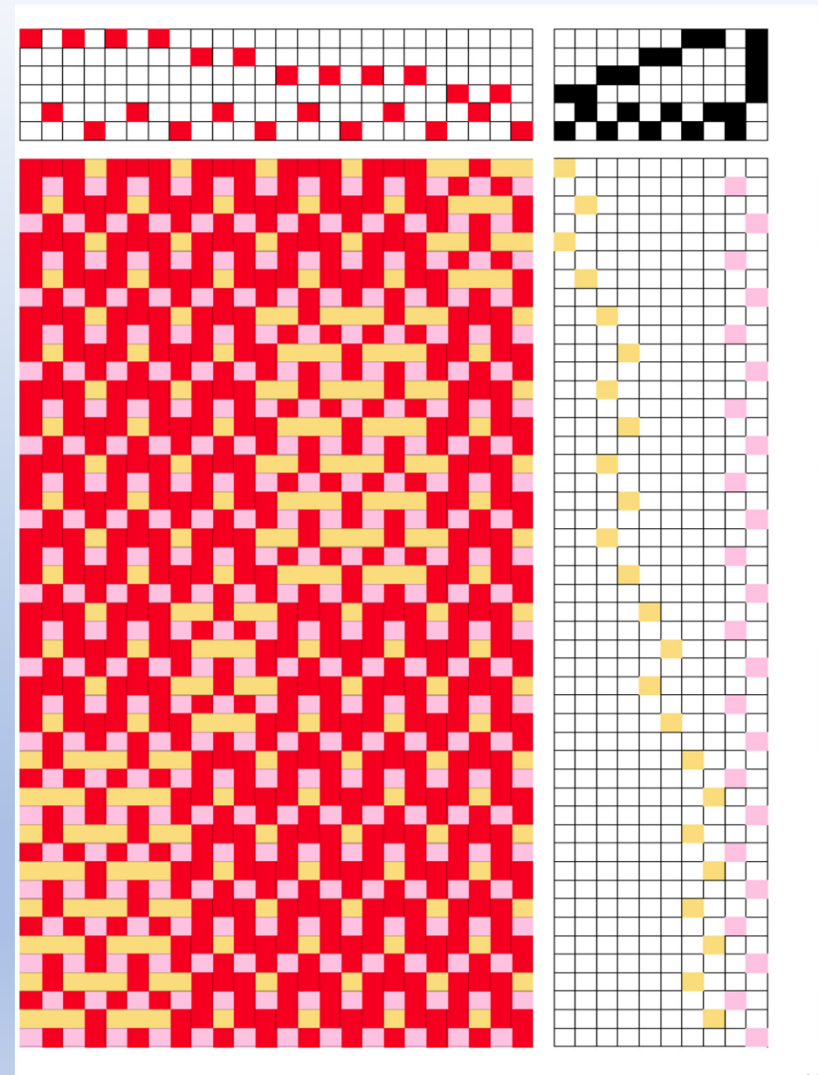
# After Turning

The design on the left should look like the one on the right after it is turned:

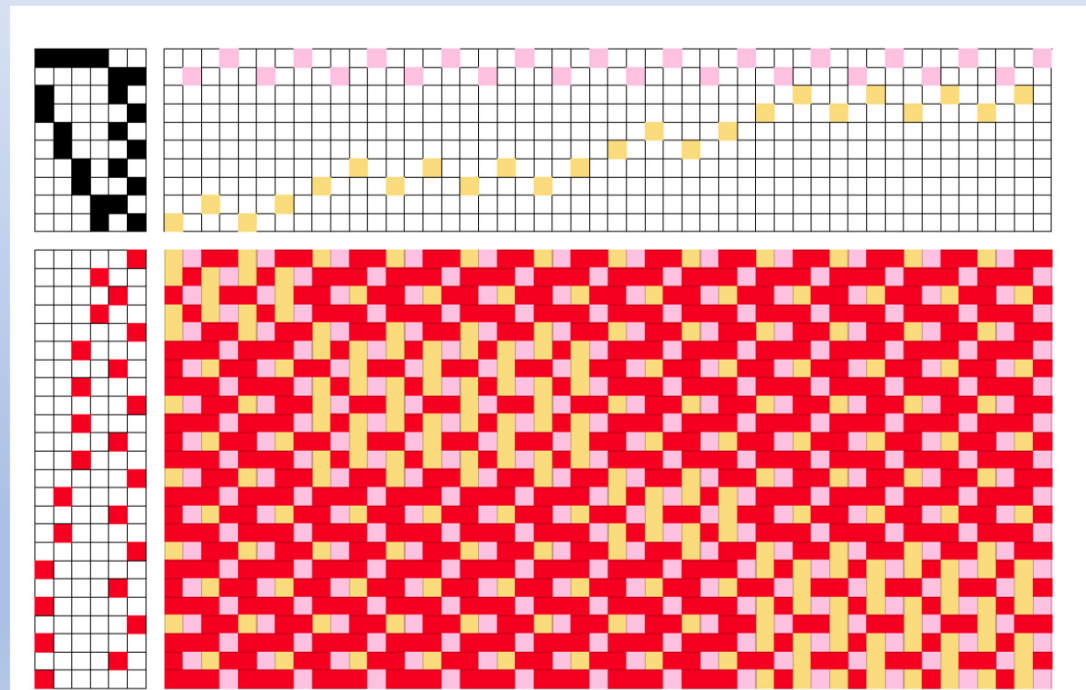
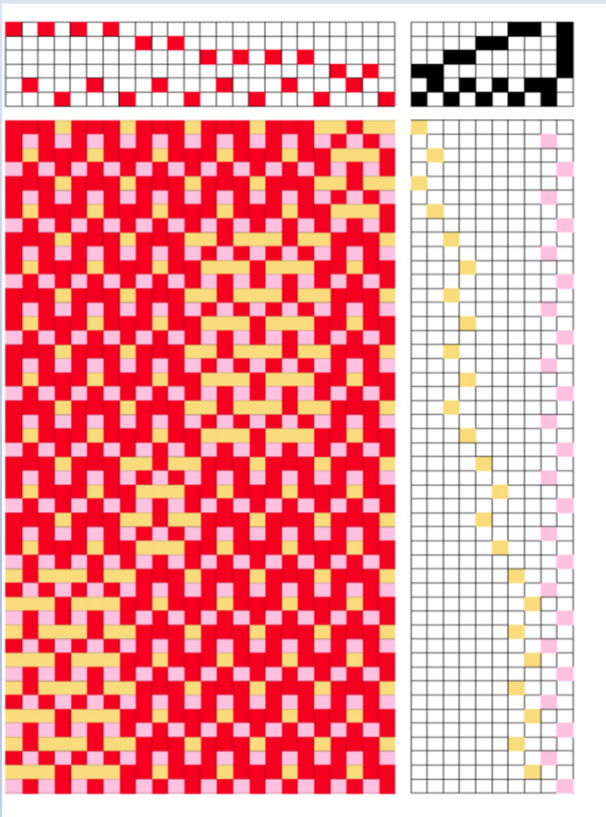


# Positions not Numbers

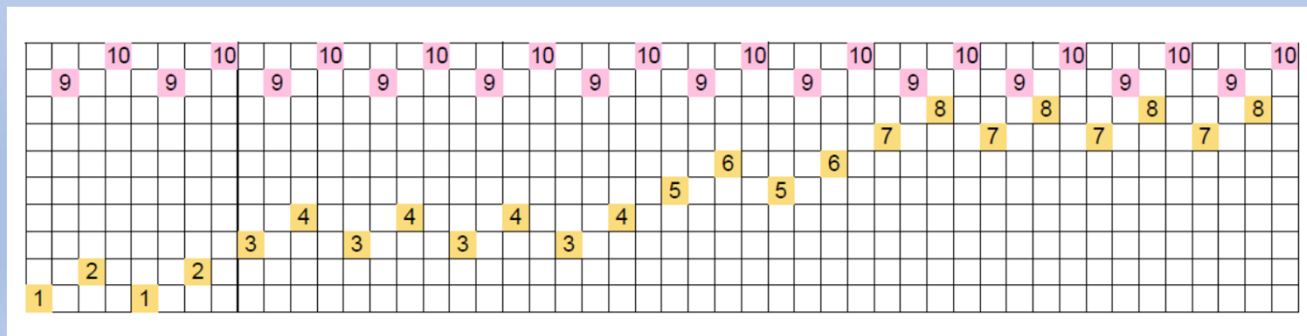
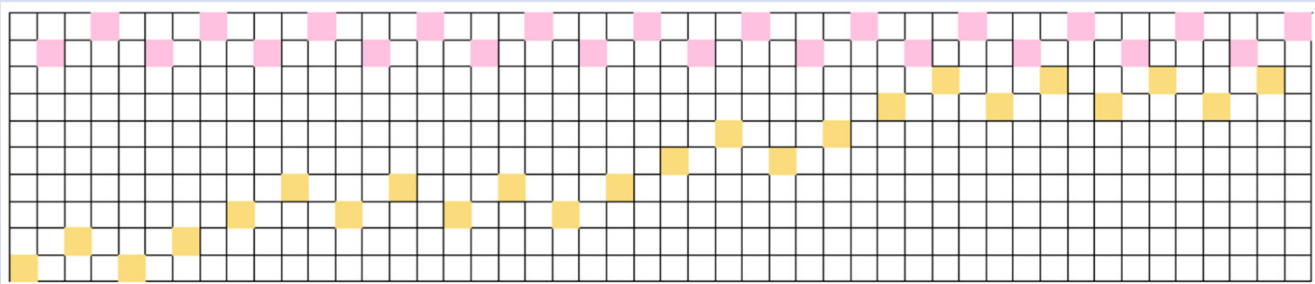
- When turning a draft, I like to think about positions, not number
- It makes it easier to renumber to obtain the new draft



# Turning the Complete Draft

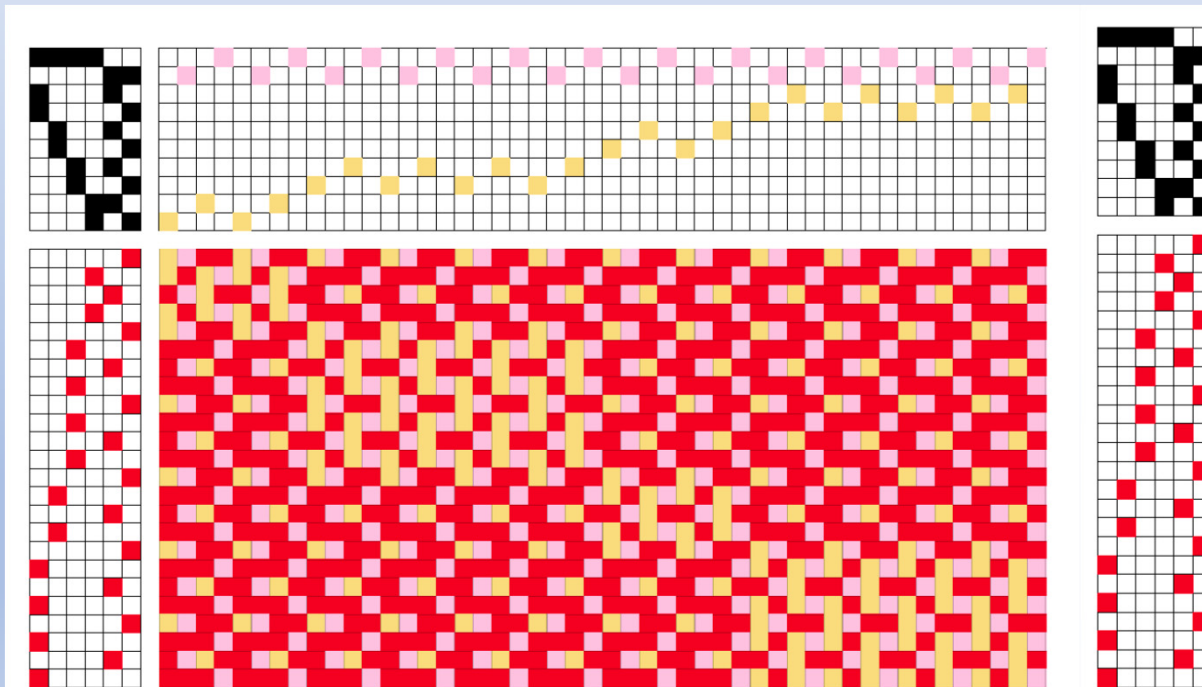


# The Turned Threading



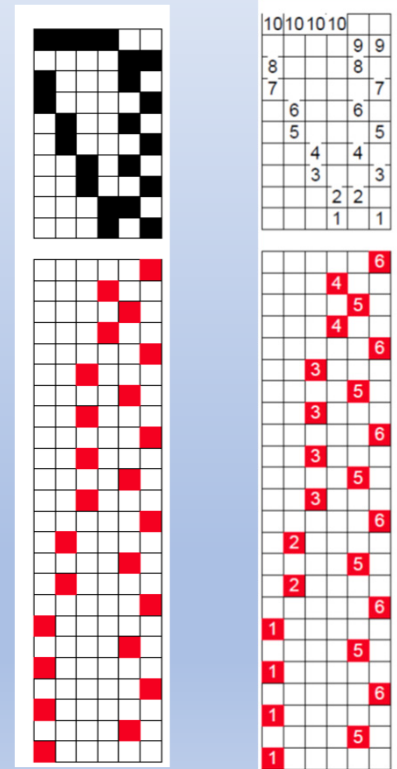
# Turning the Treadling and Tie-Up

- By convention, we slide the treadling and tie-up to the right



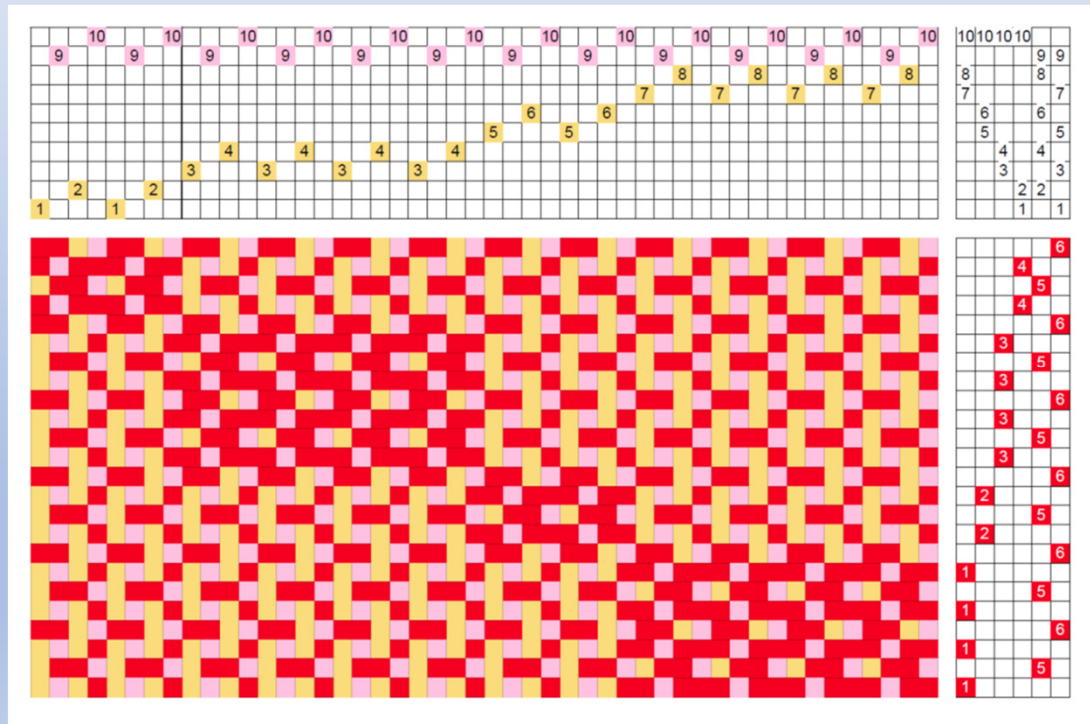
# Numbering the Treadles and Treading Steps

- On the near right is the tie-up and treading from the previous slide
- On the far right is the same tie-up and treading converted from positions to numbers



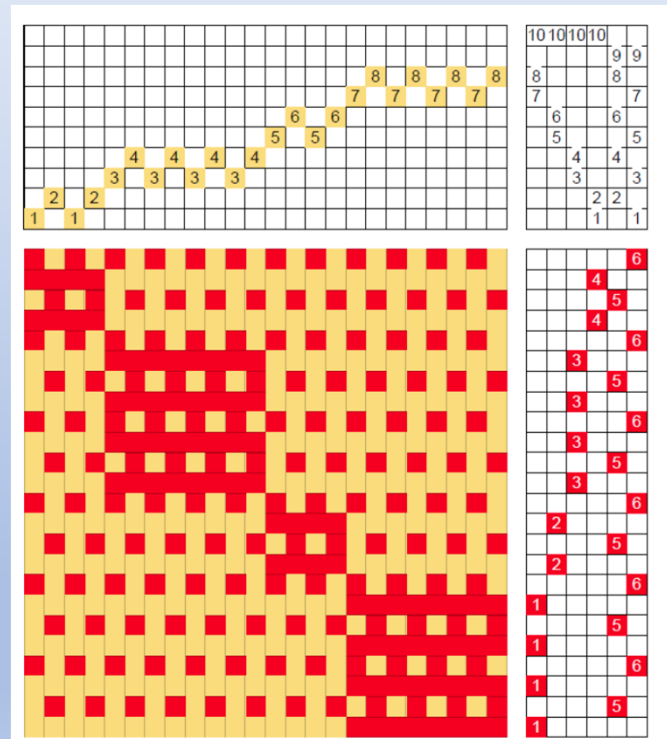


# The Turned Drawdown



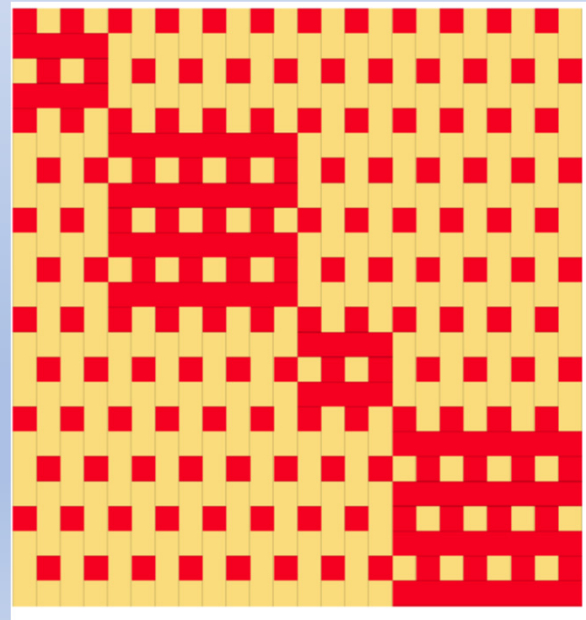
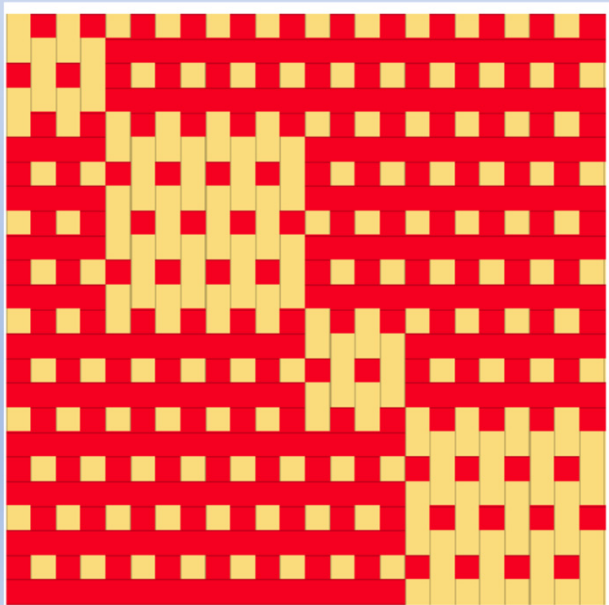
# Turned Drawdown without Ground Warp

- Without the ground warp, it is easier to see the pattern



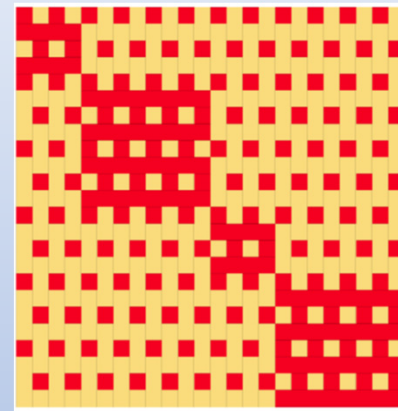
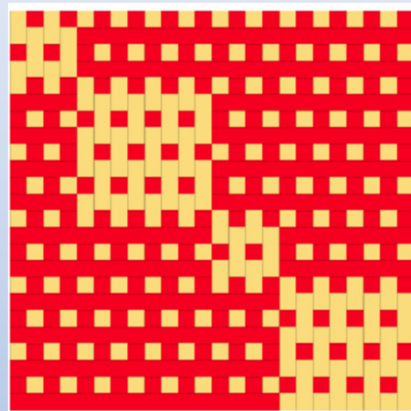
# Can You Tell the Difference Between These Two?

- On the left is the original drawdown rotated
- On the right is the turned draft



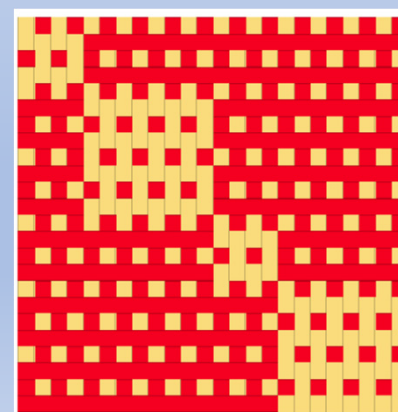
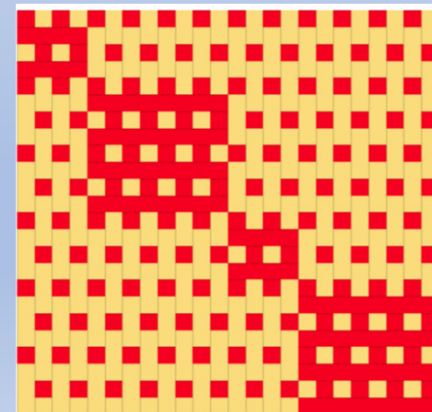
# Comparing Drawdowns

- Front, rotated
- Blocks from weft
- Yellow, thicker



- Front, turned
- Blocks from weft
- Red, thinner

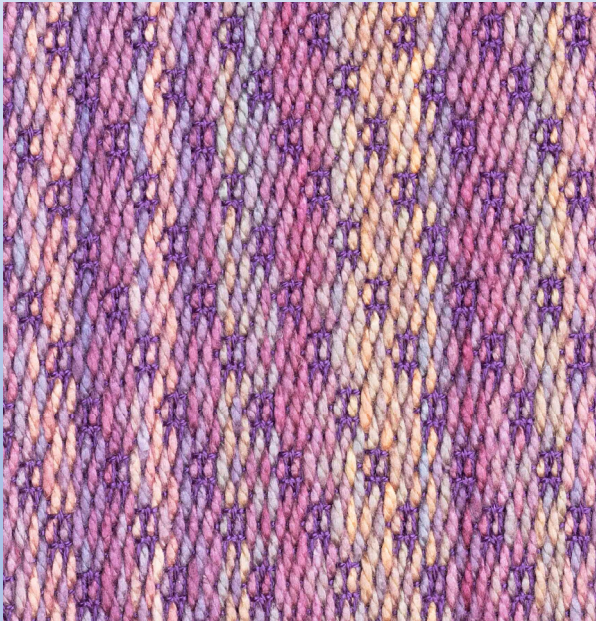
- Back, rotated
- Blocks from warp
- Red, thinner



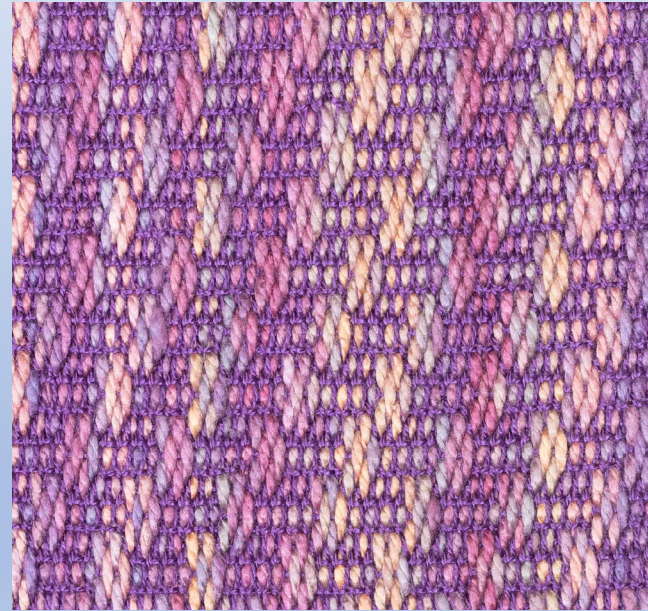
- Back, turned
- Blocks from warp
- Yellow, thicker

# Sample of Turned Summer and Winter

**Front**

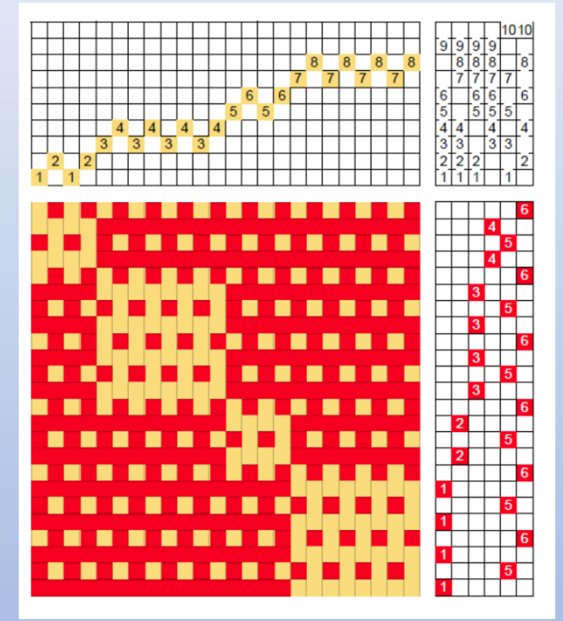
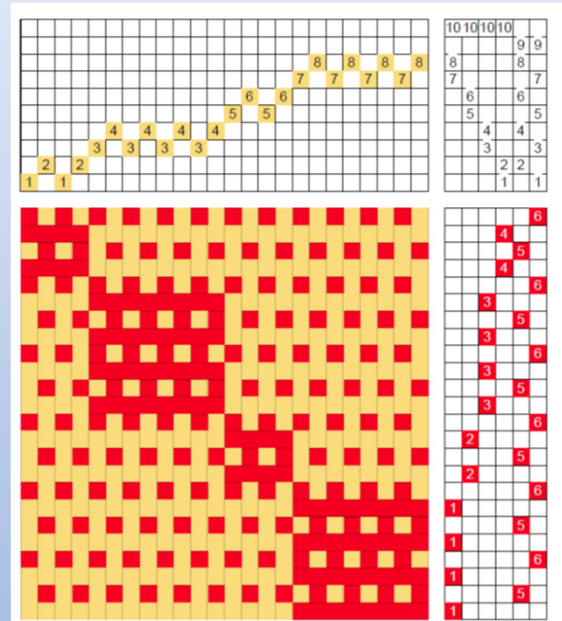


**Back**

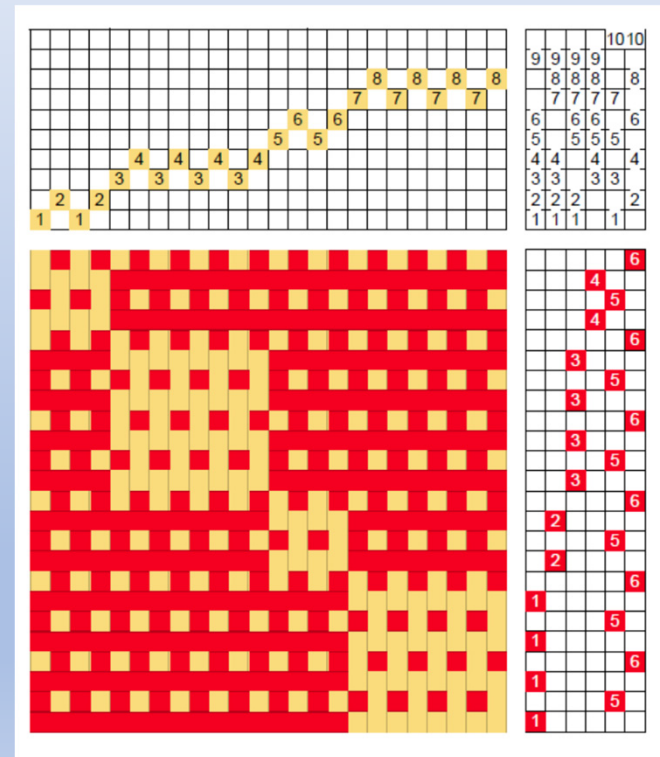
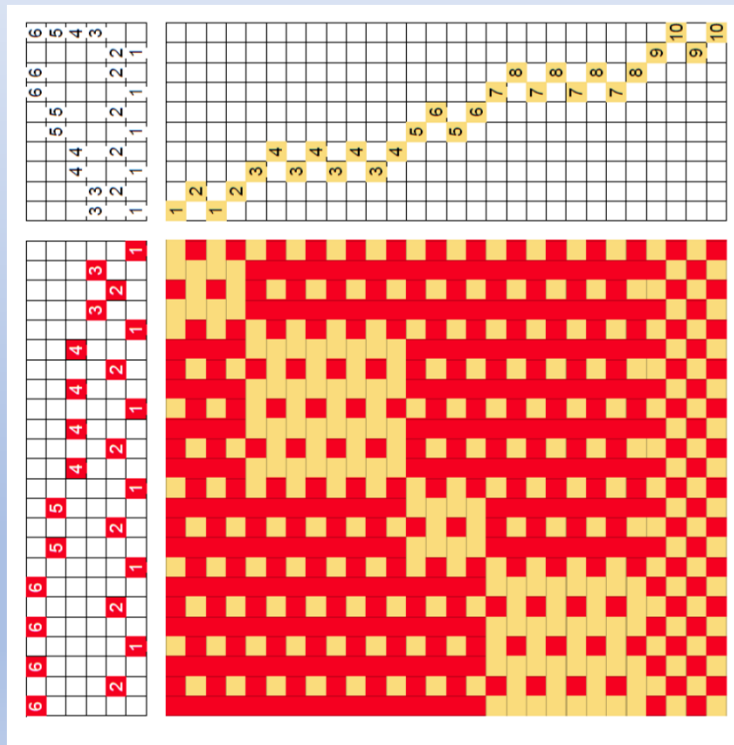


# Our choice

- Weave the cloth so the back of the original rotated draft is on top (left)
- We can change the tie-up the usual way: tied become untied & *vice versa* (right)
- Don't forget what is a thin (red) and what is a thick thread (yellow)

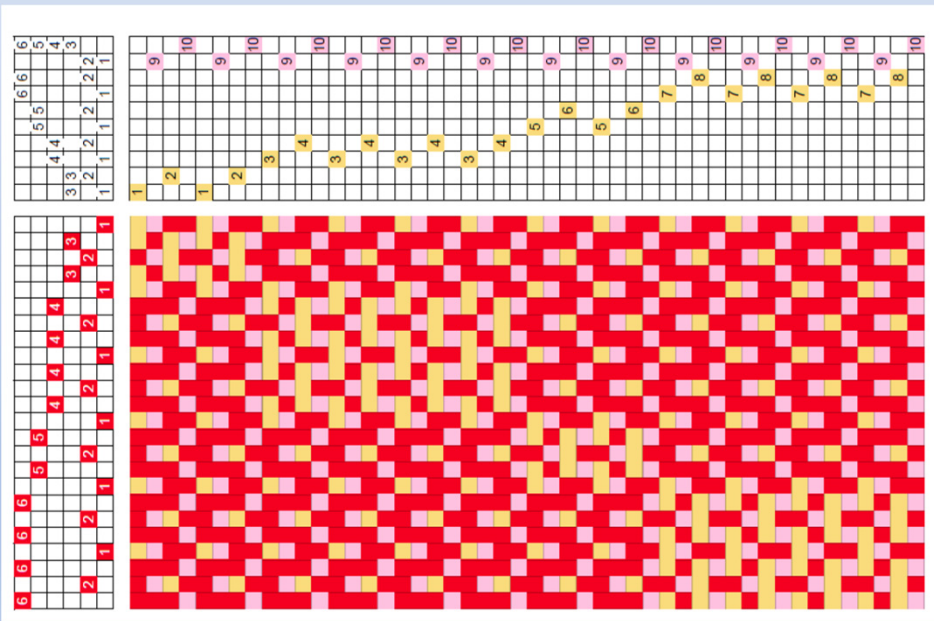


# Turned Same as Rotated

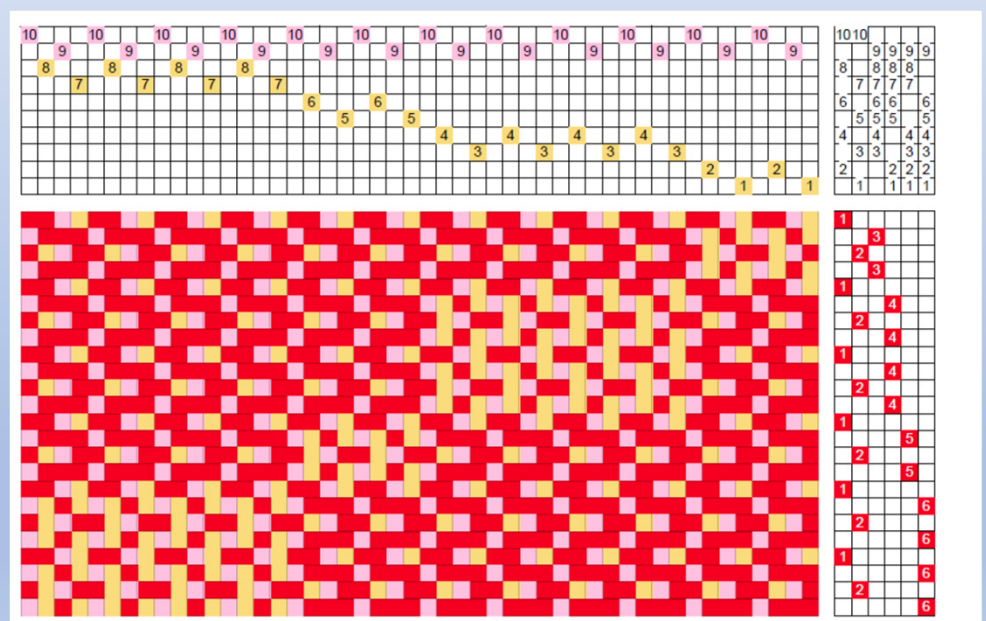


# Turning by Steps vs. Software

## Original draft rotated



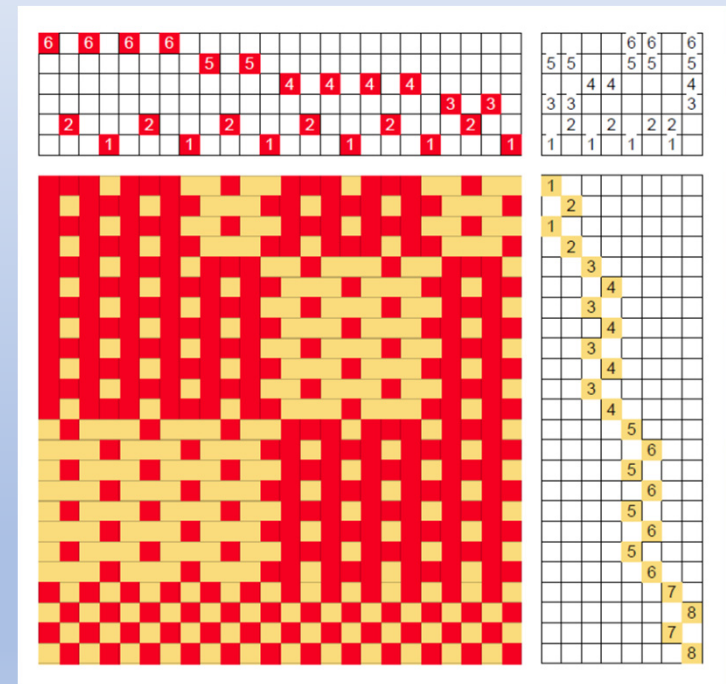
## Turned by software





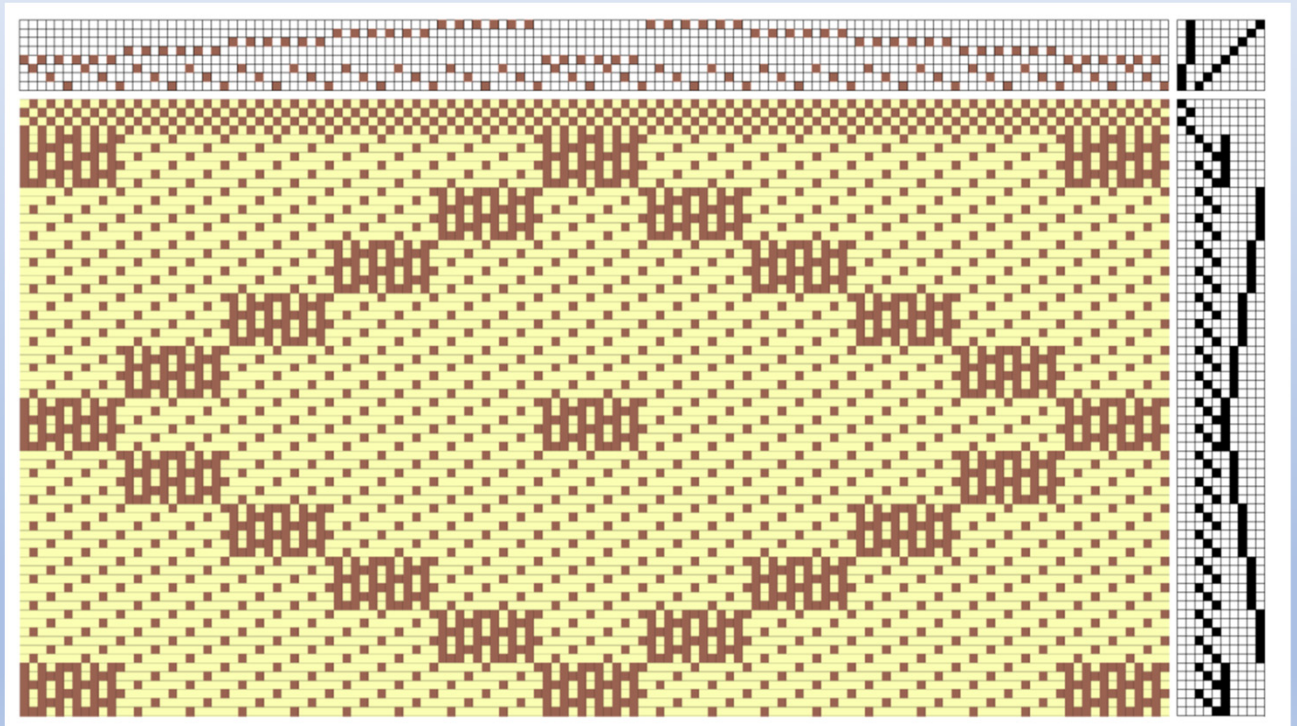
# What if we don't have 10 shafts?

- We can combine blocks in the treadling
- On the right, block C is combined with A and D
- 8 treadles remain, turned is 8 shafts
- When combining, we need to make sure that the block doesn't become unnecessary

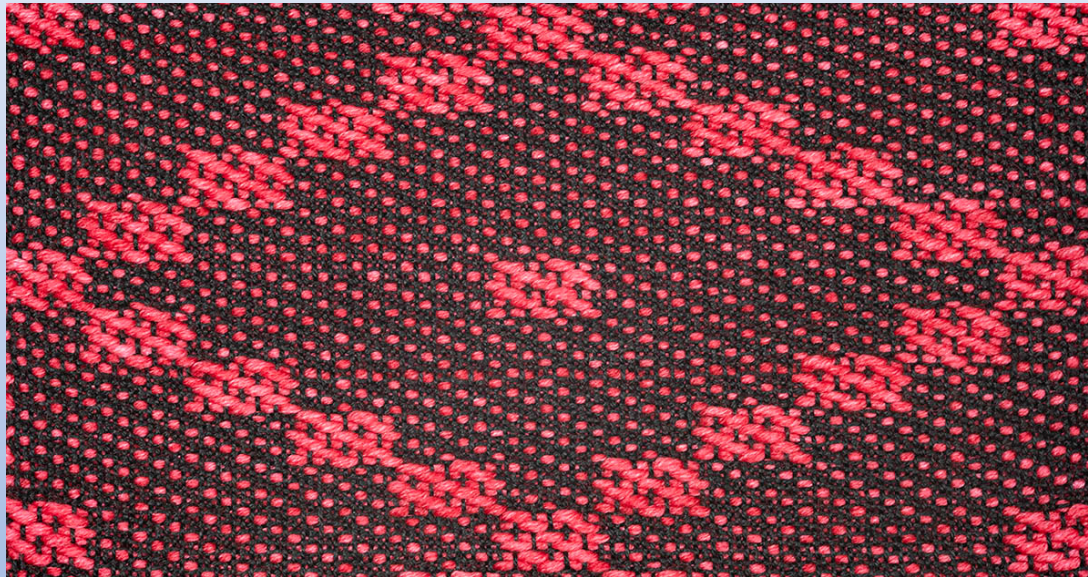


# Single, Three-ties, Unpaired, 1:1 ratio

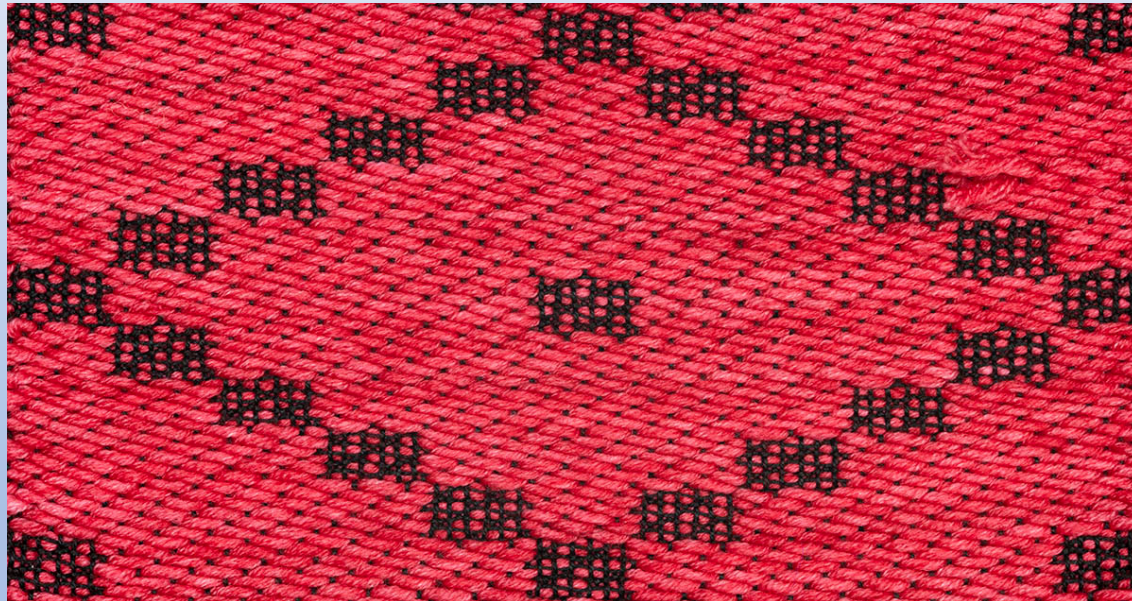
- In order to weave this structure with 10 treadles, I had to use two feet
- However, I cannot turn this draft, since when the treadling becomes the threading, I would have threads going to two shafts!



# Single, Three-ties, Unpaired, 1:1 ratio Front

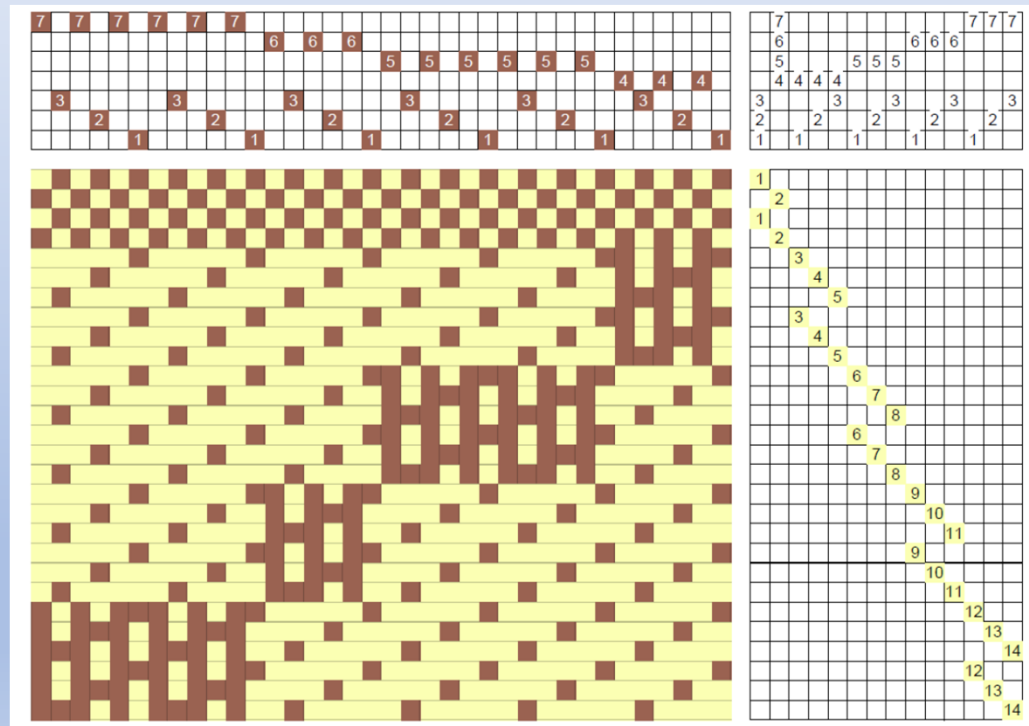


# Single, Three-ties, Unpaired, 1:1 ratio Back



# Profile Draft with Single, Three-ties, Unpaired, 1:1 ratio

If we turn this draft,  
we will need 14  
shafts and 7  
treadles

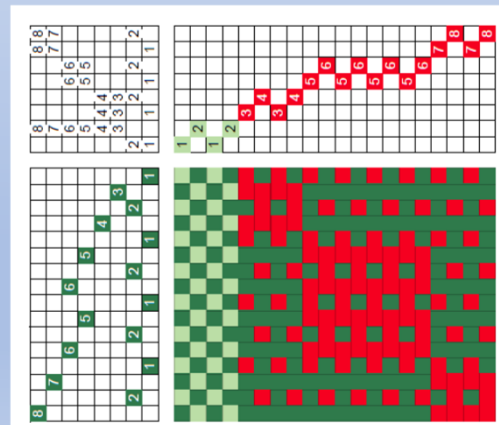
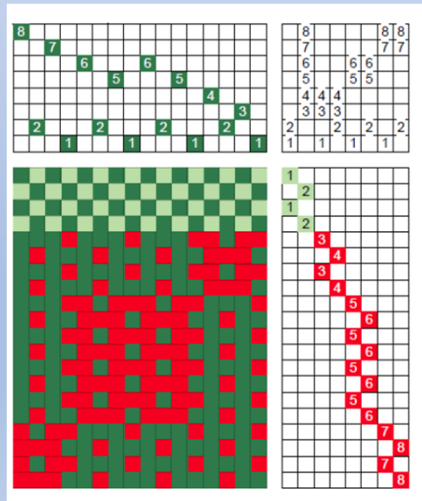


# Considerations in Turning Drafts

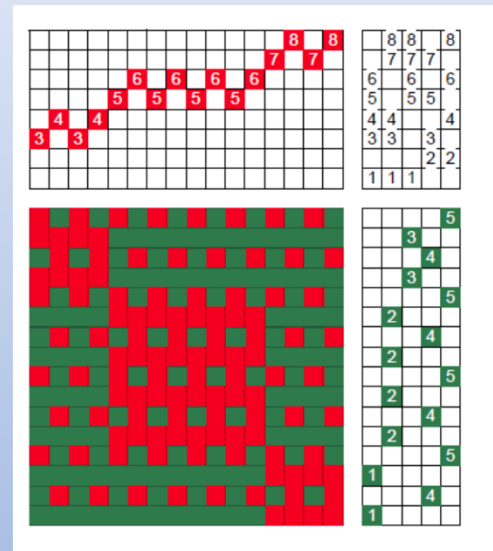
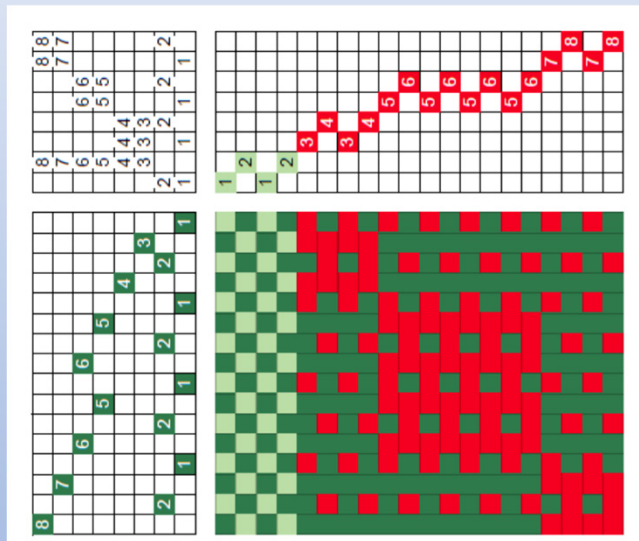
- **Before starting, make sure that each treading step uses one single treadle**
- **The number of treadles becomes the number of shafts; make sure that you have enough shafts; if not either combine blocks or change the design**
- **The number of shafts become the number of treadles; make sure you have enough treadles; if not, can the treading be obtained with two feet?**

# How Do I Know My Turned Draft is Correct?

- The turned draft should be the same as the original draft rotated
- Let's use another example: Double, two unpaired ties, 1:1
- Left side original draft, right side original draft rotated



# Rotated Draft (Left) Turned Draft (Right)



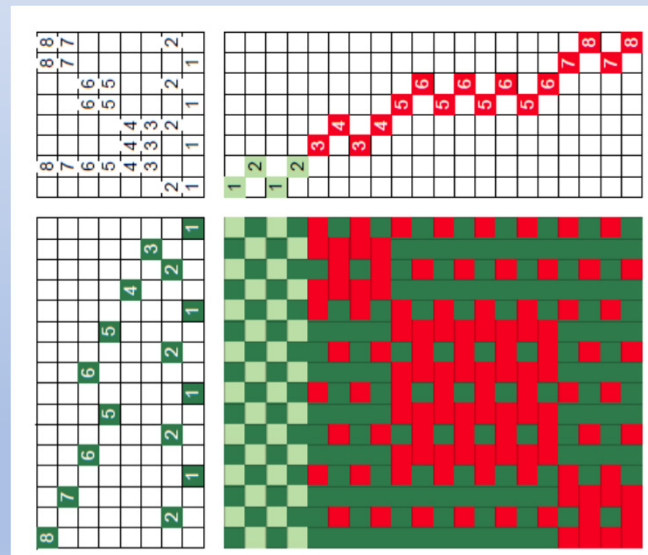
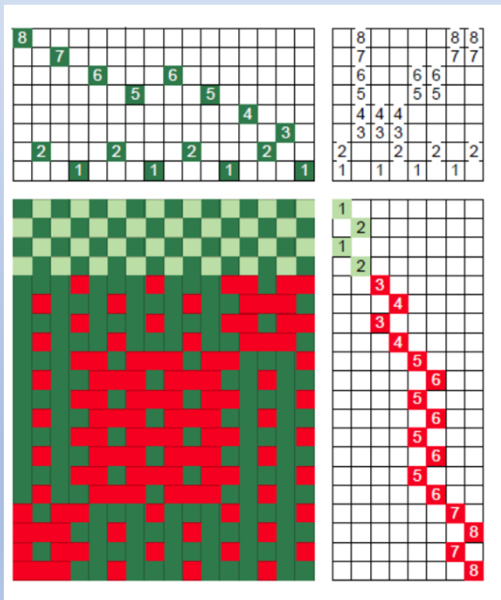
The sequence going from left to right is in the following slides



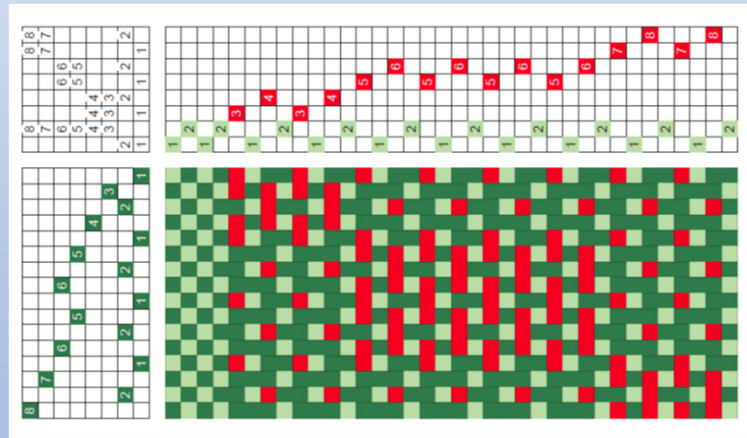
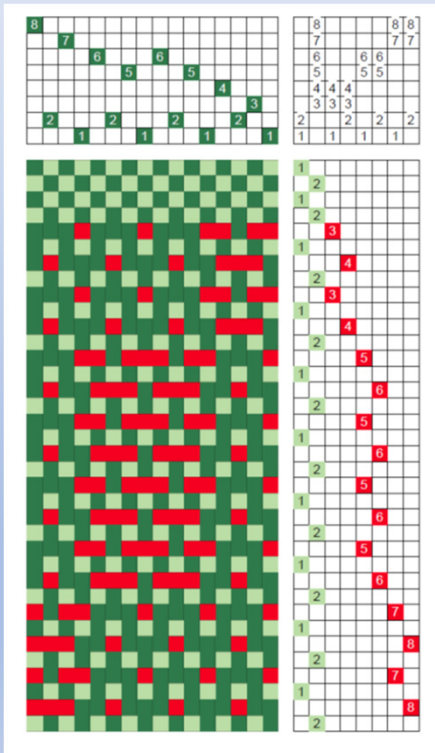
# **The Sequence for Turning the Double, Two Unpaired Ties, 1:1**

# Double, Two Unpaired ties, 1:1

Original on the left, rotated on the right

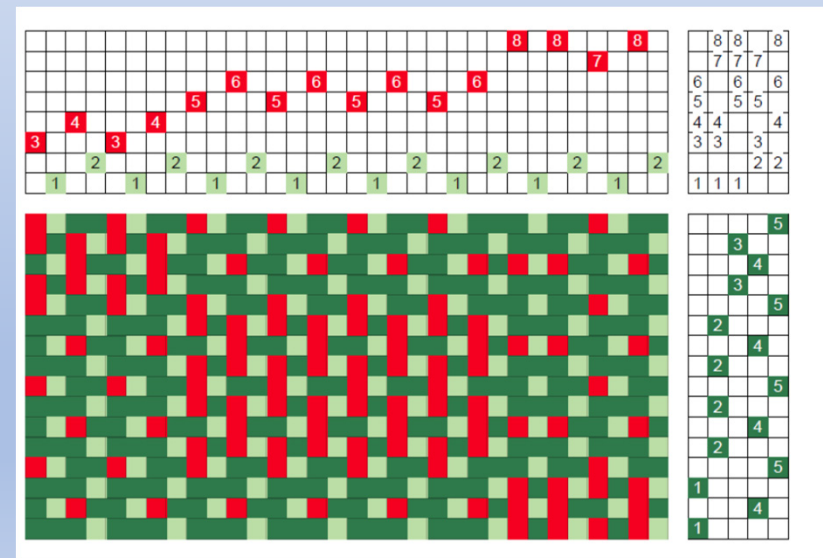
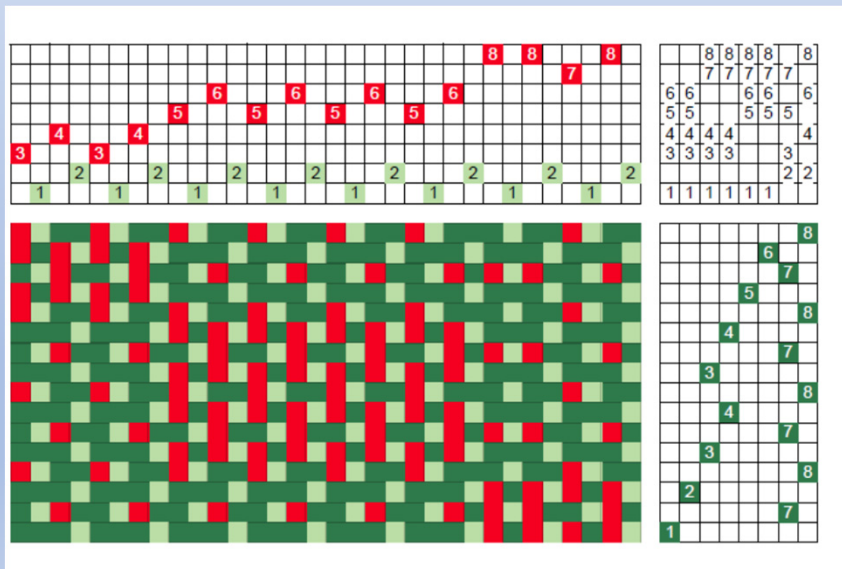


# Drawdown with Tabbies & Rotated

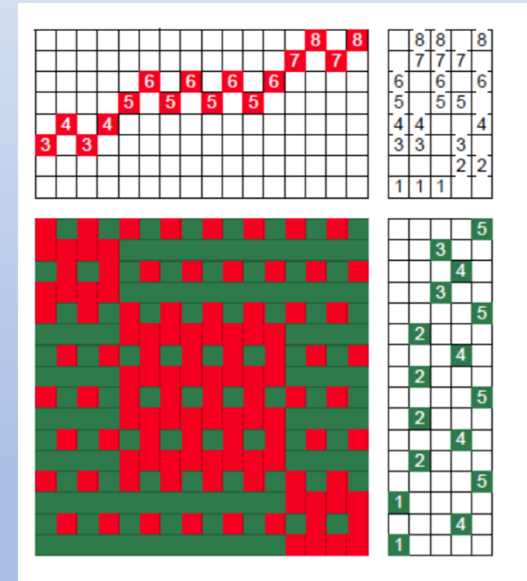
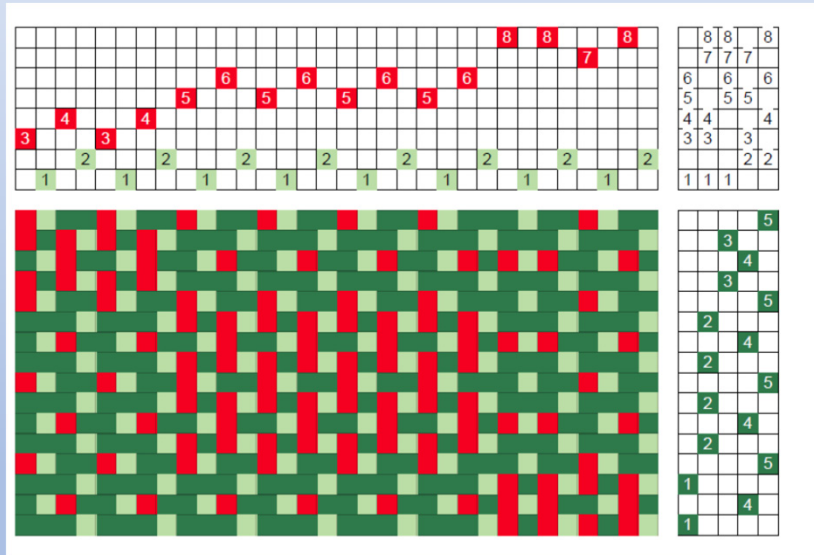


# Drawdown Turned with Double Treadles

The turned drawdown on the left has double treadles next to each other; we can simplify the treading by removing them as shown on the right.



# Drawdown Turned with Tabbies and Without



# Rotated Draft (Left) Turned Draft (Right)

