



# *Warp speed*

**majacraft**

*all you need to weave your dreams*

# *table of contents*

introduction	3	pattern	24
		photos	25
reading the patterns	4		
symbol key	4	layered warp	26
		description	26
standard circular warp	6	photos	27
description	6		
pattern	7	3d warp	28
photos	9	description	28
		constructing a 3d loom	29
grid warp	10	pattern	31
description	10	photos	33
pattern	11		
photos	15	loom origins	34
linear warp	17	warp development	36
description	17		
pattern	18	creativity	38
		inspirational weaving	38
fan warp	19		
description	19	template	43
pattern	20		
photos	21	credits	44
offset warp	23		
description	23		



# introduction

At some point, weaving in circles becomes a whole lot more than just weaving in circles. Initially, there is much satisfaction to be found by simply starting in the middle of a disc, and weaving outwards, turning around and around, spiraling towards the edge in ever increasing waves. It is a process that can be meditative and restful, but it can also be thought challenging and creative. The discoveries come, not just with experimentations in the use of different fibers, textures, colours and patterns on the basic circular loom warp, but also in the many variations that can be made in the warp itself.

Experimenting with different kinds of warping patterns and methods, allows for a range of items to be created from the circular loom, as well as allowing all kinds of techniques to be used, such as tapestry weaving, beading, crochet and knitting, even cross stitch and embroidery techniques. I love to combine skills and techniques, to use unusual materials, and to play around with ideas as part of the creative process. Think of the possibilities in combining weaving, crochet, and felting all in one piece, or using fine silks and threads to form delicate structures and then suspending beads, or shells and feathers, within it. All these possibilities and more exist within your head and can be translated into a circular weaving.



What follows are some ideas to get you started with alternative warping designs for the circular loom. Most of these can be used on all three sizes of the loom, and although they are presented as 'patterns', there is no reason to limit yourself to just what you see here. Consider the patterns to be starting points rather than end results, and feel free to add, adapt, and expand on them to express your own creativity and design choices. But don't finish there, I encourage you to share what you have done, grow the craft and provide seeds for others to explore new ideas and directions in their own creativity too.

*Suzy Brown*

# *reading the patterns*

Describing a pattern for warping the circular loom using text is a tricky process. It is very easy to introduce complexity and confusion for the weaver. To overcome this issue, we have developed a pattern scheme in an attempt to make an intuitive and simple system for warping.

The first thing to identify is the start point. Typically the warp is started on the 'back' of the circular loom - that is the opposite side to the one you plan to work on.

You will notice on the patterns a series of numbers. Number '1' is the start point so tape your warp yarn to the back of the loom near the number '1' and with the long end of the yarn pointing toward the '1'.

From this point, you simply follow the numerical sequence. The yarn will go from the back through the '1' slot and then across to '2'. Obviously the yarn, when it goes through the '2' slot will now be on the back side of the circular loom so you then loop around the back of the notches and then back out the '3' notch.

The patterns have been created to show one or two 'sequences' of the pattern. When the numbers end, simply repeat the sequence all the way around the loom.

The next thing to identify is the end point. This is usually labelled as point 'x'. 'We chose not to give it a fixed number as the pattern should work on any loom regardless of the total number of notches. One notch before the end point will be 'x-1', two notches will be 'x-2'. You can see that the pattern as it leads to the end point will be ..., 'x-3', 'x-2', 'x-1', 'x'. On patterns where something interesting happens in the warp at the end point, the end sequence of numbers will be used to help show the pattern.

On some patterns with increased complexity, the patterns are sometimes split into two to simplify the pattern and avoid having a sea of lines and numbers. The continuation symbol as shown below will help show where the first stage of the pattern ends and the second stage begins.

## *symbol key*

1 - 2 - 3 - 4 ...

Numbers are to be read in ascending order

—————

A solid line demonstrates yarn on the working/visible side of the circular loom



A dashed line demonstrates yarn on the back side of the circular loom



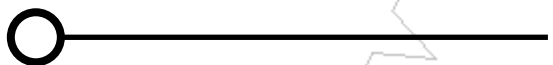
An arrow on the line is sometimes used as an extra measure to clarify the warping direction. In general the numbering scheme should be sufficient



Once a cycle of the pattern has been demonstrated, a pair of arrows are used to indicate the repetition of the pattern until the warp is completed. These are typically used after showing the start of the warp.



When you need to show an end sequence of the warp, use a pair of double arrows to indicate rejoining the warp.



A circle on the line shows the start point of the warp



A square at the end of a line shows the end point of the warp

*s1*

Numbers following an 's' are static points. In some warps you may need to pass through the same notch several times. These are called static points. There will be specific instructions with the pattern to determine the warping direction for a static point.

Three dimensional designs that involve working with two looms separated by a cardboard tube will be represented as one circular loom overlaying another as shown in the image to the left. Typically the looms are the same size although there is no reason you cannot mix and match the sizes. The inner ring on the pattern refers to the topmost circular loom whereas the outer ring on the pattern refers to the loom on the bottom.



# *standard circular warp*

## *description*

This is one of the simplest and fastest ways to warp for a circular weaving and is the perfect starting point. It is based around the idea of doing a simple warp from edge to edge, passing across the centre of the loom.

This kind of warp is ideal for making circular weavings for all kinds of uses, here are some ideas:

- A wall hanging, on its own or linked to other circles.
- Stitch lots of circular weavings together to make a throw or blanket.
- Use one as the basis for crocheting or knitting into, to create a larger item of clothing such as a jersey or wrap.
- Make cushion covers.
- Make two circles and turn them into a bag.
- Tighten up the outside rows as you weave to draw it up into a bowl or hat form.
- Stitch your circles onto larger items such as jerseys, jackets, bags etc.

With this warp you can either make a solid weaving, or make holes, gaps and spaces, and create something lacier. There is much inspiration to be found when going back to some of the more traditional crafts such as Tennerife lace-making, or wagon wheel rug making.



Other interesting ideas to experiment with are things like; missing notches or doubling up your warp threads together in the warp. If you weave in and out of the doubled warp as usual you will see more of the warp as it is thicker, and as you get closer to the edge you can also split the warp and make a denser weave. You could also knot your warp threads in groups to make wider gaps and shapes in your weaving, you can even turn your weft, before completing the entire circle, and weave back and forth across the same group of threads, working one area of the circle at a time to make 'wedges'. There are many techniques for creating variation in your weaving, its a lot of fun to play around with your threads and see what happens!

# pattern

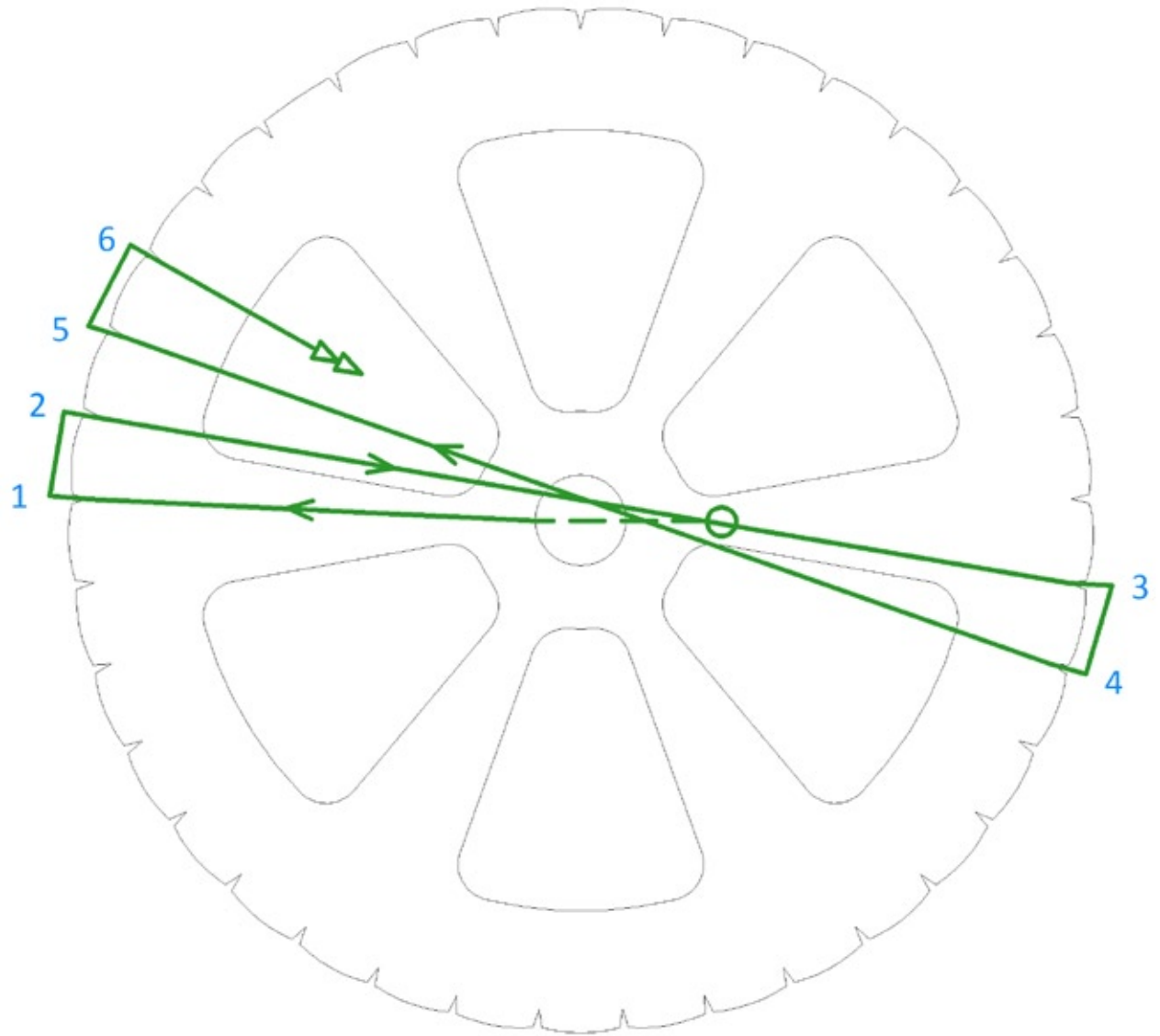
The simplest and fastest way to warp for a solid circular weaving is to take the warp thread straight across the loom, working in one direction around the circle until all the notches are used.

When you have filled all the notches, take the warp thread back through the hole in the middle and secure it at the back. The first 'round' of weaving is then used to tighten the warp threads together in the middle of the loom.

Plain weave simply requires you to go 'under and over' the warp threads with your weaving thread (weft). On each row, you alternate the sequence, so you are going 'over' the warp thread that on the previous row you went 'under'.

When you start weaving around the warp, it is easiest to pick up the warp threads further out from the center, it is clearer which warp is 'next', because in the center you will find they cross over and it is more difficult to find their sequence.

'standard circular warp - 1' shows the start sequence for pattern.



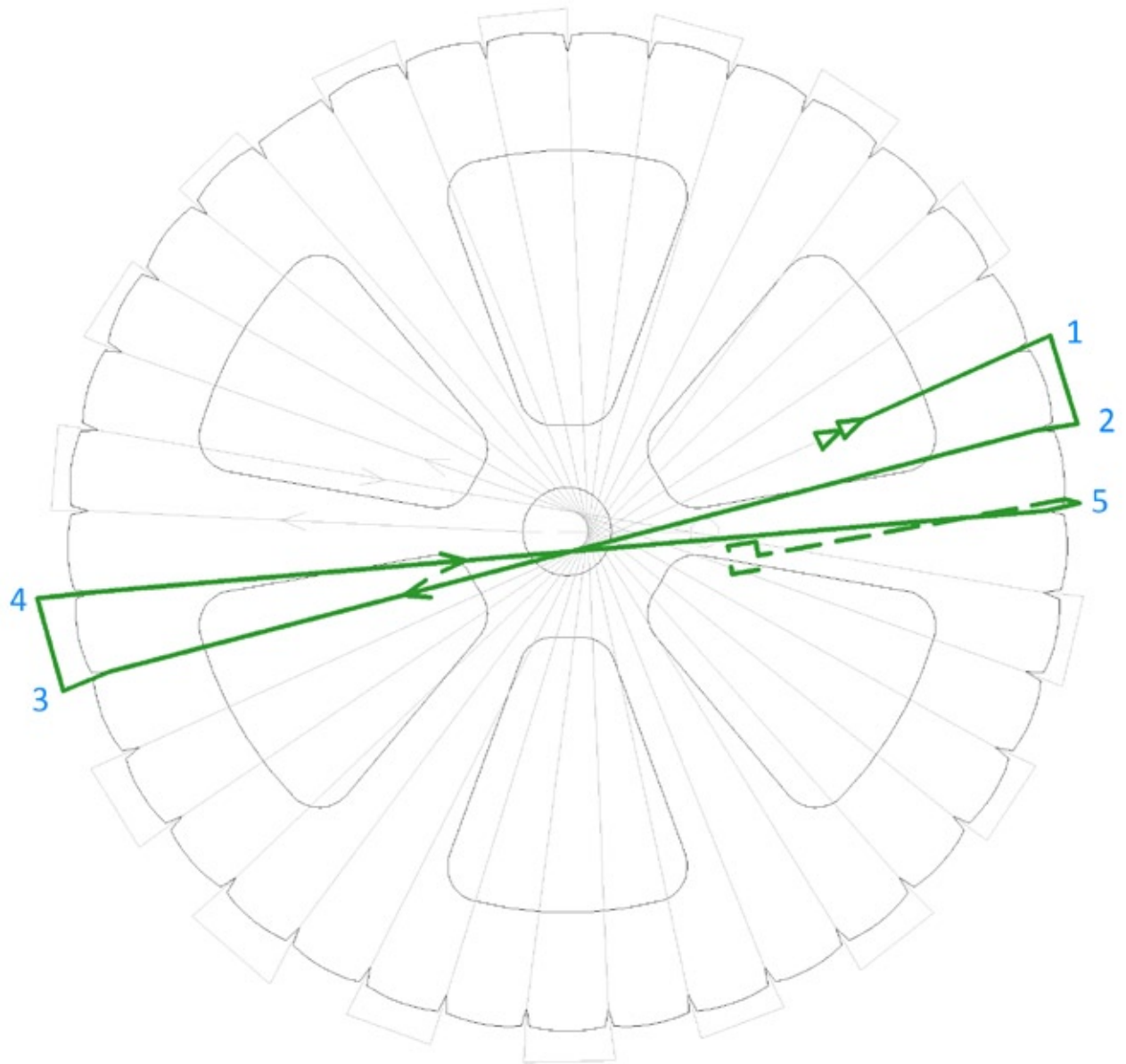
standard circular warp - 1

The 'standard circular warp - 2' image shows the end sequence for the pattern.

Finishing with the start and end points of the warp close together means you can tie them together and then secure them into the centre of the warp when you pull up your first weft round.

Techniques for weaving with this warp

- Plain weave, circling in one direction
- Making sections and weaving back and forth, one section at a time
- Clasped weft techniques (weaving two threads, one from each side, then where they meet, wrapping them around each other and returning back the way they came).
- Knotting and gathering warp threads together to make wider gaps



*standard circular warp - 2*



*photos*



# *grid warp*

## *description*

This warp can be used on any size loom, it creates a grid of squares suitable for weaving into or using as a kind of cross-stitch base. The grid 'squares' are slightly narrower near the edges and widen as they get to the centre of the loom.

The advantage of this kind of warp is that the 'weft' is not restricted to one direction only. It is possible to almost 'paint' into the warp, creating many different kinds of shapes and patterns. The warp can be almost entirely covered, or left visible.



Ideas for using this warp might include, sectioning off areas and weaving each one separately. Or making use of the ability to weave at any angle to make 'squares' and block patterns. It could be interesting to make stripes and lines, or, as shown in the images, create swirls and spirals. Since the grid warp allows a huge amount of freedom it is possible to take quite a graphic approach and create something very unusual.

You might find that as you work into the grid you don't always get a 'tidy' weave, especially if you are experimenting with a range of shapes and textures. I think the best thing you can do in this case, is to keep working on it, focus on one area at a time and make sure your weft threads are reasonably secured, you can even overstitch them with cotton and thread to either secure them further or add to the texture and shaping by pulling them together. Sometimes you can also use surrounding threads to 'push' your shaping the way you want it to go.

Your materials will also affect the end result, with finer, smoother threads being 'less forgiving' in a design than thicker fuzzier ones.

You might want to make your own drawing or sketch for your design before you start and even lay it behind the grid to guide you (much like in tapestry weaving), if you are going to do this don't forget to put it behind the grid before you have warped all around the loom!

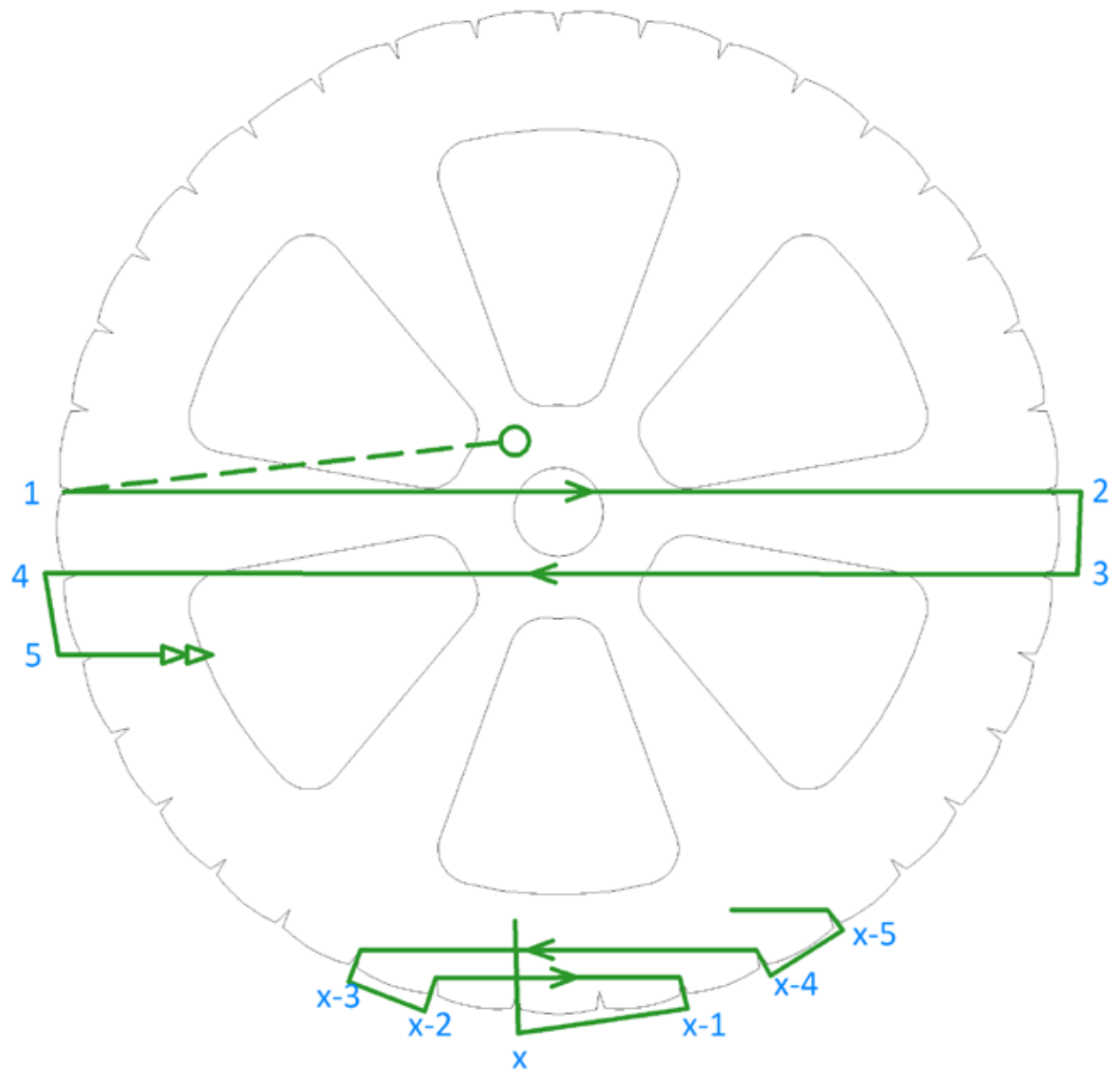
# pattern

There was considerable discussion over what we thought was the best way to complete a grid warp - and you may find as you consider this and other warps in the book that there are many ways to achieve the same thing. My preference was to use two pieces of yarn and warp the horizontal threads with one and then the vertical threads with another. After much discussion and ribbing back and forth, I came to see the error of my ways and together we decided the slightly more complicated warp pattern of using a single thread may be better. The reasons for this is that the threads of the warp are more interleaved so there should be more structure and strength to the finished design.

The warp is carried out in four sections, 'the principle is to start at the centre then work out toward the edge, start at the centre again for the perpendicular part of the warp and then work out to the edge again. Repeat this for all four quarters.

Start with the warp thread on the back of the loom, make sure it is attached near the centre (in case it is to be joined up again later). You need to do a first cross that is to be done horizontally. Work back and forth out toward the edge. Which edge you choose to work toward is not important. Also, it is not necessary to go right to the extremities because it is tricky to weave at the edges.

When you are out near the edge, choose the centre notch to start the vertical part of the warp. Move on to the next part of the pattern.

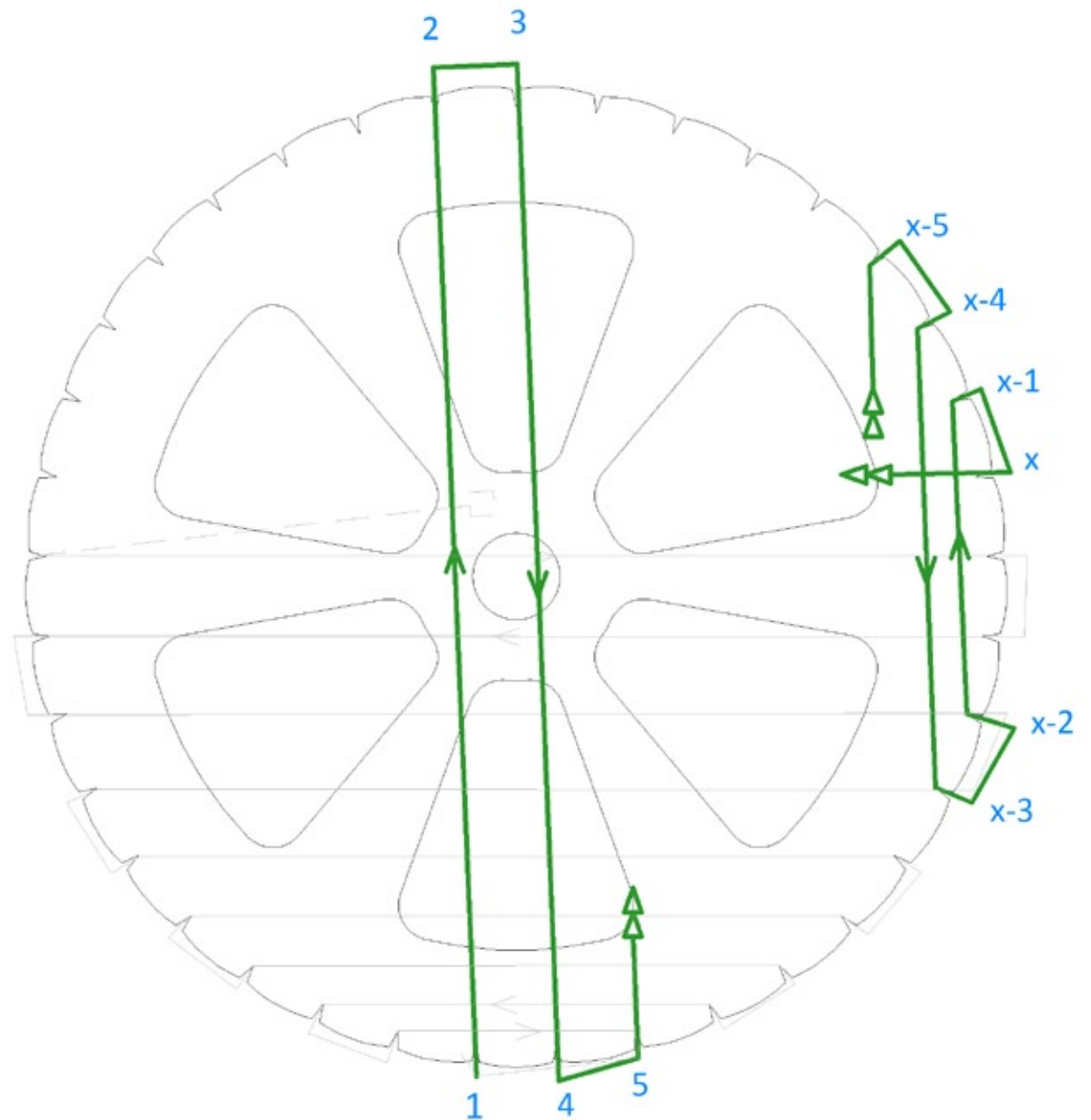




The first vertical part of the warp again starts in the centre but this time uses a vertical pass and you warp out toward the edge.

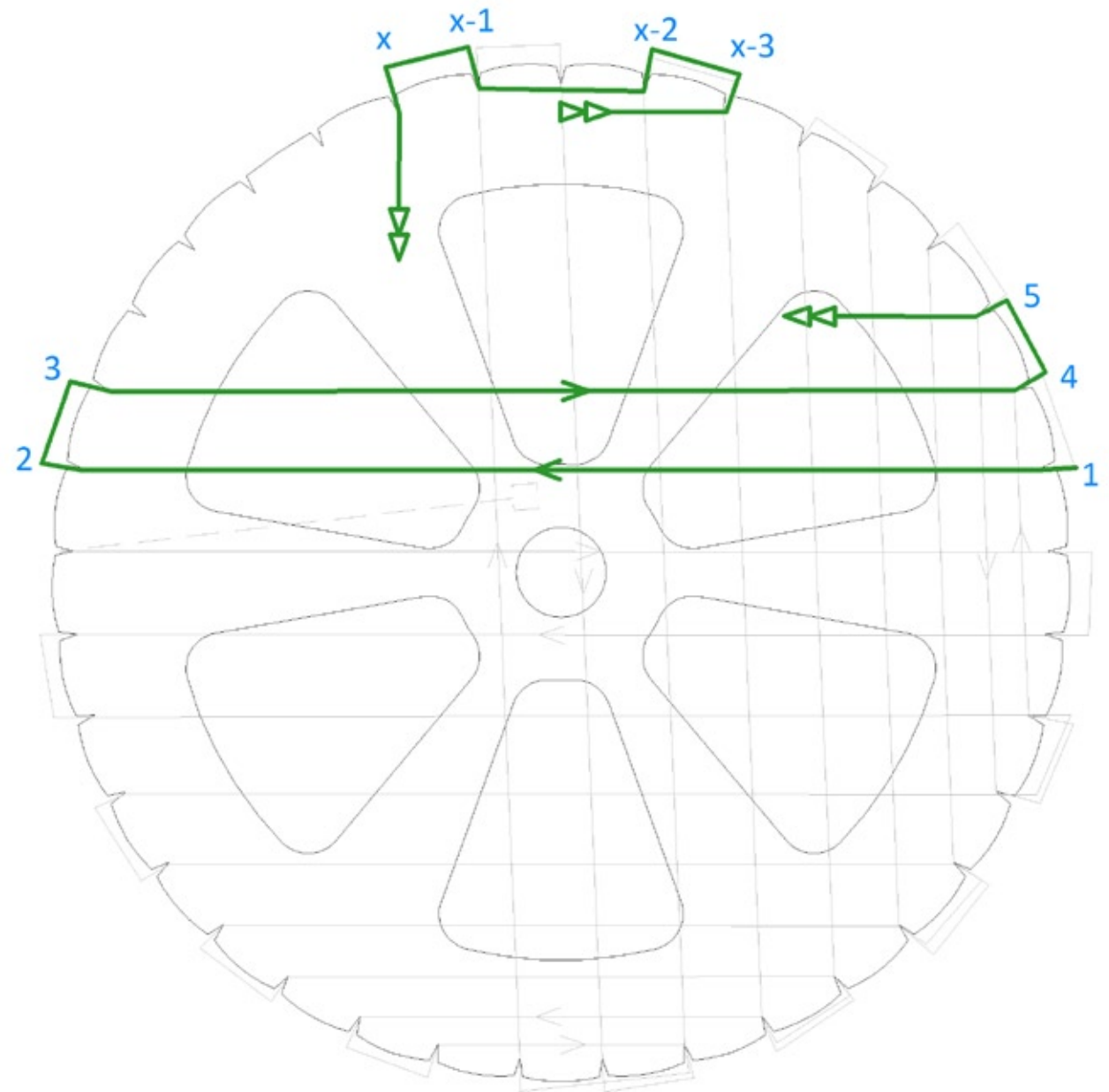
When you are nearing the edge, look for the place to change direction to continue with the horizontal section of the warp. The notches you are looking for will be the pair running immediately parallel to where you started on the first stage of the pattern.

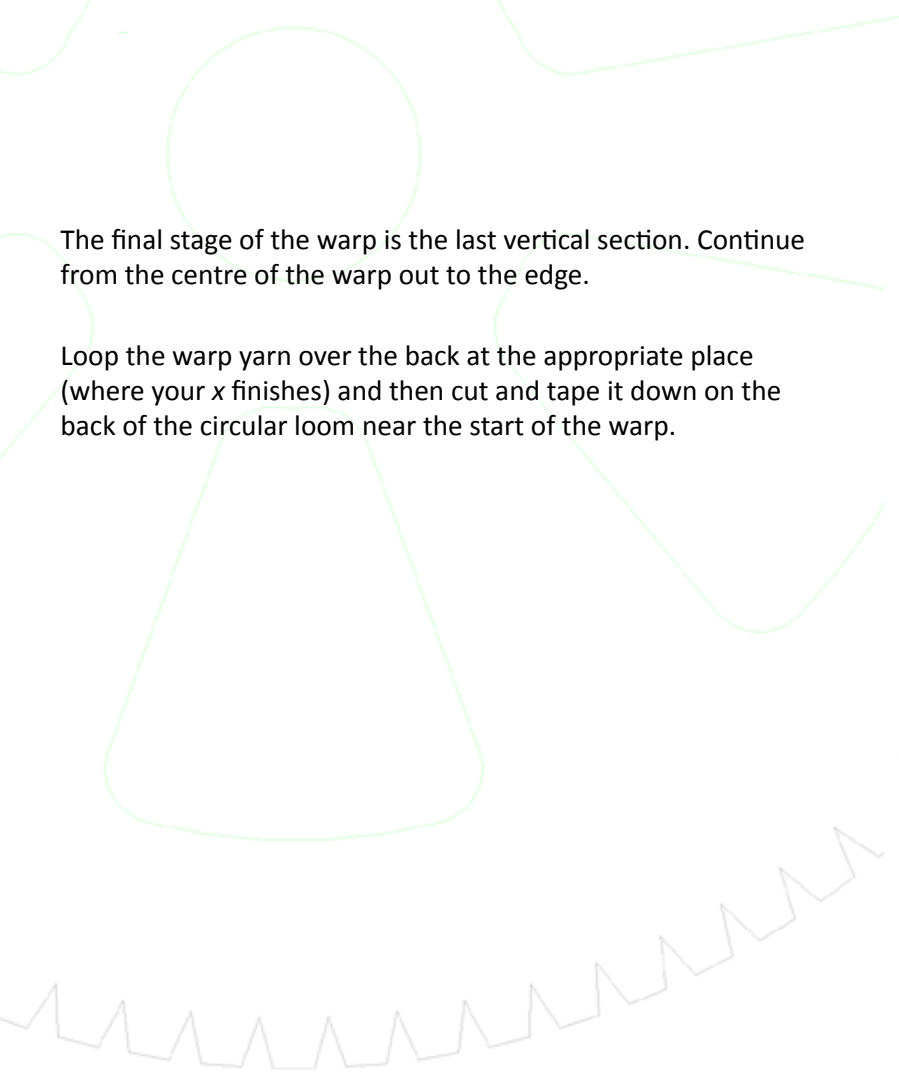
Because looms will vary or start points will vary, you may need to loop around one or two notches at  $x$  and  $x-1$ . This is not a problem. Be flexible and make it fit! There are so many variables in this process that it is tricky to get the pattern the same every time.



Now the pattern continues on the horizontal passes out to the outer edge. You will be aiming for changing direction at the notches that run parallel to the vertical part of the warp you started in second stage of this pattern.

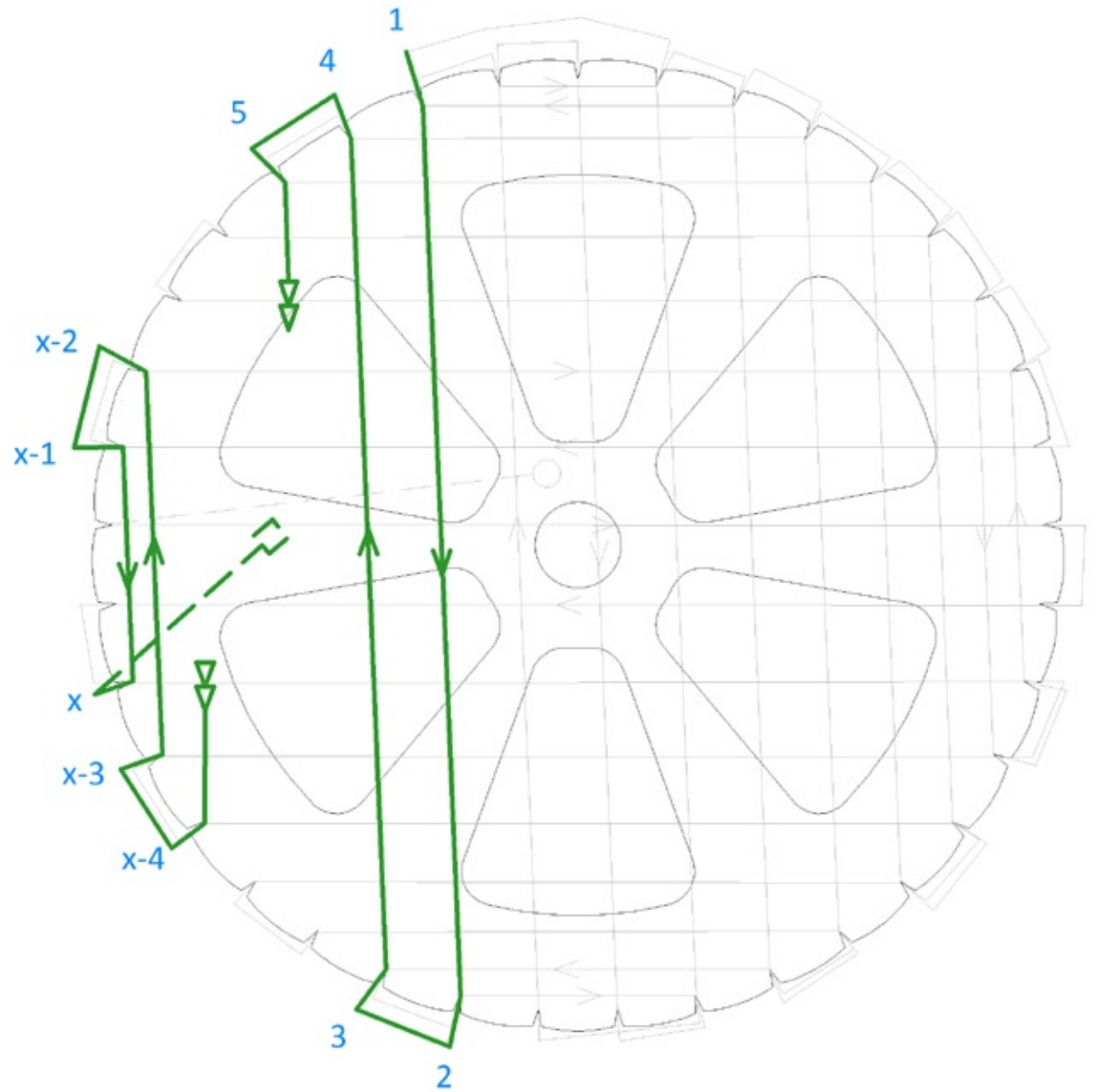
You can see even from what I have drawn that the passage of the warp yarn at the edge notches may not be the same for each stage of the warp.





The final stage of the warp is the last vertical section. Continue from the centre of the warp out to the edge.

Loop the warp yarn over the back at the appropriate place (where your *x* finishes) and then cut and tape it down on the back of the circular loom near the start of the warp.





*photos*







# *linear warp*

## *description*

This warp makes more of a tapestry style weaving. You could also vary this by doubling the warp threads (two through each notch) and then split them as you weave, creating a denser fabric. This is also suitable for using with thicker and really textured yarns

To use this warp you can weave straight across in a tapestry style, under and over the warp and alternating on each row (plain weave). Tapping the weft down on each row will cover your warp thread more and give emphasis to the weft. It is also possible to add in shapes just like in a tapestry, adding wedges, curves, building up weft in one area and pressing it down in others to create waves.

With this kind of warp you can really experiment with lots of differently textured yarns, graduated colours, thick and thins, and so on. It might be interesting to add textures by looping the yarn to make a boucle effect, or adding in things like strips of fake fur, ribbons, lace, items that prefer to sit flatter and straighter than they can in a circular weave.

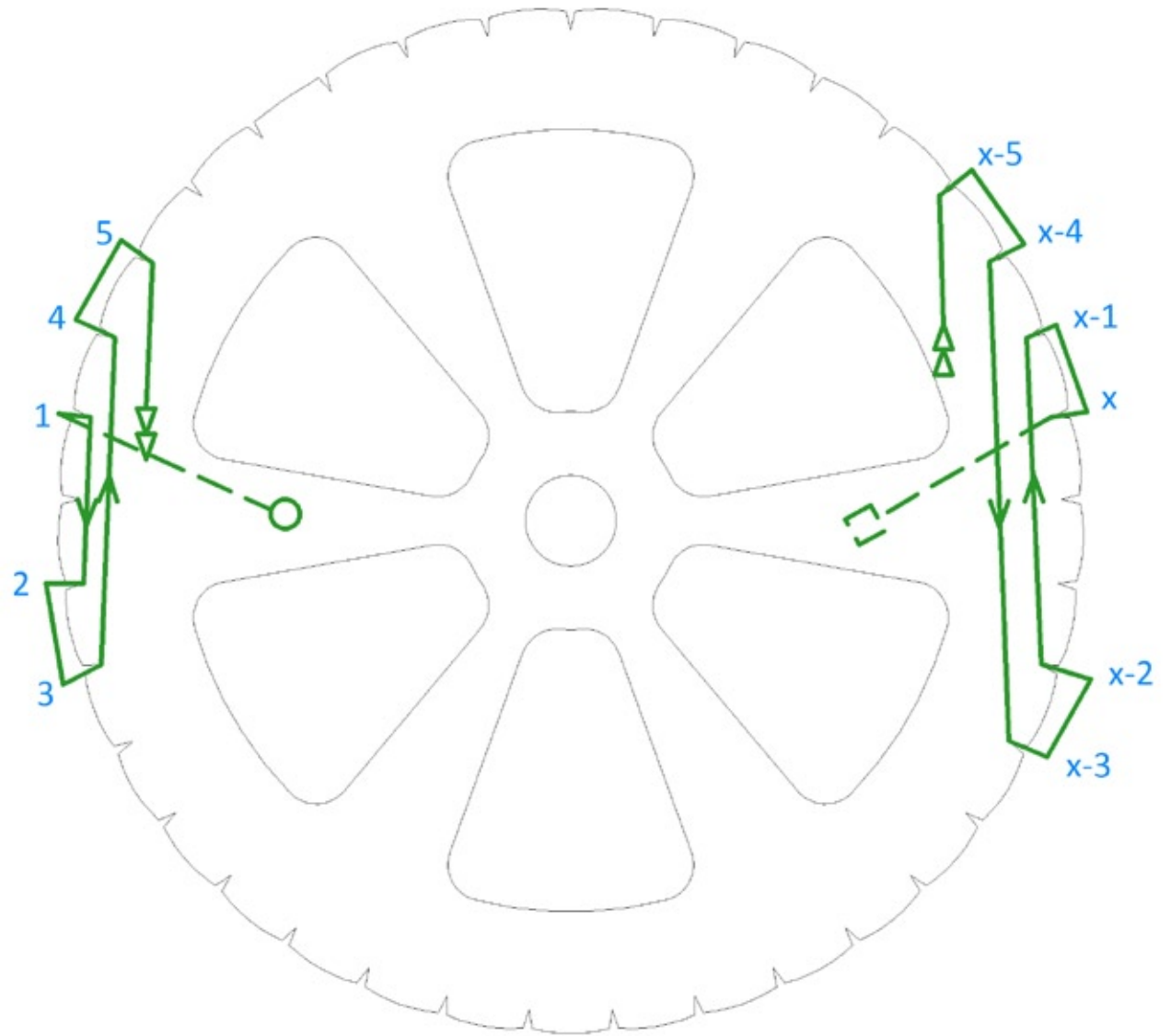
I found that it also worked pretty well to finish off with a round weft around the entire piece, ensuring that it will hold together nicely when you take it off the loom.





# *pattern*

Start the pattern by taping the end of the warp yarn to the back of the circular loom. Bring the yarn out to the edge of the loom and instead of crossing the centre of the loom, make a short chord across 1-2 notches on the edge. Loop around and then come back to create another parallel warp thread. Repeat this all the way across the circular loom to produce a vertical (or horizontal depending on which way you are holding it :- ) ) warp. Cut the end of the warp yarn off and tape it to the back of the loom.



# *fan warp*

## *description*

This warp can be used in layering or on its own, so you can either make individual triangular shapes, great for stitching together into something larger, or overlapping onto another piece like scales (for example). It is also possible to make several 'fans' around the loom and interlock them to work together. Pictured here is a triangular layer over the top of a full circle weave, woven separately to keep the pieces separate and more three dimensional.

The fan warp has two static points. You may need to refresh your mind by looking at the pattern key at the start of this book.

Multiple fan shapes could be placed around the loom to create all kinds of layers and patterns.



# *pattern*

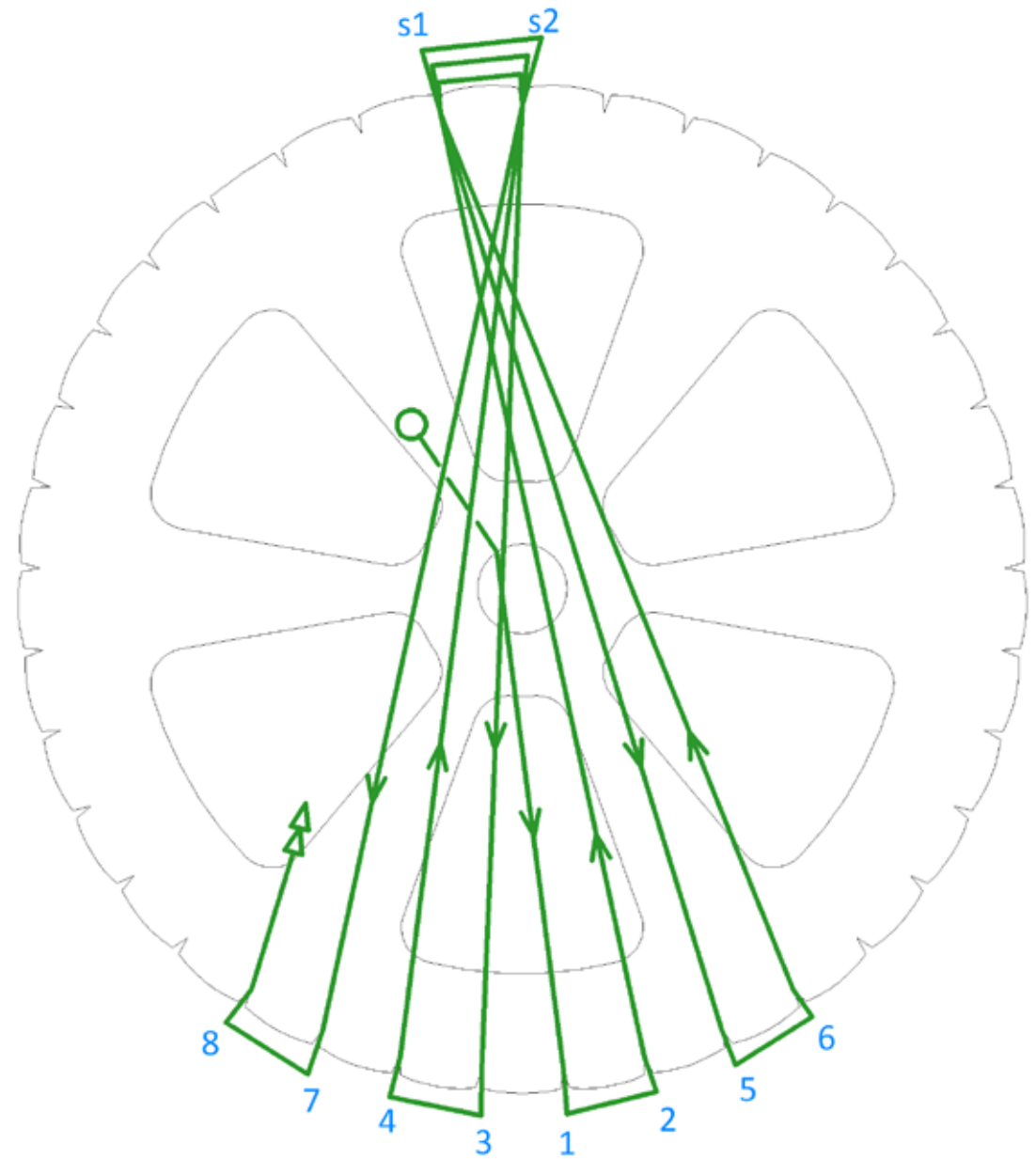
There are two static points in this pattern that make it a little more complex to follow. Here are the layouts for passing each static point:

2-s1-s2-3

4-s2-s1-5

6-s1-s2-7

...





*photos*







# *offset warp*

## *description*

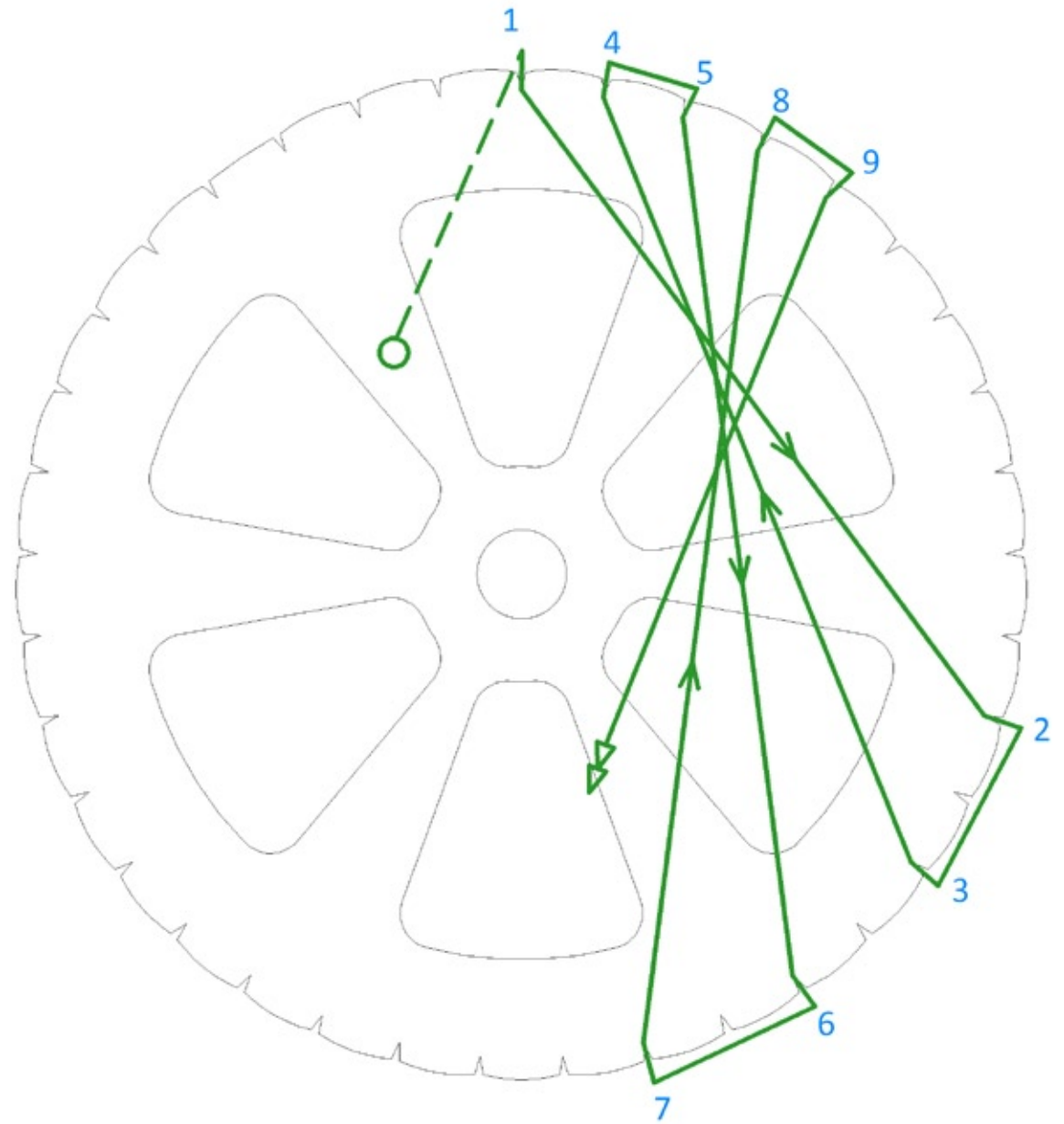
This is a variation of the basic circle warp, except this time the warp threads don't cross in the centre of the loom, but cross off center. It can be used on its own or as a part of a layered warp.



# *pattern*

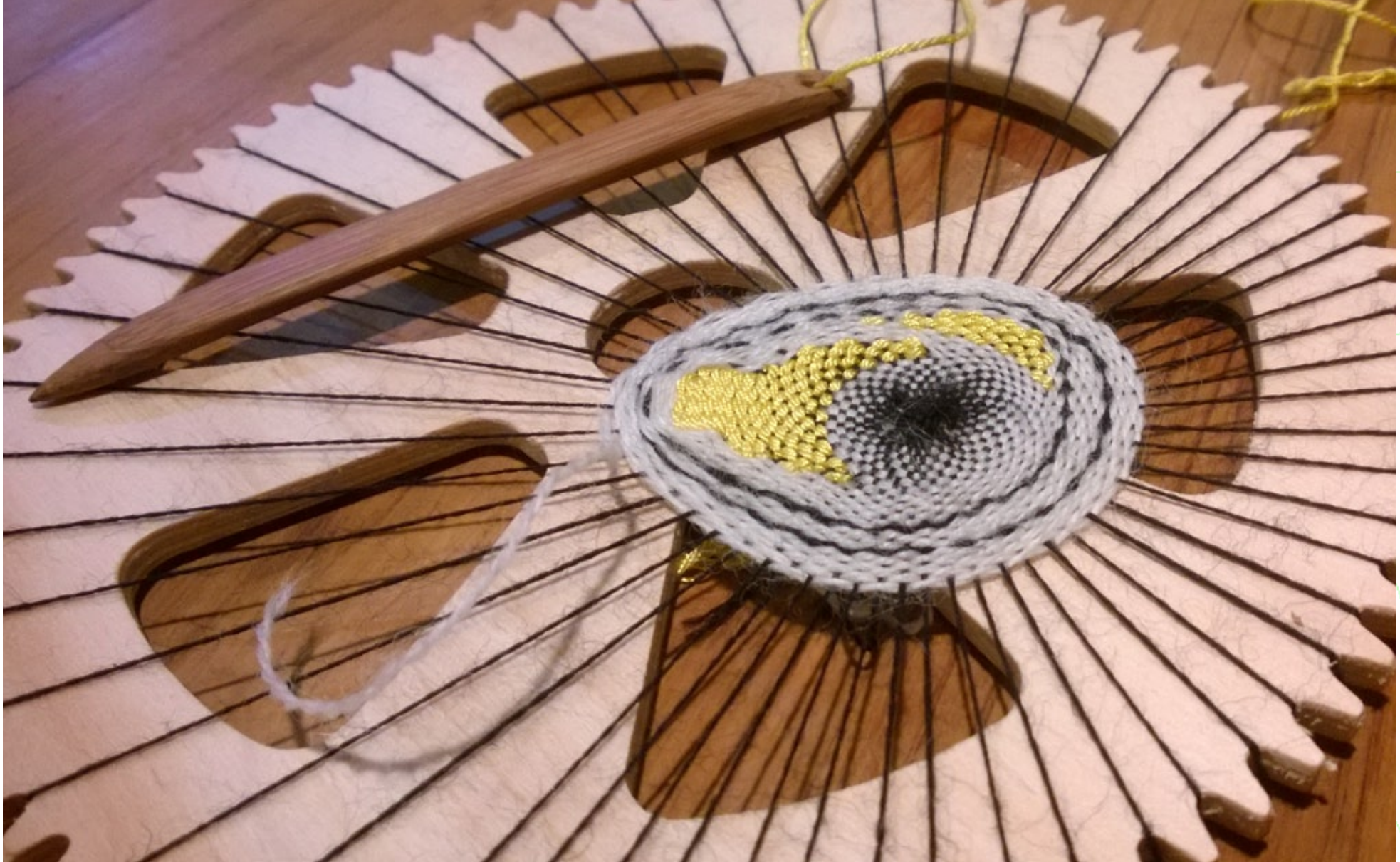
The offset warp pattern requires that you divide the circular loom up into thirds and it helps to mark each 'third' point around the circumference.

From the start point to the first third mark, you will be looping through every notch. From the first mark, past the second and around back to the start point, you will be looping through every other notch. The pattern will help clarify the warp process.





*photos*



# *layered warp*

## *description*

Layered warps can create another dimension to a weaving, building upwards as well as outwards on the loom. You can add them after the base is finished or you can add them at the start, weaving sections in and leaving sections on top. There are lots of different shapes you can use as layers, including the 'Fan' warp and the crescent shape. You could also try ideas such as:

- two off centered basic circles
- a circle over a grid
- fan shapes over any other kind of warp
- hole in the middle
- incorporating a small pre-made weaving into the warp
- crescent shape (layered or on its own? Some of these might not hold their shape off the loom)

(try out some layering - adding in pieces between layers to keep them separate?)



*photos*





# 3d warp

## description

During some experimentation with the circular looms, we have discovered a way of creating a three dimensional warp (3d). It requires two circular looms and a length of tube to separate them. Cardboard is easily accesible and worked well in the examples we tried.

Although something like a toilet roll could work, it is likely to be unstable and a bit weak. I think the ideal is a fairly thick walled cardboard tube and one that is not much larger than the centre hole of the loom. A 45mm (1" 3/4) tube worked well for me. I put some double sided tape around the centre hole of the first loom and pushed the tube on to that. I then repeated this on the second loom and pushed them both together. I found it helped to keep the centre hole clear (don't block it with the tape) and as best as possible, align the notches from the top loom with those on the bottom loom.

I have used two similar sized looms in my playing with this idea but there is no reason not to use different sized looms. One thing to consider though is that if you use a large loom on the upper loom and a smaller diameter loom in the lower position, you may have a bunch of trouble trying to get your weaving off when you are done.

ideas for things you can create with the circular loom are:

- Bowls
- Bracelets (similar to charm bracelets if you choose to add some embellishments)
- Lampshades
- Hats (this style of weaving could be well suited to a beret style hat)
- Warp from the notches on one loom just to the notches on the other loom to make a tube (that will be as long as the space you have used to hold the looms apart). The tube could be used to extend another piece, or make a circular weaving for the end and turn it into a bag. Or try leaving an opening by turning your weaving rather than going around and around and making some neckwear with it - alternatively open it out and you have a flat piece of weaving to play with!

This is a highly experimental style of weaving so I would encourage you to open your mind and just try stuff. Any of the warps in this booklet could be applied to a 3d loom - obviously in some cases it may not make sense but who knows. Maybe you can see something I can't?

# *constructing a 3d loom*

You will require two circular looms, a cardboard tube, some double-sided tape and a pair of scissors to cut the tape with.

Cut a short length of the tape that is slightly longer than the diameter of the tube. Place it over the centre of the first circular loom.

Remove the protective covering of the tape and carefully push the cardboard tube down onto the tape as close to the centre of the circular loom as you can.

Repeat adding some tape to the centre of the second circular loom. Remove the protective cover and push the other end of the cardboard tube onto the exposed double-sided tape.







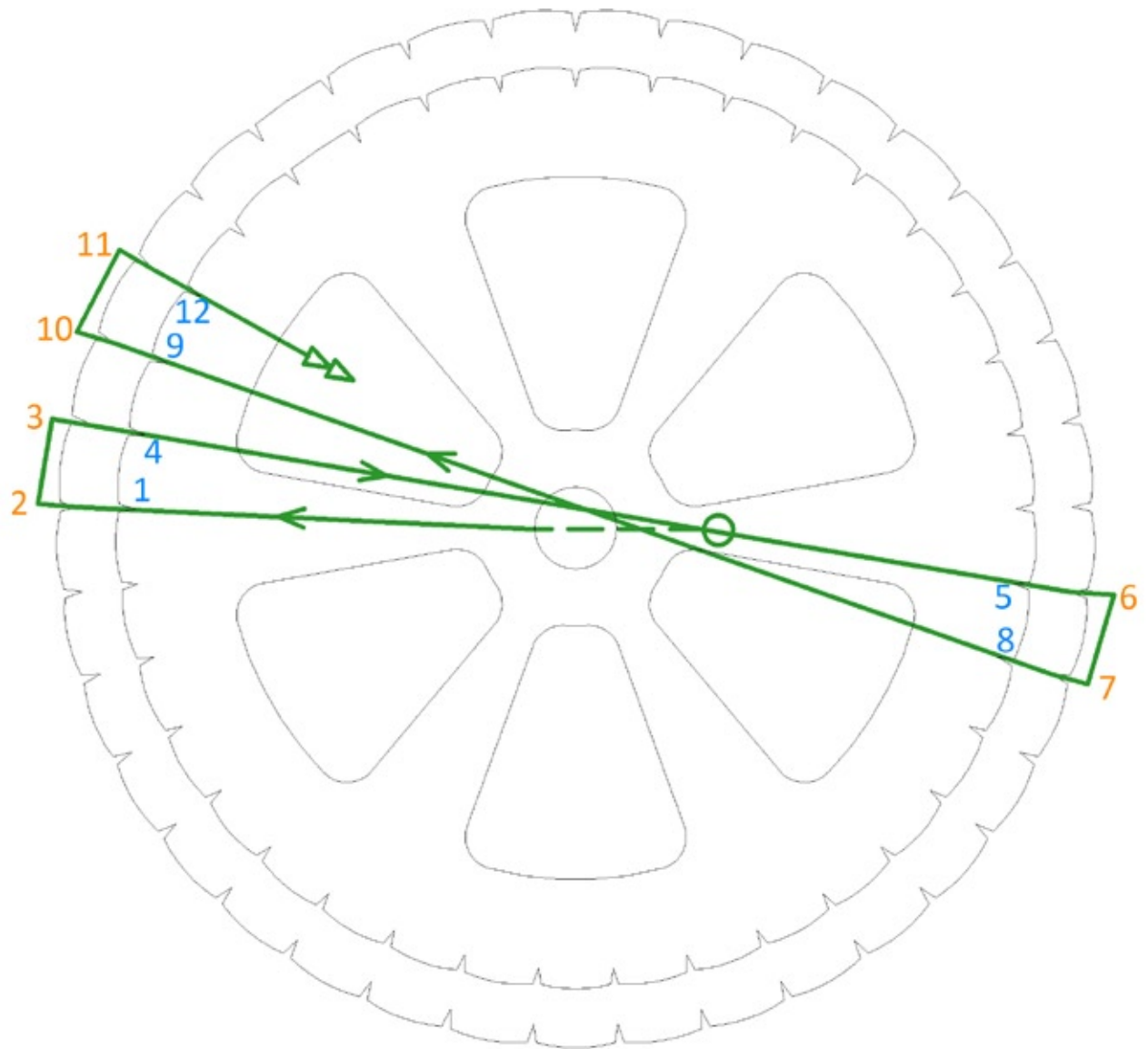
# pattern

The 3d version of the standard warp is just as simple as the standard warp on a single loom.

I started by securing the end of the warp yarn to the **BOTTOM** of the **BOTTOM** loom. Thread the yarn up through the centre of the cardboard tube and then out to the top of the upper circular loom.

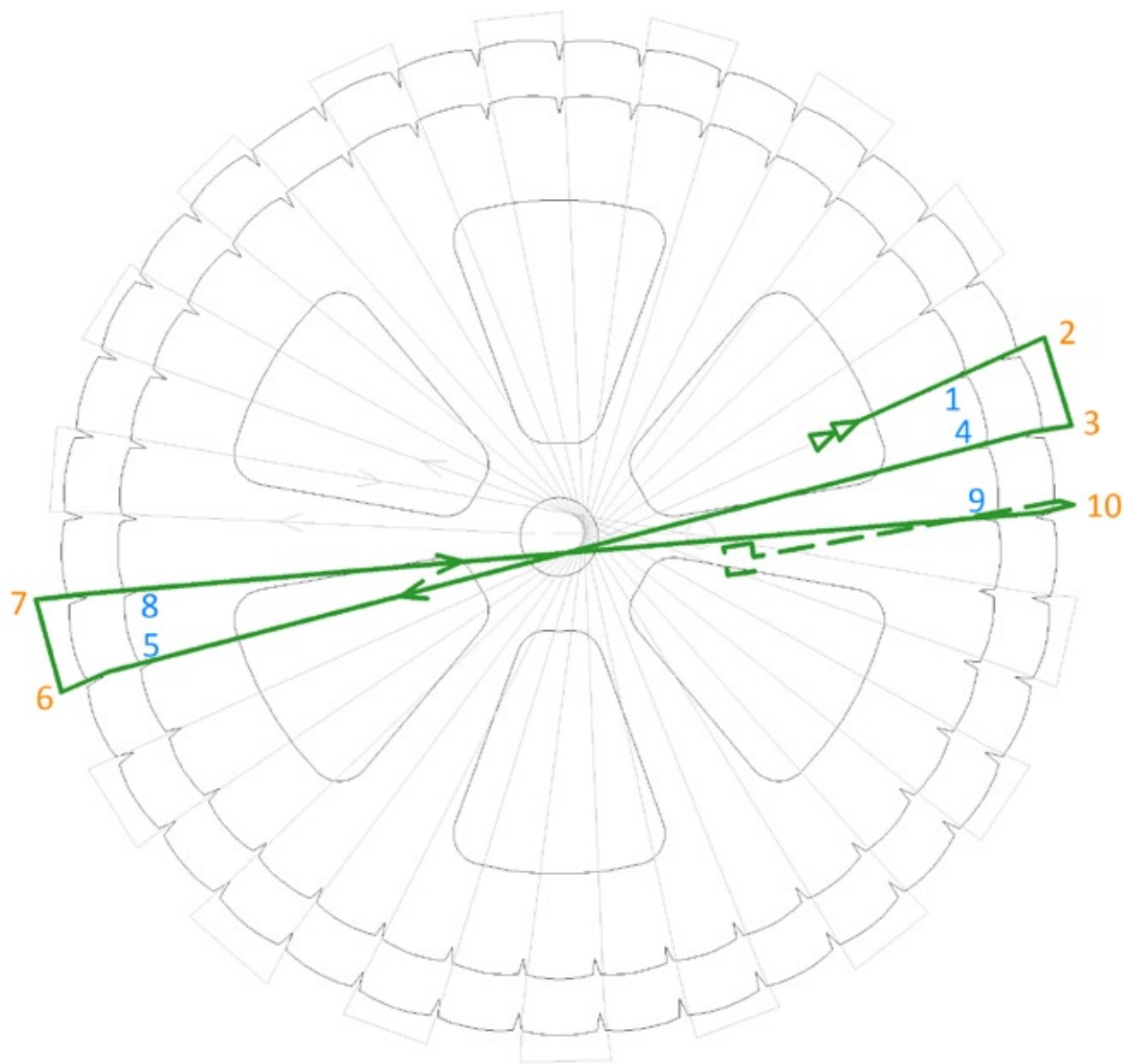
You now need to send the warp yarn out to the outer edge of the upper loom and pass it through the notch. Instead of looping around and coming back through the adjacent notch, travel down to the corresponding notch on the bottom loom and go through that before looping back through the adjacent notch and back up the the top loom.

The process hence is the same as a single circular loom but instead of looping through the notch on the top loom and then back through the nearby notch, warp down to the bottom loom and then go through and back through the corresponding notches on the lower loom.

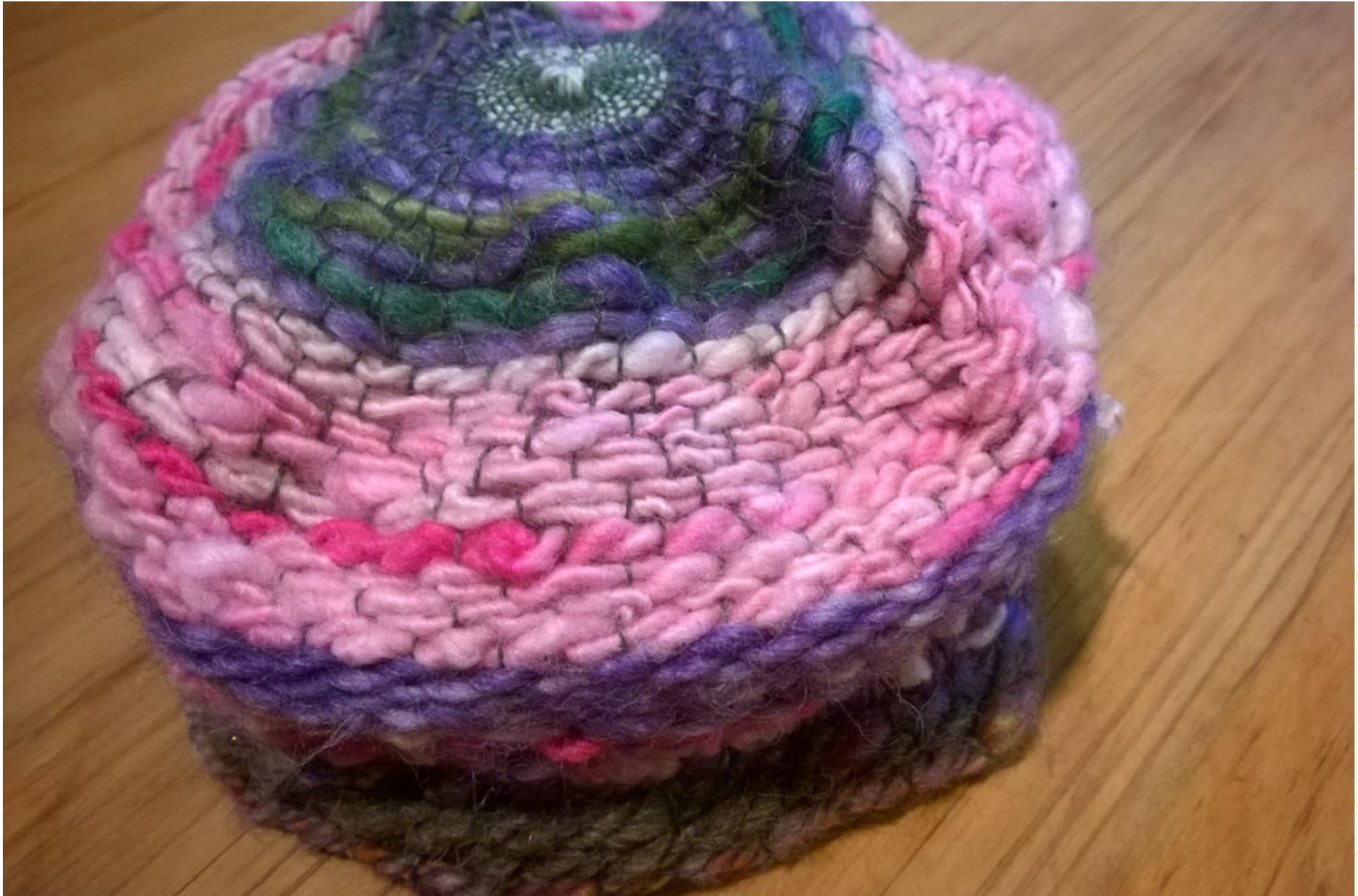


Repeat this process all the way around the loom until you arrive back at the start.

One thing I found when starting to weave was that the warp threads on the bottom loom would flick off very easily just in the normal handling of the loom. To prevent this, after warping I stuck some masking tape around the circumference of the bottom loom to keep everything in place.



*photos*





# loom origins

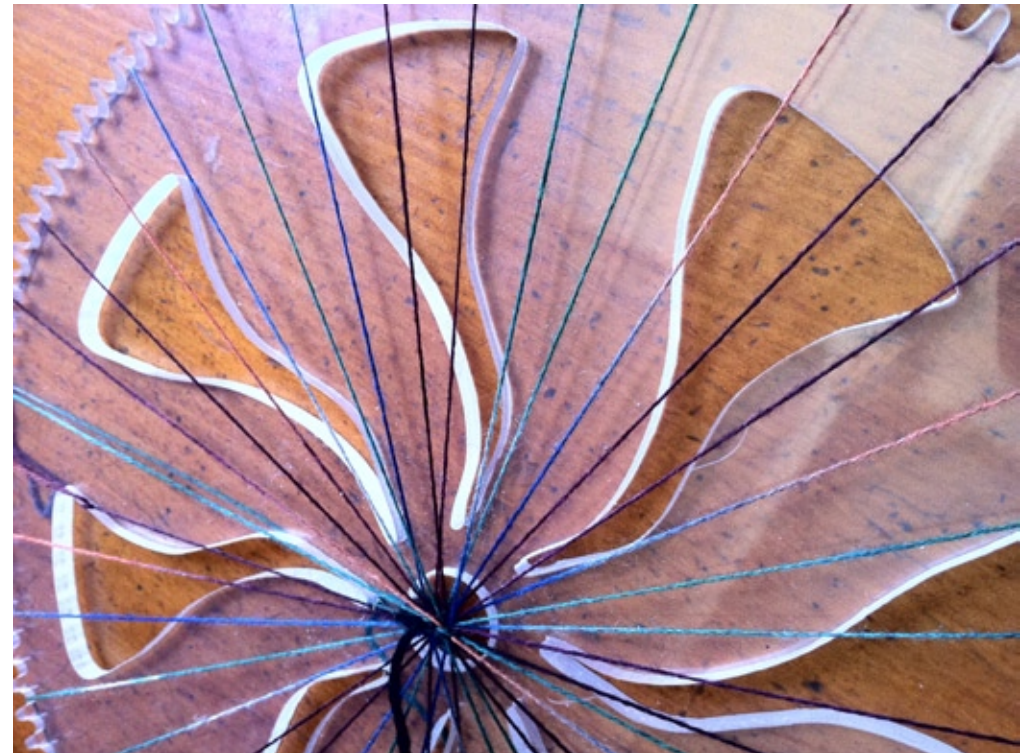
People have been working with circular looms and circular weaving ideas for some time. Here are some of the images from the development of the Majacraft circular looms



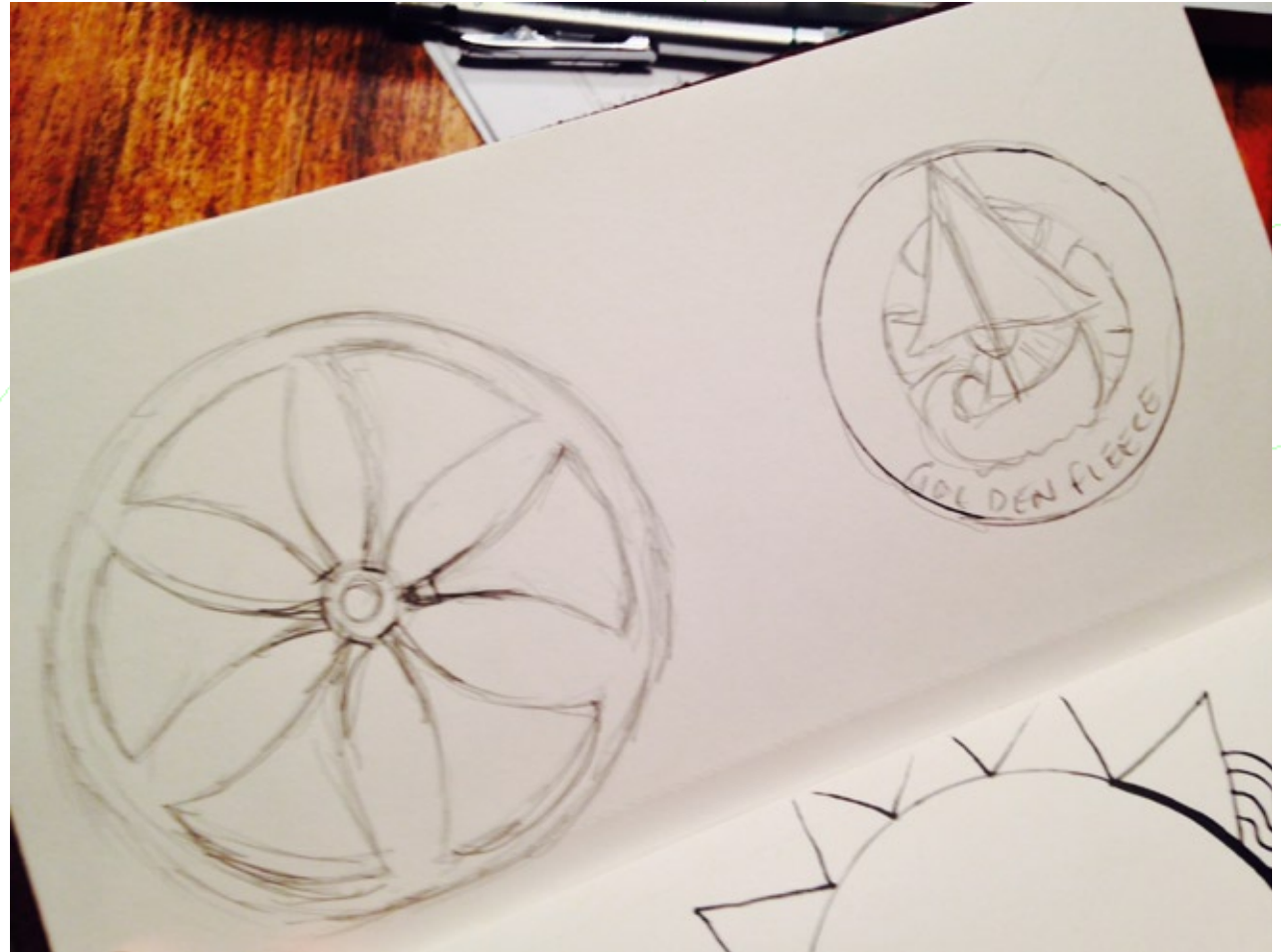
The first Majacraft circular loom. It was cut out of 6mm clear acrylic and was a primarily a gift. There were ideas being experimented with in the process though. The seeds of the Golden Fleece loom cutouts were in this. Although it was decided to choose a simpler shape as these took a LOT of sanding and cleaning and were very awkward to work with.

Suzy Brown's first circular loom. A 'retired' gear from a Louet carder. It was from this she developed some of her circular weaving ideas plus it inspired the seeds for the practical part of the Fibery Goodness "Quest for the Golden Fleece" course.

It has lots of versatility with the fine teeth but the lack of pockets in the surface made it harder to work with and not quite so pretty.

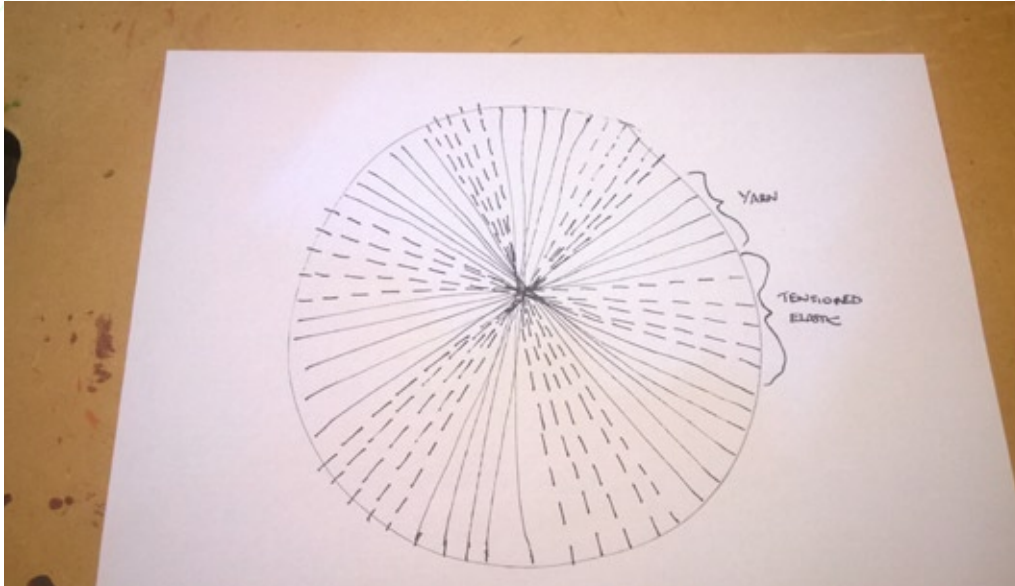


Sketches of the near final Golden Fleece looms.

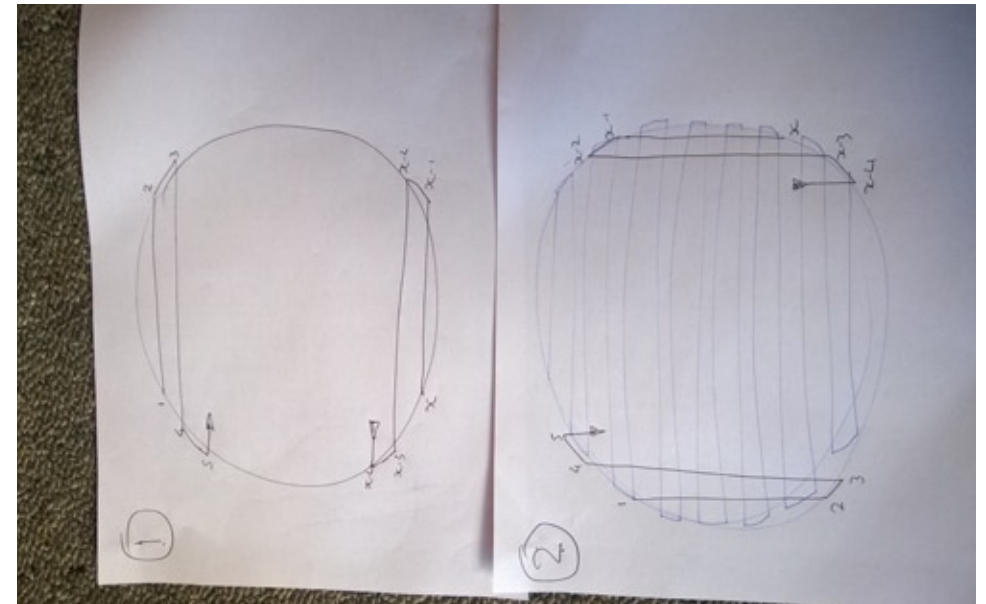


# warp development

Here are some of the photos that we used in the development of the different warps and their patterns.

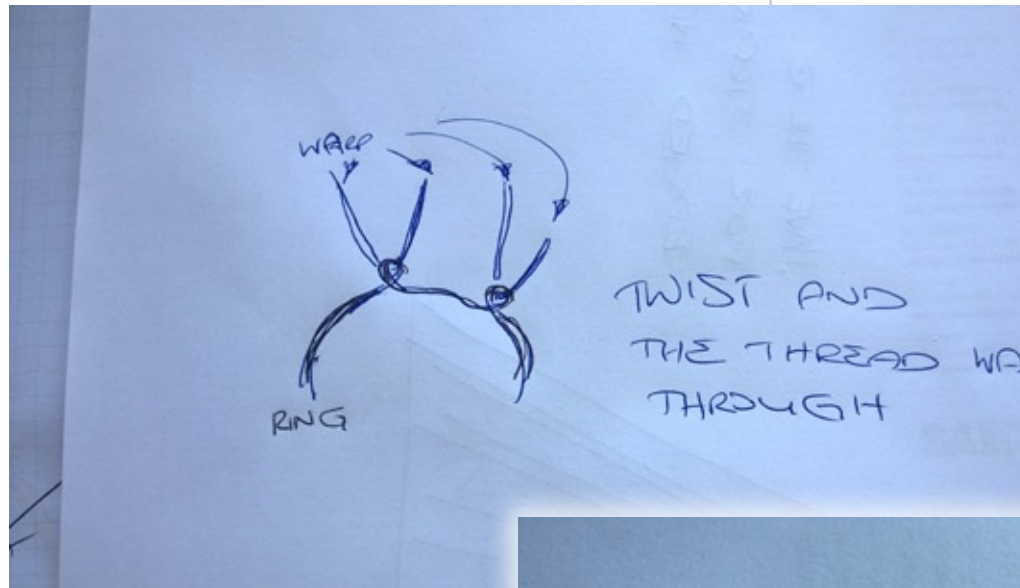


Elasticated warp

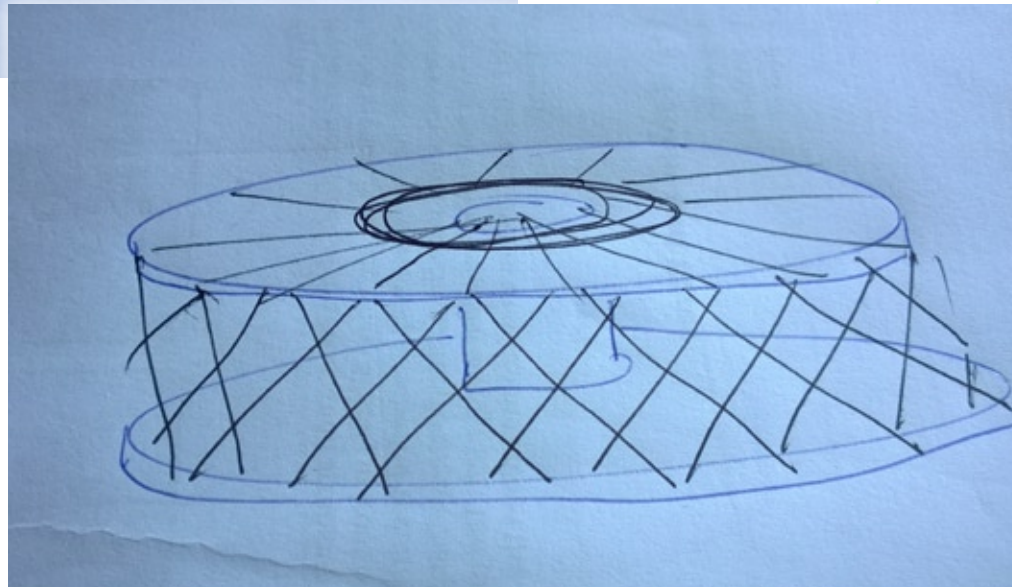


Developing pattern for the grid warp





Considering a tie technique for securing a warp onto an inner loop



Layered circular looms to weave tube type designs

# *creativity*

## *inspirational weaving*



*Melissa Yoder Ricks*





*Claire des Bruyeres*





*Ruru Mori*





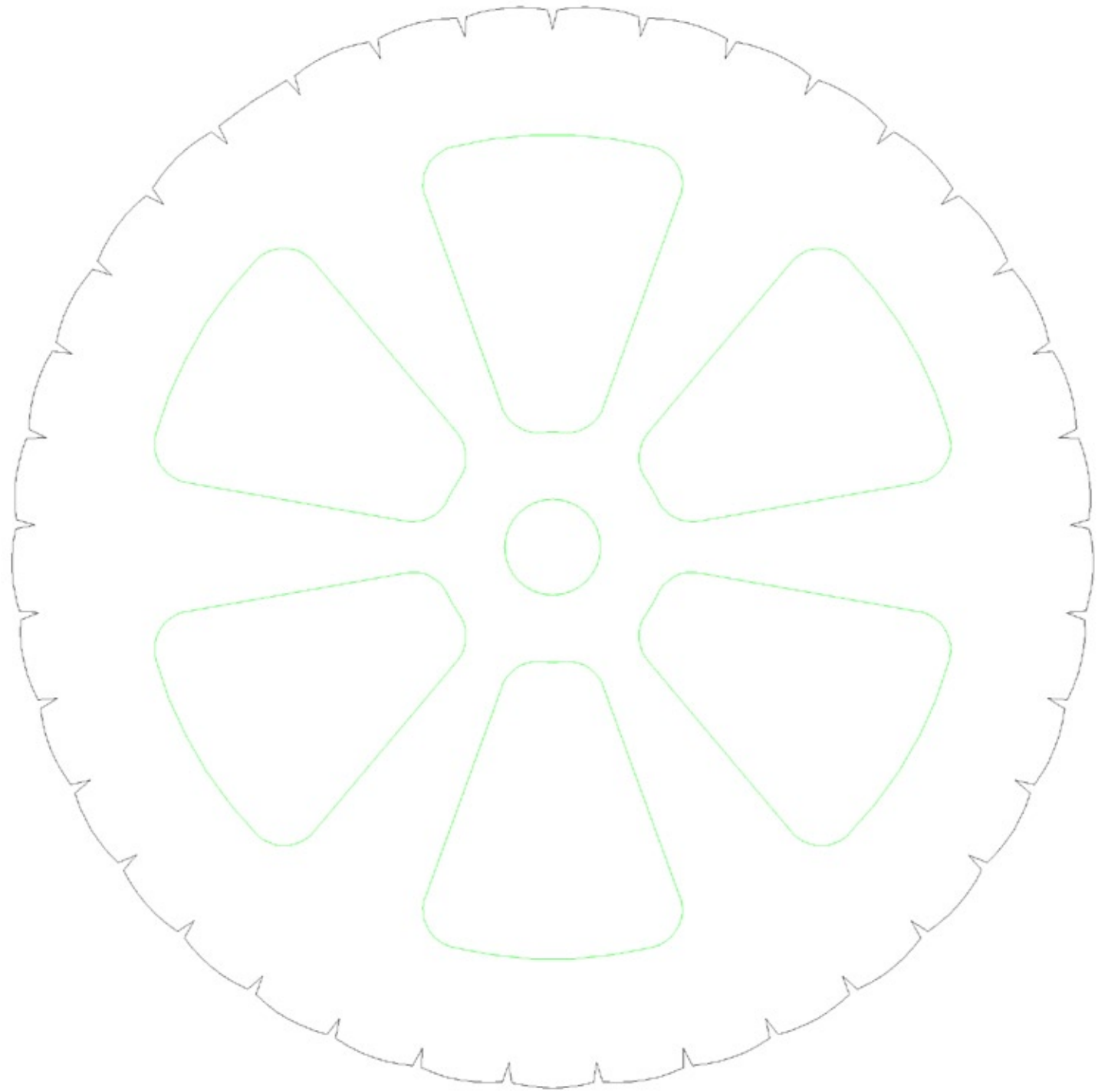




*Nancy Gould*



*template*



# credits

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[www.Facebook.com/WoolWenchYarns](http://www.Facebook.com/WoolWenchYarns)

Andrew Poad

Circle Weave Facebook group  
<https://www.facebook.com/groups/circleweaving/>

Majacraft  
[www.majacraft.co.nz](http://www.majacraft.co.nz)

Nancy Gould  
[thedailysheep.com](http://thedailysheep.com)

Angela Daish

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