

# Warping a Loom Back to Front...

## ... and other stuff

*Notes by Angela K Schneider for MGHW, 22 October 2011*

### Winding a warp

Wind the warp so that the yarn ends are away from the cross. The warp is secured to the back beam by the loop that forms near the cross.

↔ Warps wound this way can be used back-to-front or front-to-back.

BtoF: Use the loop.

FtoB: Cut the loop.

↔ Winding warps from two or more cones of yarn at once is more efficient than single-strand. If a cone runs out – start a NEW warp chain. Changing the number of strands will change your tension on the warping board.



- Tie the cross and a few choke ties before removing the warp from the warping frame.

Check heddles and reed – Make sure you have enough heddles on each shaft, and if there is a divider in the shaft, make sure there are enough on each side. Verify you have the correct reed.

### Securing the warp

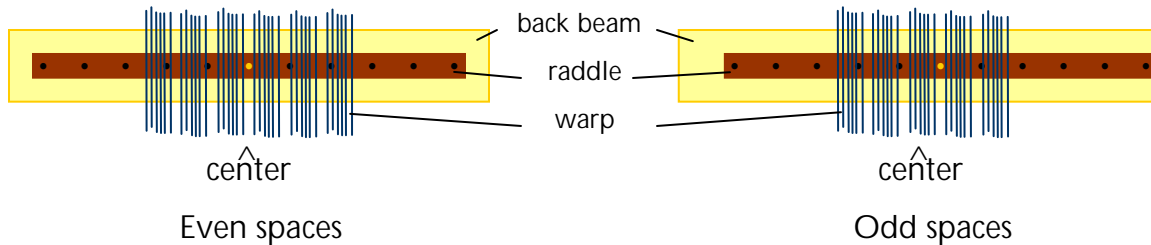
- Cut two strong cords long enough to reach the depth of the loom when doubled, plus 18" extra. Fold the cords in half. Loop them over the back beam, through the castle and beater and tie onto the front beam. Mount one doubled cord on each side. These cords will hold the lease sticks.



- Slip a stick through the loop near the cross. Tie it to the back rod attached to the warp beam. These are temporary ties.

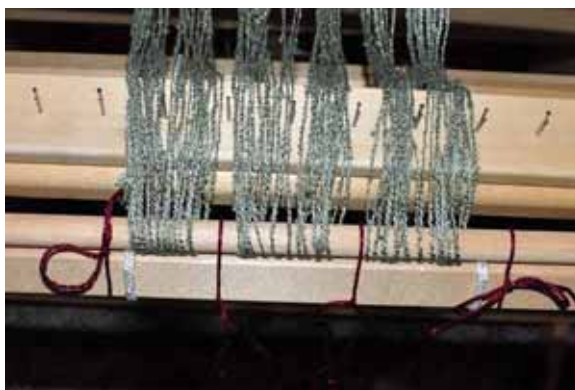


- Mount a raddle on the back beam. Consider how many raddle spaces you need. For an even number, mount the raddle with a divider in the center. For an odd number, put a space in the center.



- Place a pair of lease sticks into the cross. Mount the lease sticks in the cords in either side of the loom. Clip or tie the ends of the lease sticks outside the cords to secure them.
- Pass the warp through the castle and drape it over the front beam.
- Spread the warp in the raddle. Use the epi of the warp to determine how many ends per space.

- A folded card over the raddle will prevent the warp ends from catching on the pins until they are ready to be placed.



- Once the warp is spread out in the raddle, tie the stick securely to the warp rod. Tie just outside of the warp and multiple places in the center so the stick will not bend when the warp is under tension.
- A raddle cover or rubber bands over the pins will keep the warp ends in the raddle.

- Pull on the warp chains to even the threads on the back stick.

## Beaming

- The stickier or denser the warp, then more it must be kept under control. Loose, slick warps require less careful handling.

Tips for tricky warps:

- Have an assistant hold tension on the warp at all times while beaming.
- Keep the warp threads parallel as they approach the lease sticks:
  - Hold the warp in several bundles.
  - Grasp the warp far from the loom, not close to it.
  - For extreme cases, mount another raddle on the front beam.



Tips for easy warps:

- For small, less dense warps, a raddle may not be necessary. A pair of clamps setting the width on the back beam may be sufficient. As you beam, periodically even out the thread spacing.

↔ Guide clamps on the back beam are useful with front-to-back warping also, by preventing the warp from spreading out at it is beamed.



## Winding On

- Place heavy packing material around the warp beam to cover the cords and back stick before the warp wraps over it. Any unevenness across the warp beam will cause tension variations.
- Use heavy paper, screen, or flat sticks to separate layers on the warp beam.
- Have an assistant hold tension on the warp chains. When beaming alone, wind up to twice around the warp beam then tighten the warp by pulling from the front of the loom.
- Wind warp tightly and evenly. Work slowly and watch for tangles as yarns pass through the lease sticks.
- Tangles and loose ends: snap the warp chain or hold it under tension and strum the ends to loosen tangles. Resist combing.
- Stop when the end of the warp is past the breast beam. Cut the ends.

Check heddles and reed – Make sure you have enough heddles on each shaft, and if there is a divider in the shaft, make sure there are enough on each side. Verify you have the correct reed.  
*It's worth repeating – and checking again.*

Thread heddles and sley the reed from the front of the loom.

## Threading

Working right-to left (hook in right hand):

- Count out enough heddles for each shaft, plus a few spares, and push them to the left. Half of the leftover heddles can stay on the right edge of the shaft, unused.
- Count out the heddles required for a section of pattern and scoot them to the right.
- Reach past the left of these heddles with your left hand and catch a bunch of warp ends coming through the lease sticks. Hold them under tension.
- Thread the heddles following the draft right to left. Select the next thread out of the cross between the lease sticks.
- Repeat across until everything is threaded.



## Sleying the reed

Working right-to left (hook in right hand):

- Find the starting dent on the reed:
  - Arithmetically: measure the reed. Subtract the width of the warp from the width of the reed. Divide by two. Measure this distance from the right edge.
  - Geometrically: Measure the reed with a flexible measuring tape so the width reads on the right. Fold the tape in half so the mark for the warp width is even with the edge of the reed. The fold is the starting position for sleying.
- Make sure there is enough length for the warps to pass through the reed and stay in place.
- Secure the beater upright.
- Reach over the beater with your left hand and grasp a bunch of warp ends. Hold them under tension. Use your fingers to separate them at the heddles.
- Hold the sley hook in your right hand. Reach through the dent and catch the number of threads required per dent. Repeat across until all ends are sleyed.
- For warps with a large number of ends, periodically tie a slip knot or loose overhand knot in the sleyed ends to keep them in place.



## Tie on

↔ Tie on the front apron rod, tension the warp and weave a header.

# Tying on with Shoestrings

- Gather the warp in  $\frac{3}{4}$ " – 1" bouts. Even out the tension in the warp ends and tie a firm overhand knot in the end of the bundle.
- Gather a set of heavy cords or shoelaces, 30" long, one for each bout.
- Double the cords and loop them over the front apron rod.



- Tie each bout around its doubled cord with a lark's head knot:



Pass the warp bundle over the cord



Wrap the warp bundle around the cord and bring it over itself.



Loop the warp bundle around the cord again the opposite way. Pinch the overhand knot close to the cord.



Holding the cord taut, pull the knot towards you to tighten the warp bundle.



Completed knot

- To tighten: pull the two cords sideways.
- To loosen: push the knot up the cord.



- Check the tension between the bouts and adjust until they are even.



- Secure the bouts on the cords with a half bow in the cord tied just above the warp bundle.



- To release the bout, untie the bow and slide the knot off the cord.

- Wind on to the front beam to take up slack in the cords.