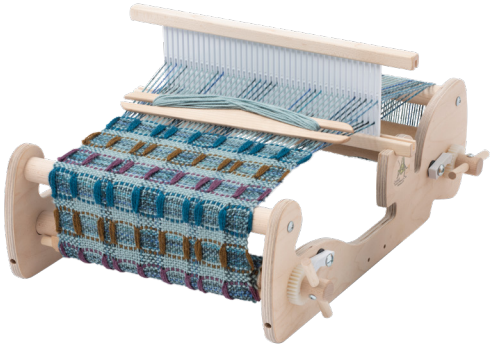
SL2030
SL2040

CRICKET LOOM™

Assembly & Weaving



15" Cricket

10" Cricket on optional
Cricket Stand

Find out more at **schachtspindle.com**
Schacht Spindle Company 6101 Ben Place Boulder, CO 80301
303.442.3212

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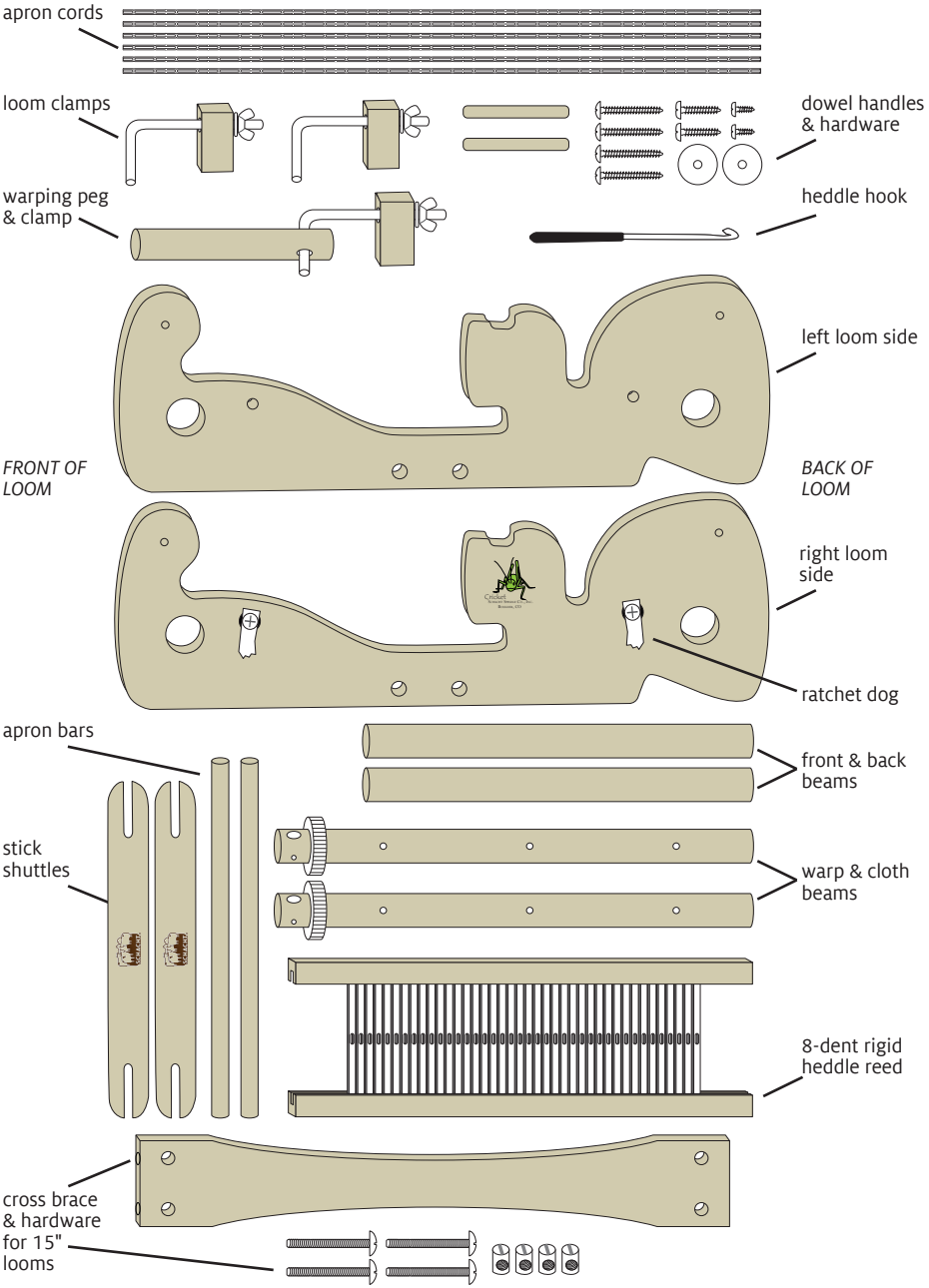

FIGURE 1: LOOM PARTS

CRICKET LOOM
Assembly & Weaving

PARTS

2X loom sides, one with ratchet dogs
2X warp and cloth beams with ratchet gears
2X front and back beams
2X apron bars
1X 8-dent rigid heddle reed
2X loom clamps
1X heddle hook
1X warping peg and clamp
2X stick shuttles
2X 50-gram balls of worsted-weight 100% wool yarn

Small parts in plastic bag:

4X 1-1/2" Phillips truss head sheet metal screws
2X 1" Phillips truss head sheet metal screws
2X fender washers
2X dowel handles
2X 3/8" Phillips truss head sheet metal screws
6X 15-1/4" Texsolv apron cords

ADDITIONAL PARTS FOR 15" LOOMS

1X cross brace
4X 10-24 barrel nuts
4X 10-24 x 2" Phillips truss head machine screws

TOOLS REQUIRED

#2 Phillips screwdriver (electric if possible)
hammer
paper clip

Watch videos on assembling and warping the Cricket Loom at *youtube.com/user/schachtspindle*

For projects and additional information, visit *www.schachtspindle.com*

ASSEMBLING YOUR CRICKET LOOM

1. Identify all loom parts and hardware (Figure 1).

2. Place the loom sides parallel to each other, with the front of the loom sides facing you and the ratchet dogs on the outside of the right loom side (Figure 2). Place the front and back beams between the sides and secure with four 1-1/2" Phillips truss head sheet metal screws.

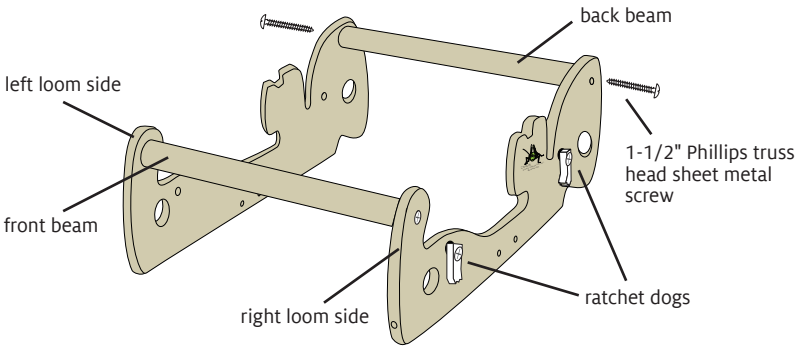

FIGURE 2: ATTACH FRONT AND BACK BEAMS

3. For 15" looms: Set the cross brace inside the loom, aligning it with holes in the loom sides (Figure 3A). Place a 10-24 barrel nut into a hole in the brace, with the slot on top perpendicular to the loom side. Insert a 10-24 x 2" Phillips truss head machine screw through the loom side and screw into the barrel nut (Figure 3B). Repeat for the remaining holes in the cross brace.

4. Insert the warp and cloth beams into the right side of the loom as shown in Figure 4A, so the ratchet gears sit outside the loom and the non-gear ends of the beams fit into the large holes of the left side. Insert each 1" Phillips truss head sheet metal screw through a fender washer. Secure the warp and cloth beams on the left side of the loom (Figure 4B). Flip the ratchet dogs over so they sit on top of the gears.

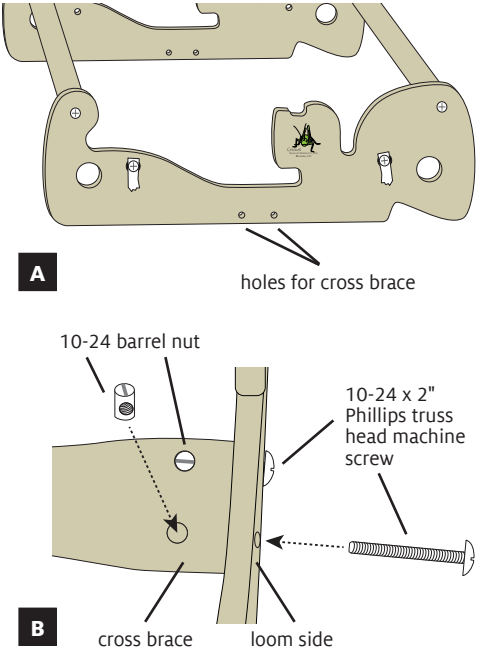

FIGURE 3: ATTACH THE CROSS BRACE

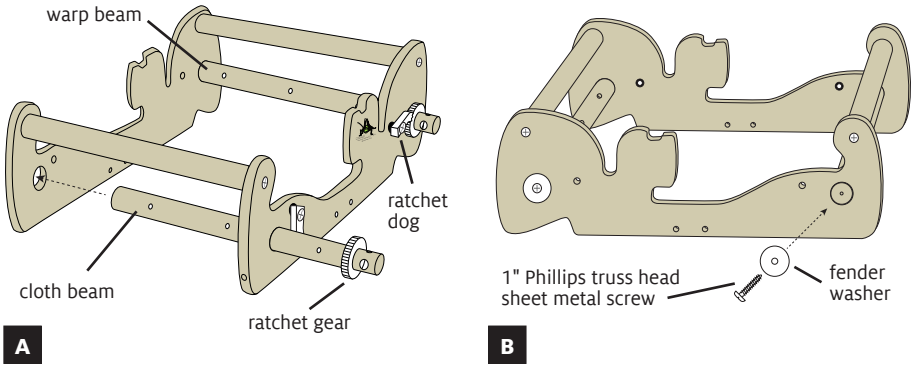

FIGURE 4: ATTACH CLOTH AND WARP BEAMS

5. Insert and center the dowel handles into the large holes in the ends of the warp and cloth beams, as shown in Figure 5. If handles fit tightly, use a hammer to gently tap them into place. Secure each handle by inserting a 3/8" Phillips truss head sheet metal screw into the small hole of the beam (Figure 5). Use an electric screwdriver if you have one, or rub some bar soap or paste wax on the screw threads.

6. Attach the apron cords to warp and cloth beams. Insert one end of a cord into a hole in the warp or cloth beam. (You can use a straightened paper clip to push the cords through.) Place the other end of the cord through the last complete loop in the cord and pull it tight around the beam (Figure 6). Repeat for all the holes in the warp and cloth beams.

7. Attach the apron cords to the apron bars. Fold a cord about 4" from the free end and insert the fold through the second loop at the free end of the cord (Figure 7A). Insert the apron bar through the loop and pull tight (Figure 7B). Repeat for each cord, attaching one apron bar to the cloth beam and another to the warp beam.

Your loom is now completely assembled. Get ready to warp!

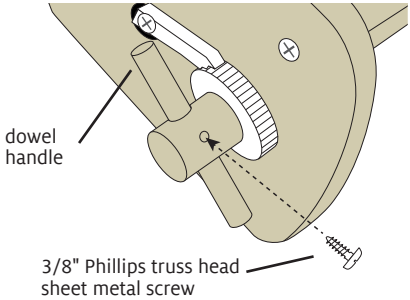

FIGURE 5: ATTACH THE DOWEL HANDLES

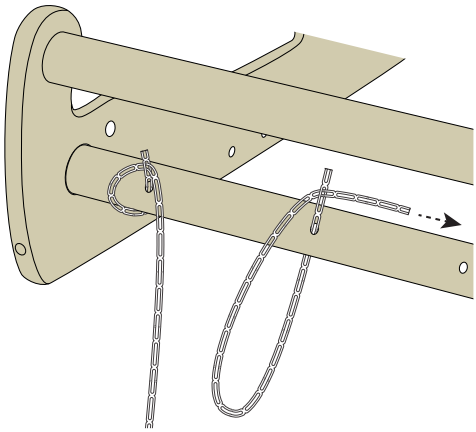

FIGURE 6: ATTACH APRON CORDS TO BEAMS

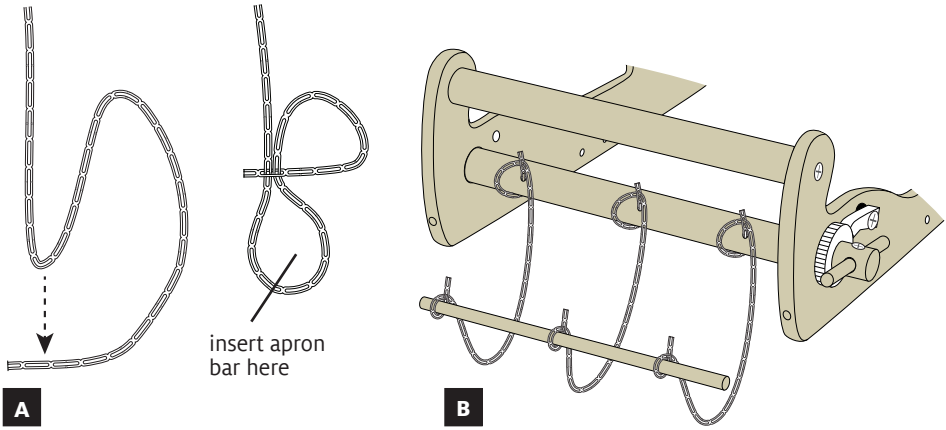

FIGURE 7: ATTACH APRON CORDS TO APRON BARS

WEAVING TERMS

You can weave fabric on your Cricket loom by interlacing warp and weft threads. These weaving terms will help you understand directions for warping and weaving.

Balanced weave: Fabric in which the number of warp ends per inch (see EPI) equals the number of weft ends, or picks, per inch (see PPI).

Beat: To push the weft threads into place with the rigid heddle.

End: One warp yarn or thread.

EPI: Ends per inch. The number of warp threads, or ends, per inch, determined by the number of slots and holes per inch on the rigid heddle. Also called sett.

Loom waste: The ends of the warp threads that are not usable because they are knotted onto the loom or remain unwoven.

Pick: One pass of the weft thread through the shed.

PPI: Picks per inch. The number of rows of weft per inch.

Plainweave: The most basic weave in which the weft is woven over and under, over and under warp threads. Also called tabby.

Rigid heddle: The loom part made up of alternating slots and holes. It creates sheds and is used to beat the weft.

Selvedge: The edge threads on a piece of woven fabric.

Shed: The space between raised and lowered warp threads through which the weft passes.

Shuttle: A tool for holding and carrying weft.

Take-up: The amount of warp and weft length "lost" during weaving. The yarns, instead of going in a straight line, actually curve over and under each other, and therefore extra yarn is required.

Warp: As a noun, the set of threads held taut by the loom. As a verb, the process of threading the warp onto the loom.

Weft: The threads interlaced with the warp threads.

WARPING YOUR CRICKET LOOM

Before you can weave, you need to warp the loom. The method below is called direct warping. It was developed by Rowena Hart and is very fast and easy to do. You'll use the warping peg and heddle hook that came with your loom.

You'll also need scissors, a tape measure or ruler, and heavy paper about the weaving width of your loom and as long as your warp. Paper grocery bags work well. You can use multiple pieces of paper to make up the length.

NOTE: Illustrations here show the loom and warping peg clamped to a clear work surface to make all the parts visible. Here the loom and peg are positioned for a very short warp. For each weaving project, determine your warp length. Then measure from the back apron rod (Figure 8) towards the front of the loom; place the warping peg at the same distance as your warp length. You can clamp the warping peg to a separate work surface.

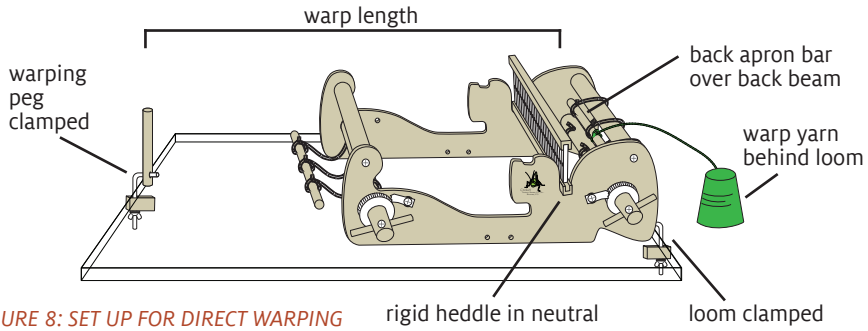

FIGURE 8: SET UP FOR DIRECT WARPING

NOTE: In these illustrations, we'll work from the right side of the loom to the left side (as viewed from the front of the loom). You can work from left to right if you prefer.

Watch our video on direct warping the Cricket at *youtube.com/user/schachtspindle*

Thread the slots

1. Set up your loom as shown in Figure 8 on page 6:

- Insert the metal part of the clamps into the holes in back of the loom sides. Clamp the loom securely to a work surface.
- Set the rigid heddle in neutral position.
- Bring the back apron bar up **over** the back beam toward the heddle. Make sure you've gone over the back beam, not under it, or you will not get a shed when you start weaving.

2. Set up the warping peg: Clamp the warping peg in front of the loom, as far away from the back apron bar as your desired warp length (Figure 8).

3. Find the center of the heddle and then measure out to one side half the width of your warp. For example, if your warp is 6" wide, measure out 3" and begin threading at this point.

4. Set up the warp yarn: tie the yarn to the back apron bar in line with the point where you will begin threading. Set the skein or cone behind the loom, so the yarn comes up over the back beam (Figure 8).

5. From the front of the heddle, insert the heddle hook through the slot where you will begin threading. Make sure to use a slot, not a hole, in the heddle. Pull a loop of warp yarn through this slot. You'll notice that the yarn coming from the skein passes **over** the back apron bar (Figure 9A). Place the loop of yarn over the warping peg (Figure 9B). You have now measured and threaded 2 warp ends through a single slot.

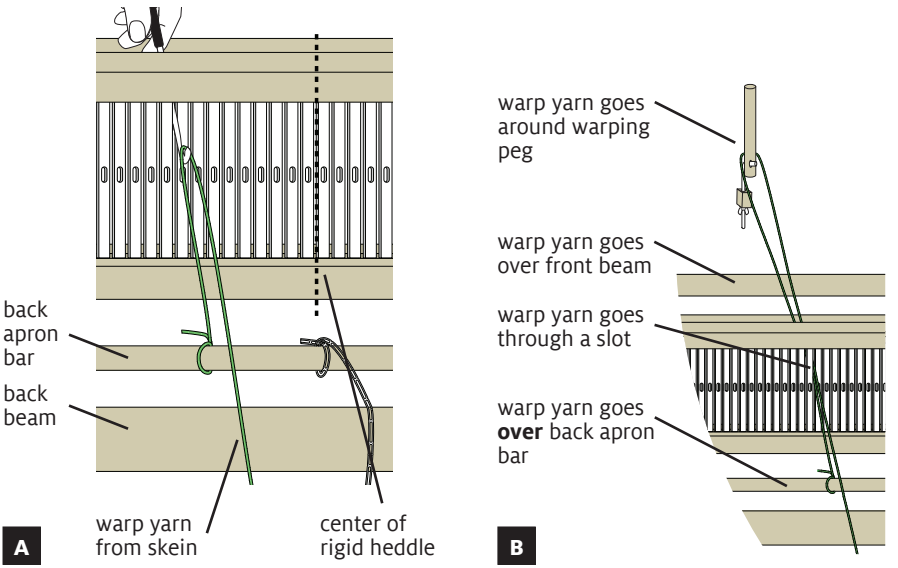

FIGURE 9: FIRST LOOP

6. From the front of the heddle, pull the next loop of yarn **under** the back apron bar and through the next slot in the rigid heddle (Figure 10). Place the loop over the warping peg. Do not twist the loop.

7. Continue pulling the loops through slots, alternately going over and under the apron bar. Place each loop over the warping peg without twisting, as shown in Figure 11. Each loop on the warping peg equals 2 warp ends; repeat these steps until all the warp ends have been measured. Cut off the yarn from the skein or cone and tie this end to the back apron bar (Figure 11).

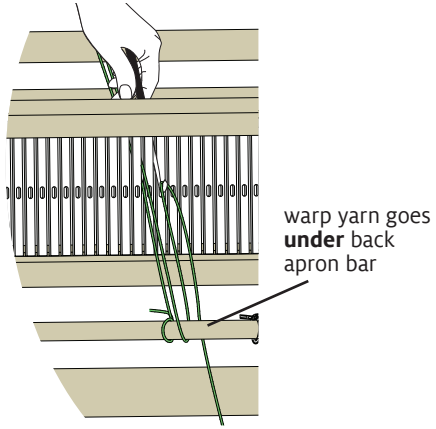

FIGURE 10: SECOND LOOP

CHANGING YARNS WHILE WARPING

Sometimes you will want stripes or different yarns in your warp. When you are using the direct warping method, you have a couple of choices for how to change yarns while you are warping:

Method 1: Drop and Pick Up

- Drop the first yarn at the back apron rod.
- Tie the second yarn to the back apron rod.
- Measure warp ends with the second yarn.

This method works best if you are changing back & forth between yarns with only a few ends—an inch or less of warp— between changes. Once your second yarn is tied onto the back apron rod, you can change between yarns by dropping one and picking up the other.

Method 2: Cut and Tie

- Cut the first yarn at the apron rod, leaving a tail a few inches long.
- Tie the first and second yarns together with the knot at the back apron rod (trim the tails on the knot if needed).
- Continue warping with the second yarn.

This method is best if you will warp many ends—more than an inch—before changing yarns again. If you need an odd number of ends, you can use this method to change yarns at the warping peg instead of at the back apron rod.

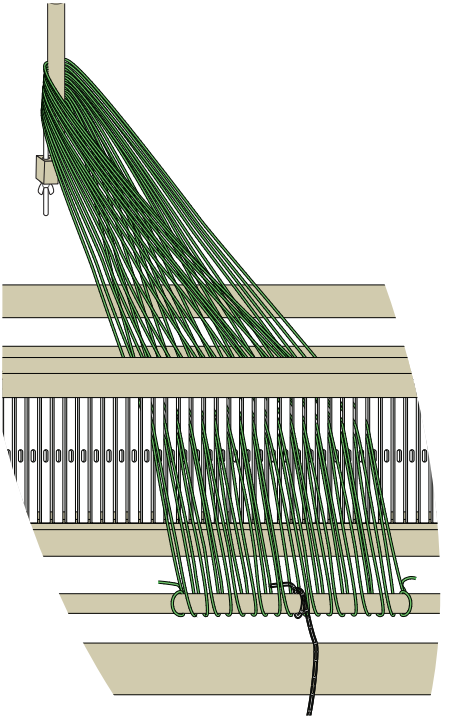

FIGURE 11: ALL SLOTS THREADED

Wind the warp onto the warp beam

1. After you have measured all the warp ends, hold all the loops in one hand and slide them off the warping peg (Figure 12A). Hold the loops tightly in your hand and use scissors to cut the ends (Figure 12B). Tie the bundle of warp threads into a loose overhand knot (Figure 13) and set aside.

2. Wind the warp onto the warp beam by turning the warp beam handle clockwise. When the warp has rolled around the beam once, insert heavy paper between the layers of warp threads to separate them. As you wind the warp on the beam, insert more paper to keep layers separate.

3. Continue rolling the warp and paper onto the warp beam. Pause every so often to pull hard on the knotted end of the warp—this tightens the paper and warp on the beam.

4. Stop winding when the knotted end of the warp is about 8" from the front of the rigid heddle. Undo the knot.

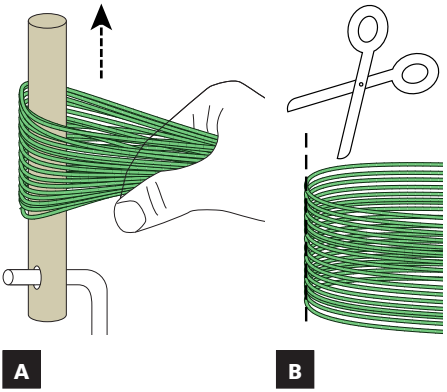

FIGURE 12: REMOVE WARP FROM PEG

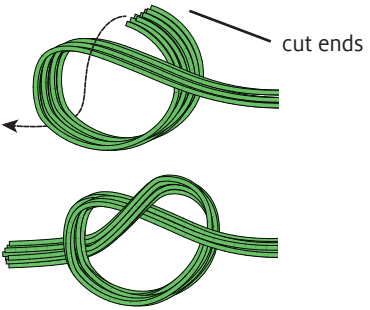

FIGURE 13: OVERHAND KNOT

Thread the holes

5. When you threaded the slots, you placed 2 warp ends in each slot. Now you'll take 1 end out of each slot and thread it through the adjacent hole using your heddle hook (Figure 14A). Work from one edge of the warp to the other until all holes have been threaded (Figure 14B).

Note: It doesn't matter which thread you move into the hole. It also doesn't matter whether you thread the hole to the right or the left of a slot, as long as you're consistent all the way across.

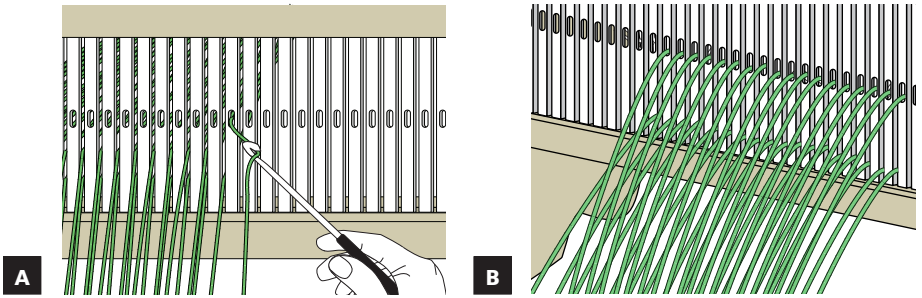

FIGURE 14: THREAD THE HOLES

Tie onto the front apron bar

6. Bring the front apron bar around and **over** the front beam so that it is about 6" from the heddle. Make sure you've gone over the front beam, not under it.

7. Select a group of threads about 1" wide at the center of the warp and bring them over the top of the apron bar, dividing them in half and tying together around the apron bar using a surgeon's knot (Figure 15A). It's like starting to tie your shoes, except the threads go around twice.

8. Alternate tying 1" groups to the right and left of center until all warp ends are tied onto the apron bar.

9. Go back across the warp again, tightening all the groups. It's best to start in the center and work outwards on each pass. Pat across the warp to check that all groups have equal tension. The tension should be even, but doesn't need to be very tight. (Once the warp has even tension, you can increase the tension by turning the cloth beam handle towards the loom front.)

10. Tie the ends of each warp group in a bow or square knot to secure them (Figure 15B).

11. If needed, reposition the front apron bar so that it sits close to the front beam. (You may have to loosen tension on the warp first: turn the cloth beam towards you so that you can flip up the ratchet dog. Once the apron bar is in position, lower the ratchet dog.) Take up any slack in the apron cords by turning the cloth or warp beam.

You are now ready to weave!

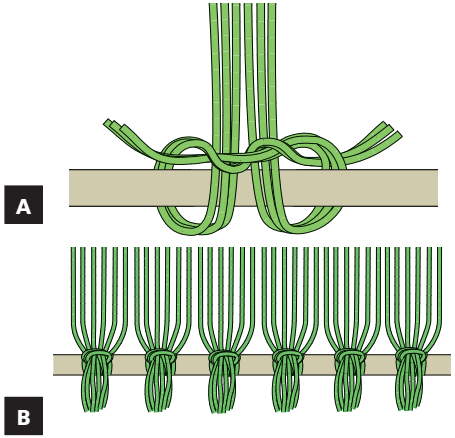

FIGURE 15: TIE ONTO FRONT APRON BAR

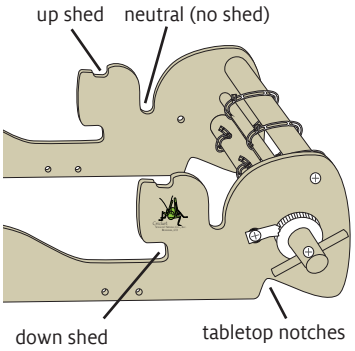

FIGURE 16: NOTCHES ON CRICKET SIDES

If a ratchet dog will not rotate easily, do not force it. Instead, loosen the screw that attaches it with a 7/16" (or adjustable) wrench and a #2 Phillips screwdriver. Hold the lock nut inside the loom with the wrench, then loosen the screw slightly with the screwdriver.

WEAVING ON YOUR CRICKET LOOM

Weaving is very simple. Read through this section before you start a project, referring back to the glossary on page 6 if necessary.

The Cricket has notches in its sides to hold the rigid heddle in up position and down position for weaving, shown in Figure 16 (you used neutral position for warping).

- Make the first shed by lifting the rigid heddle to the up position, which raises the warp ends threaded into the holes (Figure 17A). When you pass the weft from one side of the warp to the other (say, right to left), the weft goes under the raised threads and over the lowered threads. Beat the weft by pulling the rigid heddle towards the front of the loom. You've completed a pick.
- Make the second shed by lowering the rigid heddle to the down position (Figure 17B). Now the warp ends that were raised in the first shed will be lowered. Pass the weft from left to right and beat. You've completed another pick.
- You will quickly fall into a rhythm: up shed, pass the weft, beat; down shed, pass the weft, beat. Simply repeat these steps to weave fabric.

Wind a shuttle

Wind the weft yarn around a stick shuttle in a figure 8 (Figure 18). You can wind along one edge or both edges of the shuttle.

Weave a header

Use scrap yarn to weave a "header" that will spread the warp out evenly (Figure 19). Choose yarn about the same size as your project yarn. Weave 3 picks **without beating** and then beat. Repeat if needed until the warp is evenly spread.

Tips & tricks for weaving

Set up your loom for comfortable weaving. You can stand up to weave by clamping the front of the loom to a table top. Or sit down, rest the tabletop notches (see Figure 16) against the edge of a table,

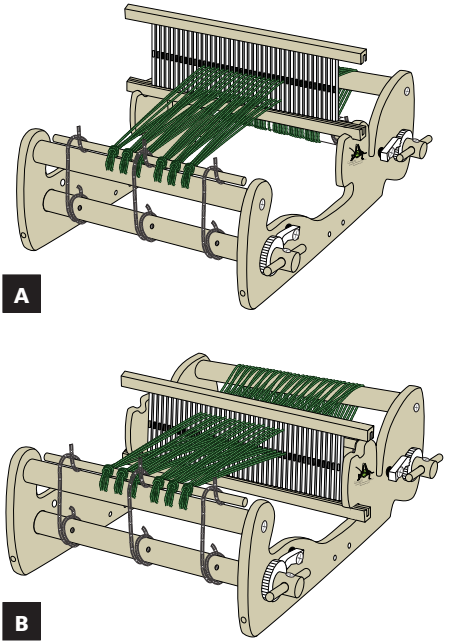

FIGURE 17: MAKING SHEDS

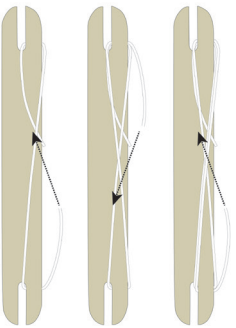

FIGURE 18: WIND A SHUTTLE

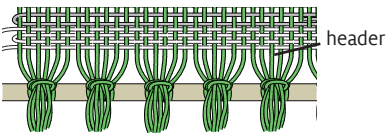

FIGURE 19: WEAVE A HEADER

and tilt the loom down. You can also use the Cricket Stand, setting the loom at a convenient angle for standing or sitting.

Adjust warp tension to get a good shed. Warp should be taut, but not stretched so much that it's difficult to raise and lower the heddle. Increase tension by turning the cloth beam toward you or the warp beam away from you—just one or two clicks of the ratchet gear should be enough. Decrease tension by turning the warp beam away from you, flipping up the warp beam ratchet dog, and then turning the warp beam towards you one or two clicks. Lower the ratchet dog.

As weft yarn comes off the shuttle, lay it at about a 30° angle so that it doesn't draw in your selvedges (Figure 20A). The weft should be snug at the selvedge but should not pull in.

On the first pick, leave a tail of weft yarn a few inches long. Keep the shed open and fold the tail over a selvedge thread (Figure 20B). Beat to secure this tail.

When your shuttle runs out of weft, leave the yarn in the shed where it ends. Wind more yarn onto your shuttle. Then insert the shuttle into the same shed, overlapping the new end with the old end for about 1/2" as shown in Figure 20B.

You can also start and stop your old and new ends at the selvedge and weave them into the shed as you did with the first pick. After you finish weaving, trim all tails.

After you have woven a few inches, you will notice that you have less room for the shuttle. It's time to advance the warp. Turn the warp beam ratchet dog toward you to release tension on the warp, then flip up the ratchet dog. Turn the cloth beam handle toward you to wind fabric onto this beam. Stop when the woven edge of the cloth is 2" to 3" in front of the front beam. Push the ratchet dog back down on the ratchet gear. Tighten the warp by turning the warp beam handle away from you. Your woven cloth will be more consistent if you advance the warp after every 2" of weaving.

Remove your project from the loom

When you have finished your project or can't weave any farther, weave a few rows with waste yarn. Cut the warp off from the back of the loom. Unwind the fabric from around the cloth beam and untie or cut off the warp from the front apron bar. Be careful not to cut the apron cords.

For finishing techniques, see the references listed below.

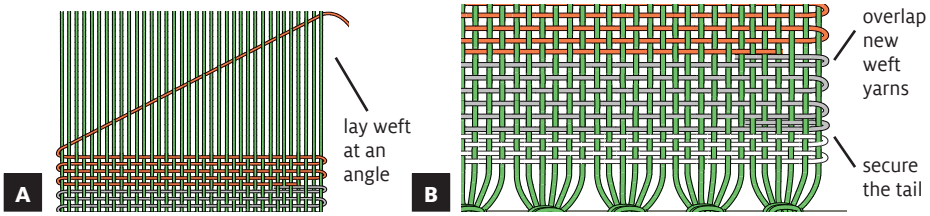

FIGURE 20: WEAVE YOUR PROJECT

RESOURCES

Gipson, Liz. *Weaving Made Easy*. Interweave, 2008.
———. *Handwoven Home*. Interweave, 2017.
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———. *Rigid Heddle Weaving* DVD. Interweave, 2011.