

Colorwork Bands

Summer 2021 Weave-Along with Liz Gipson



Key Chain Fob Specs

Yarn

2 colors of 3/2 mercerized cotton, 1,260 yd/lb with strong value contrast from each other. [Cotton Clouds is offering a kit in three different colorways.](#)

Tools Rigid-heddle loom; 12-dent rigid heddle; belt shuttle. If using the indirect warping method, you will need a warping board, or a set of at least 3 warping pegs, or any household object that serves a similar function (see page 5).

Notions 1" key fob hardware. [This is what I used.](#)

Warp Yardage 37 yd (21 yd green, 16 yd yellow.)

Weft Yardage 5 yd (2½ yd green, 2½ yd yellow)

Warp Length 57" (allows for 24" loom waste, 8" between bands; add 20" for each additional band)

Warp Ends 23 (13 green, 10 yellow)

Width in Rigid Heddle/Reed 2" (actual weaving width reduced to 1")

EPI (Ends Per Inch)/Sett 12 e.p.i. in the rigid-heddle reed and increased closer to 24 e.p.i. in the actual cloth.

PPI (Picks Per Inch) about 13

Finished Size two key chains 1" wide with 10 ¾" circumference.

During the summer 2021 weave-along, we explore warped-faced colorwork via a small key chain fob. This kind of fabric has so many uses—hat bands, belts, sashes, and straps of all kinds. For those who joined in for the mini rug weave-along, the colorwork theory is similar, however this time we are going to put all the color variations in the warp and weave with a single color. As an added bonus, this project gives us a perfect opportunity to explore the pros and cons of the direct and indirect warping methods for adding multiple colors in the warp. In order for the pattern to show up, you want to be sure that your yarns have strong [value contrast](#).

Warping During the weave-along, I'll demonstrate direct and indirect warping methods to set up the loom for colorwork. Whichever method you learn first, direct or indirect, tends to become your favorite method. Weavers can psych themselves out that indirect warping is hard and direct warping is limited depending on which they learned first. This weave-along beautifully illustrates the trade-off of the two methods. I outlined my thinking on the [differences between direct and indirect warping](#) in a recent article for Gist Yarn.

Direct Warping

The challenge with using the direct method with warps that have odd numbers of differently colored ends is managing those single ends in a paired system. In this project, I used the cut-and-wrap method covered in [Weaving 201: Colorwork](#). Although it involves a lot of cutting, tying, and wrapping, it greatly reduces crossed ends and allows you to warp a single end of two different colors in the same slot.

To work this method, set up for direct warping following the specs on page 1. Center the 2" warp in the rigid heddle. Facing the front of the loom, I'm working left to right.

Slots

See photo at right for final color order.

Tie the green yarn onto the back apron rod. Pull a single loop of green through the first 2 slots.

Tie on the yellow yarn. Pull through a single loop of yellow through the 3rd slot. Cut the yellow yarn from the supply and tie it onto the rod.

Cut and Tie

Pick up the green and pull a loop through the 4th slot. After placing the loop on the peg, cut the yarn leaving a generous tail and wrap it around the peg. You now have a single green end through the slot and secured to the peg. See page 3 for more about the cut and wrap method.

Thread *a single end* of yellow through the same slot and wrap it around the peg. You now have 1 yellow and 1 green end in this slot. Wrap the yellow

yarn around the back apron rod and thread a loop through the 5th slot.

Re-tie the green on the back rod and pull a loop of green through the 6th slot.

Pull a loop of yellow through the 7th slot and cut and wrap it so there is a single end in that slot. Thread *a single end* of green through the same slot and wrap it around the peg.

Tie on the yellow and pull a single loop through the 8th slot.



The threaded slots from left to right: 2 green, 2 green, 2 yellow, 1 green/1 yellow, 2 yellow, 2 green, 1 yellow/1 green, 2 yellow, 1 green, 2 yellow, 2 green, 2 green.

Thread a single end of green through the 9th slot. *This is the only end in this slot.*

Pull a loop of yellow through the 10th slot and tie it off at the apron rod.

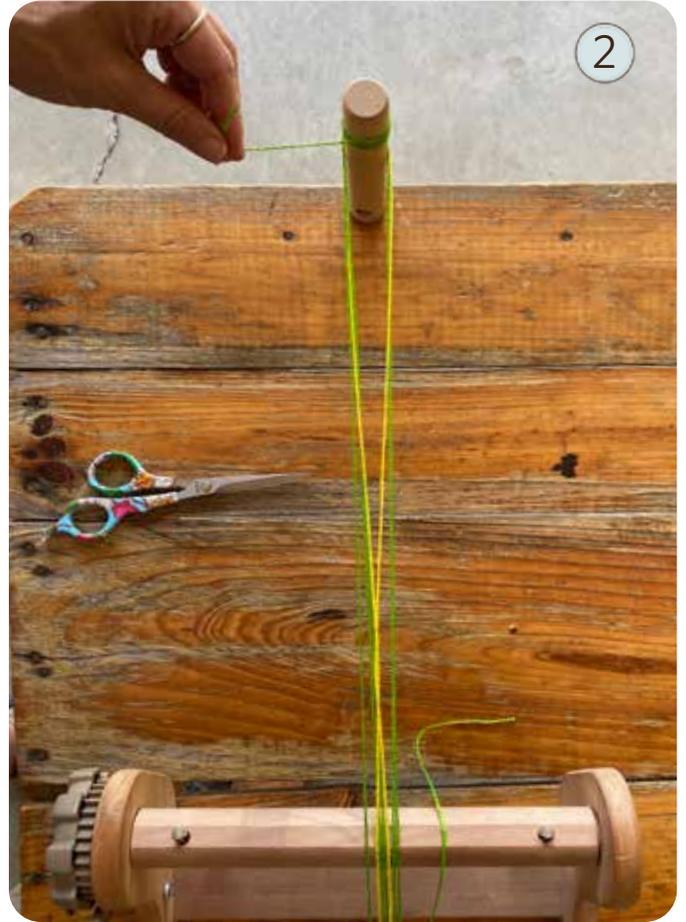
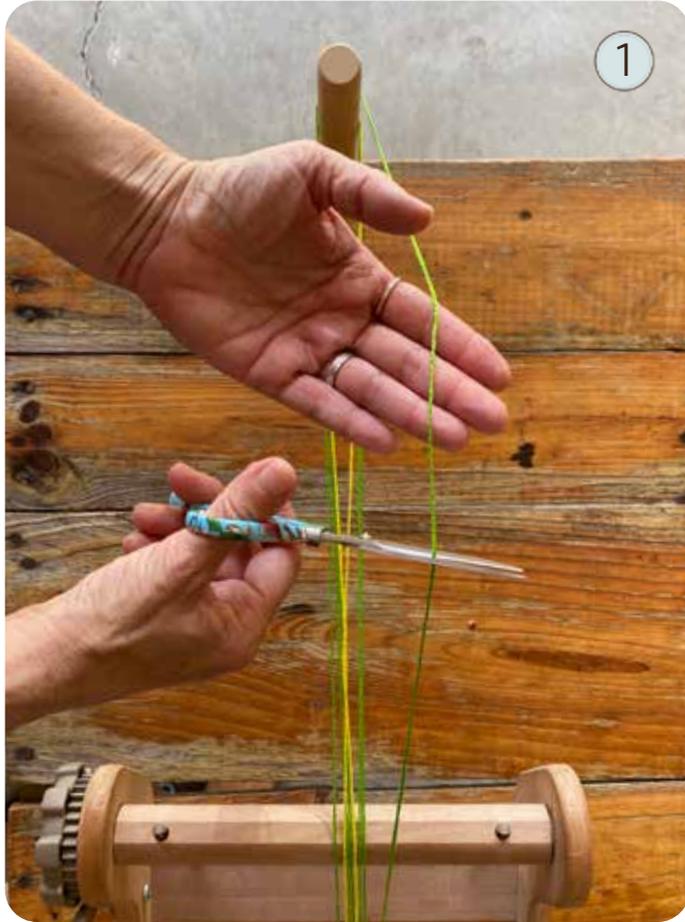
Pull a loop of green through the 11th and 12th slots.

Wind the warp onto the back beam, adding packing paper between the layers. I prefer using the [crank and yank method](#) to do this.

Holes

Facing the loom and starting on the left, move one end of green yarn from the 1st slot to the hole to its right. Repeat with one end of green from the second slot and then one end of yellow from the 3rd slot. The final threading order is on page 4.

Leave the green end in the 4th slot and move the yellow to the hole to its right. (Cont. on page 4)



Cut and Wrap Method

- 1) To thread a single end of two different colors when using the direct warping method, start by pulling a loop of the first color through the slot as you normally would. Place the loop on the peg and then cut it from the yarn supply leaving a generous tail.
- 2) Wrap the tail around the peg to secure a single end in the slot.
- 3) Thread a *single end* of the next color through the same slot and secure it to the peg by wrapping the end around it a couple of times. This new yarn is now set up to wrap around the back apron rod for the next loop. The next time you need to thread the first yarn, you will need to re-tie it to the rod.

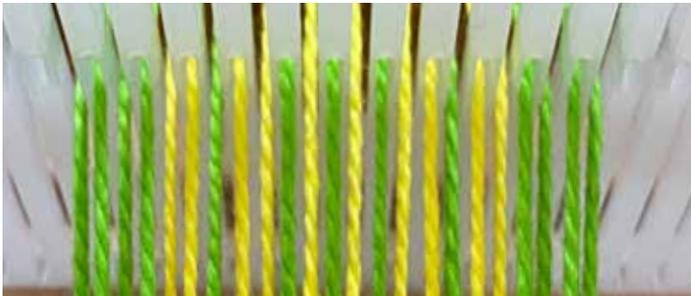
You could thread these single ends in their respective holes, but I find it easiest to thread the slots first, and then move the yarns to the holes later.

Pull out one of the yellow ends in the 5th slot and leave it hanging free. I do this so I don't forget it.

Move both of the green ends from the 6th slots, one to the left and one to the right, leaving the slot temporarily empty.

Thread the free hanging yellow end from the 5th slot into the 6th slot between the two green ends.

Move the green end in the 7th slot to the hole to its right.



Final threading order: 4 green, 2 yellow, 1 green, 2 yellow, 1 green, 1 yellow, 1 green, 1 yellow, 1 green, 2 yellow, 1 green, 2 yellow, 4 green.

Move one of the yellow ends in the 8th slot to the hole to its right.

Leave the single green end in the 9th slot.
Move the one end from each of the last three slots, 10, 11, and 12, to the hole to its *left*.

Tie the warp on the front apron rod and adjust for even tension.

Indirect Warping

If you have never tried indirect warping, this is the time. This short warp can be wound with a minimal amount of equipment.

Wind the Warp

I'll demonstrate winding a warp using warping pegs. See page 5 for more information about setting up and using pegs. You will need at least three pegs. You probably have some household or easily attainable items you can use for pegs if you don't have enough pegs on hand. You can also use a warping board.

I like to wind my colors separately, but you can also wind them in color order. (I demonstrate how to do this in [Weaving 202: Indirect Warping](#).)



Pressure clamps and various kind of brackets can be used for all sorts of DIY weaving tools including warping pegs and cross holders. In a pinch, even an upside down stool or chair can be used to wind a warp.

Start by winding 13 green ends. Since this is an odd number, you will stop at Peg 1 (see page 5). Secure the end by cutting the yarn so that there is a generous tail and wrap it around the peg (see photo 2 on page 3).

Then wind 10 yellow ends. Secure the cross (see page 5).

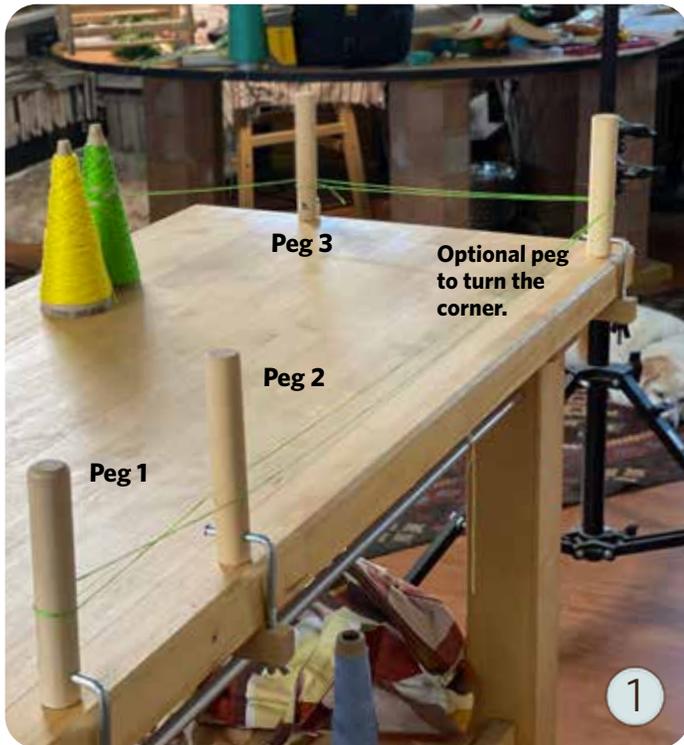
Measure the distance from your cloth beam to your warp beam and tie a choke that distance from the first peg (see page 5). If you were winding a wider warp you could choose to tie separate chokes on each color.

Thread the Heddle

Keeping tension on the warp, remove the warp from Peg 3, the one farthest away from the cross, and cut the loops to create individual ends.

Securing the cross in your hand, move it to the loom (see page 6). You can either keep the cross in your hand while threading or place it in a holder. Keep the green color on top so you can work the green threads first. (I cover the basic process of threading a warp with a cross, including some tips for DIY holders, in [this blog post](#). Scroll down to the section "Threading a Warp With a Cross".)

(Cont. on page 6)



Using Warping Pegs to Wind a Warp

It isn't necessary to have a big bulky piece of equipment to work the indirect warping method. Instead, you can use pegs. You will need at least 3, or any similar peg-like object such as a clamped bracket. Shown here, I'm using four pegs so I can turn the corner and make the warp longer than the table. The most important part of the process is forming the cross.



To form the first leg of the cross, bring the yarn on top of Peg 2 and under Peg 1, working from left to right.

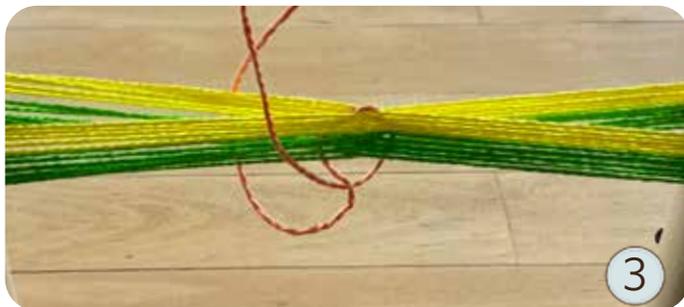


To form the second leg of the cross, bring the yarn around Peg 1 and then under Peg 2, working left to right.



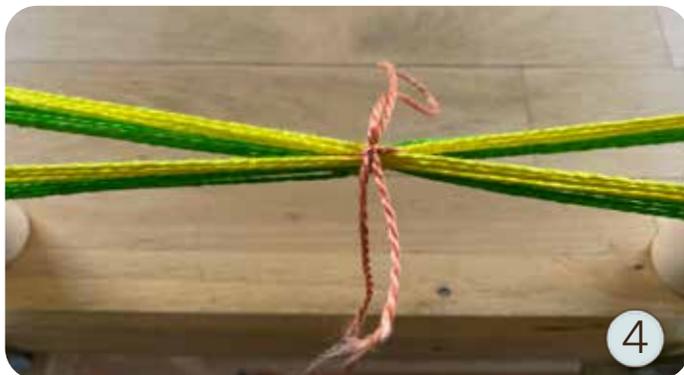
Setting Up Your Pegs and Forming a Cross Place two pegs about 4" apart (Peg 1 and 2). This is where you will form the cross. Place a third peg the distance from the first peg equal to the full length of the warp. (Peg 3, see photo 1).

Secure the yarn to the Peg 3. I use a slipknot. Bring the yarn up and over the Peg 2 and below Peg 1. Bring the yarn around Peg 1, then down and under the Peg 2 and back to the last peg. This forms 2 warp ends stacked one on top of the other in the cross (see photo 1). Repeat this process for all the ends in the warp, looping the yarn around Peg 3 rather than cutting and tying each time unless you need to change yarns for fix a knot.



Secure the Cross Cut a length of contrasting yarn about 16" long. Thread either end of the yarn on either side of the cross (photo 2). Secure with a slip knot (photo 4).

Cross the ends over one another and then bring the ends to either side of the cross (photo 3). Secure with a slip knot (photo 4).



Tie Choke Measure the distance from your cloth beam to your warp beam and tie a choke at that distance from the first peg (photo 5). The choke keeps the yarns in place while threading the heddle.





Remove the cross from the loom so the green is on top by placing a finger above and below the cross, and on either side. Tie the choke to the front or cloth beam, then thread the heddle.



Center for 2", tie the choke to either the front or cloth beam, then thread the heddle using the warp color order in Fig. 1. Because each color is wound separately, start by threading the green ends and leave spaces to come back in and thread the yellow.

Tie the warp onto the back apron rod, then cut the choke tie securing the warp to the beam.

Wind the warp on the back beam, adding packing paper between the layers. Tie the warp on the front apron rod and adjust for even tension.

Fig 1. Key Fob Warp Color Order

4	1	1	1	1	1	1	4	Green
2	2	1	1	2	2			Yellow

This style of warp color order chart is used for indirect warping. It is written assuming you are working with individual threads. Each number indicates how many ends of each color you should thread. For instance, the 4 indicates you should thread 4 green ends, each in their own individual slot or hole.

Weaving Wind a small amount of scrap yarn onto a belt shuttle. Only put yarn on the side of the shuttle without the bevel.

Alternatively, you can go ahead and wind your first warp color, use the scrap from another shuttle, then use the belt shuttle with your wound weft to press the scrap into place. (See shuttle in use on page 7.)

This style of weaving is very different from other weaves you may have tackled on your rigid-heddle loom. You are never going to bring your heddle to the cloth to press the yarn in place. Instead you are going to use the heddle to open and close the shed and use the beveled edge of your shuttle to place the yarn.

Rather than trying to spread the warp evenly with your header, you are instead going to try to bring the warp yarns as close together as you can.

Start by pushing the knots towards each other so the warp ends are sitting next to each other. Then, depending on your loom style, advance the warp over either your front or cloth beam and tension the warp. This will keep the narrow warp from bending your apron rod and skewing your tension.

It is helpful to use scrap yarn the same size or slightly thinner than your warp yarn.

Start by opening a shed and placing your scarp yarn in the shed. Align the yarn horizontally, pulling it back and forth.



Rather than spreading the warp, you are instead going to try to keep the warp close together as you weave. To do this, scooch the warp yarns together so they are sitting right next to each other, then advance the warp over your front or cloth beam and tension the warp.



Place the weft in an arc instead of the more traditional angle. My scrap yarn is slightly bigger than my warp yarn, which isn't optimal.



Use the beveled edge of the belt shuttle on a changed shed to press each pick into place. I had some scrap on a separate shuttle that wasn't a belt, so I used it to pass the weft and then beat with the belt shuttle I wound with my first weft color.

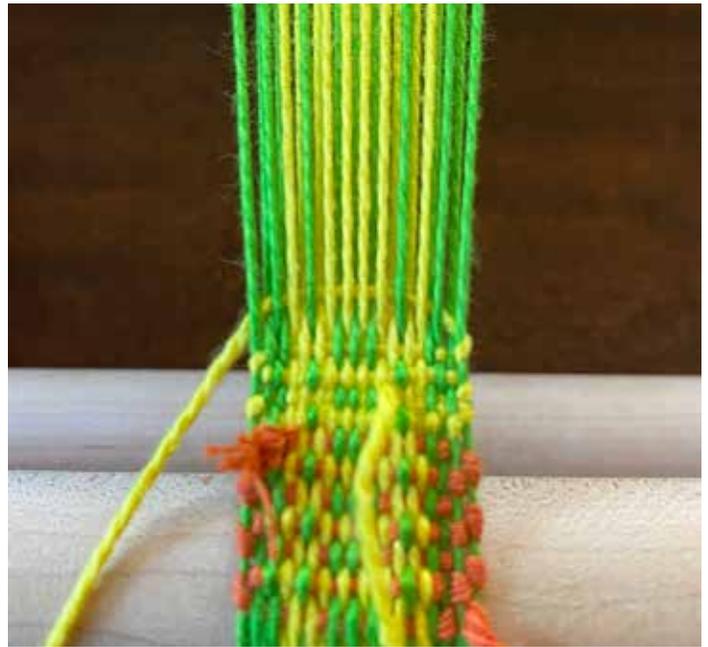
Change sheds *without* bringing the heddle to the fell of the cloth. Insert a second pick and allow it to form an arc in the weft instead of the more traditional angle. Your weaving width will be reduced to about 1".

Change the shed and pause before placing another weft pick. This is a "changed" shed, sometimes called a closed shed, although technically that would be when the heddle is in neutral. The weft yarn below is trapped by the changing of the shed. This allows you to beat the weft with less of a chance of it springing back as it might on an open shed. I discussed open and closed sheds [in this blog post](#).

Use the beveled edge of the shuttle to press the pick into place.

Place another pick in the shed, arching the weft, changing the shed, then pressing this next pick into place.

I find it helpful to hook my thumbs around the beam to provide some resistance when pressing the yarn into place. This can place strain on your thumb joints. To mitigate this, I advance often. You can also weave with your body pressed up against the loom to provide some resistance.



You can use a simple tail tuck to incorporate the weft tail at the start of the weaving. Notice how the slightly thicker scrap yarn doesn't allow the warp yarns to sit as close together as the thinner weft. A scrap yarn in a similar size to the warp is optimal.

Continue weaving with the scrap yarn for five or six picks, working to keep the yarns close together.

Change to your first weft color. Continue weaving as you did for the header. Unlike most weaves where you want to leave space between the yarns, you want the yarns to sit as snugly together without having the yarns pile on top of one another. When adjusting the weft, be mindful that you don't crowd your selvages too much and cause draw-in at the selvages.

Some weavers will leave a little extra weft loop at the edge. After they have pressed the weft into place, they tug gently on the weft to eliminate the loop and guide the weft into place. This allows you to pull the warp yarns closer together. I'll demonstrate this during the weave-along.

Because of the proximity of the heddle to the work in most styles of rigid-heddle looms, the weave won't be truly warp-faced. You will see a little bit of the weft yarn peeking through, which will shift the colorwork (see page 10). You can achieve a warp-faced weave by using just a section of rigid heddle instead of a full rigid-heddle reed, this allows you to move the shedding mechanism farther away from the work. However, I find it helpful to be able to lock the heddle into place as I work.



To incorporate the weft tail at the end of the weave, use a loop of dental floss to pull the tail under the second-to-last pick.

Continue weaving for 12½" advancing often.

To incorporate the weft tail at the end of each band, reverse-engineer a tail tuck using a bit of dental floss (shown here with the green weft).

To do this, cut off an 8" length of dental floss. (Dental "tape" is my preferred style.) You can also use a bit of smooth, fine yarn if you don't have any floss handy.

Fold the length of floss in half and place it in the same shed as you weave the second-to-last pick so it sits under the pick. You want the loop to extend past the opposite side where the shuttle is exiting. Allow the loop tails to exit the shed just short of the middle of the warp.

Press the yarn and floss into place, change the shed, and weave the last pick. Cut a generous tail, then thread the tail through the loop of floss. Use the floss tails to pull the weft yarn back into the cloth and out of the fabric. Leave the yarn tail in place until you are ready to do your finishing work.

Weave a few picks of scrap yarn and advance the warp about 8". Switching to the green weft, weave a second band as you did the first.



Thread the tail through the loop and pull it back into the weave cloth and exit a little short of halfway from the edge of the fabric.

The loom waste on this project is overly generous to enable you to weave both bands before your apron rod pops over the back beam. If this happens before you finish your project, you need to be careful that you don't put too much tension on your project and snap your rod.

Finishing Remove the bands from the loom.

Cut the two bands apart. I left a generous amount of fringe between the bands to allow you to work either a Philippine edge or a twisted fringe, which requires a bit more length. If you would like to try each finish, cut the bands apart so there is 3" of fringe on one end and 5" on the other.

If using the key fob hardware, I finish using the Philippine edge (see page 9). Alternatively, you can work a twisted fringe and sew the two ends together to create a fringed finish.

Before adding the hardware or sewing the fob, soak the band in room temperature water for about 20 minutes. Press out the water and lay flat to dry. In most cases, it isn't necessary to scour the yarn with detergent as a soak is enough to help the yarns settle. 🧺

Philippine Edge

A quick and easy finish to secure your ends before adding the fob hardware.

Set Up Place the band on a flat surface, and weight it with a heavy object. Using small, sharp scissors, carefully cut away the header. This will keep your weft from drifting out of position as you work. The finish will be worked over three ends. I'm working from left to right, but you can also work right to left.



Step 1: Wrap the first two warp ends with the third.



Step 2: Set aside the first two warp ends you just wrapped. Use the wrapping end and its neighbor as a new pair.



Step 3: Wrap the new pair with the adjacent yarn.



The final fringe.

Step 1: Hold the first 2 warp ends under tension. Wrap the 3rd end around the first two using a half hitch knot, as demonstrated in the video, and snug it up to the edge of the fabric.

Step 2: Tension the end that you used to wrap the previous pair and its neighbor to the right.

Step 3: Wrap these two ends using the next end over to the right.

Continue working in this manner until you have worked across the warp (bottom). The last end will have a mind of its own. If not clamping it in the fob hardware, you can needleweave it back up into the cloth for four or five picks and then trim it flush after washing.

Trim fringe close, about $\frac{1}{4}$ " from the knots. It is best to encase them in the fob hardware right away to keep the ends from slipping from the knots.

To add the key fob hardware, fold the band in half, then slip the hardware over the ends of the fabric. Push the fabric as far to the back of the hardware as possible and use a blunt nose needle to push in the edges if needed. If the corners of the band stick out too far, you can tack down these corners with a few whip stitches to keep the edges tidy.



Trim the fringe close to the end of the band, then fold it in half. If necessary, tack down the corners with sewing thread so they don't extend past the hardware. Push the fabric to the back of the clamp and press the clamp lips together firmly.

Design Considerations



There are four different design elements used in these bands:

Line made of at least three ends

Wavy Line made of two ends

Dot made of a single end

Column made of alternating different-colored ends

Strong [value contrast](#) between the design elements pops the patterns. The band on the left is woven with a yellow weft and the band on the right with green. Because these bands are not completely warp-faced, the weft influences the warp colors slightly, shifting its appearance.



This variation is woven in Beam from Gist Yarn and adds a three-ended stripe between the wavy line and the columns. In the band on the left, this sets apart the wavy line and dot pattern and creates the appearance of little diamond shapes between them. The band on the right, woven using a blue weft on the right, fills in the wave on the line, making it appear like a solid line with dots in the middle. You can also see this happening in the mercerized band on the left above.



This hatband was made from 5/2 mercerized cotton using a 12-dent rigid-heddle. I used a partial design from the key fob, a stripe (4 ends), a wavy line (2 ends) and a dot (1 end). It is finished using a long twisted fringe and tied onto the hat using a simple overhand knot.

Resources

We are exploring the tip of the iceberg that is band weaving. There are so many more styles, such as pick-up and card weaving. Here are some other resources if you wish to continue your band weaving journey. They aren't designed to translate exactly to the rigid-heddle loom.

I learned to weave bands using Helen Bress' *Inkle Weaving*, which is out of print.

The Weaver's Inkle Pattern Directory by Anne Dixon is a good resource that is available.

Jennifer Williams of [Inkled Pink](#) has been doing "daily band practice" where she posts a band each day and she has great projects and tutorials.

Annie MacHale of [A Spinning Weaver](#) has a wealth of resources on her website, including her book, *In Celebration of Plain Weave*, that takes a deep dive into design for warp-faced weaves.

You can also set up your loom for card weaving by skipping the heddle all together and using cards. If you [search YouTube](#), there are a bevy of videos to get you started, as well as host of other band-like techniques.