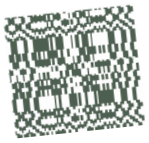


Free Weaving Patterns from

WEAVING TODAY™

Explore Techniques for Inlay, Plain Weave,
and Huck Lace



The Draft: How to Read Weaving Patterns

Patterns for weaving are written in a form called a “draft.” The draft is a standardized shorthand way of explaining how to set up a loom to weave a particular cloth. Imagine, for example, trying to tell someone how to warp and weave a complicated overshot pattern using words alone! Sometimes, however, the draft seems more like a confusing barrier than an aid to communication.

Most of the confusion comes from the many different ways in which drafts have been written in weaving literature. If you examined all of your weaving books and magazines, you would probably find three or four different formats among them. No format is “right” or “wrong”; they are each just a different way of conveying the same information.

The basic draft

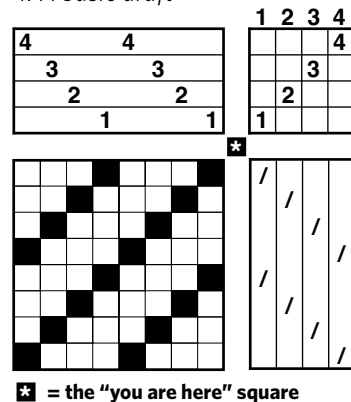
A draft for weaving is divided into four parts: the threading, tie-up, treadling, and drawdown. No matter what draft format is used, the threading is always horizontal and the treadling always vertical. Identify the threading and treadling sections of the draft in Figure 1.

When you read any draft, always start where the threading, tie-up, and treadling meet. I call this the

“you are here” square. Everything in the draft is read moving away from that point. In Figure 1, therefore, read the threading: 1-2-3-4-1-2-3-4. Read the tie-up: treadle 1, treadle 2, treadle 3, treadle 4. Read the treadling: 1-2-3-4-1-2-3-4.

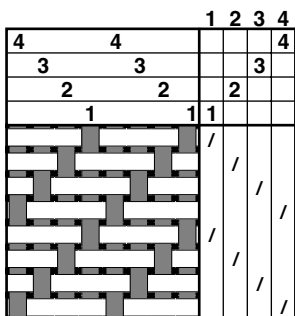
The drawdown shows the interlacement of the threads. Black squares either indicate raised warp threads (a warp drawdown), or they indicate weft threads passing over warp threads that are not raised (a weft drawdown). In Figure 1, black squares indicate raised warp threads (a warp drawdown): Shaft 1 is raised for the first pick; black squares appear under ends on shaft 1.

1. A basic draft

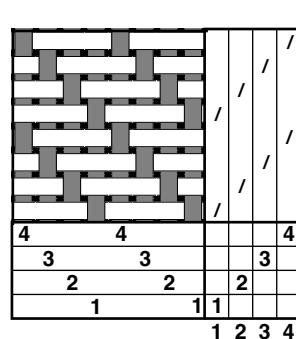


Drafts for weaving can be written in several different ways and give the same information.

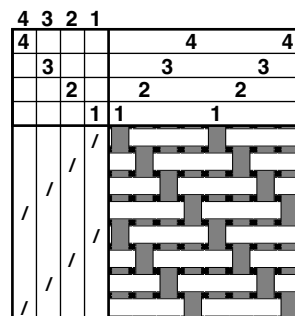
2a. threading R to L
treadling T to B



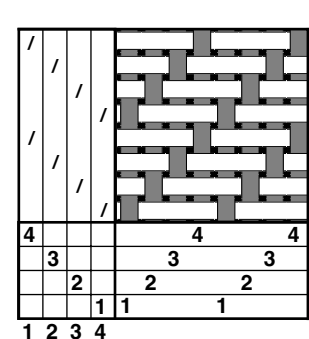
2b. threading R to L
treadling B to T

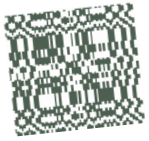


2c. threading L to R
treadling T to B



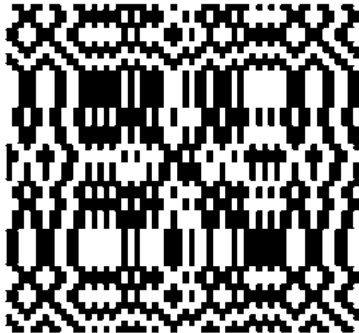
2d. threading L to R
treadling B to T



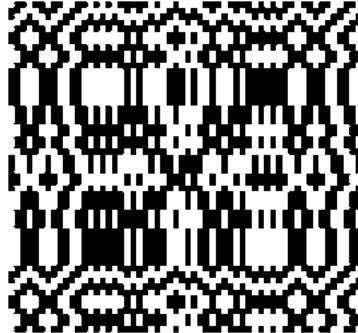


3a. Overshot name draft by Barbara Walker

														repeat						1	2	3	4	5	6		
4	4	4													4	4	4	4	4	4	4	4	4	4	4	4	4
3	3	3	3	3	3								3	3	3	3	3	3	3	3	3	3	3	3			
2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2						
1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1						



3b. Treadled from top to bottom



3c. Treadled from bottom to top

To read a draft: Begin at the “you are here” square. Areas of threading or treadling to be repeated are enclosed in brackets.

“Use tabby” indicates that a tabby pick alternates with every pattern pick but is not shown in the treadling sequence. Numbers in the treadling indicate the number of times a pattern pick is treadled.

			repeat		
1	1	1	1	1	1
2		1		1	
			2	1	
			4	1	
			2	2	
			1		
			3		
2	1	3			
			3	3	
			6		
1	1	1	1	1	1
2		1		1	
			2	1	
			1		

use tabby

Four draft formats

Figures 2a–d shows the four directional formats in which a draft can be written. All four are derived from changing only two elements: the threading, which can be written from right to left or from left to right, and the treadling, which can be written from top to bottom or from bottom to top.

The draft in 2a presents the threading from right (R) to left (L) and the treadling from top (T) to bottom (B). In 2b, the treadling is changed to read from bottom to top. 2c and 2d present the remaining two options.

The most common format

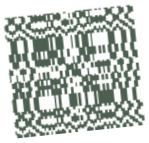
Figures 1 and 2a are written in the drafting format that is used in most of the weaving literature from this century.

You have probably wondered why the threading is written in the opposite direction from the way we write words. This has its origin in the idea that the draft is a picture of the setup on the loom. You are presumed to be standing in front of it. The first thread on shaft 1 is at your right; the treadles are tied so that the left treadle is treadle 1.

We inherit this format because most weavers in the early part of this century warped their looms from back to front. Back-to-fronters sit at the front of the loom to thread. If they are right-handed, they are most comfortable threading from right to left, exactly as shown in the draft.

If, however, as a front-to-backer, you thread sitting behind the shafts (and you are right-handed) you will also work from right to left—but this will be in the opposite direction from the orientation of the draft. If you are left-handed, you are likely to thread in the opposite direction from right-handed weavers in either threading position.

The treadling in the most common draft format is written from top to bottom probably because we are used to reading that way. Note that a drawdown in this format does not accurately represent the cloth, since we weave from the bottom of the cloth to the top. The drawdowns in 2b and 2d, for example, show the cloth accurately—provided the loom has been threaded and treadled in the directions indicated in the drafts (the twill also changes direction if the threading is reversed; compare 2a and 2c; 2b and 2d).



For many interlacements there is no visual difference between a top-to-bottom drawdown and the cloth.

Asymmetrical block designs can be affected by reversing treading direction. See Barbara Walker’s 4-block overshot draft on page 2. If the treading is followed from top to bottom in Figure 3a, the woven cloth looks like the drawdown in 3b. If the treading is followed from bottom to top, the woven cloth looks like the drawdown in 3c. Symmetrical block designs are not affected by treading direction.

HANDWOVEN drafts

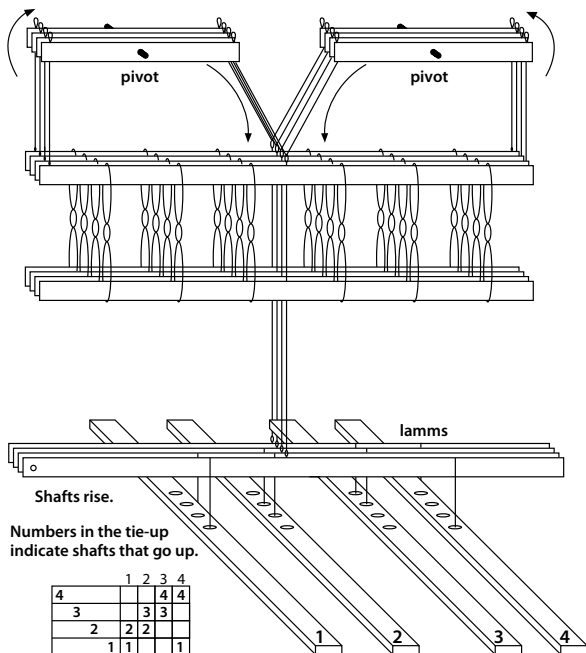
Our goal is that all the drafts in **HANDWOVEN** and **Interweave** books are clear, accurate, and easy to read. Since project drafts do not include drawdowns, there is no compelling reason to place the threading at the bottom of the page and write the treading from bottom to top. A top-to-bottom treading, in addition to being easier to follow, places the most important parts for loom setup—the threading and the tie-up—at the top of the page.

It makes as much sense to write threading drafts from left to right (the way we read) as from right to left since threading direction (front to back or back to front) varies so much today. Weavers are so accustomed to the right-to-left format, however, that we will continue to present drafts that way.

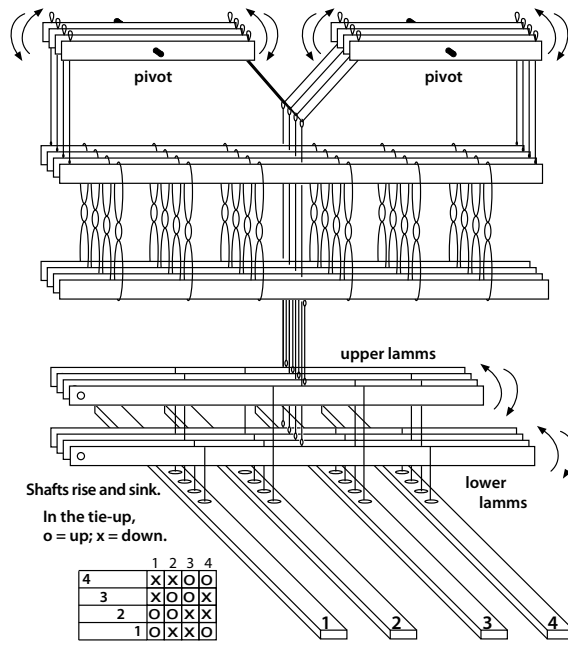
Numbers are used in the tie-up instead of symbols to make the shafts easier to distinguish when many shafts are used. Numbers always indicate shafts that are raised. Since counterbalance looms raise and sink shafts, tie the blank squares to lower shafts and the numbered squares to raise them when you are working with counterbalance looms; see Figure 4. Tie the blank squares to lower shafts for counterbalance looms.

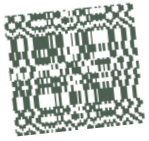
Because you may meet many different drafting formats in your weaving life, it is very helpful to learn to use them all. It is safe to read all drafts beginning at the “you are here” square. If a different order is intended but not indicated in the draft, the worst that can happen is that twill diagonals will be flipped, or you’ll weave the tops of your hearts or the heads of your turtles first.

4a. Tie-up for a jack loom



4b Tie-up for a counterbalance loom





Summer Plaid Scarf

by Ceil Lambert



CEI LAMBERT

STRUCTURE

Plain weave with
reverse soumak

EQUIPMENT

Rigid-heddle or 2-shaft
loom, 10" weaving width;
12-dent heddle or reed;
3 boat shuttles
or 3 stick shuttles.

YARNS

Warp: Bambu 7
(525 yd/4 oz cone, 2,100
yd/lb, Cotton Clouds),
Apache Blue #034,
Cilantro #883, Lime #797,
132 yd each; Golden
Wheat #845, 33 yd.
Weft: Bambu 7, Apache
Blue #034, Cilantro #883,
Lime #797, 105 yd each;
Golden Wheat
#845, 40 yd.
(Available as a kit from
Cotton Clouds.)

WARP LENGTH

156 ends (78 doubled)
2¾ yd long (allows 4" for
take-up, plus 29" for
loom waste and fringe).

SETTS

Warp: 12 doubled epi
(24 actual epi; 2/dent
in a 12-dent reed).
Weft: 13 ppi (using
doubled threads
for weft).

DIMENSIONS

Width in the reed: 6½".
Woven length (measured
under tension
on the loom): 66".
Finished size after
washing: 5½" x 63" plus
6" fringe at each end.

Summer plaid scarf

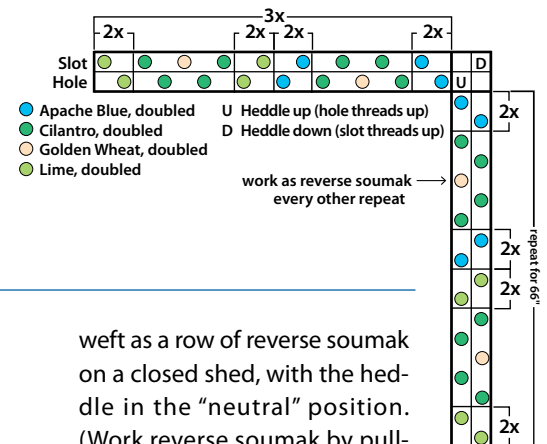
You never know how colors are going to look until you actually weave them, so plaid is a fun way to experiment with color. For this scarf, I chose bright eye-catching hues that hearken to summer. It's a great take-along project for your summer weaving, too.

In my book, plaids are never boring; they offer up infinite variations. I love plaid so much that I own enough plaid shirts to wear a different one each day for two weeks. Part of my fascination with plaids is the way the colors play against each other. Colors that look at odds with one another sitting on cones often make interesting and attractive complements when woven into a plaid pattern. For this scarf, for example, I mixed bright green and blue that might have been too garish. But a grayed turquoise yarn together with a gold accent stripe tone down the bright colors and make the finished cloth work, and accents of reverse soumak worked

every other pattern repeat give a little extra dimension and style.

This relatively narrow scarf was a quick and fun way to get my plaid fix, and it helps me justify all those shirts in my closet: they make excellent studies for my plaid designs!

1. Draft



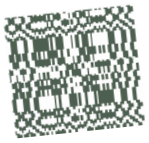
1 Set up your loom to direct warp a length of 2¾ yd (99"). The warp ends are doubled, so warp by pulling a loop through each slot and each hole following the draft in Figure 1. (If you prefer to use a warping board, wind a warp of 156 ends 2¾ yd long doubling each end shown in Figure 1. Then use your preferred method to warp the loom centering for a weaving width of 6½".)

2 Wind a bobbin or make a butterfly with scrap yarn. Allowing 8" for fringe, weave a heading to spread the warp with scrap yarn. Leaving a tail of the first pick for hemstitching, weave three picks in Apache Blue. Hemstitch groups of 2 warp ends (4 threads). Weave the scarf for 66" following the weaving order in Figure 1. On every other repeat, instead of a regular pick, you will work the first Golden Wheat

weft as a row of reverse soumak on a closed shed, with the heddle in the "neutral" position. (Work reverse soumak by pulling the weft under a group of 2 warp ends, around in front of those ends, and then under the same 2 ends and the following 2 ends to begin the next loop, as shown in Photo A). After 66", hemstitch as before. To help achieve uniform selvages, weave tails into the next shed and then start the new color at the opposite edge.

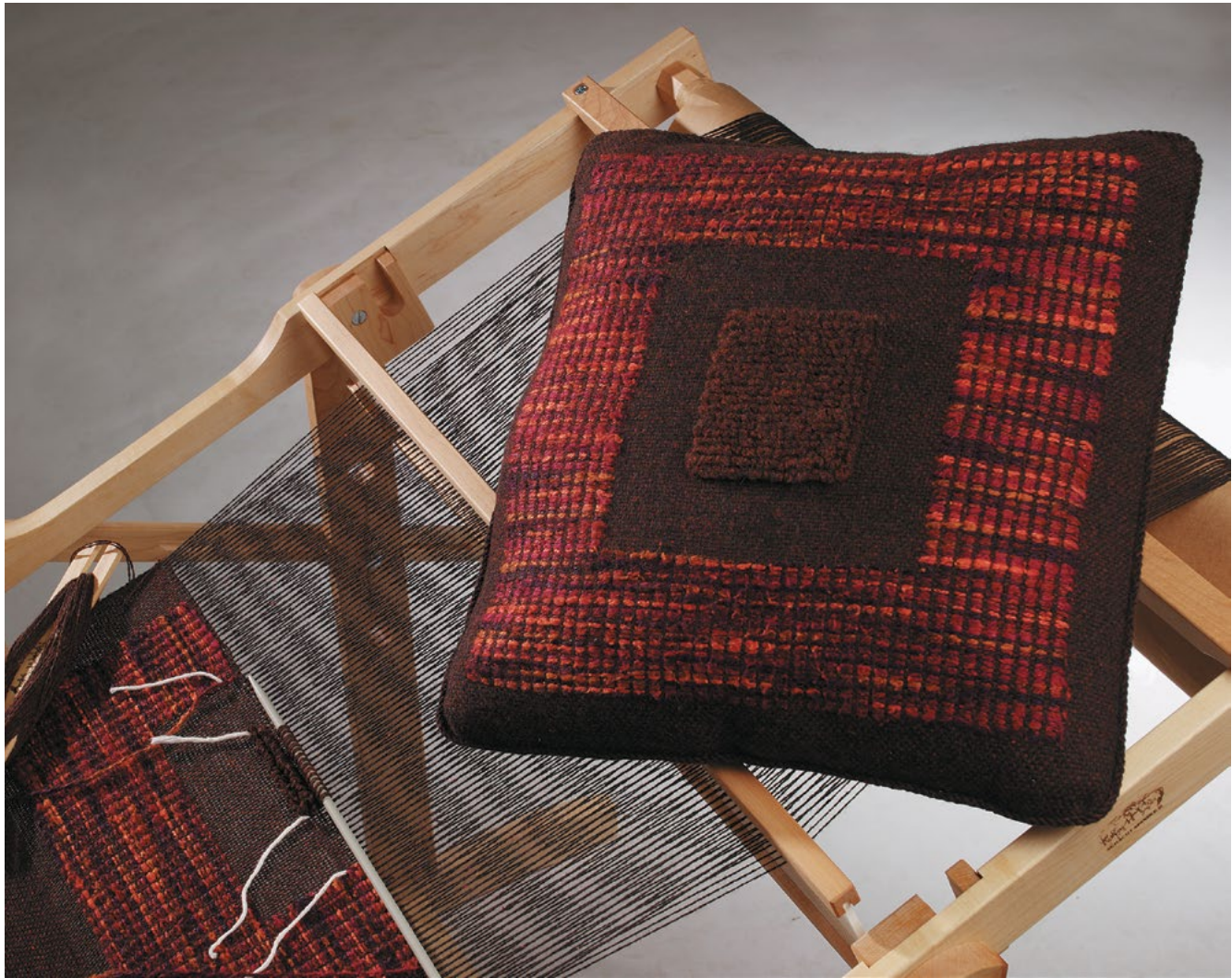
3 Remove the scarf from the loom, leaving 8" of unwoven warp at the end for fringe. Prepare a twisted fringe using two groups of hemstitched warp ends in each fringe.

4 Handwash in hot water with mild soap. Lay flat to dry. If necessary, press with a warm iron.



Simple Textures and Patterns on the Rigid-Heddle Loom

by Jane Patrick

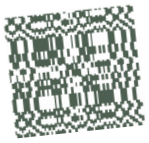


Thinking texture instead of structure is a good way to approach pattern weaving on the rigid-heddle loom. Since there are no shafts to create pattern, you must rely on other tricks! Of course, interesting yarns and colors woven in simple plain weave can be wonderfully effective. But if texture is to be provided by something other than yarn, there are two possibilities: finger-manipulated techniques such as loops, rya knots,

soumak, or simple wrapping—or pattern floats created with a pick-up stick.

Pick-up

On a rigid-heddle loom, warp ends are alternately threaded in slots and holes. When the heddle is in the up position, the hole threads are pulled up and the slot threads slide down to the bottom of the slot.



When the heddle is in the down position, the hole threads are pushed down and the slot threads slide to the top of the slot. Because the slot threads are free to slide up and down, they are ideal for manipulation with a pick-up stick.

To pick up selected warp threads, place the heddle in the down position (hole threads are down). Working behind the heddle, slide a pick-up stick under the warp threads to be picked up. The pick-up stick can be turned on edge to make a shed with weft floats occurring over all threads that are not picked up, or the heddle can be raised to bring up the hole threads and the threads on the pick-up stick, creating warp floats of the threads on the stick. Although both warp and weft floats can be created with pick-up, this pillow uses only weft-float patterning (for the orange design).

Looped-weft pile

Weft pile creates a textured square in the center of the pillow. The pile is formed by pulling up loops of weft yarn between raised warp threads. A knitting needle is used to keep the loops a uniform size. To make the loops: Insert the weft used for the loops loosely in the shed from right to left. (If you are right-handed, it is easiest to work in this direction; if you are left-handed, work from left to right.) With the fingers of the left hand, pull a loop of weft between the first two warp threads in the pile area. With the right hand, insert the knitting needle in the loop and pull taut with the left hand. Pull up a loop in the next space between warp threads, place on the needle, pull taut, and repeat.

When all the loops for the row are on the needle, allow the weft to exit the shed in the usual way, and then, with the knitting needle still in place, beat. Remove the knitting needle and beat again.

Fireside pillow

Wind a warp and prepare the loom following Project at-a-glance, page 9. Using Teak wool for the weft, weave 2½" plain weave at 10 picks per inch. (Although



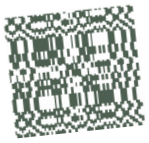
Pull loops of weft onto a knitting needle to make weft pile.

the fabric looks very open, it fulls beautifully in the finishing process.) Watch the space between the interlacing threads to keep the beat even; the space should be square.

To begin the pick-up for the bottom section of the orange design (see Figure 2), place the heddle in the down shed. Slide a piece of paper between the raised (slot) threads and the lowered (hole) threads behind the heddle, so you can see to count.

Working from the right side behind the heddle, slide the pick-up stick under the thirteenth thread if your outside thread on the right selvedge is a slot thread (under the twelfth thread if your outside thread is a hole thread); this will be about 2½" from the right selvedge. Then pass the stick over the next thread and continue under one over one until you pick up the twelfth thread from the left selvedge (if you picked up the twelfth thread on the right side, pick up the thirteenth thread from the left selvedge).

Remove the paper and slide the pick-up stick to the back of the loom. To weave the pattern pick, place the heddle in neutral position (neither up nor down), slide the pick-up stick forward to the heddle, turn the stick on edge, and insert the weft.



Alternate tabby picks (heddle up and heddle down) in Teak wool with pattern picks (pick-up stick forward and on edge) in rayon/silk for 3½". (Note that the pattern weft always weaves in the same shed, the shed created by the pick-up stick. Turn the pattern weft neatly around the outside thread on each side of the inlay design areas to create a clean design edge.)

When you've completed the bottom of the orange frame, you are ready to weave the sides. Use two shuttles, one for each side. Turn the pick-up stick on edge and insert one pattern weft under the 9 outside threads on one side, the other under 9 threads on the opposite side. Weave for 2" (alternating pattern and tabby picks).

Begin the center square of weft pile by counting 22 threads from the inlay sections on both sides (count these threads at the fell). Place marker threads or tailor pins at the edges of the square since the loops make them difficult to see. The square is 34 warp threads wide. To weave the center section (keep all shuttles moving in the same direction):

- Weave tabby from right to left.
- For the pile weft, wind a stick shuttle with a double strand of Teak. Insert this weft in the same tabby shed and, one by one, pick up loops in the 33 spaces between the warp threads between markers.
- Insert the inlay pattern wefts on both sides of the frame design.
- Weave tabby from left to right.
- In the same shed, weave the doubled weft from left to right (no loops are pulled up in this direction).
- Weave inlay pattern weft on both sides of the frame design.

Repeat this sequence for 3½" and then repeat the other sections in reverse order.

Finishing

Secure ends with machine stitching. Wash by hand with dish detergent in water that is too hot to touch (wear rubber gloves). Agitate vigorously for 10 minutes. Then shock the fabric by rinsing in very cold

water; continue to agitate for another 10 minutes. Lay fabric flat to dry; steam-press with a pressing cloth and a lot of pressure. Do not press the pile area.

Sewing the pillow

The pillow is backed with two pieces of backing fabric that overlap in the center and are secured with a Velcro tab (see Figure 3). Cut two pieces 17" × 10½". On one piece (A) fold over one long edge ¼", press, and stitch down. Sew a 2" piece of Velcro on the right side 1" from this edge. Fold over the edge of the second piece (B) and stitch the reciprocal piece of Velcro on the center of the right side ½" from the folded edge. Fold this edge under again but 1½" this time and stitch down. Topstitch ¼" from the fold. Join the Velcro tabs to join the two pieces as the pillow back. With right sides together, stitch the pillow back to the pillow top. Sew ½" seams, rounding the corners ½", beginning 1½" from corner point; see Figure 1. Leave one corner unsewn to hide ends of rope trim. Press and clip corners. Insert pillow form.

Make a rope trim. I used Schacht's Incredible Rope Machine for a 12-strand rope with 6 strands each of Cocoa and Teak wool. Handsew to the edge of the pillow with matching thread. Hide the ends in the corner seam and sew closed.

A color tip

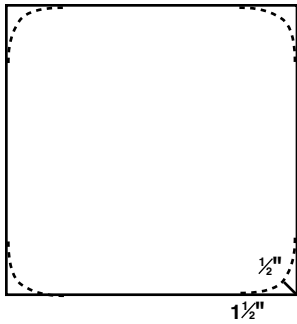
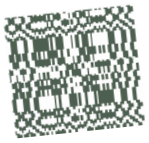
The pillow uses two different values of brown: dark for the warp and medium for the weft. At first or even at second glance the colors appear the same, but the result is livelier than if just one color is used.

Resources

For complete information about warping and weaving on a rigid-heddle loom, see:

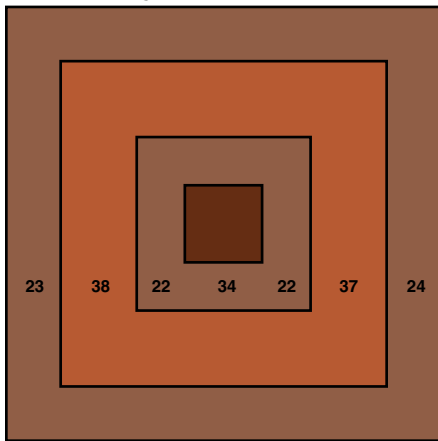
Davenport, Betty Linn. *Hands on Rigid Heddle Weaving*. Loveland, Colorado: Interweave, 1987.

Jane Patrick of Boulder, Colorado, loves talking about weaving as much as weaving itself. Former editor of *HANDWOVEN*, she is sales and service manager at Schacht Spindle Co.



1. Pillow seam

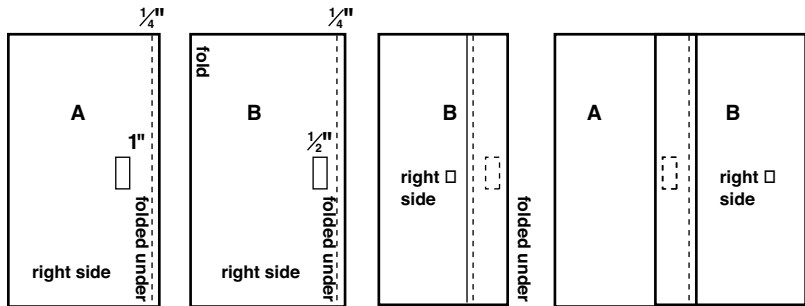
2. Pillow design



■ weft pile numbers indicate warp threads
■ supplementary weft



Every other thread is picked up to act as a tie-down end for an inlay weft.



3. Pillow back

PROJECT at-a-glance

Weave structure for pillow

Plain weave with inlay weft patterning and weft pile.

Equipment

Rigid-heddle loom, 20" weaving width; 10-dent rigid heddle; four shuttles; pick-up stick; knitting needle, size 10.

Yarns

Warp: 8/2 wool (1,800 yd/lb, Harrisville Shetland), Cocoa, 300 yd (3 oz).

Tabby and pile weft: 8/2 wool (1,800 yd/lb), Teak, 220 yd (2 oz).

Inlay weft: 85/20 rayon-silk (1,020 yd/lb, Fame, Classic Elite), October Oaks, 60 yd (1 oz).

Yarn sources

Harrisville and Classic Elite yarns are available from most suppliers.

Notions and other supplies

1/2 yd backing fabric, 2" strip of velcro, sewing thread.

Warp order and length

200 ends 1 1/2 yd long (allows 36" loom waste and sampling).

Warp and weft spacing

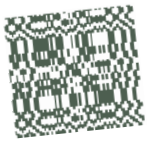
Warp: 10 epi (1/slot, 1/ hole). Width: 20". Weft: 10 ppi in plain weave areas and 20 ppi in pattern areas.

Notions and other materials

Commercial fabric for backing, Velcro, rope trim.

Take-up and shrinkage

After washing, 15% in width, 14% in length (5% take-up and 9% shrinkage). These amounts produce one pillow top 17" x 17 1/4".



HUCK HEAVEN Linen Towels in Huck

4-shaft huck towels

by Lynn Tedder

Fine linen produces beautiful cloth. In simple weave structures, its characteristic crisp hand and simple gleaming elegance serve as a classic foundation for hand-manipulated border and edge treatments. The investment in time is well worth the heirloom-quality results!

Design considerations

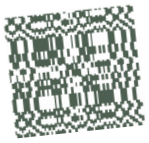
When you're adding borders or end finishes to a design, it is important to consider how all the elements interact. If one is visually complex, the others should be plainer. A plain-weave towel can

be enhanced by Spanish lace or Italian hemstitching, while very intricate patterns may require simpler treatments. These techniques (and many others) are from *Finishing Touches for the Handweaver*; see Resources, page 13.

Linen towels in 4-shaft huck

For the towels in the bottom row above (Towels 1–4), wind the warp and prepare the loom as in Figure 3, page 12 and the Project-at-a-glance, page 16.

Linen's inelasticity requires special handling during warping. Wind bouts of fewer than 150 ends on the



warping board to minimize excessive tension on the pegs. Remove knots in the warp, since abrasion with heddles and reed can cause them to come undone. Beam the warp as tightly and evenly as possible with heavy paper or plenty of sticks. Any loose warp end will become progressively looser as you weave and will interfere with clean shed formation.

Weave with tight warp tension and a firm beat. Place the weft at an angle sufficient to prevent draw-in. Wiry linen can spring off the bobbin and wind around the spindle if the shuttle is thrown in the usual way; draw out the necessary length of weft before throwing the shuttle.

Instructions are given for four towels. (Add one yard to warp length for each additional towel.) Three of the towels are variations of 4-shaft huck lace; see *The Best of Weaver's: Huck Lace* in Resources, page 13, for complete information on drafting, designing, and weaving huck lace and for additional patterns on four shafts.

Towel 1: Ladder hemstitching

- Weave 4" plain weave for the hem; end with the shuttle on the right side if you are right-handed, left if you are left-handed. Measure a length of weft three times warp width, leaving it as a "tail," and cut. Thread tail in a size 18 or 20 tapestry needle, loosen warp tension slightly.
- On a closed shed, take the needle under the first 5 warp ends above the fell and bring it up and back to the starting point, encircling the 5 ends; see Figure 1a (4 warp threads are shown in the diagram). Pass the needle back under the same 5

ends, bringing it out through the weaving 2 weft threads below the fell. Repeat for each group of 5 ends across the warp. (Once you have counted the first two groups of 5 ends, if you raise shafts 2 and 3, you can distinguish the groups easily.) At the end of the row, weave the tail into the selvedge for a few stitches and trim.

- Tighten warp tension and throw a pick of heavy, smooth filler yarn as a spacer between the first and second rows of hemstitching. Leaving a tail of weft as before, weave $\frac{5}{8}$ " (about 16 picks) of plain weave. Release warp tension and thread the tapestry needle with the tail. Just above the spacer, hemstitch around the same groups of threads as before. This time the needle moves behind and up two weft picks; see Figure 1b. Complete the row, weave the end into the selvedge, and clip. Remove the spacer. Weave the body of the towel following Figure 3; weave $\frac{5}{8}$ " plain weave; hemstitch as for the first end; weave 4" plain weave.

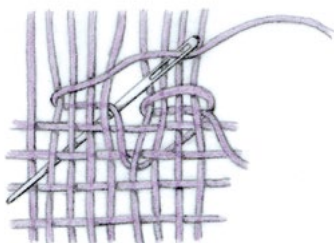
Towel 2: Plain hem

- Weave 4" plain weave at both ends for hems; weave the towel following Figure 3.

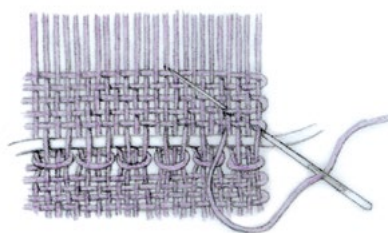
Towel 3: Spanish lace

- Wind on a netting or small stick shuttle about 20 yards of a "pattern" weft such as 10/2 linen (4 ends of 40/2 linen can be substituted). Weave 5" plain weave with 40/2 linen for the hem. Weave 1 pick with pattern weft; weave 5 picks 40/2 linen; weave 1 pick pattern weft. The Spanish lace is worked over

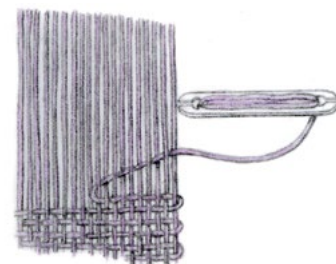
1a. Simple hemstitching

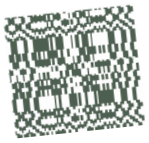


1b. Ladder hemstitching



2. Spanish lace





groups of 20 ends (10 ends per shed), but because the warp is not divisible by 20, 7–8 extra ends are included in the selvedge groups.

- Open the next shed, pass the pattern shuttle under 14 warp ends and bring it out of the shed. Change the shed, beat lightly, and return the shuttle under 14 ends back to the selvedge. Change the shed, beat again, and pass the shuttle under the same 14 ends as at the first but continue through the shed under the next 10 ends. Bring the shuttle out of the shed. Change the shed, return the shuttle under 10 ends; bring it out; change the shed, and beat. Pass the shuttle under 20 ends (10 from the current group, 10 from the next group), and continue with 10 ends per shed; see Figure 2 (groups in Figure 2 show 10 ends, 5 per shed). At the opposite selvedge, the shuttle should weave with 14 ends per shed as at the first.
- Work a second row the same way but in the opposite direction. Repeat the two rows. Throw 1 pick of heavy weft; weave 5 picks with 40/2 linen; weave 1 pick with heavy weft; secure end; clip. Weave 24" plain weave; repeat as for the first border; weave 5" plain weave.

Towel 4: Italian hemstitching

- Weave 4" plain weave; secure and cut the weft. Weave 1 pick heavy yarn as a spacer. Leaving a length of weft four times the width of the warp and entering the shuttle into the shed so that the weft tail is on the same side as your dominant hand, weave 6 picks plain weave; end and secure the weft. Remove the spacer. Thread the tapestry needle with the weft tail.

3. Draft for
4-shaft huck

5x		balance				60x				5x		1	2	3	4	5	6	
			4	4											4	4		
		3	3			3	3					3	3					
2	2	2	2			2	2	2	2					2			2	
1				1	1	1				1		1						

Treading for towels
(not including hems)

Towel 1
2a
[2b 1a 2b 2a
1b 2a] for 25½"
2b 1a 2b 2a

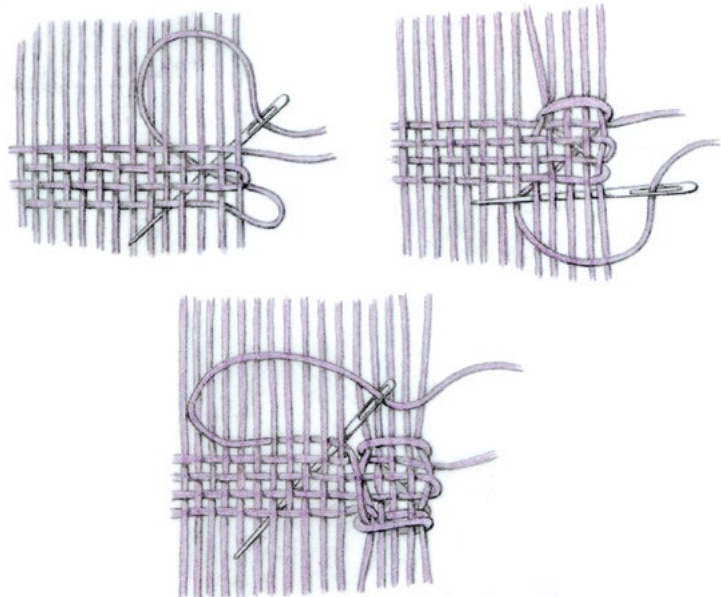
Towel 2
[3b 3a 1b 1a 1b
3a 3b 1a 1b 1a] 2x;
end with 3b 3a
[1b 1a] for 19½";
end with 1b.
[3a 3b 1a 1b 1a
3b 3a 1b 1a 1b] 2x;
end with 3a 3b.

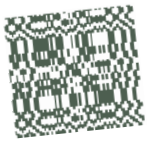
Towel 3
plain weave for 23"

Towel 4
[1a 1b] for 24¾"

	plain weave (pw)	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
1. warp floats/plain weave	a. warp floats in A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	b. warp floats in B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
2. weft floats/plain weave	a. weft floats in B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	b. weft floats in A	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
3. huck lace: warp floats/weft floats	a. warp floats in A weft floats in B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/
	b. weft floats in A warp floats in B	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/	/

4. Italian hemstitching





- On a closed shed, take the needle under the first 10 ends above the 6 picks and bring it up, around, and back to the selvedge encircling the 10 ends at the top. Take the needle down behind the cloth, bringing it out between the tenth and eleventh ends in the gap left by the spacer. Encircle the ends at the bottom by bringing the needle back around and under the tenth ends and out again between the tenth and eleventh ends at the bottom; see Figure 3 (5 ends are shown instead of 10, 4 picks instead of 6).
- Take the needle up over the weft picks and encircle the next 10 ends and repeat, continuing across the width of the warp. Secure the end of the thread at the selvedge and clip.
- Repeat for the second row. (The spacer weft can be omitted because the first row of hemstitching will maintain a gap.) Repeat for the third row but do not cut the weft after the 6 picks; it is used when weaving resumes.
- Weave $\frac{5}{8}$ " plain weave; follow Figure 3 for body of towel; repeat plain weave and hemstitching as for the first end.

See finishing directions, page 15.

A cotton alternative

Linen's stiffness makes it difficult to see the huck pattern during weaving. For easier warping and weaving, substitute 20/2 pearl cotton (8,400 yd/lb), 15 oz, 36 epi and ppi; use 5/2 pearl cotton for heavy weft in decorative finishes.

Resources

- Heinrich, Linda. *The Magic of Linen: Flax Seed to Woven Cloth*. Victoria, British Columbia: Orca Book Publishers Ltd; 1992.
- Tedder, Lynn. "Stuck on Huck." In *The Best of Weaver's: Huck Lace*, Madelyn van der Hoogt, ed., pp. 6–9. Sioux Falls, South Dakota: XRX Inc., 2000.
- West, Virginia. *Finishing Touches for the Handweaver*, available from Virginia West, 2901 Boston St. #216, Baltimore, MD 21224.

Lynn Tedder of Tulsa, Oklahoma, has been weaving for twenty years with a love for linen and lace. She especially enjoys designing new patterns in 4-shaft huck.

8-shaft huck towels

by Ruth Morrison

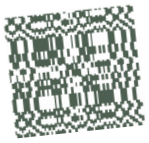
The towels in the top row on page 10 use the 8-shaft threading in Figure 7 with the same warp setup as Lynn's towels. The tie-up in Figure 7 is for towel 5; for other designs on the same threading, see "The Way Huck Works" in Resources, page 16.

Towel 5: Brooks bouquet

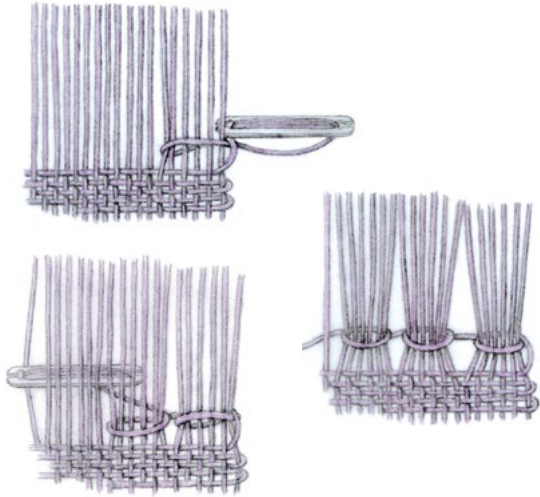
- Weave $1\frac{1}{2}$ " plain weave for hem.
- Wind 6 yards 40/2 linen on a small shuttle. Using this shuttle, weave 5 plain-weave picks with the 10 warp threads on the right side of the warp to

produce a solid selvedge next to the open work; pack with fingers, fork, or shuttle edge. End on the inside edge of this section.

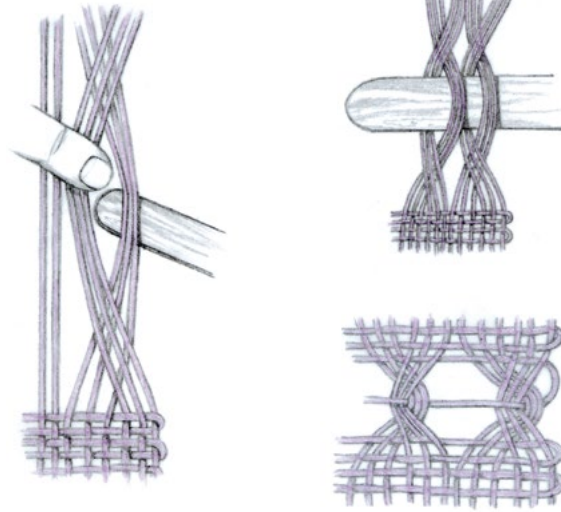
- Begin Brooks bouquet: Take the shuttle under the first 6 warp ends, up to the surface and back under the first 6 ends, and pull taut. Repeat, passing the shuttle under the next 6 ends, up to the surface, back under the same 6 ends, and pull taut. You will see that you are actually going under 12 and around 6; see Figure 5. Adjust tautness to prevent too much draw-in. Weave 5 picks in the left 10 selvedge ends as for the right.



5. Brooks bouquet



6. Leno



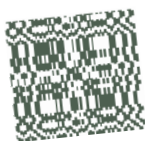
- Throw 3 picks plain weave and work a second row of Brooks bouquet exactly as the first.
- Weave 12 picks plain weave; weave pattern for 31"; weave 12 picks plain weave; repeat Brooks bouquet and hem.

Towel 6: Zigzag hemstitching

- Weave 1½" for hem. End at the side of your dominant hand; unwind a length of weft three times warp width; thread in a tapestry needle.
- Work a row of hemstitching as in Figure 1a, page 11 (reverse directions if you are left-handed), with 6 ends in each group, stitching 2 or 3 weft threads into the fell.
- Insert a spacer (smooth, heavy waste yarn) and weave 4 plain-weave picks with linen.
- Weave huck pattern for an inch or two.
- Work the second row of hemstitching on the plain-weave picks above the spacer. Use the same process as for the first row, except begin with a group of 3 warp ends instead of 6; then continue with 6-end groups. The new groups will be offset from the groups in the previous row, to give a zigzag look.
- Weave huck pattern for 32"; weave 4 plain-weave picks; work hemstitching as for first border; weave 1½" for second hem.

Towel 7: Offset Danish medallion and leno

- Weave 1½" for hem. Wind 10 yards doubled 20/1 linen on a netting or other small shuttle and weave 3 plain-weave picks using this shuttle with the 10 selvage ends to produce a solid selvage next to the open work as for Towel 5.
- End with the weft on the inside edge of this section. Twist a row of 3/3 leno on a closed shed (see Figure 6): Pick up on the pick-up stick the first 3 warp ends, transfer them to your left hand. Pick up the next 3 ends on the stick and tuck those that you are holding under the point of the pick-up stick. This gives you your first leno twist. Continue in this manner for five or six twists. Turn the pick-up stick on edge, weave through this shed with the netting shuttle, and pull the weft taut. Continue across the row. Weave 3 plain weave picks with the last 10 ends of the left selvage as for the right; end and trim weft.
- Using the 40/2 linen weft from the right, weave 12 plain-weave picks.
- To begin the second row of leno and form the medallion, weave 3 picks with the first 10 ends of the right selvage as before with the netting shuttle. Make two leno twists. Push a crochet



hook down through the hole next to the selvedge in the bottom row of leno (above the leno weft). Pick up a loop of the weft thread from the top row and pull it through the bottom hole with the hook. Enlarge the loop and put the netting shuttle through it. Pull the loop taut up to the fell. Put the hook through the fifth hole in the bottom row, catching the weft to make another loop, put the shuttle through, and pull up the loop. This makes the first inverted V of the medallion. Twist five more 3/3 leno groups and work two loops as for the first inverted V, using the last hole of the first V for the first hole of the next. Continue forming loops across the web; weave 3 plain-weave picks with the last 10 ends; end and trim the weft.

- Weave 14 picks plain weave with 40/2 linen. Weave body of towel in huck pattern; weave 14 picks plain weave; repeat border and hem.

Towel 8: Danish medallion (straight)

- Weave 1½" for hem. Wind 15 yards doubled 20/1 linen or other pattern thread on a netting shuttle. From the left edge, weave 1 pick with this shuttle, the "outline" pick. Weave 12 picks plain weave with 40/2 linen.
- Open the next shed and insert the netting shuttle through the right

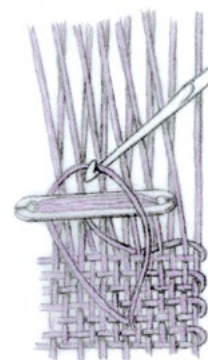
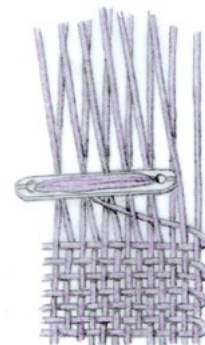
selvedge area (1/3") and bring it to the surface. Push a crochet hook down through the cloth below the outline pick and between the same 2 warp threads where the netting shuttle exited. Hook the weft coming from the netting shuttle and bring the loop up through the hole. Enlarge the loop, pass the shuttle through it, and tighten the loop. Open the shed again, count 10 raised warp threads, pass the shuttle through and bring to the surface. Close the shed and repeat as for the first loop. Continue in this way to 1/3" from the left selvedge; weave plain weave through this section. Weave 3 loose plain-weave picks across the whole web with the netting shuttle (or for a more secure openwork area, strengthen the selvages as for towels 5 and 7 and work a row of leno). Repeat the Danish medallion.

- Weave 12 plain-weave picks; weave the pattern section of the towel; weave 12 picks; repeat the Danish medallions and plain-weave hems.

Finishing

Cut towels apart and machine stitch raw edges. Machine wash with detergent in hot water, regular cycle; rinse in cold water. Remove and smooth out creases. If reed marks are still visible and the huck patterning not defined, put the towels through another wash cycle.

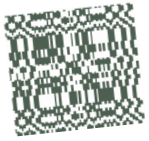
8. Danish medallion



7. Draft for 8-shaft huck

12x											5x																					
											1	2	3	4	5	6	7	8														
				8	8			7	7			7	7			7	7			8	8											
				6	6			5	5			6	6			5	5			6	6											
				4	4			3	3			4	4			3	3			4	4											
				2	2	2		1	1	1		2	2	2		1	1	1		2	2	2										
				1	1	1		1	1	1		2	2	2		1	1	1		2	2	2										
				1	1	1		1	1	1		1	1	1		1	1	1		1	1	1										
plain weave											1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Weave the huck pattern "tromp as writ"; Use the treadle number that corresponds to each shaft number in the threading 2-3-2-3-2, 1-4-1-4-1, etc.



Iron repeatedly while still damp on both sides with a hot iron until the linen is dry and has a crisp but pliable hand and a smooth sheen.

Fold raw edges under $\frac{1}{2}$ " and press. Turn up hems to meet the bottom of border treatments. Press hems flat and pin. With a sewing needle and thread, join the selvages of the hem and then slip-stitch (slip the needle into the fold of the hem for about $\frac{1}{4}$ ", bring it out of the fabric catching a thread at the edge of the border treatment, and take it back into the fold of the hem).

Note: The sett of 30 epi (sleyed 2-3 in a 12-dent reed) divides the 5-end huck groups so that the reed marks and the breaks in the huck structure coincide. A sett of 32 epi would also work well, but

the divisions in the reed would not coincide with the breaks in the huck.

Resources

Morrison, Ruth, and Madelyn van der Hoogt. "The Way Huck Works." In *The Best of Weaver's: Huck Lace*, edited by Madelyn van der Hoogt, pp. 10–15. Sioux Falls, South Dakota: XRX Inc., 2000.

West, Virginia. *Finishing Touches for the Handweaver*. Available from Virginia West, 2901 Boston St. #216, Baltimore, MD 21224.

Ruth Morrison of Tulsa Oklahoma, is a skilled weaver and teacher. She loves weaving with fine threads, exploring weave structures, and designing garments for her fabrics.

PROJECT at-a-glance

Weave structure for towels

Huck lace.

Equipment

4-shaft loom (Lynn's towels) or 8-shaft loom (Ruth's towels), 22" weaving width; 12-dent reed; boat shuttle; small netting or stick shuttle for Brooks bouquet, Spanish lace, and Danish medallion; crochet hook for Danish medallion.

Yarns

Warp: 40/2 linen (6,000 yd/lb), half-bleached, 3,125 yd.
Weft: 40/2 linen, 2,625 yd; 20 yd 10/1 linen (3,000 yd/lb) or similar for Spanish lace; 50 yd 20/1 (6,000 yd/lb) linen for Danish medallions.

Yarns sources

Linen yarns are available from Webs, Vävstuga, and the Lone Star Loom Room.

Warp order and length

625 ends 5 yd long.

Warp and weft spacing

Warp: 30 epi (2-3/dent in a 12-dent reed). Width in the reed: 21". Weft: 30 ppi.


Take-up and shrinkage

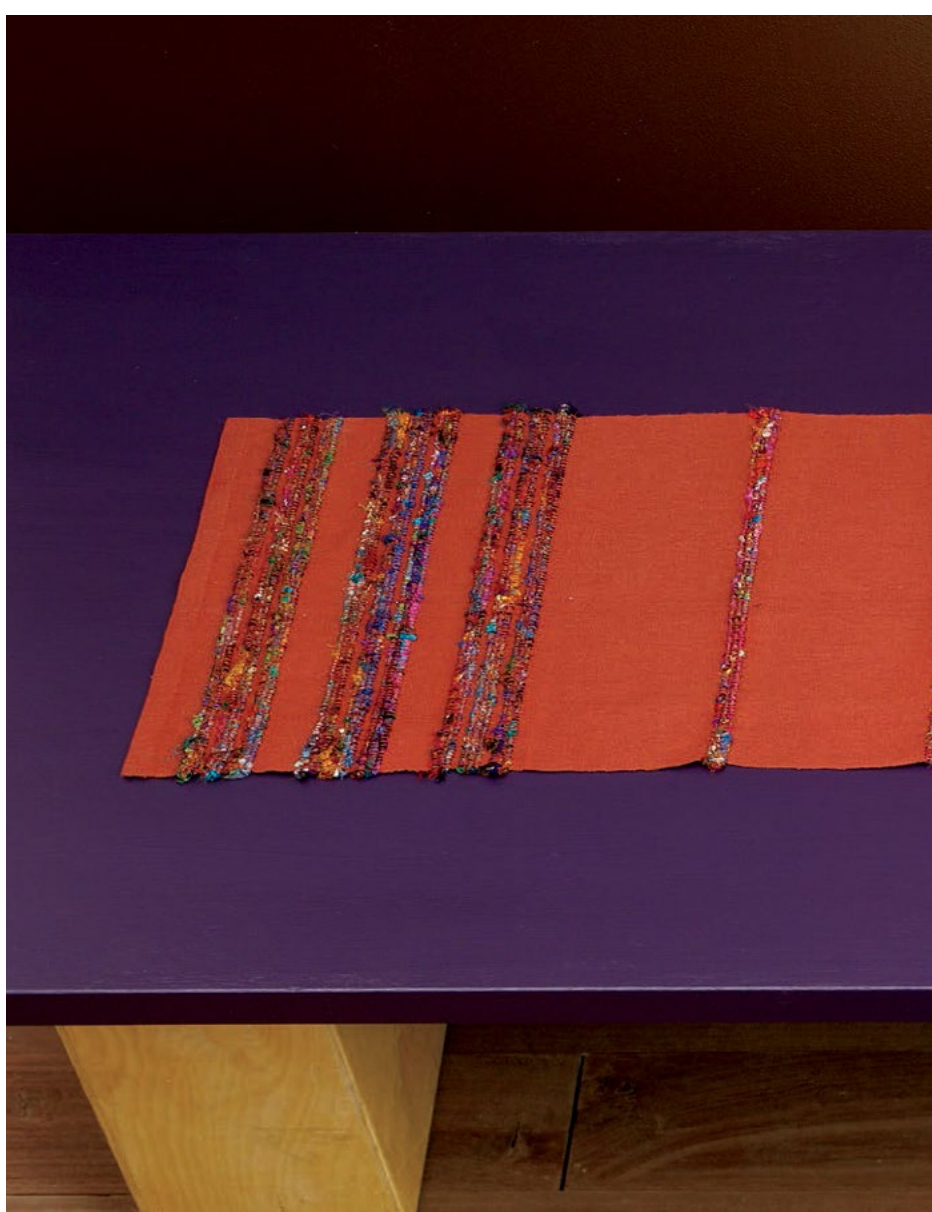
9% in width, 7% in length (2% take-up, 5% shrinkage). Amounts produce four towels about $19\frac{1}{8}$ " \times 30" each.

Festive Dresser Scarf

BETSY BLUMENTHAL

Recycled silk yarn has been available for at least a decade. I am attracted to its bright colors, but as it is a relatively dense singles yarn, I have pondered how to use it effectively. Then I was inspired by a handwoven jacket from India, which combined the heavy silk with a fine cotton yarn. Using the recycled silk yarn as an accent weft gives a nice weight to the final textile. While I created a piece that can double as a dresser scarf or table runner, it would have a wonderful hand for a shawl, too.

The soft brick color of this cotton background weft made an interesting contrast to the many colors in the silk. With a simple plain-weave structure, you can choose to place the accent yarn at whatever intervals you want. I made my choices as I wove and then repeated the first half in reverse to make the pattern symmetrical. 



- 1** Wind a warp of 420 ends 3 yd long. For ease in warping, wind a second ball of yarn from the cone; hold 2 ends together separated by your fingers to prevent twisting. Use your preferred method to warp the loom following Figure 1. Note that the ends are sleyed 2/dent in the 15-dent reed for a total of 30 epi.
- 2** Weave the runner following the treadling and weave plan in Figure 1.
- 3** Remove the fabric from the loom. Machine zigzag both raw edges.
- 4** Handwash in cold water with mild soap, then line-dry. Press with a warm iron on the wrong side.
- 5** For the hems: Press $\frac{3}{4}$ " under on one end. Turn again $\frac{3}{4}$ " and machine stitch or hand-stitch in place. Repeat for the second hem.

STRUCTURE

Plain weave, 1/3 twill.

EQUIPMENT

4-shaft loom, 14" weaving width; 15-dent reed; 2 shuttles.

YARNS

Warp: 16/2 unmercerized cotton (6,720 yd/lb; Yarn Barn), #1316 Rust, 1,260 yd.

Weft: 16/2 unmercerized cotton, # 1316 Rust, 600 yd; recycled sari silk yarn (270 yd/lb; Treenway Silks), 40 yd.

WARP LENGTH

420 ends 3 yd long (allows 4" for take-up, 32" for loom waste).

SETTS

Warp: 30 epi (2/dent in a 15-dent reed).

Weft: 20 ppi plain weave (cotton), 9 ppi twill (silk).

DIMENSIONS

Width in the reed: 14".

Woven length (measured under tension on the loom): 72 $\frac{1}{4}$ ".

Finished size after washing: 13" × 68" (hemmed).



1. Draft

● cotton
● recycled silk

105x				
4			4	
3			3	3
2	2	2	2	
1	1			1

Weave plan :
 Weave 5" plain weave

Repeat 2 times:
 -Weave border pattern
 -Weave 2" plain weave

Weave border pattern

Repeat 6 times:
 -Weave 5 3/4" plain weave
 -Weave stripe

Weave 5 3/4" plain weave

Repeat 2 times:
 -Weave border pattern
 -Weave 2" plain weave

Weave border pattern

Weave 5" plain weave

plain weave
 2x border
 stripe

