Part two: AN INTRODUCTION TO SCANDINAVIAN WEFT-FACED WEAVING

Basics

- An uneven number of ends are used to facilitate neat selvedges. This loom was warped with 53 ends.
- Keep scissors, darning needle, measuring tape, beater, safety pins, and shuttles within reach.
- Wind a shuttle in figure 8s.
- Tension the back strap loom: Clamp a C-clamp upside-down to a table. Tie a slipknot in the warp and place the loop over the C-clamp.
- While weaving, keep everything parallel and perpendicular.
- The deepest shed is near pipe 2. Weave close to this pipe.
- Keep the back spacer close to pipe 2.
- 2 forks taped together make a heavy beater.
- Rather than cutting the yarn, break it whenever possible to help hide loose ends.
- The pattern emerges in what you <u>cover</u> with weft.
- Patterns will crunch down as you weave. Sometimes you need to weave your pattern a little longer to compensate for this.

Introduction to Plain Weave

- First shed: Start with natural shed--weft covers the 2s.
- Second shed: Lift heddle stick. Weft covers the 1s.
- Each row of table = one shot (pick, throw) of weft.
- Read tables from bottom to top.
- Prevent draw-in. After weaving several rows, measure from selvedge to selvedge. Warp is sett at 8 ends per inch (epi). Divide 53 ends by 8 = 6 5/8 inches. A little draw-in occurs. Width should measure 61/4 to 61/2 inches.
- The following weave structures are weft-faced. Beat down the wefts so that they are packed together.
- Measure length and determine picks per inch (ppi). Keep ppi even throughout the piece.

Start Weaving Plain Weave

Use one color. The table shows what warp ends are covered with each pick.

	\rightarrow L	ift he	ddle	stick	(. 2 nd	sho	t star	ts at	left.	
1		1		1		1		1		1
	2		2		2		2		2	

<u>Start</u> at the bottom right of the graph. Read tables from bottom to top.

<u>First shot</u>: Choose a light color. Begin at right selvedge. Pass shuttle from right to left through natural shed. Pinch right selvedge. Bubble weft.

<u>Beat</u> weft down for about one inch at the right selvedge, then beat from the tail-end at the left selvedge across to the right (to prevent draw-in). VERY IMPORTANT

<u>Tuck loose tail</u> around right selvedge and cover approximately 3 warp ends in the same shed. Drop it to the back. Tails can be trimmed later.

<u>Second shot</u>: Same color as 1st row. Lift heddle stick. Pass weft from left to right. Pinch left selvedge. Pull it out a little. Bubble weft. Beat left selvedge down for ½ inch, then switch to right selvedge and beat across toward the left. Do this in reverse after your next shot, and so forth.

<u>Continue</u> to weave about 20 shots, or until you feel comfortable weaving plain weave. This will serve as your <u>header</u>, initial weft rows to spread the warp ends evenly across the width of your weaving. When you are finished with the entire piece, tear out these first few rows, which are usually uneven, as you tie the fringe.

Start Weaving Kjerringtenner (Hag's Teeth), also called Pick and Pick.

L= Light color D= Dark color

L		L		L		L		L		L
	L						L		L	
L		L		L		L		L		L
	D		D		D		D		D	
L		L		L		L		L		L
	D		D		D		D		D	
L		L		L		L		L		L
	D		D		D		D		D	
D		D		D		D		D		D
	L		L		L		L		L	
D		D		D		D		D		D
	L		L		L		L		L	
D		D		D		D		D		D
	L		L		L		L		L	
										Start

- <u>First shot</u>: Throw light-colored yarn from right to left through natural shed.
- <u>Second shot</u>: Start a dark yarn at left selvedge. Lift heddle stick. Throw dark. Bubble. Beat. Tuck-in tail.
- <u>Alternate light and dark picks</u>. Notice that dark turns appear at each selvedge for the first 6 rows.
 Manipulate weft so that dark yarn only shows at each selvedge. Light weft will catch the next warp end in from selvedges.

- Rows 6 & 7: To reverse vertical stripes, throw 2 dark picks. Then continue alternating light and dark picks. Now the light weft covers the selvedges. With completion of charted dark color, break yarn and tuck in tail.
- Finish chart. Tuck in light tail.

In the photo, Sharon helps a student work with a pattern chart.

Weave a Striped Border between Main Patterns

A= new color B= new color C= new medium or dark color

С		С		С		С		С		С
	С		С		С		С		С	
В		В		В		В		В		В
	В		В		В		В		В	
Α		Α		Α		Α		Α		Α
	Α		Α		Α		Α		Α	

<u>Start</u>

<u>Start color changes at opposite selvedges</u> to prevent build-up of tucked-in yarns. Tuck-in loose ends.



Weave Krabbasnar

It looks like little crabs. Is Swedish it is called brocaded tabby, and in Norwegian it is also called halvsmett.

L= Light background color

D= Dark pattern color

L		L		L		L		L		L22					
	L		L		L		L		L	21					
L		L		L		L		L		L20					
	D		D		D		D		D	19					
L				L		L		Ш		L ₁₈					
	D		D		D		D		D	17					
L		L		L		L		L		L ₁₆					
	D		D		D		D		D	15					
			L	L	L				L	L14					
D		D		D		D		D		D ₁₃					
	D		D		D		D		D	12					
	D D D D D D D D D														
D		D				D		D		D10					
	D D D D D B														
D D D D 8															
L L L L L L															
	D		D		D		D		D	6					
L		Ш		L		L		L		L_5					
	D		D		D		D		D	4					
L		Ш		L		L		L		L ₃					
	L		L		L		L		L	2					
L		L		L		L		L		L ₁					
					Star	t									

Rows 1-3: Choose a light color that will become the background color. Weave 3 rows of plain weave.

Rows 4 - 8: Weave the kjerringtenner pattern.

Rows 9, 11, 14: Use pick-up stick. From the left, pick up 3, down 3, across ($\uparrow 3 \downarrow 3$). End with down 2. Throw light weft.

<u>Row 10</u>: Notice that the dark pattern weft stays in plain weave. The previous picked-up light row crunches down and the crab legs seem to <u>connect</u> to the body in plain weave. (The concept of "connecting" is important in Scandinavian weaving, as in krokbragd.)

Row 22: Weave, break or cut yarn, tuck in end.

Weave Another Striped Border

Continue with another striped border between Krabbasnar and the next main pattern, Krokbragd. End with a medium- or dark-colored stripe.

Weave Krokbragd, a Boundweave Technique

Begin by weaving a plain weave stripe in a light color that will become your background color for krokbragd. End with the natural shed, which covers the 2s. (This prevents the first krokbragd pattern from partially sinking into the rows below.)

| | L
2 | |
|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----|
| L
1 | | L1 |
| | L
2 | |

Start

Set-up Loom for Krokbragd:

The 1s are now split into 1s & 3s.

- 1 = the first warp end on the right
- 2 = the second warp end on the right
- 3 = the third warp end on the right

Extend the numbering 1,2,3,2 1,2,3,2 from right to left across the width of your warp.



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Information about krokbragd: For now, follow the charts, but to further understand krokbragd, the following notes are helpful: We are using a 3-warp-end krokbragd (or 3-harness krokbragd when woven on a floor loom). (Krokbragd can also be woven with expanded sequences such as krokbragd on rosepath which has a 4-end sequence.) As charted, the weft starts out covering first the 1s, then the 3s, and then the 2s, in that order. But the sequence changes once the center is reached. Here it switches to covering the 1s, 2s, 3s. The center sections are noted with * and ** on each chart. Color changes are also made in varying sequences.

Krokbragd is a bound weave because all 3 ends in a row have to be bound (or covered) by weaving. It takes 3 shots to cover one row of weaving.

Create new sheds.

We will keep: The natural shed. This covers the <u>2s</u>. We will add: A new heddle stick to cover only the <u>1s</u>.

We will add the use of the: Pick-up stick to cover only the 3s.

A. Cover the 1s.

1	2	3	2	1	2	3	2	1
cover				cover				cover

Make a new heddle stick in front of the one we have been using: Starting at the <u>right</u>, use the pick-up stick and pick up the 2,3,2s, across. This will look like:

↓1 ↑3



End with \$\psi 1\$. Place a string heddle under each group of 3 ends on the pick-up stick. Place each string heddle around the new heddle stick. Spread the string heddles between the width marks on the stick. Tape in place. Throw a shot of medium-colored weft. Tuck in tail. (Below, Sharon picks up three threads to start.)

B. Cover the 3s.

1	2	3	2	1	2	3	2	1
		cover				cover		

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Pick up all the 1s and 2s, across. Turn pick-up stick on its side. Throw the same light weft, but do not go around the selvedge. Let this weft catch on the second to the last end.

C. Cover the 2s.

	2	2	2	2	
	cover	cover	cover	cover	

Use the natural shed which allows the weft to cover only the 2s. Throw the same light weft. Again do not go around the

<u>selvedge</u>. Let the weft catch on the second to the last end. To continue, start at the bottom of the chart on the next page.

L = Light color M = Medium D = Dark

Do not go around the selvedge unless a pattern weft goes all the way to the selvedge; otherwise, turn on the warp end that completes a pattern close to the selvedge edge.

L L L L L L L L L L L L L L L L L L L		L		L		L		L		L	
M	L		L		L		L		L		L
L I		L		L		L		L		L	
L L L L L L L L M			М				М				M**
M	L				L				L		
L		L		L		L		L		L	
L L L L L L L M			M				M				M
M	L				L				L		
L I		L		L		L		L		L	
M M M M M M M D M D			M				М				M
D	L				L				L		
L		M		M		M		M		M	
M M M M M M M M L D D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D M D D D D D M D D D D D D M D D D D D D M D D D D D D M D D D D D D M D D D D D D M <td></td> <td></td> <td>D</td> <td></td> <td></td> <td></td> <td>D</td> <td></td> <td></td> <td></td> <td>D</td>			D				D				D
L D	L				L			L	L	L	
L 3 </td <td></td> <td>M</td> <td></td> <td>M</td> <td></td> <td>M</td> <td></td> <td>M</td> <td></td> <td>M</td> <td></td>		M		M		M		M		M	
M M 2 M <td></td> <td></td> <td>D</td> <td></td> <td></td> <td></td> <td>D</td> <td></td> <td></td> <td></td> <td>D</td>			D				D				D
2 2 2 2 2 2 2 L 3 M 1 L L M L 2 2 L L L L L 2 2 2 2 L L L L L L L L L L L L L L L L N L N L N L N <td>L 3</td> <td></td> <td></td> <td></td> <td>L 3</td> <td></td> <td></td> <td></td> <td>L 3</td> <td></td> <td></td>	L 3				L 3				L 3		
L 3		M 2		M 2		M 2		M 2		M 2	
M	L 3				L 3				L* 3		
L 3 L 3 L 3 M 1 M 1			M 1				M 1				М
L 3 L 3 L 3 M 1 M 1		L 2		L 2		L 2		L 2		L 2	
M 1 M 1	L 3				L 3				L 3		
			M 1				M 1				M 1

Start ↑

We have already completed the first 3 rows. Notice on rows 5 and 6 how the pattern switches as the weaving approaches the center. Both color changes and weaving sequence change. Colors are manipulated so that they <u>connect in hue</u>. This is very important in weaving traditional krokbragd. Changes are made in sequence to allow smooth color changes.

A longer version of krokbragd follows.

Weave Another Striped Border

Continue with another striped border in plain weave between patterns. Use the first heddle stick that lifts all the 1s. End with a medium- or dark-colored stripe.

Krokbragd - A Longer Version

Start at the bottom of the chart.

52	L		L		L		L		L		L
51		L		L		L		L		L	
50	L		L		L		L		L		L
49		L		L		L		L		L	
48			M				М				М
47	L				L				L		
46		L		L		L		L		L	
45			M				М				M
44	L				L				L		
43		L		L		L		L		L	
42			М				М				M
41	L				L				L		
40		М		М		M		М		М	
39			D				D				D**
38	L				L				L		
37				М		M		M		M	
36			D				D				D
35	L	L			L	L			L	ļ.,	
34		М		М		М	_	М		М	
33			D				D				D
32	M			N 4	M				M		
31		М		М		М	_	М		М	<u> </u>
30	N /I		D		B.4		D		B.4		D
29 28	M	D		D	M	D		D	M	D	-
27		υ	L	υ		υ	L	υ		υ	L
26	М		L		М		L		М		L
25	IVI	D		D	IVI	D		D	IVI	D	-
24		D	L	D		U	L	U		U	L
23	М				М				М		-
22	IVI	D		D	IVI	D		D	IVI	D	_
21	М			D	М				M*		
20	141		D				D				D
19		М		М		М		М		М	
18	L	_ ···			L				L		
17			D				D				D
16		М		М		М		М		М	
15	L				L				L		
14			D				D				D
13		М		М		М		М		М	
12	L				L				L		
11			M				М				М
10		L		L		L		L		L	
9	L				L				L		
8		<u> </u>	M				M			<u> </u>	M
7		L		L		L		L		L 2	
6	L				L				L 3	<u> </u>	
5			М				М		Ĭ		M
4		L	-	L		L		L		L	1
3	L	L	L	L .	L	L	L	L	L	L	L
2	L .	L	L	L	L	L	L	L	L	L	L .
1	L	L .	L		L	L .	L	L	L	L	L
		· · · · ·		1		tort		1		1	
					3	<u>tart</u>					

As shown on the graph, start by weaving 4 rows in plain weave using a light color. The krokbragd pattern begins on row 5.

Weave Another Striped Border

Weave a border of several stripes between krokbragd and flossa.

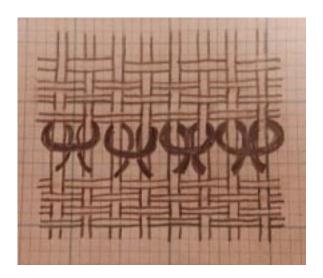
Weave Flossa

Flossa is a short pile weave more common in Swedish weaving than Norwegian. Rya is a close relative and has longer pile. In Finland, rya (ryijy) has been traditionally woven on a plain weave ground. In northern Norway, boat rya is woven on a twill ground, historically for fisherman. In the area of Voss, rya is woven on a goose-eye twill pattern. For our purposes, we will weave flossa on a plain weave ground following the steps below. Four rows of plain weave will follow each row of knots. These 4 rows are not shown on the chart.

Key:

- g Ground weave in a separate color.
- m Background color for knots. Use 2 pieces of cut yarn to tie knots.
- x or o Pattern knots in various colors. Again, use 2 pieces of cut yarn to tie knots.
- 1. Mark the center warps. Graph-out a design or use the design below.
- 2. Choose a background color and pattern colors for the knots. Pieces for knots: Wind weft yarn around and around a piece of mini-blind. Cut down the middle.
- 3. The "ground" is the plain weave foundation for the knots. Weave 8 rows of plain weave in the ground color starting at the right selvedge.
- 4. First row of knots: Tie knots on a flat warp. No sheds are used. Using 2 pieces of background color, tie Ghiordes knots (pictured below) around pairs of warp ends across the pattern area, but not around the warp ends close to the selvedges labeled g (ground).
- 5. Weave the ground: The knots leave a space at the selvedge. Fill in this area in plain weave with the ground weft. The fill-in is called an argatch. To fill in the hole at the right selvedge, weave up 4 rows from the last rows of plain weave over the warp ends labeled g. Weave plain weave across the warp all the way to the left selvedge. Here, dip down to the last row of plain weave and weave up 2 more rows in the argatch area ending at the far left selvedge. Then weave 3 more rows of plain weave across the warp to separate the last row of knots from the next row of knots. End at far right selvedge.
- 6. Tie knots across the pattern area, including background knots.
- 7. Repeat steps 5and 6 until pattern is completed.
- 8. End with 4 rows of plain weave in ground color.

g	g	g																				g	g	g	g
g	g	g						Χ	Χ		0	0	0	0		Χ	Х					g	g	g	g
g	g	g					Χ	Χ	Χ	Χ		0	0		Χ	Χ	Х	Х				g	g	g	g
g	g	g				Х	Χ			Χ	Χ			Χ	Χ			Х	Χ			g	g	g	g
g	g	g			Х	Х		0	0		Χ	Χ	Х	Χ		0	0		Χ	Х		g	g	g	g
g	g	g		Χ	Х		0	0	0	0		Χ	Х		0	0	0	0		Х	Χ	g	g	g	g
g	g	g																				g	g	g	g
57	55	53	51	49	1								28	26								7	5	3	1
	56	54	52	50	1								29	27								8	6	4	2



Weave Another Striped Border

Finish the piece by weaving a striped border, then 4 more rows of the color used for the ground weave. Then weave about 6 rows of leftover yarn in plain weave to protect the warp ends. Cut the warp from the loom leaving 6-inch ends for fringe. Take out the warp-protector weft as you tie the fringe (see picture below).



Note that the last end in the fringe bundle is crossed to keep the weft from sagging. Tie fringe at beginning edge, unweaving the header as you go. On the back, clip those ends that had been woven in at the selvedges. Lastly, darn in loose ends on the back.