

Sons of Norway

Norwegian Cultural Skills Program

Unit 10: Weaving



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Unit 10—Weaving

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INTRODUCTION

Weaving is the process of producing cloth by interlacing two separate sets of fibers: warp threads, which provide a foundation, and weft threads, which interlace with the warps in various ways to make a finished product.

The origins of weaving are lost in the prehistoric past, but actual remnants of cloth from Egyptian tombs are believed to date around 5,000 B.C.; and grave finds from Danish bog lands have been assigned to the Bronze Age (1500–1100 B.C.). The ability to construct from various fibers served man in making shelters; in providing warmth, protection and covering for the body; and probably early in man's history, in designating authority, wealth and skill. It also helped to establish cultural identity.

Flexible materials have been created from earliest times by non-loom methods such as felting, plaiting, twining, braiding, coiling and looping. All of these were also part of the Norwegian heritage and are a broad and fascinating study in themselves. However, to keep within manageable limits, we will concentrate only on materials produced on some kind of loom device utilizing separate warp and weft threads.

Though such loom devices, and the products made on them, have had many basic similarities throughout the world, the appearance of these products can vary greatly both among and within cultural groups. The variations stem from differences in source and choice of fibers, fiber preparation methods, dyeing techniques, design choices and varieties of fiber embellishment. It is these characteristics which help to identify traditional Norwegian weaving from, for example, South American or European and, in some cases, a coverlet woven in Sogn from one produced in Setesdal.

The Norwegian Cultural Skills Unit in weaving has been divided into a two-track system with each having three levels or categories of attainment. The two tracks are based on the kind of loom required and not on skill levels. Track I deals with weaving on rigid heddle, inkle or card (tablet) looms and Track II on floor or table looms.

GUIDELINES FOR EITHER TRACK I OR TRACK II

In order to meet the specifications for each part of Track I or Track II, the starred activities in each are required, plus your choice of any one of the optional activities. A Final Report must also be completed. Note: Your photographs and xeroxed reports will not be returned to you. Be sure to keep your original samples and reports for your own records.

TRACK I.

PART I. REQUIRED ACTIVITIES

* Learn to warp a rigid heddle loom or an inkle loom or a set of cards for card weaving, and produce a sample. Samples for the inkle or card looms should be a minimum of 1" in width and 24" in length, excluding end fringes. Rigid heddle samples should be at least 10" x 12" after all finishing. Submit a clear, close-up colored photograph of your sample, together with the completed information form.

Reference Guides

While written references are very helpful in learning specific weaving skills, assistance through a class or an individual weaver can be of tremendous help to the beginner. Check with the Chamber of Commerce in the town nearest you for names of weavers or weaving groups. Even if they are not familiar with Norwegian traditions, they can assist you with the skills basic to all weaving.

Sampler Guidelines

The inkle loom sample should include at least two colors in the warp,
 In addition to basic plain weave, at least two repeats of a traditional picked-up pattern such as diamonds or crosses should be included.

The card woven sample should be threaded with a minimum of three colors in the warp. Patterns should demonstrate turning the cards both forward and back.

The rigid heddle sample should be set in 6 or 8 warp threads per inch (8 is preferable). It should demonstrate several types of weft faced weaving (warp threads not visible) including plain weave in one color, a pattern of stripes, weaving with two alternating colors, straight twill, and some laid-in bands of a traditional design such as rosepath or monksbelt. Weave a heading at top and bottom, to be turned under and stitched to prevent work from raveling.

* Complete one of the Optional Activities. (see p. 4)

PART II. REQUIRED ACTIVITIES

- * Inkle or card weaving or rigid heddle.
Submit information form with photograph of finished weaving.

Inkle loom.

Weave a band minimum 1" x 24" excluding fringe, using a traditional pick-up pattern. Try to keep even tension and straight selvages in your work.

Card Weaving.

Weave a band minimum 1"x24" excluding fringe in the traditional Telemark style (see attached instruction sheet) or from a pattern in one of the references listed.

Rigid Heddle

Make a pillow, bag or runner at least 12" square when finished, incorporating three of the following:

- a. one traditional single interlock band of crosses or a diamond or eight-pointed star motif
- b. an inlay design in *Vestfold*, *Dukagang* or similar inlay technique
- c. four border patterns used on west coast coverlets. For example: *rosepath*, *kjerringtenner*, *harrender*, *krabberender*, *lynild*, *fjord og fjell*
- d. a motif worked in *rya* or *flossa* knotted techniques

*** Complete one of the Optional Activities.**

If you have begun working with a study group, continued participation meets this requirement. (See p. 4)

PART III. REQUIRED ACTIVITIES

*** Inkle or card-weaving or rigid heddle.** Submit information form with photograph of finished weaving.

Inkle Loom

Make a belt, headband, guitar or camera strap, or another object of your choice, incorporating a traditional pick-up design or creating one of your own.

Card Weaving

Make a belt incorporating traditional Telemark or other patterns, or create one of your own based on the traditional.

Rigid Heddle

Adapt a coverlet pattern to a hanging, bag or similar object, in which the traditional techniques listed in Part II are used as indicated in the original. Or create your own designs utilizing the traditional techniques to make a pleasing and unified object.

MATERIALS:

Inkle loom: Cotton, linen and wool can be used in inkle loom weaving. Follow the directions for materials listed in whatever source you choose for your first projects. For wool, use *spelsau åklevev* or *kunstvev* wool, obtainable from the three suppliers listed under Sources of Materials. Linen and cotton will be available from them also, but it can be found in other weaving supply stores as well.

Card Weaving: The wool used for the East Telemark belts is only available from Telemark. A satisfactory substitute, especially for beginning card weaving, is ~~Maypole~~ "Nehalem" three-ply worsted, available from many weaving supply houses and possibly from the three listed suppliers of Norwegian yarns.

Rigid heddle and floor loom: The best sources for warp for the projects in Parts I and II are the listed suppliers of Norwegian yarns. *Fiskegarn* in size 12/9 is generally satisfactory. *Spelsau* wool in *kunstvev* size is the best choice of wool weft. For your projects in Part III, you may wish to experiment with other available Norwegian materials.

OPTIONAL ACTIVITIES FOR BOTH TRACKS I AND II.

1. Write a report on the importance of weaving on the farms of Norway during the 17th through 19th centuries. In what ways was it important? Who did most of the weaving? What materials were most common and why might they have been chosen? What kinds of objects were woven? In what ways were these woven objects similar throughout much of Norway and what were their differences? (about 500 words)
2. Visit one of the following:
 - A craft fair, exhibition or demonstration which includes weaving;
 - A museum or private collection with examples of Norwegian folk weaving;
 - An individual weaver or a weaving guild doing any type of weaving.

In a written report, with accompanying photos, if possible, compare any weaving you see with what you know and recognize as traditional Norwegian weaving. What similarities and differences do you note in materials, techniques, color, design and purpose?
3. Present what you have learned as a result of 2. above in a written or oral report to your lodge, or through a newsletter.
4. Present a video to your lodge and/or other interested community group on weaving. Discuss how the presentation relates to traditional Norwegian techniques. Possibly encourage people to bring any examples of weaving they might have for discussion and comparison.
5. Weave an object, or several small objects, for a fund-raising event for your lodge or community, such as a sale booth or a silent auction. Label the objects to indicate their relationship to traditional Norwegian weaving.
6. Organize a class through your lodge or community in inkle, card, rigid heddle, or floor loom weaving with the emphasis on the Norwegian tradition.

7. Plan an exhibition of traditional Norwegian weaving in the private possession of members of your lodge. A meeting of informal show-and-tell could be arranged or, if space and time permit, an exhibit could be mounted to remain for several weeks or more.

TRACK II (FLOOR OR TABLE LOOM WEAVING)

PART I. REQUIRED ACTIVITIES (STARRED)

*Learn to warp a floor or table loom and produce a sampler at least 10" x 12" after finishing. Warp should be set at 6 or 8 ends per inch in plain weave if your loom is two-harness or in straight four-harness twill if more than two-harness. The sampler should demonstrate types of weft faced weaves (warp not visible) including plain weave in one color, stripes in plain weave, two-shuttle plain weave, straight twill and some twill variation. Headings should be woven on top and bottom, turned under and stitched to prevent raveling. Work at producing even tension and straight selvages in your sampler.

*Complete one of the Optional Activities (See p. 4)

PART II.

*Warp a floor or table loom in four-harness rosepath pattern (or in plain weave if you have a two-harness loom). Warp should be set at 6 or 8 ends per inch. Make a pillow, bag or runner at least 12" square when finished, incorporating three of the following:

- a. one traditional single interlock band of crosses or a diamond or eight-pointed star motif
- b. an inlay design in Vestfold, Dukagang or similar inlay technique
- c. four border patterns used on west coast coverlets. For example: *rosepath*, *kjerringtenner*, *harrender*, *krabberender*, *lynild*, *fjord og fjell*
- d. a motif worked in *rya* or *flossa* knotted techniques

*Complete one of the Optional Activities. If you have begun working with a study group, continued participation meets this requirement. (See p. 4)

PART III.

*Adapt a coverlet pattern to a hanging, bag or similar object, in which the traditional techniques listed in Part II are used as indicated in the original. Or create your own designs utilizing the traditional techniques to make a pleasing and unified object.

*Complete one of the Optional Activities (see p.4). If you have begun working with a study group, continued participation meets this requirement.

TRADITIONAL TAPESTRY WOVEN COVERLETS OF RURAL NORWAY

Åklær were objects woven and used in most Norwegian farm homes from the 17th century, or possibly earlier, through the 19th century to provide bed coverlets, carriage robes and bench covers. In the earliest times, they served the equally important function of decorative wall hangings for festive occasions. We might translate *åklær* as a "hanging coverlet." Three other terms used in referring to these objects are:

- rutevev*— indicating a design built on geometric units of, usually, 4 or 6 warp threads per block,
- smettåklær*— identifying the technique as that of laying in discontinuous wefts,
- Vestlandsåklær*— referring to the west coast area, where these *åklær* were produced in greatest numbers.

Modern weaving books will also use *åklær* as a generic term covering a range of coverlet techniques such as bound weave, overshot and others.

The techniques described here include single interlock tapestry, the most common, but not exclusive method used to make the coverlets, together with several of the non-tapestry methods of producing the patterns in the top and bottom borders found in most *åklær*.

Warp for the earliest *åklær* was coarse hemp or linen set at about 6.40 ends per inch. In the later 19th century, a finer version of *fiskegarn*, the tight twist cotton from which fish nets were made, was also used. The weft was *spelsau*, wool from an early breed of sheep which was coarse and long stapled, used in thick singles or two-ply. It was eased into the shed and bubbled to produce a full, rich texture. It was beaten down tightly so the patterns were sharp and their outlines explicit. All ends on the back were hidden by threading them parallel to the warps with a tapestry needle after weaving was completed.

DESCRIPTION OF ÅKLEVEV TECHNIQUES

(in order of their appearance on the sampler which follows)

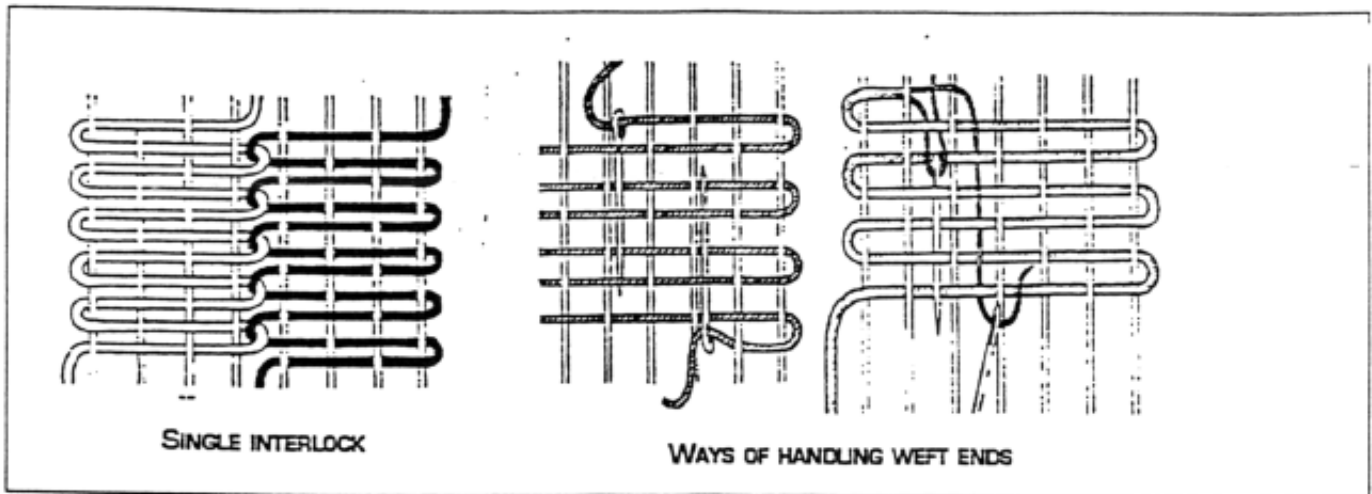
I. STRIPES

These were generally narrow and symmetrical rather than broad and bold. They included the basic colors found in the *åklær* and often separated some of the more elaborate motifs from each other.

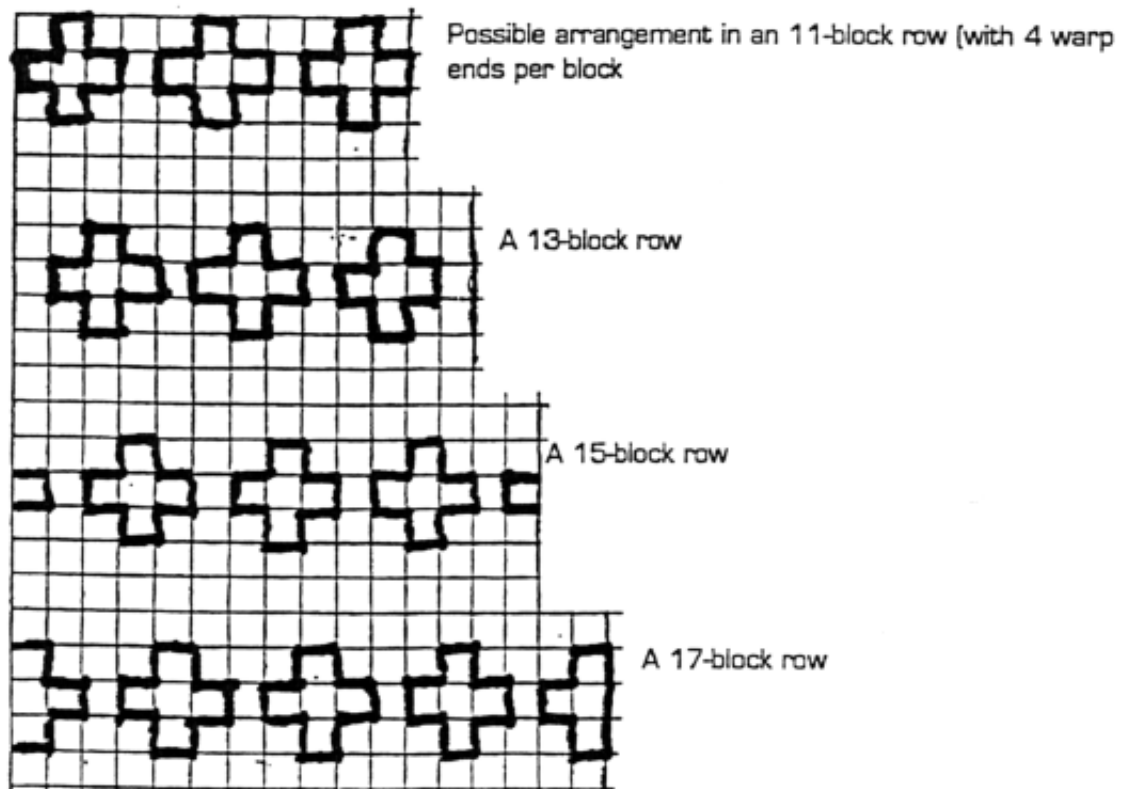
II. ROW OF CROSSES (KORSBORD)

These are executed in the single interlock tapestry technique which is used for the main designs in the body of an *åklær*. Each block of the pattern consists of 4 warp threads (occasionally 6). Wefts are laid in an open shed starting from left to right, all in the same direction. The first thread on the left must be in the UP position. Ends hang down on the reverse side, to be buried along the warp later as in the sketches that follow. Interlocking is done on the right to left rows only. As shown in the diagram below, it consists of encircling the previous weft before placing the next in its place in the shed. Practice is necessary to achieve flat and even joins between colors. Each block of the pattern should be squared; but since weaving packs down as it progresses, a block must appear somewhat higher before

beginning a new pattern row. When one unit has been done, all wefts must be cut off and pushed to the back. The next new pattern is begun like the first, laying in wefts from left to right when the first thread on the left is up.

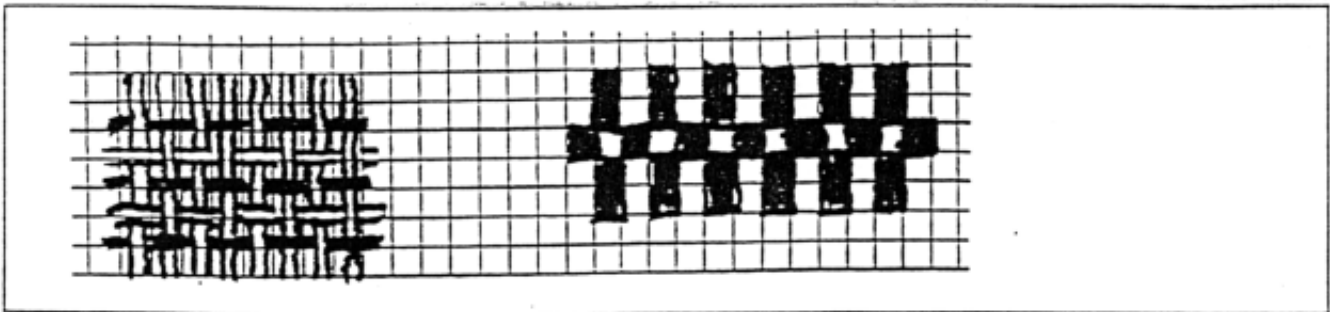


Various placements for row of crosses. Each individual cross is usually one color, but the row may include all the colors used in an *åklæ* in a prescribed order.



III. HAG'S TEETH (KJERRINGTENNER)

Two contrasting colors are used, such as white with blue or red. They are placed in alternate tabby sheds for three or more shots of each color to build a vertical striped or toothed effect. Then the colors are reversed by weaving two consecutive shots of one color. These, together with stripes, are basic to most *åklær* borders.



Interlacement of Wefts

A Typical Pattern

IV. H's (HARRENDER)

Harrender, as well as the next two patterns, is done in an overshot technique (a tabby shot between each laid-in shot) combined with *kjerringtenner*. Unlike most American overshots in which the pattern weft is ordinarily larger than the background, the same weft material serves for both background and pattern. Two contrasting colors are typical, such as white or yellow with red. Visualizing what the final result should look like plus one practice H will help. First, throw three shots of a light color alternating with a dark as in *kjerringtenner*, ending with the light shot. Next the central bars of the H's are made in the dark color by floating it over three warps and under three warps across the loom on a closed shed. The floats must be placed so that they join the legs of the dark H's, which means that you may have to go over or under 1 or 2 instead of 3 warps at the beginning selvage in order to place the floats correctly. A light tabby shot must go between each row of floats. After a total of three floats with tabby in between have been completed, finish the top bars of the H's in the same way and in line with the bottom bars or legs. The size of the H's can be enlarged by increasing the number of shots in the legs and the floats.

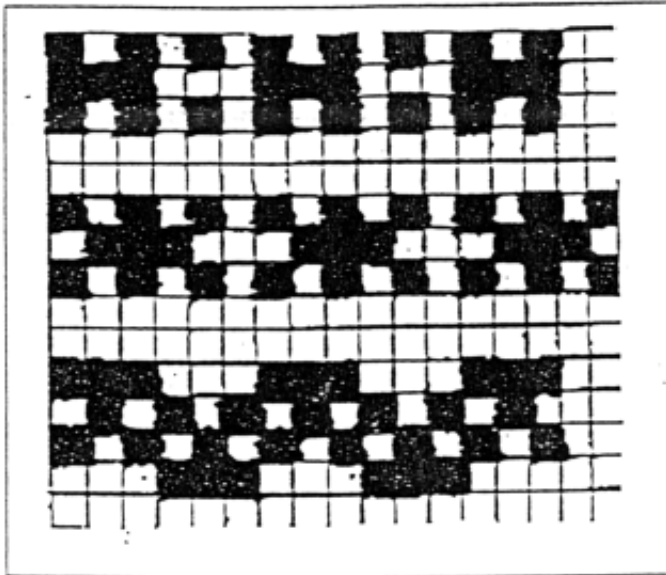
V. CRABS (KRABBERENDER)

This is done in the same overshot technique as H's with the same center weft floats over three warps and under three warps with tabby shots in between. However, the floats are placed so they cross a central dark weft and a light one on each side; this gives a six-legged effect. They can also look like rows of spaced little crosses (*liten kors*).

VI. WATER AND MOUNTAINS (FJORD OG FJELL)

The Decorah, Iowa, *åklær* workshop of February 1978 gave this name to a pattern often seen on *åklær* in the textile collection of the Norwegian-American Museum, but one for which no Norwegian name has been found. It is a three-color pattern, seen most often in red, white and blue. The alternating floats at top and bottom are red; the central *kjerringtenner* is

alternating blue and white. *Fjord og fjell* follows the same overshot techniques as *Harrender* and *krabberender*, but the floats are at the top and bottom of the design. Note in the sketch how the top and bottom floats alternate with each other, and note also that the dark wefts between are centered in the middle of the float areas above and below them.



Kjerringtanner
floats
Kjerringtanner

Harrender

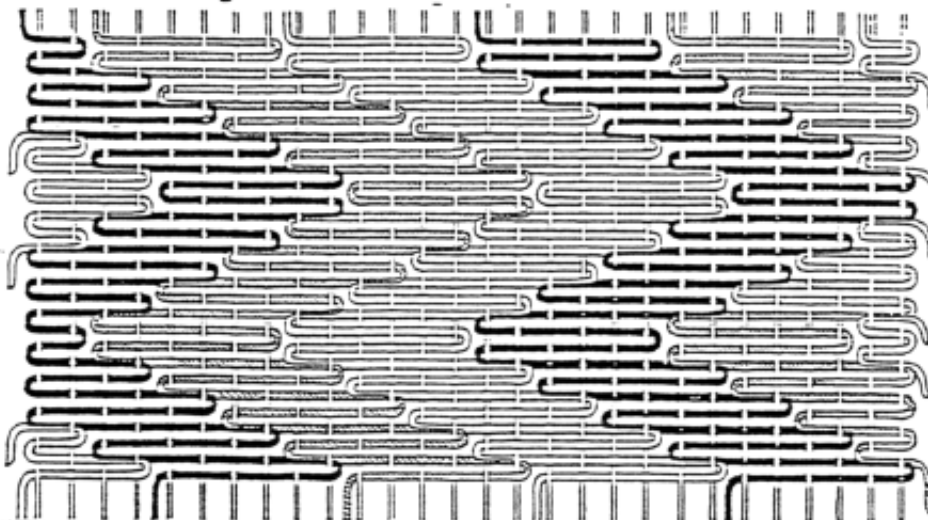
Krabberender

Fjord og fjell

VII. LIGHTNING (LYNILD)

The progression of this pattern is achieved by letting 1 or 2 weft threads overlap in the same shed when the wefts are moving in the direction of the pattern. By following the diagram which follows, you can weave this design in one of the several ways in which the lightning forms are executed. Divide the color areas into even-numbered groups; for example, blue over 8 warps, yellow over 8 warps, etc. Begin on the left with the first warp in the UP position and with butterflies to the right. In the next shot (see diagram) each butterfly is brought around the UP warp just behind it and it overlaps one weft in the adjoining color to the left. Note that the butterfly always is brought around the UP warp behind it, but it overlaps the adjoining color only when it is moving in the direction the lightning pattern is moving.

All colors used in an *åklæ* are generally placed in progression in the *lynild* border and are repeated as needed to go across the width of the warp.



START HERE

MATERIALS FOR ÅKLEVEV

For runners or other objects less than 12" wide:

Warp—12/6 *fiskegarn*. 8/3 or 7/2 tight twist linen. 8 epi.

Weft—6/2 *Rauma prydivergarn* or *Grimstad kunstvevgarn*.

For objects more than 12" but less than about 30" wide:

Warp—12/9 or 12/12 *fiskegarn*. 7/3 or 8/4 linen. 7–8 epi.

Weft—as above. Also 7/2 *åklægarn*.

For more than 30" wide up to full *åklæ* size (4–5 feet wide):

Warp—12/12 *fiskegarn*. 8/5 linen. 6–6 1/2 epi.

Weft—*Rauma ullspissgarn*, *rya* or *flossa* yarns from Rauma or Grimstad.

SOURCES OF MATERIALS:

Syvilla Tweed Bolson

TWEEDS AND FLEECE, Locust Road, Decorah, IA 52101. Mail order and direct home sales. All types of Scandinavian and American yarns.

Noel Thurner

NORSK FJORD FIBER, Rt. 2, Box 152, Lexington, GA 30648. American outlet for Grimstad yarns. Weaving and spinning materials from Scandinavia.

Mrs. Eva Asher

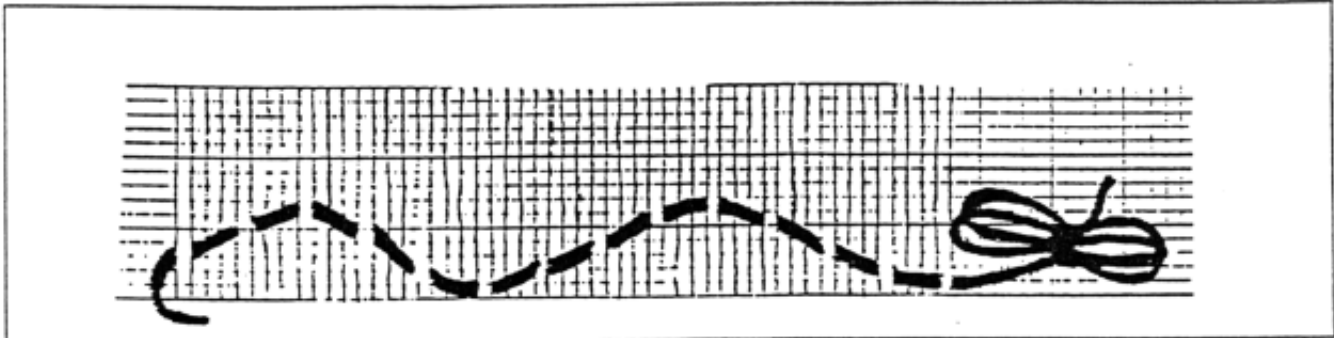
THE UNIQUE, 21 1/2 E. Bijou, Colorado Springs, CO 80902. Broad Scandinavian yarn selection.

Glimåkra Looms and Yarns, Inc., 1304 Scott Street, Petaluma, CA 94954-1181. Swedish looms and yarns and books.

GENERAL SUGGESTIONS

It is essential that the weaving not pull in at the selvages. Tips to avoid this pitfall:

1. When tying to the cloth beam, use groups of no more than 4 warp threads, and use only 2 for the group at each end.
2. BUBBLE the weft for all excepting the areas of interlock (*åklevev*). While the weft should rest firmly against the outer selvedge warps, it should describe a series of generous arcs within the shed.



BUBBLING

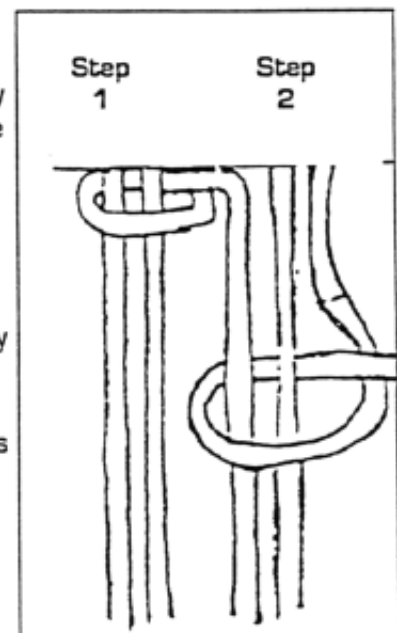
3. Maintain a taut warp at all times.
4. Weave an inch in just one color at the beginning, concentrating on establishing a proper width in the warp. What you don't want can be taken out after you have your object off the loom.
5. Use butterflies for all of the weaving—borders as well as interlocked areas. You will be less apt to vary your tension on the weft than if you change from shuttles to butterflies.

FINISHING SUGGESTIONS

Traditional *åklær* were usually turned under at top and bottom and securely overcast. Later *åklær* sometimes have a warp fringe secured by overhand knots. For small pieces, I use the system to the right to secure the warps, then turn them back and cover them with cotton twill tape. If the object is to be hung, I attach an additional washed unbleached muslin sleeve by hand-sewing it across the top to hold a dowel or rod.

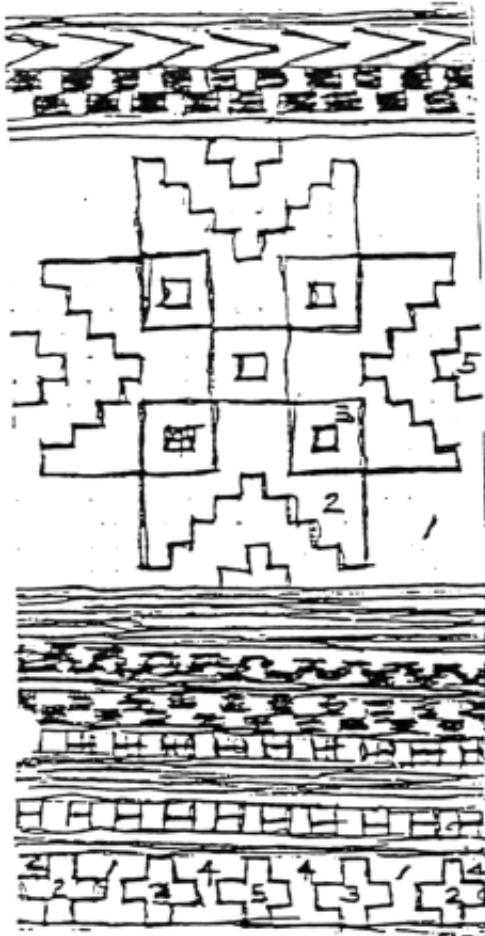
All hanging warp ends should be entered along warp paths and then clipped. If necessary, a piece can be blocked. Otherwise, it can be gently steamed by holding a steam iron above the woven surface.

The edge to the right is like a macrame half-hitch, with the two warp ends to the left held taut in the left hand while the right hand slides the third warp end up firmly along the two ends and against the web. That third end then transfers to the left hand and becomes the first of the two holding cords on which the next knot will be tied.



For long-term care, your object can be wet-cleaned in a shallow amount of lukewarm water and Orvus or Ivory soap. Press gently with sponges or the flat of the hand, avoiding agitation or wringing. Blot and dry flat.

AN ÅKLEVEV PROJECT



- ← *lynild*
- ← *kjerringtenner*

- ← *åklevev, eight-pointed star and Celtic knot motifs*

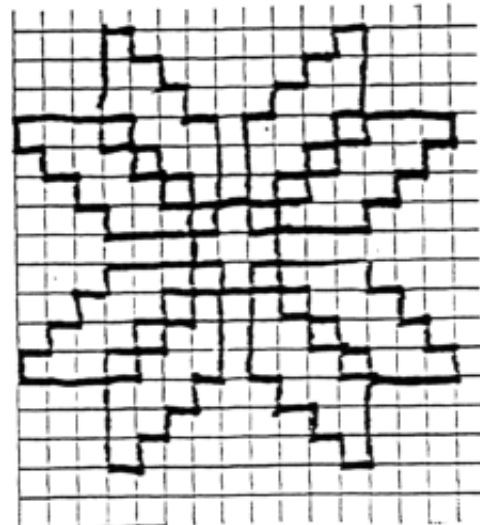
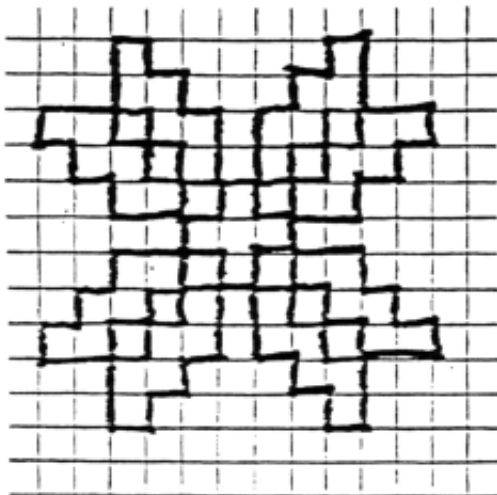
- ← *stripes and/or kjerringtenner*
- ← *fjord og fjell*
- ← *kjerringtenner*
- ← *krabberender*
- ← *stripes*
- ← *harrender*
- ← *Korsbord in åklevev*

Possible colors:

1. white
2. red
3. blue
4. yellow
5. blue

11-block eight-pointed star

15 block eight-pointed star



A SMALL SELECTION OF SPECIALIZED NORWEGIAN AND SWEDISH WEAVING BOOKS:

Strømberg, Geijer, Hald and Hoffmann:

NORDISK TEXTILTEKNISK TERMINOLOGI. Johan Grundt Tanum Forlag, Oslo, 1974. 132 pp. Soft cover. An initial attempt to develop a standardized international textile language. Words are listed in Danish, Icelandic, Swedish, Norwegian, English, French and German and are followed by a brief definition in Swedish. Some of the English translations are puzzling.

Emily Mohr:

GAMMEL VESTLANDSK ÅKLEVEV. Reprint in booklet form of an article in *Bergens Tidende* in 1936. 15 pp. Black and white illustrations of 14 typical early åklær with colors, size and basic information. Husflid, Bergen 5001, Norway.

Marit Wang:

RUTEÅKLÆR. Universitetsforlaget, P.O. Box 2977, Tøyen, Oslo 6, Oslo, Norway. 1983. 185 pp. Hard cover. Norwegian with brief English summary. Important for anyone wishing to study åklevev in some depth. About \$50.00.

Torbjerg Gauslaa & Tove Østby:

ÅKLEBOKA. Landsbruksforlaget, Oslo, Norway. 1977. 96 pp. Hard cover. About \$17.00. Norwegian. Modern patterns based on traditional techniques of interlocked tapestry, double weave, bound weaves and several overshots. Complete drafts with a picture of each.

Janice S. Stewart:

THE FOLK ARTS OF NORWAY. An excellent and readable introduction to the folk arts of Norway in general. Now in soft cover by Dover Publications, Inc., 180 Varick Street, New York, NY 10014. 246 pp. \$5.00.

VESTFOLD WEAVING

WEAVING TECHNIQUE:

Vestfold weaving is a type of inlay which gets its name from the area where coverlets made in this technique were found. Individual bedcovers were further identified by the farm or village where they originated.

The background is weft-faced plain weave, tightly packed. All sources have taken for granted that the pattern was laid in on the loom, although Aase Bey Sjørvold points out that no one knows this for certain. There is, however, no extension of pattern threads going across the center seams, one indicator of embroidery. It is also illogical and unlikely that thread count embroidery would be attempted on tightly packed wool foundations.

Pattern wefts are laid in on a closed shed. All directions indicate that the technique is done wrong-side-up, using butterflies for the pattern wefts, but again there is no certain proof. I work right-side-up, using a reasonable length of weft instead of butterflies because 1) there is less chance of error or at least a better chance of spotting errors, and 2) it is essential if one is designing freely in a modern fashion or is including other techniques.

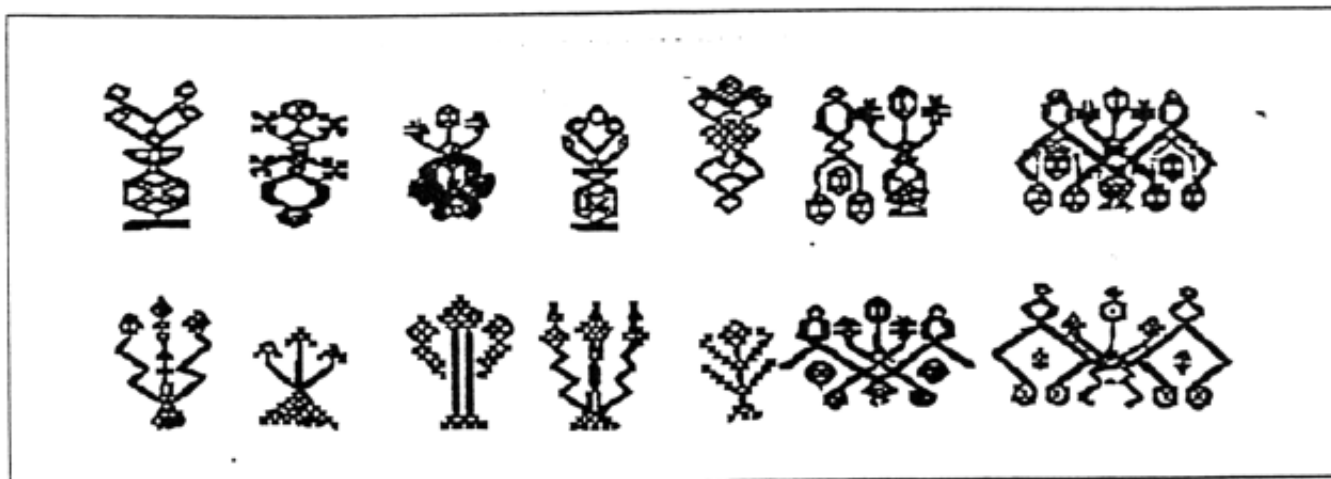
There appear to be two shots of foundation weft between each pattern inlay although I could not examine the coverlets extensively enough to be sure that this was constant. Most floats were over two or over three warps. Patterns requiring longer floats appeared to be treated in increments of two and three. Although some sources indicate longer floats were covered in soumak or figure-eight fashion, I could not in my cursory investigation see evidence of this. It appeared that the weaver went over three warps, under two, and so on across the pattern area, then returning to fill in the previously uncovered warps. Any of the above three methods, however, would seem to be workable and look approximately the same when, as is usually the case in Vestfoldteknikk, they are used in limited fashion.

COLORS:

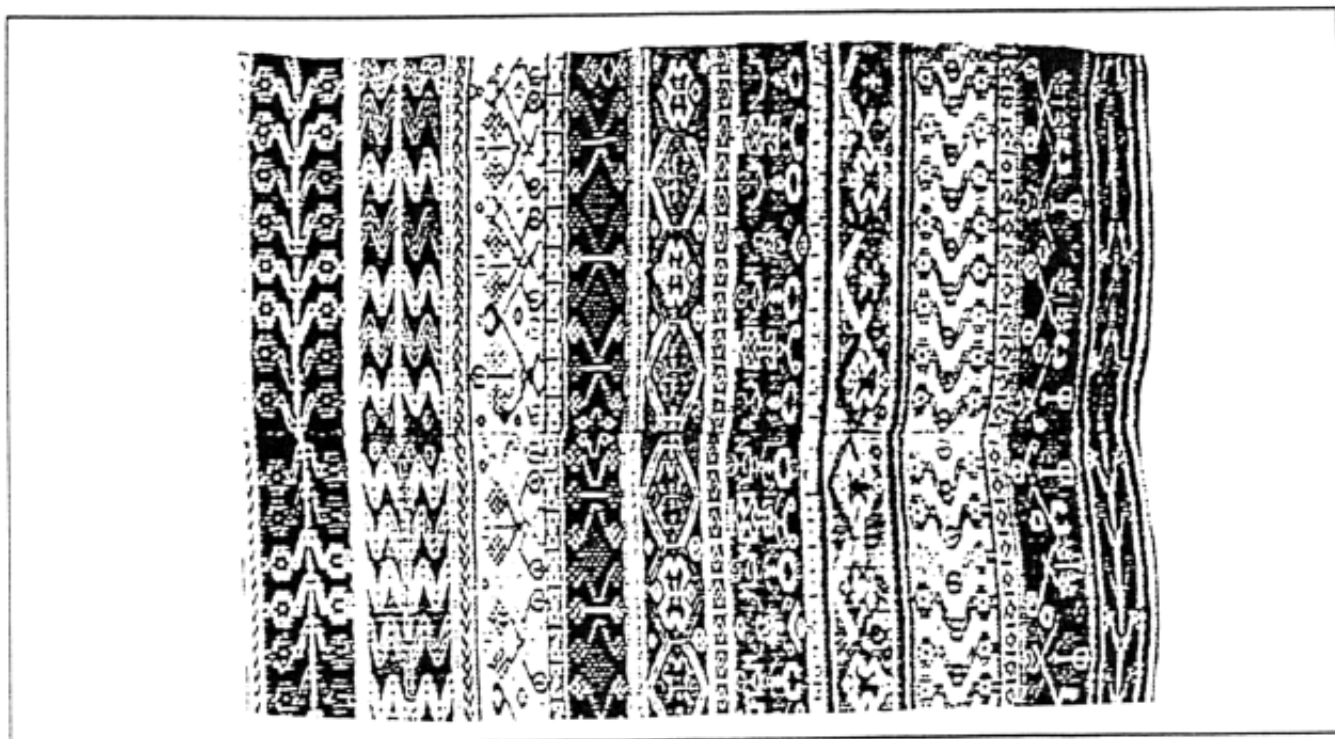
As in aged textiles generally, colors have changed in varying degrees throughout the years and one can only surmise what they originally were. Some have faded to a rather non-identifiable grayed tone. In 1979 Gunn Bremnes described tests she had made to determine the original colors of *Døvlenteppet* and she came to the conclusion that they were natural white sheep, pale yellow, darker yellow, golden, orange, beige-brown, sharp red, blue and black. (The colors in *Døvlenteppet* are generally better preserved than in many of the other pieces.) I will not go into details on the studies with indigo and various plant dyes which Bremnes carried out, but she points to what is evident in most of the coverlets and that is the predominance of shades of gold and yellow. She mentions that birch trees, common in the area, were widely used to produce yellows. Blues are next in importance, along with natural white and black. Orange-red, pinkish beige and brownish-beige tones are also found, as is a grayed green. Generally, one can say that the colors vary a good deal from one coverlet to another, as do the designs, making for a wide variety of effects. Although the background color usually varies within each band of design, the Svarstad coverlet is said to be on an all-black background.

DESIGNS:

All of the *Vestfoldtepper* designs consist of a series of horizontal bands, each with a different motif, the total number per coverlet varying from about 8 to 13. These are separated by narrow bands which always include *kjerringtanner* (two colors alternating on plain weave to produce a toothed effect) and very often inlay diamond, arrow or zigzag forms. The total has been aptly described as "continuously varied repetition." Each band is filled with a horizontally repeated motif which is built up of floating pattern wefts. The lines usually move diagonally by one or more threads as the pattern is built up, although some, especially the more geometric motifs, have three repeats and therefore a block effect. Ragnar Nordby classifies the major designs as being based on urns and flowers, and he graphs 14 patterns: five with constantly changing lines, five with a primarily block orientation, and four with elaborately ornamented variations. Karin Archer stated that the Aske coverlet was described by Martha Aske as symbolizing the story of life and growth in nature. Other sources, however, question this interpretation or any other specific symbolic significance in the motifs.



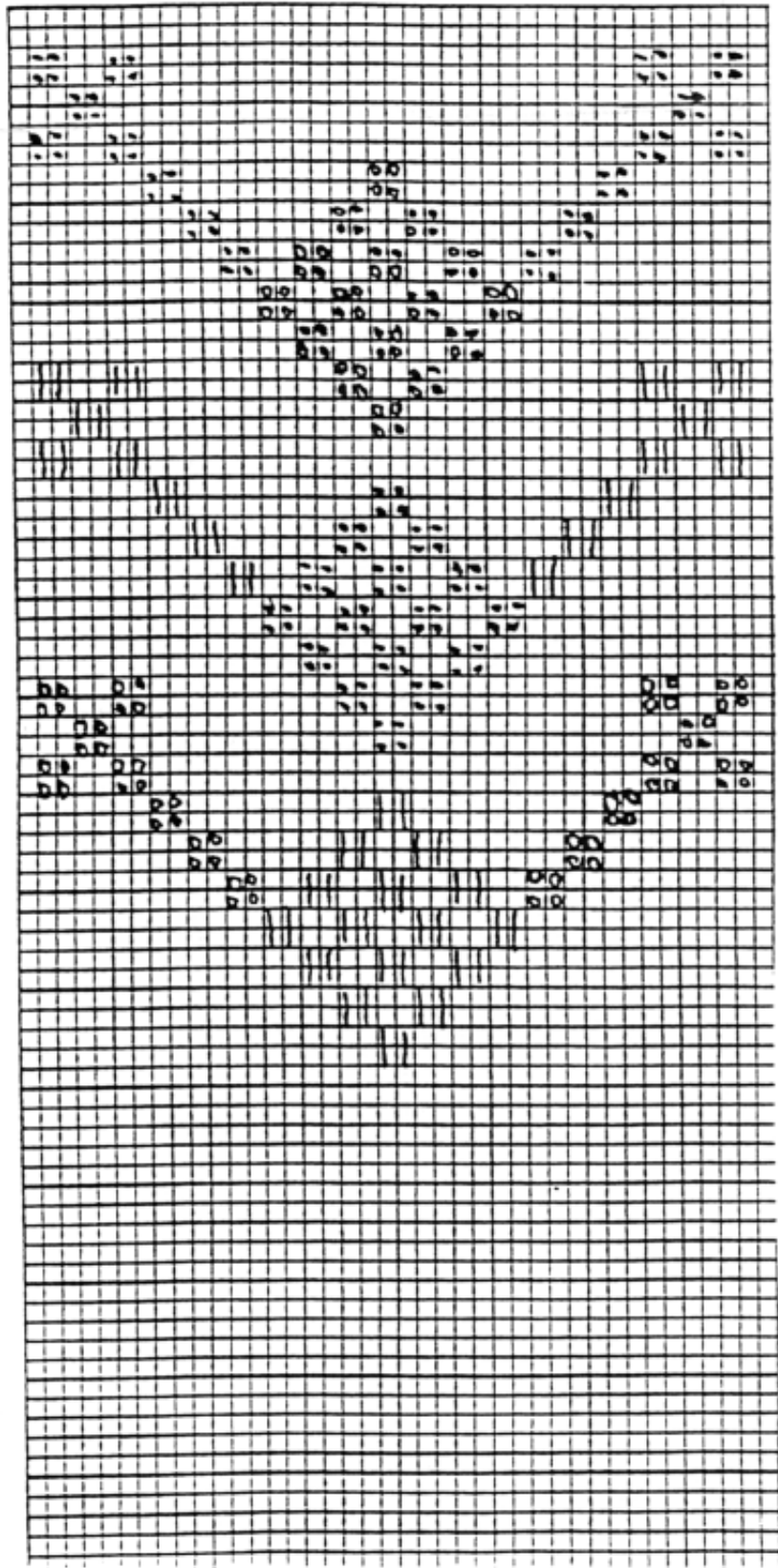
Dovleteppe

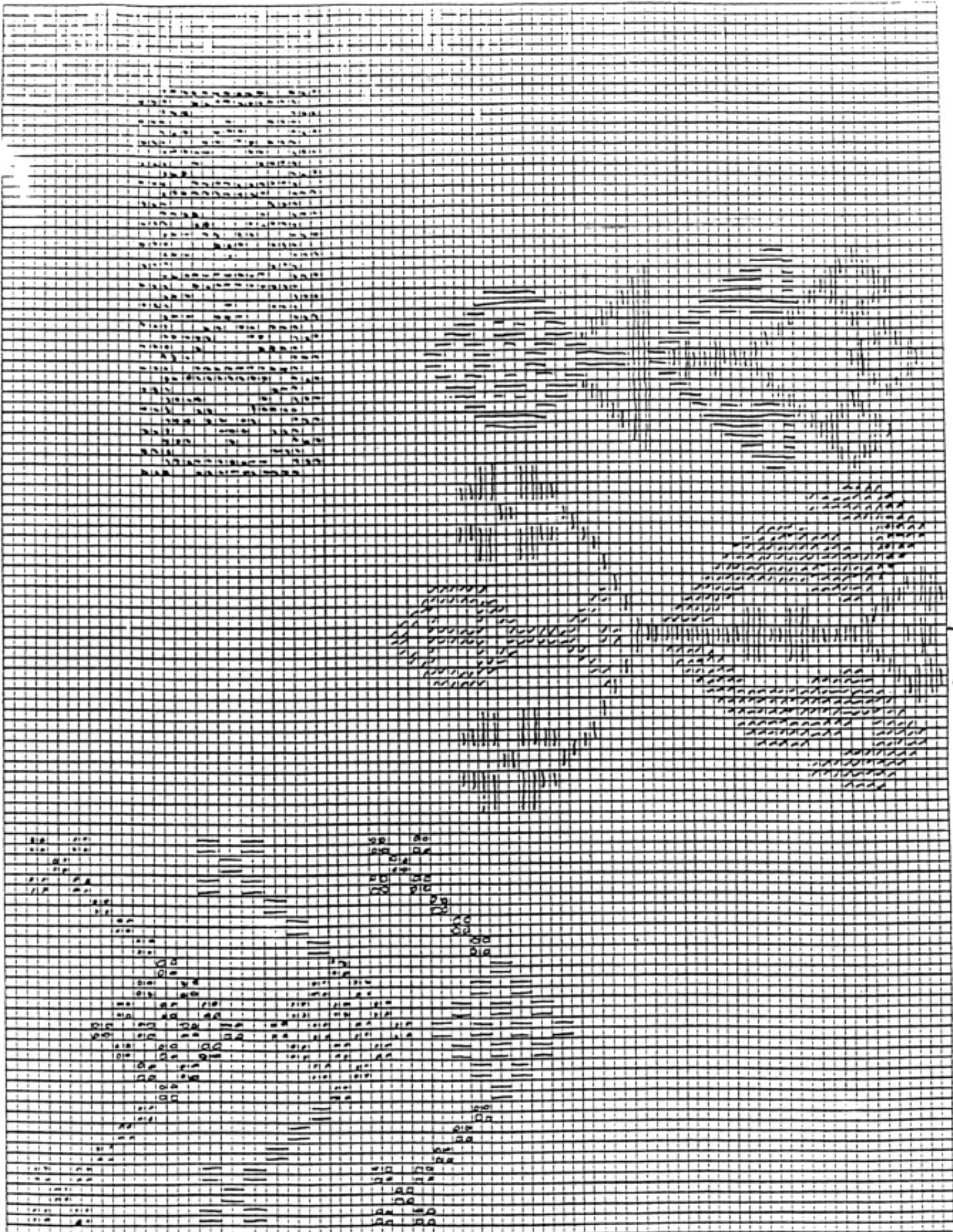


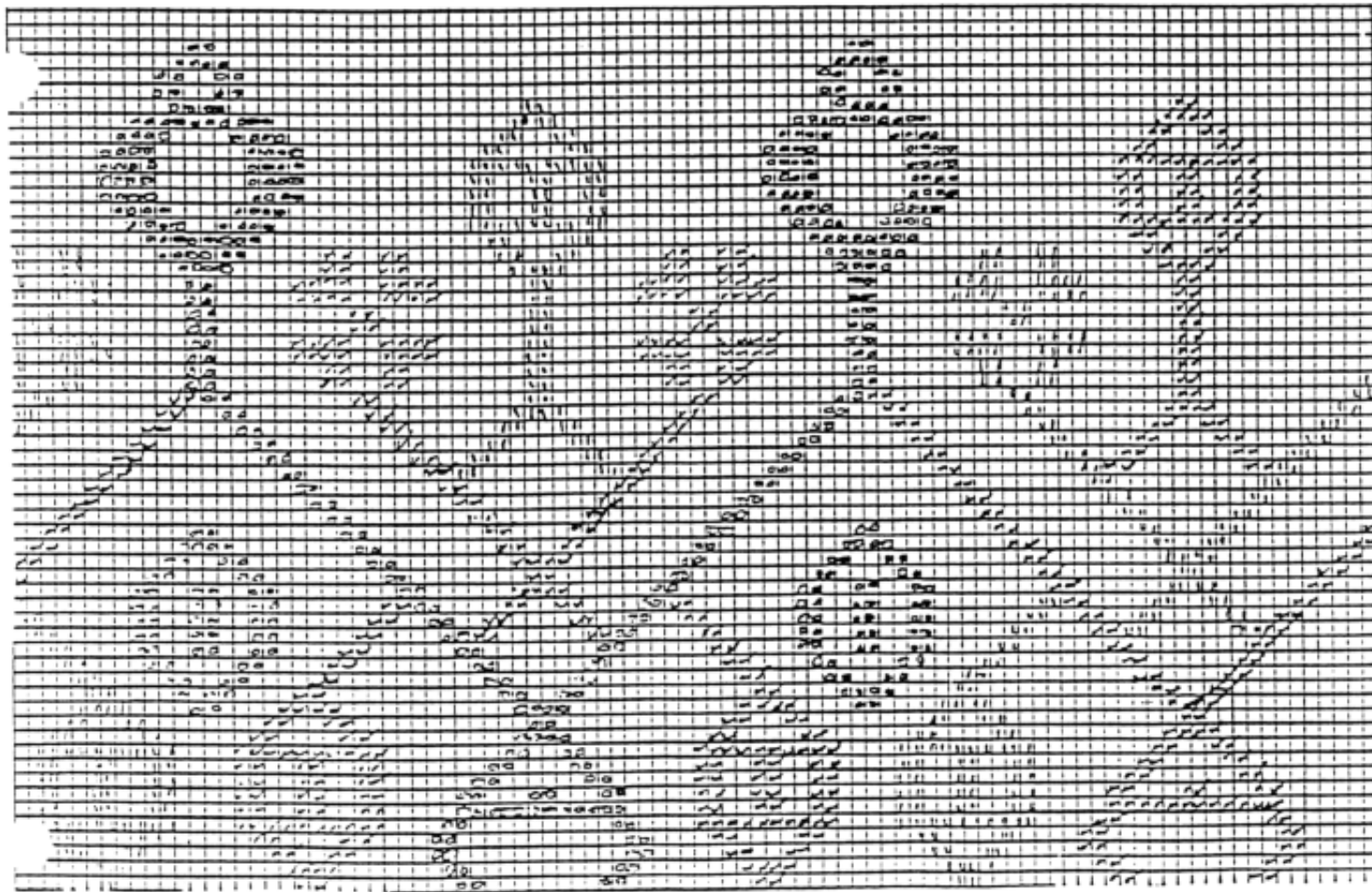
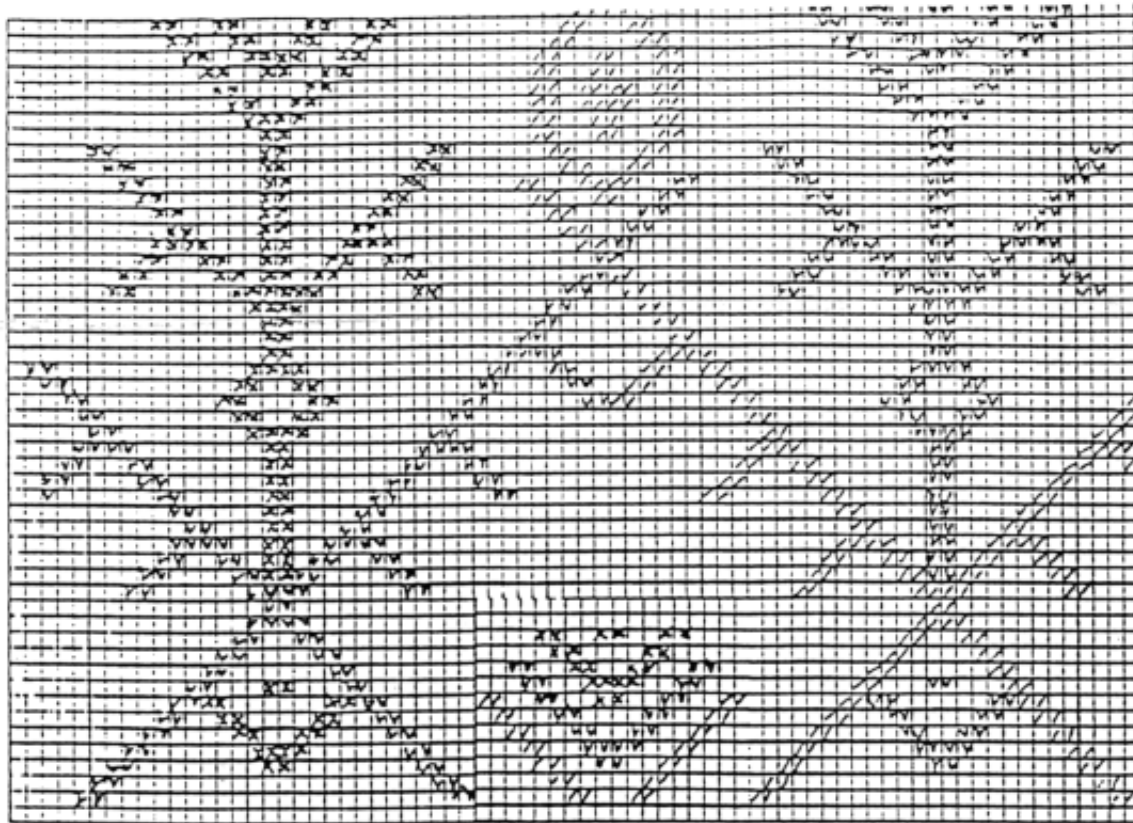
GRAPHED PATTERNS FOR VESTFOLD INLAY

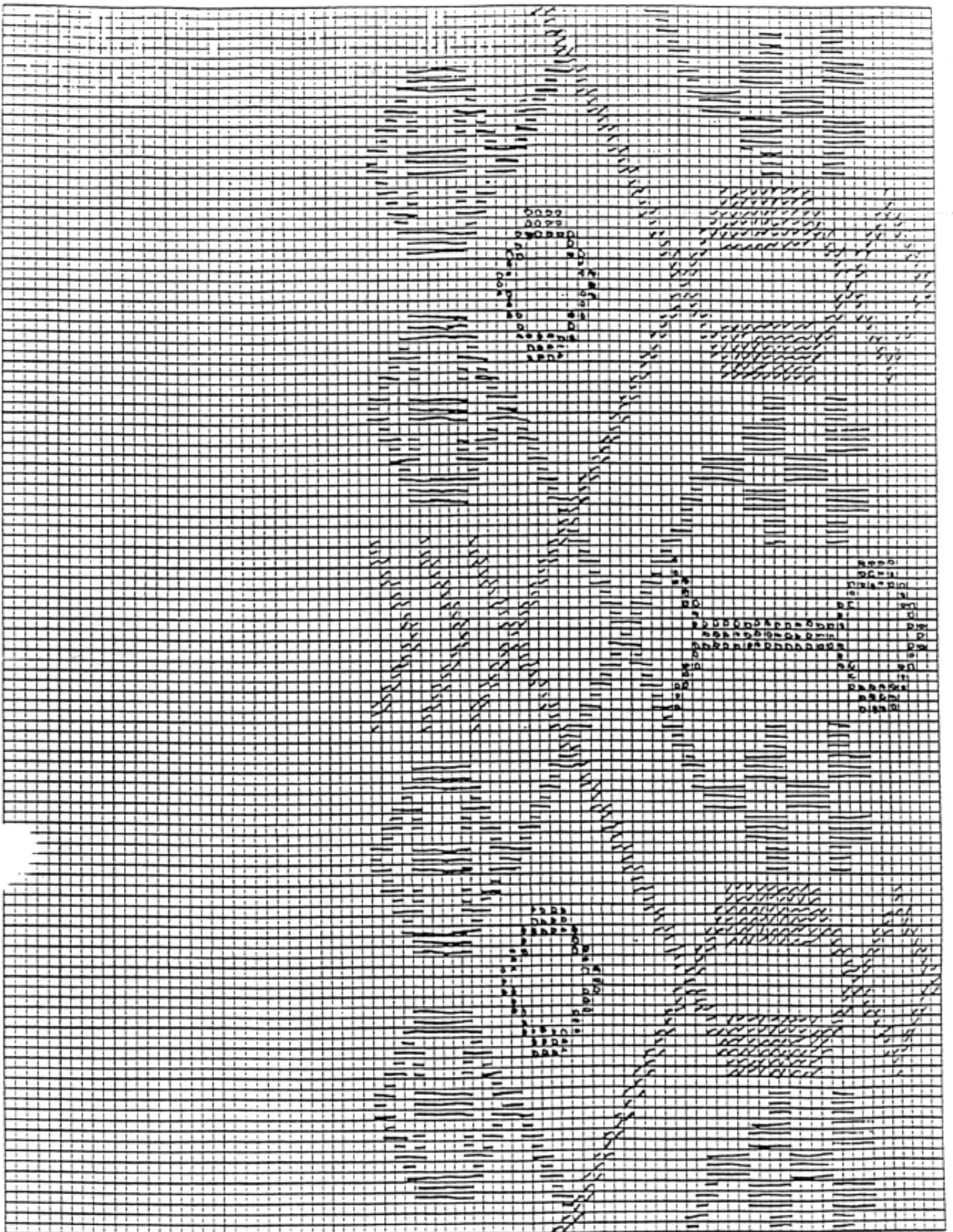
Each block represents one warp thread.

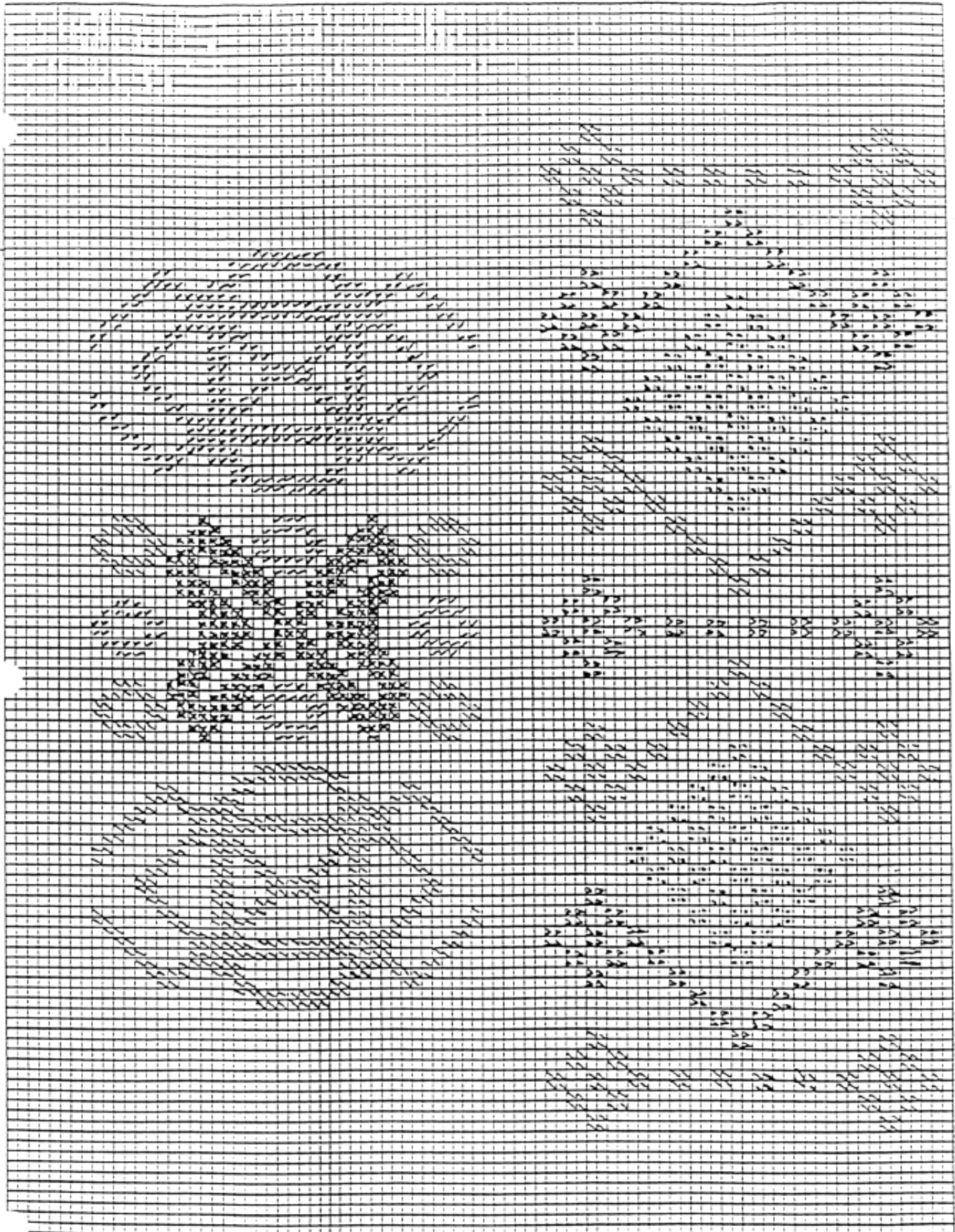
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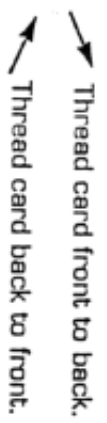


CARD WOVEN PATTERN FOR A TRADITIONAL EAST TELEMARKE HEADBAND

Card Number:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
A	B	B	B	B	R	R	B	B	B	B	r	r	R	R	B	B	Y	Y	Y	Y
B	B	B	G	G	B	B	G	B	B	B	B	r	r	R	R	B	B	Y	Y	Y
C	B	B	G	G	G	G	G	B	B	B	B	B	r	r	R	R	B	B	B	B
D	B	B	G	G	B	B	G	B	B	B	B	r	r	R	R	B	B	Y	Y	Y

Cards 19 and 20 mark the center of the band. To complete, thread back to card 1 from card 18. Total of 38 cards.



(If you have Norwegian cards, which are unmarked, two cards with identical threading are threaded from front to back and placed face-to-face.)

- Color Key: B—black. 78 threads Material: Perle 70 100% wool. Available from:
- R—red. 20 threads Ingebjørg Almanaks AS
- G—green. 28 threads 3800 Bø i Telemark
- Y—yellow. 10 threads NORWAY
- r—rust. 16 threads

Turn cards forward until twisting interferes. Then reverse until twisting again is pronounced.
 To visualize the appearance of this belt, simply color the squares in the graph with the color indicated.
 Since card-weaving is warp-faced, the pattern will be formed by the colors of the exposed warps.

SOURCES OF MATERIALS

EQUIPMENT:

- Rigid heddle loom
Beka, Inc., 542 Selby, Box.
St. Paul, MN 55102
Other companies may also be making rigid heddle looms, but be sure your choice is sturdily made.
- Inkle looms and cards
Glimåkra Looms, 338 Ross Street
Petaluma, CA 94954-6502
A number of floor loom companies make inkle looms as well. The three suppliers of Norwegian yarns may carry cards and/or inkle looms.
- Norwegian yarns
Tweeds n' Fieece, Locust Road RR. 2, Box 12,
Decorah, IA 52101
- The Unique, 11 East Bijou
Colorado Springs, CO 80903
- Norsk Fjord Fibers, P.O. Box 271
Lexington, GA 30648

REFERENCE WORKS:

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- Bradley, Lavinia
Inkle Weaving.
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- Collingwood, Peter
The Techniques of Tablet Weaving. Watson-Guptil
Publications, New York, NY. 1982.
- Crockett, Candace
Card Weaving. Watson-Guptil Publications, New
York, NY. 1973.
- Iribeck, Sonja
Aklæ: Norwegian Tapestry. in *The Weavers Journal*,
Vol. VIII, No. 1, Issue 29, Summer 1983.
- Liebler, Barbara
Hands-On-Weaving. Interweave Press, Loveland,
CO. 1986.
- Nelson, Lila
Card Woven Belt of East Telemark in *The Weavers
Journal*, Vol. IV, No. 1, Issue 33, Summer 1984.

Sources of Materials (cont'd)

- Nelson, Lila Color in Traditional Norwegian Folk Textiles in *Minnesota Weaver's Quarterly*, Vol. 1, No. 2, Winter 1982.
- Trotzig, Liv & Axelsson, Astrid Weaving Bands. Van Nostrand Reinhold Company New York, NY 1972.
- Ulla Cyrus-Zetterström Manual of Swedish Handweaving. Charles Branford Co., New Centre, MA 1977.
- Vestfold Fylkesmuseum Tepper i Vestfold. Published by the Vestfold Museum, Tønsberg, Norway 1989.

VIDEOS:

(Victorian Video Productions, 1304 Scott Street, Petaluma, CA 94954 has the following videos, among others, available):

- Deborah Chandler Introduction to Weaving. 57 minutes. A prerequisite to other videos if you are new to weaving.
- Constance Crockett Card Weaving. 97 minutes.
- Betty Davenport Rigid Heddle Weaving. 87 minutes.

NORWEGIAN CULTURAL SKILLS PROGRAM

WEAVING—LEVEL 1, 2 OR 3

I have completed the requirements in Weaving for (circle one):

- Part One
- Part Two
- Part Three

I. ATTACHED ARE:

1. Weaving Record—required activity
Report on Optional Activity. Include any essay or written report.
2. Copies of documents, as specified in guidelines.
3. Essay.

II. I CHOSE 1, 2, 3, 4, 5, 6, 7 (PLEASE CIRCLE) TO COMPLETE MY OPTIONAL PROJECT.

A Report is enclosed. The lodge officer or designated person who has signed below is witness to the completion of this activity.

Name: _____ Lodge Name and No. if applicable: _____

Mailing Address: _____

_____ Tel. No. _____

Pin applied for: Generalist Specialist (check one)

Have you completed cultural skills categories before? Yes No If yes, please specify: _____

This report is for: #1 #2 #3 (Check one)
(bronze) (silver) (gold)

Signature (Applicant)

Date

Signature (Lodge Cultural Director/Social Director or Secretary)

Date

Complete Mailing Address (Cultural/Social Director or Secretary)

City State Zip

Signature (International Headquarters)

Date

NORWEGIAN HERITAGE SKILLS WEAVING RECORD

Name of Participant Date Completed

Address

City State Phone

REQUIREMENT FOR:
(Check applicable squares)

TRACK I

TRACK II

PART I

PART I

- Inkle
- Card
- Rigid heddle

- Floor loom
- Table loom

PART II

PART II

- Inkle
- Card
- Rigid heddle

- Floor loom
- Table loom

PART III

PART III

- Inkle
- Card
- Rigid heddle

- Floor loom
- Table loom

Type of object woven: _____

Size: _____ Yarn type(s), size(s) and color(s) used for warp _____

Yarn type(s), size(s) and color(s) used for weft _____

Techniques used, listing in order from bottom to top of piece, and approximate number of inches woven:

FOR FLOOR OR TABLE LOOMS ONLY:

Type of loom (counterbalance, jack, countermarch): _____

Brand name, if any: _____

Number harnesses used: _____

Please complete the draft below:

Please add any comments regarding problems, pointers to remember, etc. on back of this sheet.

RECORDS

SAMPLE YARN-CALCULATION FORM (FROM WEAVING BY SHIRLEY HELD)

title/description of project: *rug in log cabin weave*

finished length: 55"

allowance for warp take-up (10%): 5-1/2"

allowance for shrinkage (10%): 5-1/2"

allowance for loom waste: 27 3/4 yard

allowance for hems: 8"

total warp length: 101" 3 yards (cotton rug warp)

finished width: 28

allowance for draw-in (10%): 3"

allowance for shrinkage (10%): 3"

allowance for hems: _____

width at reed: 34 (rag strips) (also rug warp for weft)

sett:	12	+	34	=	408
	(ends per inch)		(width at reed)		(total warp yarns)

warp quantity:	408	+	3	=	1,224
	(warp yarns)		(length of warp)		(Yards)

	1,224	X	800	=	1-1/2
	(warp quantity)		(amt per spool/pound)		(No. spools/pounds)

weft quantity:	34	+	3-1/2	=	37-1/2
	(width at reed)		(10% take-up)		(length of one weft)

	4 (rags)	X	101"	=	404
	(weft yarns per inch)		(length of warp)		(No. weft shots)

	37-1/2	X	404	=	15,150"
	length of one weft		No. weft shots		weft quantity

	421 yds	+	(ball) 100 yards	=	4-5
	weft quantity		amt per spool/pound		No. of spools/pounds

(421 yds. of warp also needed for weft, or 1/2 spool)

FEEDBACK QUESTIONNAIRE

CULTURAL SKILL COMPLETED _____

INSTRUCTIONS: For each of the 8 questions below, please check the box which fits your opinion most accurately. The choices are: Agree (A), Neutral (N) and Disagree (D). It would be helpful for improving the unit if you would also add your specific comments in the space provided.

- | | A | N | D |
|--|--------------------------|--------------------------|--------------------------|
| 1. The instructions for this unit were easy to follow: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. The requirements for this unit were reasonable: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. There were enough varied choices for optional activities: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. There were enough instructions and guidelines for doing the activities: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. The forms for the final report were helpful: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. The unit provided interesting activities: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. The unit increased my understanding of Norwegian heritage: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. The unit promoted my involvement in the lodge: | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



SPECIFIC COMMENTS: In the space below, please add other comments and suggestions you may have with respect to this unit. Your comments are confidential and will in no way affect the awarding of your completed pin/bar. Do you have any suggestions for additional optional activities for this unit?

Return to:
 Sons of Norway
 Fraternal Depart./Culture
 1455 West Lake St.
 Minneapolis, MN 55408

SONS OF NORWAY

Norwegian Cultural Skills Program

Specialist	Person who wishes to go in depth in one area, e.g. Hardanger embroidery or genealogy, etc.
Generalist	Person who decides to sample several skills and qualify for the basic level in each, for example: stamp collecting, crafts, and Norwegian foods.
Mentor	Person who is skilled in activities offered in the Norwegian Cultural Skills Program can do a different challenge: mentor others who need formal or informal instruction. The mentor is an extremely important person in passing on the Norwegian heritage to others.
Master of Cultural Skills	Persons who have completed at least three levels of three different skills, or nine individual basic activities.

1. TRADITION NORWEGIAN COOKING

- Level 1 Your Favorites
- Level 2 Baked Goods and Desserts
- Level 3 Meat or Fish Dishes

2. READING NORWEGIAN AND NORWEGIAN-AMERICAN AUTHORS

- Level 1 Your Favorites
- Level 2 Fiction
- Level 3 Nonfiction

3. COLLECTING NORWEGIAN AND NORTH AMERICAN STAMPS

- Level 1 Collect General Norwegian and North American Stamps
- Level 2 Specialize Your Stamp Collection
- Level 3 Complete a Collection of a Ten-Year Period

4. NORWEGIAN ROSEMALING

- Level 1 Basic Strokes, Flower Form and Scroll
- Level 2 Completed Design
- Level 3 Create an Original Design

5. GENEALOGY—FAMILY HISTORY

- Level 1 Complete people 1-7 on a four-generation ancestor chart, etc.
- Level 2 Complete four more people on the ancestor, family group chart and document
- Level 3 Complete all information for 15 people on the charts—document and write an essay

6. HAND-KNITTING

- Level 1 The Basics
- Level 2 Knit with Two Colors
- Level 3 Create a two or multicolored sweater (based on Norwegian designs)

7. NORWEGIAN LANGUAGE AND CULTURE

- Level 1 The Basics of Norwegian Language
- Level 2 A Sampling of Norwegian Culture
- Level 3 A topic from Norwegian Language or Norwegian Culture

8. HARDANGER EMBROIDERY

- Level 1 The Basics
- Level 2 Complete a Larger Item
- Level 3 Using Your Skills in Creative Ways

9. FIGURE CARVING

- Level 1 The Basics
- Level 2 Complete a Detailed Carving
- Level 3 Complete an Original Carving

10. WEAVING

Track I

- Level 1 The Basics—Make a Sampler
- Level 2 Inkle or Card Weaving or Rigid heddle—Complete a Project
- Level 3 Create an Original Design

Track II—Floor or Table Loom Weaving

- Level 1 Produce a Sampler
- Level 2 Make a Finished Project
- Level 3 Create an Original Design

11. ORNAMENTAL WOODCARVING

- Level 1 The Basics
- Level 2 Flatskurd
- Level 3 Carve the Acanthus

12. CHIP CARVING

- Level 1 The Basics
- Level 2 Carve Borders
- Level 3 Carve Rosettes

13. FOLK DANCING

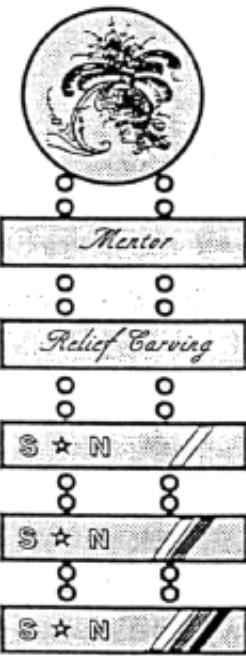
- Level 1 Easy Dances
- Level 2 Intermediate Dances
- Level 3 Advanced Dances

14. MUSIC AND MUSICIANS OF NORWAY

- Level 1 Folk Music: Roots of Norwegian Music
- Level 2 The 19th Century: Edvard Grieg & Contemporaries
- Level 3 The 20th Century: Composers, Performers, Conductors

MENTOR

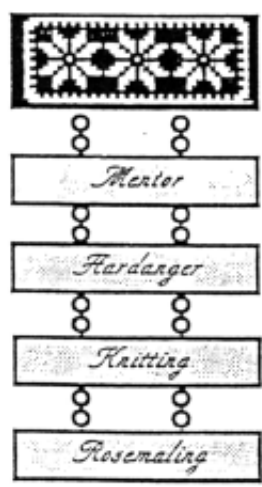
Many people are already skilled in the activities offered in the Norwegian Cultural Skills Program. To those, a different challenge is available: Become a mentor. A mentor is a person who becomes a formal or informal teacher, leading other individuals along the generalist or specialist tracts. The mentor is an extremely important person as he/she plays a key role in passing on the Norwegian heritage to others.



EXAMPLE 1

Meet John. He has spent a lifetime doing beautiful wood carving. He decides to become a mentor in his lodge by teaching relief carving. When he has taught a minimum of five people the basics of relief carving and they complete level one* of that activity, John applies for the specialist pin (he intends to continue teaching relief carving). He receives the specialist pin and three bars: Mentor, Relief Carving and level one. When at least three of his students have qualified for level two*, John receives his level two bar. If John can assist at least one* student all the way to the top, John is awarded the level three bar. See illustration.

*Note that these people must send in their reports to the Norwegian Cultural Skills Program.



EXAMPLE 2

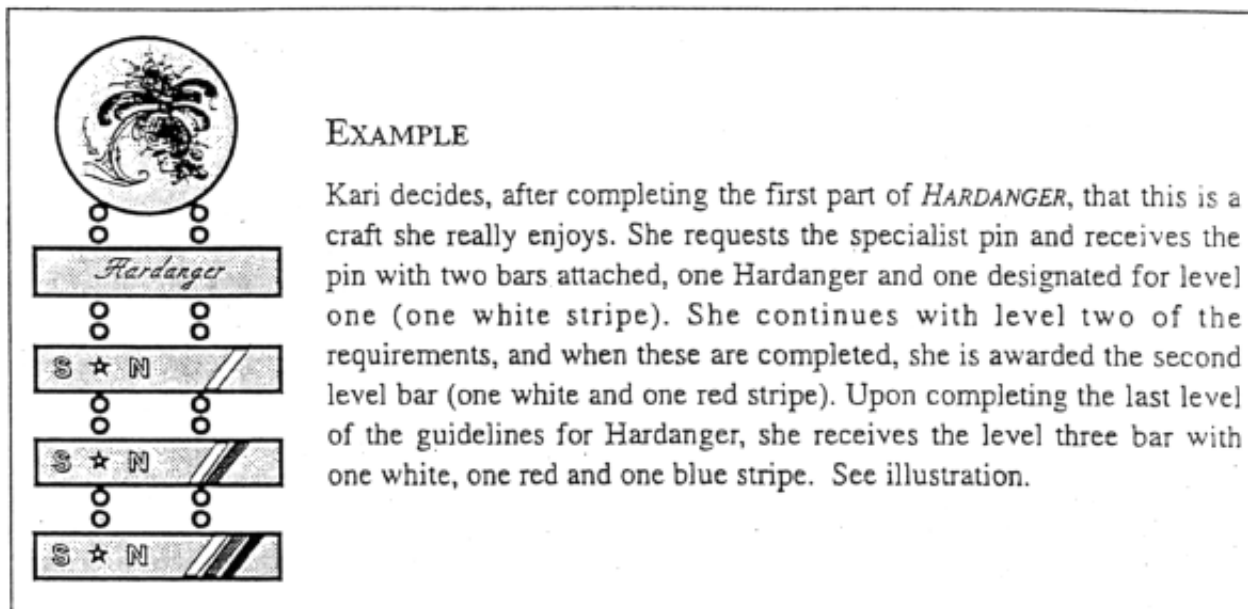
Irene is cultural director of her lodge. She decides to get a number of cultural skills activities going. She starts a crafts club. She encourages the group to try knitting, *Hardanger* embroidery and *rosemaling*. Irene's strongest suit is *rosemaling*, but she knows enough about *Hardanger* embroidery and knitting to instruct her fellow members in the basics. Irene is on her way to becoming a mentor on the generalist track. When at least five of her fellow club members qualify for part one of *Hardanger* embroidery, Irene receives the generalist pin with two bars: Mentor and *Hardanger*. When five more of the participants qualify for part one of Knitting, Irene receives one bar: Knitting, and when yet five others qualify for part one of *Rosemaling*, Irene receives another bar: *Rosemaling*. See illustration.

NORWEGIAN CULTURAL SKILLS PROGRAM PINS

REVISED POLICY (MAY 1999)

SPECIALIST*

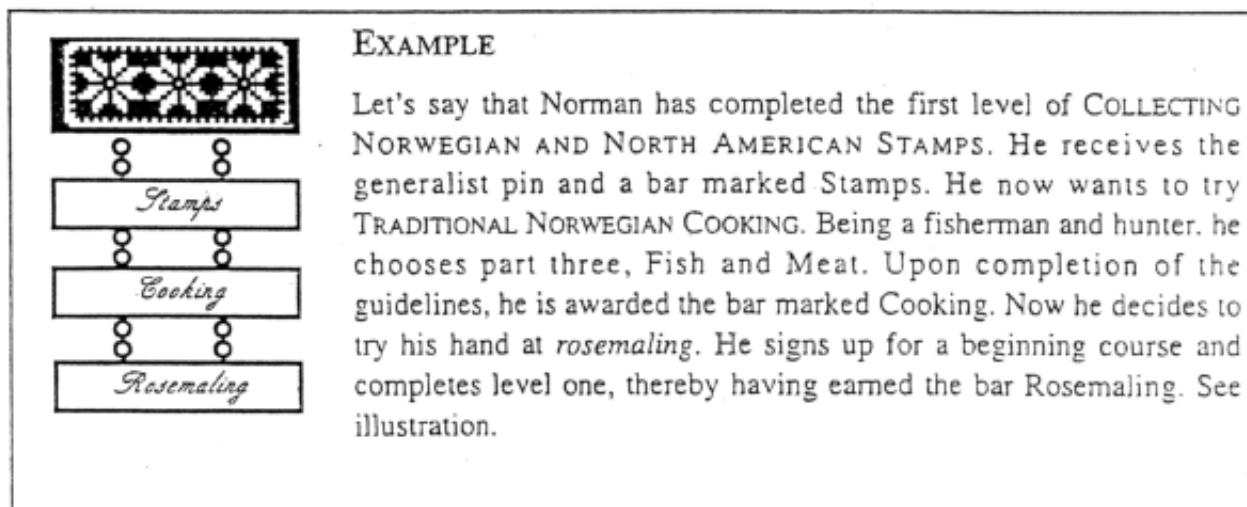
The specialist pin is earned by people who wish to go into some depth in one area, e.g. *Hardanger* Embroidery. The pin was designed by Marilyn Olin, a Vesterheim Gold Medalist in *Rosemaling*.



GENERALIST

The generalist pin is awarded to any person who decides to sample several skills and qualify for the basic level (e.g. in stamp collecting, genealogy and a number of crafts), or any one part of the following units: Traditional Norwegian Foods, Reading Norwegian and Norwegian-North American Authors, Norwegian Language and Culture.

The design of the pin is based on the Selbu rose, chosen to honor the founding fathers of Sons of Norway who hailed from the Selbu community. It was designed by Krista Lauritzen and Liv Dahl.



*Please note: Only one specialist pin is given per participant. Bars will be awarded to be affixed to the original pin. Thus one pin may reflect one or several activities.